

**DATA PACKAGE
VOLATILE ORGANICS**

PROJECT NAME : NJ WASTE WATER PT

CHEMTECH CONSULTING GROUP

284 Sheffield St,

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : P3845

ATTENTION : QA Officer



Laboratory Certification ID # 20012



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Cover Page

Order ID : P3845

Project ID : NJ Waste Water PT

Client : Chemtech Consulting Group

Lab Sample Number

P3845-01
P3845-02
P3845-03
P3845-04
P3845-05
P3845-06
P3845-07
P3845-08
P3845-09
P3845-10
P3845-11
P3845-12
P3845-13
P3845-14
P3845-15
P3845-16
P3845-17
P3845-18
P3845-19
P3845-20
P3845-21
P3845-22

Client Sample Number

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

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

Signature : _____

Date: 10/19/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Chemtech Consulting Group

Project Name: NJ Waste Water PT

Project # N/A

Chemtech Project # P3845

Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

22 Water samples were received on 09/05/2024.

B. Parameters

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

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries 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 for {VN0909WBSD01} with File ID: VN083708.D met requirements for all samples except for m/p-Xylenes[86%] is failing marginally low therefore no corrective action taken.

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

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

F. Manual Integration Comments:

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

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

Signature_____

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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: P3845

MATRIX: Water

METHOD: 624.1

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements. The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			✓
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Blank Spike met requirements for all samples . The Blank Spike Duplicate for {VN0909WBSD01} with File ID: VN083708.D met requirements for all samples except for m/p-Xylenes[86%] is failing marginally low therefore no corrective action taken.		✓	
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:			✓

ADDITIONAL COMMENTS:

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

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

NA NO YES

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

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P3845

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: 10/19/2024

LAB CHRONICLE

OrderID:	P3845	OrderDate:	9/5/2024 2:19:00 PM
Client:	Chemtech Consulting Group	Project:	NJ Waste Water PT
Contact:	QA Officer	Location:	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3845-01	PT-VOA-WP	Water	VOCMS Group1	8260-Low	09/03/24		09/10/24	09/05/24
P3845-01DL	PT-VOA-WPDL	Water	VOCMS Group1	8260-Low	09/03/24		09/11/24	09/05/24
P3845-02	PT-VOA-WP	Water	VOCMS Group1	624.1	09/03/24		09/09/24	09/05/24

Hit Summary Sheet SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	PT-VOA-WP							
P3845-02	PT-VOA-WP	Water	Vinyl Chloride	34.3		1.20	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Bromomethane	46.0		1.40	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Acetone	38.7		4.90	25.0	ug/L
P3845-02	PT-VOA-WP	Water	Methyl tert-Butyl Ether	73.8		0.83	5.00	ug/L
P3845-02	PT-VOA-WP	Water	trans-1,2-Dichloroethene	100		0.95	5.00	ug/L
P3845-02	PT-VOA-WP	Water	2-Butanone	86.0		3.60	25.0	ug/L
P3845-02	PT-VOA-WP	Water	cis-1,2-Dichloroethene	20.1		0.90	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Chloroform	22.9		0.72	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Benzene	40.7		0.69	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,2-Dichloroethane	140		0.75	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Trichloroethene	57.4		0.77	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,2-Dichloropropane	20.9		0.65	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Dibromomethane	14.7		0.70	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Bromodichloromethane	92.5		0.81	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Toluene	98.1		0.72	5.00	ug/L
P3845-02	PT-VOA-WP	Water	t-1,3-Dichloropropene	100		0.79	5.00	ug/L
P3845-02	PT-VOA-WP	Water	cis-1,3-Dichloropropene	100		0.83	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Dibromochloromethane	29.9		0.72	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,2-Dibromoethane	40.7		0.78	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Chlorobenzene	45.8		0.67	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Ethyl Benzene	86.2		0.73	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Total Xylenes	137		2.52	15.0	ug/L
P3845-02	PT-VOA-WP	Water	m/p-Xylenes	26.5	Q	1.70	10.0	ug/L
P3845-02	PT-VOA-WP	Water	o-Xylene	110		0.82	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Styrene	100		0.80	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Bromoform	71.1		1.00	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,2,3-Trichloropropane	100		1.70	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,3,5-Trimethylbenzene	30.4		0.74	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,2,4-Trimethylbenzene	15.3		0.83	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,3-Dichlorobenzene	94.2		0.88	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,4-Dichlorobenzene	39.2		0.95	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,2-Dichlorobenzene	13.4		0.88	5.00	ug/L
P3845-02	PT-VOA-WP	Water	1,2-Dibromo-3-Chloropropane	120		0.91	5.00	ug/L
P3845-02	PT-VOA-WP	Water	Naphthalene	66.2		1.40	5.00	ug/L
Total Voc :				2080				
Total Concentration:				2080				

Hit Summary Sheet
SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units



QC SUMMARY

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Surrogate Summary

SDG No.: **P3845**

Client: **Chemtech Consulting Group**

Analytical Method: **SW624.1**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P3845-02	PT-VOA-WP	1,2-Dichloroethane-d4	30	31.2	104	91	110
		Toluene-d8	30	30.1	100	91	112
		4-Bromofluorobenzene	30	29.9	100	63	112
VN0909WBL02	VN0909WBL02	1,2-Dichloroethane-d4	30	29.8	99	91	110
		Toluene-d8	30	30.1	100	91	112
		4-Bromofluorobenzene	30	27.3	91	63	112
VN0909WBS01	VN0909WBS01	1,2-Dichloroethane-d4	30	30.0	100	91	110
		Toluene-d8	30	29.8	99	91	112
		4-Bromofluorobenzene	30	28.9	96	63	112
VN0909WBSD0	VN0909WBSD01	1,2-Dichloroethane-d4	30	29.6	99	91	110
		Toluene-d8	30	30.1	100	91	112
		4-Bromofluorobenzene	30	29.8	99	63	112

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Analytical Method: SW624.1

Datafile : VN083707.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0909WBS01	Dichlorodifluoromethane	20	18.5	ug/L	93			72	118	
	Chloromethane	20	18.8	ug/L	94			1	205	
	Vinyl Chloride	20	18.7	ug/L	94			5	195	
	Ethyl Acetate	20	19.1	ug/L	96			68	140	
	Isopropyl Acetate	20	18.8	ug/L	94			70	130	
	Bromomethane	20	18.9	ug/L	95			15	185	
	Chloroethane	20	21.3	ug/L	106			40	160	
	Trichlorofluoromethane	20	18.4	ug/L	92			50	150	
	1,1,2-Trichlorotrifluoroethane	20	18.3	ug/L	92			64	127	
	tert-Butyl Alcohol	100	100	ug/L	100			42	163	
	Diethyl Ether	20	18.2	ug/L	91			70	130	
	1,1-Dichloroethene	20	18.3	ug/L	92			50	150	
	Acrolein	100	100	ug/L	100			60	140	
	Acrylonitrile	100	95.7	ug/L	96			60	140	
	Acetone	100	97.9	ug/L	98			41	148	
	Carbon disulfide	20	17.4	ug/L	87			76	107	
	Methyl tert-butyl Ether	20	18.7	ug/L	94			82	114	
	Methyl Acetate	20	18.6	ug/L	93			63	139	
	Methylene Chloride	20	18.1	ug/L	91			60	140	
	trans-1,2-Dichloroethene	20	18.2	ug/L	91			70	130	
	Vinyl Acetate	100	87.2	ug/L	87			25	181	
	1,1-Dichloroethane	20	18.3	ug/L	92			70	130	
	Cyclohexane	20	17.9	ug/L	90			79	113	
	2-Butanone	100	100	ug/L	100			69	129	
	Carbon Tetrachloride	20	18.1	ug/L	91			70	130	
	2,2-Dichloropropane	20	18.6	ug/L	93			62	139	
	cis-1,2-Dichloroethene	20	18.1	ug/L	91			81	112	
	Chloroform	20	18.6	ug/L	93			70	135	
	1,1,1-Trichloroethane	20	18.3	ug/L	92			70	130	
	Methylcyclohexane	20	17.6	ug/L	88			79	112	
	1,1-Dichloropropene	20	18.1	ug/L	91			70	139	
	Benzene	20	18.6	ug/L	93			65	135	
	1,2-Dichloroethane	20	18.6	ug/L	93			70	130	
	Trichloroethene	20	17.6	ug/L	88			65	135	
	1,2-Dichloropropane	20	18.1	ug/L	91			35	165	
	Dibromomethane	20	18.2	ug/L	91			72	138	
	Bromodichloromethane	20	18.3	ug/L	92			65	135	
	4-Methyl-2-Pentanone	100	98.4	ug/L	98			73	131	
	Toluene	20	18.2	ug/L	91			70	130	
	t-1,3-Dichloropropene	20	17.8	ug/L	89			50	150	
	cis-1,3-Dichloropropene	20	17.6	ug/L	88			25	175	
	1,1,2-Trichloroethane	20	18.7	ug/L	94			70	130	
	1,3-Dichloropropane	20	18.6	ug/L	93			70	141	
	2-Chloroethyl vinyl ether	100	100	ug/L	100			1	225	
	2-Hexanone	100	100	ug/L	100			72	128	
	Dibromochloromethane	20	18.1	ug/L	91			70	135	
	1,2-Dibromoethane	20	18.8	ug/L	94			86	114	
	Tetrachloroethene	20	17.7	ug/L	89			70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Analytical Method: SW624.1

Datafile : VN083707.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0909WBS01	Chlorobenzene	20	17.7	ug/L	89			65	135	
	1,1,1,2-Tetrachloroethane	20	18.3	ug/L	92			63	138	
	Hexachloroethane	20	17.7	ug/L	89			70	130	
	Ethyl Benzene	20	17.3	ug/L	86			60	140	
	m/p-Xylenes	40	35.4	ug/L	89			87	111	
	o-Xylene	20	17.9	ug/L	90			87	111	
	Styrene	20	17.3	ug/L	86			85	106	
	Bromoform	20	17.5	ug/L	88			70	130	
	Isopropylbenzene	20	17.7	ug/L	89			86	112	
	1,1,2,2-Tetrachloroethane	20	18.7	ug/L	94			60	140	
	1,2,3-Trichloropropane	20	19.1	ug/L	96			61	148	
	Bromobenzene	20	17.5	ug/L	88			59	142	
	N-propylbenzene	20	17.1	ug/L	86			67	139	
	2-Chlorotoluene	20	17.1	ug/L	86			66	138	
	1,3,5-Trimethylbenzene	20	17.9	ug/L	90			66	139	
	4-Chlorotoluene	20	16.8	ug/L	84			66	141	
	tert-Butylbenzene	20	17.9	ug/L	90			56	140	
	1,2,4-Trimethylbenzene	20	17.8	ug/L	89			63	142	
	Sec-butylbenzene	20	17.4	ug/L	87			63	144	
	p-Isopropyltoluene	20	17.4	ug/L	87			57	147	
	1,3-Dichlorobenzene	20	16.6	ug/L	83			70	130	
	1,4-Dichlorobenzene	20	16.8	ug/L	84			65	135	
	n-Butylbenzene	20	16.6	ug/L	83			49	157	
	1,2-Dichlorobenzene	20	17.4	ug/L	87			65	135	
	1,2-Dibromo-3-Chloropropane	20	19.1	ug/L	96			69	122	
	1,2,4-Trichlorobenzene	20	16.6	ug/L	83			61	118	
	Hexachlorobutadiene	20	17.3	ug/L	86			16	187	
	Naphthalene	20	16.7	ug/L	84			45	152	
	1,2,3-Trichlorobenzene	20	16.6	ug/L	83			38	159	
	n-amyl Acetate	20	19.0	ug/L	95			70	130	
	Allyl chloride	20	18.3	ug/L	92			70	130	
	Methacrylonitrile	20	19.6	ug/L	98			70	130	
	t-1,4-Dichloro-2-butene	20	18.5	ug/L	93			70	130	
	1,4-Dioxane	400	390	ug/L	98			70	130	
	Methyl methacrylate	20	18.9	ug/L	95			70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Analytical Method: SW624.1

Datafile : VN083708.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0909WBSD01	Dichlorodifluoromethane	20	17.2	ug/L	86	8		72	118	20
	Chloromethane	20	17.5	ug/L	88	7		1	205	20
	Vinyl Chloride	20	17.2	ug/L	86	9		5	195	20
	Ethyl Acetate	20	18.4	ug/L	92	4		68	140	20
	Isopropyl Acetate	20	18.7	ug/L	94	0		70	130	20
	Bromomethane	20	17.5	ug/L	88	8		15	185	20
	Chloroethane	20	18.3	ug/L	92	14		40	160	20
	Trichlorofluoromethane	20	17.2	ug/L	86	7		50	150	20
	1,1,2-Trichlorotrifluoroethane	20	17.6	ug/L	88	4		64	127	20
	tert-Butyl Alcohol	100	100	ug/L	100	0		42	163	20
	Diethyl Ether	20	17.9	ug/L	90	1		70	130	20
	1,1-Dichloroethene	20	17.1	ug/L	86	7		50	150	20
	Acrolein	100	110	ug/L	110	10		60	140	20
	Acrylonitrile	100	90.1	ug/L	90	6		60	140	20
	Acetone	100	91.2	ug/L	91	7		41	148	20
	Carbon disulfide	20	16.5	ug/L	83	5		76	107	20
	Methyl tert-butyl Ether	20	17.7	ug/L	89	5		82	114	20
	Methyl Acetate	20	18.7	ug/L	94	1		63	139	20
	Methylene Chloride	20	17.5	ug/L	88	3		60	140	20
	trans-1,2-Dichloroethene	20	17.4	ug/L	87	4		70	130	20
	Vinyl Acetate	100	83.1	ug/L	83	5		25	181	20
	1,1-Dichloroethane	20	17.5	ug/L	88	4		70	130	20
	Cyclohexane	20	16.8	ug/L	84	7		79	113	20
	2-Butanone	100	95.0	ug/L	95	5		69	129	20
	Carbon Tetrachloride	20	17.9	ug/L	90	1		70	130	20
	2,2-Dichloropropane	20	18.2	ug/L	91	2		62	139	20
	cis-1,2-Dichloroethene	20	16.9	ug/L	85	7		81	112	20
	Chloroform	20	17.5	ug/L	88	6		70	135	20
	1,1,1-Trichloroethane	20	17.8	ug/L	89	3		70	130	20
	Methylcyclohexane	20	17.7	ug/L	89	1		79	112	20
	1,1-Dichloropropene	20	17.2	ug/L	86	6		70	139	20
	Benzene	20	18.0	ug/L	90	3		65	135	20
	1,2-Dichloroethane	20	18.1	ug/L	91	2		70	130	20
	Trichloroethene	20	17.8	ug/L	89	1		65	135	20
	1,2-Dichloropropane	20	18.0	ug/L	90	1		35	165	20
	Dibromomethane	20	18.0	ug/L	90	1		72	138	20
	Bromodichloromethane	20	17.7	ug/L	89	3		65	135	20
	4-Methyl-2-Pentanone	100	99.3	ug/L	99	1		73	131	20
	Toluene	20	17.7	ug/L	89	2		70	130	20
	t-1,3-Dichloropropene	20	17.4	ug/L	87	2		50	150	20
	cis-1,3-Dichloropropene	20	18.0	ug/L	90	2		25	175	20
	1,1,2-Trichloroethane	20	18.8	ug/L	94	0		70	130	20
	1,3-Dichloropropane	20	18.0	ug/L	90	3		70	141	20
	2-Chloroethyl vinyl ether	100	85.6	ug/L	86	15		1	225	20
	2-Hexanone	100	100	ug/L	100	0		72	128	20
	Dibromochloromethane	20	18.2	ug/L	91	0		70	135	20
	1,2-Dibromoethane	20	18.1	ug/L	91	3		86	114	20
	Tetrachloroethene	20	17.3	ug/L	86	3		70	130	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Analytical Method: SW624.1

Datafile : VN083708.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0909WBSD01	Chlorobenzene	20	17.5	ug/L	88	1		65	135	20
	1,1,1,2-Tetrachloroethane	20	17.9	ug/L	90	2		63	138	20
	Hexachloroethane	20	17.5	ug/L	88	1		70	130	20
	Ethyl Benzene	20	17.2	ug/L	86	0		60	140	20
	m/p-Xylenes	40	34.5	ug/L	86	3	*	87	111	20
	o-Xylene	20	17.6	ug/L	88	2		87	111	20
	Styrene	20	17.2	ug/L	86	0		85	106	20
	Bromoform	20	18.1	ug/L	91	3		70	130	20
	Isopropylbenzene	20	17.7	ug/L	89	0		86	112	20
	1,1,2,2-Tetrachloroethane	20	19.1	ug/L	96	2		60	140	20
	1,2,3-Trichloropropane	20	19.4	ug/L	97	1		61	148	20
	Bromobenzene	20	17.7	ug/L	89	1		59	142	20
	N-propylbenzene	20	17.1	ug/L	86	0		67	139	20
	2-Chlorotoluene	20	17.7	ug/L	89	3		66	138	20
	1,3,5-Trimethylbenzene	20	17.7	ug/L	89	1		66	139	20
	4-Chlorotoluene	20	16.8	ug/L	84	0		66	141	20
	tert-Butylbenzene	20	17.8	ug/L	89	1		56	140	20
	1,2,4-Trimethylbenzene	20	17.5	ug/L	88	1		63	142	20
	Sec-butylbenzene	20	17.0	ug/L	85	2		63	144	20
	p-Isopropyltoluene	20	17.1	ug/L	86	1		57	147	20
	1,3-Dichlorobenzene	20	16.9	ug/L	85	2		70	130	20
	1,4-Dichlorobenzene	20	16.7	ug/L	84	0		65	135	20
	n-Butylbenzene	20	16.4	ug/L	82	1		49	157	20
	1,2-Dichlorobenzene	20	17.2	ug/L	86	1		65	135	20
	1,2-Dibromo-3-Chloropropane	20	18.8	ug/L	94	2		69	122	20
	1,2,4-Trichlorobenzene	20	15.9	ug/L	79	5		61	118	20
	Hexachlorobutadiene	20	17.0	ug/L	85	1		16	187	20
	Naphthalene	20	16.5	ug/L	83	1		45	152	20
	1,2,3-Trichlorobenzene	20	15.9	ug/L	79	5		38	159	20
	n-amyl Acetate	20	19.0	ug/L	95	0		70	130	20
	Allyl chloride	20	17.1	ug/L	86	7		70	130	20
	Methacrylonitrile	20	19.7	ug/L	99	1		70	130	20
	t-1,4-Dichloro-2-butene	20	17.3	ug/L	86	8		70	130	20
	1,4-Dioxane	400	420	ug/L	105	7		70	130	20
	Methyl methacrylate	20	19.1	ug/L	96	1		70	130	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0909WBL02

Lab Name: CHEMTECH

Contract: CHEM02

Lab Code: CHEM Case No.: P3845

SAS No.: P3845 SDG NO.: P3845

Lab File ID: VN083710.D

Lab Sample ID: VN0909WBL02

Date Analyzed: 09/09/2024

Time Analyzed: 10:50

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
VN0909WBS01	VN0909WBS01	VN083707.D	09/09/2024
VN0909WBSD01	VN0909WBSD01	VN083708.D	09/09/2024
PT-VOA-WP	P3845-02	VN083712.D	09/09/2024

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
 BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG NO.: P3845
 Lab File ID: VN083689.D BFB Injection Date: 09/06/2024
 Instrument ID: MSVOA_N BFB Injection Time: 09:26
 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	20.9
75	30.0 - 60.0% of mass 95	55.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3 (0.5) 1
174	50.0 - 100.0% of mass 95	70.5
175	5.0 - 9.0% of mass 174	5 (7.1) 1
176	95.0 - 101.0% of mass 174	68.6 (97.3) 1
177	5.0 - 9.0% of mass 176	4.4 (6.4) 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
VSTDICC150	VSTDICC150	VN083690.D	09/06/2024	11:58
VSTDICC100	VSTDICC100	VN083691.D	09/06/2024	12:22
VSTDICC050	VSTDICC050	VN083692.D	09/06/2024	12:46
VSTDICCC020	VSTDICCC020	VN083693.D	09/06/2024	13:10
VSTDICC005	VSTDICC005	VN083694.D	09/06/2024	13:33

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
 BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG NO.: P3845
 Lab File ID: VN083705.D BFB Injection Date: 09/09/2024
 Instrument ID: MSVOA_N BFB Injection Time: 07:56
 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	21.4
75	30.0 - 60.0% of mass 95	56.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.8 (1.1) 1
174	50.0 - 100.0% of mass 95	70.4
175	5.0 - 9.0% of mass 174	5.5 (7.9) 1
176	95.0 - 101.0% of mass 174	69.9 (99.3) 1
177	5.0 - 9.0% of mass 176	4.1 (5.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC020	VSTDCCC020	VN083706.D	09/09/2024	08:57
VN0909WBS01	VN0909WBS01	VN083707.D	09/09/2024	09:39
VN0909WBSD01	VN0909WBSD01	VN083708.D	09/09/2024	10:03
VN0909WBL02	VN0909WBL02	VN083710.D	09/09/2024	10:50
PT-VOA-WP	P3845-02	VN083712.D	09/09/2024	12:48

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG NO.: P3845
Lab File ID: VN083706.D Date Analyzed: 09/09/2024
Instrument ID: MSVOA_N Time Analyzed: 08:57
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	29901	7.81	176779	9.10	156716	11.87
UPPER LIMIT	59802	8.306	353558	9.6	313432	12.365
LOWER LIMIT	14950.5	7.306	88389.5	8.6	78358	11.365
EPA SAMPLE NO.						
PT-VOA-WP	28130	7.81	166592	9.10	148981	11.87
VN0909WBL02	29530	7.81	165572	9.10	139818	11.87
VN0909WBS01	29833	7.81	175066	9.10	158507	11.87
VN0909WBSD01	31032	7.81	176340	9.09	157868	11.87

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

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

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



SAMPLE DATA

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

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	09/03/24
Project:	NJ Waste Water PT			Date Received:	09/05/24
Client Sample ID:	PT-VOA-WP			SDG No.:	P3845
Lab Sample ID:	P3845-02			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083712.D	1		09/09/24 12:48	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	1.20	U	1.20	5.00	ug/L
74-87-3	Chloromethane	1.20	U	1.20	5.00	ug/L
75-01-4	Vinyl Chloride	34.3		1.20	5.00	ug/L
141-78-6	Ethyl Acetate	1.50	U	1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	0.66	U	0.66	5.00	ug/L
74-83-9	Bromomethane	46.0		1.40	5.00	ug/L
75-00-3	Chloroethane	2.90	U	2.90	5.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	1.00	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/L
75-65-0	tert-Butyl Alcohol	8.50	U	8.50	25.0	ug/L
60-29-7	Diethyl Ether	0.92	U	0.92	5.00	ug/L
75-35-4	1,1-Dichloroethene	1.10	U	1.10	5.00	ug/L
107-02-8	Acrolein	9.30	U	9.30	25.0	ug/L
107-13-1	Acrylonitrile	3.70	U	3.70	25.0	ug/L
67-64-1	Acetone	38.7		4.90	25.0	ug/L
75-15-0	Carbon Disulfide	0.93	U	0.93	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	73.8		0.83	5.00	ug/L
79-20-9	Methyl Acetate	1.20	U	1.20	5.00	ug/L
75-09-2	Methylene Chloride	1.20	U	1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	100		0.95	5.00	ug/L
108-05-4	Vinyl Acetate	3.80	U	3.80	25.0	ug/L
75-34-3	1,1-Dichloroethane	0.81	U	0.81	5.00	ug/L
110-82-7	Cyclohexane	1.00	U	1.00	5.00	ug/L
78-93-3	2-Butanone	86.0		3.60	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.91	U	0.91	5.00	ug/L
594-20-7	2,2-Dichloropropane	1.10	U	1.10	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.1		0.90	5.00	ug/L
67-66-3	Chloroform	22.9		0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.79	U	0.79	5.00	ug/L
108-87-2	Methylcyclohexane	0.89	U	0.89	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	09/03/24	
Project:	NJ Waste Water PT		Date Received:	09/05/24	
Client Sample ID:	PT-VOA-WP		SDG No.:	P3845	
Lab Sample ID:	P3845-02		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083712.D	1		09/09/24 12:48	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
563-58-6	1,1-Dichloropropene	0.75	U	0.75	5.00	ug/L
71-43-2	Benzene	40.7		0.69	5.00	ug/L
107-06-2	1,2-Dichloroethane	140		0.75	5.00	ug/L
79-01-6	Trichloroethene	57.4		0.77	5.00	ug/L
78-87-5	1,2-Dichloropropane	20.9		0.65	5.00	ug/L
74-95-3	Dibromomethane	14.7		0.70	5.00	ug/L
75-27-4	Bromodichloromethane	92.5		0.81	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	4.20	U	4.20	25.0	ug/L
108-88-3	Toluene	98.1		0.72	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	100		0.79	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	100		0.83	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.68	U	0.68	5.00	ug/L
142-28-9	1,3-Dichloropropane	0.68	U	0.68	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	5.60	U	5.60	25.0	ug/L
591-78-6	2-Hexanone	3.90	U	3.90	25.0	ug/L
124-48-1	Dibromochloromethane	29.9		0.72	5.00	ug/L
106-93-4	1,2-Dibromoethane	40.7		0.78	5.00	ug/L
127-18-4	Tetrachloroethene	0.94	U	0.94	5.00	ug/L
108-90-7	Chlorobenzene	45.8		0.67	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	0.91	U	0.91	5.00	ug/L
67-72-1	Hexachloroethane	0.91	U	0.91	5.00	ug/L
100-41-4	Ethyl Benzene	86.2		0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	26.5	Q	1.70	10.0	ug/L
1330-20-7	Total Xylenes	137		2.52	15.0	ug/L
95-47-6	o-Xylene	110		0.82	5.00	ug/L
100-42-5	Styrene	100		0.80	5.00	ug/L
75-25-2	Bromoform	71.1		1.00	5.00	ug/L
98-82-8	Isopropylbenzene	0.85	U	0.85	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.60	U	0.60	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	100		1.70	5.00	ug/L
108-86-1	Bromobenzene	0.69	U	0.69	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	09/03/24
Project:	NJ Waste Water PT			Date Received:	09/05/24
Client Sample ID:	PT-VOA-WP			SDG No.:	P3845
Lab Sample ID:	P3845-02			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083712.D	1		09/09/24 12:48	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
103-65-1	n-propylbenzene	0.80	U	0.80	5.00	ug/L
95-49-8	2-Chlorotoluene	0.81	U	0.81	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	30.4		0.74	5.00	ug/L
106-43-4	4-Chlorotoluene	0.82	U	0.82	5.00	ug/L
98-06-6	tert-butylbenzene	0.77	U	0.77	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	15.3		0.83	5.00	ug/L
135-98-8	sec-Butylbenzene	0.77	U	0.77	5.00	ug/L
99-87-6	p-Isopropyltoluene	0.82	U	0.82	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	94.2		0.88	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	39.2		0.95	5.00	ug/L
104-51-8	n-Butylbenzene	0.86	U	0.86	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	13.4		0.88	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	120		0.91	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.00	ug/L
87-68-3	Hexachlorobutadiene	1.10	U	1.10	5.00	ug/L
91-20-3	Naphthalene	66.2		1.40	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.40	U	1.40	5.00	ug/L
628-63-7	n-amyl Acetate	0.91	U	0.91	5.00	ug/L
74-88-4	Methyl Iodide	0.94	U	0.94	5.00	ug/L
107-05-1	Allyl chloride	1.30	U	1.30	5.00	ug/L
126-98-7	Methacrylonitrile	1.20	U	1.20	5.00	ug/L
97-63-2	Ethyl methacrylate	0.79	U	0.79	5.00	ug/L
108-20-3	Diisopropyl ether	0.82	U	0.82	5.00	ug/L
123-91-1	1,4-Dioxane	18.4	U	18.4	100	ug/L
80-62-6	Methyl methacrylate	1.00	U	1.00	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	31.2		91 - 110	104%	SPK: 30
2037-26-5	Toluene-d8	30.1		91 - 112	100%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.9		63 - 112	100%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	28100	7.812			
540-36-3	1,4-Difluorobenzene	167000	9.1			

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/03/24
Project:	NJ Waste Water PT	Date Received:	09/05/24
Client Sample ID:	PT-VOA-WP	SDG No.:	P3845
Lab Sample ID:	P3845-02	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083712.D	1		09/09/24 12:48	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
3114-55-4	Chlorobenzene-d5	149000	11.865			

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\VN090924\
 Data File : VN083712.D
 Acq On : 09 Sep 2024 12:48
 Operator : JC\MD
 Sample : P3845-02
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 PT-VOA-WP

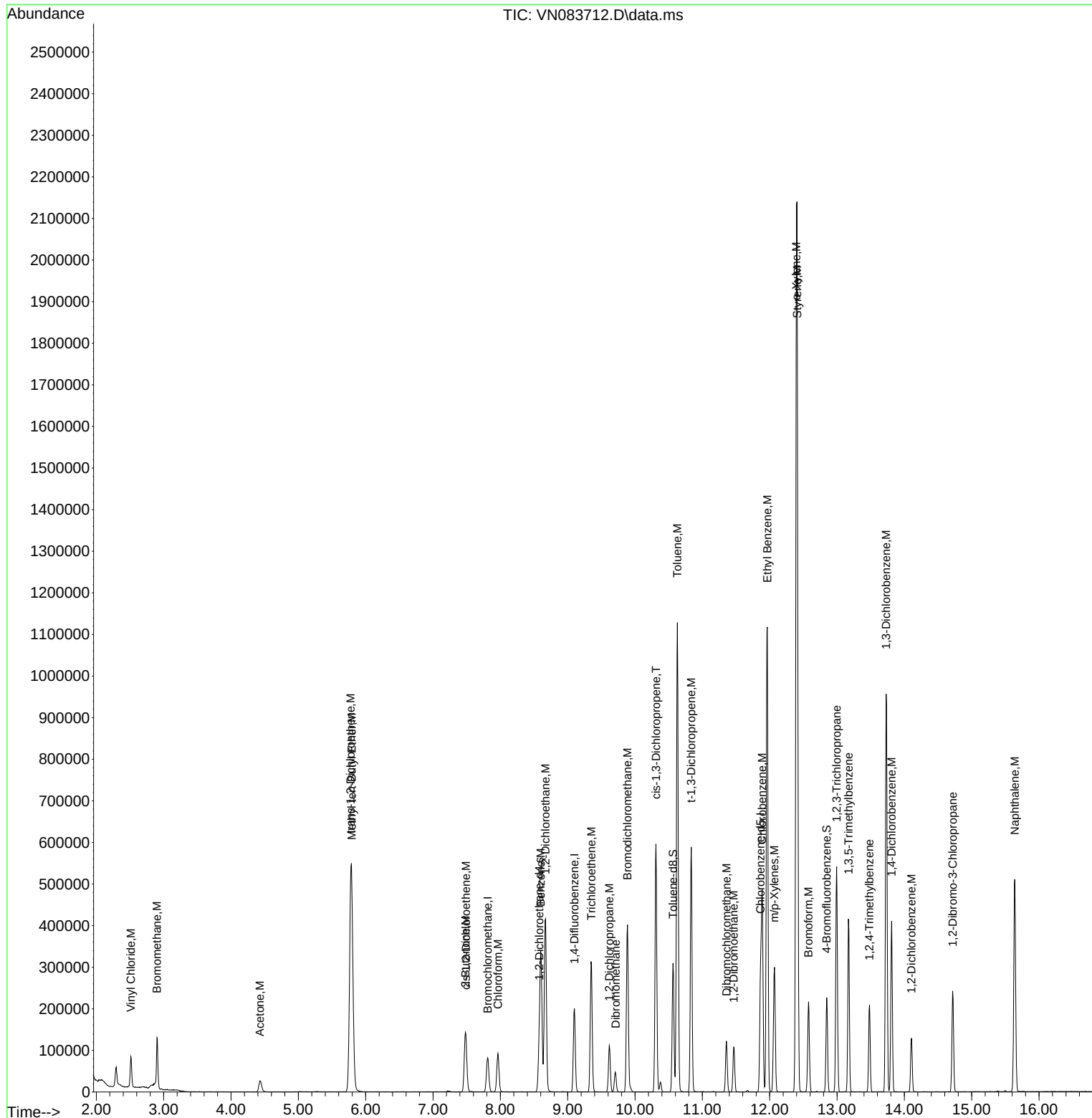
Quant Time: Sep 10 01:19:02 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

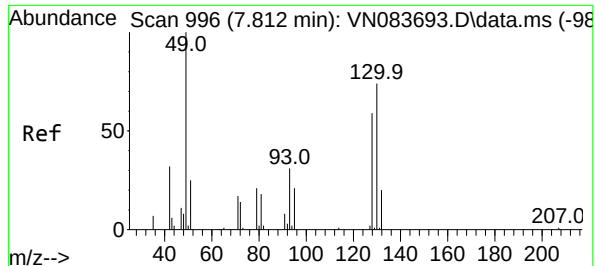
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.812	128	28130	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	166592	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	148981	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.576	65	80172	31.180	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	= 103.933%	
60) 4-Bromofluorobenzene	12.847	95	76864	29.935	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	= 99.800%	
63) Toluene-d8	10.565	98	207330	30.055	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	= 100.167%	
Target Compounds						Qvalue
4) Vinyl Chloride	2.512	62	69091	34.337	ug/l	97
5) Bromomethane	2.900	94	51735	46.019	ug/l	98
15) Acetone	4.430	58	10947	38.675	ug/l	98
19) trans-1,2-Dichloroethene	5.777	96	186023	102.660	ug/l	96
22) cis-1,2-Dichloroethene	7.488	96	44392	20.129	ug/l	97
24) Methyl tert-Butyl Ether	5.794	73	458211	73.751	ug/l #	88
25) Chloroform	7.965	83	85779	22.897	ug/l	96
30) 2-Butanone	7.482	43	107107	85.989	ug/l	94
34) Benzene	8.600	78	322886	40.726	ug/l	97
36) 1,2-Dichloroethane	8.671	62	411494	138.060	ug/l	95
37) Trichloroethene	9.353	130	106906	57.422	ug/l	96
39) 1,2-Dichloropropane	9.618	63	39928	20.925	ug/l	95
40) Dibromomethane	9.712	93	20453	14.659	ug/l	96
41) Bromodichloromethane	9.888	83	274291	92.451	ug/l	98
48) t-1,3-Dichloropropene	10.835	75	315419	101.072	ug/l	94
49) cis-1,3-Dichloropropene	10.312	75	337464	103.977	ug/l #	84
53) Dibromochloromethane	11.359	129	63667	29.899	ug/l	97
54) 1,2-Dibromoethane	11.465	107	74791	40.722	ug/l	99
56) Bromoform	12.576	173	96187	71.100	ug/l #	97
62) Toluene	10.629	91	839936	98.086	ug/l	100
64) Chlorobenzene	11.888	112	242728	45.783	ug/l	99
66) Ethyl Benzene	11.964	91	838967	86.153	ug/l	99
67) m/p-Xylenes	12.070	106	94768	26.452	ug/l	97
68) o-Xylene	12.394	106	381963	110.157	ug/l	97
69) Styrene	12.412	104	594560	101.482	ug/l	98
72) 1,2,3-Trichloropropane	12.994	75	223815	102.142	ug/l	1
76) 1,3,5-Trimethylbenzene	13.170	105	232418	30.407	ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	118401	15.329	ug/l	100
83) 1,3-Dichlorobenzene	13.729	146	380935	94.170	ug/l	99
84) 1,4-Dichlorobenzene	13.811	146	158714	39.245	ug/l	99
87) 1,2-Dichlorobenzene	14.106	146	52672	13.417	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	14.717	75	65947	120.069	ug/l	92
91) Naphthalene	15.641	128	465664	66.226	ug/l	99

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

Instrument :
MSVOA_N
ClientSampleId :
PT-VOA-WP

Quant Time: Sep 10 01:19:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

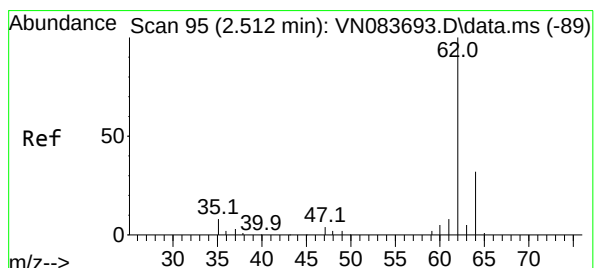
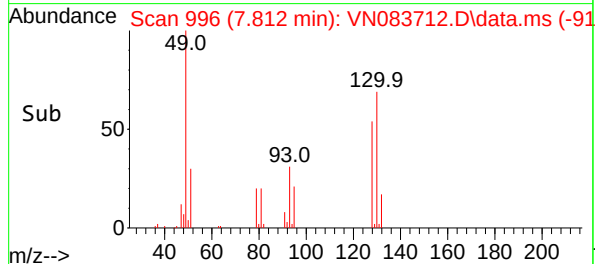
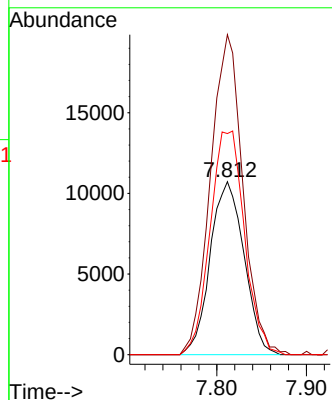
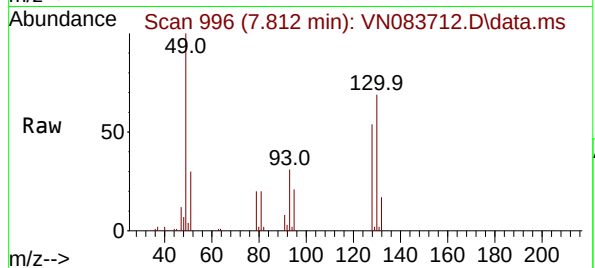




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

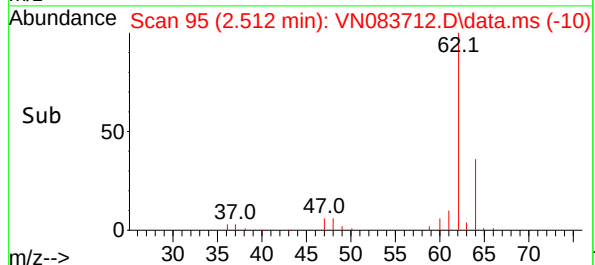
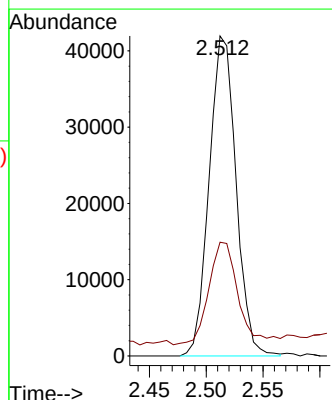
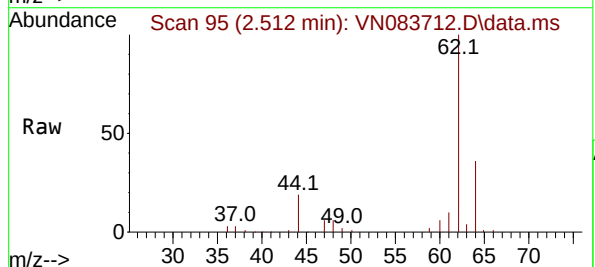
Instrument :
MSVOA_N
ClientSampleId :
PT-VOA-WP

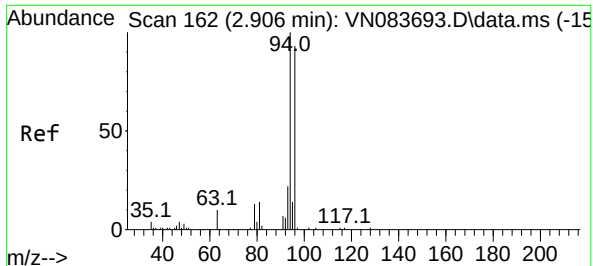
Tgt Ion	Ratio	Lower	Upper
128	100		
49	176.4	0.0	403.7
130	131.4	0.0	323.3



#4
Vinyl Chloride
Concen: 34.337 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

Tgt Ion	Ratio	Lower	Upper
62	100		
64	31.6	24.1	36.1

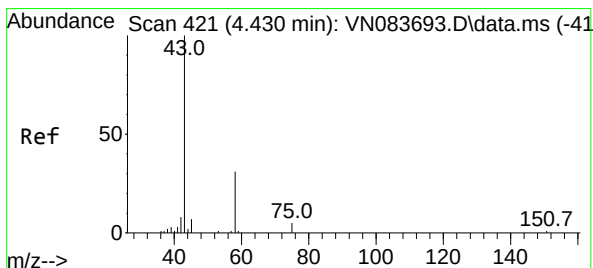
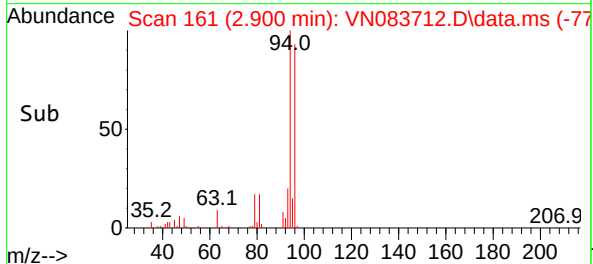
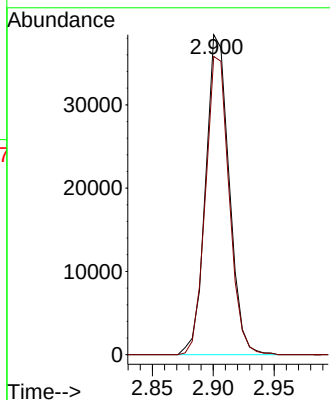
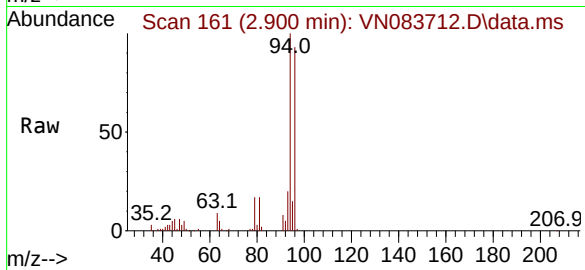




#5
Bromomethane
Concen: 46.019 ug/l
RT: 2.900 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

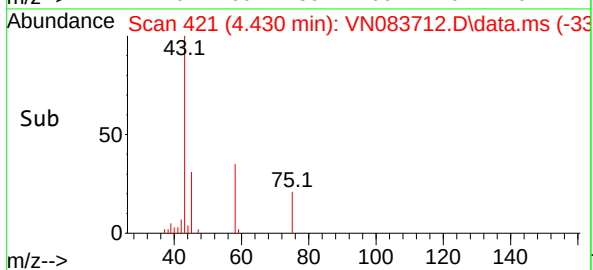
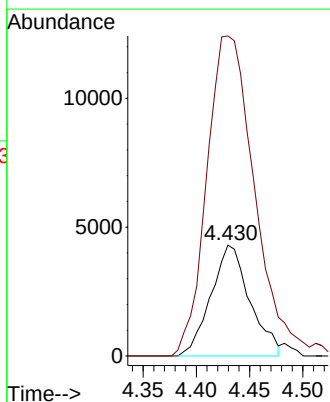
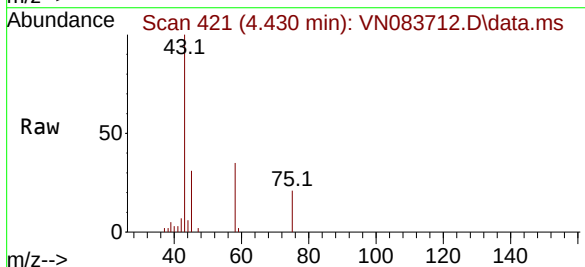
Instrument :
MSVOA_N
ClientSampleId :
PT-VOA-WP

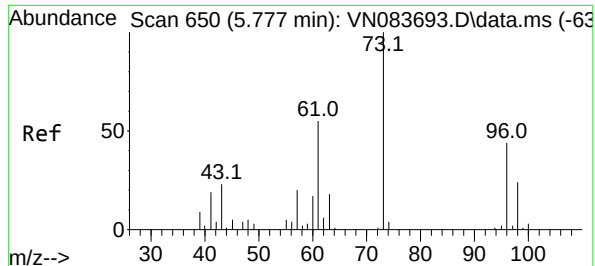
Tgt Ion: 94 Resp: 51735
Ion Ratio Lower Upper
94 100
96 93.2 72.8 109.2



#15
Acetone
Concen: 38.675 ug/l
RT: 4.430 min Scan# 421
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

Tgt Ion: 58 Resp: 10947
Ion Ratio Lower Upper
58 100
43 283.2 223.1 334.7





#19

trans-1,2-Dichloroethene

Concen: 102.660 ug/l

RT: 5.777 min Scan# 61

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

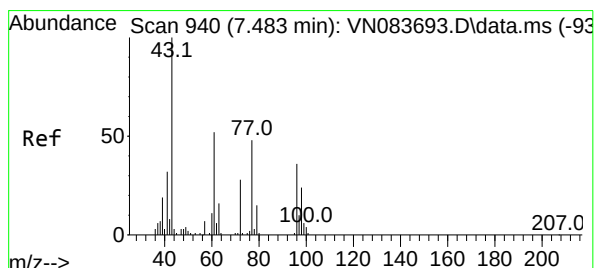
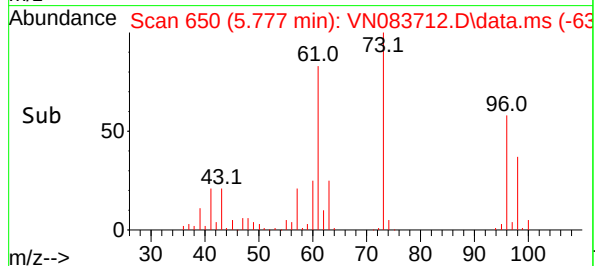
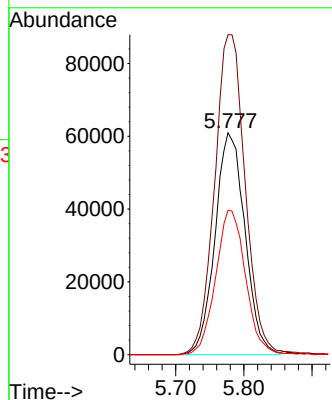
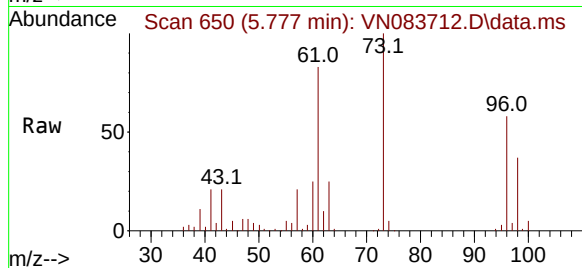
Tgt Ion: 96 Resp: 186023

Ion Ratio Lower Upper

96 100

61 144.0 111.8 167.6

98 65.1 49.2 73.8



#22

cis-1,2-Dichloroethene

Concen: 20.129 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

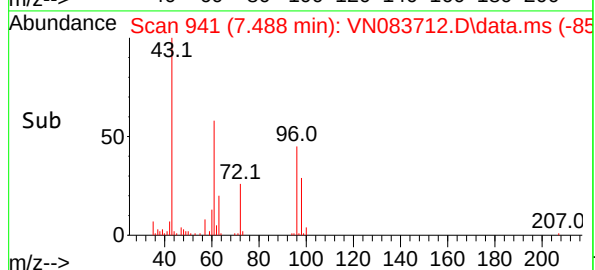
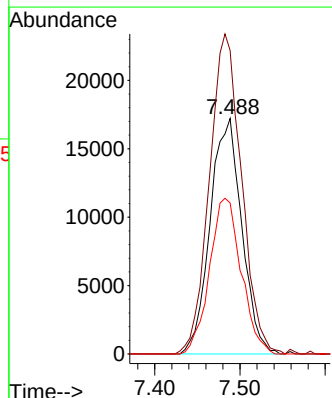
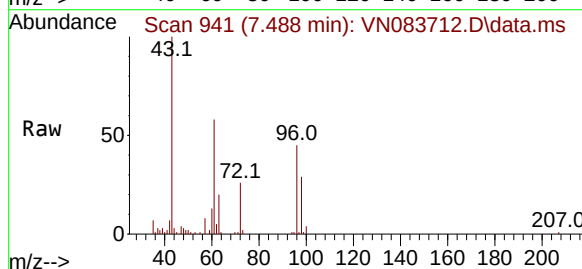
Tgt Ion: 96 Resp: 44392

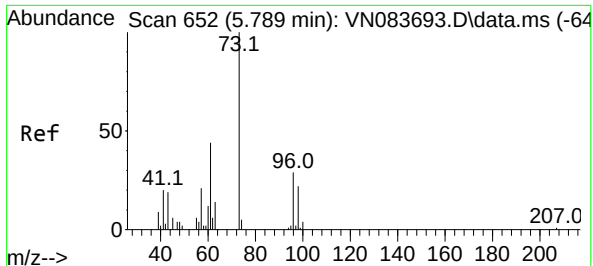
Ion Ratio Lower Upper

96 100

61 137.8 113.5 170.3

98 66.3 52.0 78.0

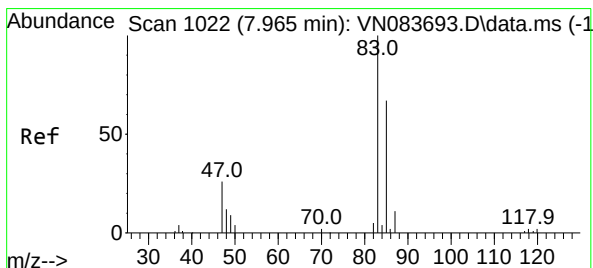
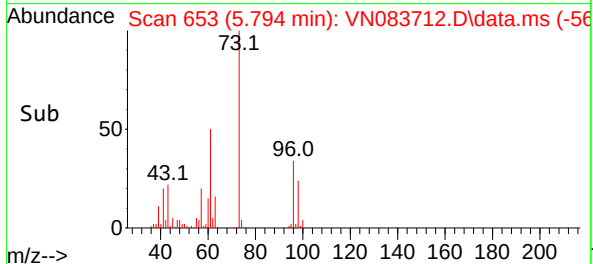
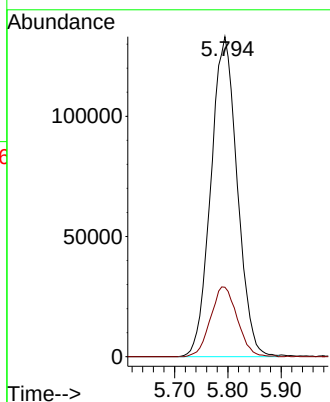
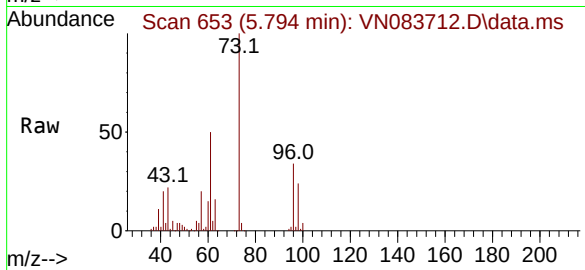




#24
Methyl tert-Butyl Ether
Concen: 73.751 ug/l
RT: 5.794 min Scan# 61
Delta R.T. 0.006 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

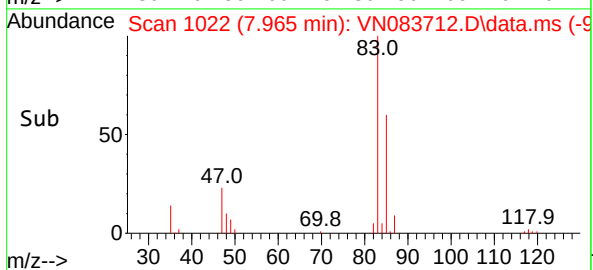
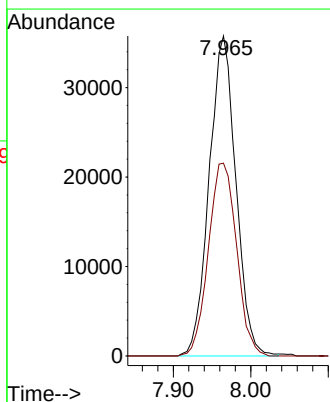
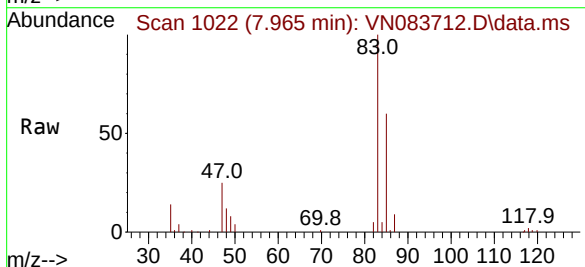
Instrument :
MSVOA_N
ClientSampleId :
PT-VOA-WP

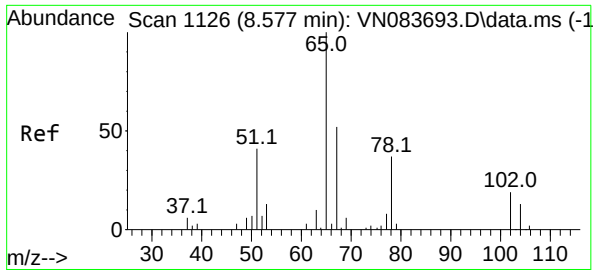
Tgt Ion: 73 Resp: 458211
Ion Ratio Lower Upper
73 100
43 22.1 13.4 20.2#



#25
Chloroform
Concen: 22.897 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

Tgt Ion: 83 Resp: 85779
Ion Ratio Lower Upper
83 100
85 60.3 50.9 76.3





#27

1,2-Dichloroethane-d4

Concen: 31.180 ug/l

RT: 8.576 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

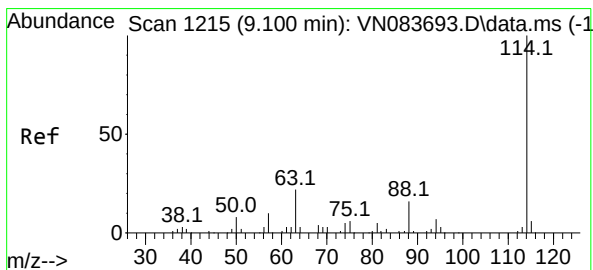
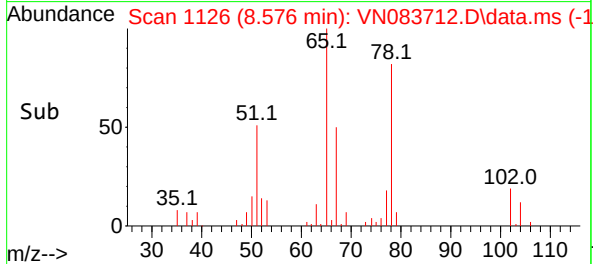
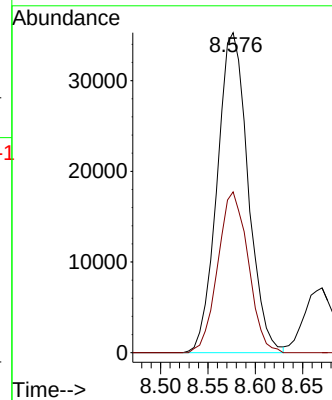
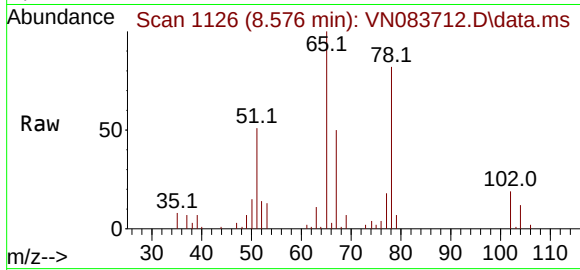
PT-VOA-WP

Tgt Ion: 65 Resp: 80172

Ion Ratio Lower Upper

65 100

67 49.3 43.2 64.8



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

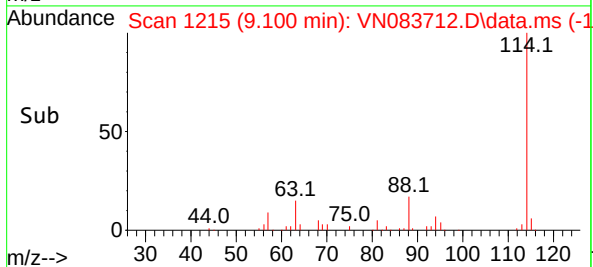
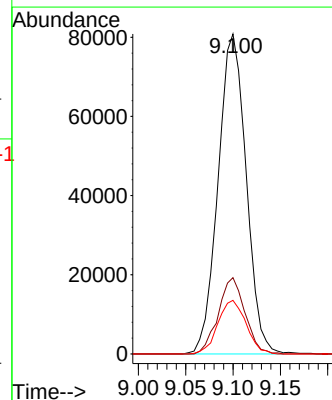
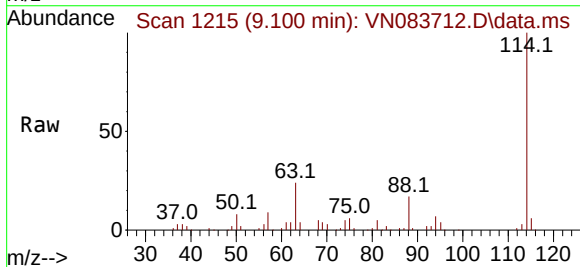
Tgt Ion: 114 Resp: 166592

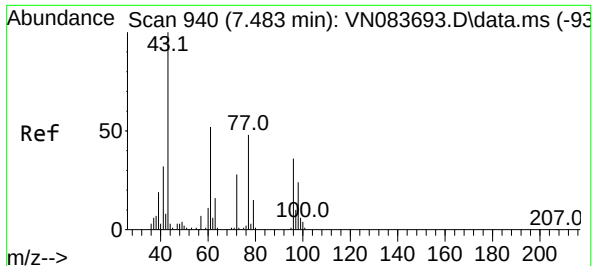
Ion Ratio Lower Upper

114 100

63 22.7 15.9 23.9

88 16.8 12.7 19.1





#30

2-Butanone

Concen: 85.989 ug/l

RT: 7.482 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

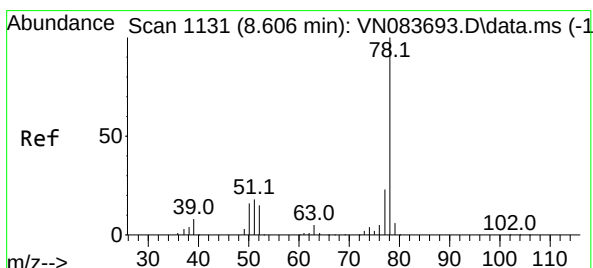
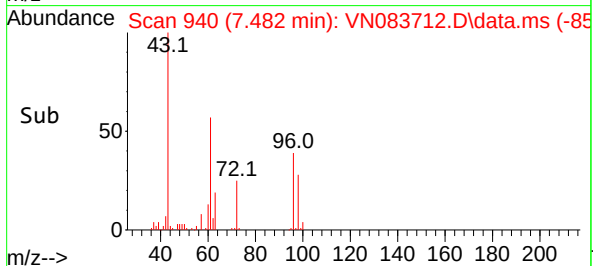
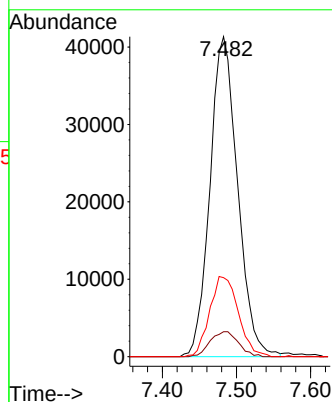
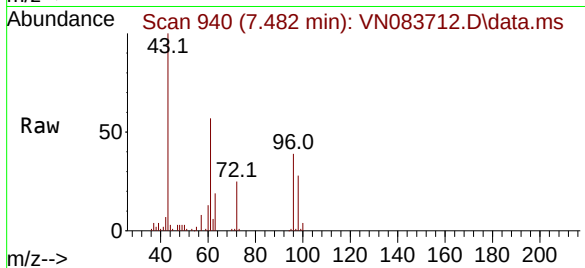
Tgt Ion: 43 Resp: 107107

Ion Ratio Lower Upper

43 100

57 8.0 6.7 10.1

72 25.9 24.0 36.0



#34

Benzene

Concen: 40.726 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.006 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

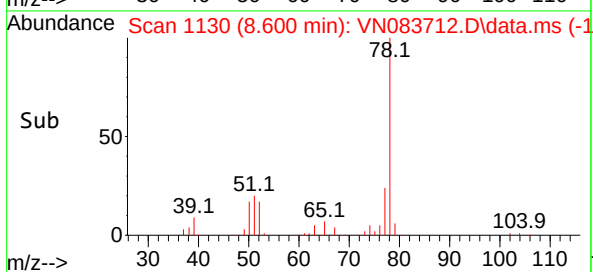
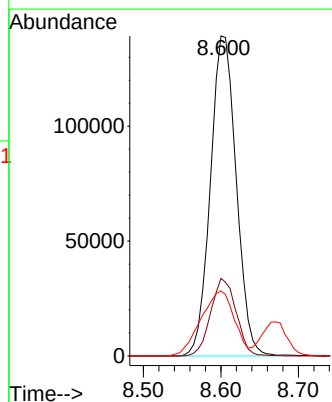
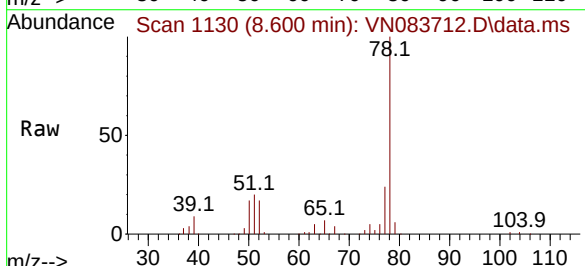
Tgt Ion: 78 Resp: 322886

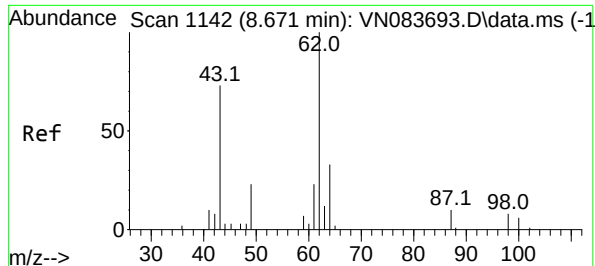
Ion Ratio Lower Upper

78 100

77 24.2 19.2 28.8

51 19.2 13.3 19.9





#36

1,2-Dichloroethane

Concen: 138.060 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

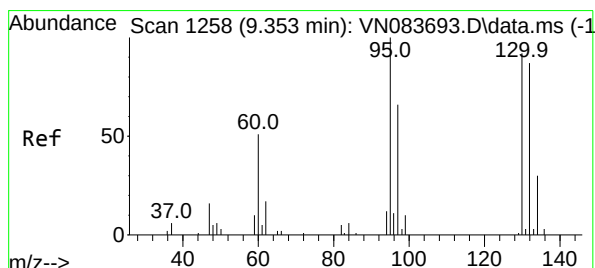
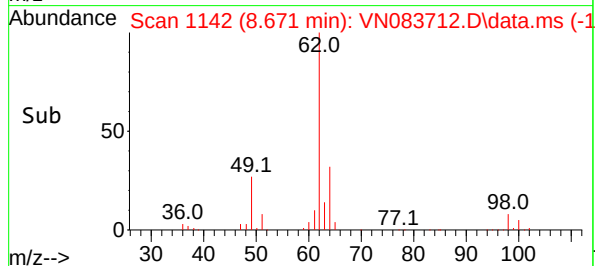
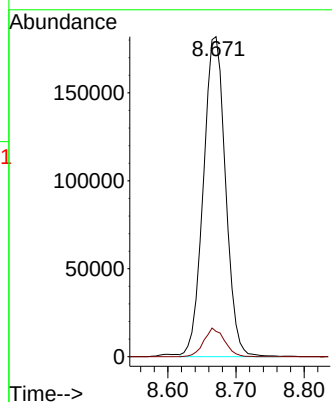
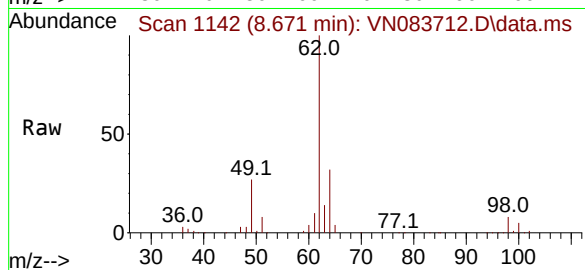
PT-VOA-WP

Tgt Ion: 62 Resp: 411494

Ion Ratio Lower Upper

62 100

98 8.3 8.2 12.4



#37

Trichloroethene

Concen: 57.422 ug/l

RT: 9.353 min Scan# 1258

Delta R.T. -0.000 min

Lab File: VN083712.D

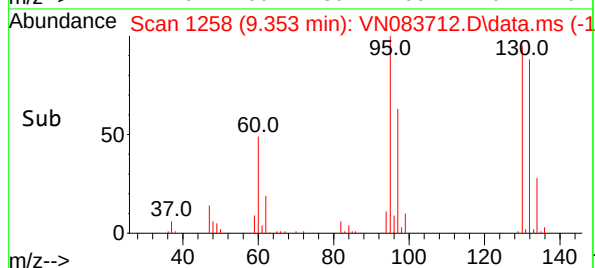
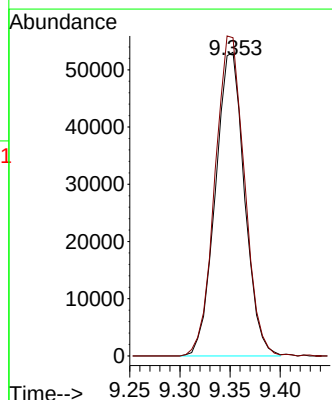
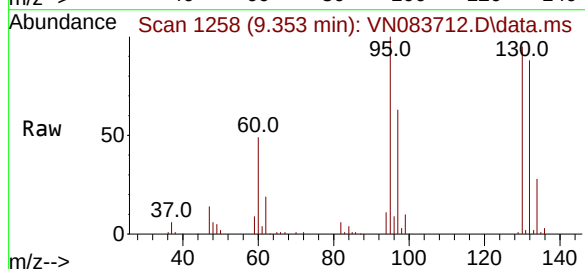
Acq: 09 Sep 2024 12:48

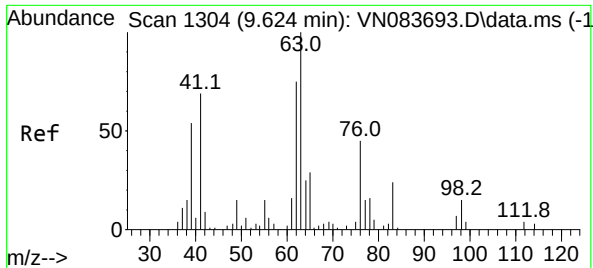
Tgt Ion: 130 Resp: 106906

Ion Ratio Lower Upper

130 100

95 104.8 80.2 120.4





#39

1,2-Dichloropropane

Concen: 20.925 ug/l

RT: 9.618 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

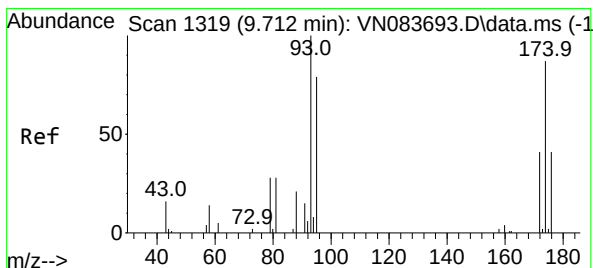
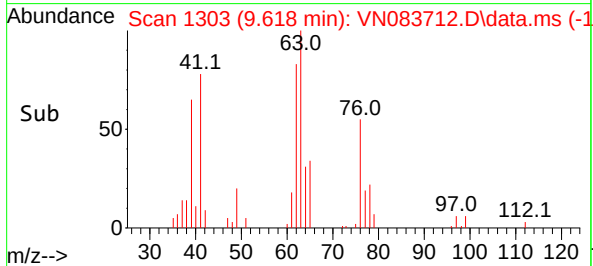
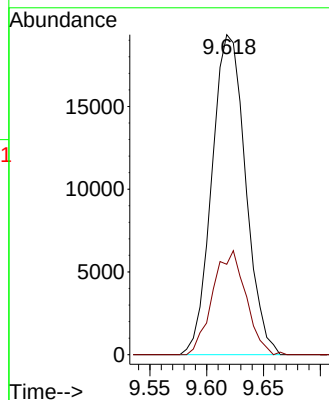
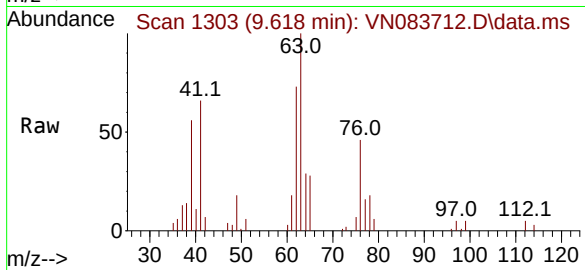
PT-VOA-WP

Tgt Ion: 63 Resp: 39928

Ion Ratio Lower Upper

63 100

65 28.3 25.0 37.4



#40

Dibromomethane

Concen: 14.659 ug/l

RT: 9.712 min Scan# 1319

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

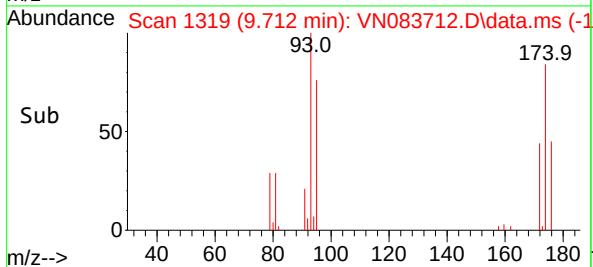
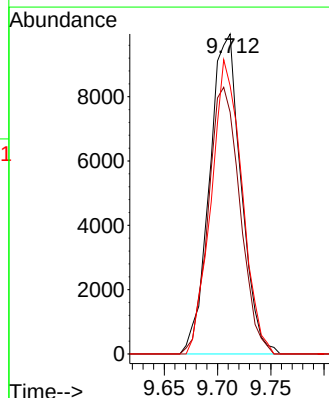
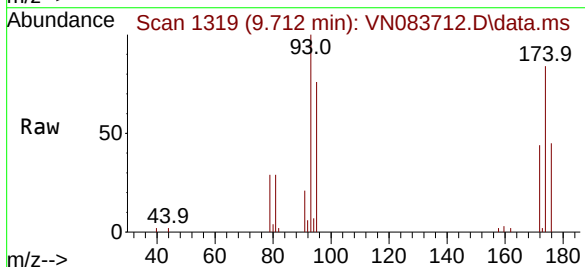
Tgt Ion: 93 Resp: 20453

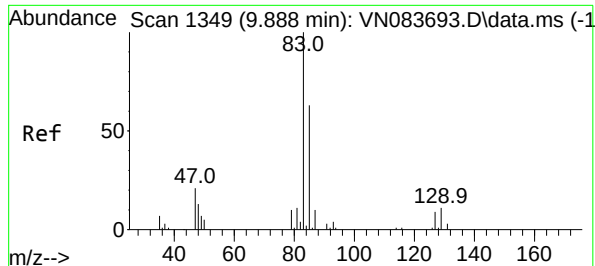
Ion Ratio Lower Upper

93 100

95 83.9 0.0 164.6

174 89.9 0.0 193.2





#41

Bromodichloromethane

Concen: 92.451 ug/l

RT: 9.888 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

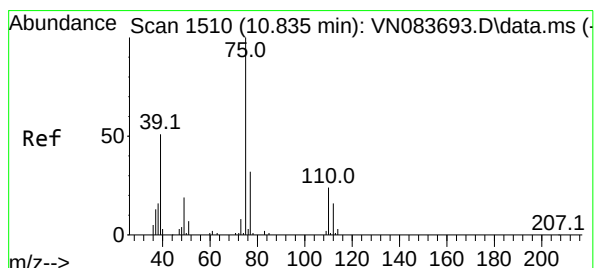
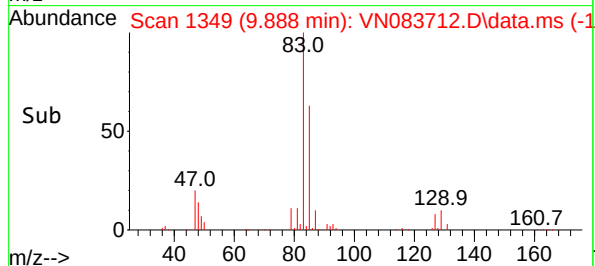
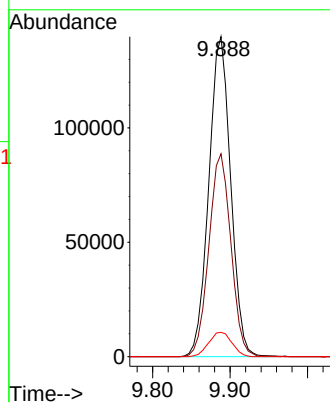
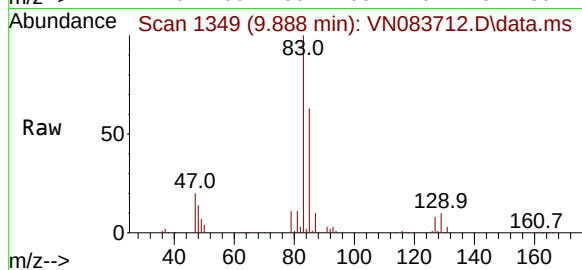
Tgt Ion: 83 Resp: 274291

Ion Ratio Lower Upper

83 100

85 63.4 49.4 74.2

127 7.6 7.3 10.9



#48

t-1,3-Dichloropropene

Concen: 101.072 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. -0.000 min

Lab File: VN083712.D

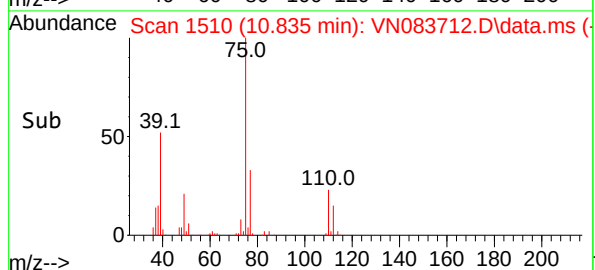
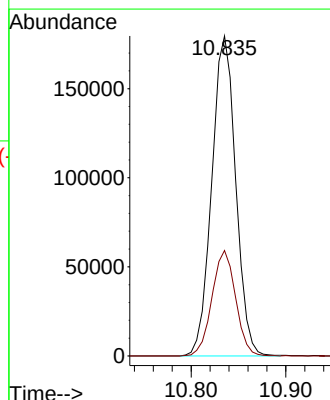
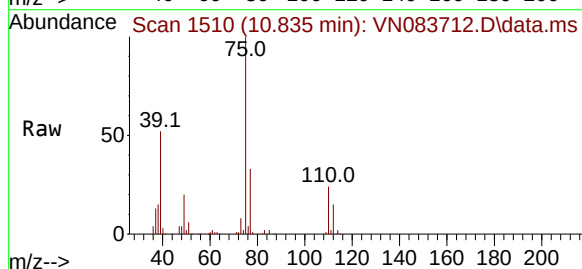
Acq: 09 Sep 2024 12:48

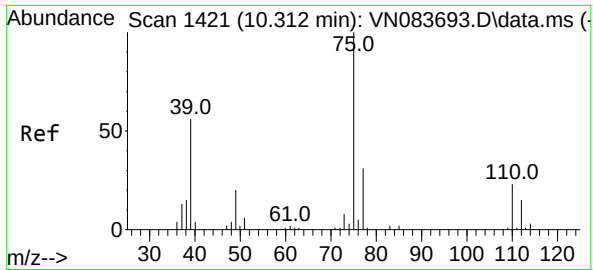
Tgt Ion: 75 Resp: 315419

Ion Ratio Lower Upper

75 100

77 32.9 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 103.977 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

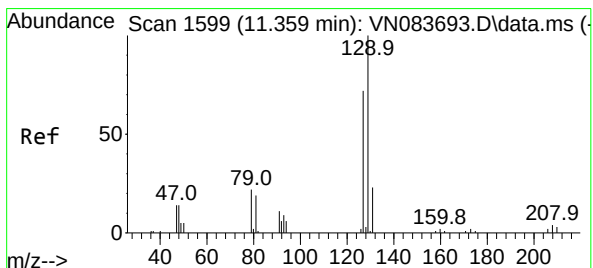
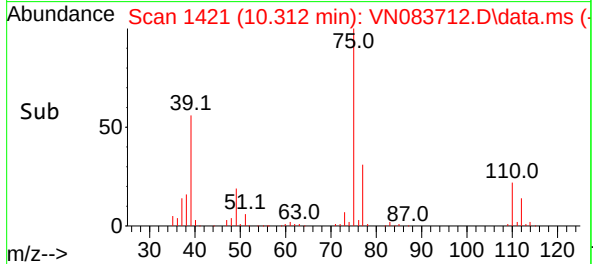
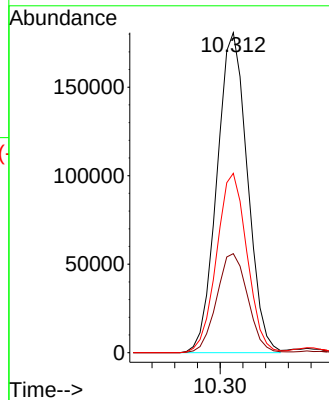
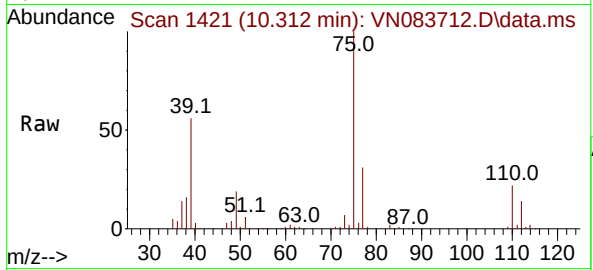
Tgt Ion: 75 Resp: 337464

Ion Ratio Lower Upper

75 100

77 30.9 24.9 37.3

39 56.1 31.0 46.6#



#53

Dibromochloromethane

Concen: 29.899 ug/l

RT: 11.359 min Scan# 1599

Delta R.T. -0.000 min

Lab File: VN083712.D

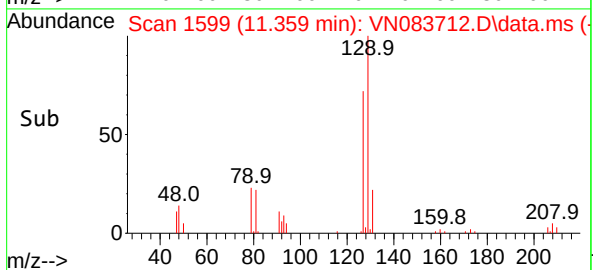
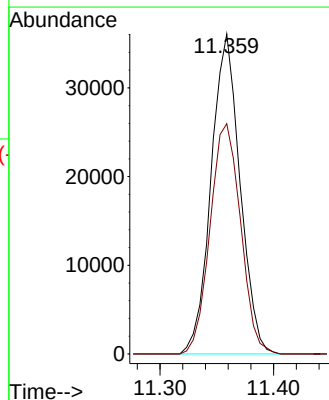
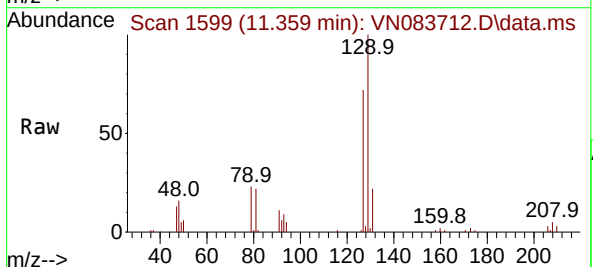
Acq: 09 Sep 2024 12:48

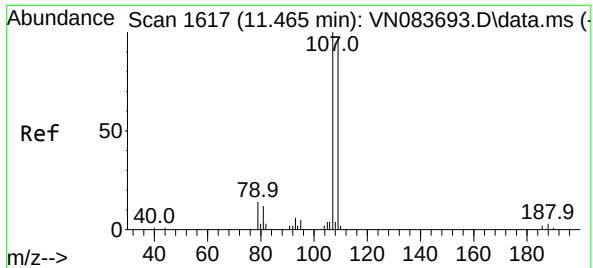
Tgt Ion: 129 Resp: 63667

Ion Ratio Lower Upper

129 100

127 75.9 39.4 118.1

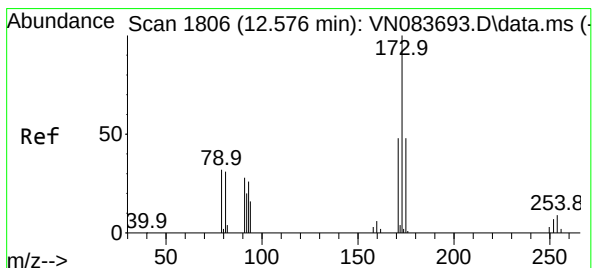
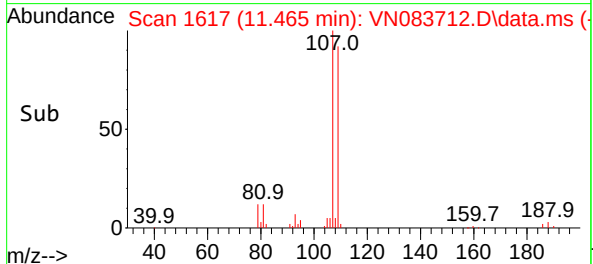
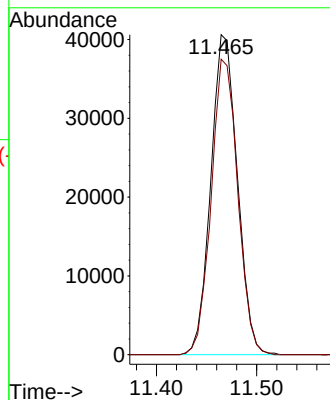
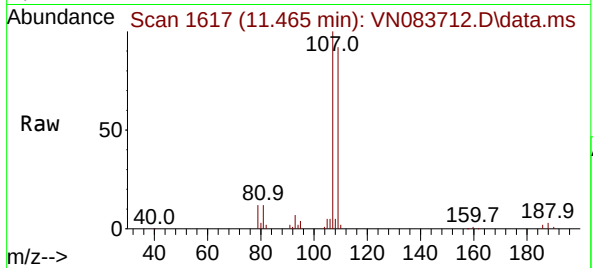




#54
1,2-Dibromoethane
Concen: 40.722 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

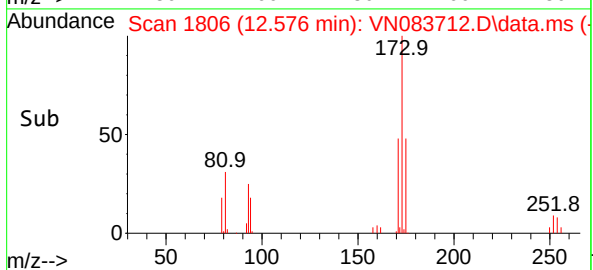
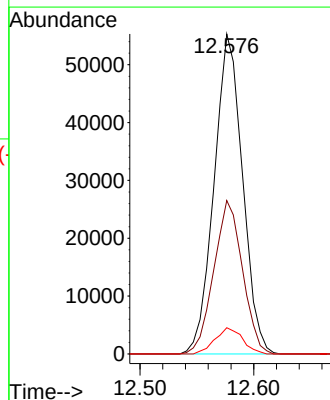
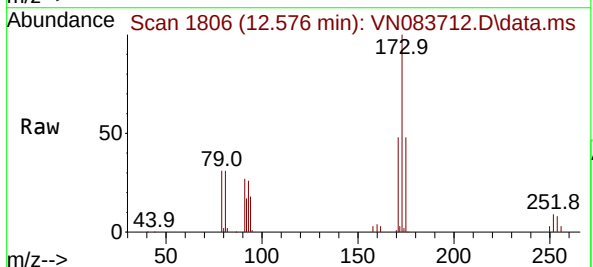
Instrument :
MSVOA_N
ClientSampleId :
PT-VOA-WP

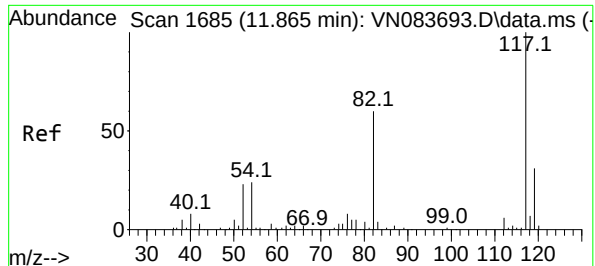
Tgt Ion:107 Resp: 74791
Ion Ratio Lower Upper
107 100
109 92.3 74.7 112.1



#56
Bromoform
Concen: 71.100 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

Tgt Ion:173 Resp: 96187
Ion Ratio Lower Upper
173 100
175 48.3 40.0 60.0
254 7.9 8.3 12.5#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

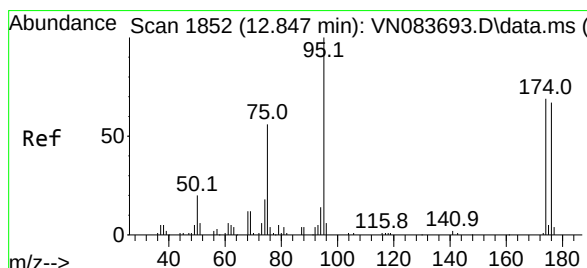
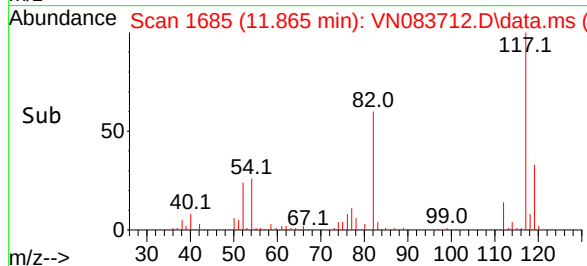
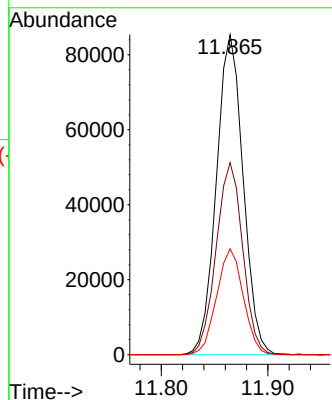
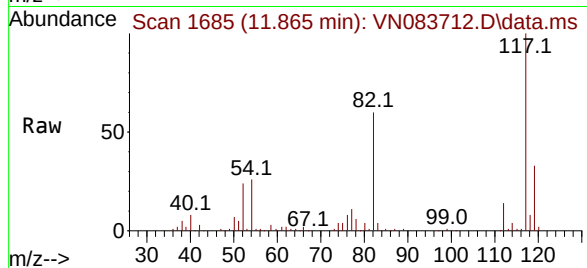
Tgt Ion:117 Resp: 148981

Ion Ratio Lower Upper

117 100

82 59.6 46.6 69.8

119 32.9 25.4 38.2



#60

4-Bromofluorobenzene

Concen: 29.935 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

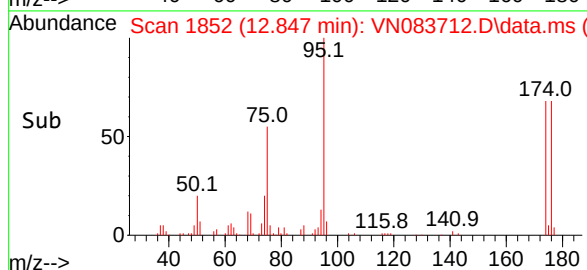
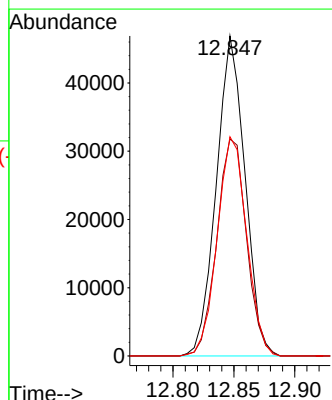
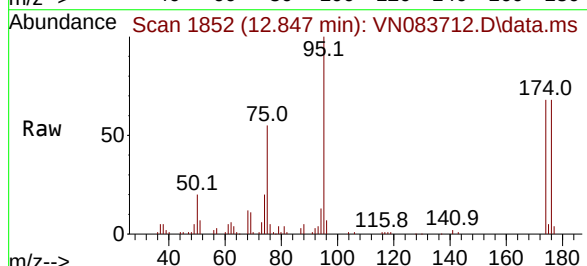
Tgt Ion: 95 Resp: 76864

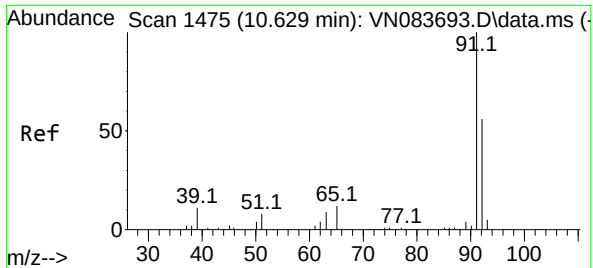
Ion Ratio Lower Upper

95 100

174 70.2 60.5 90.7

176 70.2 57.8 86.6





#62

Toluene

Concen: 98.086 ug/l

RT: 10.629 min Scan# 1475

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

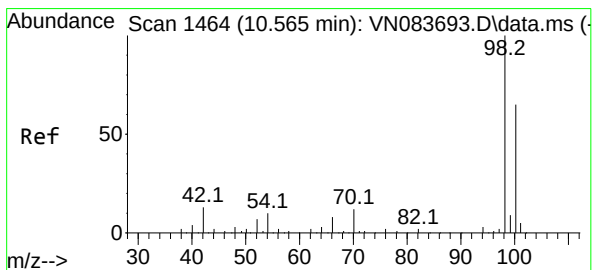
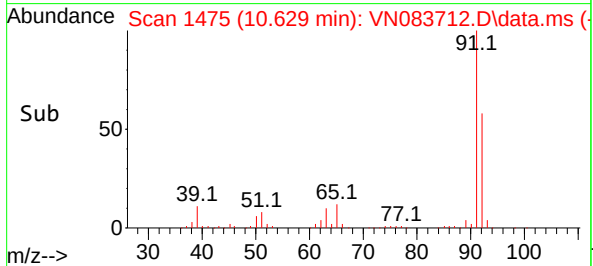
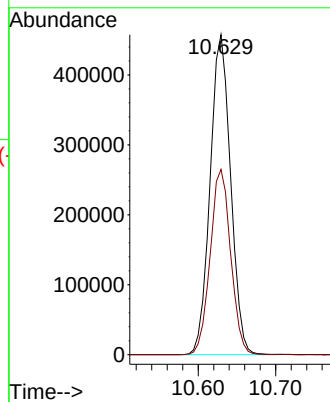
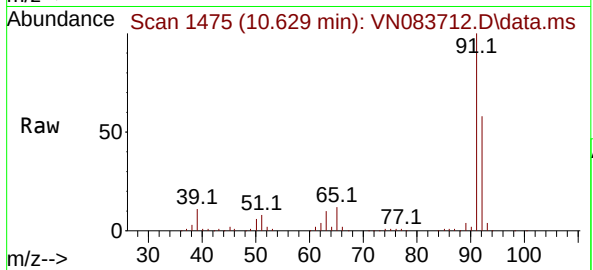
PT-VOA-WP

Tgt Ion: 91 Resp: 839936

Ion Ratio Lower Upper

91 100

92 57.8 46.5 69.7



#63

Toluene-d8

Concen: 30.055 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN083712.D

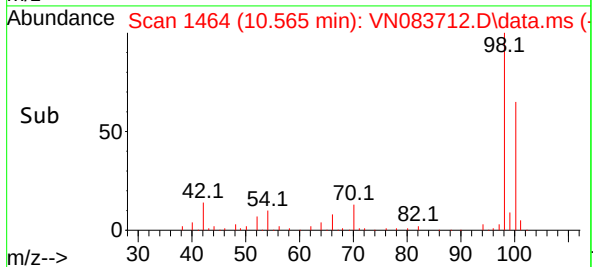
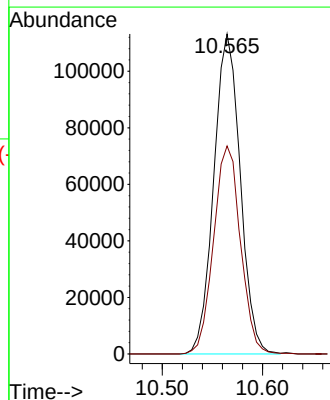
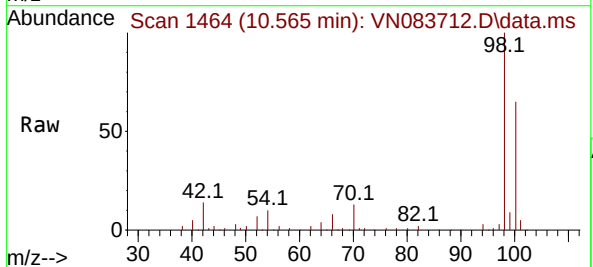
Acq: 09 Sep 2024 12:48

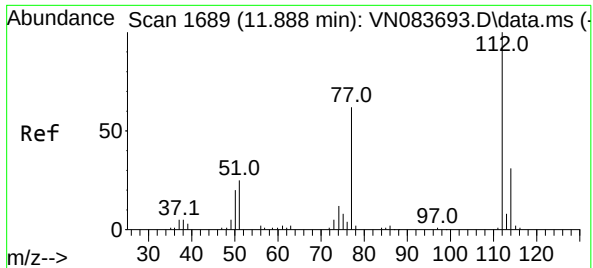
Tgt Ion: 98 Resp: 207330

Ion Ratio Lower Upper

98 100

100 66.0 52.7 79.1

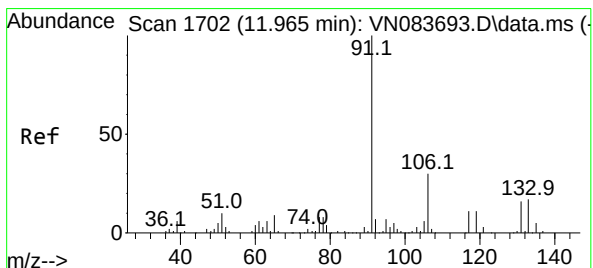
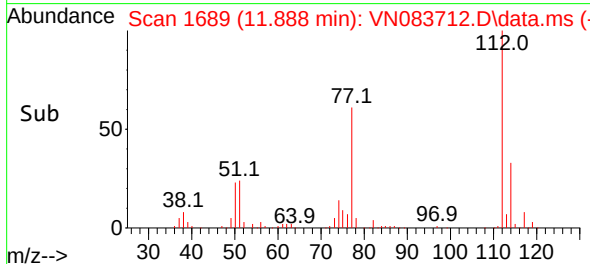
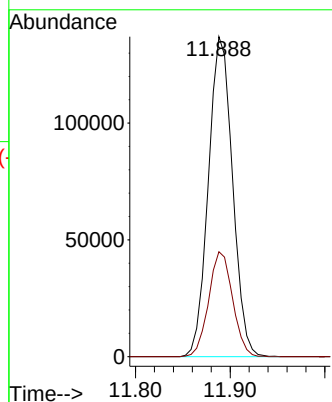
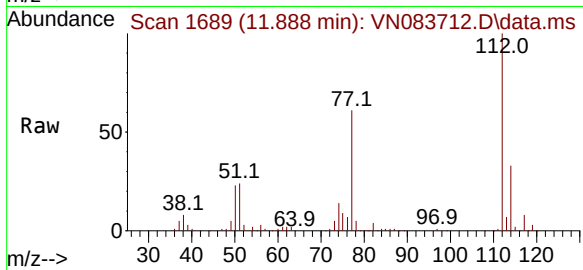




#64
Chlorobenzene
Concen: 45.783 ug/l
RT: 11.888 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

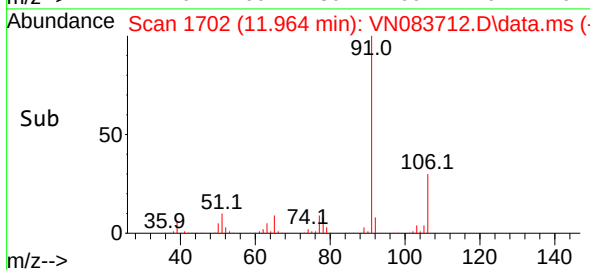
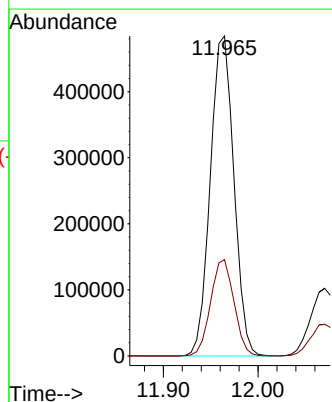
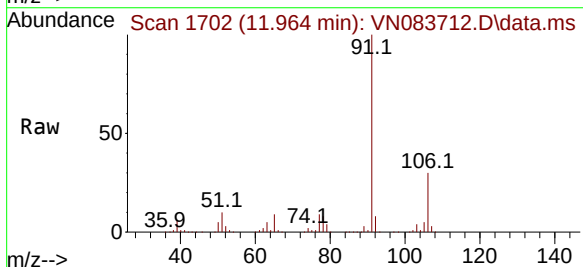
Instrument :
MSVOA_N
ClientSampleId :
PT-VOA-WP

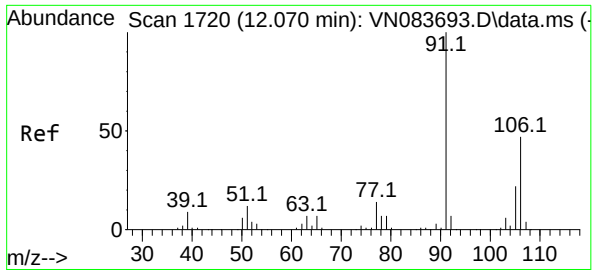
Tgt Ion:112 Resp: 242728
Ion Ratio Lower Upper
112 100
114 32.8 26.6 39.8



#66
Ethyl Benzene
Concen: 86.153 ug/l
RT: 11.964 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

Tgt Ion: 91 Resp: 838967
Ion Ratio Lower Upper
91 100
106 30.1 24.4 36.6

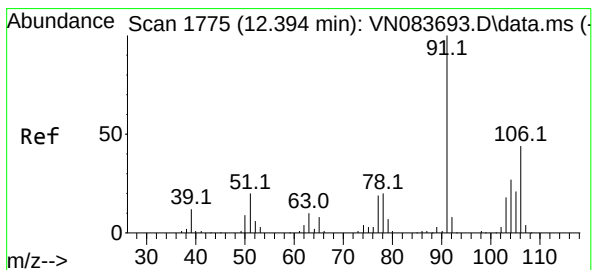
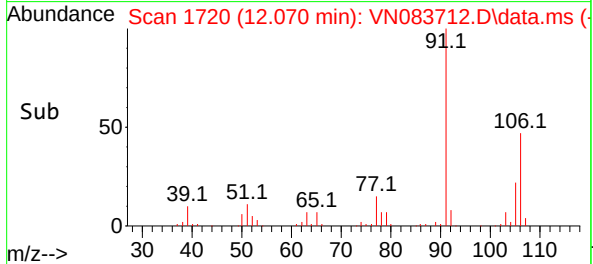
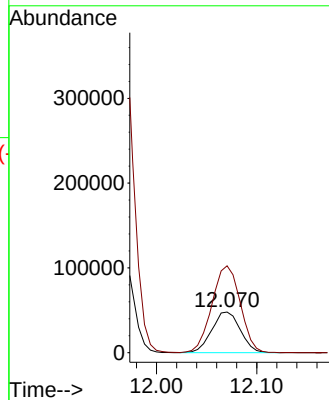
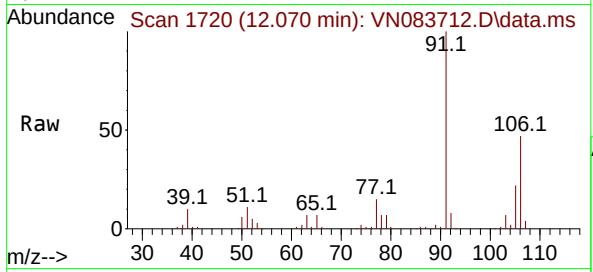




#67
m/p-Xylenes
Concen: 26.452 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

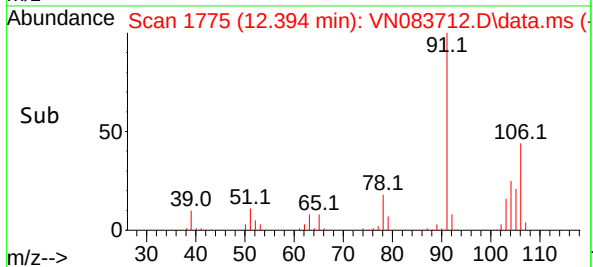
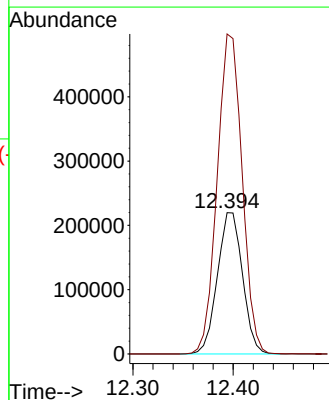
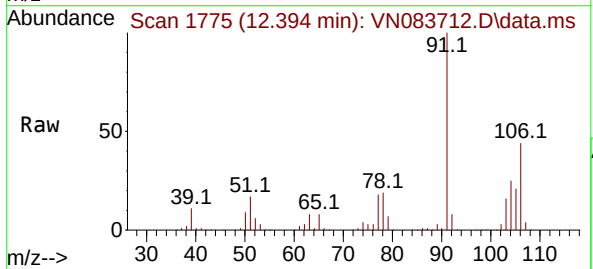
Instrument :
MSVOA_N
ClientSampleId :
PT-VOA-WP

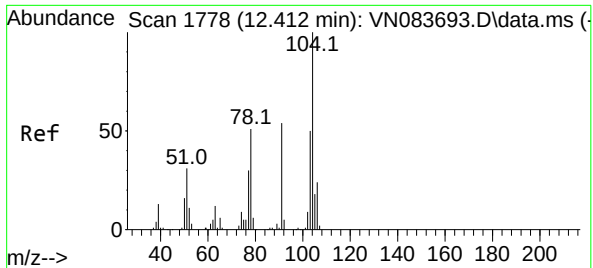
Tgt Ion:106 Resp: 94768
Ion Ratio Lower Upper
106 100
91 212.2 166.6 249.8



#68
o-Xylene
Concen: 110.157 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. -0.000 min
Lab File: VN083712.D
Acq: 09 Sep 2024 12:48

Tgt Ion:106 Resp: 381963
Ion Ratio Lower Upper
106 100
91 225.3 110.0 330.0





#69

Styrene

Concen: 101.482 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

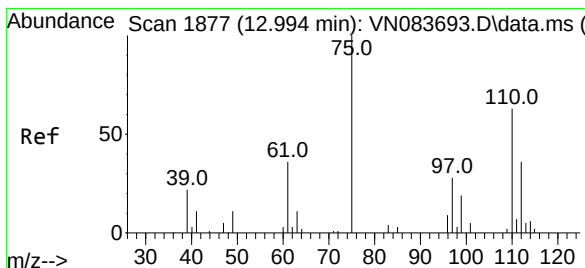
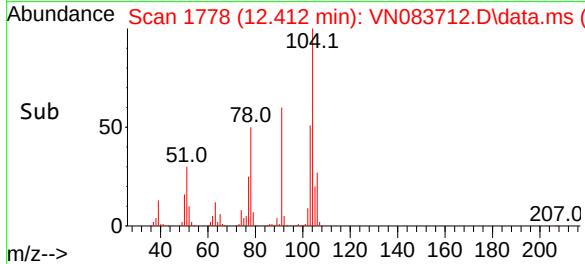
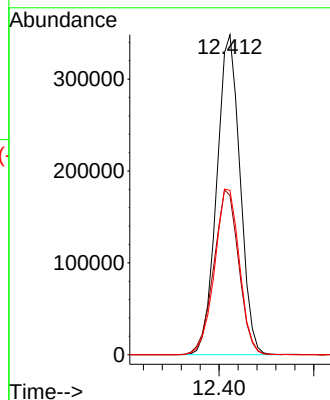
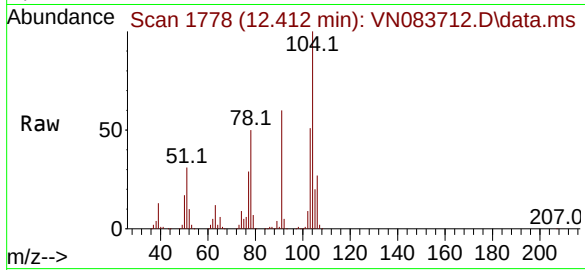
Tgt Ion:104 Resp: 594560

Ion Ratio Lower Upper

104 100

78 55.3 42.6 64.0

103 55.2 43.7 65.5



#72

1,2,3-Trichloropropane

Concen: 102.142 ug/l

RT: 12.994 min Scan# 1877

Delta R.T. -0.000 min

Lab File: VN083712.D

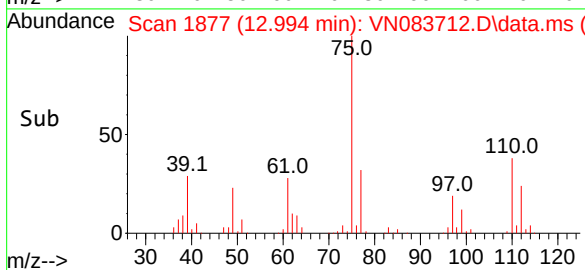
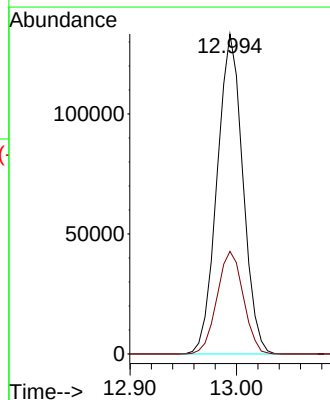
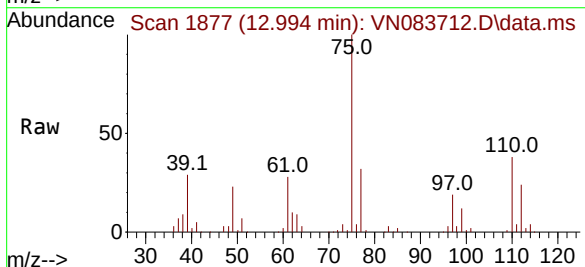
Acq: 09 Sep 2024 12:48

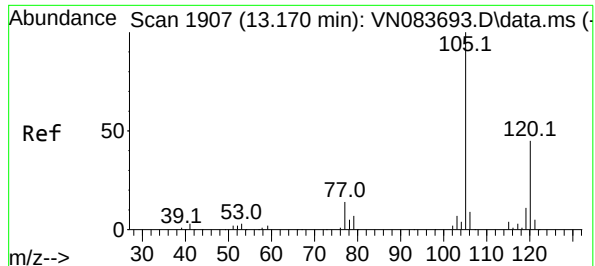
Tgt Ion: 75 Resp: 223815

Ion Ratio Lower Upper

75 100

77 32.7 0.0 367.6





#76

1,3,5-Trimethylbenzene

Concen: 30.407 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

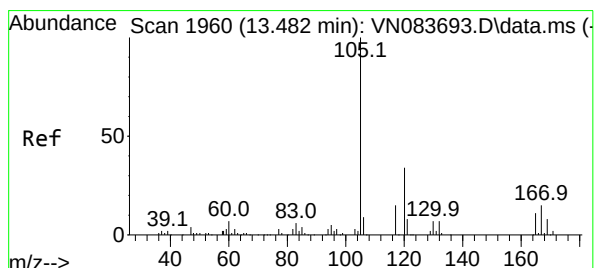
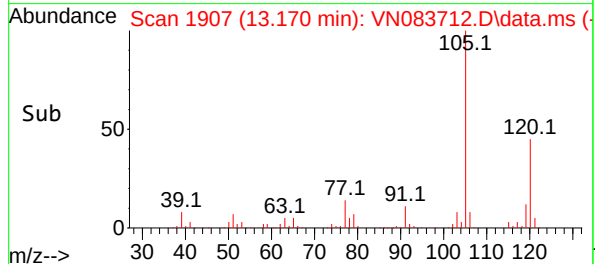
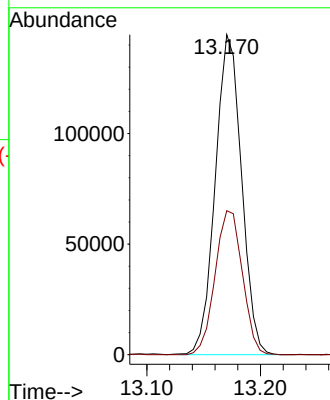
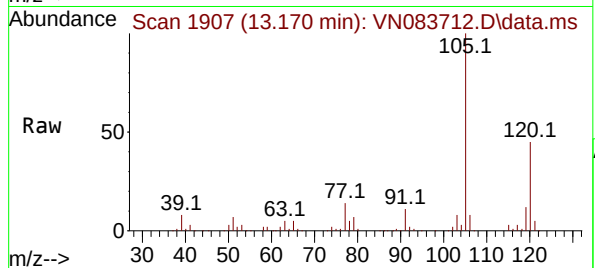
PT-VOA-WP

Tgt Ion:105 Resp: 232418

Ion Ratio Lower Upper

105 100

120 46.7 0.0 95.8



#80

1,2,4-Trimethylbenzene

Concen: 15.329 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. -0.000 min

Lab File: VN083712.D

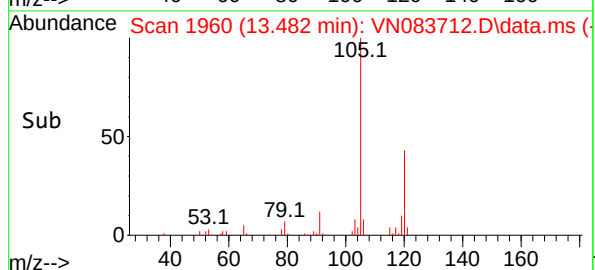
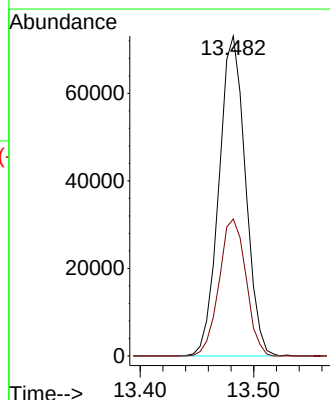
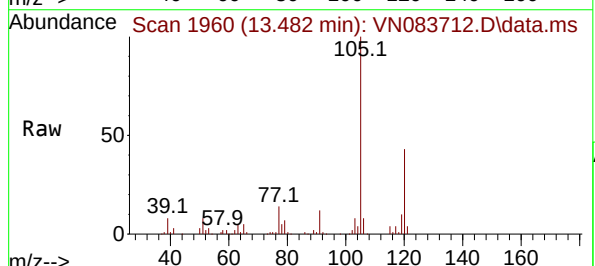
Acq: 09 Sep 2024 12:48

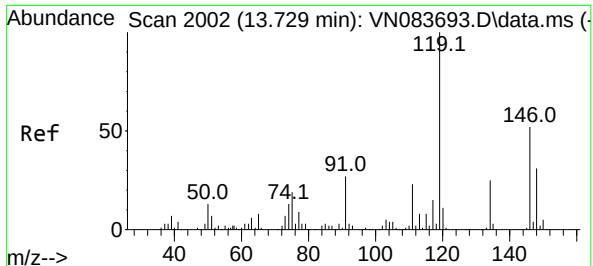
Tgt Ion:105 Resp: 118401

Ion Ratio Lower Upper

105 100

120 43.5 0.0 86.8





#83

1,3-Dichlorobenzene

Concen: 94.170 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

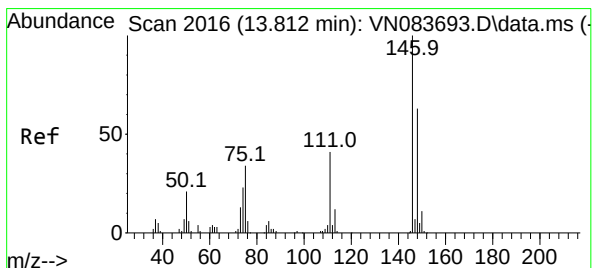
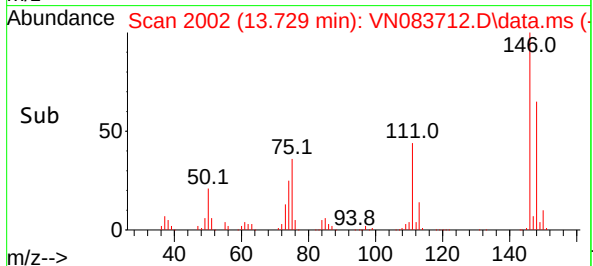
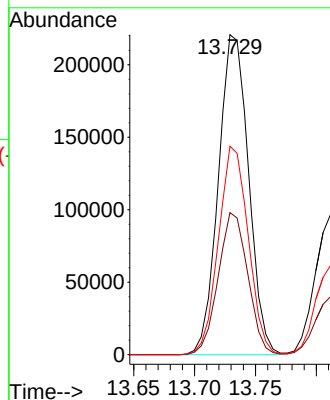
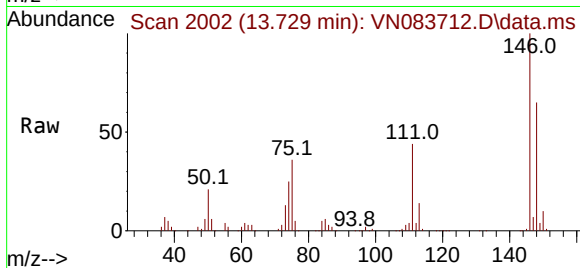
Tgt Ion:146 Resp: 380935

Ion Ratio Lower Upper

146 100

111 43.5 22.4 67.0

148 64.2 32.1 96.5



#84

1,4-Dichlorobenzene

Concen: 39.245 ug/l

RT: 13.811 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

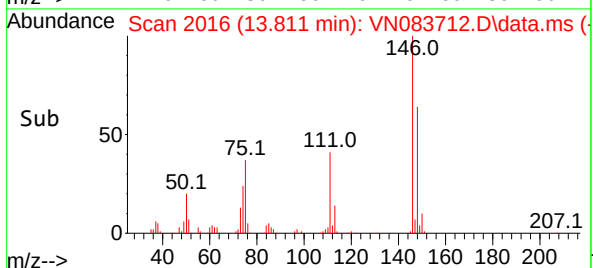
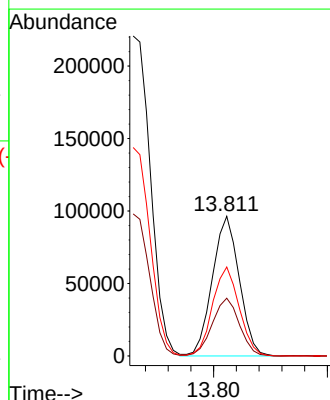
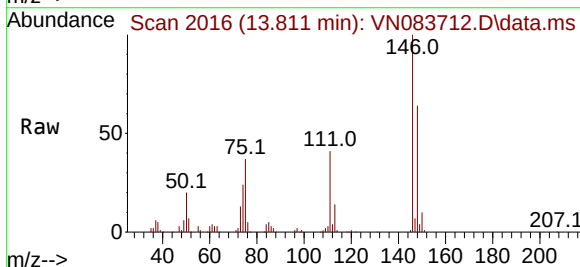
Tgt Ion:146 Resp: 158714

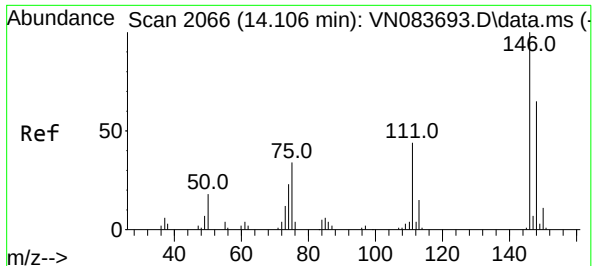
Ion Ratio Lower Upper

146 100

111 41.7 21.3 63.9

148 63.0 31.9 95.5





#87

1,2-Dichlorobenzene

Concen: 13.417 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP

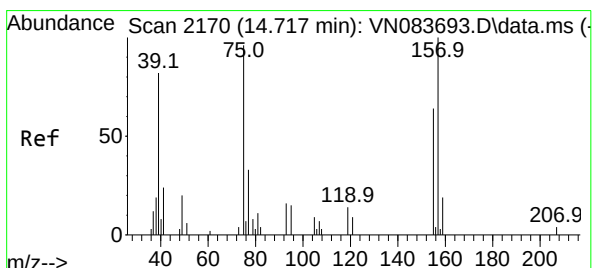
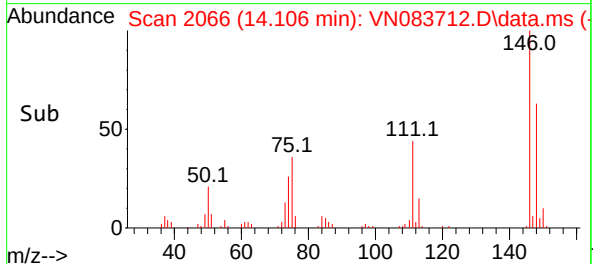
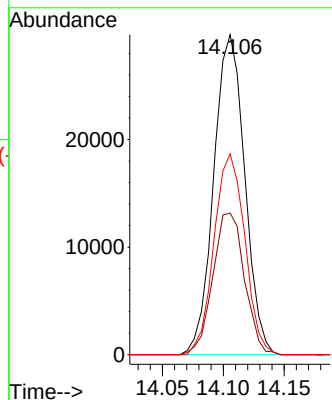
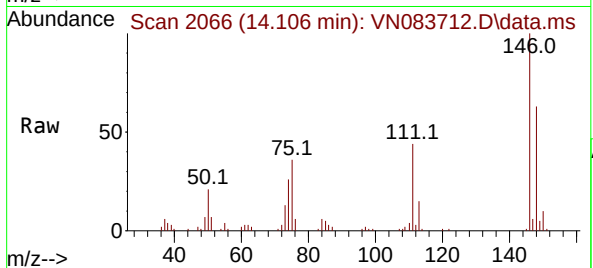
Tgt Ion:146 Resp: 52672

Ion Ratio Lower Upper

146 100

111 45.2 22.6 67.8

148 62.3 31.3 93.8



#88

1,2-Dibromo-3-Chloropropane

Concen: 120.069 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. -0.000 min

Lab File: VN083712.D

Acq: 09 Sep 2024 12:48

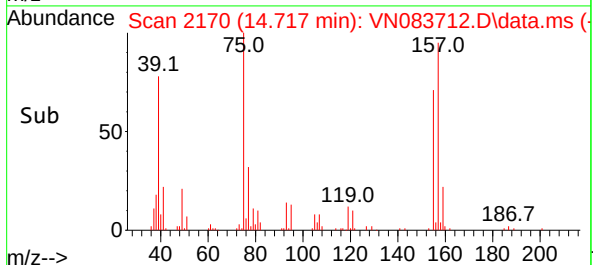
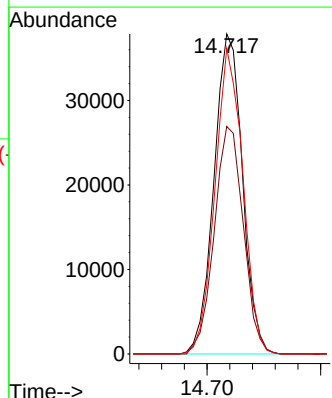
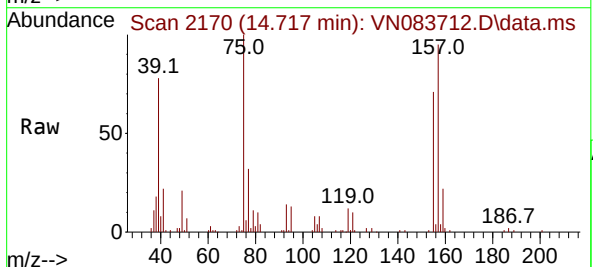
Tgt Ion: 75 Resp: 65947

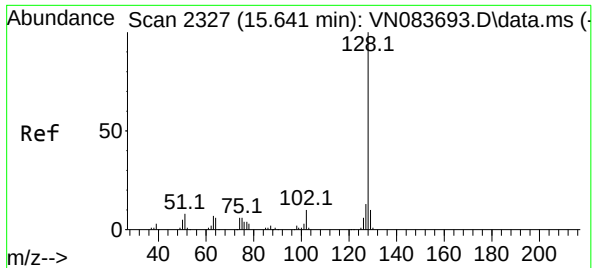
Ion Ratio Lower Upper

75 100

155 72.6 61.7 92.5

157 93.6 83.6 125.4





#91

Naphthalene

Concen: 66.226 ug/l

RT: 15.641 min Scan# 21

Delta R.T. -0.000 min

Lab File: VN083712.D

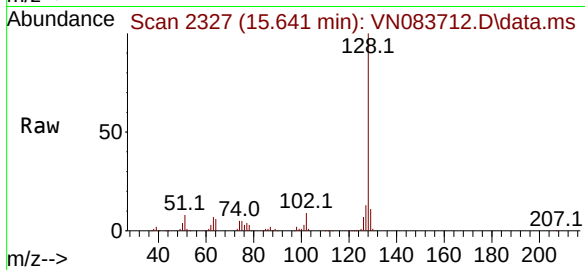
Acq: 09 Sep 2024 12:48

Instrument :

MSVOA_N

ClientSampleId :

PT-VOA-WP



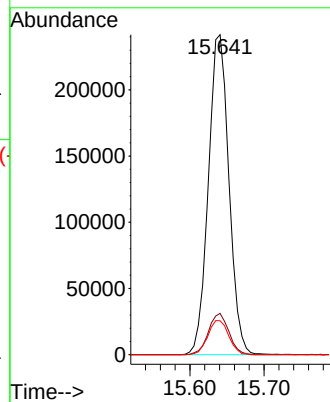
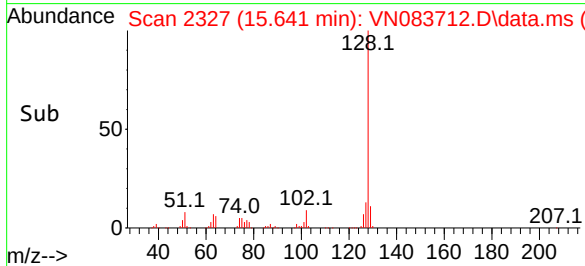
Tgt Ion:128 Resp: 465664

Ion Ratio Lower Upper

128 100

127 12.8 10.6 16.0

129 10.8 8.6 13.0





CALIBRATION SUMMARY

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VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845
 Instrument ID: MSVOA_N Calibration Date(s): 09/06/2024 09/06/2024
 Heated Purge: (Y/N) N Calibration Time(s): 11:58 13:33
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF150 = VN083690.D		RRF100 = VN083691.D		RRF050 = VN083692.D			
		RRF020 = VN083693.D		RRF005 = VN083694.D		RRF =			
COMPOUND	RRF150	RRF100	RRF050	RRF020	RRF005	RRF	RRF	% RSD	
Dichlorodifluoromethane	2.144	2.096	1.956	1.985	1.864		2.009	5.6	
Chloromethane	2.157	2.159	1.995	2.050	2.076		2.087	3.4	
Vinyl Chloride	2.219	2.261	2.069	2.101	2.079		2.146	4.1	
Ethyl Acetate	0.474	0.466	0.425	0.430	0.462		0.451	5	
Isopropyl Acetate	0.829	0.837	0.746	0.735	0.758		0.781	6.2	
Bromomethane	1.249	1.222	1.121	1.195	1.208		1.199	4	
Chloroethane	1.482	1.472	1.303	1.376	1.551		1.437	6.8	
Trichlorofluoromethane	3.745	3.724	3.447	3.455	3.618		3.598	4	
1,1,2-Trichlorotrifluoroethane	2.083	2.018	1.847	1.837	1.878		1.932	5.7	
tert-Butyl Alcohol	0.357	0.347	0.316	0.329	0.320		0.334	5.3	
Diethyl Ether	1.311	1.284	1.170	1.187	1.160		1.222	5.7	
1,1-Dichloroethene	1.959	1.975	1.785	1.782	1.821		1.865	5.1	
Acrolein	0.343	0.362	0.333	0.350	0.252		0.328	13.3	
Acrylonitrile	0.958	0.940	0.861	0.871	0.921		0.910	4.7	
Acetone	0.386	0.340	0.285	0.272	0.226		0.302	20.5	
Carbon Disulfide	5.498	5.449	5.042	5.123	5.236		5.270	3.8	
Methyl tert-Butyl Ether	7.123	6.990	6.327	6.456	6.233		6.626	6.1	
Methyl Acetate	2.239	2.202	2.034	2.072	2.696		2.249	11.8	
Methylene Chloride	2.133	2.155	1.938	1.983	1.991		2.040	4.8	
trans-1,2-Dichloroethene	2.032	2.024	1.845	1.891	1.870		1.932	4.6	
Vinyl Acetate	0.939	0.923	0.826	0.807	1.116		0.922	13.3	
1,1-Dichloroethane	4.011	3.981	3.560	3.618	3.680		3.770	5.6	
Cyclohexane	0.592	0.599	0.544	0.534	0.552		0.564	5.2	
2-Butanone	0.250	0.240	0.212	0.209	0.210		0.224	8.7	
Carbon Tetrachloride	0.576	0.586	0.525	0.512	0.552		0.550	5.8	
2,2-Dichloropropane	0.657	0.655	0.579	0.565	0.578		0.607	7.5	
cis-1,2-Dichloroethene	2.502	2.460	2.256	2.299	2.244		2.352	5.1	
Chloroform	4.234	4.201	3.823	3.886	3.833		3.995	5.1	
1,1,1-Trichloroethane	0.662	0.672	0.608	0.600	0.636		0.635	5	
Methylcyclohexane	0.621	0.614	0.549	0.525	0.539		0.570	7.8	

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



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845
 Instrument ID: MSVOA_N Calibration Date(s): 09/06/2024 09/06/2024
 Heated Purge: (Y/N) N Calibration Time(s): 11:58 13:33
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF150 = VN083690.D RRF100 = VN083691.D RRF050 = VN083692.D RRF020 = VN083693.D RRF005 = VN083694.D RRF =								
COMPOUND	RRF150	RRF100	RRF050	RRF020	RRF005	RRF	RRF	% RSD
1,1-Dichloropropene	0.496	0.503	0.454	0.448	0.478		0.476	5.1
Benzene	1.491	1.502	1.356	1.373	1.417		1.428	4.7
1,2-Dichloroethane	0.548	0.559	0.509	0.509	0.559		0.537	4.8
Trichloroethene	0.347	0.357	0.316	0.310	0.347		0.335	6.3
1,2-Dichloropropane	0.355	0.362	0.327	0.324	0.349		0.344	5
Dibromomethane	0.259	0.262	0.240	0.244	0.250		0.251	3.8
Bromodichloromethane	0.566	0.576	0.512	0.497	0.519		0.534	6.5
4-Methyl-2-Pentanone	0.487	0.492	0.456	0.458	0.485		0.476	3.7
Toluene	1.762	1.783	1.661	1.633	1.782		1.724	4.2
t-1,3-Dichloropropene	0.597	0.607	0.534	0.521	0.551		0.562	6.8
cis-1,3-Dichloropropene	0.626	0.635	0.557	0.538	0.566		0.584	7.4
1,1,2-Trichloroethane	0.333	0.341	0.306	0.302	0.316		0.320	5.4
1,3-Dichloropropane	0.585	0.602	0.547	0.546	0.608		0.577	5.1
2-Chloroethyl vinyl ether	0.230	0.208	0.197	0.229	0.224		0.218	6.6
2-Hexanone	0.386	0.377	0.343	0.340	0.352		0.359	5.7
Dibromochloromethane	0.414	0.418	0.372	0.352	0.362		0.383	7.9
1,2-Dibromoethane	0.352	0.355	0.313	0.310	0.323		0.331	6.5
Tetrachloroethene	0.323	0.330	0.296	0.291	0.348		0.317	7.6
Chlorobenzene	1.067	1.094	1.008	1.014	1.156		1.068	5.7
1,1,1,2-Tetrachloroethane	0.383	0.389	0.360	0.349	0.379		0.372	4.5
Hexachloroethane	0.313	0.324	0.292	0.267	0.269		0.293	8.7
Ethyl Benzene	2.043	2.073	1.879	1.799	2.010		1.961	5.9
m/p-Xylenes	0.757	0.762	0.697	0.673	0.718		0.721	5.3
o-Xylene	0.730	0.741	0.683	0.665	0.672		0.698	5
Styrene	1.233	1.272	1.147	1.102	1.145		1.180	5.9
Bromoform	0.265	0.269	0.237	0.223	0.224		0.244	9
Isopropylbenzene	1.931	1.981	1.809	1.700	1.792		1.843	6.1
1,1,2,2-Tetrachloroethane	0.511	0.529	0.482	0.484	0.510		0.503	4
1,2,3-Trichloropropane	0.450	0.454	0.417	0.423	0.462		0.441	4.5
Bromobenzene	0.420	0.435	0.408	0.396	0.457		0.423	5.7

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845
 Instrument ID: MSVOA_N Calibration Date(s): 09/06/2024 09/06/2024
 Heated Purge: (Y/N) N Calibration Time(s): 11:58 13:33
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF150 = VN083690.D		RRF100 = VN083691.D		RRF050 = VN083692.D		
		RRF020 = VN083693.D		RRF005 = VN083694.D		RRF =		
COMPOUND	RRF150	RRF100	RRF050	RRF020	RRF005	RRF	RRF	% RSD
n-propylbenzene	2.266	2.323	2.106	1.989	2.102		2.157	6.3
2-Chlorotoluene	1.363	1.423	1.297	1.256	1.393		1.346	5.1
1,3,5-Trimethylbenzene	1.590	1.653	1.522	1.453	1.478		1.539	5.3
4-Chlorotoluene	1.386	1.433	1.298	1.263	1.445		1.365	5.9
tert-butylbenzene	1.388	1.456	1.282	1.283	1.321		1.346	5.6
1,2,4-Trimethylbenzene	1.613	1.676	1.535	1.444	1.509		1.555	5.8
sec-Butylbenzene	1.935	2.000	1.798	1.667	1.792		1.839	7.1
p-Isopropyltoluene	1.653	1.704	1.524	1.403	1.451		1.547	8.3
1,3-Dichlorobenzene	0.809	0.843	0.772	0.755	0.893		0.815	6.8
1,4-Dichlorobenzene	0.816	0.843	0.771	0.756	0.885		0.814	6.4
n-Butylbenzene	1.492	1.505	1.306	1.208	1.314		1.365	9.4
1,2-Dichlorobenzene	0.807	0.827	0.764	0.729	0.826		0.791	5.4
1,2-Dibromo-3-Chloropropane	0.115	0.115	0.109	0.104	0.110		0.111	4.3
1,2,4-Trichlorobenzene	0.443	0.452	0.411	0.396	0.464		0.433	6.6
Hexachlorobutadiene	0.186	0.187	0.174	0.160	0.190		0.179	7.1
Naphthalene	1.468	1.518	1.365	1.300	1.428		1.416	6
1,2,3-Trichlorobenzene	0.443	0.452	0.411	0.396	0.464		0.433	6.6
1,2-Dichloroethane-d4	2.793	2.739	2.747	2.768	2.665		2.742	1.7
Toluene-d8	1.376	1.374	1.381	1.385	1.429		1.389	1.6
4-Bromofluorobenzene	0.537	0.524	0.519	0.503	0.503		0.517	2.8
n-amyl Acetate	0.767	0.771	0.682	0.641	0.597		0.692	11.1
Allyl chloride	3.528	3.494	3.156	3.113	3.058		3.270	6.8
t-1,4-Dichloro-2-butene	0.207	0.206	0.180	0.171	0.169		0.187	10
Methacrylonitrile	0.257	0.259	0.235	0.244	0.266		0.252	4.9
1,4-Dioxane	6.137	6.351	5.826	6.120	6.018		6.091	3.1
Methyl methacrylate	0.406	0.403	0.363	0.349	0.369		0.378	6.8

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
 Method File : 624N090624W.M
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 Last Update : Fri Sep 06 23:42:47 2024
 Response Via : Initial Calibration

Calibration Files

5 =VN083694.D 20 =VN083693.D 50 =VN083692.D 100 =VN083691.D 150 =VN083690.D

Compound		5	20	50	100	150	Avg	%RSD

1) I	Bromochloromethane	-----ISTD-----						
2) M	Dichlorodifluoro...	1.864	1.985	1.956	2.096	2.144	2.009	5.58
3) M	Chloromethane	2.076	2.050	1.995	2.159	2.157	2.087	3.38
4) M	Vinyl Chloride	2.079	2.101	2.069	2.261	2.219	2.146	4.11
5) M	Bromomethane	1.208	1.195	1.121	1.222	1.249	1.199	4.00
6) M	Chloroethane	1.551	1.376	1.303	1.472	1.482	1.437	6.76
7) M	Trichlorofluorom...	3.618	3.455	3.447	3.724	3.745	3.598	3.96
8) T	Diethyl Ether	1.160	1.187	1.170	1.284	1.311	1.222	5.72
9)	1,1,2-Trichlorot...	1.877	1.837	1.847	2.018	2.083	1.932	5.74
10) M	1,1-Dichloroethene	1.821	1.782	1.785	1.975	1.959	1.865	5.11
11)	Methyl Iodide	2.326	2.438	2.459	2.709	2.731	2.533	7.04
12)	Methyl Acetate	2.696	2.072	2.034	2.202	2.239	2.249	11.76
13) M	Acrolein	0.252	0.350	0.333	0.362	0.343	0.328	13.31
14) M	Acrylonitrile	0.921	0.871	0.861	0.940	0.958	0.910	4.69
15) M	Acetone	0.226	0.272	0.285	0.340	0.386	0.302	20.54
16) M	Carbon Disulfide	5.236	5.123	5.042	5.449	5.498	5.269	3.78
17)	Allyl chloride	3.058	3.113	3.156	3.494	3.528	3.270	6.82
18) M	Methylene Chloride	1.991	1.983	1.938	2.155	2.133	2.040	4.77
19) M	trans-1,2-Dichlo...	1.870	1.891	1.845	2.024	2.032	1.932	4.58
20) T	Diisopropyl ether	6.415	6.156	6.254	6.983	7.207	6.603	7.05
21) M	1,1-Dichloroethane	3.680	3.618	3.560	3.981	4.011	3.770	5.59
22) M	cis-1,2-Dichloro...	2.244	2.299	2.256	2.460	2.502	2.352	5.11
23) M	tert-Butyl Alcohol	0.320	0.329	0.316	0.347	0.357	0.334	5.31
24) M	Methyl tert-Buty...	6.233	6.456	6.327	6.990	7.123	6.626	6.10
25) M	Chloroform	3.833	3.886	3.823	4.201	4.234	3.995	5.12
26)	Cyclohexane	3.099	3.187	3.220	3.527	3.569	3.320	6.41
27) s	1,2-Dichloroetha...	2.665	2.768	2.747	2.739	2.793	2.742	1.75
28) I	1,4-Difluorobenzene	-----ISTD-----						
29)	1,1-Dichloropropene	0.478	0.448	0.454	0.503	0.496	0.476	5.14
30) M	2-Butanone	0.210	0.209	0.212	0.240	0.250	0.224	8.67
31)	2,2-Dichloropropane	0.578	0.565	0.579	0.655	0.657	0.607	7.46
32) M	1,1,1-Trichloroe...	0.636	0.600	0.608	0.672	0.662	0.635	5.00
33) M	Carbon Tetrachlo...	0.552	0.512	0.525	0.586	0.576	0.550	5.79
34) M	Benzene	1.417	1.373	1.356	1.502	1.491	1.428	4.65
35)	Methacrylonitrile	0.266	0.244	0.235	0.259	0.257	0.252	4.87
36) M	1,2-Dichloroethane	0.559	0.509	0.509	0.559	0.548	0.537	4.83
37) M	Trichloroethene	0.347	0.310	0.316	0.357	0.347	0.335	6.30
38)	Methylcyclohexane	0.539	0.525	0.549	0.614	0.621	0.570	7.81
39) M	1,2-Dichloropropane	0.349	0.324	0.327	0.362	0.355	0.344	4.99
40)	Dibromomethane	0.250	0.244	0.240	0.262	0.259	0.251	3.77
41) M	Bromodichloromet...	0.519	0.497	0.512	0.576	0.566	0.534	6.54
42) M	Vinyl Acetate	1.116	0.807	0.826	0.923	0.939	0.922	13.30
43)	Ethyl Acetate	0.462	0.430	0.425	0.466	0.474	0.451	4.97
44)	Isopropyl Acetate	0.758	0.735	0.746	0.837	0.829	0.781	6.19
45) T	1,4-Dioxane	0.006	0.006	0.006	0.006	0.006	0.006	3.14
46)	Methyl methacrylate	0.369	0.349	0.363	0.403	0.406	0.378	6.75
47)	n-amyl Acetate	0.597	0.641	0.682	0.771	0.767	0.692	11.09
48) M	t-1,3-Dichloropr...	0.551	0.521	0.534	0.607	0.597	0.562	6.78
49) T	cis-1,3-Dichloro...	0.566	0.538	0.557	0.635	0.626	0.584	7.42
50) M	1,1,2-Trichloroe...	0.316	0.302	0.306	0.341	0.333	0.320	5.37
51)	Ethyl methacrylate	0.499	0.526	0.525	0.594	0.588	0.546	7.71
52)	1,3-Dichloropropane	0.608	0.546	0.547	0.602	0.585	0.577	5.10
53) M	Dibromochloromet...	0.362	0.352	0.372	0.418	0.414	0.383	7.90
54) M	1,2-Dibromoethane	0.323	0.310	0.313	0.355	0.352	0.331	6.48
55) M	2-Chloroethyl vi...	0.224	0.229	0.197	0.208	0.230	0.218	6.61
56) M	Bromoform	0.224	0.223	0.237	0.269	0.265	0.244	8.99

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 624N090624W.M

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57) I	Chlorobenzene-d5	-----ISTD-----						
58) M	4-Methyl-2-Penta...	0.485	0.458	0.456	0.492	0.487	0.476	3.68
59) M	2-Hexanone	0.352	0.340	0.343	0.377	0.386	0.359	5.75
60) S	4-Bromofluoroben...	0.503	0.503	0.519	0.524	0.537	0.517	2.84
61) M	Tetrachloroethene	0.348	0.291	0.296	0.330	0.323	0.317	7.55
62) M	Toluene	1.782	1.633	1.661	1.783	1.762	1.724	4.16
63) S	Toluene-d8	1.429	1.385	1.381	1.374	1.376	1.389	1.65
64) M	Chlorobenzene	1.156	1.014	1.008	1.094	1.067	1.068	5.72
65)	1,1,1,2-Tetrachl...	0.379	0.349	0.360	0.389	0.383	0.372	4.51
66) M	Ethyl Benzene	2.010	1.799	1.879	2.073	2.043	1.961	5.95
67) M	m/p-Xylenes	0.718	0.673	0.697	0.762	0.757	0.721	5.32
68) M	o-Xylene	0.672	0.665	0.683	0.741	0.730	0.698	4.96
69) M	Styrene	1.145	1.102	1.147	1.272	1.233	1.180	5.94
70)	Isopropylbenzene	1.792	1.700	1.809	1.981	1.931	1.843	6.13
71) M	1,1,2,2-Tetrachl...	0.510	0.484	0.482	0.529	0.511	0.503	4.03
72)	1,2,3-Trichlorop...	0.462	0.423	0.417	0.454	0.450	0.441	4.48
73)	Bromobenzene	0.457	0.396	0.408	0.435	0.420	0.423	5.65
74)	n-propylbenzene	2.102	1.989	2.106	2.323	2.266	2.157	6.27
75)	2-Chlorotoluene	1.393	1.256	1.297	1.423	1.363	1.346	5.11
76)	1,3,5-Trimethylb...	1.478	1.453	1.522	1.653	1.590	1.539	5.32
77)	t-1,4-Dichloro-2...	0.169	0.171	0.180	0.206	0.207	0.187	10.02
78)	4-Chlorotoluene	1.445	1.263	1.298	1.433	1.386	1.365	5.94
79)	tert-butylbenzene	1.321	1.283	1.282	1.456	1.388	1.346	5.58
80)	1,2,4-Trimethylb...	1.509	1.444	1.535	1.676	1.613	1.555	5.82
81)	sec-Butylbenzene	1.792	1.667	1.798	2.000	1.935	1.839	7.13
82)	p-Isopropyltoluene	1.451	1.403	1.524	1.704	1.653	1.547	8.35
83) M	1,3-Dichlorobenzene	0.893	0.755	0.772	0.843	0.809	0.815	6.83
84) M	1,4-Dichlorobenzene	0.885	0.756	0.771	0.843	0.816	0.814	6.45
85)	n-Butylbenzene	1.314	1.208	1.306	1.505	1.492	1.365	9.43
86) T	Hexachloroethane	0.269	0.267	0.292	0.324	0.313	0.293	8.70
87) M	1,2-Dichlorobenzene	0.826	0.729	0.764	0.827	0.807	0.791	5.43
88)	1,2-Dibromo-3-Ch...	0.110	0.104	0.109	0.115	0.115	0.111	4.30
89)	1,2,4-Trichlorob...	0.464	0.396	0.411	0.452	0.443	0.433	6.62
90)	Hexachlorobutadiene	0.190	0.160	0.174	0.187	0.186	0.179	7.11
91) M	Naphthalene	1.428	1.300	1.365	1.518	1.468	1.416	6.05
92)	1,2,3-Trichlorob...	0.464	0.396	0.411	0.452	0.443	0.433	6.62

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083690.D
 Acq On : 06 Sep 2024 11:58
 Operator : JC\MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC150

Quant Time: Sep 06 23:30:33 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:27:49 2024
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John
 Carlone

09/09/2024
 Supervised By :Mahesh
 Dadoda

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.818	128	31398	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	189169	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	174274	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	87679	30.550	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	101.833%
60) 4-Bromofluorobenzene	12.847	95	93633	31.174	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	103.900%
63) Toluene-d8	10.565	98	239716	29.706	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	99.033%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.124	85	336635	160.101	ug/l	98
3) Chloromethane	2.359	50	338607	154.991	ug/l	100
4) Vinyl Chloride	2.518	62	348412	155.131	ug/l	97
5) Bromomethane	2.906	94	196019	156.214	ug/l	96
6) Chloroethane	3.065	64	232703	154.727	ug/l	96
7) Trichlorofluoromethane	3.471	101	587924	156.143	ug/l	95
8) Diethyl Ether	3.953	74	205807	160.859	ug/l	87
9) 1,1,2-Trichlorotrifluo...	4.359	101	326971	161.663	ug/l	95
10) 1,1-Dichloroethene	4.324	96	307599	157.627	ug/l	82
11) Methyl Iodide	4.577	142	428686	161.727	ug/l	98
12) Methyl Acetate	5.018	43	351533	149.371	ug/l #	82
13) Acrolein	4.171	56	269495	784.641	ug/l	99
14) Acrylonitrile	5.718	53	751763	789.335	ug/l	98
15) Acetone	4.424	58	303036	959.183	ug/l #	67
16) Carbon Disulfide	4.694	76	863088	156.497	ug/l	97
17) Allyl chloride	5.012	41	553844	161.667	ug/l	85
18) Methylene Chloride	5.271	84	334858	156.844	ug/l	90
19) trans-1,2-Dichloroethene	5.777	96	318991	157.718	ug/l	95
20) Diisopropyl ether	6.665	45	1131470	163.721	ug/l	95
21) 1,1-Dichloroethane	6.559	63	629653	159.578	ug/l	96
22) cis-1,2-Dichloroethene	7.483	96	392740	159.544	ug/l	92
23) tert-Butyl Alcohol	5.536	59	280415	802.352	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	1118258	161.254	ug/l #	87
25) Chloroform	7.965	83	664688	158.958	ug/l	98
26) Cyclohexane	8.253	56	560255	161.214	ug/l #	89
29) 1,1-Dichloropropene	8.365	75	468837	156.254	ug/l	98
30) 2-Butanone	7.483	43	1183423	836.702	ug/l	96
31) 2,2-Dichloropropane	7.488	77	621435	162.450	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	626452	156.335	ug/l	98
33) Carbon Tetrachloride	8.359	117	544935	157.035	ug/l	97
34) Benzene	8.600	78	1409980	156.616	ug/l	98
35) Methacrylonitrile	7.777	41	243037	152.855	ug/l	93
36) 1,2-Dichloroethane	8.665	62	518126	153.088	ug/l #	94
37) Trichloroethene	9.353	130	328143	155.218	ug/l	96
38) Methylcyclohexane	9.600	83	587155	163.450	ug/l	96
39) 1,2-Dichloropropane	9.618	63	336152	155.142	ug/l	98
40) Dibromomethane	9.706	93	245139	154.730	ug/l	94
41) Bromodichloromethane	9.888	83	535642	158.993	ug/l	97
42) Vinyl Acetate	6.600	43	4441006	763.681	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083690.D
 Acq On : 06 Sep 2024 11:58
 Operator : JC\MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :John
 Carlone

09/09/2024
 Supervised By :Mahesh
 Dadoda

Quant Time: Sep 06 23:30:33 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:27:49 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	448321	157.479	ug/l	98
44) Isopropyl Acetate	8.688	43	784558	159.336	ug/l	91
45) 1,4-Dioxane	9.700	88	116100	3023.055	ug/l #	1
46) Methyl methacrylate	9.677	41	384453	161.311	ug/l	81
47) n-amyl Acetate	12.494	43	725440	166.323	ug/l	89
48) t-1,3-Dichloropropene	10.835	75	564506	159.299	ug/l	97
49) cis-1,3-Dichloropropene	10.312	75	591965	160.623	ug/l #	84
50) 1,1,2-Trichloroethane	11.018	97	315295	156.400	ug/l	97
51) Ethyl methacrylate	10.871	69	555946	161.418	ug/l	78
52) 1,3-Dichloropropane	11.159	76	552853	151.858	ug/l	99
53) Dibromochloromethane	11.359	129	391451	161.889	ug/l	98
54) 1,2-Dibromoethane	11.471	107	333191	159.763	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	1086274	791.404	ug/l	98
56) Bromoform	12.576	173	250373	162.983	ug/l #	98
58) 4-Methyl-2-Pentanone	10.447	43	2122727	768.178	ug/l #	89
59) 2-Hexanone	11.194	43	1679722	804.463	ug/l	89
61) Tetrachloroethene	11.100	164	281775	152.775	ug/l	95
62) Toluene	10.629	91	1535761	153.315	ug/l	100
64) Chlorobenzene	11.888	112	929353	149.851	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	333589	154.406	ug/l	98
66) Ethyl Benzene	11.965	91	1780342	156.289	ug/l	99
67) m/p-Xylenes	12.070	106	1319129	314.757	ug/l	98
68) o-Xylene	12.394	106	636232	156.858	ug/l	99
69) Styrene	12.412	104	1074725	156.815	ug/l	99
70) Isopropylbenzene	12.694	105	1683033	157.234	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	445602	152.420	ug/l	100
72) 1,2,3-Trichloropropane	12.994	75	392380m	153.378	ug/l	
73) Bromobenzene	12.982	156	366279	148.978	ug/l	94
74) n-propylbenzene	13.035	91	1974229	157.557	ug/l	100
75) 2-Chlorotoluene	13.123	91	1187471	151.841	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	1385400	154.944	ug/l	98
77) t-1,4-Dichloro-2-butene	12.735	75	179987	166.125	ug/l	89
78) 4-Chlorotoluene	13.223	91	1207880	152.299	ug/l	99
79) tert-butylbenzene	13.435	119	1209753	154.725	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	1405691	155.573	ug/l	100
81) sec-Butylbenzene	13.617	105	1686510	157.897	ug/l	100
82) p-Isopropyltoluene	13.729	119	1440587	160.303	ug/l	98
83) 1,3-Dichlorobenzene	13.735	146	705097	149.009	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	710765	150.244	ug/l	100
85) n-Butylbenzene	14.053	91	1299816	163.904	ug/l	98
86) Hexachloroethane	14.335	117	272497	160.011	ug/l	89
87) 1,2-Dichlorobenzene	14.106	146	703368	153.162	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	100140	155.862	ug/l	93
89) 1,2,4-Trichlorobenzene	15.841	180	385824	153.353	ug/l	98
90) Hexachlorobutadiene	15.500	225	161655	155.236	ug/l	99
91) Naphthalene	15.641	128	1279331	155.538	ug/l	99
92) 1,2,3-Trichlorobenzene	15.841	180	385824	153.353	ug/l	98

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

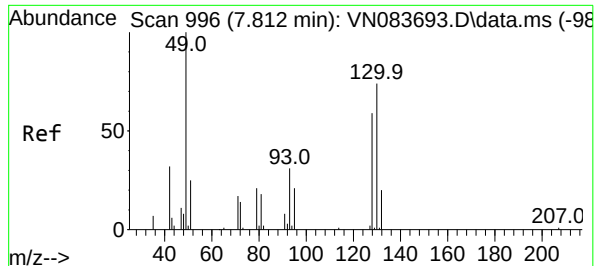
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

09/09/2024
Supervised By :Mahesh
Dadoda

09/09/2024





#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.818 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

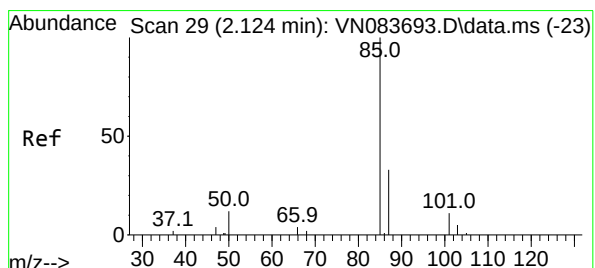
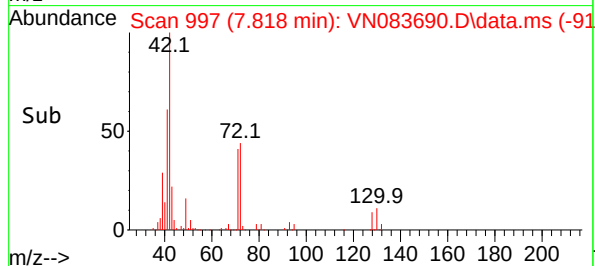
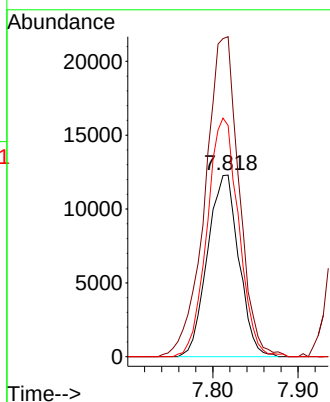
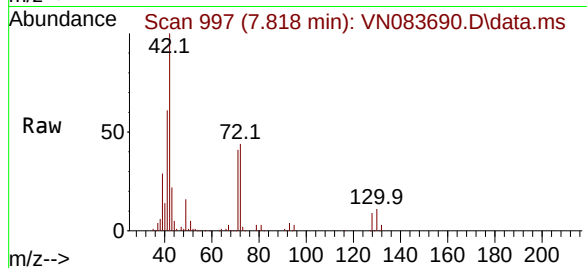
Tgt Ion:128 Resp: 31398
Ion Ratio Lower Upper
128 100
49 190.9 0.0 403.7
130 132.7 0.0 323.3

Manual Integrations
APPROVED

Reviewed By :John
Carlone

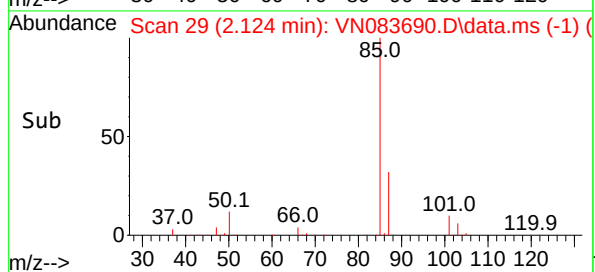
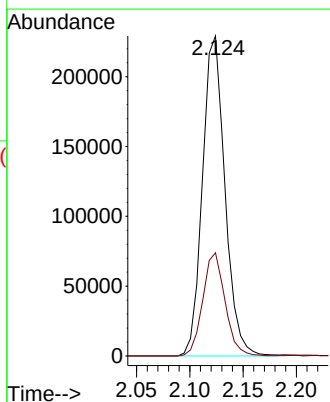
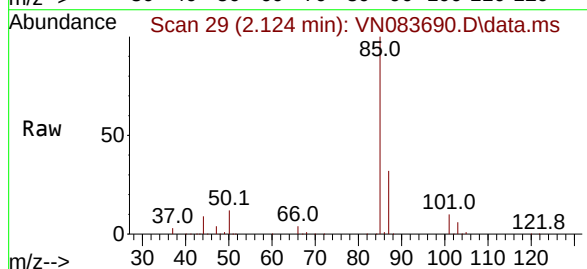
09/09/2024
Supervised By :Mahesh
Dadoda

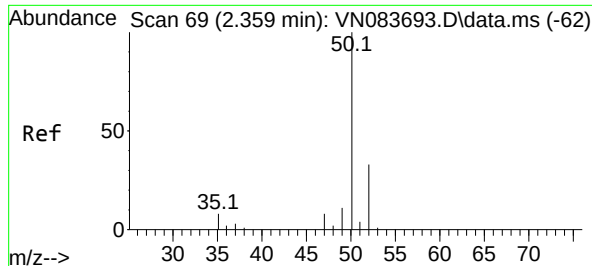
09/09/2024



#2
Dichlorodifluoromethane
Concen: 160.101 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion: 85 Resp: 336635
Ion Ratio Lower Upper
85 100
87 32.3 16.8 50.3





#3
Chloromethane
Concen: 154.991 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

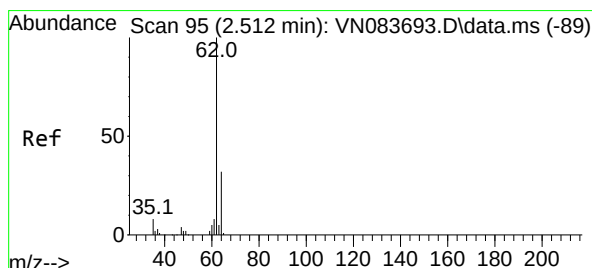
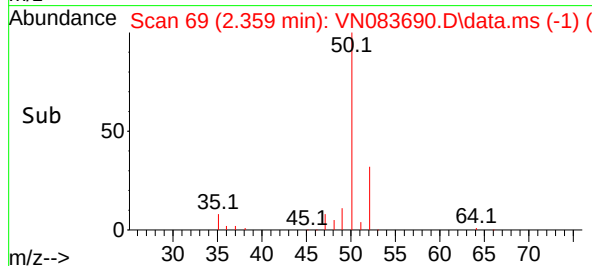
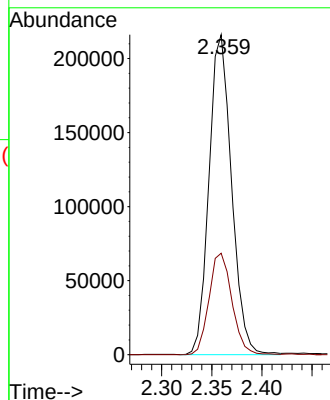
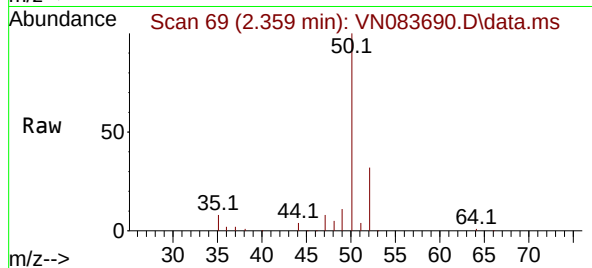
Tgt Ion: 50 Resp: 33860
Ion Ratio Lower Upper
50 100
52 31.7 25.4 38.0

Manual Integrations
APPROVED

Reviewed By :John
Carlone

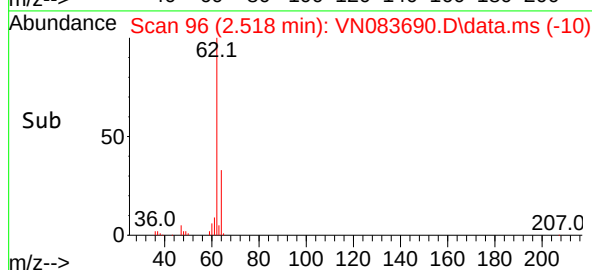
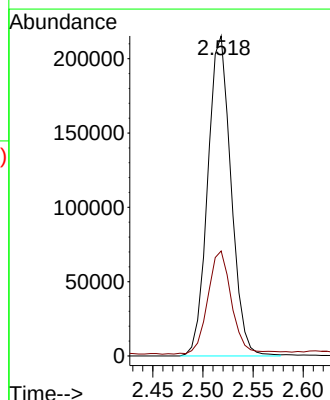
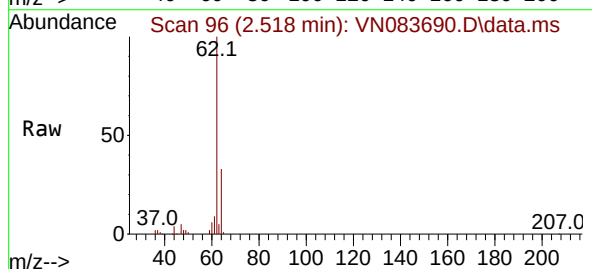
09/09/2024
Supervised By :Mahesh
Dadoda

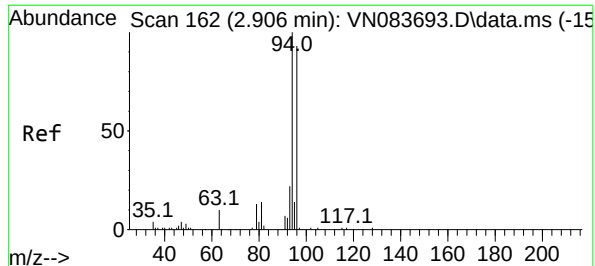
09/09/2024



#4
Vinyl Chloride
Concen: 155.131 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.006 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion: 62 Resp: 348412
Ion Ratio Lower Upper
62 100
64 31.9 24.1 36.1





#5

Bromomethane

Concen: 156.214 ug/l

RT: 2.906 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 94 Resp: 196019

Ion Ratio Lower Upper

94 100

96 95.2 72.8 109.2

Manual Integrations

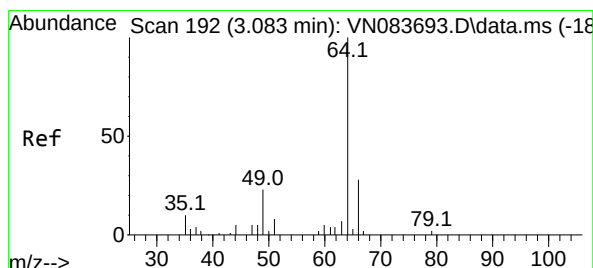
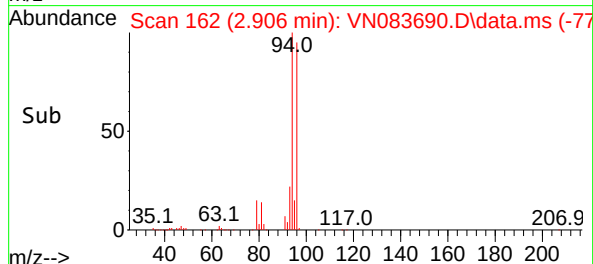
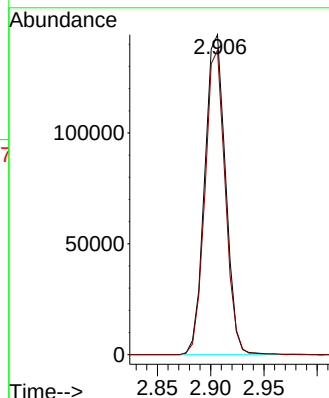
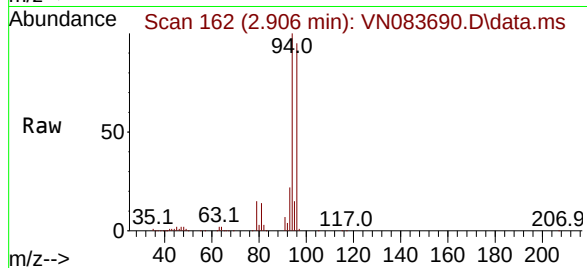
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#6

Chloroethane

Concen: 154.727 ug/l

RT: 3.065 min Scan# 189

Delta R.T. -0.018 min

Lab File: VN083690.D

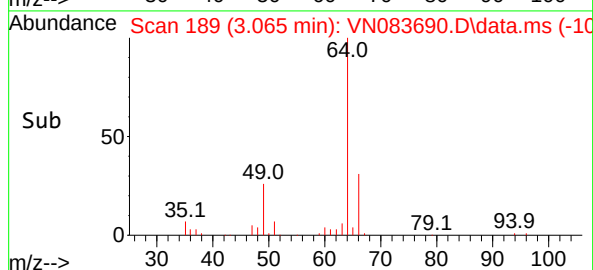
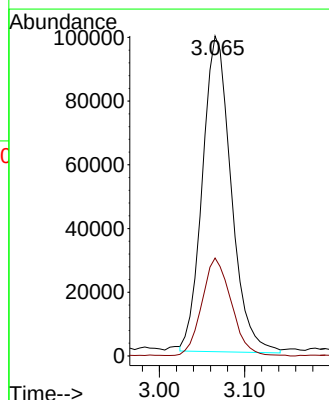
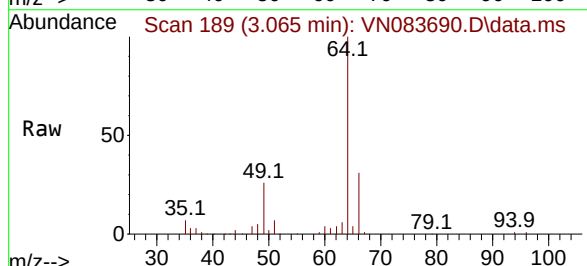
Acq: 06 Sep 2024 11:58

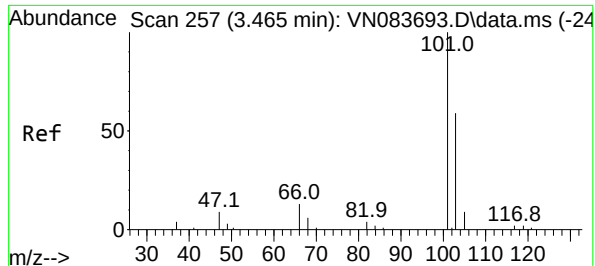
Tgt Ion: 64 Resp: 232703

Ion Ratio Lower Upper

64 100

66 30.9 26.7 40.1





#7
Trichlorofluoromethane
Concen: 156.143 ug/l
RT: 3.471 min Scan# 21
Delta R.T. 0.006 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

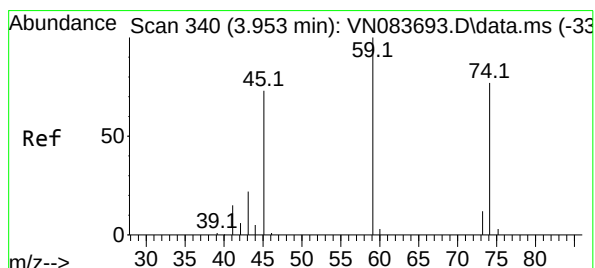
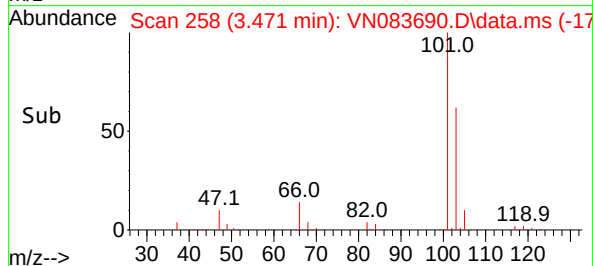
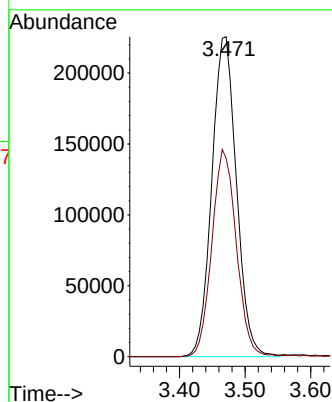
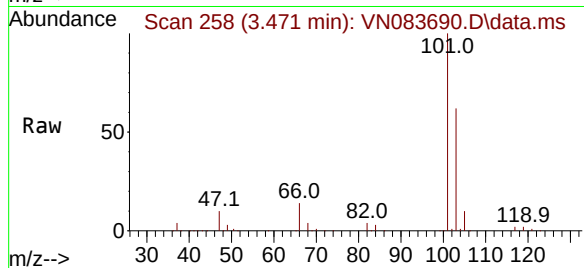
Tgt Ion:101 Resp: 587924
Ion Ratio Lower Upper
101 100
103 62.0 53.0 79.4

Manual Integrations
APPROVED

Reviewed By :John
Carlone

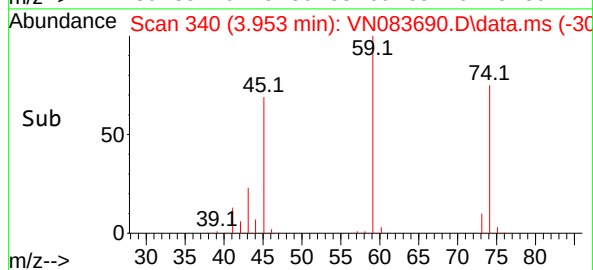
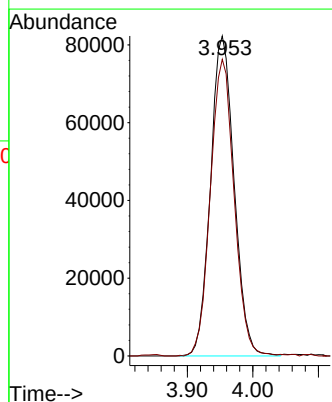
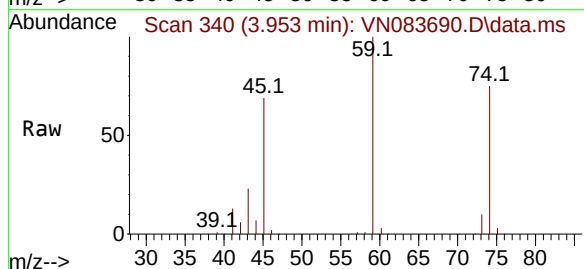
09/09/2024
Supervised By :Mahesh
Dadoda

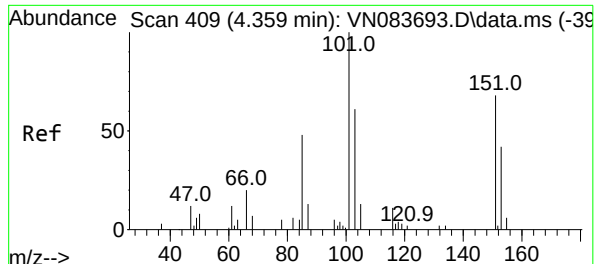
09/09/2024



#8
Diethyl Ether
Concen: 160.859 ug/l
RT: 3.953 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion: 74 Resp: 205807
Ion Ratio Lower Upper
74 100
45 93.1 16.4 147.4





#9

1,1,2-Trichlorotrifluoroethane

Concen: 161.663 ug/l

RT: 4.359 min Scan# 409

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion:	101	Resp:	32697
Ion	Ratio	Lower	Upper
101	100		
85	46.3	0.0	90.6
151	72.5	0.0	157.6

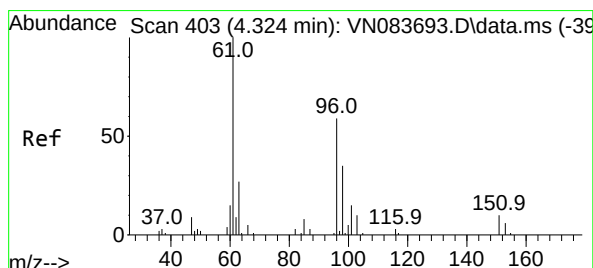
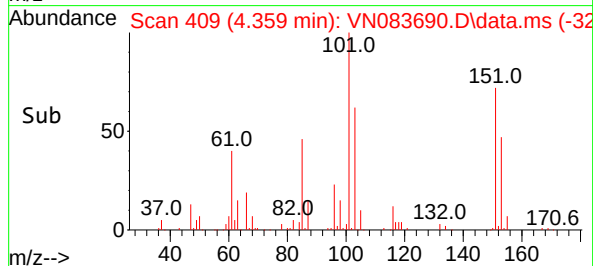
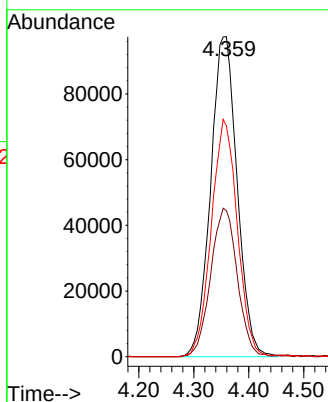
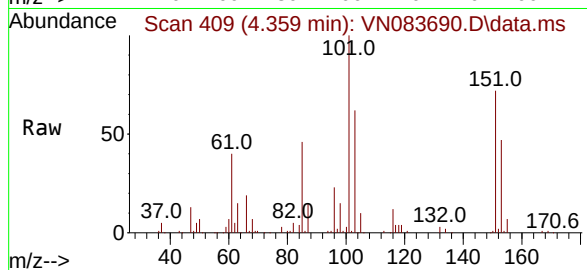
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#10

1,1-Dichloroethene

Concen: 157.627 ug/l

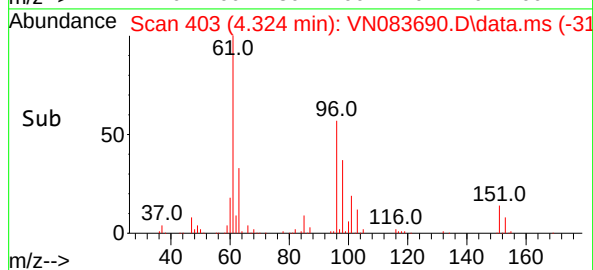
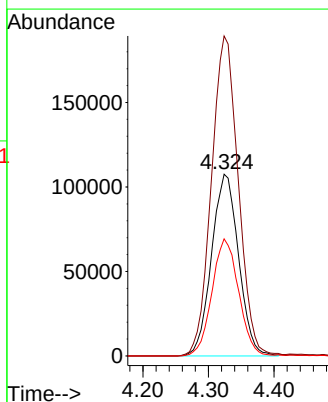
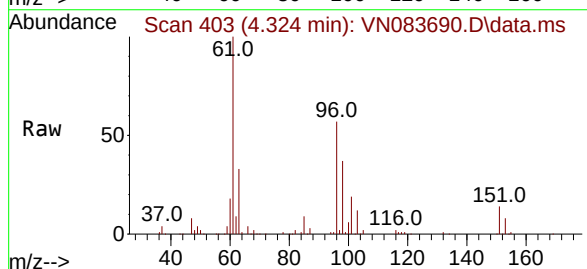
RT: 4.324 min Scan# 403

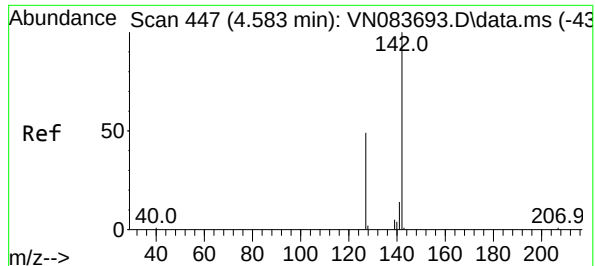
Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Tgt Ion:	96	Resp:	307599
Ion	Ratio	Lower	Upper
96	100		
61	176.1	117.6	176.4
98	64.5	48.4	72.6





#11

Methyl Iodide

Concen: 161.727 ug/l

RT: 4.577 min Scan# 447

Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:142	Resp: 42868
Ion Ratio	Lower Upper
142 100	
127 51.5	26.3 78.9
141 14.4	8.3 24.9

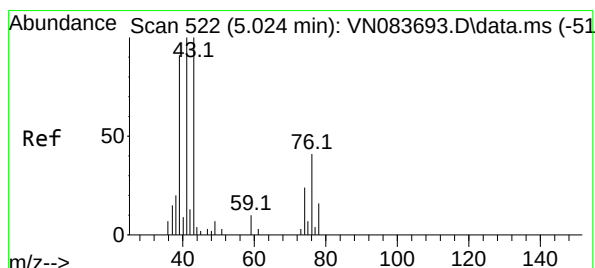
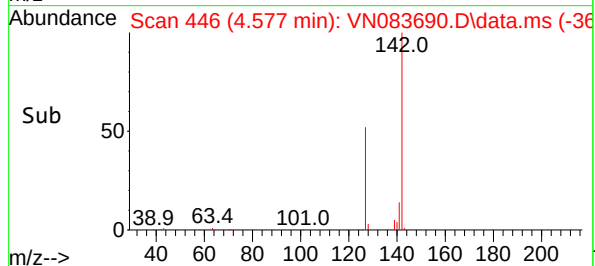
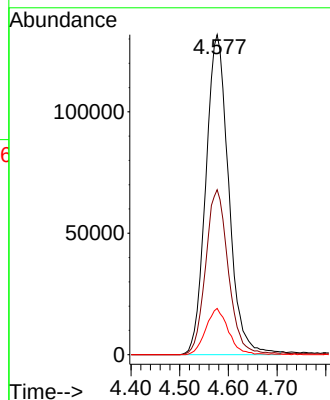
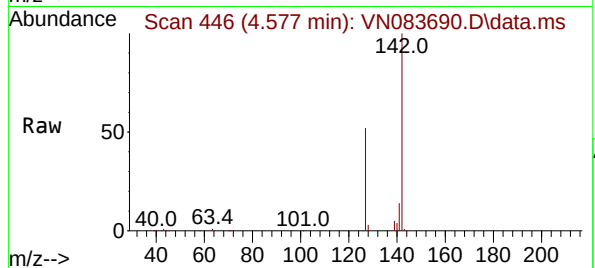
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#12

Methyl Acetate

Concen: 149.371 ug/l

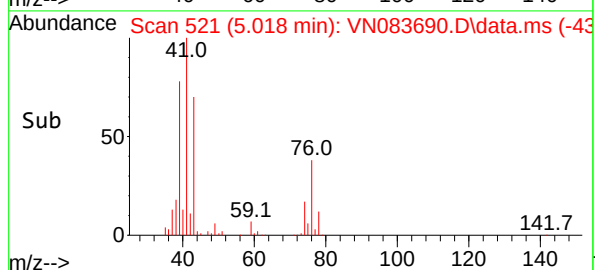
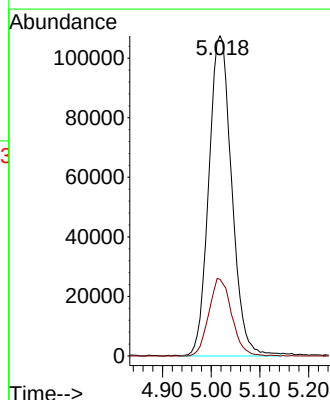
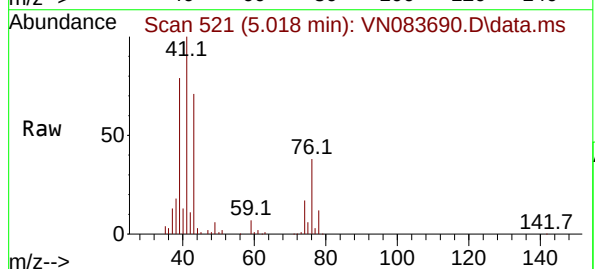
RT: 5.018 min Scan# 521

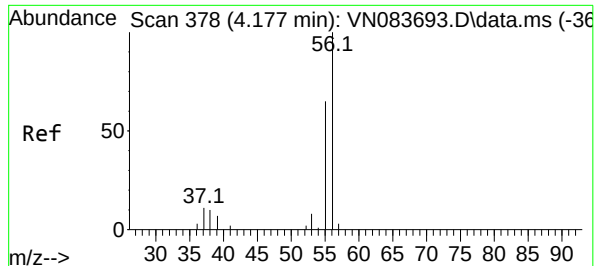
Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Tgt Ion: 43	Resp: 351533
Ion Ratio	Lower Upper
43 100	
74 24.0	27.7 41.5#





#13

Acrolein

Concen: 784.641 ug/l

RT: 4.171 min Scan# 31

Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 56 Resp: 26949

Ion Ratio Lower Upper

56 100

55 70.2 55.5 83.3

Manual Integrations

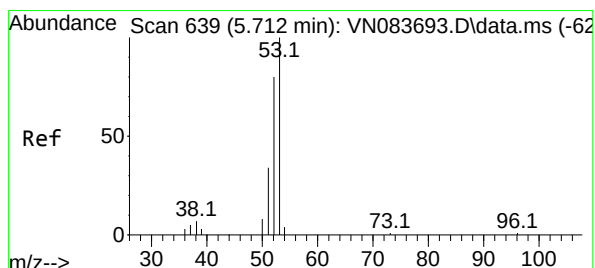
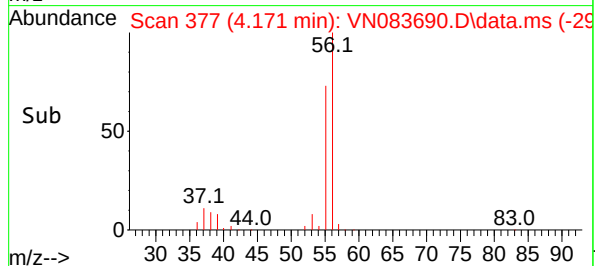
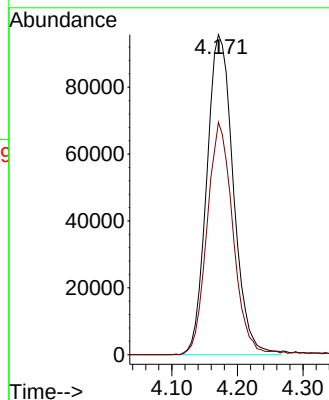
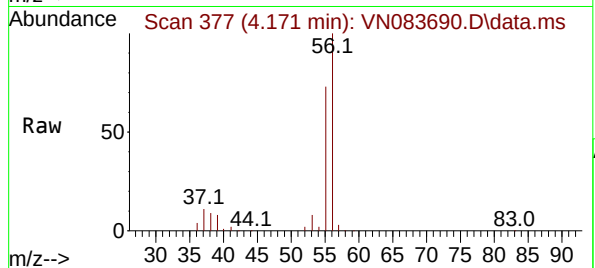
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#14

Acrylonitrile

Concen: 789.335 ug/l

RT: 5.718 min Scan# 640

Delta R.T. 0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

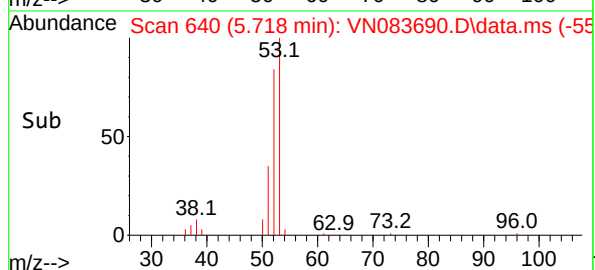
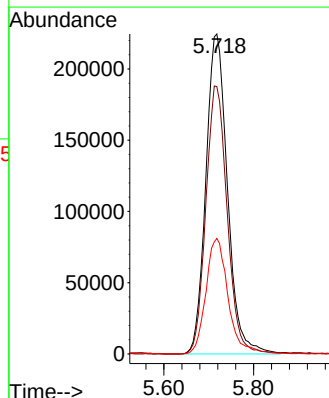
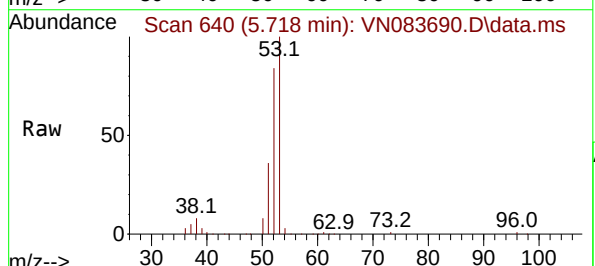
Tgt Ion: 53 Resp: 751763

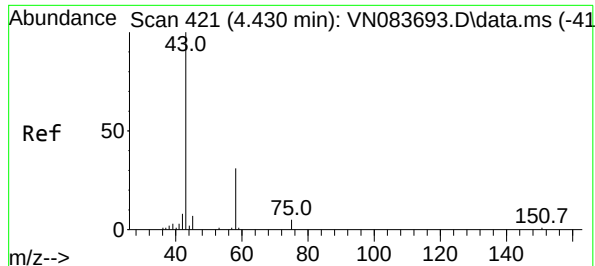
Ion Ratio Lower Upper

53 100

52 82.4 41.3 123.9

51 37.2 16.8 50.3





#15

Acetone

Concen: 959.183 ug/l

RT: 4.424 min Scan# 41

Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 58 Resp: 303030

Ion Ratio Lower Upper

58 100

43 340.2 223.1 334.7

Manual Integrations

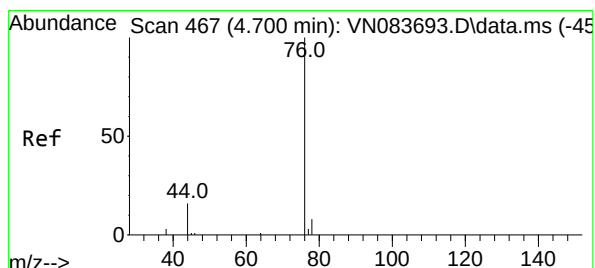
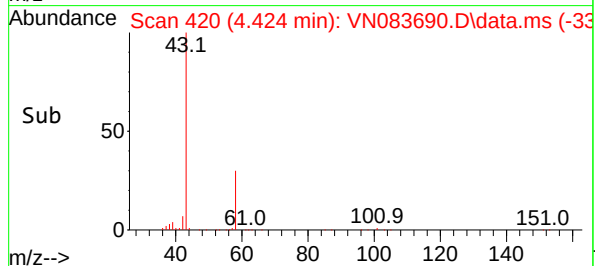
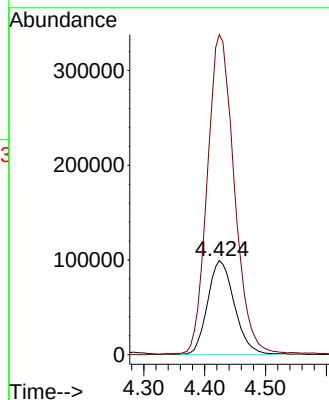
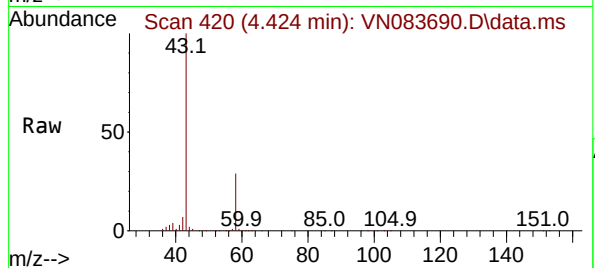
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#16

Carbon Disulfide

Concen: 156.497 ug/l

RT: 4.694 min Scan# 466

Delta R.T. -0.006 min

Lab File: VN083690.D

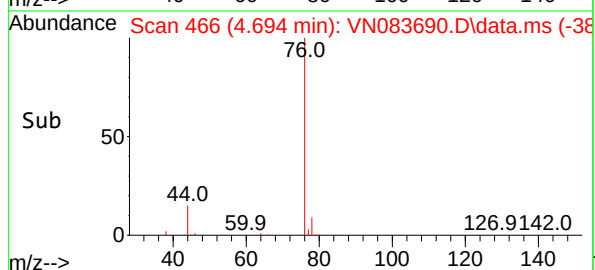
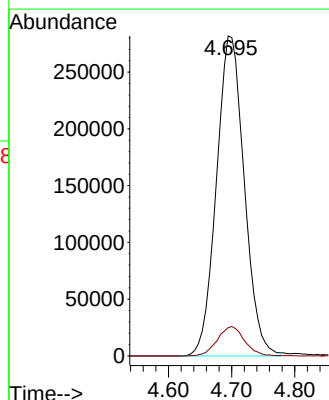
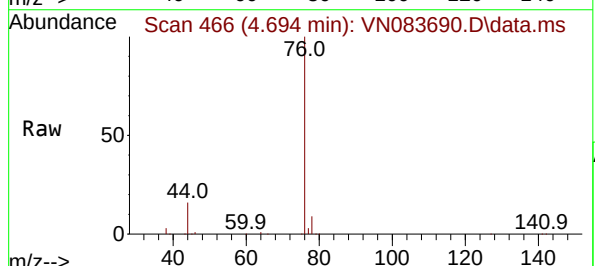
Acq: 06 Sep 2024 11:58

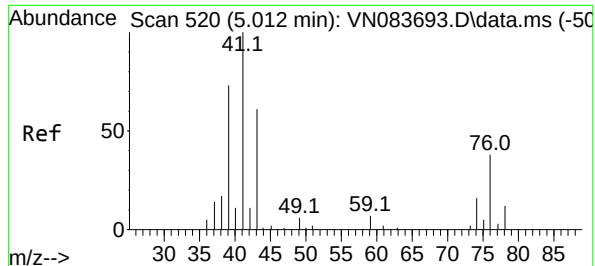
Tgt Ion: 76 Resp: 863088

Ion Ratio Lower Upper

76 100

78 8.8 6.3 9.5





#17

Allyl chloride

Concen: 161.667 ug/l

RT: 5.012 min Scan# 51

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion:	41	Resp:	55384
Ion	Ratio	Lower	Upper
41	100		
39	80.9	37.6	112.9
76	36.5	27.8	83.4

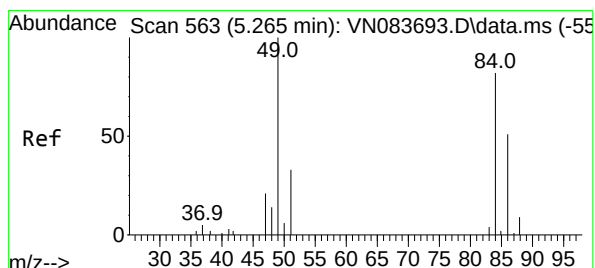
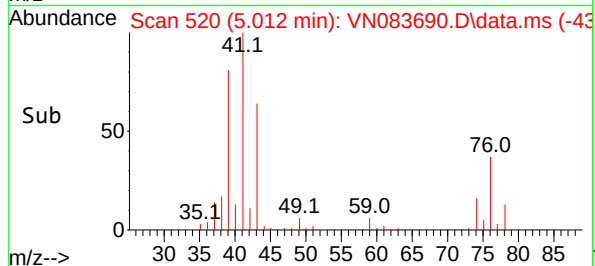
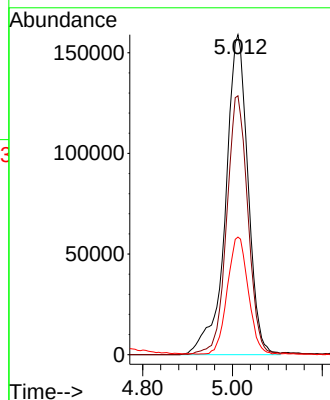
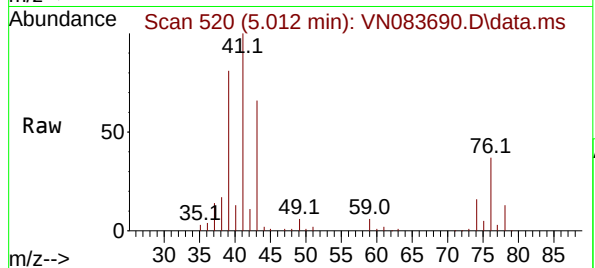
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#18

Methylene Chloride

Concen: 156.844 ug/l

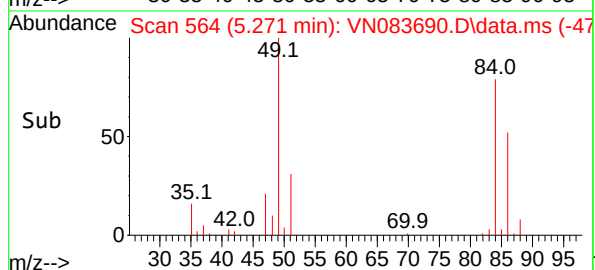
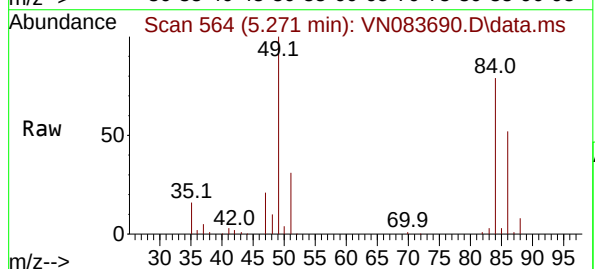
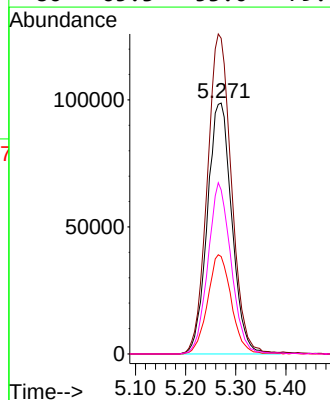
RT: 5.271 min Scan# 564

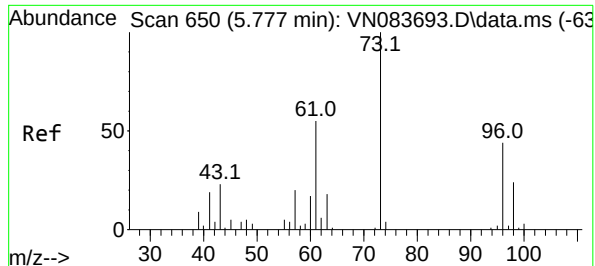
Delta R.T. 0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Tgt Ion:	84	Resp:	334858
Ion	Ratio	Lower	Upper
84	100		
49	125.8	86.0	129.0
51	38.8	30.0	45.0
86	65.3	53.0	79.4





#19

trans-1,2-Dichloroethene

Concen: 157.718 ug/l

RT: 5.777 min Scan# 61

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 96 Resp: 31899

Ion Ratio Lower Upper

96 100

61 147.8 111.8 167.6

98 62.9 49.2 73.8

Manual Integrations

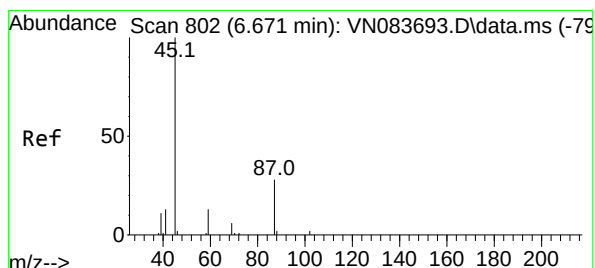
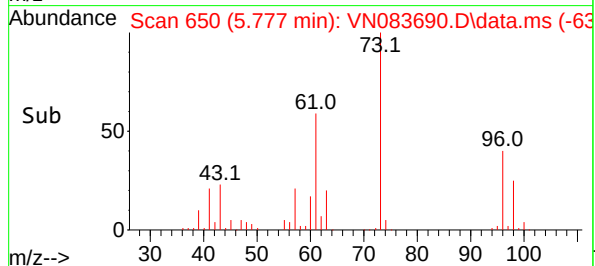
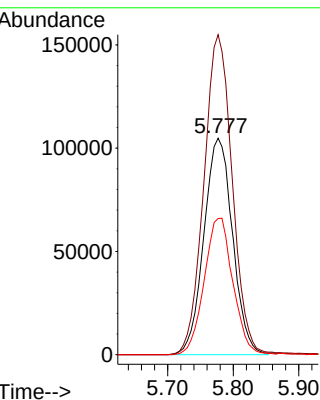
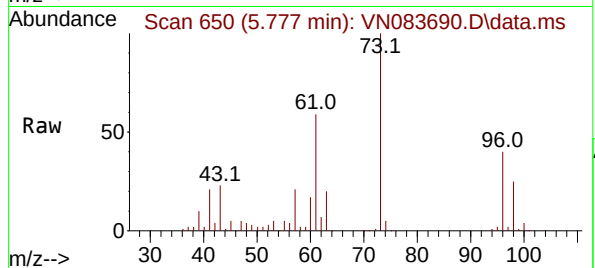
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#20

Diisopropyl ether

Concen: 163.721 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Tgt Ion: 45 Resp: 1131470

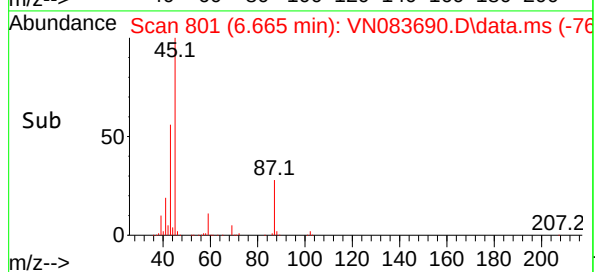
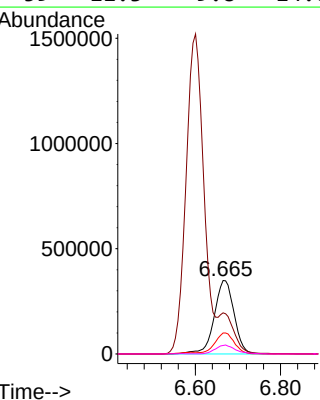
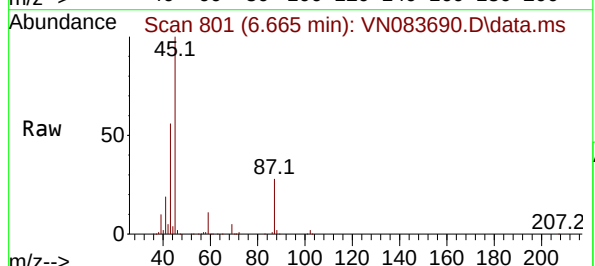
Ion Ratio Lower Upper

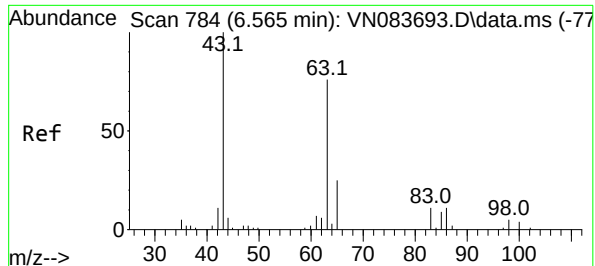
45 100

43 55.2 40.4 60.6

87 28.4 23.8 35.8

59 11.3 9.8 14.6





#21

1,1-Dichloroethane

Concen: 159.578 ug/l

RT: 6.559 min Scan# 71

Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 63 Resp: 62965

Ion Ratio Lower Upper

63 100

98 6.8 4.1 12.3

100 4.5 3.0 9.0

Manual Integrations

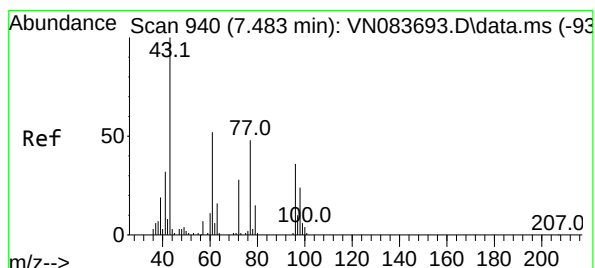
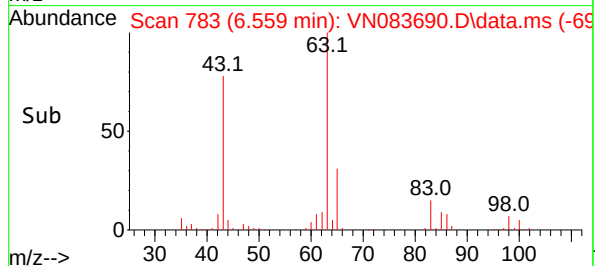
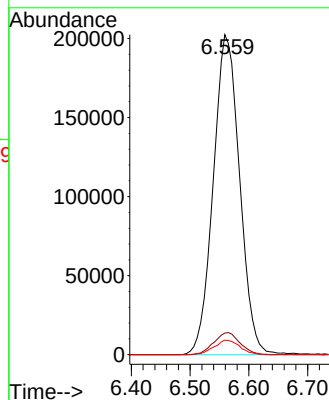
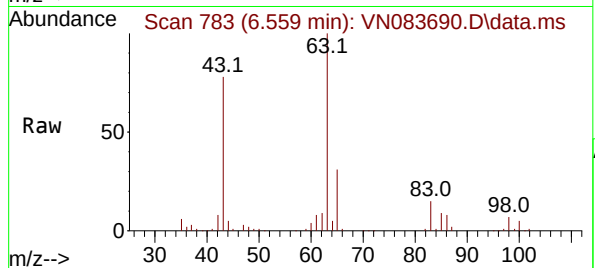
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#22

cis-1,2-Dichloroethene

Concen: 159.544 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

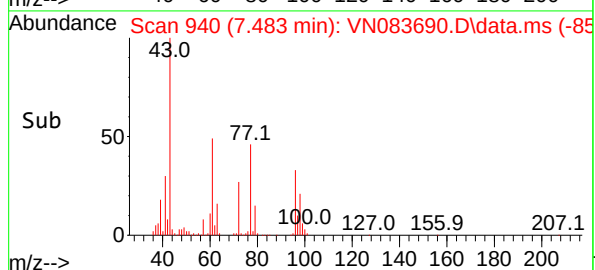
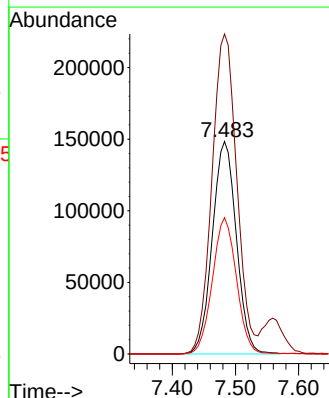
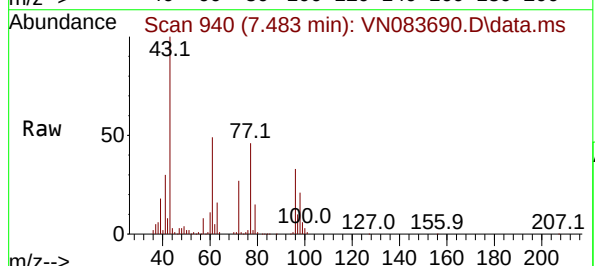
Tgt Ion: 96 Resp: 392740

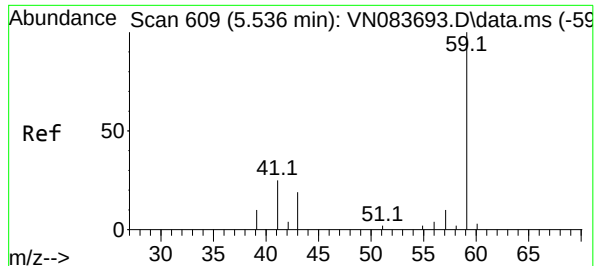
Ion Ratio Lower Upper

96 100

61 155.6 113.5 170.3

98 64.1 52.0 78.0





#23

tert-Butyl Alcohol

Concen: 802.352 ug/l

RT: 5.536 min Scan# 609

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 59 Resp: 280415

Ion Ratio Lower Upper

59 100

52 0.1 0.0 0.0

Manual Integrations

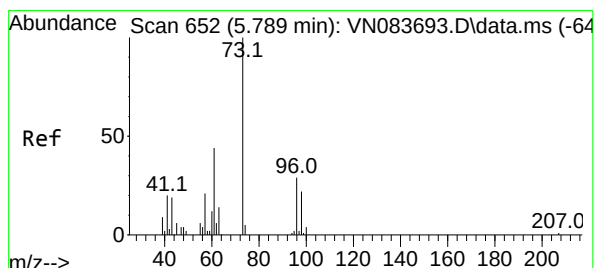
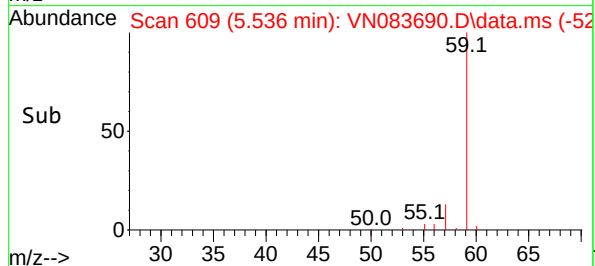
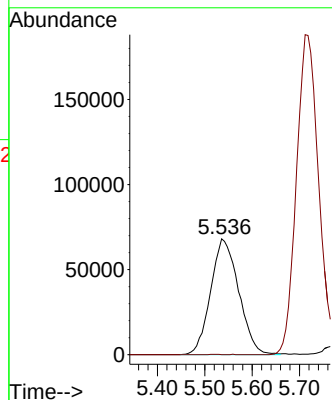
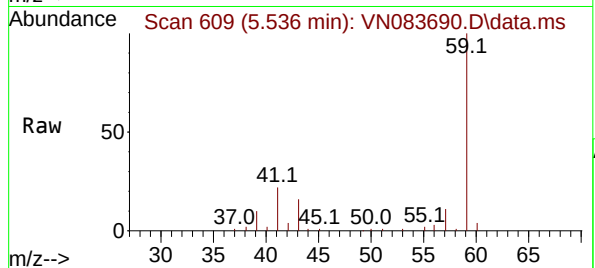
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#24

Methyl tert-Butyl Ether

Concen: 161.254 ug/l

RT: 5.789 min Scan# 652

Delta R.T. 0.000 min

Lab File: VN083690.D

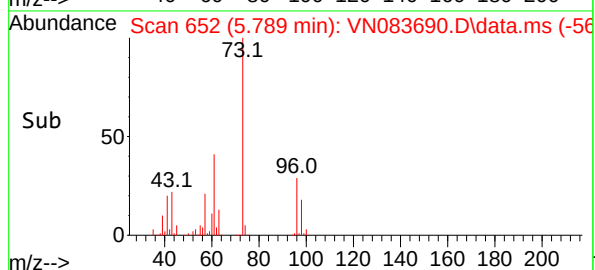
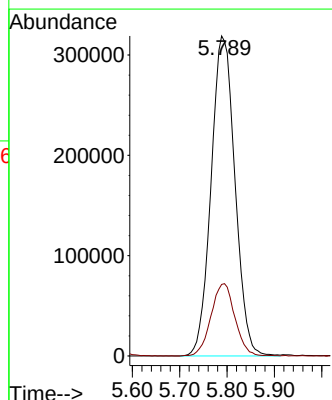
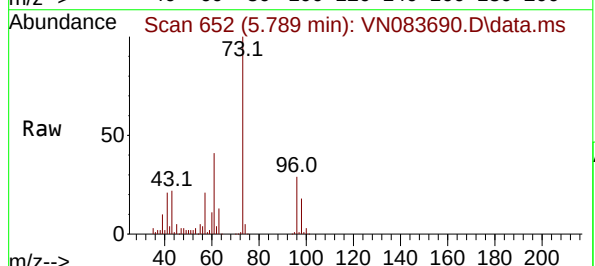
Acq: 06 Sep 2024 11:58

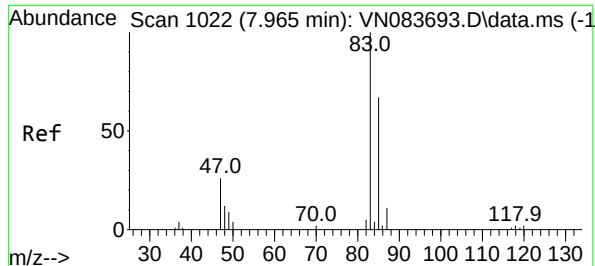
Tgt Ion: 73 Resp: 1118258

Ion Ratio Lower Upper

73 100

43 22.5 13.4 20.2





#25

Chloroform

Concen: 158.958 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 83 Resp: 66468

Ion Ratio Lower Upper

83 100

85 65.2 50.9 76.3

Manual Integrations

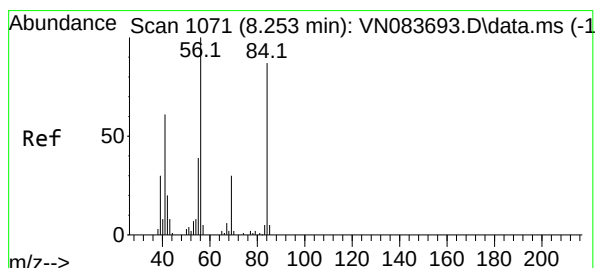
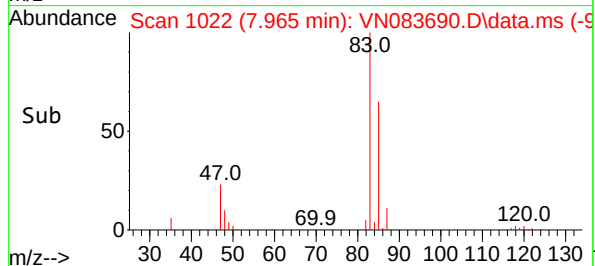
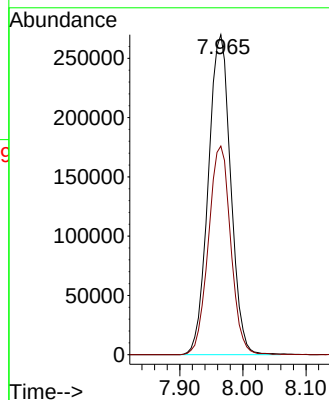
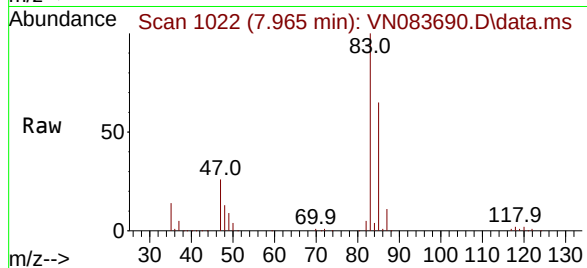
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#26

Cyclohexane

Concen: 161.214 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

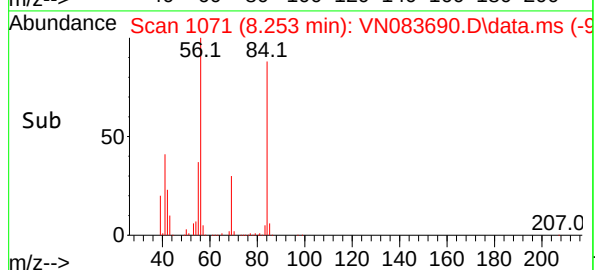
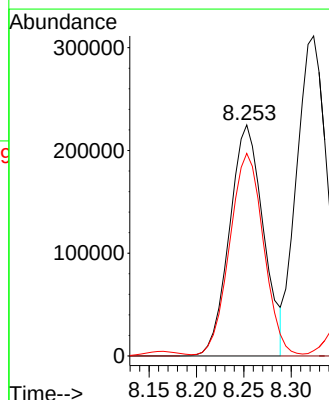
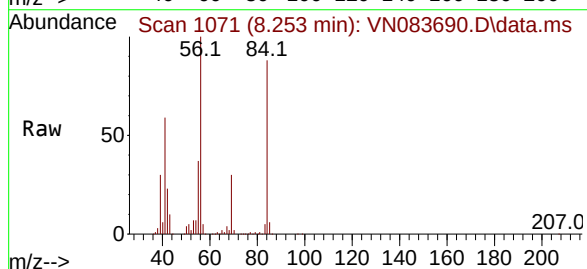
Tgt Ion: 56 Resp: 560255

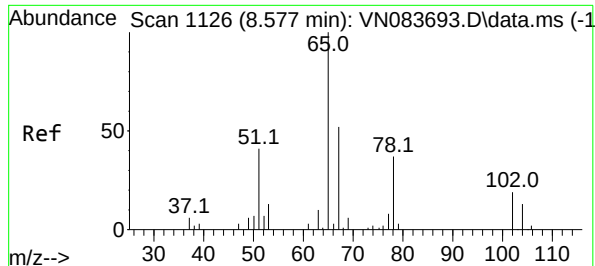
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9#

84 88.0 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 30.550 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 65 Resp: 87679

Ion Ratio Lower Upper

65 100

67 50.7 43.2 64.8

Manual Integrations

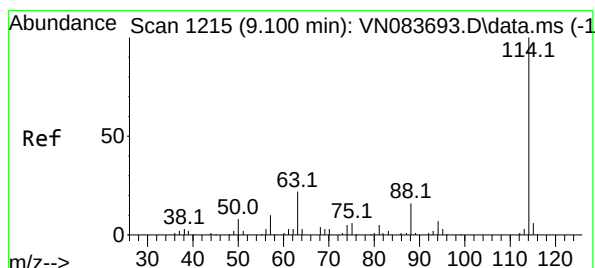
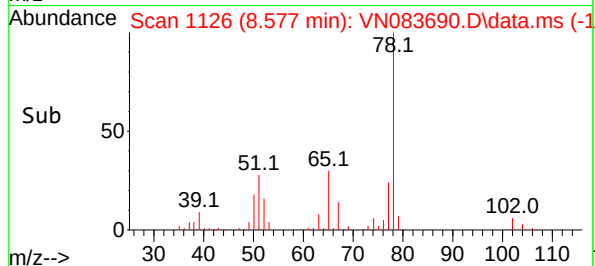
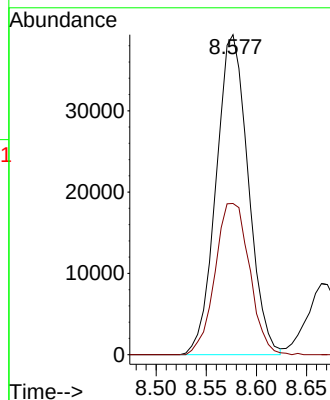
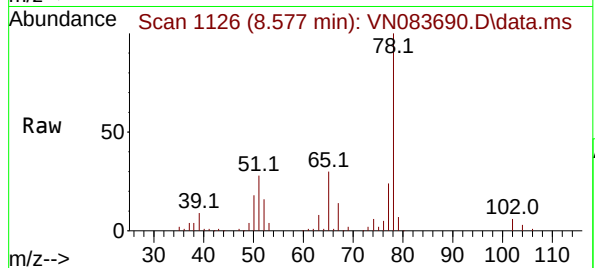
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

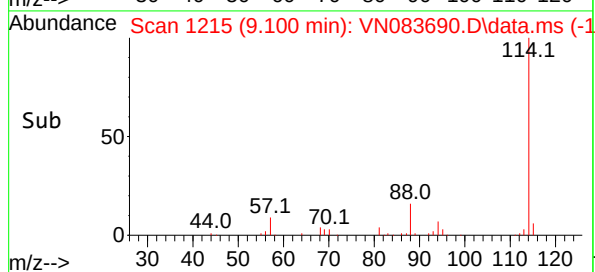
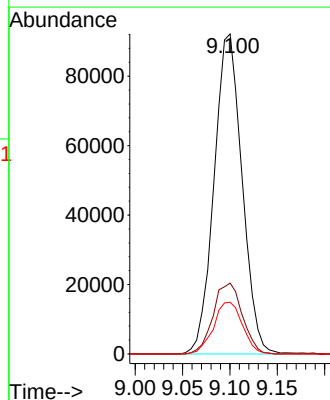
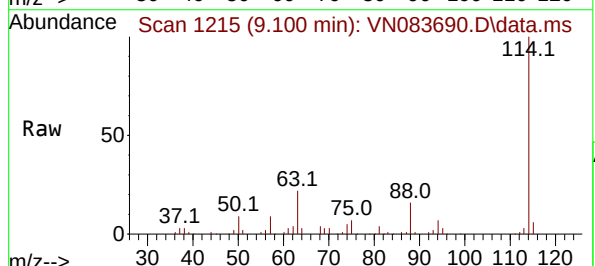
Tgt Ion:114 Resp: 189169

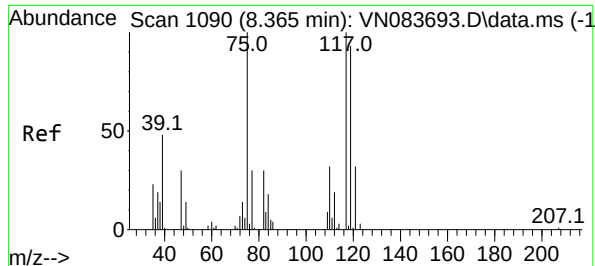
Ion Ratio Lower Upper

114 100

63 23.1 15.9 23.9

88 16.7 12.7 19.1





#29

1,1-Dichloropropene

Concen: 156.254 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 75 Resp: 46883

Ion Ratio Lower Upper

75 100

110 33.7 0.0 70.2

77 31.2 0.0 61.4

Manual Integrations

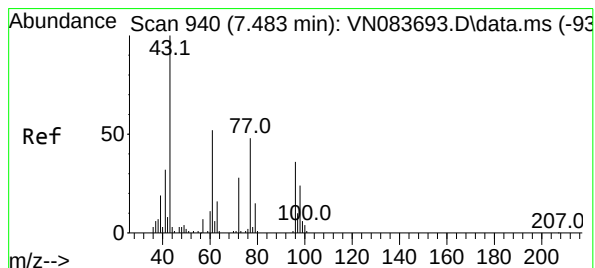
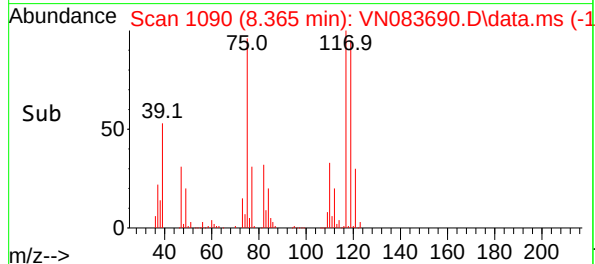
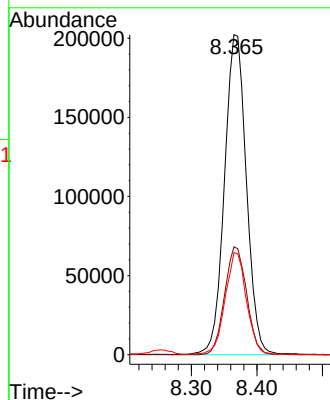
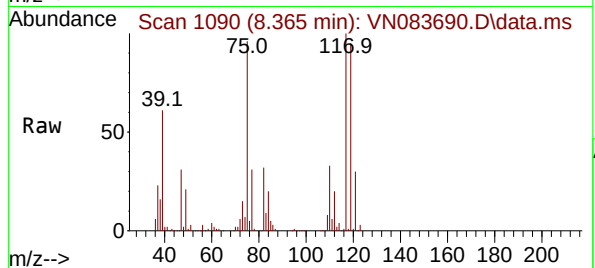
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#30

2-Butanone

Concen: 836.702 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

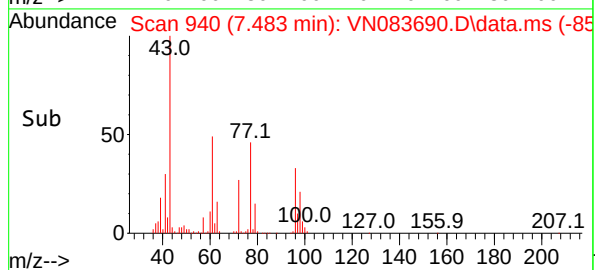
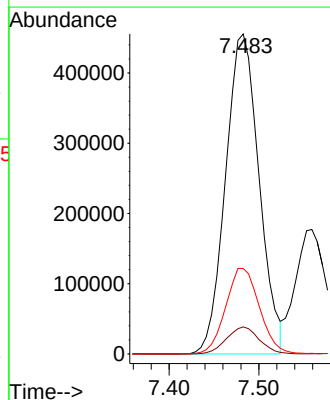
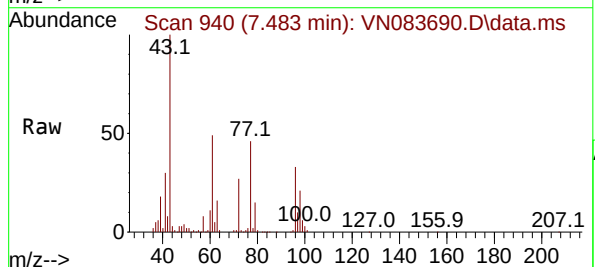
Tgt Ion: 43 Resp: 1183423

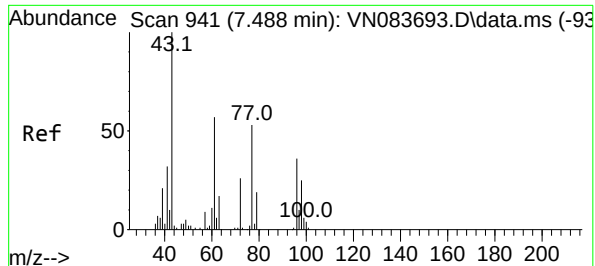
Ion Ratio Lower Upper

43 100

57 8.3 6.7 10.1

72 27.0 24.0 36.0





#31

2,2-Dichloropropane

Concen: 162.450 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 77 Resp: 621435

Ion Ratio Lower Upper

77 100

97 20.9 18.3 27.5

Manual Integrations

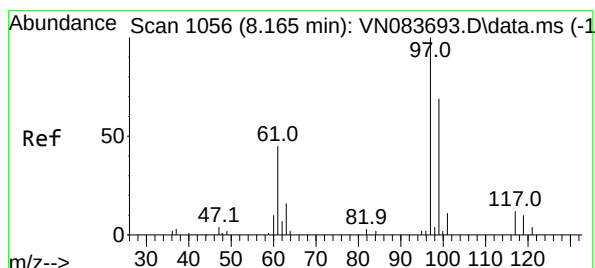
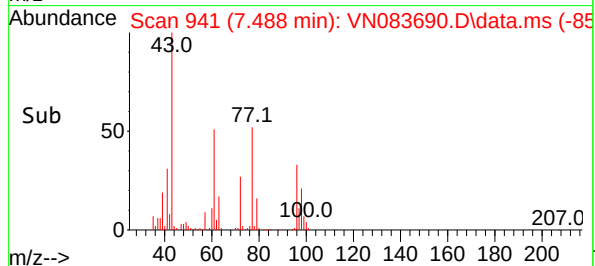
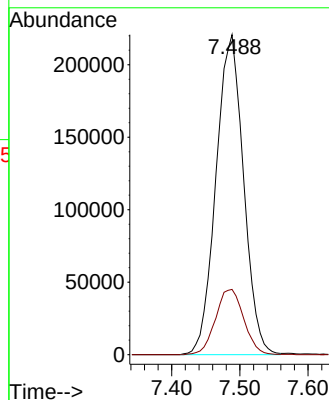
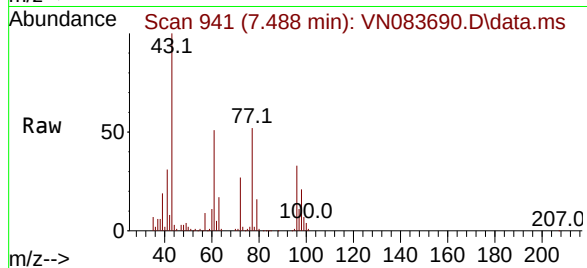
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#32

1,1,1-Trichloroethane

Concen: 156.335 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

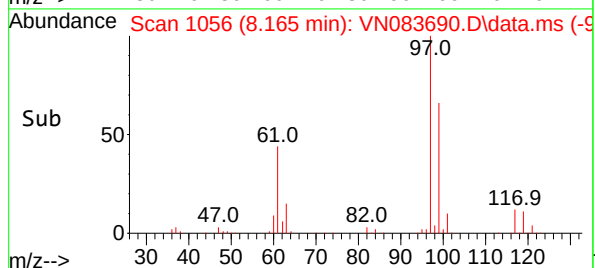
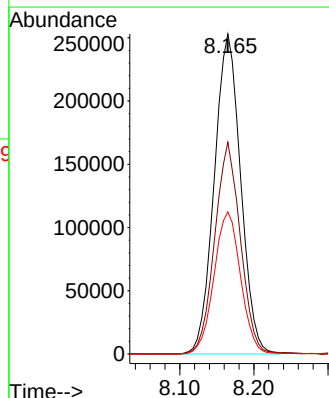
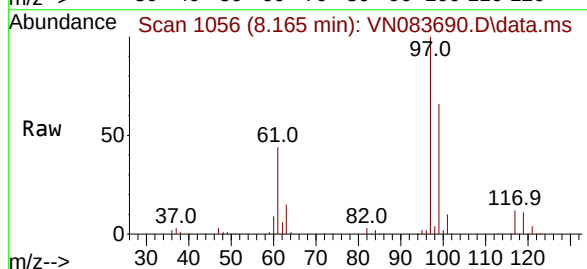
Tgt Ion: 97 Resp: 626452

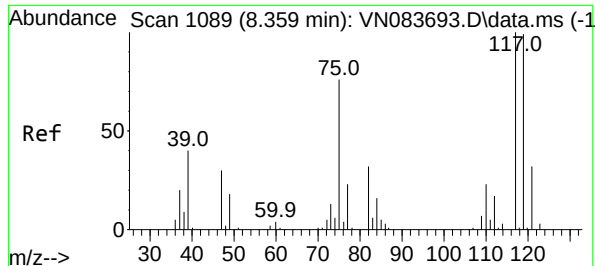
Ion Ratio Lower Upper

97 100

99 64.3 51.0 76.4

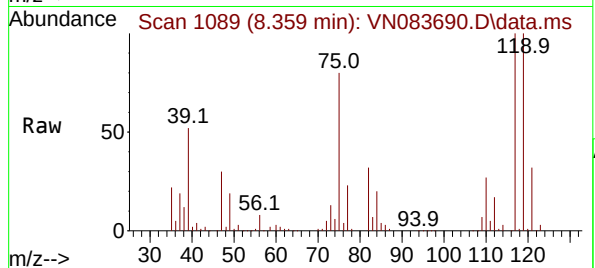
61 44.7 33.8 50.8





#33
Carbon Tetrachloride
Concen: 157.035 ug/l
RT: 8.359 min Scan# 1109
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150



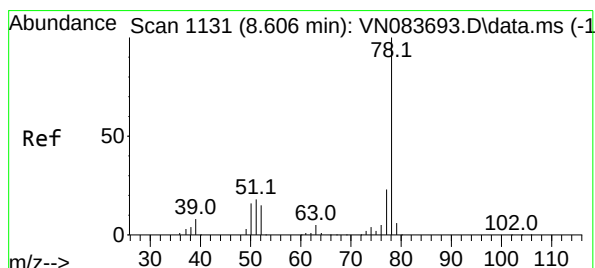
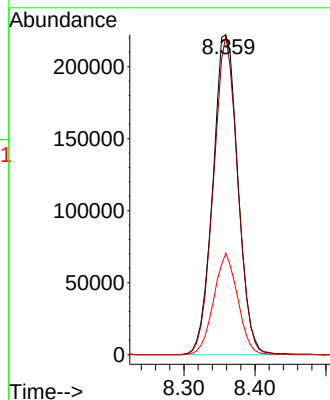
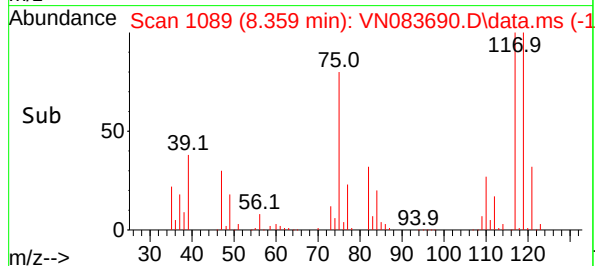
Tgt Ion: 117 Resp: 544935
Ion Ratio Lower Upper
117 100
119 99.5 77.7 116.5
121 31.7 27.0 40.6

Manual Integrations
APPROVED

Reviewed By :John
Carlone

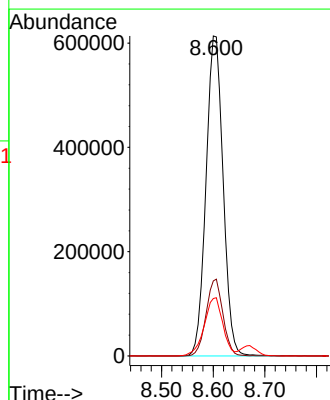
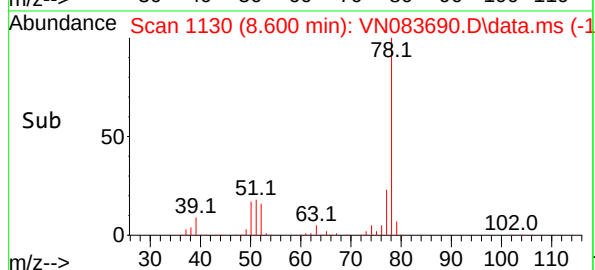
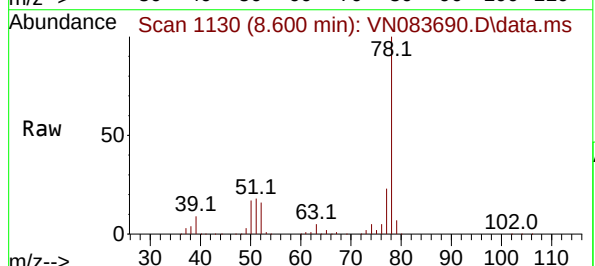
09/09/2024
Supervised By :Mahesh
Dadoda

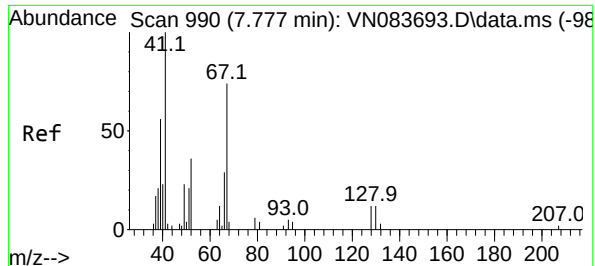
09/09/2024



#34
Benzene
Concen: 156.616 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.006 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion: 78 Resp: 1409980
Ion Ratio Lower Upper
78 100
77 23.4 19.2 28.8
51 18.0 13.3 19.9





#35

Methacrylonitrile

Concen: 152.855 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 41 Resp: 24303

Ion Ratio Lower Upper

41 100

39 57.4 25.3 75.9

67 72.4 38.7 116.1

52 29.7 13.6 40.8

Manual Integrations

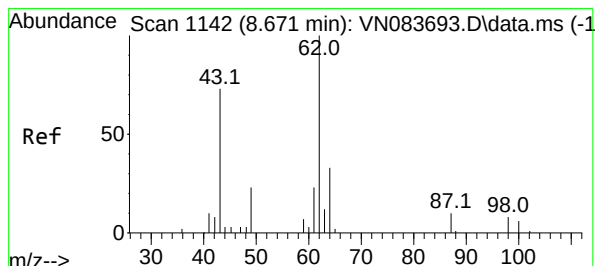
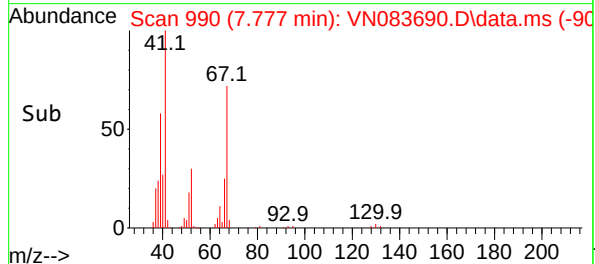
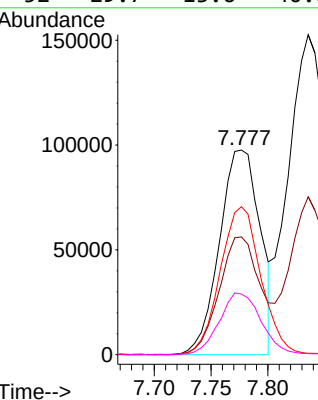
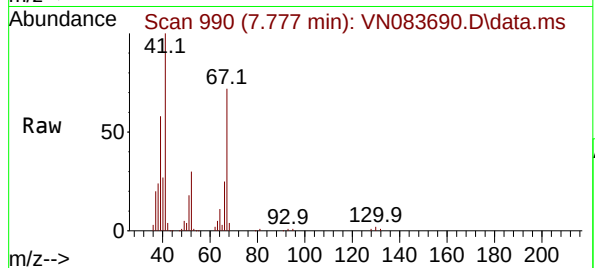
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#36

1,2-Dichloroethane

Concen: 153.088 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.006 min

Lab File: VN083690.D

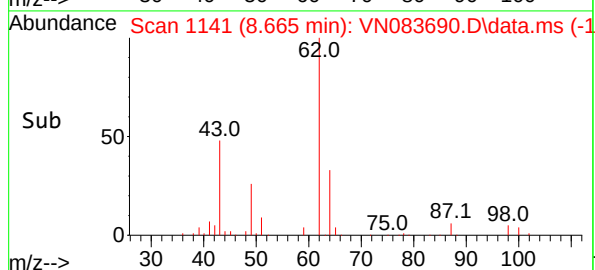
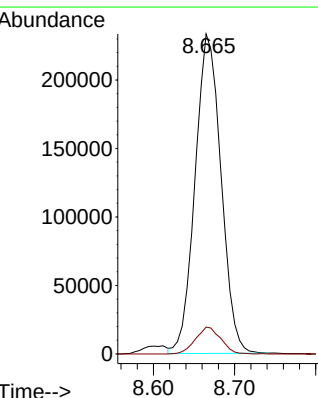
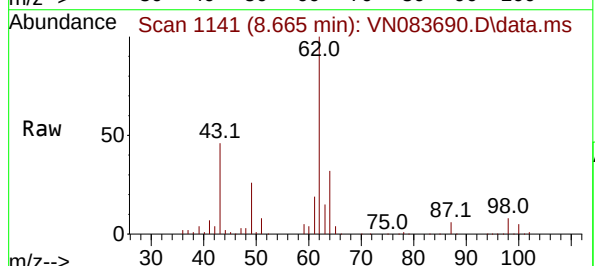
Acq: 06 Sep 2024 11:58

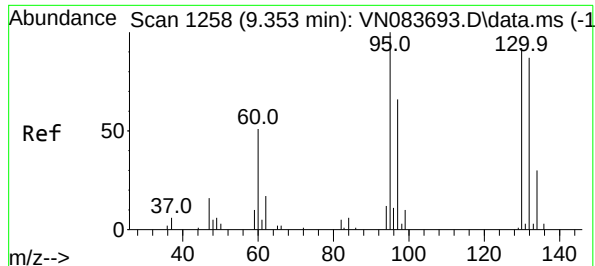
Tgt Ion: 62 Resp: 518126

Ion Ratio Lower Upper

62 100

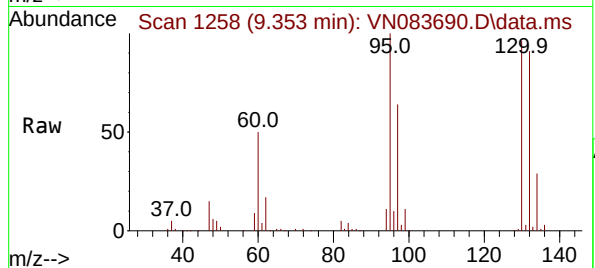
98 8.2 8.2 12.4#





#37
Trichloroethene
Concen: 155.218 ug/l
RT: 9.353 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150



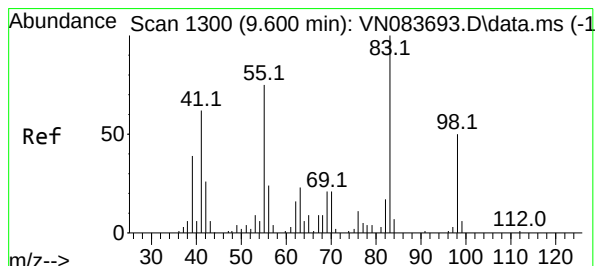
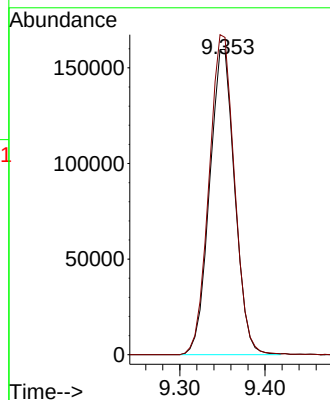
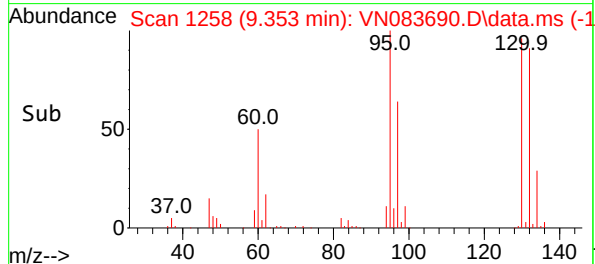
Tgt Ion:130 Resp: 32814
Ion Ratio Lower Upper
130 100
95 103.9 80.2 120.4

Manual Integrations
APPROVED

Reviewed By :John
Carlone

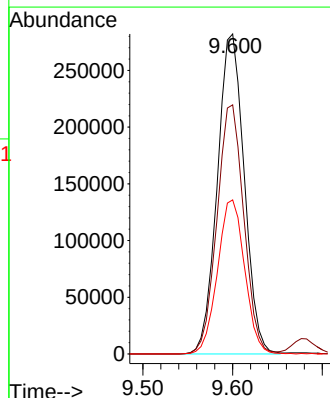
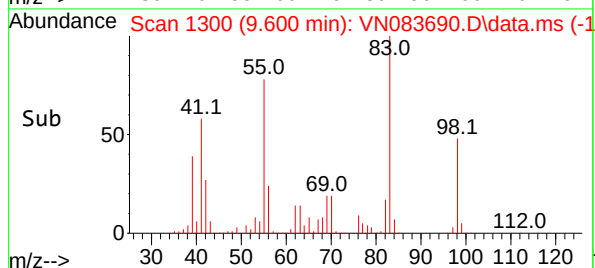
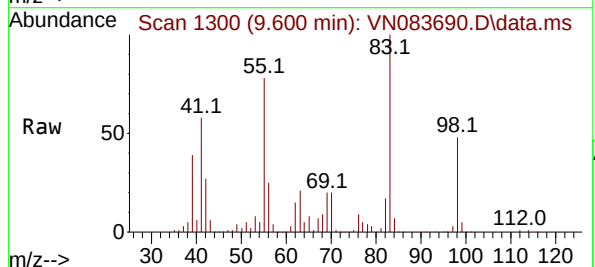
09/09/2024
Supervised By :Mahesh
Dadoda

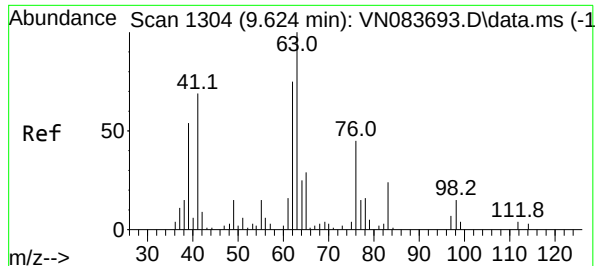
09/09/2024



#38
Methylcyclohexane
Concen: 163.450 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion: 83 Resp: 587155
Ion Ratio Lower Upper
83 100
55 77.6 36.6 109.9
98 48.7 23.8 71.5





#39

1,2-Dichloropropane

Concen: 155.142 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 63 Resp: 33615

Ion Ratio Lower Upper

63 100

65 32.4 25.0 37.4

Manual Integrations

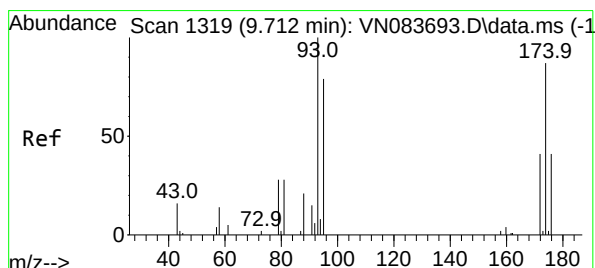
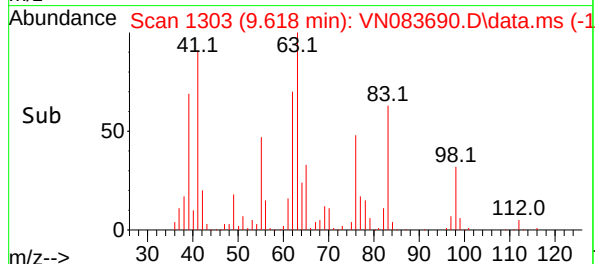
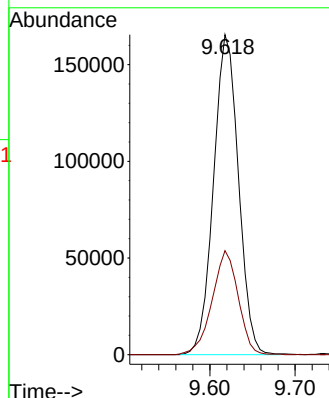
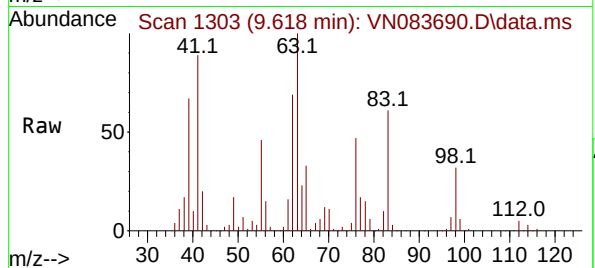
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#40

Dibromomethane

Concen: 154.730 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

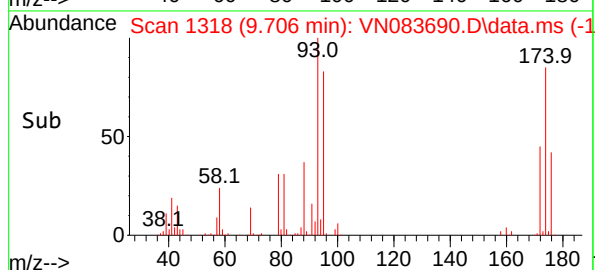
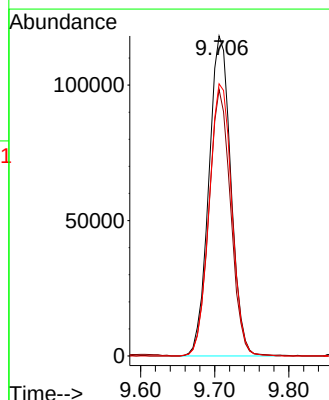
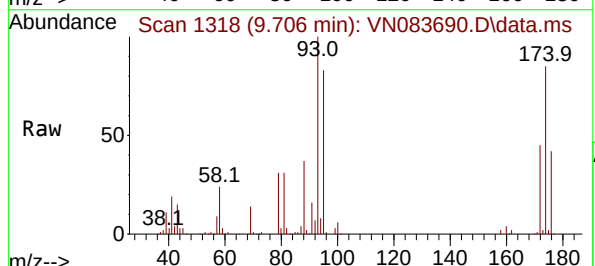
Tgt Ion: 93 Resp: 245139

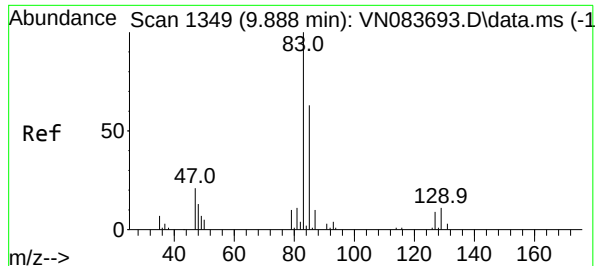
Ion Ratio Lower Upper

93 100

95 81.6 0.0 164.6

174 86.9 0.0 193.2





#41

Bromodichloromethane

Concen: 158.993 ug/l

RT: 9.888 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 83 Resp: 53564

Ion Ratio Lower Upper

83 100

85 64.5 49.4 74.2

127 8.2 7.3 10.9

Manual Integrations

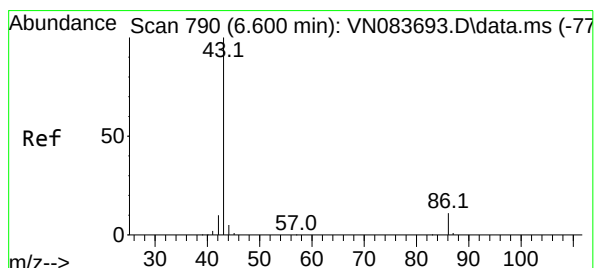
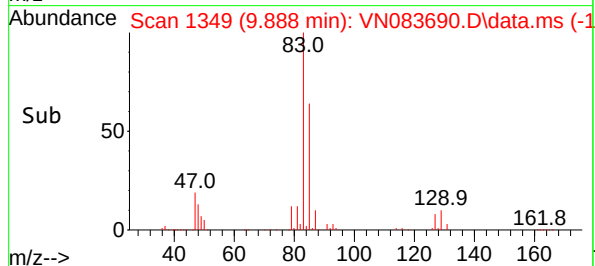
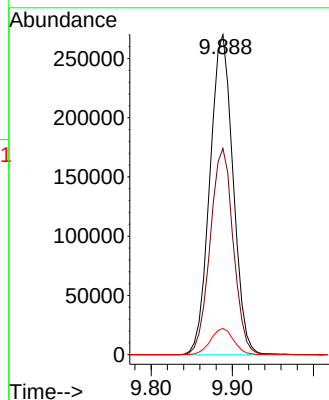
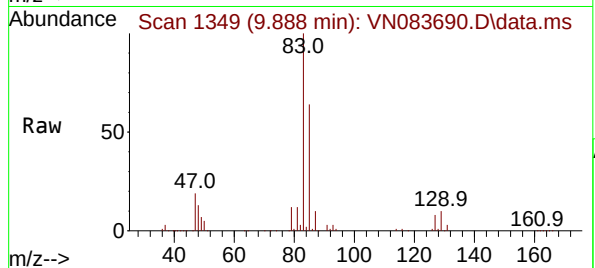
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#42

Vinyl Acetate

Concen: 763.681 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.000 min

Lab File: VN083690.D

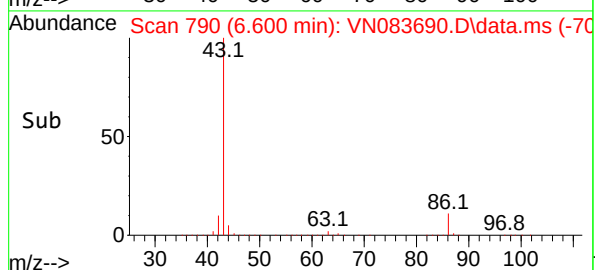
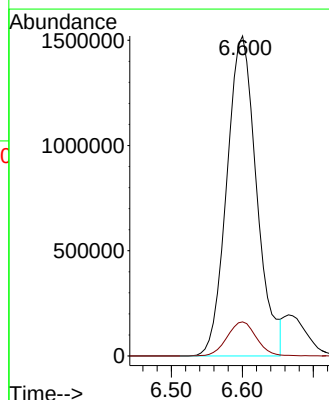
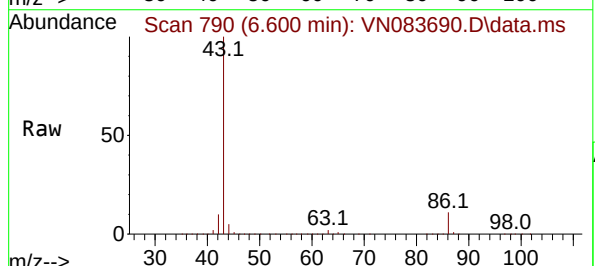
Acq: 06 Sep 2024 11:58

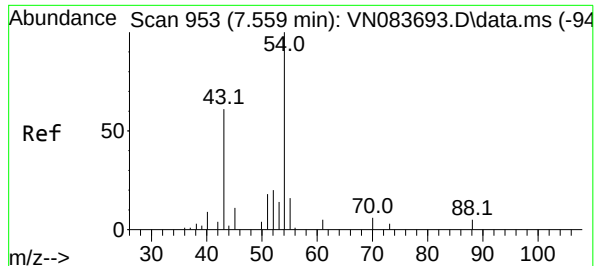
Tgt Ion: 43 Resp: 4441006

Ion Ratio Lower Upper

43 100

86 10.5 9.4 14.2





#43

Ethyl Acetate

Concen: 157.479 ug/l

RT: 7.559 min Scan# 91

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 43 Resp: 44832

Ion Ratio Lower Upper

43 100

45 12.2 10.6 15.8

Manual Integrations

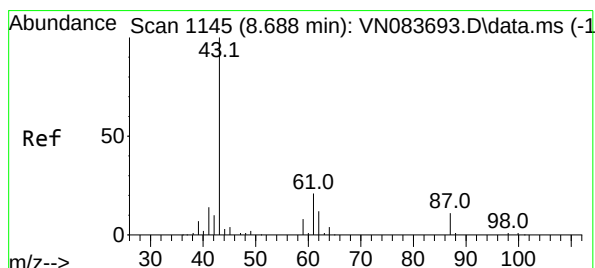
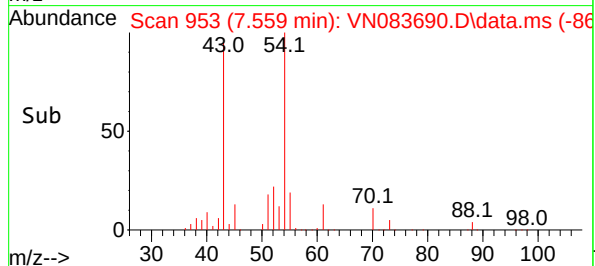
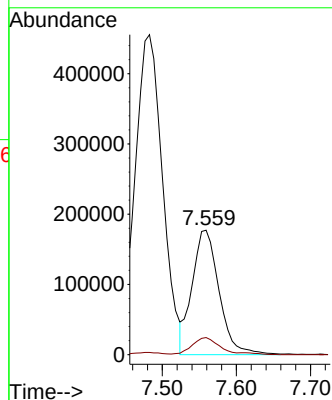
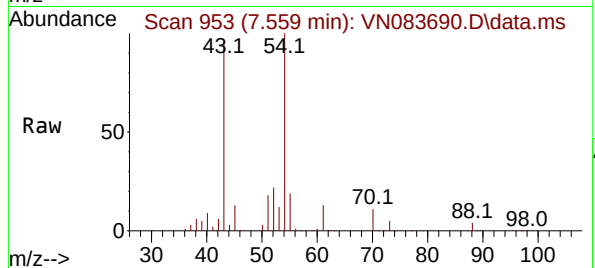
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#44

Isopropyl Acetate

Concen: 159.336 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.000 min

Lab File: VN083690.D

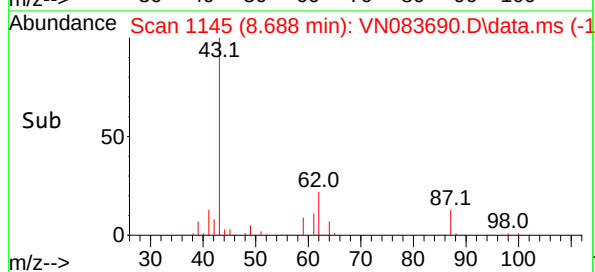
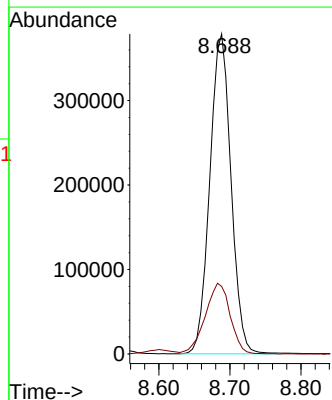
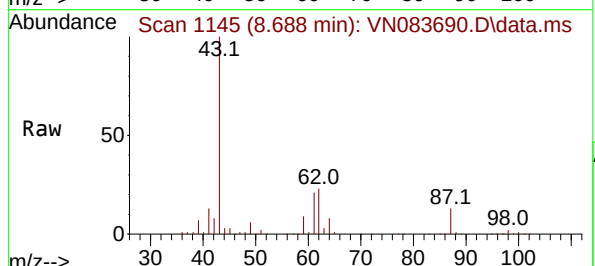
Acq: 06 Sep 2024 11:58

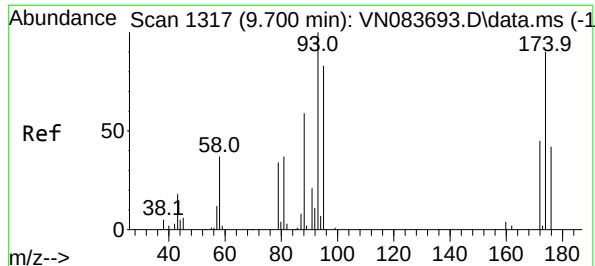
Tgt Ion: 43 Resp: 784558

Ion Ratio Lower Upper

43 100

61 26.1 25.0 37.4





#45

1,4-Dioxane

Concen: 3023.055 ug/l

RT: 9.700 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN083690.D

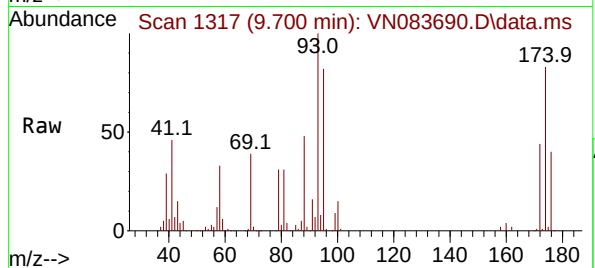
Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150



Tgt Ion:	88	Resp:	116100
Ion	Ratio	Lower	Upper
88	100		
43	566.2	19.8	29.6
58	71.5	55.4	83.0

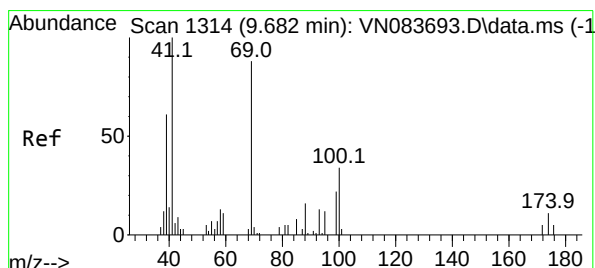
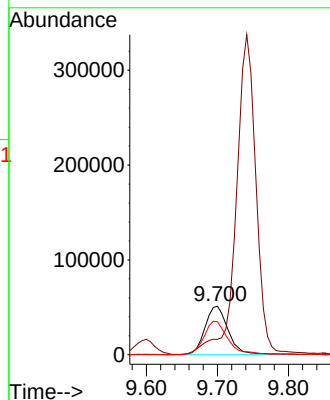
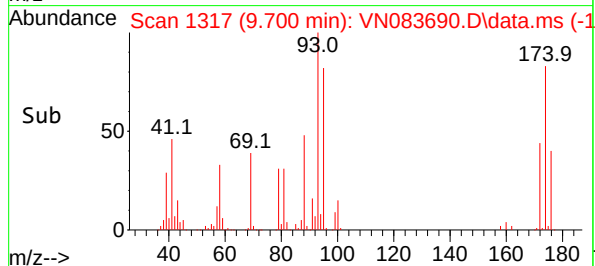
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#46

Methyl methacrylate

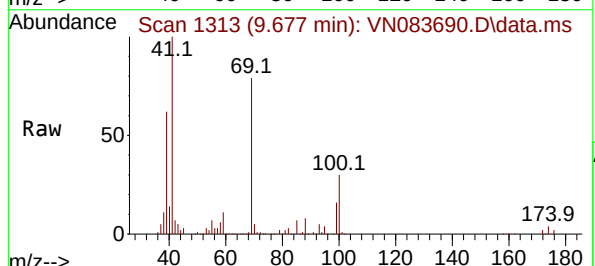
Concen: 161.311 ug/l

RT: 9.677 min Scan# 1313

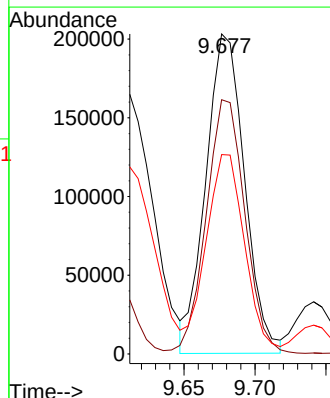
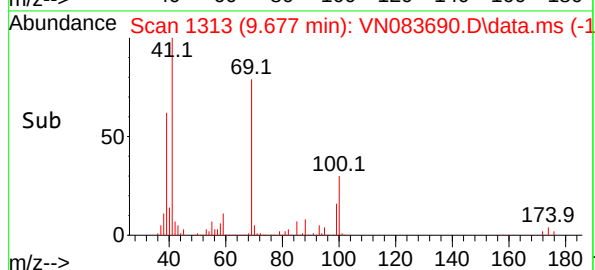
Delta R.T. -0.006 min

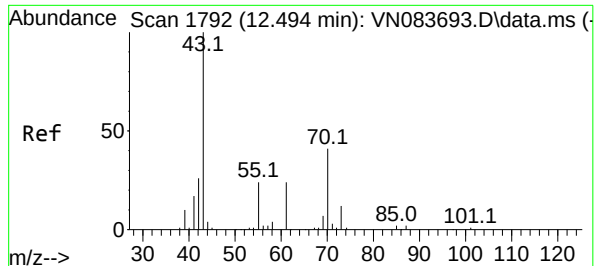
Lab File: VN083690.D

Acq: 06 Sep 2024 11:58



Tgt Ion:	41	Resp:	384453
Ion	Ratio	Lower	Upper
41	100		
69	81.7	51.1	153.3
39	62.7	25.8	77.3





#47

n-amy1 Acetate

Concen: 166.323 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 43 Resp: 725440

Ion Ratio Lower Upper

43 100

55 23.5 23.4 35.2

Manual Integrations

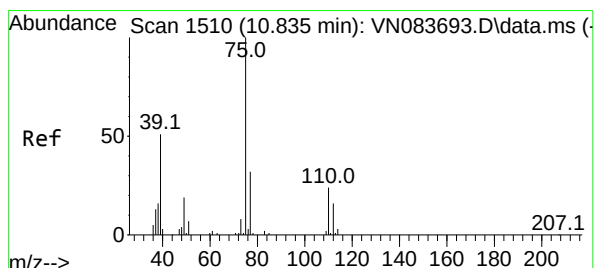
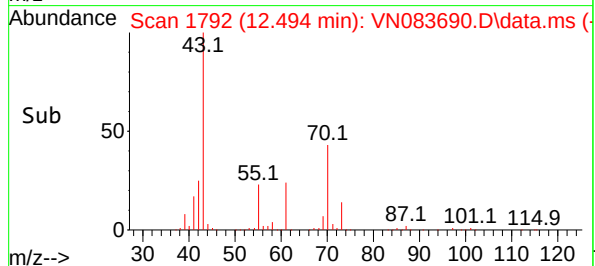
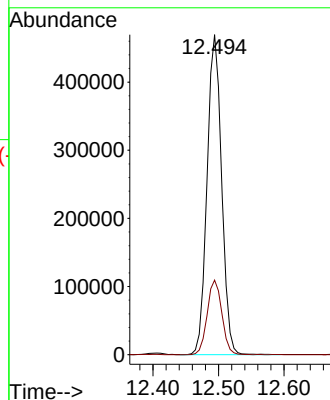
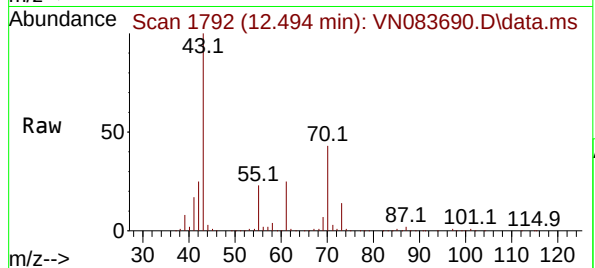
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#48

t-1,3-Dichloropropene

Concen: 159.299 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN083690.D

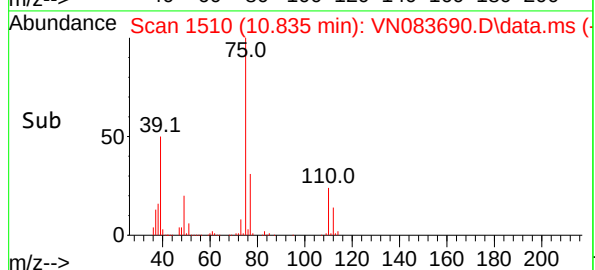
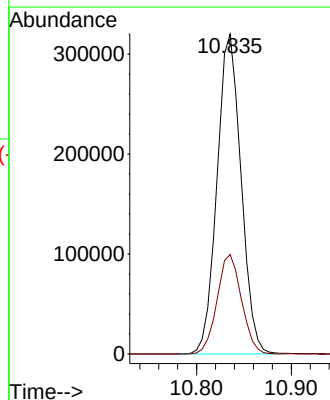
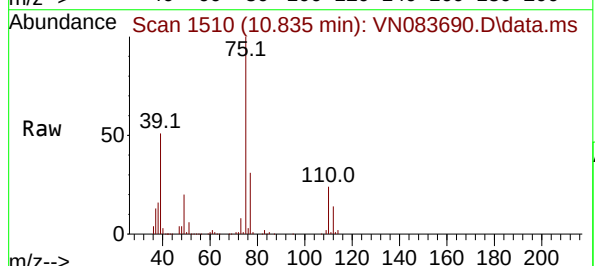
Acq: 06 Sep 2024 11:58

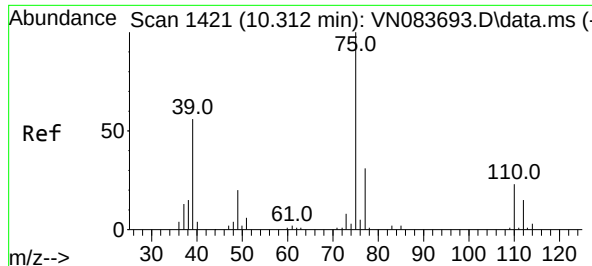
Tgt Ion: 75 Resp: 564506

Ion Ratio Lower Upper

75 100

77 31.1 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 160.623 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 75 Resp: 59196

Ion Ratio Lower Upper

75 100

77 31.2 24.9 37.3

39 55.9 31.0 46.6

Manual Integrations

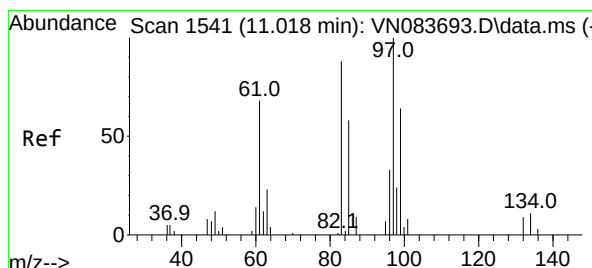
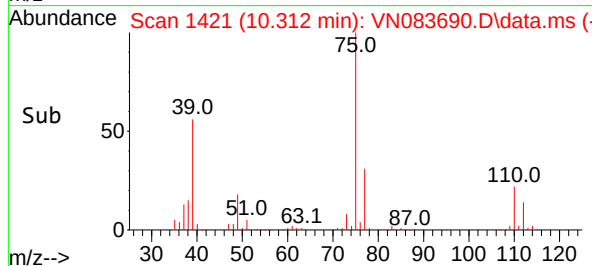
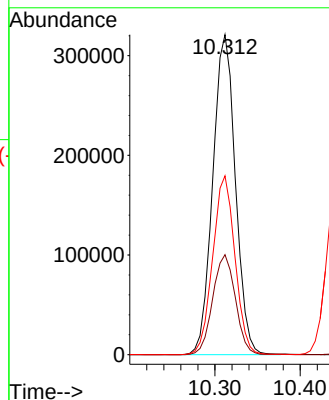
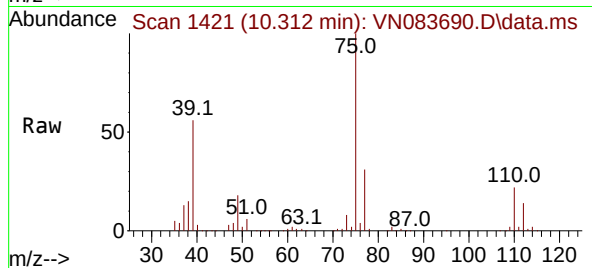
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#50

1,1,2-Trichloroethane

Concen: 156.400 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Tgt Ion: 97 Resp: 315295

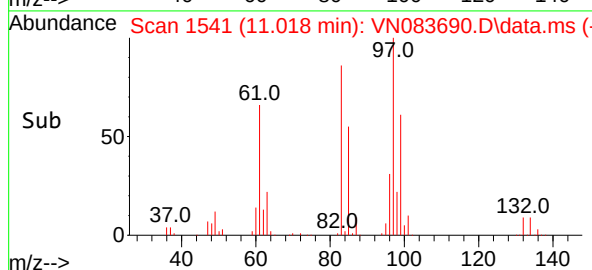
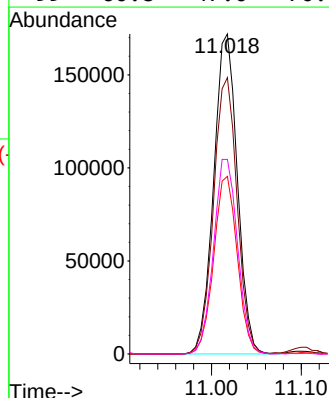
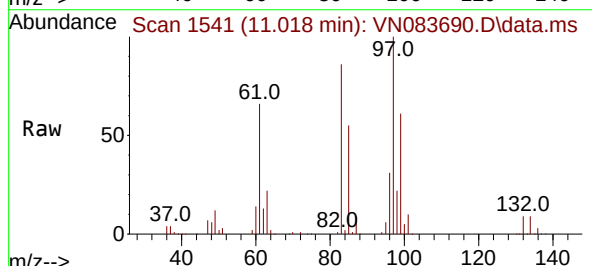
Ion Ratio Lower Upper

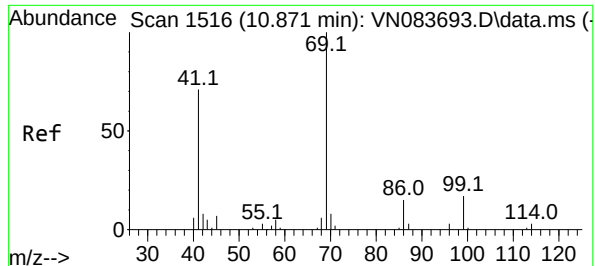
97 100

83 86.3 68.1 102.1

85 55.5 41.8 62.6

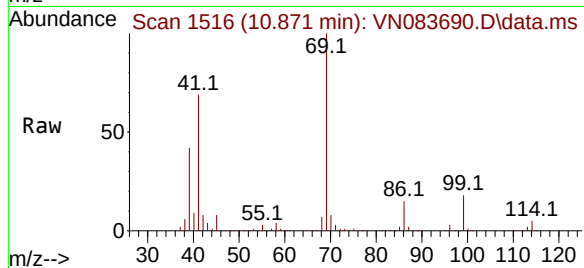
99 60.8 47.0 70.4





#51
Ethyl methacrylate
Concen: 161.418 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150



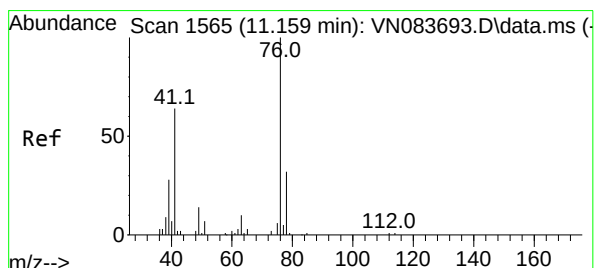
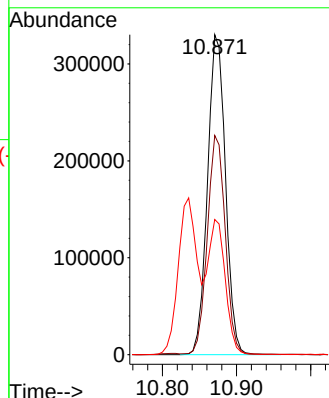
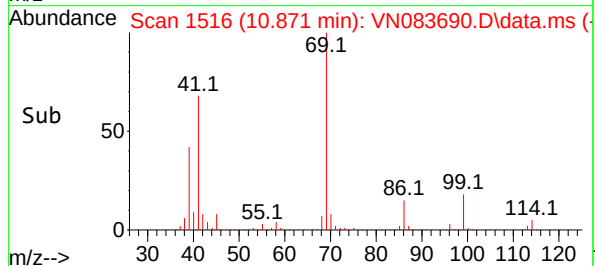
Tgt Ion: 69 Resp: 555940
Ion Ratio Lower Upper
69 100
41 68.4 25.5 76.5
39 42.1 16.0 47.9

Manual Integrations
APPROVED

Reviewed By :John
Carlone

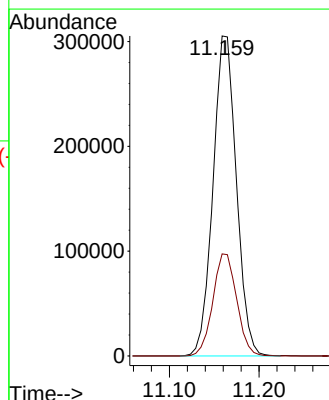
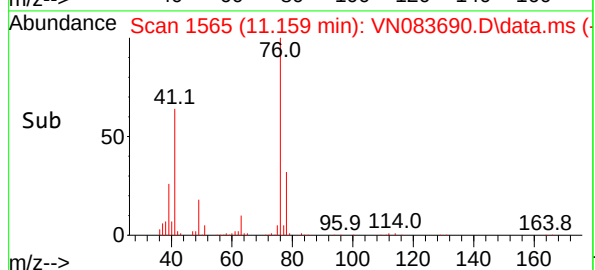
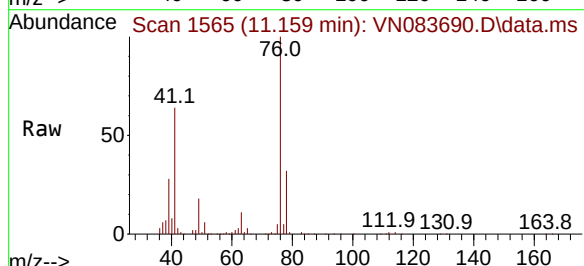
09/09/2024
Supervised By :Mahesh
Dadoda

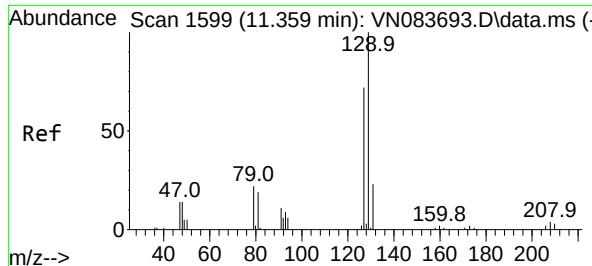
09/09/2024



#52
1,3-Dichloropropane
Concen: 151.858 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

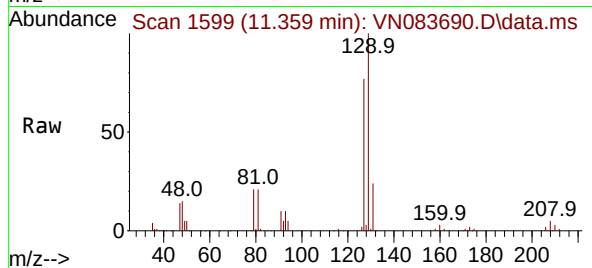
Tgt Ion: 76 Resp: 552853
Ion Ratio Lower Upper
76 100
78 32.5 0.0 65.8





#53
Dibromochloromethane
Concen: 161.889 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150



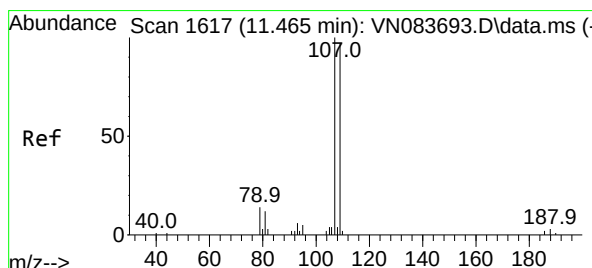
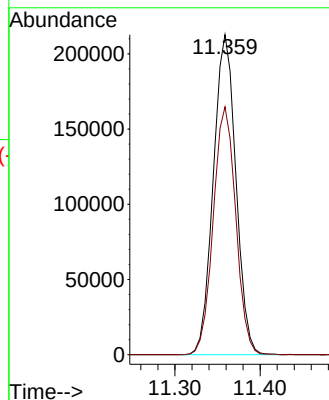
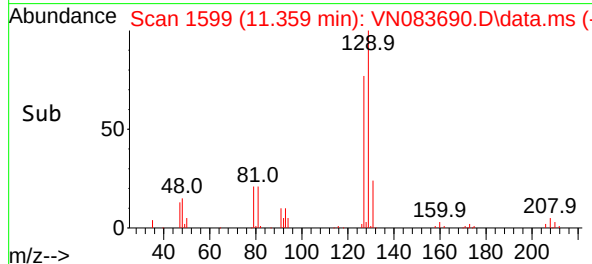
Tgt Ion:129 Resp: 39145
Ion Ratio Lower Upper
129 100
127 77.1 39.4 118.1

Manual Integrations
APPROVED

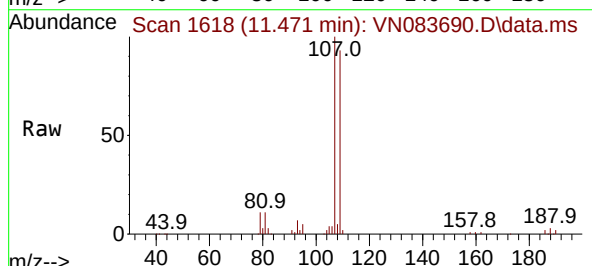
Reviewed By :John
Carlone

09/09/2024
Supervised By :Mahesh
Dadoda

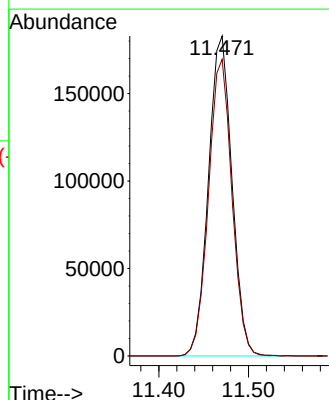
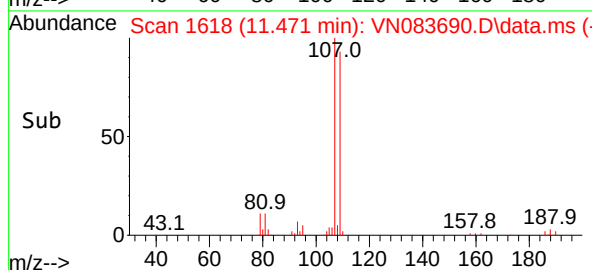
09/09/2024

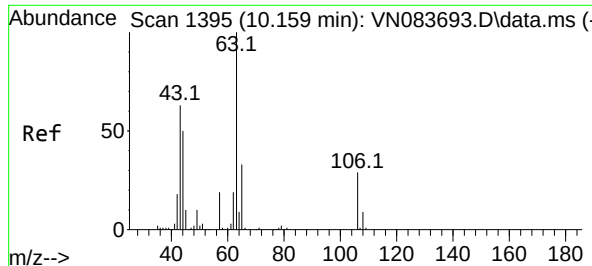


#54
1,2-Dibromoethane
Concen: 159.763 ug/l
RT: 11.471 min Scan# 1618
Delta R.T. 0.006 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58



Tgt Ion:107 Resp: 333191
Ion Ratio Lower Upper
107 100
109 92.2 74.7 112.1





#55

2-Chloroethyl vinyl ether

Concen: 791.404 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 63 Resp: 1086274

Ion Ratio Lower Upper

63 100

65 32.1 26.2 39.2

106 28.2 23.8 35.8

Manual Integrations

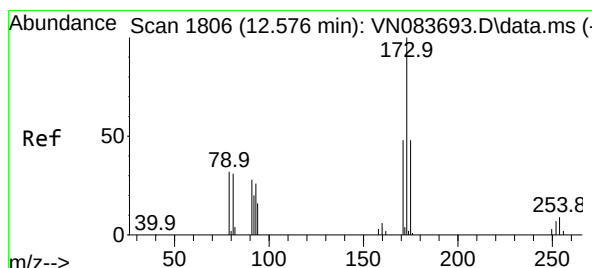
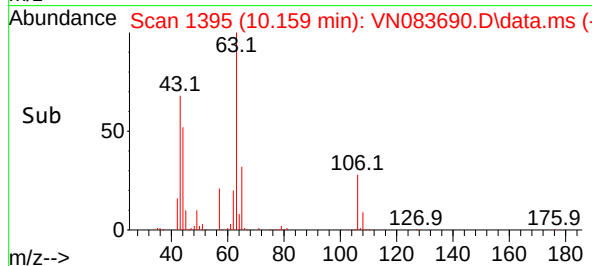
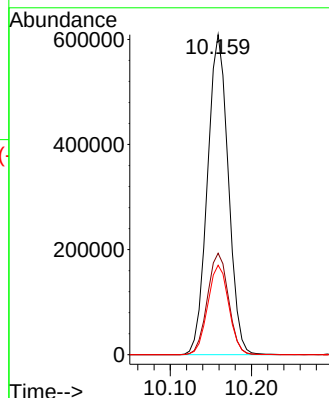
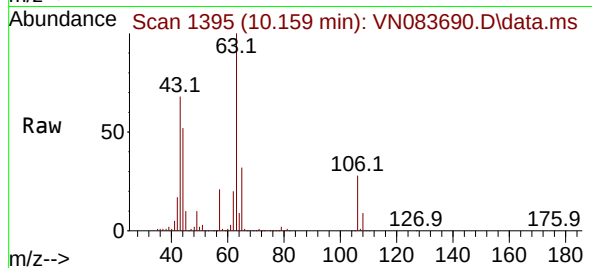
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#56

Bromoform

Concen: 162.983 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

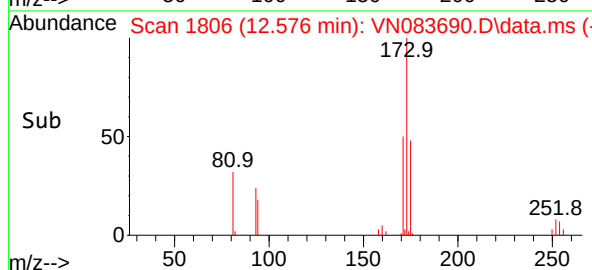
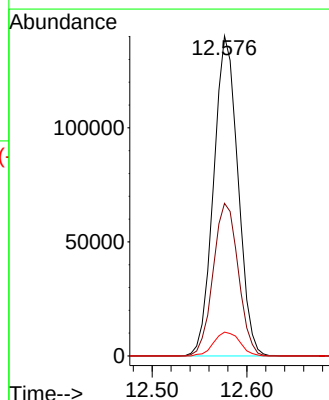
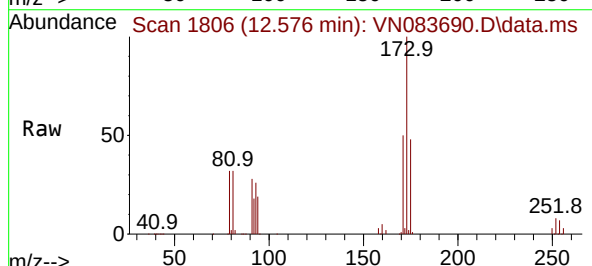
Tgt Ion:173 Resp: 250373

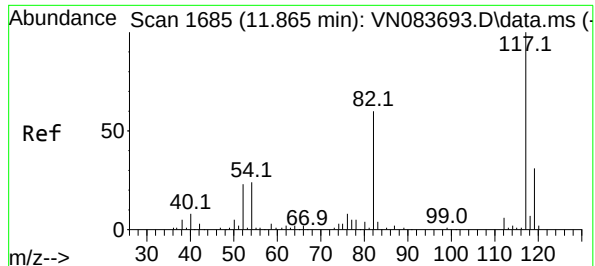
Ion Ratio Lower Upper

173 100

175 49.1 40.0 60.0

254 8.0 8.3 12.5#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion:117 Resp: 174274

Ion Ratio Lower Upper

117 100

82 59.6 46.6 69.8

119 32.8 25.4 38.2

Manual Integrations

APPROVED

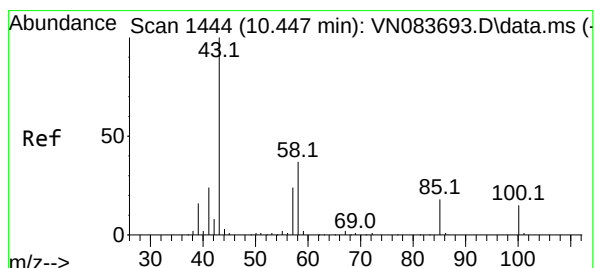
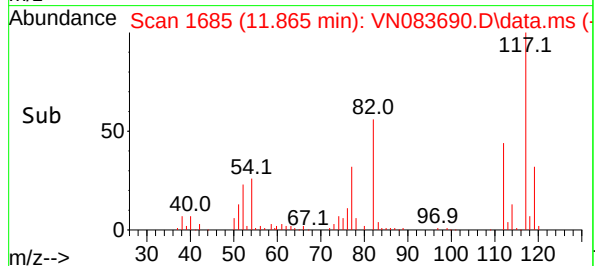
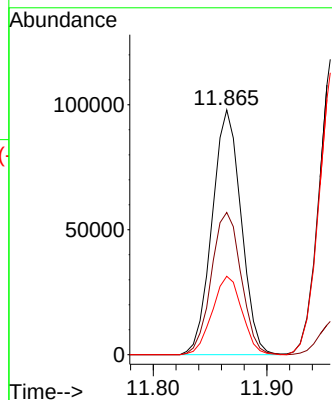
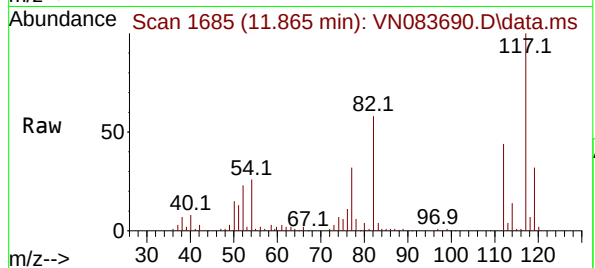
Reviewed By :John

Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#58

4-Methyl-2-Pentanone

Concen: 768.178 ug/l

RT: 10.447 min Scan# 1444

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

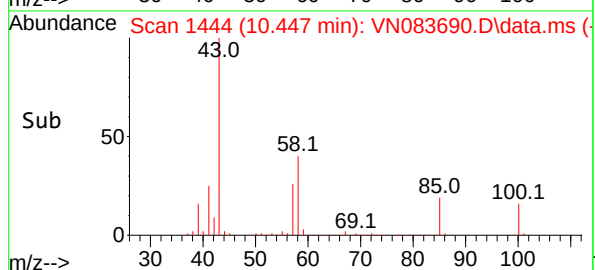
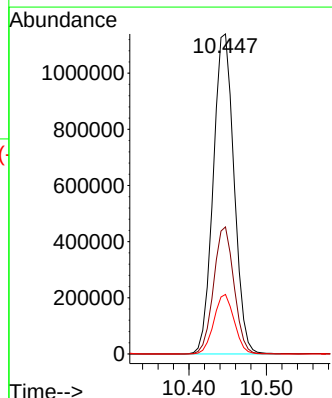
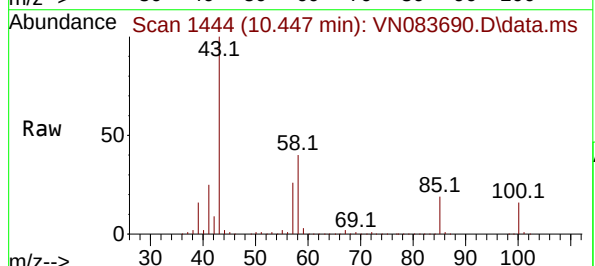
Tgt Ion: 43 Resp: 2122727

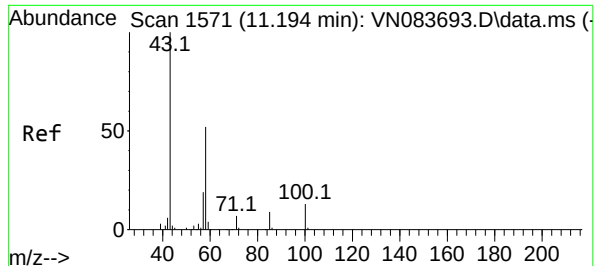
Ion Ratio Lower Upper

43 100

58 39.0 36.5 54.7

85 18.2 19.5 29.3#





#59

2-Hexanone

Concen: 804.463 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion: 43 Resp: 167972

Ion Ratio Lower Upper

43 100

58 54.1 50.4 75.6

57 19.4 18.6 27.8

Manual Integrations

APPROVED

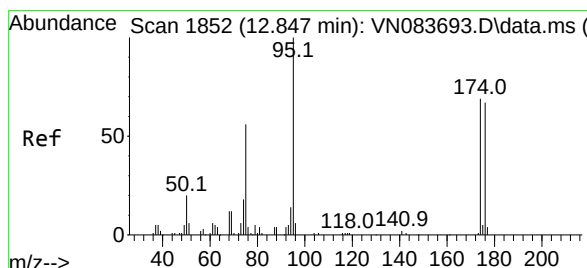
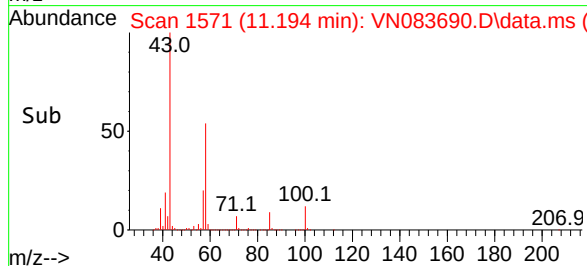
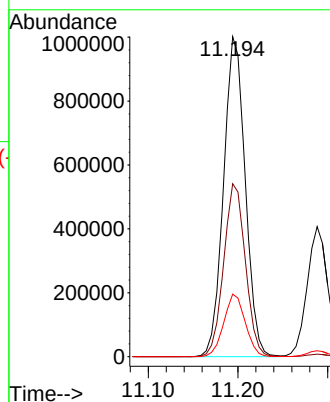
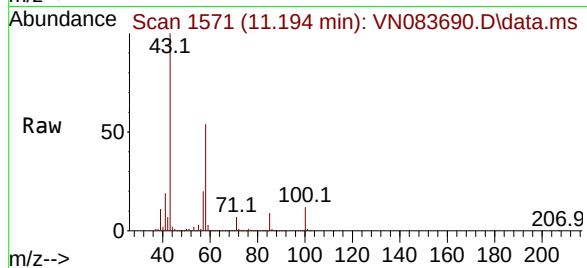
Reviewed By :John

Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#60

4-Bromofluorobenzene

Concen: 31.174 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

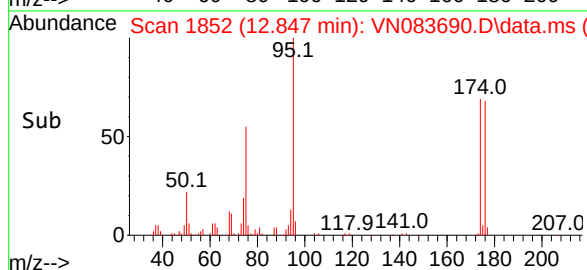
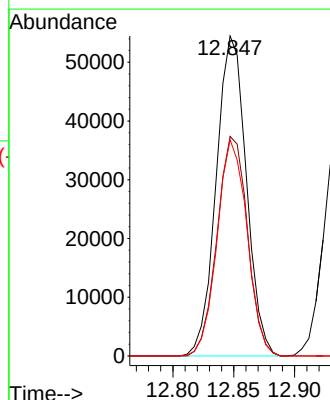
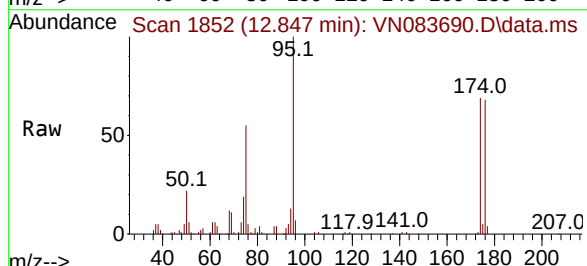
Tgt Ion: 95 Resp: 93633

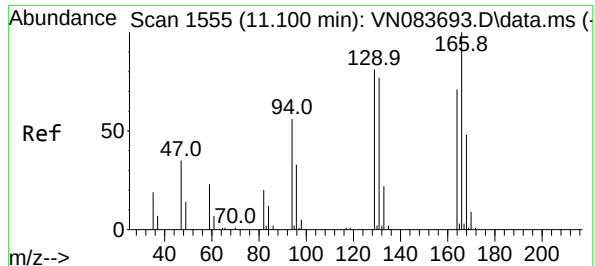
Ion Ratio Lower Upper

95 100

174 69.3 60.5 90.7

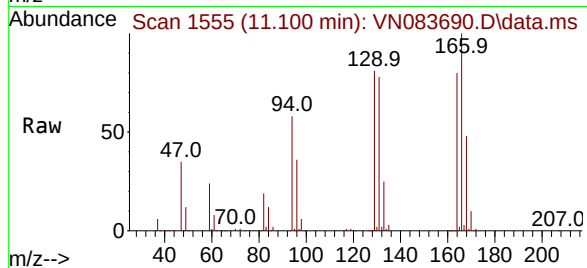
176 67.3 57.8 86.6





#61
Tetrachloroethene
Concen: 152.775 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150



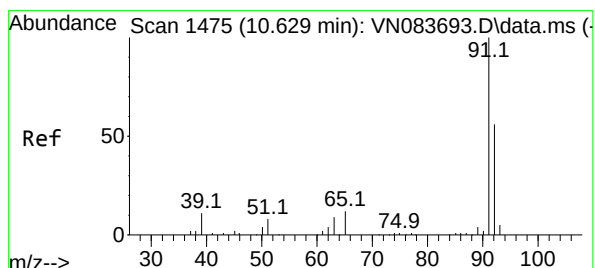
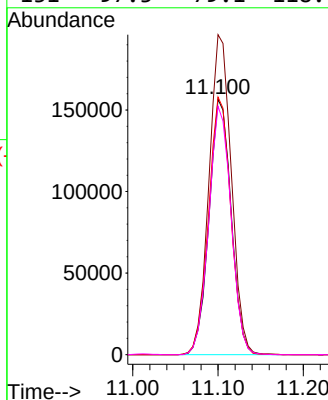
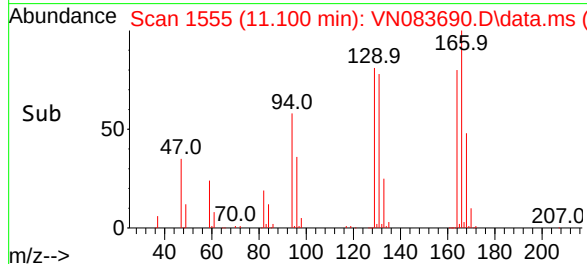
Tgt Ion:164 Resp: 281775
Ion Ratio Lower Upper
164 100
166 125.3 106.7 160.1
129 100.9 85.8 128.6
131 97.3 79.1 118.7

Manual Integrations
APPROVED

Reviewed By :John
Carlone

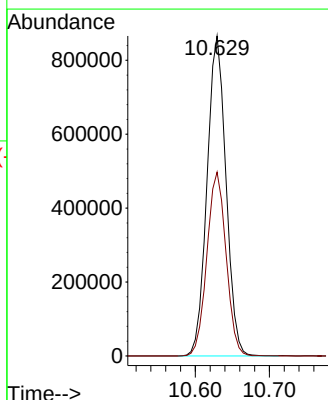
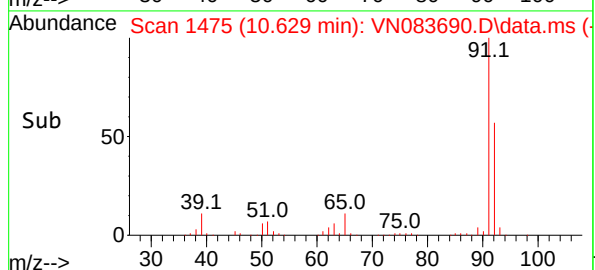
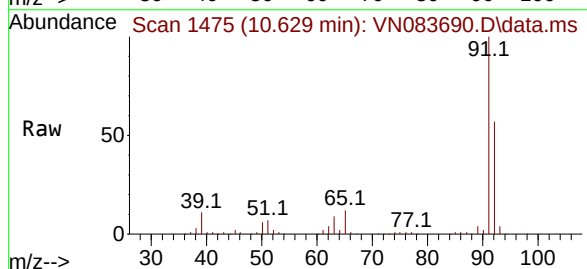
09/09/2024
Supervised By :Mahesh
Dadoda

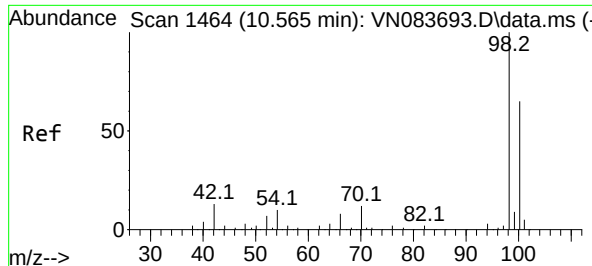
09/09/2024



#62
Toluene
Concen: 153.315 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

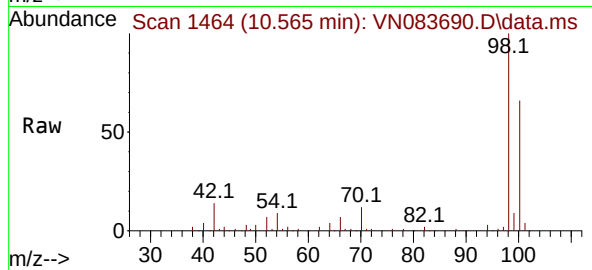
Tgt Ion: 91 Resp: 1535761
Ion Ratio Lower Upper
91 100
92 58.0 46.5 69.7





#63
Toluene-d8
Concen: 29.706 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150



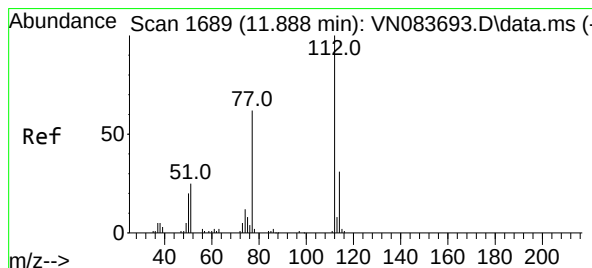
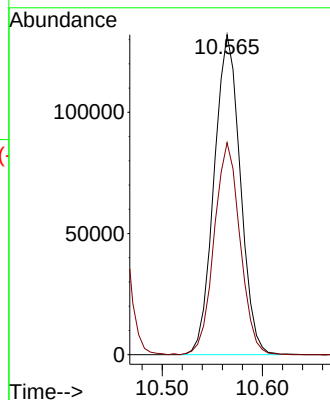
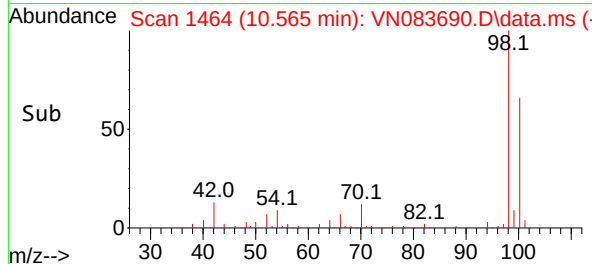
Tgt Ion: 98 Resp: 239710
Ion Ratio Lower Upper
98 100
100 65.4 52.7 79.1

Manual Integrations
APPROVED

Reviewed By :John
Carlone

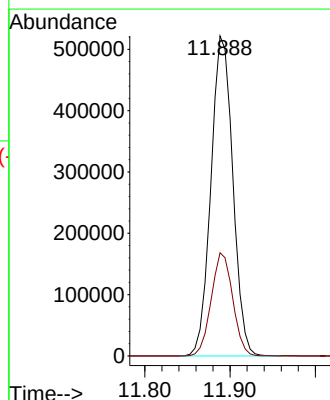
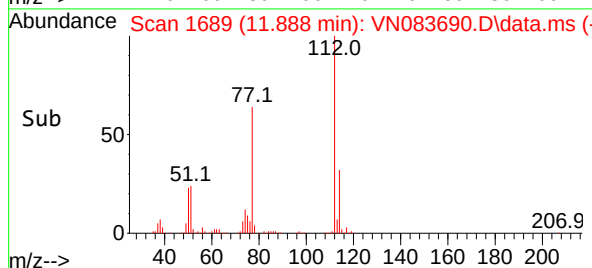
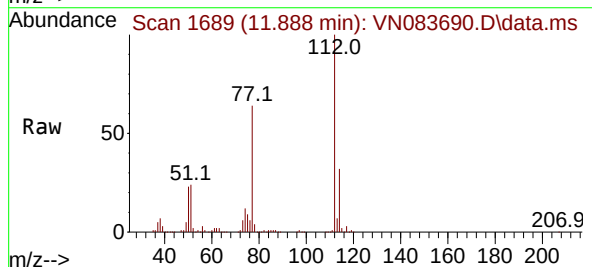
09/09/2024
Supervised By :Mahesh
Dadoda

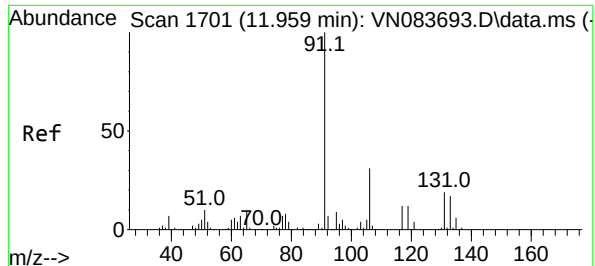
09/09/2024



#64
Chlorobenzene
Concen: 149.851 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion:112 Resp: 929353
Ion Ratio Lower Upper
112 100
114 32.2 26.6 39.8





#65

1,1,1,2-Tetrachloroethane

Concen: 154.406 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion:131 Resp: 333589

Ion Ratio Lower Upper

131 100

133 95.4 0.0 188.0

119 64.3 0.0 122.8

Manual Integrations

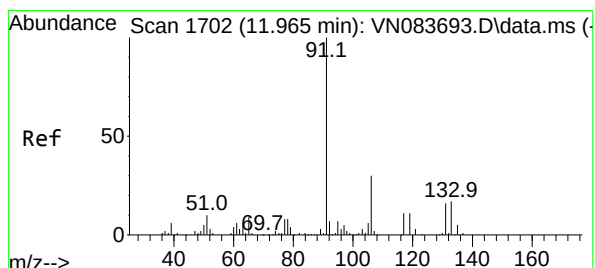
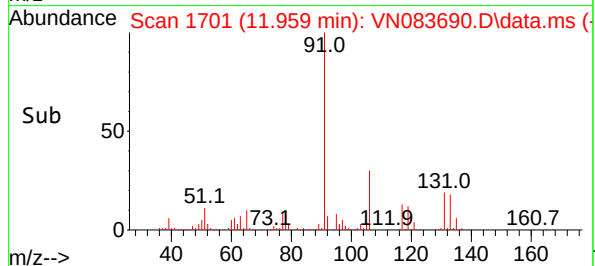
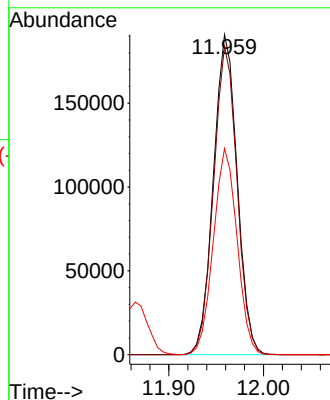
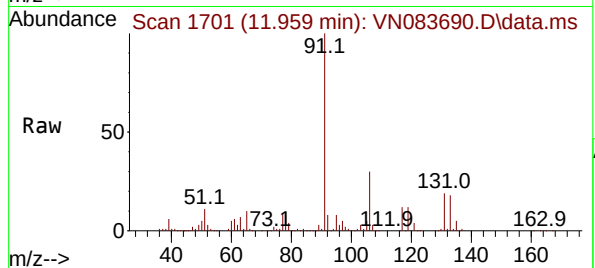
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#66

Ethyl Benzene

Concen: 156.289 ug/l

RT: 11.965 min Scan# 1702

Delta R.T. 0.000 min

Lab File: VN083690.D

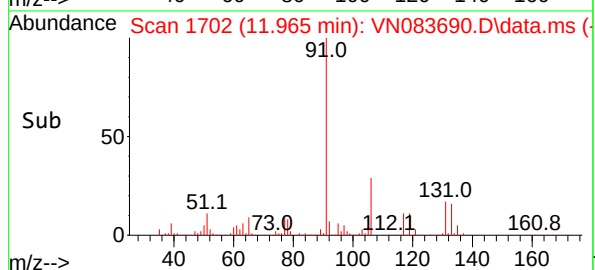
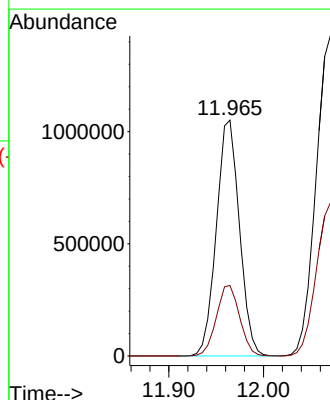
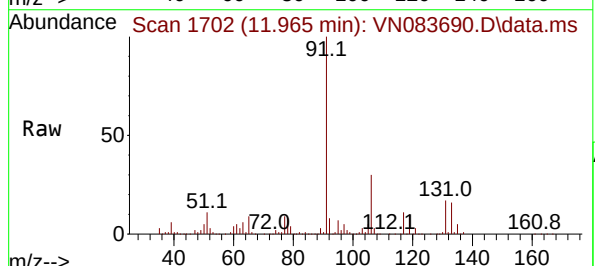
Acq: 06 Sep 2024 11:58

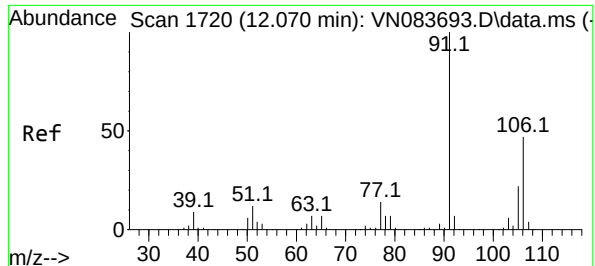
Tgt Ion: 91 Resp: 1780342

Ion Ratio Lower Upper

91 100

106 29.9 24.4 36.6





#67

m/p-Xylenes

Concen: 314.757 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:106 Resp: 1319129

Ion Ratio Lower Upper

106 100

91 210.9 166.6 249.8

Manual Integrations

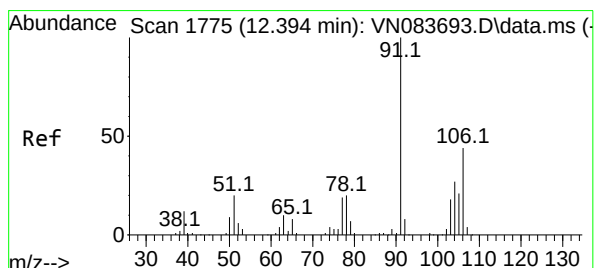
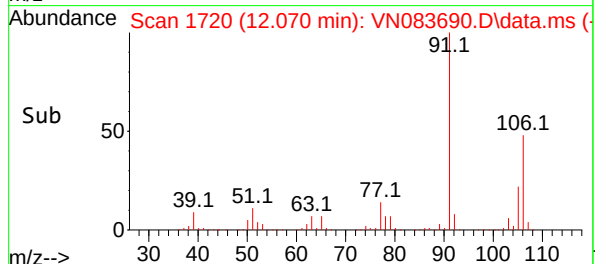
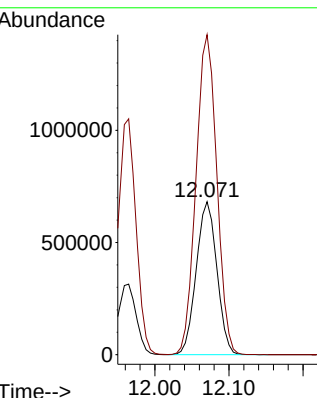
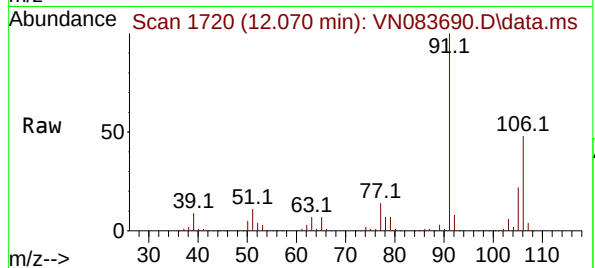
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#68

o-Xylene

Concen: 156.858 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN083690.D

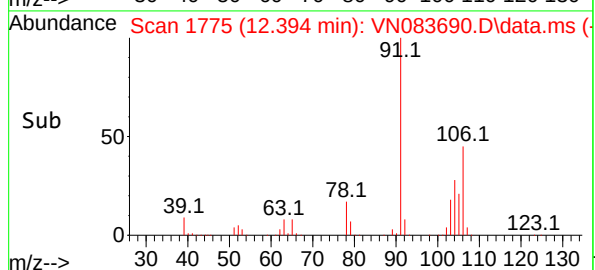
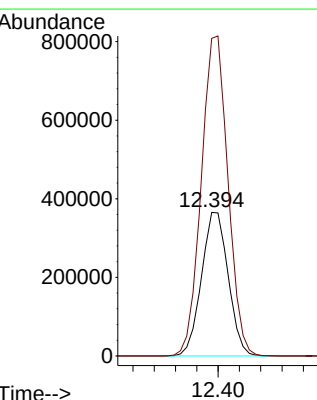
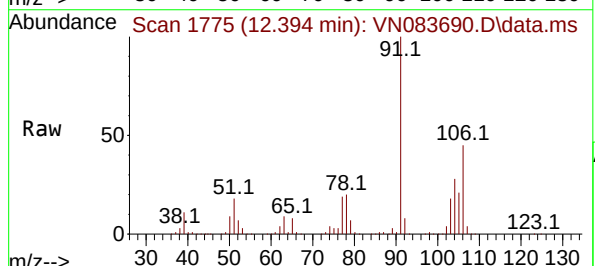
Acq: 06 Sep 2024 11:58

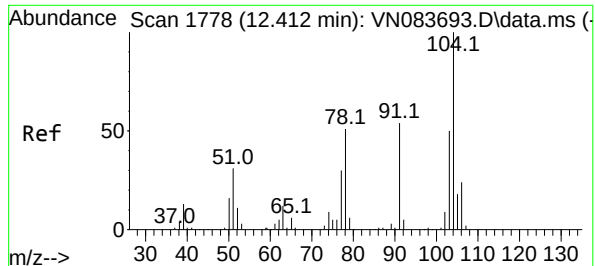
Tgt Ion:106 Resp: 636232

Ion Ratio Lower Upper

106 100

91 222.4 110.0 330.0





#69

Styrene

Concen: 156.815 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC150

Tgt Ion:104 Resp: 107472

Ion Ratio Lower Upper

104 100

78 54.5 42.6 64.0

103 54.8 43.7 65.5

Manual Integrations

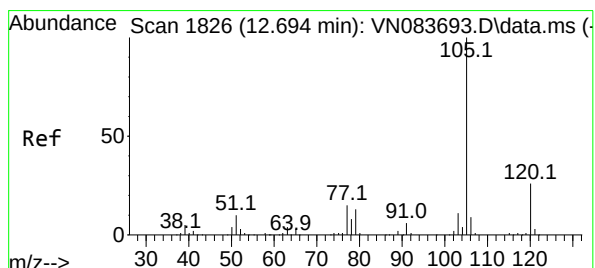
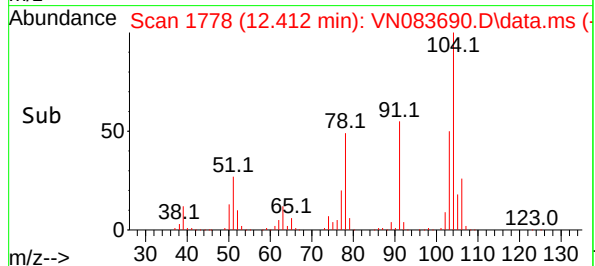
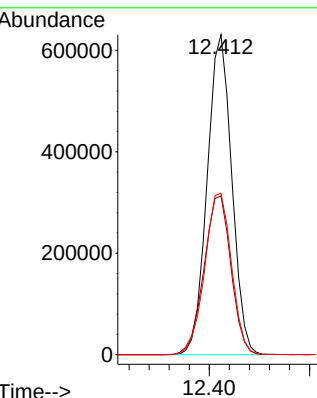
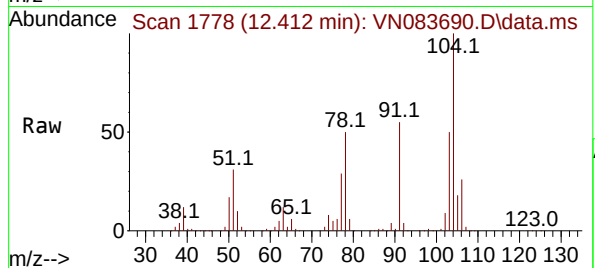
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#70

Isopropylbenzene

Concen: 157.234 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.000 min

Lab File: VN083690.D

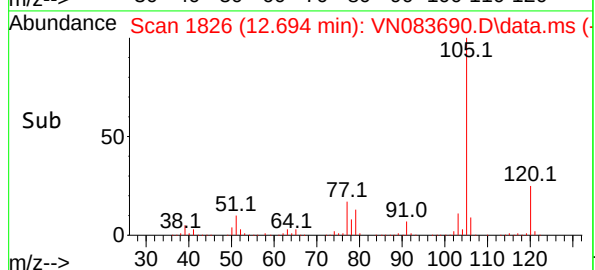
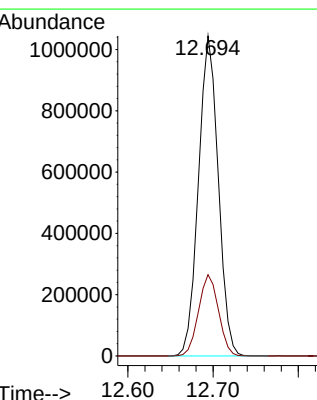
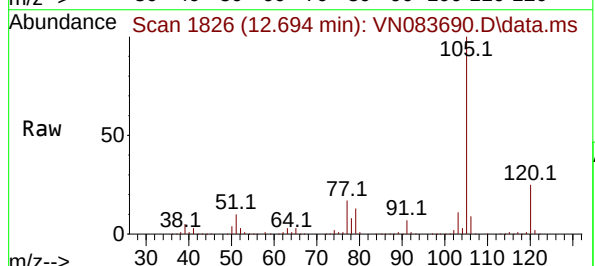
Acq: 06 Sep 2024 11:58

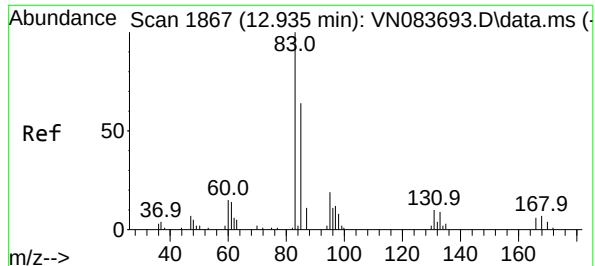
Tgt Ion:105 Resp: 1683033

Ion Ratio Lower Upper

105 100

120 25.6 17.8 33.1





#71
1,1,2,2-Tetrachloroethane
Concen: 152.420 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

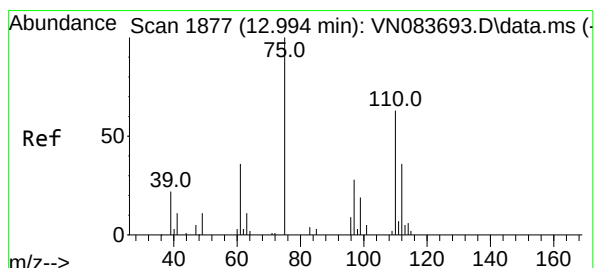
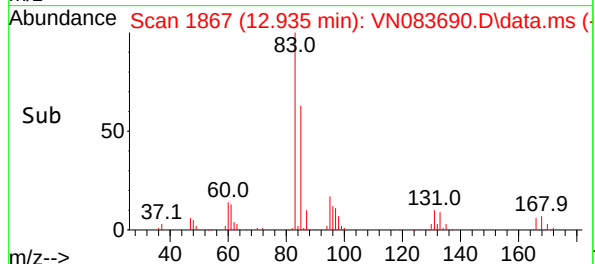
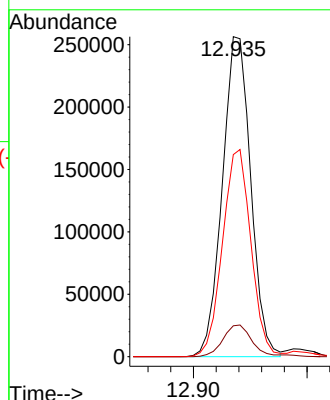
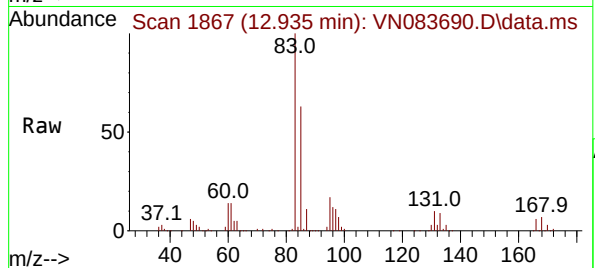
Tgt Ion: 83 Resp: 445602
Ion Ratio Lower Upper
83 100
131 9.9 5.2 15.6
85 64.7 32.3 96.8

Manual Integrations
APPROVED

Reviewed By :John
Carlone

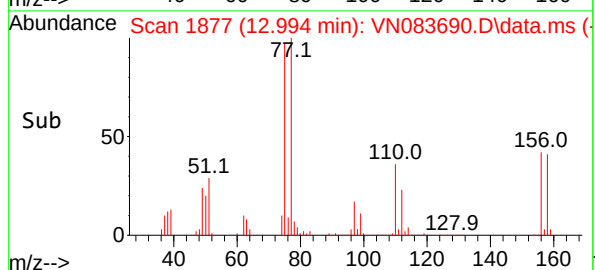
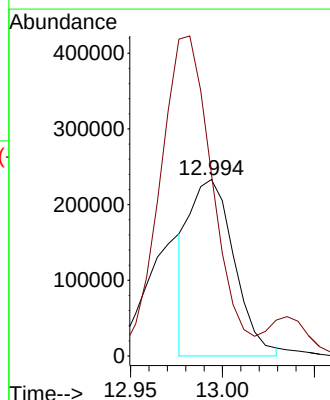
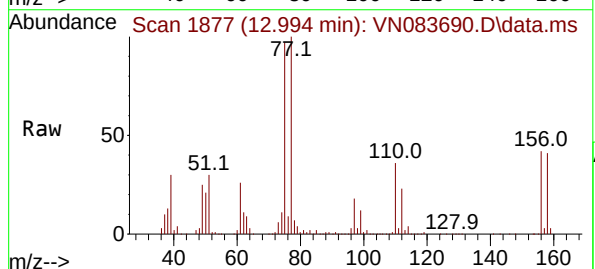
09/09/2024
Supervised By :Mahesh
Dadoda

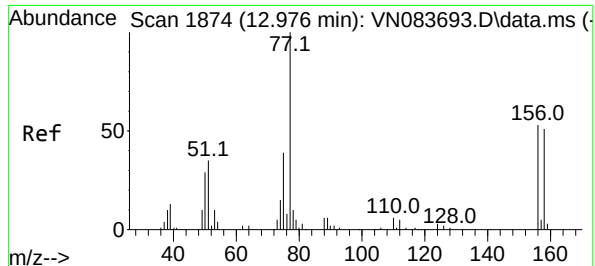
09/09/2024



#72
1,2,3-Trichloropropane
Concen: 153.378 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

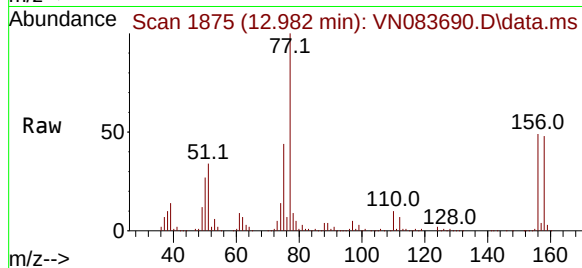
Tgt Ion: 75 Resp: 392380
Ion Ratio Lower Upper
75 100
77 215.1 0.0 367.6





#73
Bromobenzene
Concen: 148.978 ug/l
RT: 12.982 min Scan# 1875
Delta R.T. 0.006 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC150



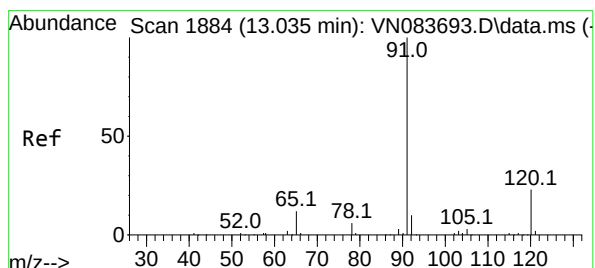
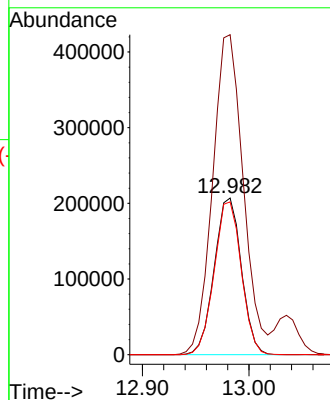
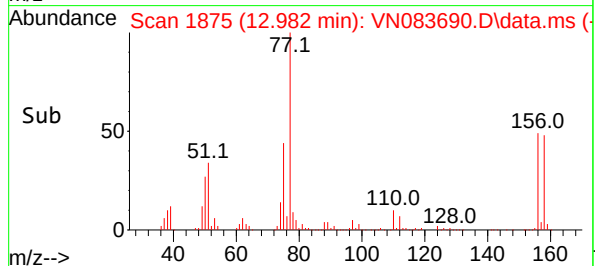
Tgt Ion:156 Resp: 366279
Ion Ratio Lower Upper
156 100
77 230.4 0.0 437.6
158 97.3 0.0 203.8

Manual Integrations
APPROVED

Reviewed By :John
Carlone

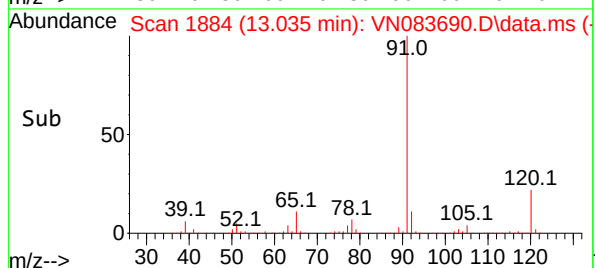
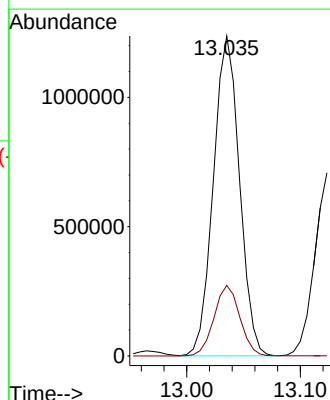
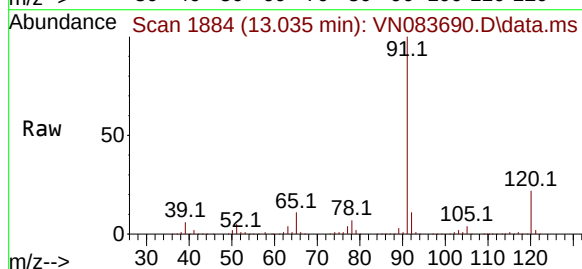
09/09/2024
Supervised By :Mahesh
Dadoda

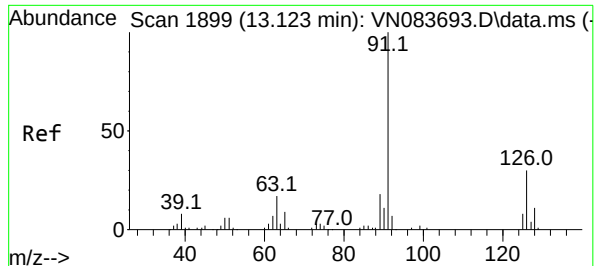
09/09/2024



#74
n-propylbenzene
Concen: 157.557 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion: 91 Resp: 1974229
Ion Ratio Lower Upper
91 100
120 21.8 0.0 43.8





#75

2-Chlorotoluene

Concen: 151.841 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 91 Resp: 118747

Ion Ratio Lower Upper

91 100

126 31.0 0.0 61.2

Manual Integrations

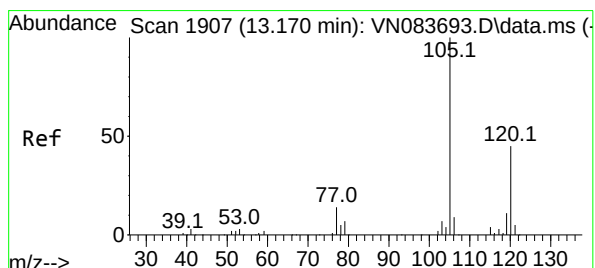
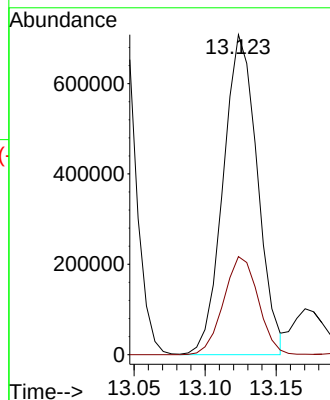
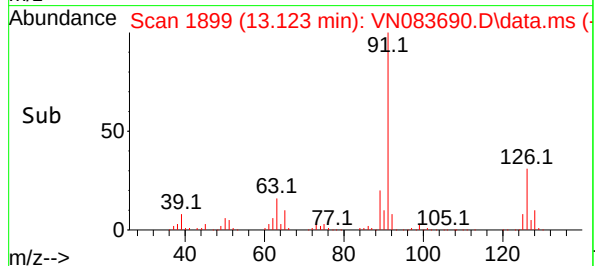
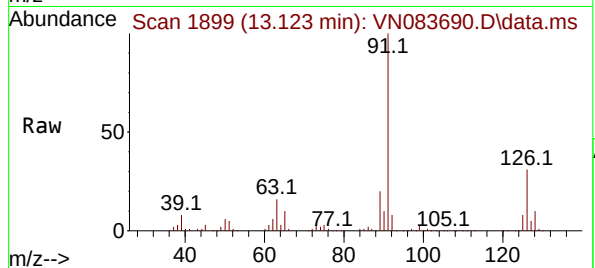
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#76

1,3,5-Trimethylbenzene

Concen: 154.944 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN083690.D

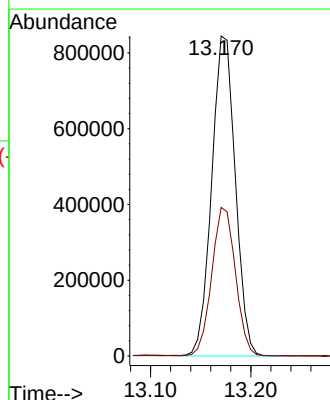
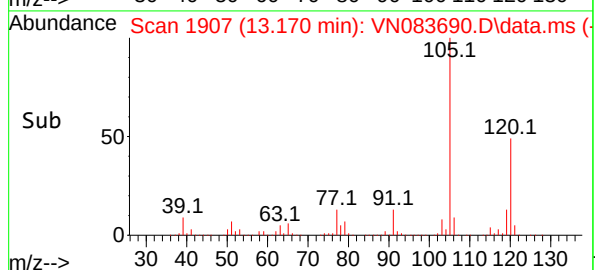
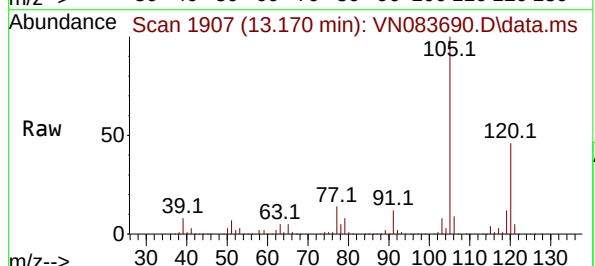
Acq: 06 Sep 2024 11:58

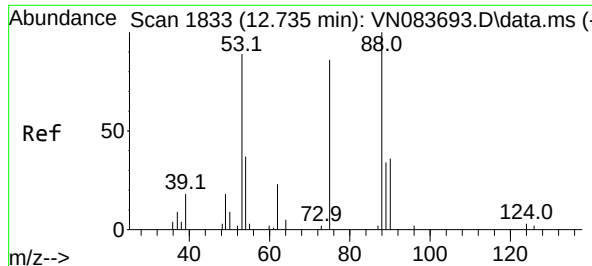
Tgt Ion:105 Resp: 1385400

Ion Ratio Lower Upper

105 100

120 46.5 0.0 95.8





#77

t-1,4-Dichloro-2-butene

Concen: 166.125 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 75 Resp: 17998

Ion Ratio Lower Upper

75 100

53 104.0 45.9 137.7

89 47.1 25.9 77.7

Manual Integrations

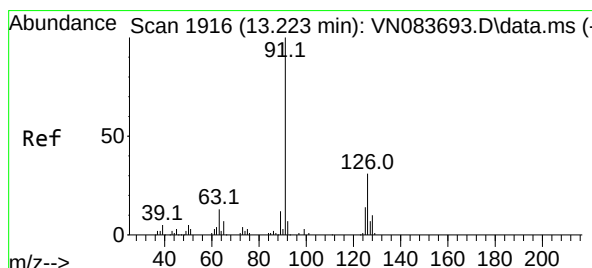
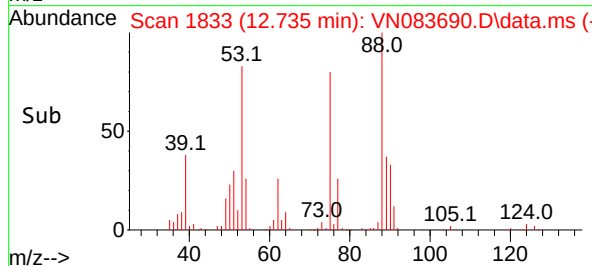
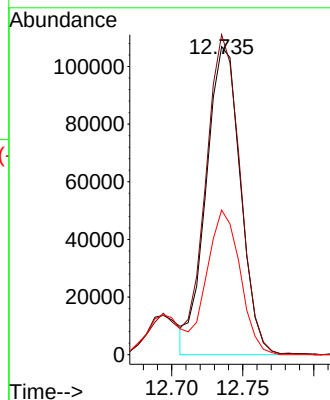
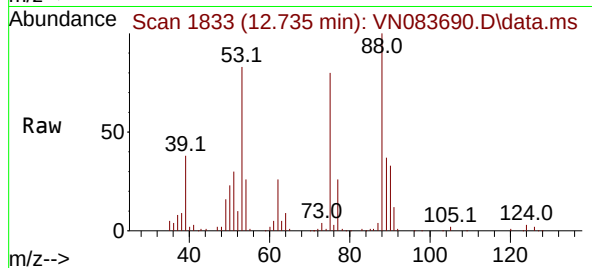
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#78

4-Chlorotoluene

Concen: 152.299 ug/l

RT: 13.223 min Scan# 1916

Delta R.T. 0.000 min

Lab File: VN083690.D

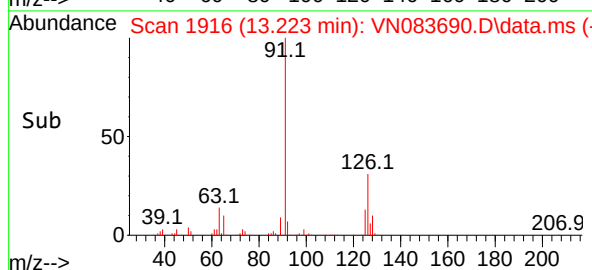
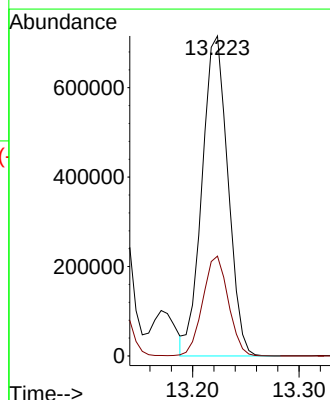
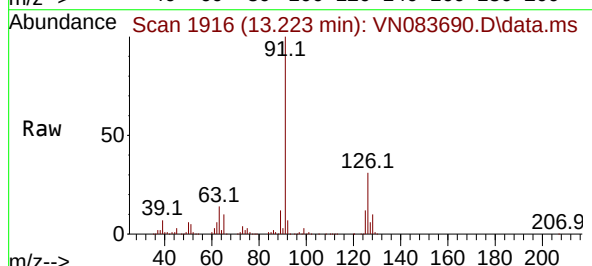
Acq: 06 Sep 2024 11:58

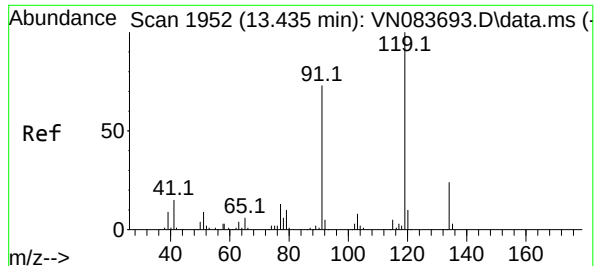
Tgt Ion: 91 Resp: 1207880

Ion Ratio Lower Upper

91 100

126 30.9 0.0 62.8





#79
tert-butylbenzene
Concen: 154.725 ug/l
RT: 13.435 min Scan# 1952
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

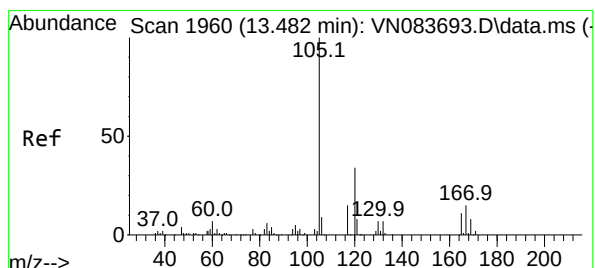
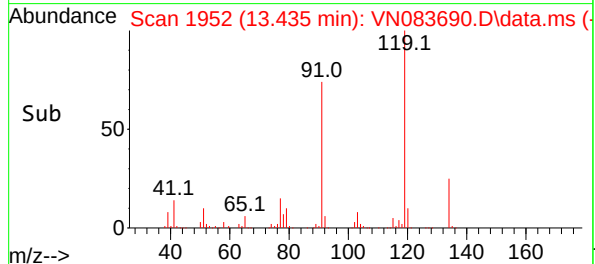
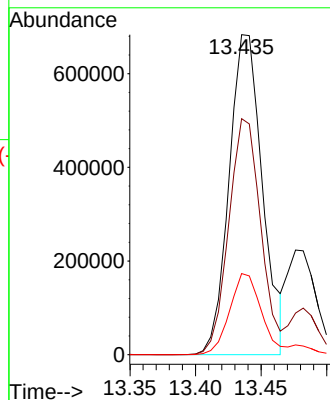
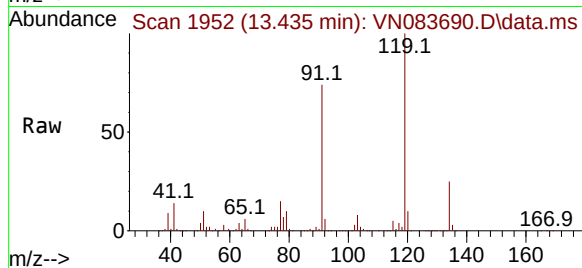
Tgt Ion:119 Resp: 120975
Ion Ratio Lower Upper
119 100
91 70.8 0.0 138.8
134 24.3 0.0 48.6

Manual Integrations
APPROVED

Reviewed By :John
Carlone

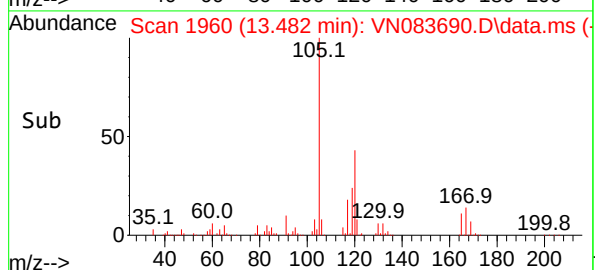
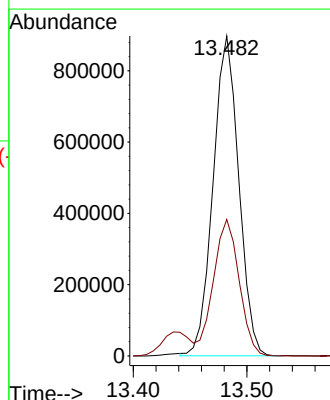
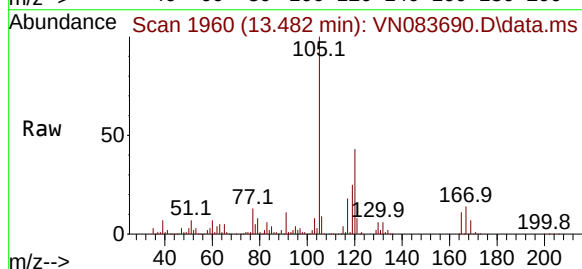
09/09/2024
Supervised By :Mahesh
Dadoda

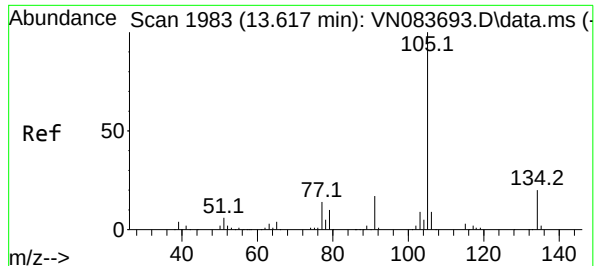
09/09/2024



#80
1,2,4-Trimethylbenzene
Concen: 155.573 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

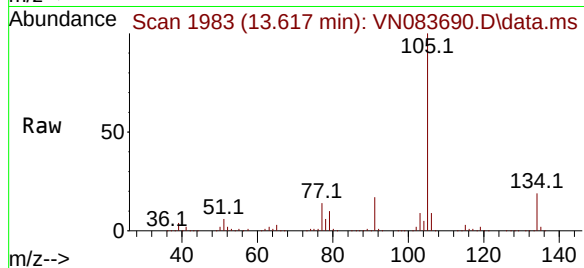
Tgt Ion:105 Resp: 1405691
Ion Ratio Lower Upper
105 100
120 43.1 0.0 86.8





#81
sec-Butylbenzene
Concen: 157.897 ug/l
RT: 13.617 min Scan# 1983
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150



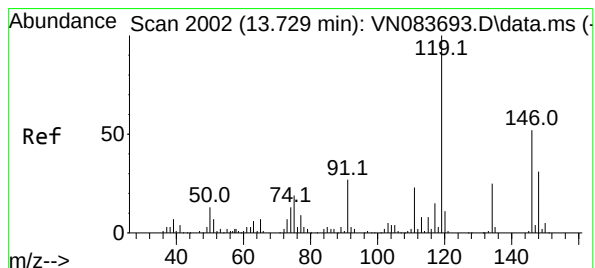
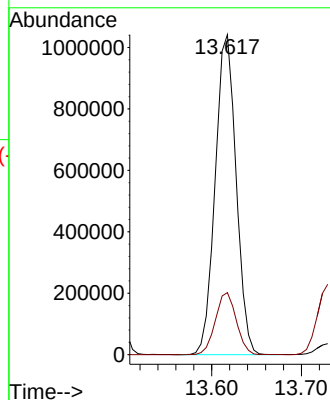
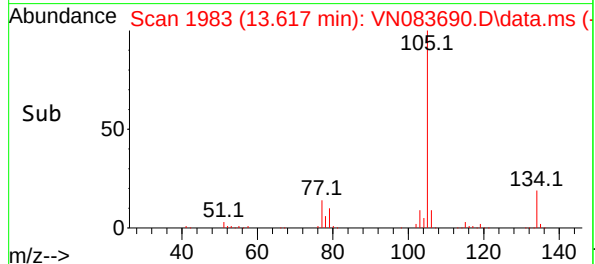
Tgt Ion:105 Resp: 1686510
Ion Ratio Lower Upper
105 100
134 19.4 0.0 39.0

Manual Integrations
APPROVED

Reviewed By :John
Carlone

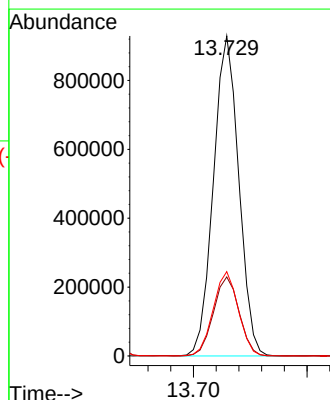
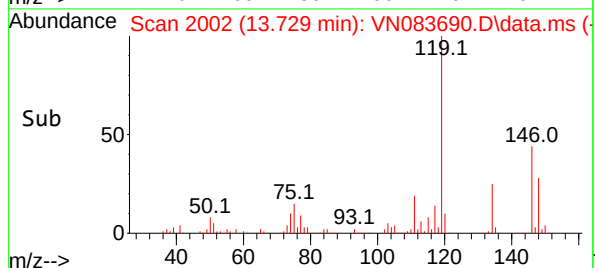
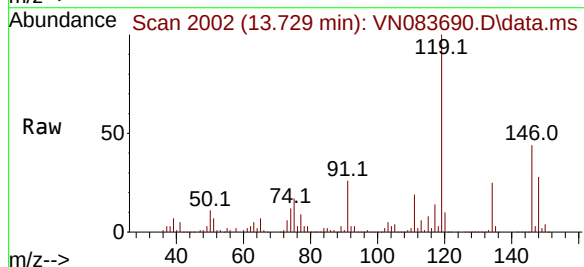
09/09/2024
Supervised By :Mahesh
Dadoda

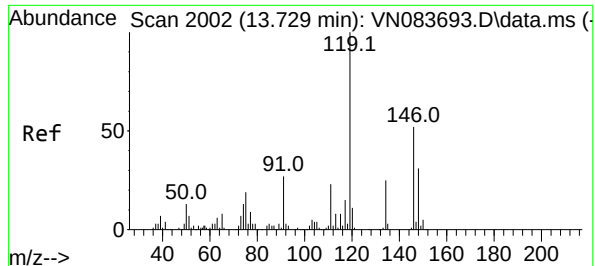
09/09/2024



#82
p-Isopropyltoluene
Concen: 160.303 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Tgt Ion:119 Resp: 1440587
Ion Ratio Lower Upper
119 100
134 25.0 0.0 49.2
91 26.1 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 149.009 ug/l

RT: 13.735 min Scan# 2003

Delta R.T. 0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

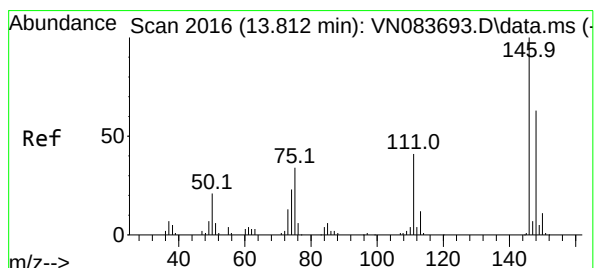
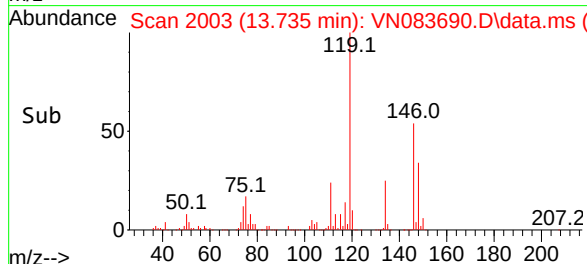
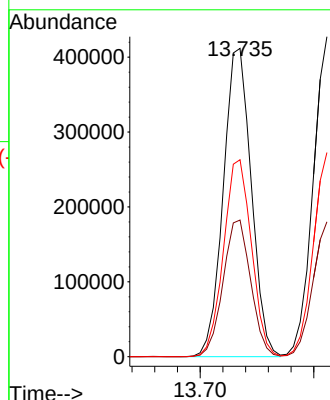
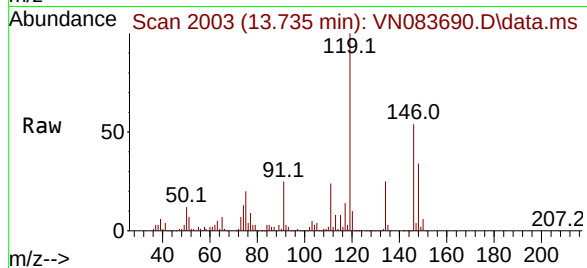
Tgt Ion:146	Resp: 70509
Ion Ratio	Lower Upper
146	100
111	43.8 22.4 67.0
148	63.9 32.1 96.5

Manual Integrations
APPROVEDReviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#84

1,4-Dichlorobenzene

Concen: 150.244 ug/l

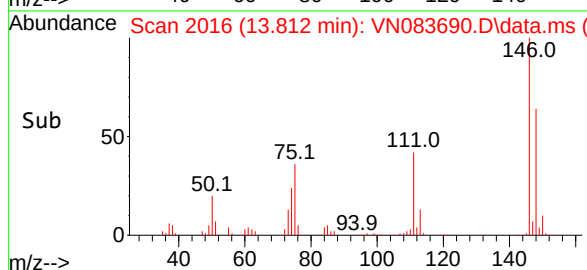
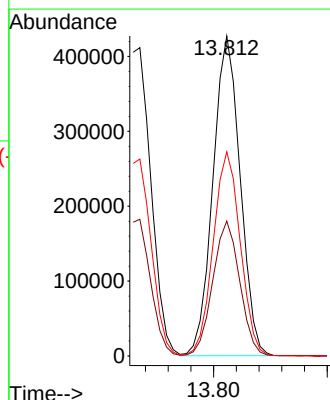
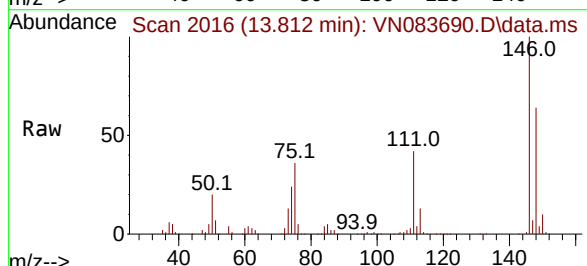
RT: 13.812 min Scan# 2016

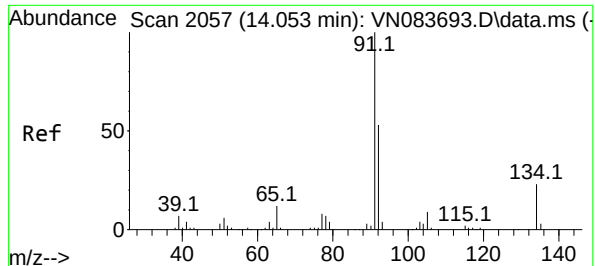
Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Tgt Ion:146	Resp: 710765
Ion Ratio	Lower Upper
146	100
111	41.9 21.3 63.9
148	63.7 31.9 95.5





#85

n-Butylbenzene

Concen: 163.904 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion: 91 Resp: 1299810

Ion Ratio Lower Upper

91 100

92 53.1 0.0 105.0

134 24.2 0.0 51.8

Manual Integrations

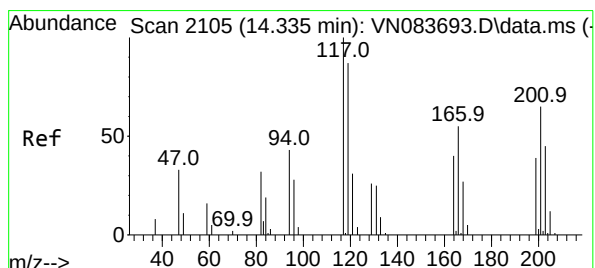
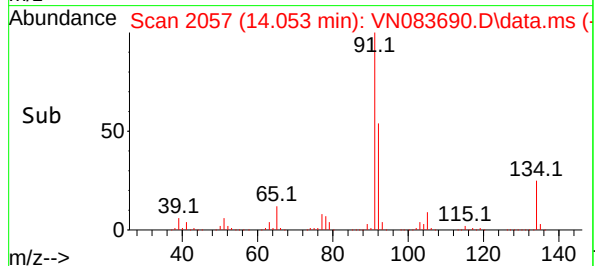
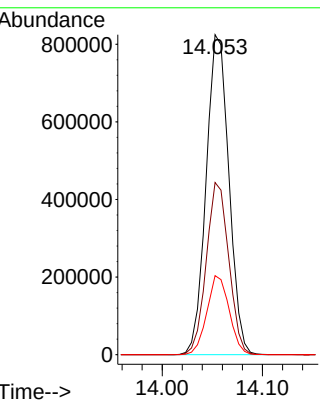
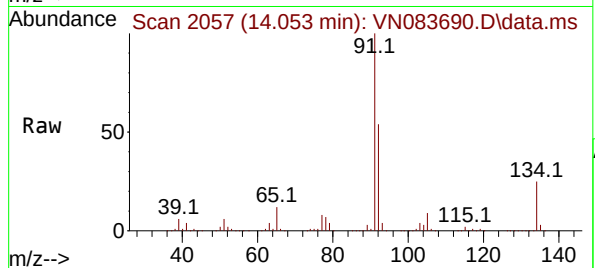
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#86

Hexachloroethane

Concen: 160.011 ug/l

RT: 14.335 min Scan# 2105

Delta R.T. 0.000 min

Lab File: VN083690.D

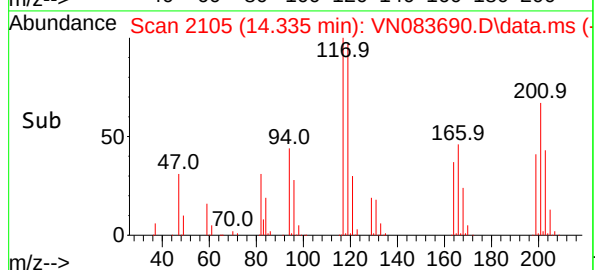
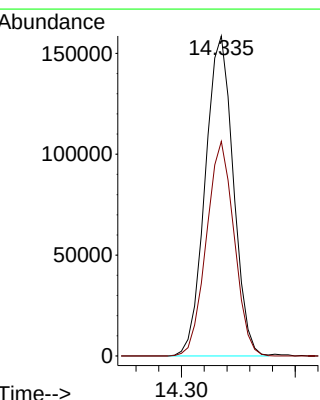
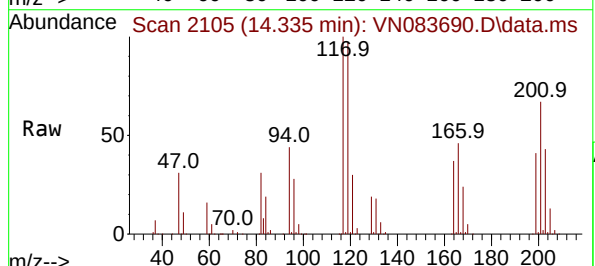
Acq: 06 Sep 2024 11:58

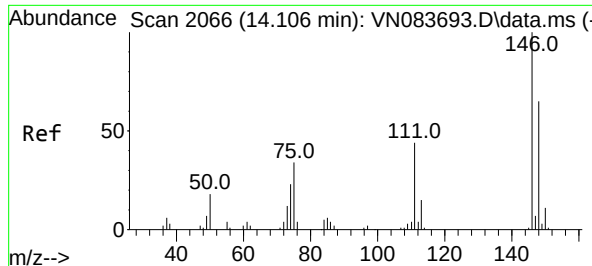
Tgt Ion:117 Resp: 272497

Ion Ratio Lower Upper

117 100

201 66.2 38.0 114.0





#87

1,2-Dichlorobenzene

Concen: 153.162 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Tgt Ion:146 Resp: 70336

Ion Ratio Lower Upper

146 100

111 44.9 22.6 67.8

148 63.2 31.3 93.8

Manual Integrations

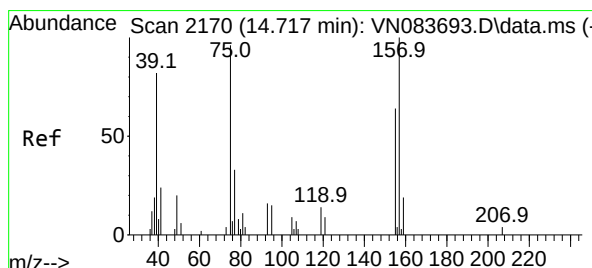
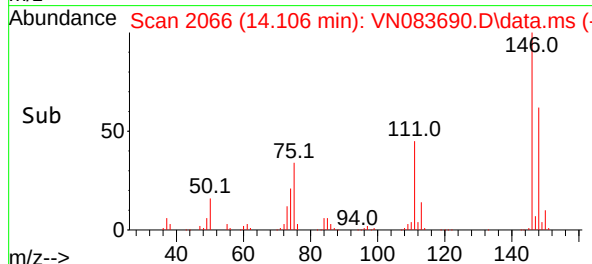
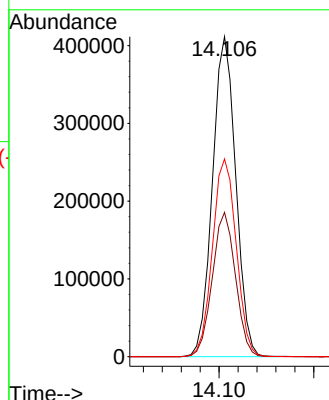
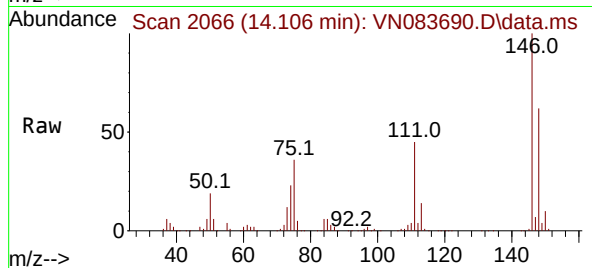
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 155.862 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

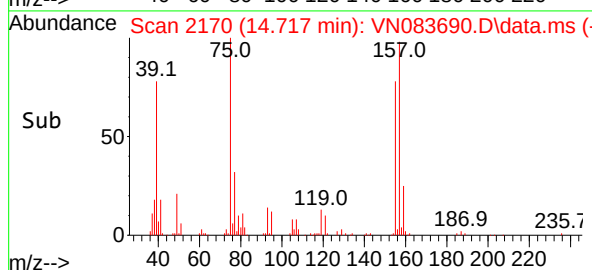
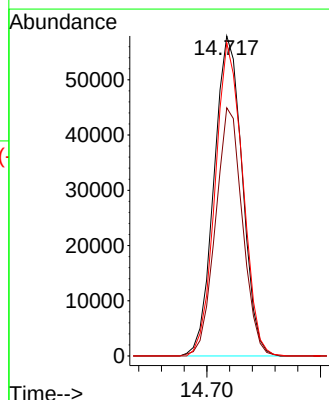
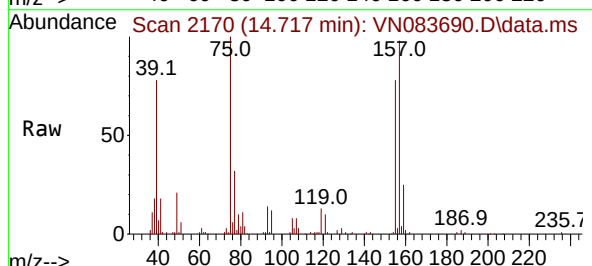
Tgt Ion: 75 Resp: 100140

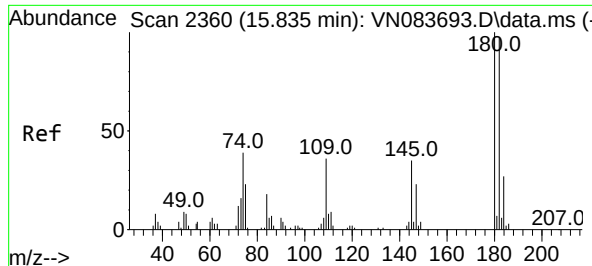
Ion Ratio Lower Upper

75 100

155 74.1 61.7 92.5

157 95.5 83.6 125.4





#89

1,2,4-Trichlorobenzene

Concen: 153.353 ug/l

RT: 15.841 min Scan# 21

Delta R.T. 0.006 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

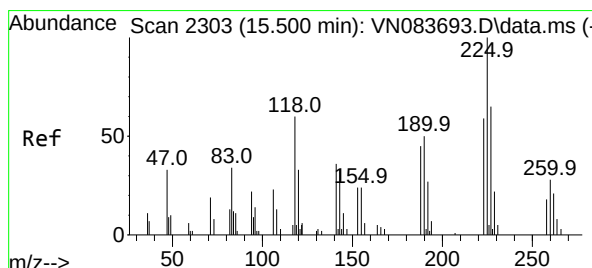
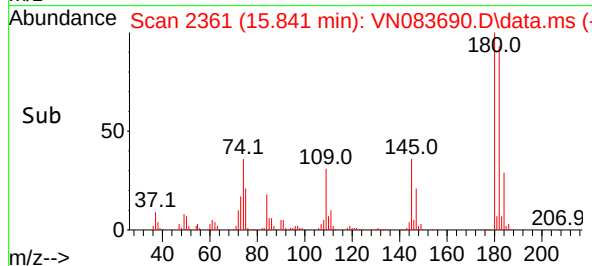
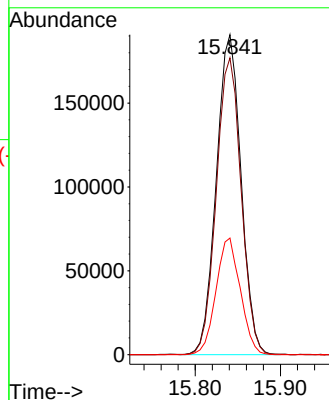
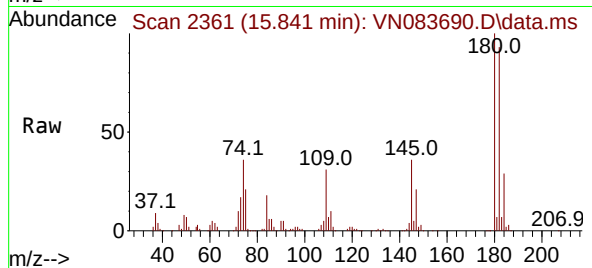
Tgt Ion:	180	Resp:	385824
Ion Ratio	Lower	Upper	
180	100		
182	93.1	76.4	114.6
145	35.8	28.4	42.6

Manual Integrations
APPROVEDReviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#90

Hexachlorobutadiene

Concen: 155.236 ug/l

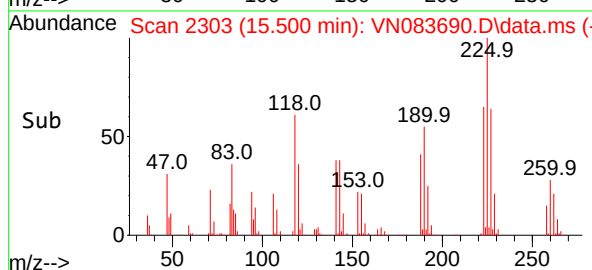
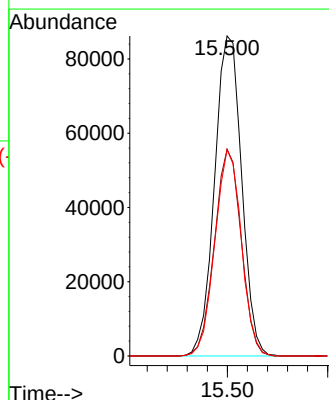
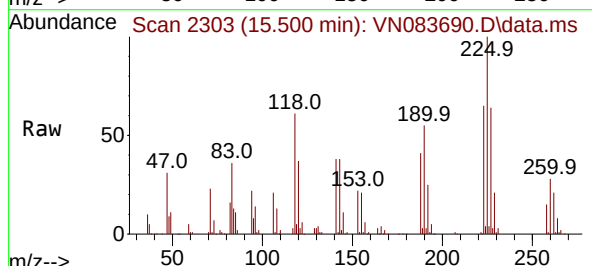
RT: 15.500 min Scan# 2303

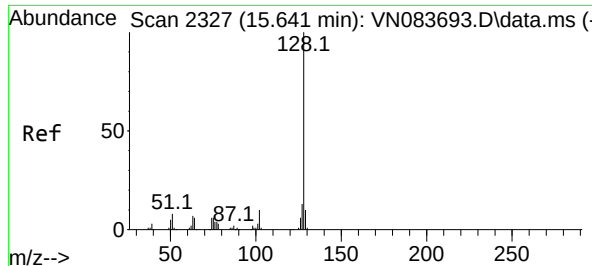
Delta R.T. 0.000 min

Lab File: VN083690.D

Acq: 06 Sep 2024 11:58

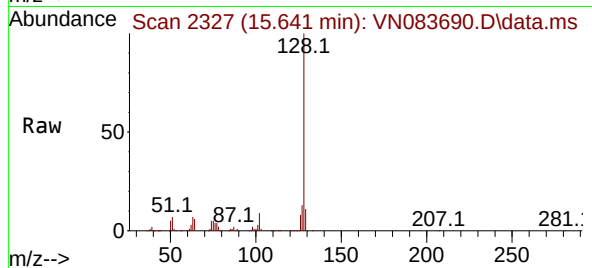
Tgt Ion:	225	Resp:	161655
Ion Ratio	Lower	Upper	
225	100		
223	63.7	0.0	126.6
227	62.9	0.0	126.6





#91
Naphthalene
Concen: 155.538 ug/l
RT: 15.641 min Scan# 2327
Delta R.T. 0.000 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150



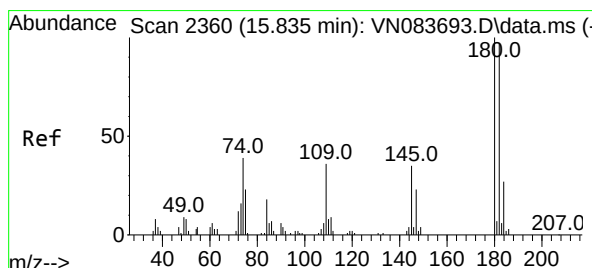
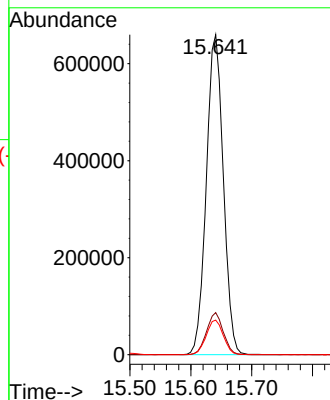
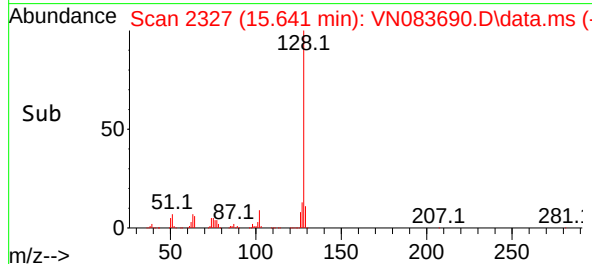
Tgt Ion:128 Resp: 127933
Ion Ratio Lower Upper
128 100
127 12.9 10.6 16.0
129 10.9 8.6 13.0

Manual Integrations
APPROVED

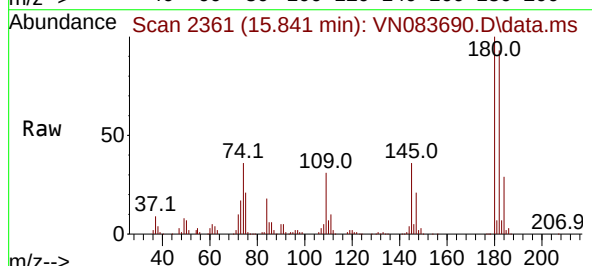
Reviewed By :John
Carlone

09/09/2024
Supervised By :Mahesh
Dadoda

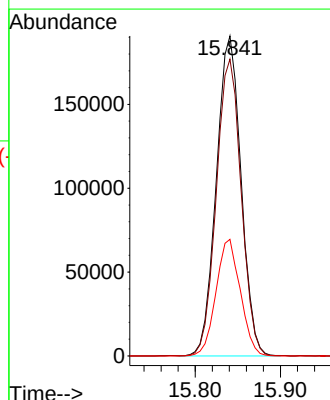
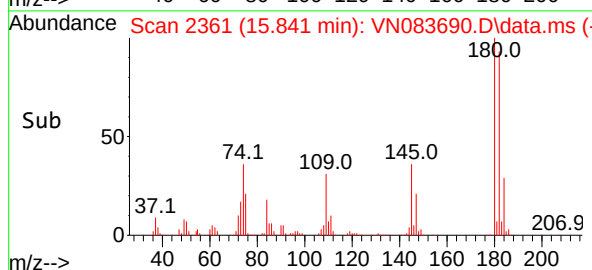
09/09/2024



#92
1,2,3-Trichlorobenzene
Concen: 153.353 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN083690.D
Acq: 06 Sep 2024 11:58



Tgt Ion:180 Resp: 385824
Ion Ratio Lower Upper
180 100
182 93.1 0.0 191.0
145 35.8 0.0 71.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083691.D
 Acq On : 06 Sep 2024 12:22
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024

Quant Time: Sep 06 23:31:34 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Sep 06 23:27:49 2024

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	7.812	128	29990	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	176500	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	162431	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	82140	29.964	ug/l	0.00
Spiked Amount 30.000	Range	91 - 110	Recovery	=	99.867%	
60) 4-Bromofluorobenzene	12.847	95	85052	30.381	ug/l	0.00
Spiked Amount 30.000	Range	63 - 112	Recovery	=	101.267%	
63) Toluene-d8	10.565	98	223216	29.678	ug/l	0.00
Spiked Amount 30.000	Range	91 - 112	Recovery	=	98.933%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	209558	104.343	ug/l	96
3) Chloromethane	2.359	50	215800	103.416	ug/l	98
4) Vinyl Chloride	2.518	62	226055	105.377	ug/l	98
5) Bromomethane	2.901	94	122124	101.894	ug/l	100
6) Chloroethane	3.071	64	147195	102.467	ug/l	97
7) Trichlorofluoromethane	3.471	101	372240	103.502	ug/l	98
8) Diethyl Ether	3.954	74	128401	105.070	ug/l	87
9) 1,1,2-Trichlorotrifluo...	4.359	101	201727	104.422	ug/l	94
10) 1,1-Dichloroethene	4.330	96	197471	105.943	ug/l	90
11) Methyl Iodide	4.577	142	270815	106.965	ug/l	94
12) Methyl Acetate	5.018	43	220123	97.924	ug/l #	82
13) Acrolein	4.171	56	181106	552.050	ug/l	97
14) Acrylonitrile	5.712	53	469720	516.351	ug/l	98
15) Acetone	4.430	58	169727	562.450	ug/l	72
16) Carbon Disulfide	4.701	76	544689	103.401	ug/l	96
17) Allyl chloride	5.012	41	349243	106.730	ug/l	85
18) Methylene Chloride	5.271	84	215394	105.625	ug/l	93
19) trans-1,2-Dichloroethene	5.777	96	202294	104.715	ug/l	93
20) Diisopropyl ether	6.671	45	698099	105.756	ug/l	97
21) 1,1-Dichloroethane	6.559	63	397981	105.599	ug/l	96
22) cis-1,2-Dichloroethene	7.483	96	245891	104.579	ug/l	92
23) tert-Butyl Alcohol	5.536	59	173594	520.025	ug/l #	100
24) Methyl tert-Butyl Ether	5.795	73	698808	105.500	ug/l #	87
25) Chloroform	7.965	83	419936	105.142	ug/l	99
26) Cyclohexane	8.253	56	352624	106.232	ug/l #	88
29) 1,1-Dichloropropene	8.365	75	296128	105.778	ug/l	97
30) 2-Butanone	7.483	43	706552	535.402	ug/l	95
31) 2,2-Dichloropropane	7.483	77	385127	107.903	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	395080	105.672	ug/l	98
33) Carbon Tetrachloride	8.359	117	344923	106.532	ug/l	97
34) Benzene	8.600	78	883536	105.185	ug/l	96
35) Methacrylonitrile	7.777	41	152162	102.570	ug/l	94
36) 1,2-Dichloroethane	8.665	62	328967	104.175	ug/l #	94
37) Trichloroethene	9.347	130	209884	106.405	ug/l	94
38) Methylcyclohexane	9.600	83	361334	107.807	ug/l	96
39) 1,2-Dichloropropane	9.618	63	213074	105.397	ug/l	99
40) Dibromomethane	9.706	93	154362	104.426	ug/l	95
41) Bromodichloromethane	9.883	83	339079	107.873	ug/l	97
42) Vinyl Acetate	6.600	43	2715172	500.418	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083691.D
 Acq On : 06 Sep 2024 12:22
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024

Quant Time: Sep 06 23:31:34 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Sep 06 23:27:49 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	274239	103.245	ug/l	96
44) Isopropyl Acetate	8.688	43	492170	107.129	ug/l	91
45) 1,4-Dioxane	9.694	88	74732	2085.575	ug/l	96
46) Methyl methacrylate	9.677	41	237084	106.617	ug/l	81
47) n-amyl Acetate	12.494	43	453691	111.485	ug/l	90
48) t-1,3-Dichloropropene	10.835	75	357101	108.005	ug/l	98
49) cis-1,3-Dichloropropene	10.312	75	373701	108.678	ug/l #	86
50) 1,1,2-Trichloroethane	11.012	97	200803	106.757	ug/l	97
51) Ethyl methacrylate	10.871	69	349215	108.672	ug/l	80
52) 1,3-Dichloropropane	11.165	76	353943	104.200	ug/l	99
53) Dibromochloromethane	11.359	129	245689	108.901	ug/l	99
54) 1,2-Dibromoethane	11.471	107	208856	107.334	ug/l	100
55) 2-Chloroethyl vinyl ether	10.159	63	612442	478.222	ug/l	98
56) Bromoform	12.576	173	158228	110.393	ug/l #	97
58) 4-Methyl-2-Pentanone	10.441	43	1332742	517.461	ug/l #	89
59) 2-Hexanone	11.194	43	1020446	524.351	ug/l	89
61) Tetrachloroethene	11.106	164	178440	103.802	ug/l	93
62) Toluene	10.630	91	965496	103.413	ug/l	99
64) Chlorobenzene	11.888	112	592341	102.474	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.959	131	210376	104.475	ug/l	98
66) Ethyl Benzene	11.965	91	1122330	105.709	ug/l	100
67) m/p-Xylenes	12.071	106	825202	211.258	ug/l	97
68) o-Xylene	12.394	106	400965	106.062	ug/l	97
69) Styrene	12.412	104	688492	107.784	ug/l	99
70) Isopropylbenzene	12.694	105	1072525	107.504	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	286536	105.157	ug/l	99
72) 1,2,3-Trichloropropane	12.988	75	245619m	103.011	ug/l	
73) Bromobenzene	12.976	156	235332	102.697	ug/l	94
74) n-propylbenzene	13.035	91	1257711	107.692	ug/l	100
75) 2-Chlorotoluene	13.124	91	770527	105.710	ug/l	100
76) 1,3,5-Trimethylbenzene	13.171	105	894833	107.375	ug/l	98
77) t-1,4-Dichloro-2-butene	12.735	75	111742	110.656	ug/l	90
78) 4-Chlorotoluene	13.218	91	775962	104.973	ug/l	99
79) tert-butylbenzene	13.435	119	788164	108.154	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	907299	107.735	ug/l	100
81) sec-Butylbenzene	13.618	105	1083038	108.791	ug/l	99
82) p-Isopropyltoluene	13.729	119	922780	110.170	ug/l	99
83) 1,3-Dichlorobenzene	13.735	146	456338	103.470	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	456667	103.570	ug/l	99
85) n-Butylbenzene	14.053	91	815058	110.271	ug/l	98
86) Hexachloroethane	14.335	117	175667	110.673	ug/l	88
87) 1,2-Dichlorobenzene	14.106	146	447620	104.578	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.717	75	62273	103.991	ug/l	95
89) 1,2,4-Trichlorobenzene	15.841	180	244783	104.388	ug/l	100
90) Hexachlorobutadiene	15.500	225	101462	104.537	ug/l	99
91) Naphthalene	15.641	128	822022	107.226	ug/l	99
92) 1,2,3-Trichlorobenzene	15.841	180	244783	104.388	ug/l	100

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
Data File : VN083691.D
Acq On : 06 Sep 2024 12:22
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

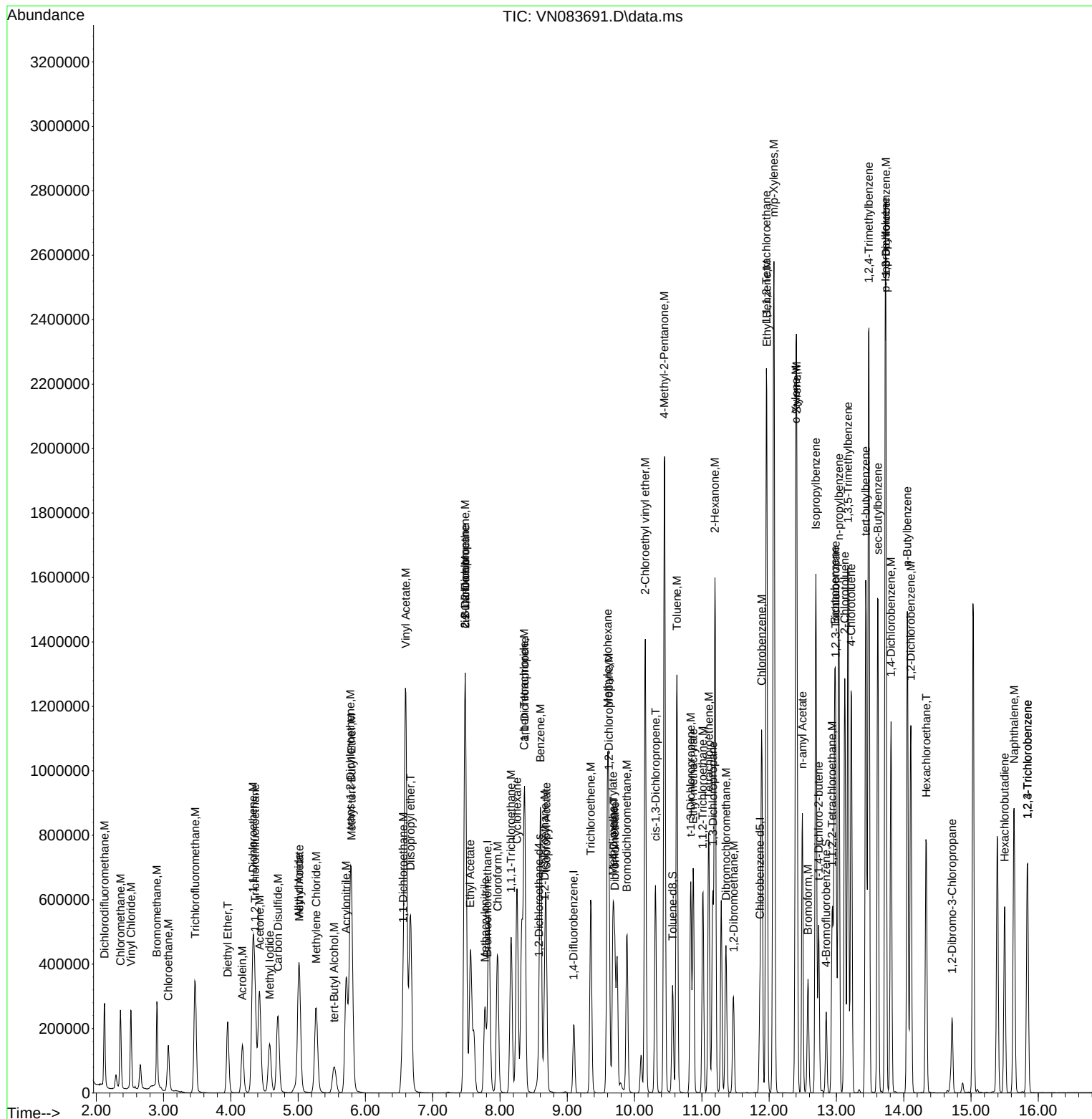
Manual Integrations

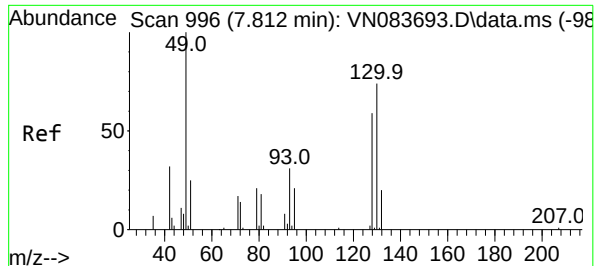
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024

Quant Time: Sep 06 23:31:34 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:27:49 2024
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.812 min Scan# 996

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

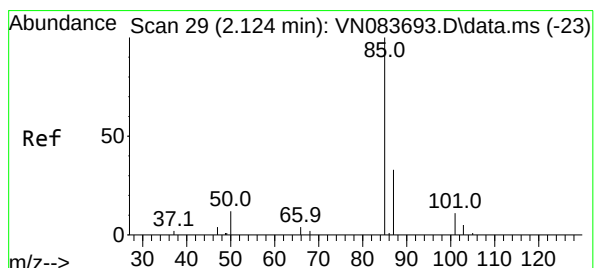
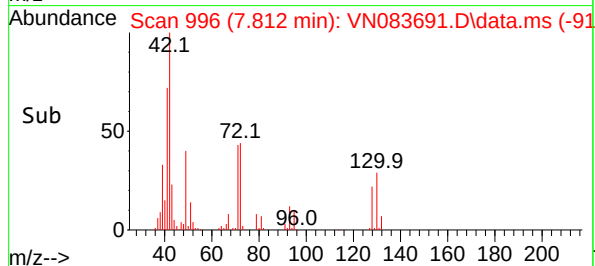
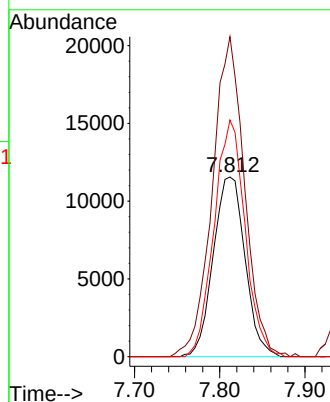
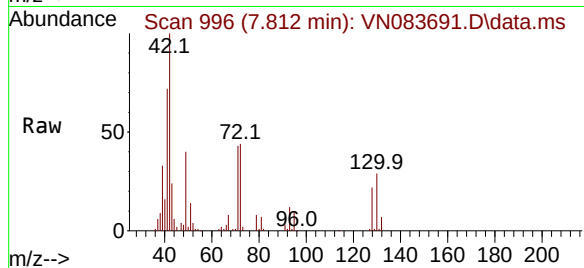
Tgt Ion:	128	Resp:	29990
Ion	Ratio	Lower	Upper
128	100		
49	180.1	0.0	403.7
130	128.6	0.0	323.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#2

Dichlorodifluoromethane

Concen: 104.343 ug/l

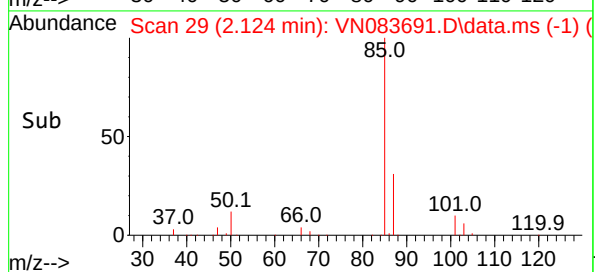
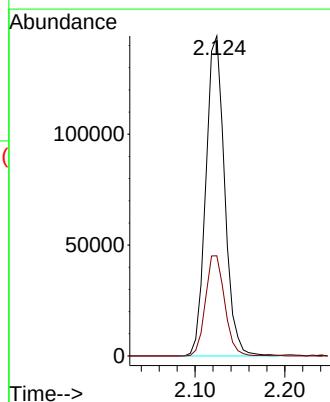
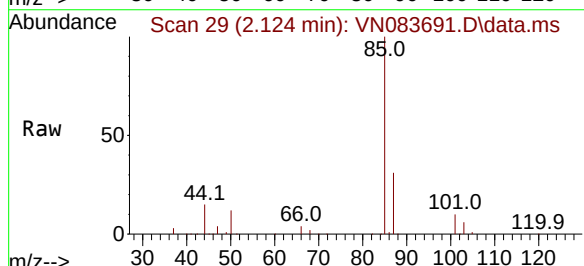
RT: 2.124 min Scan# 29

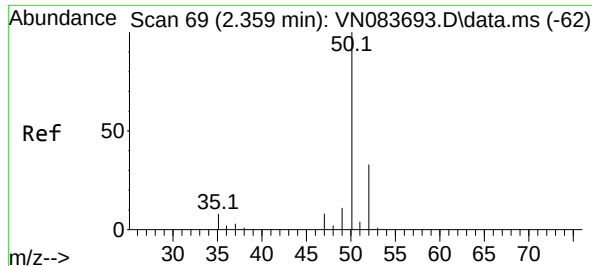
Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion:	85	Resp:	209558
Ion	Ratio	Lower	Upper
85	100		
87	31.3	16.8	50.3





#3

Chloromethane

Concen: 103.416 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 50 Resp: 215800

Ion Ratio Lower Upper

50 100

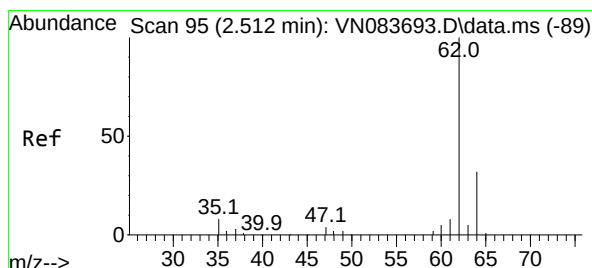
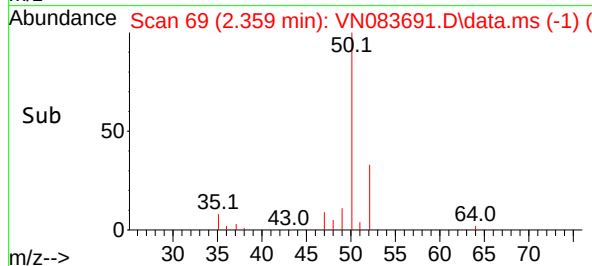
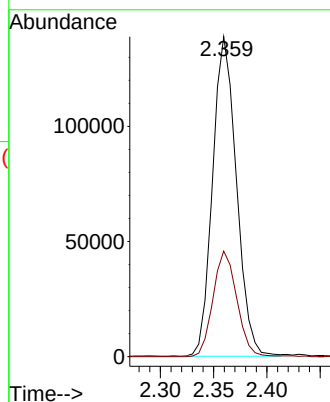
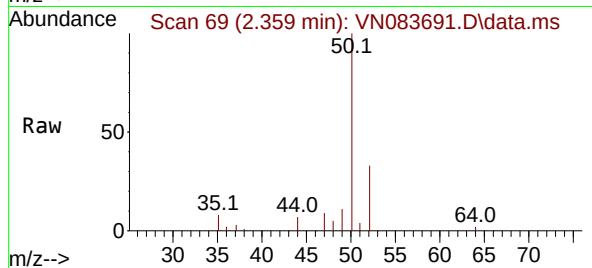
52 33.0 25.4 38.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#4

Vinyl Chloride

Concen: 105.377 ug/l

RT: 2.518 min Scan# 96

Delta R.T. 0.006 min

Lab File: VN083691.D

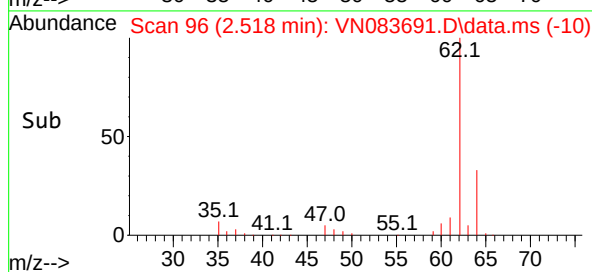
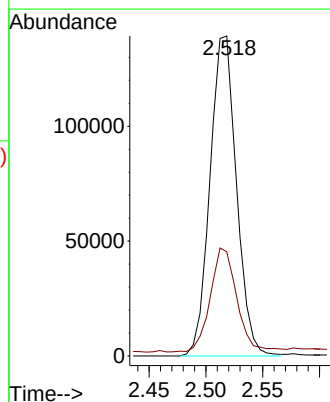
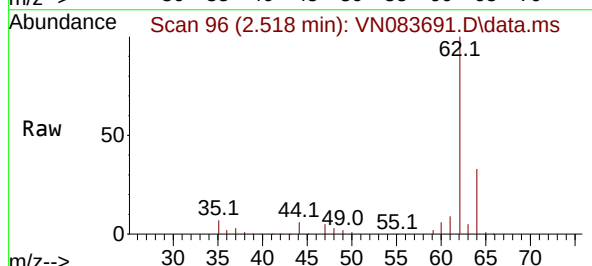
Acq: 06 Sep 2024 12:22

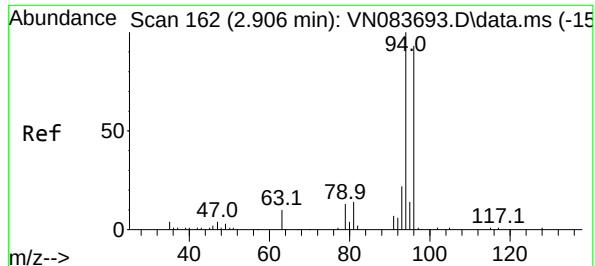
Tgt Ion: 62 Resp: 226055

Ion Ratio Lower Upper

62 100

64 31.1 24.1 36.1





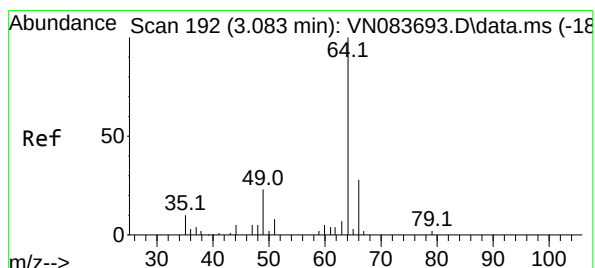
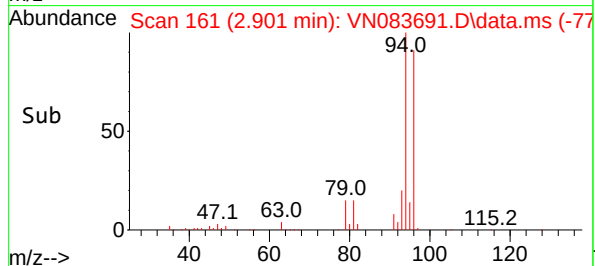
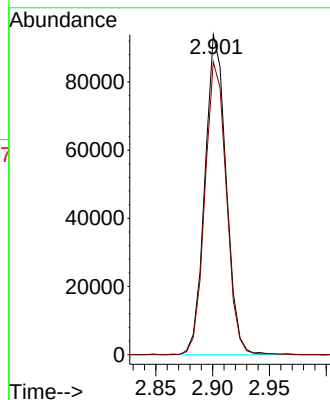
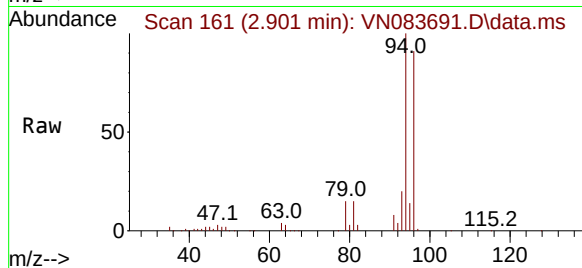
#5
Bromomethane
Concen: 101.894 ug/l
RT: 2.901 min Scan# 110
Delta R.T. -0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 94 Resp: 122124
Ion Ratio Lower Upper
94 100
96 91.3 72.8 109.2

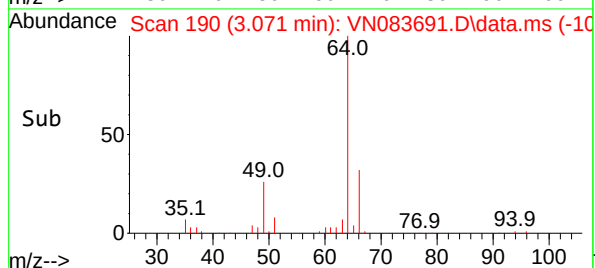
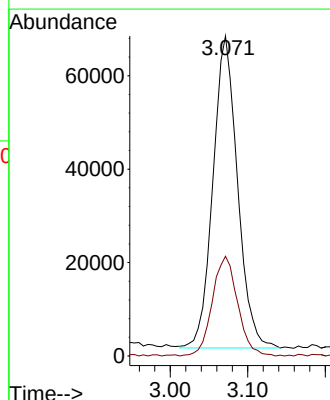
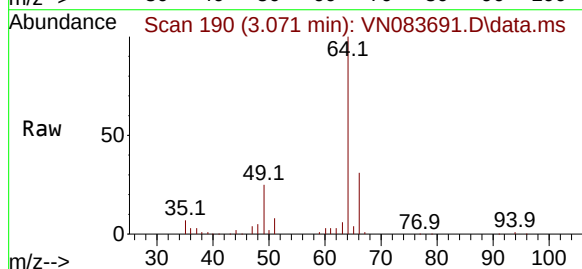
Manual Integrations
APPROVED

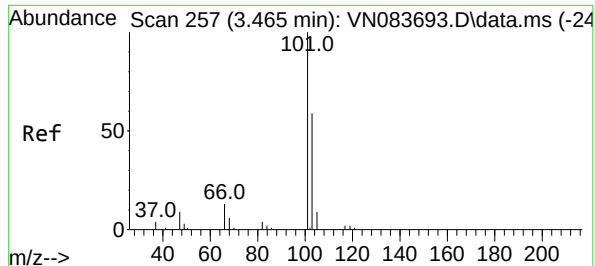
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#6
Chloroethane
Concen: 102.467 ug/l
RT: 3.071 min Scan# 190
Delta R.T. -0.012 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion: 64 Resp: 147195
Ion Ratio Lower Upper
64 100
66 31.9 26.7 40.1





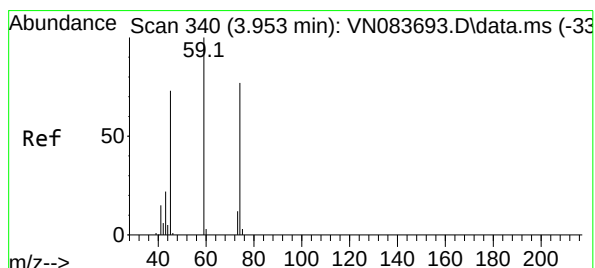
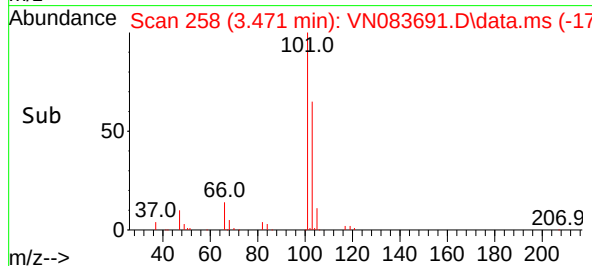
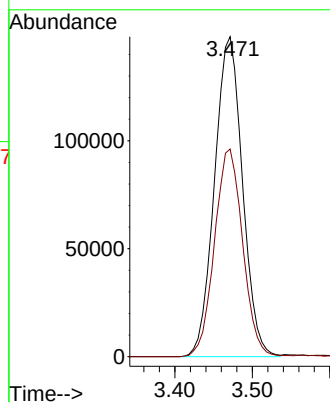
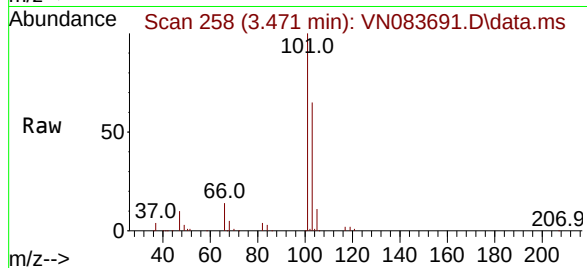
#7
Trichlorofluoromethane
Concen: 103.502 ug/l
RT: 3.471 min Scan# 257
Delta R.T. 0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion:101 Resp: 372240
Ion Ratio Lower Upper
101 100
103 64.9 53.0 79.4

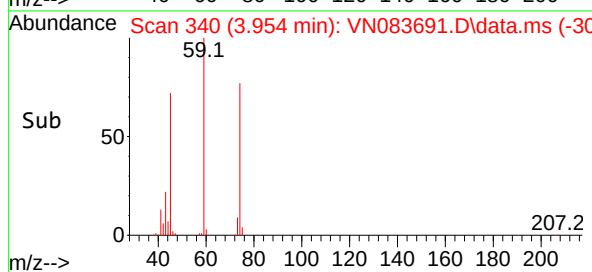
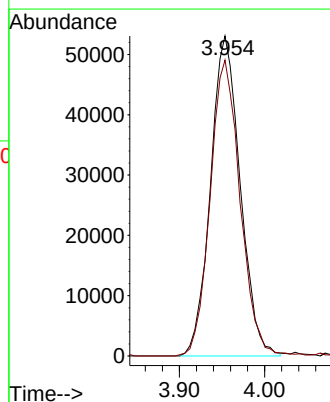
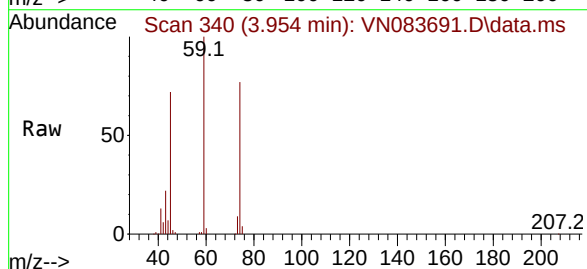
Manual Integrations
APPROVED

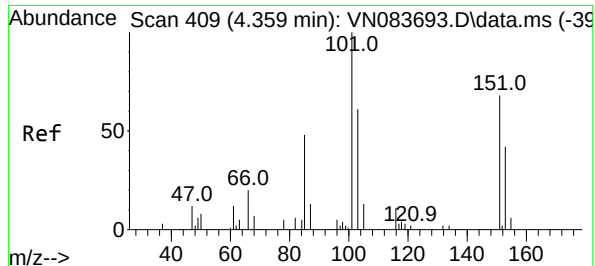
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#8
Diethyl Ether
Concen: 105.070 ug/l
RT: 3.954 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion: 74 Resp: 128401
Ion Ratio Lower Upper
74 100
45 93.1 16.4 147.4





#9

1,1,2-Trichlorotrifluoroethane

Concen: 104.422 ug/l

RT: 4.359 min Scan# 409

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

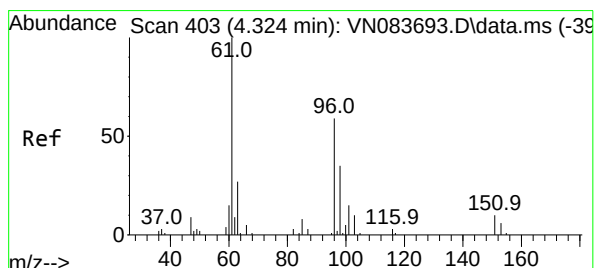
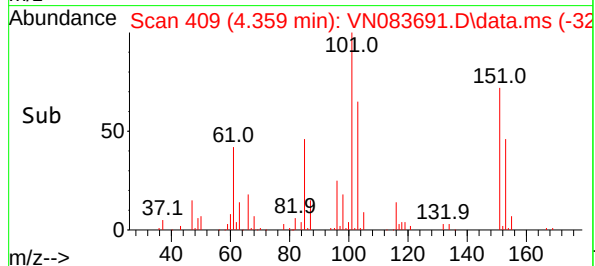
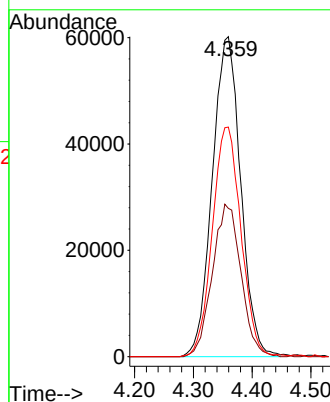
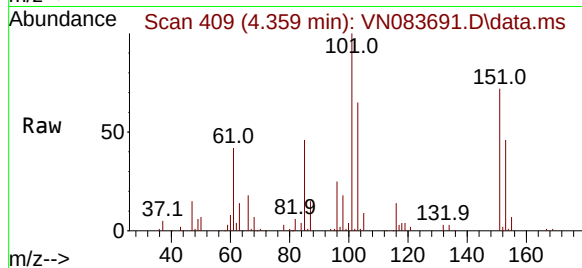
Tgt Ion:	101	Resp:	20172
Ion	Ratio	Lower	Upper
101	100		
85	48.0	0.0	90.6
151	72.3	0.0	157.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#10

1,1-Dichloroethene

Concen: 105.943 ug/l

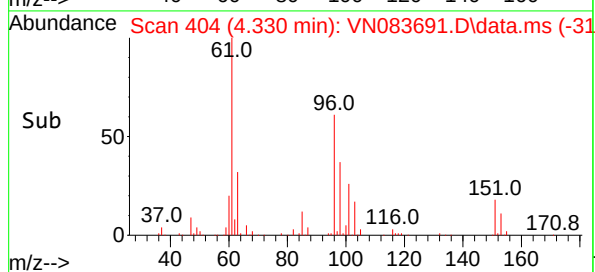
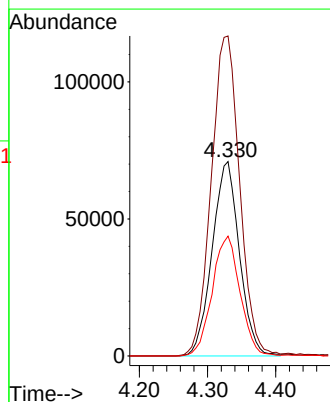
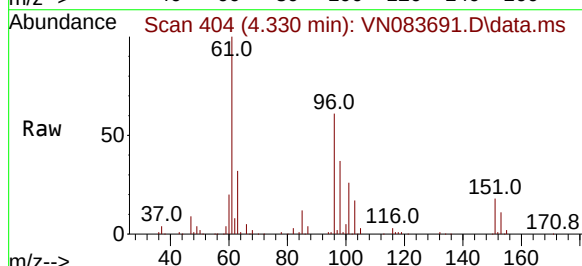
RT: 4.330 min Scan# 404

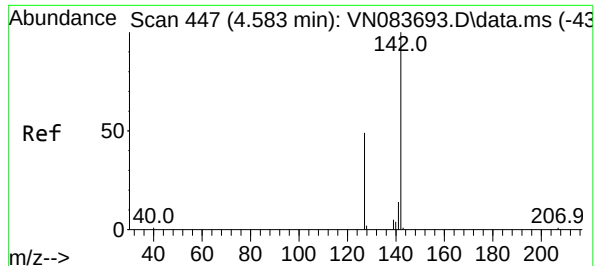
Delta R.T. 0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion:	96	Resp:	197471
Ion	Ratio	Lower	Upper
96	100		
61	164.2	117.6	176.4
98	61.7	48.4	72.6





#11

Methyl Iodide

Concen: 106.965 ug/l

RT: 4.577 min Scan# 447

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

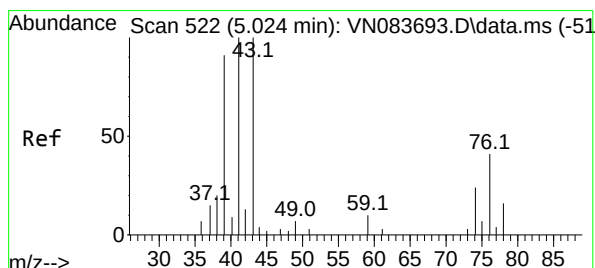
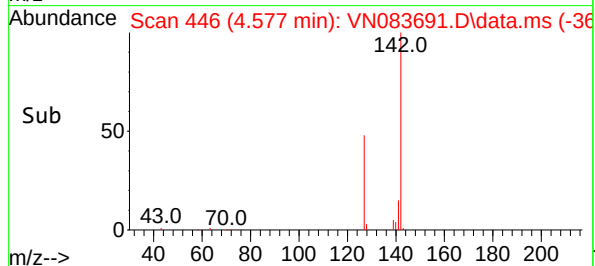
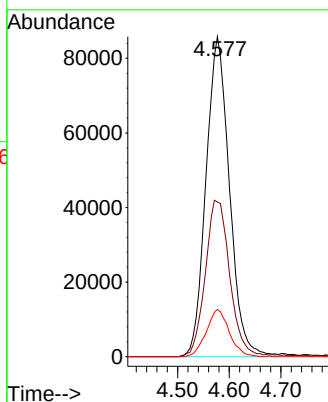
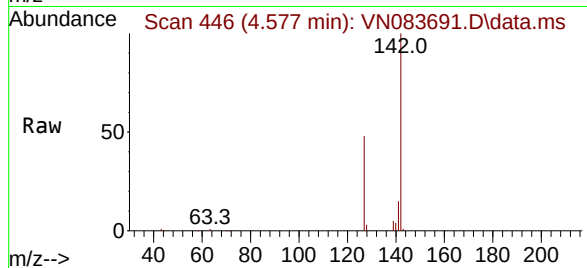
VSTDICC100

Tgt Ion:	142	Resp:	27081
Ion	Ratio	Lower	Upper
142	100		
127	48.2	26.3	78.9
141	14.8	8.3	24.9

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#12

Methyl Acetate

Concen: 97.924 ug/l

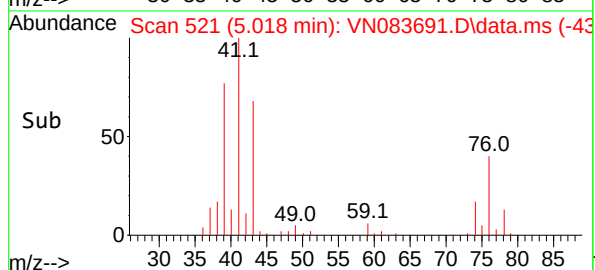
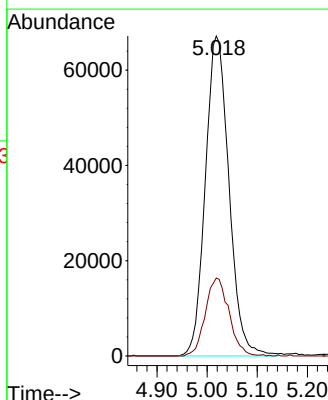
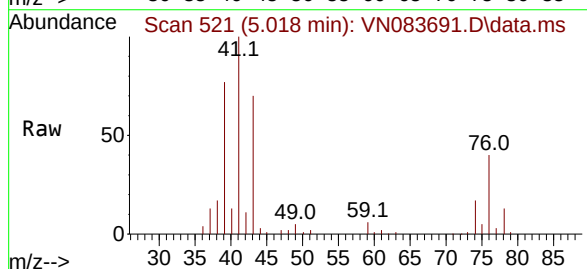
RT: 5.018 min Scan# 521

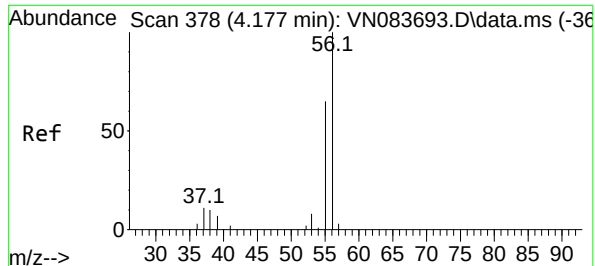
Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion:	43	Resp:	220123
Ion	Ratio	Lower	Upper
43	100		
74	24.2	27.7	41.5#





#13

Acrolein

Concen: 552.050 ug/l

RT: 4.171 min Scan# 31

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 56 Resp: 181100

Ion Ratio Lower Upper

56 100

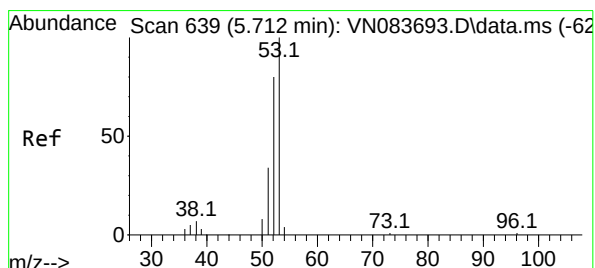
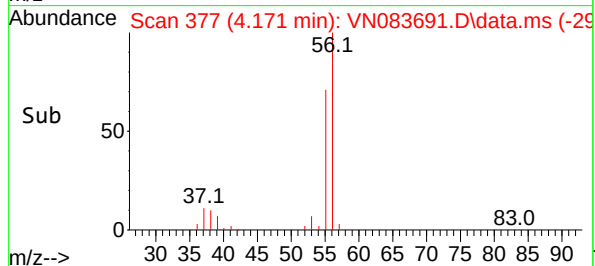
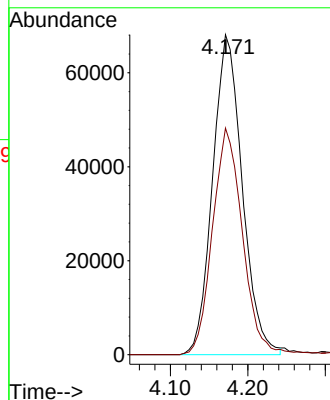
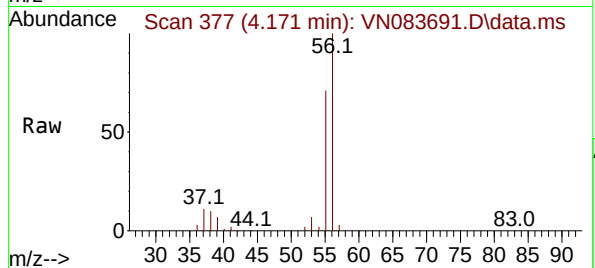
55 71.7 55.5 83.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#14

Acrylonitrile

Concen: 516.351 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

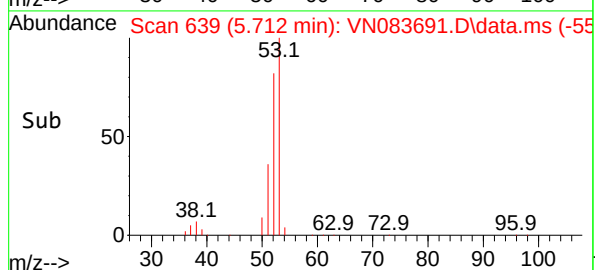
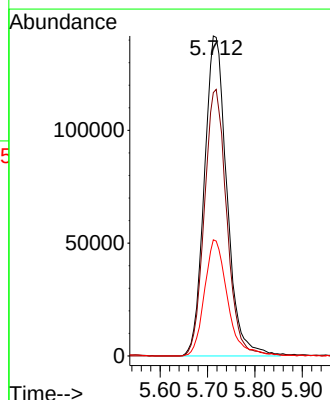
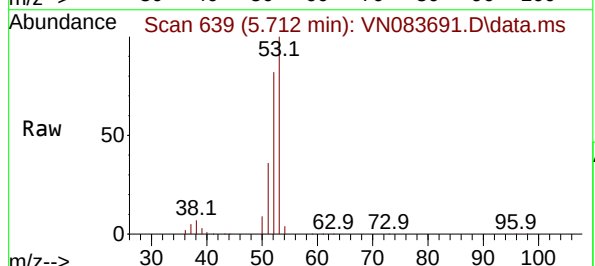
Tgt Ion: 53 Resp: 469720

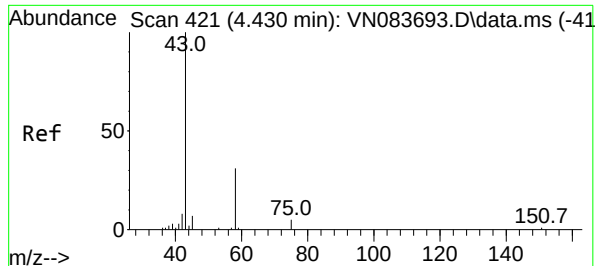
Ion Ratio Lower Upper

53 100

52 82.3 41.3 123.9

51 36.9 16.8 50.3





#15

Acetone

Concen: 562.450 ug/l

RT: 4.430 min Scan# 41

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 58 Resp: 16972

Ion Ratio Lower Upper

58 100

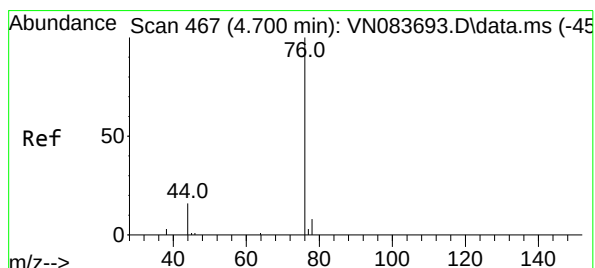
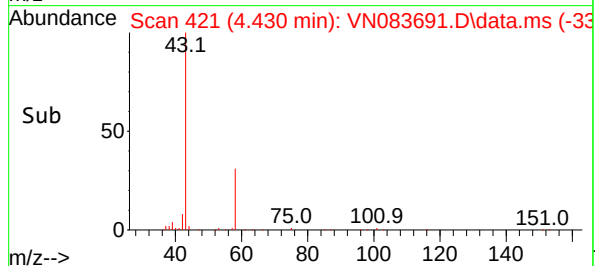
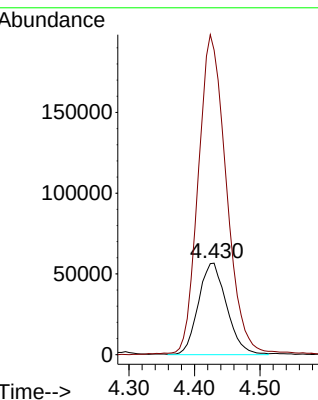
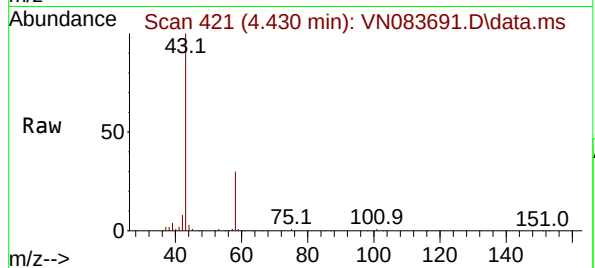
43 332.0 223.1 334.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#16

Carbon Disulfide

Concen: 103.401 ug/l

RT: 4.701 min Scan# 467

Delta R.T. 0.000 min

Lab File: VN083691.D

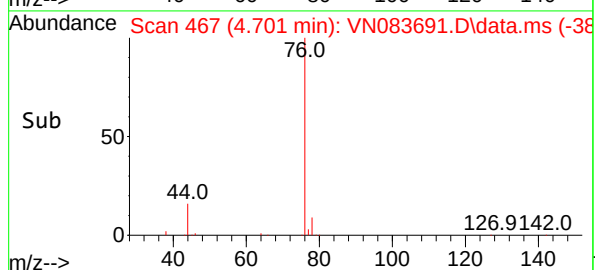
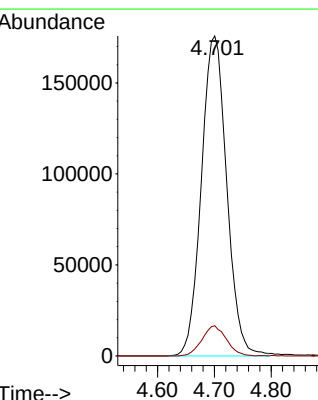
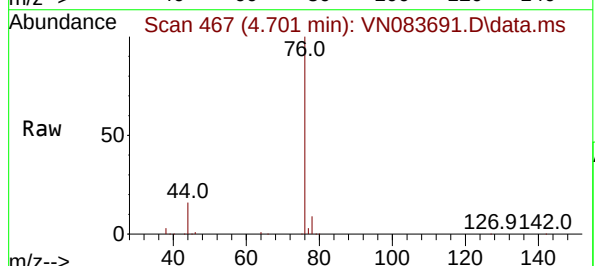
Acq: 06 Sep 2024 12:22

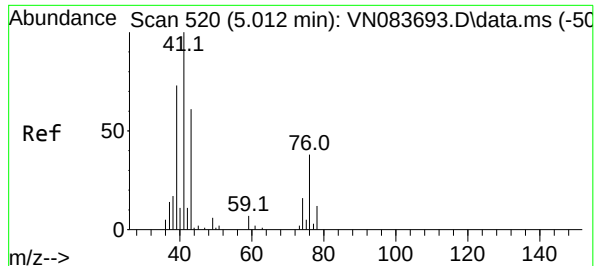
Tgt Ion: 76 Resp: 544689

Ion Ratio Lower Upper

76 100

78 9.5 6.3 9.5





#17

Allyl chloride

Concen: 106.730 ug/l

RT: 5.012 min Scan# 51

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 41 Resp: 34924

Ion Ratio Lower Upper

41 100

39 81.9 37.6 112.9

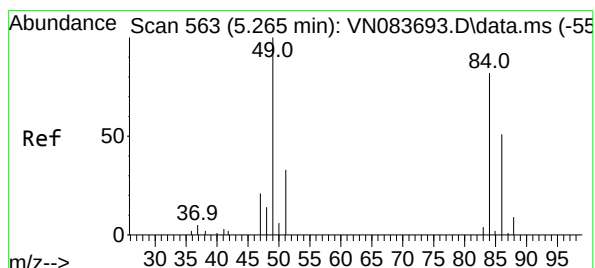
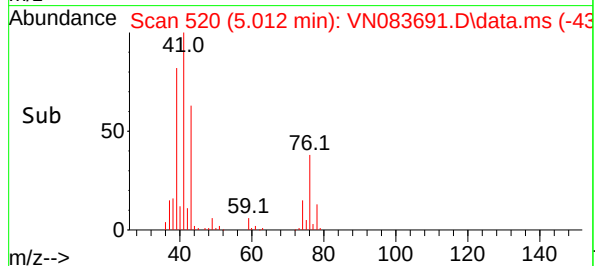
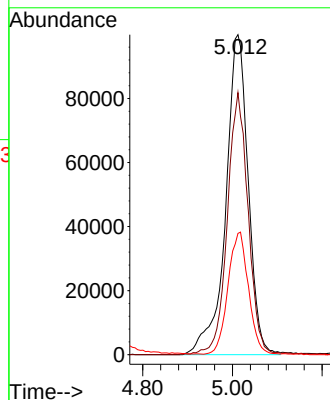
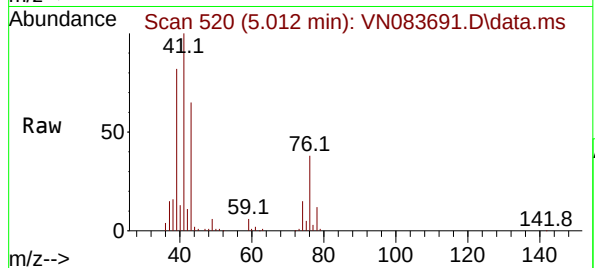
76 37.7 27.8 83.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#18

Methylene Chloride

Concen: 105.625 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion: 84 Resp: 215394

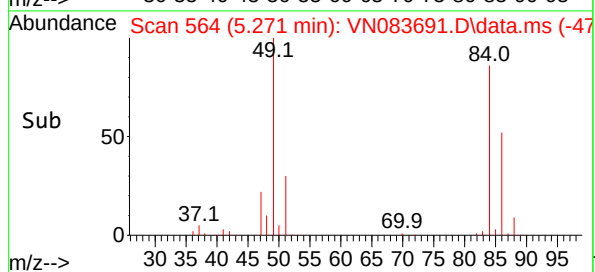
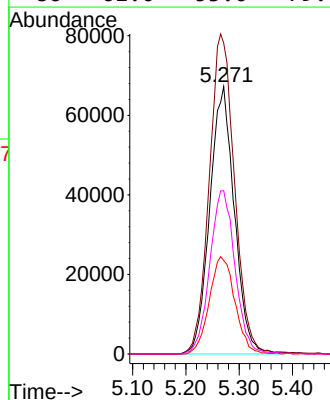
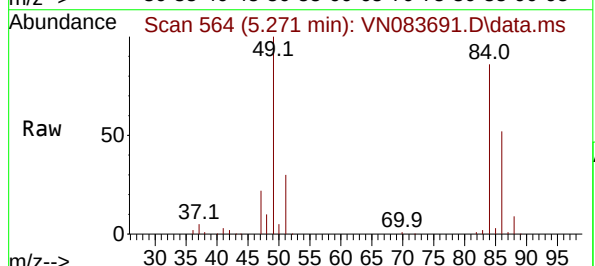
Ion Ratio Lower Upper

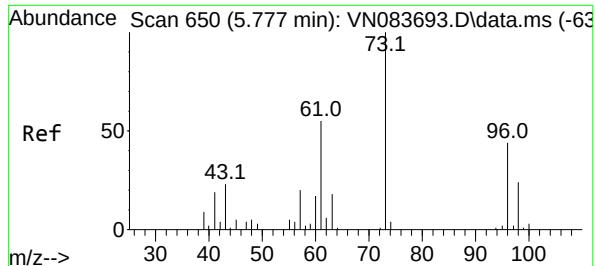
84 100

49 116.3 86.0 129.0

51 34.9 30.0 45.0

86 61.0 53.0 79.4





#19

trans-1,2-Dichloroethene

Concen: 104.715 ug/l

RT: 5.777 min Scan# 61

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 96 Resp: 202294

Ion Ratio Lower Upper

96 100

61 149.9 111.8 167.6

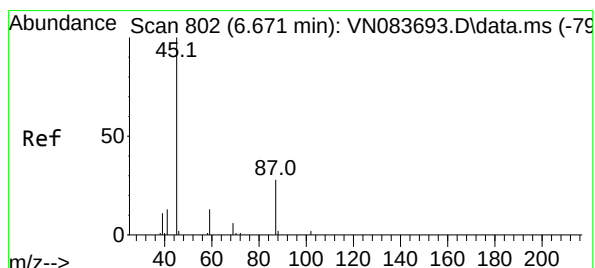
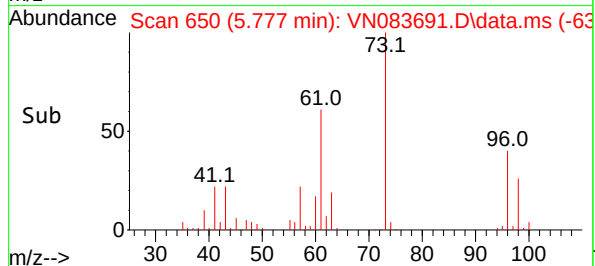
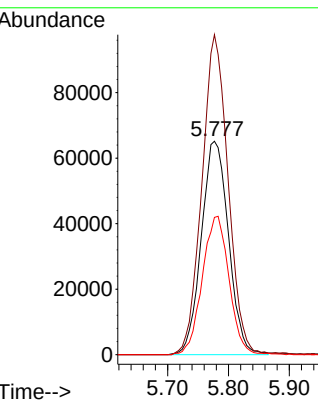
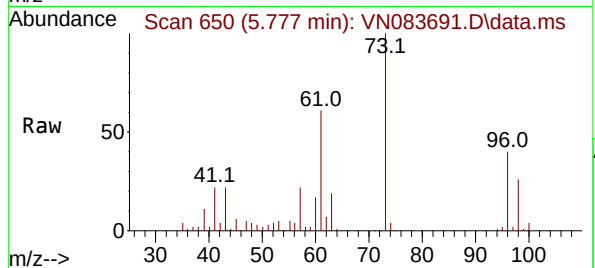
98 64.3 49.2 73.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#20

Diisopropyl ether

Concen: 105.756 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion: 45 Resp: 698099

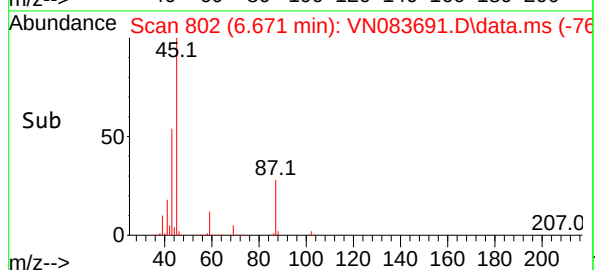
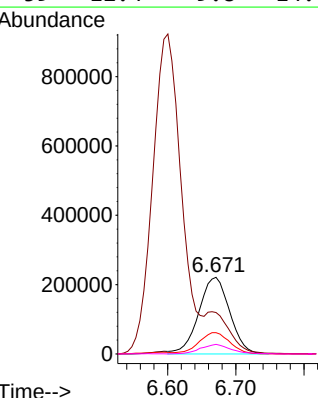
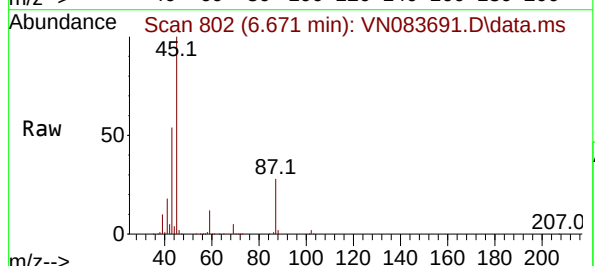
Ion Ratio Lower Upper

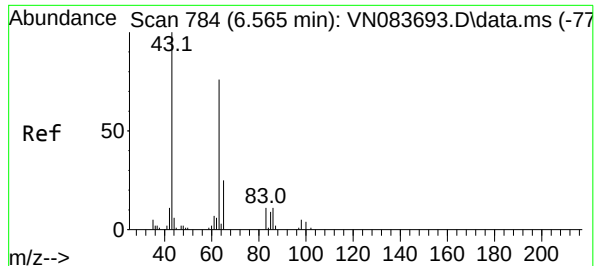
45 100

43 53.1 40.4 60.6

87 27.7 23.8 35.8

59 12.4 9.8 14.6





#21

1,1-Dichloroethane

Concen: 105.599 ug/l

RT: 6.559 min Scan# 71

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 63 Resp: 39798

Ion Ratio Lower Upper

63 100

98 7.0 4.1 12.3

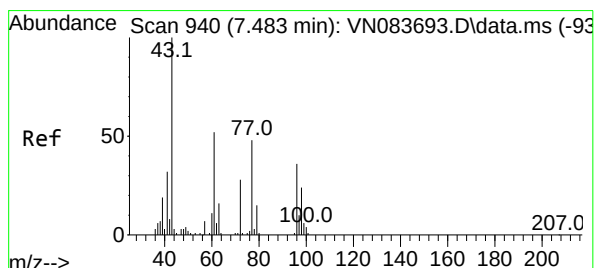
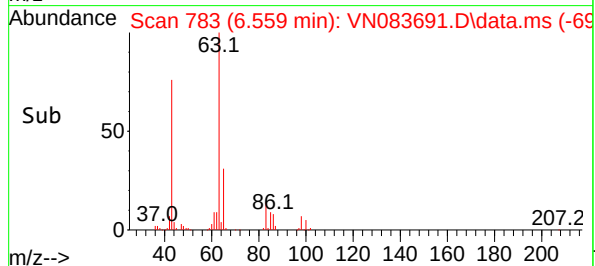
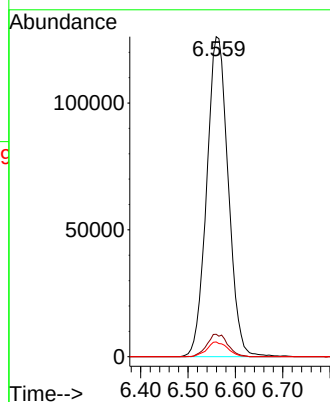
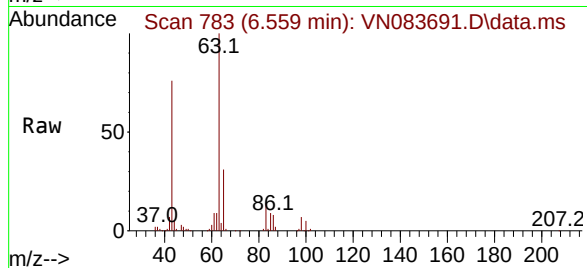
100 4.6 3.0 9.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#22

cis-1,2-Dichloroethene

Concen: 104.579 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

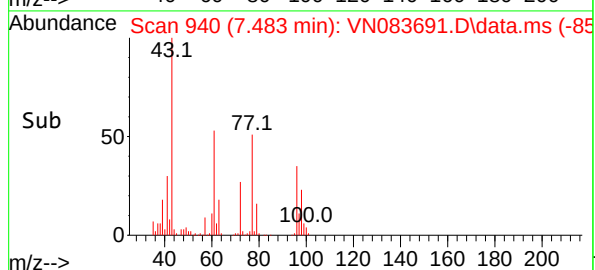
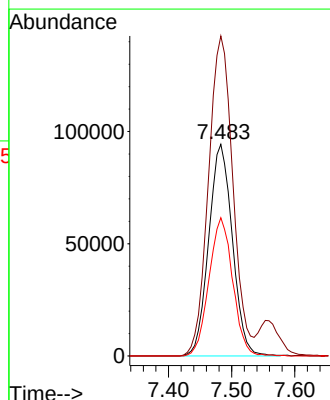
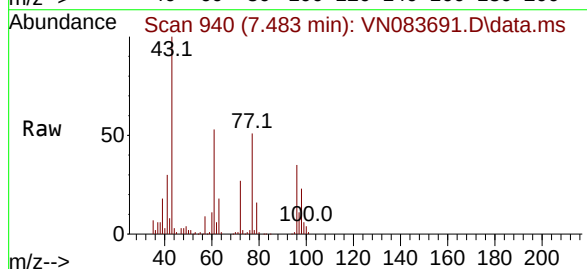
Tgt Ion: 96 Resp: 245891

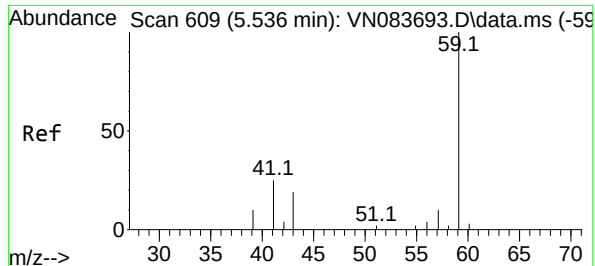
Ion Ratio Lower Upper

96 100

61 156.2 113.5 170.3

98 65.2 52.0 78.0





#23

tert-Butyl Alcohol

Concen: 520.025 ug/l

RT: 5.536 min Scan# 609

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 59 Resp: 173594

Ion Ratio Lower Upper

59 100

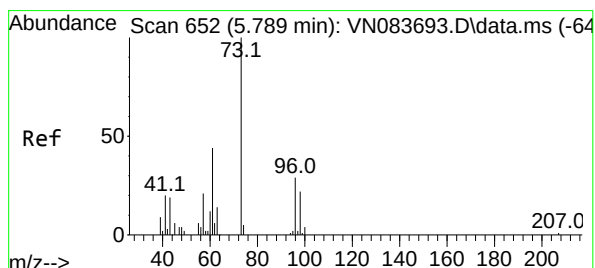
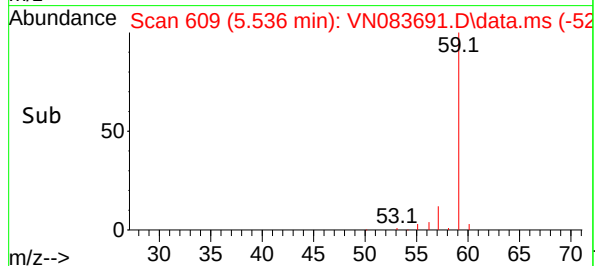
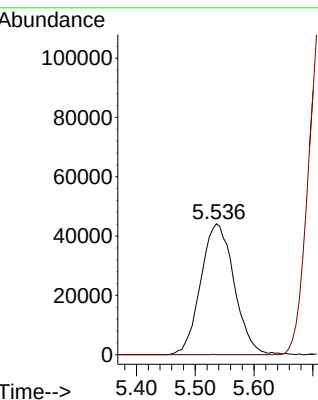
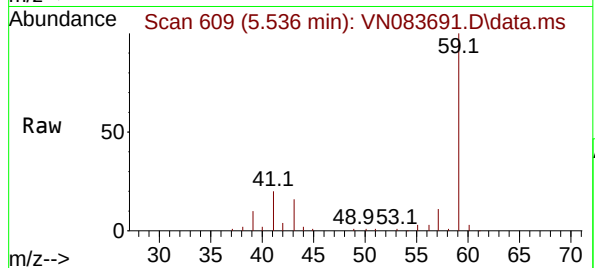
52 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#24

Methyl tert-Butyl Ether

Concen: 105.500 ug/l

RT: 5.795 min Scan# 653

Delta R.T. 0.006 min

Lab File: VN083691.D

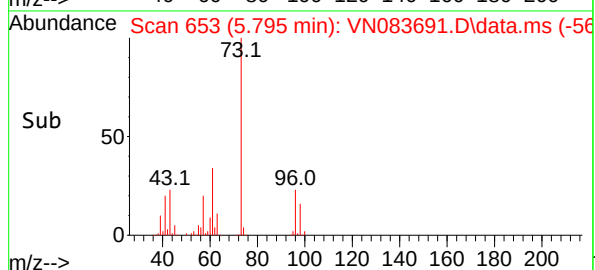
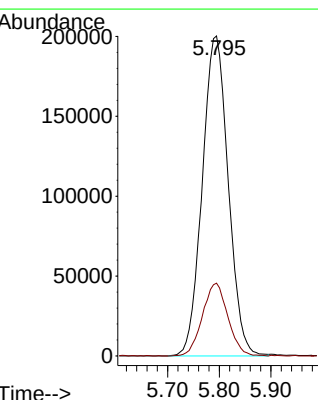
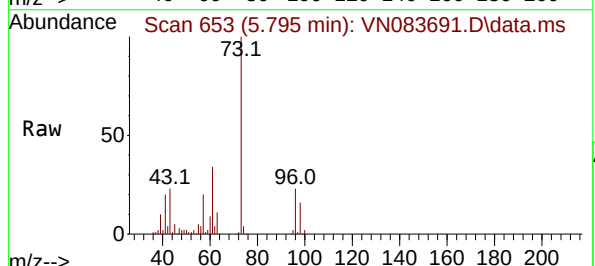
Acq: 06 Sep 2024 12:22

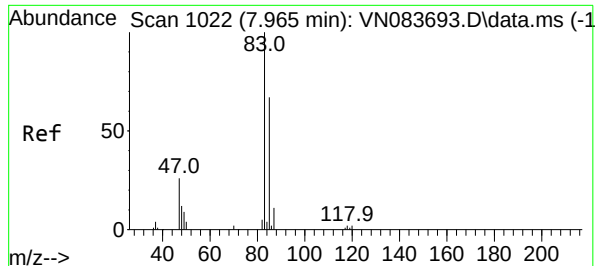
Tgt Ion: 73 Resp: 698808

Ion Ratio Lower Upper

73 100

43 22.2 13.4 20.2#





#25

Chloroform

Concen: 105.142 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 83 Resp: 419936

Ion Ratio Lower Upper

83 100

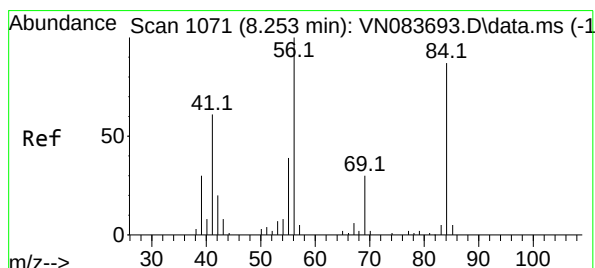
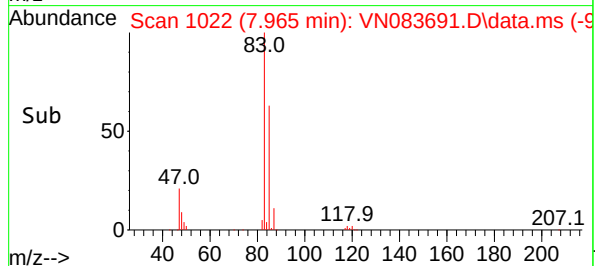
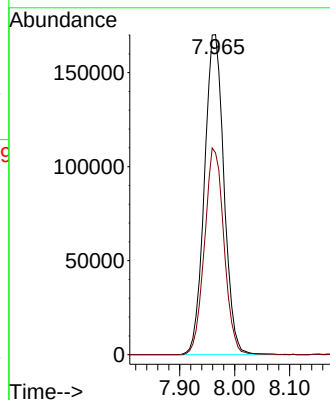
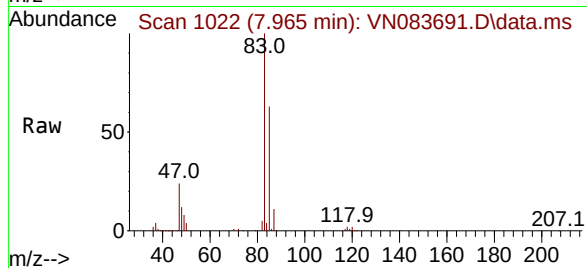
85 63.0 50.9 76.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#26

Cyclohexane

Concen: 106.232 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

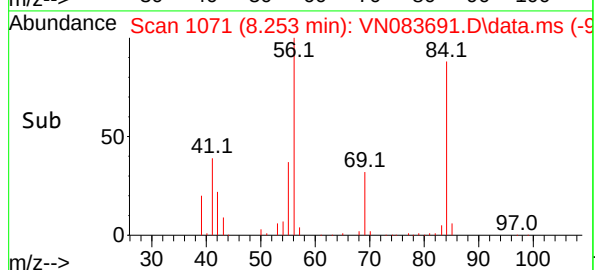
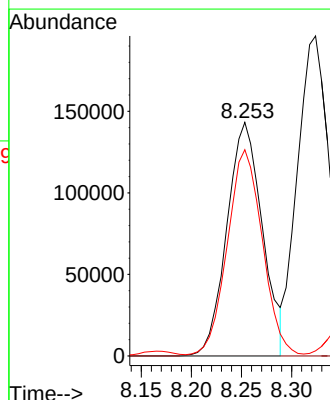
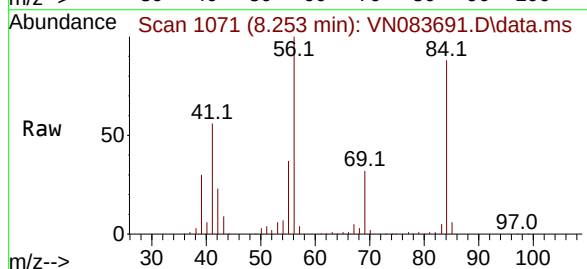
Tgt Ion: 56 Resp: 352624

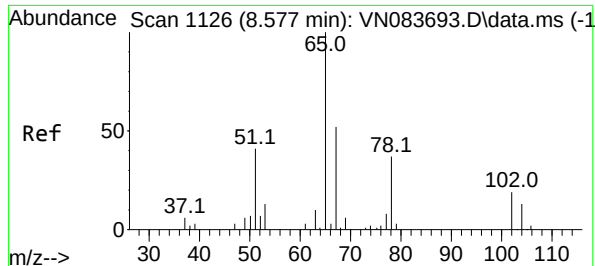
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9#

84 87.7 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 29.964 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 65 Resp: 82140

Ion Ratio Lower Upper

65 100

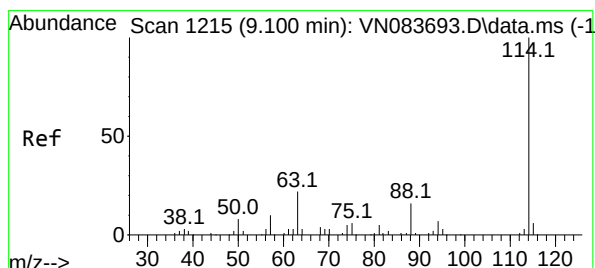
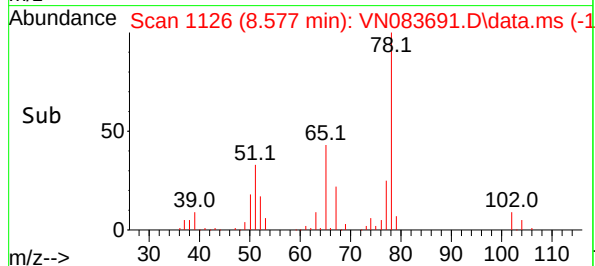
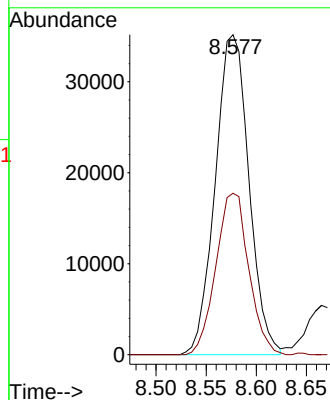
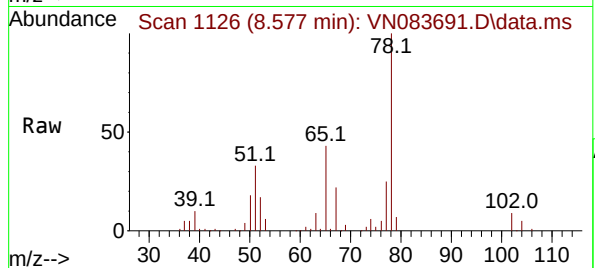
67 49.2 43.2 64.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

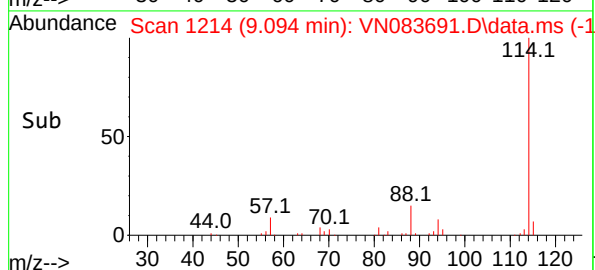
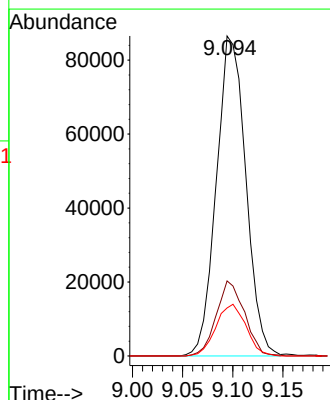
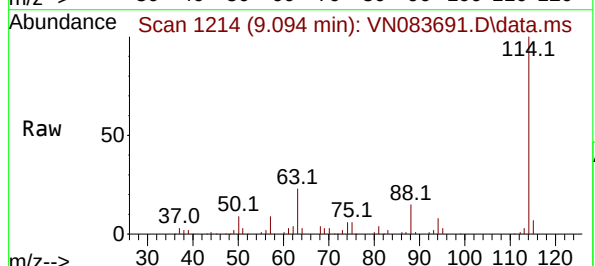
Tgt Ion:114 Resp: 176500

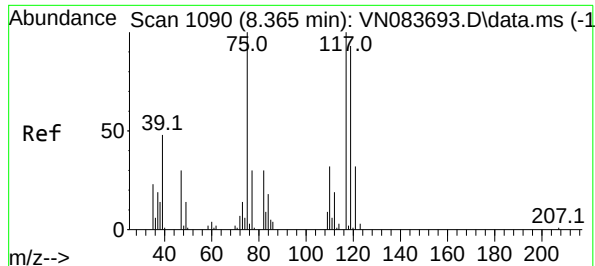
Ion Ratio Lower Upper

114 100

63 22.5 15.9 23.9

88 16.5 12.7 19.1





#29

1,1-Dichloropropene

Concen: 105.778 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 75 Resp: 296128

Ion Ratio Lower Upper

75 100

110 32.7 0.0 70.2

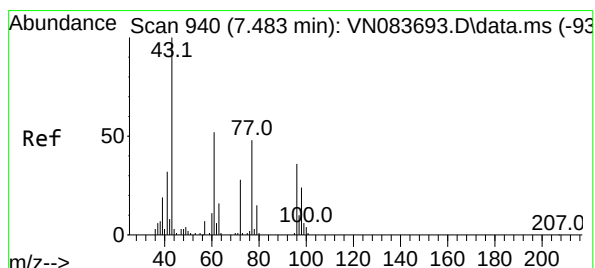
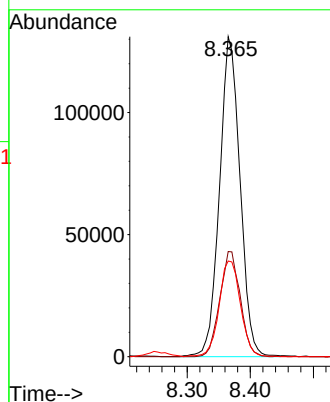
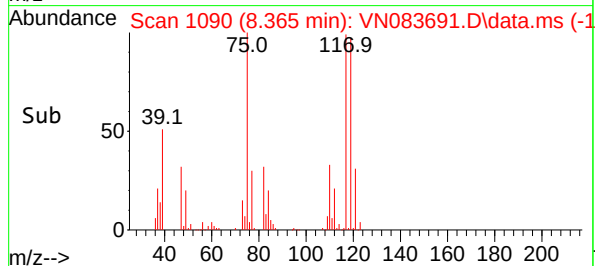
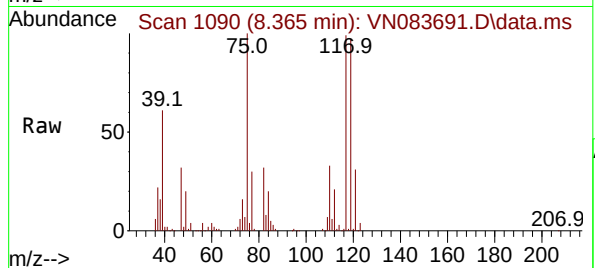
77 31.1 0.0 61.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#30

2-Butanone

Concen: 535.402 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

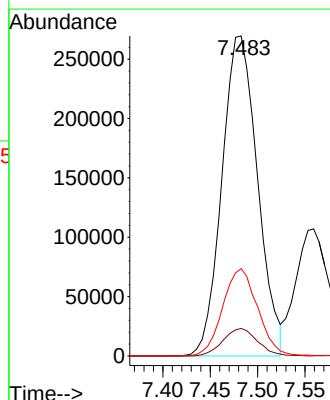
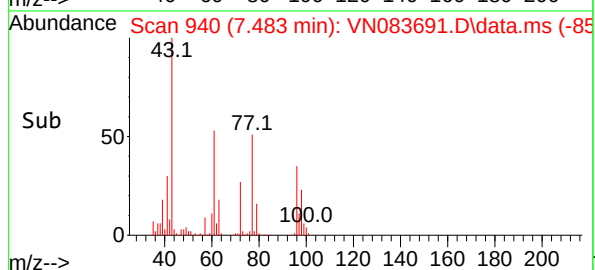
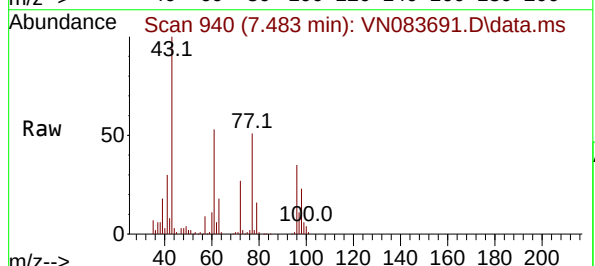
Tgt Ion: 43 Resp: 706552

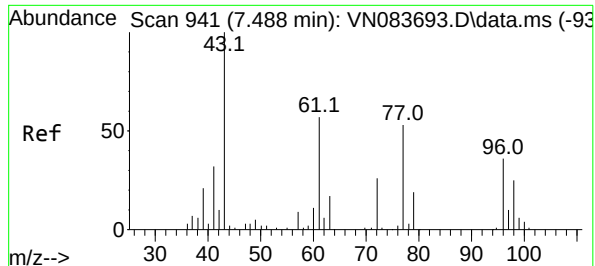
Ion Ratio Lower Upper

43 100

57 8.3 6.7 10.1

72 26.7 24.0 36.0





#31

2,2-Dichloropropane

Concen: 107.903 ug/l

RT: 7.483 min Scan# 941

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 77 Resp: 38512

Ion Ratio Lower Upper

77 100

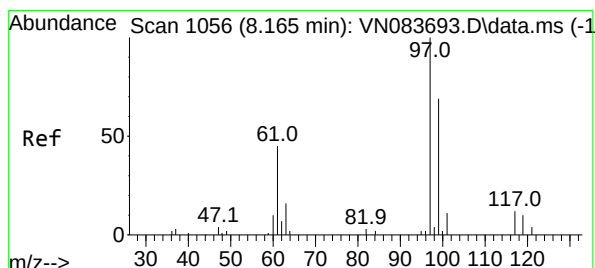
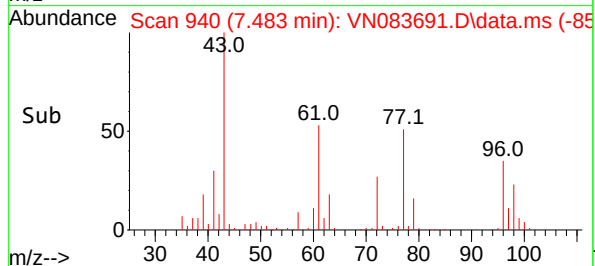
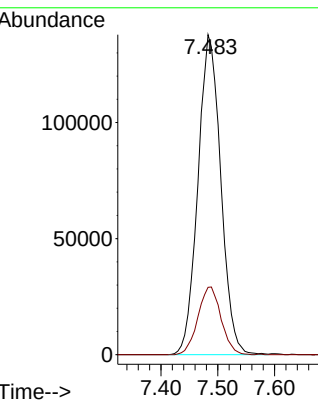
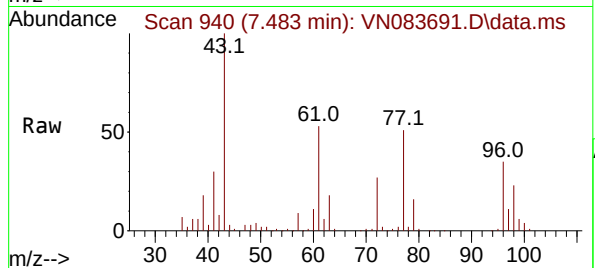
97 21.4 18.3 27.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#32

1,1,1-Trichloroethane

Concen: 105.672 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

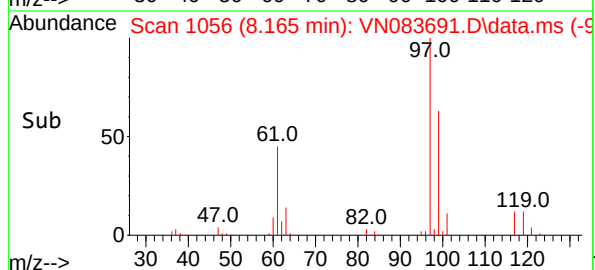
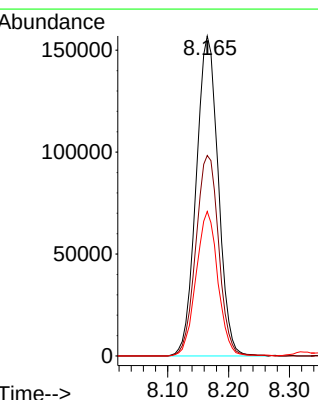
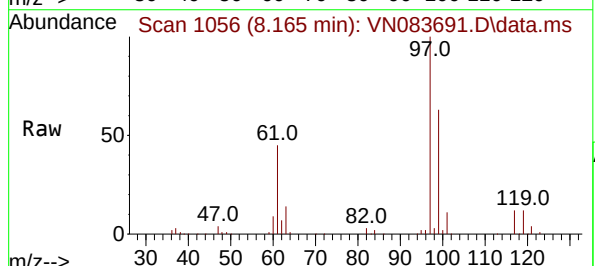
Tgt Ion: 97 Resp: 395080

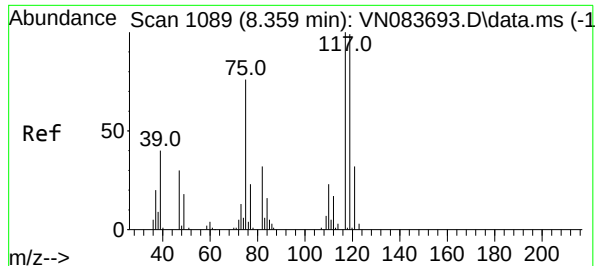
Ion Ratio Lower Upper

97 100

99 64.9 51.0 76.4

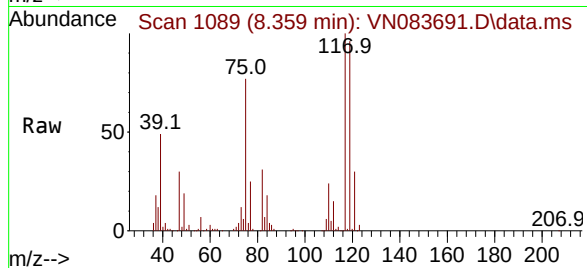
61 44.8 33.8 50.8





#33
Carbon Tetrachloride
Concen: 106.532 ug/l
RT: 8.359 min Scan# 1108
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

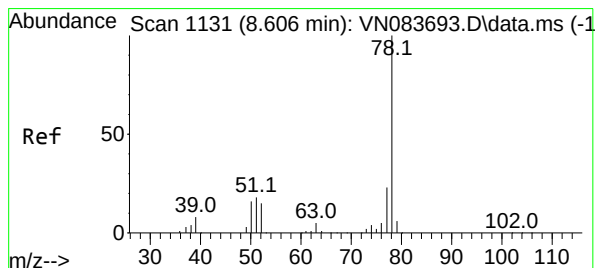
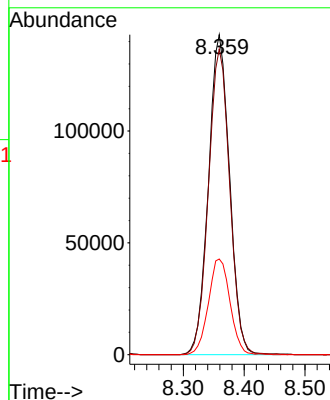
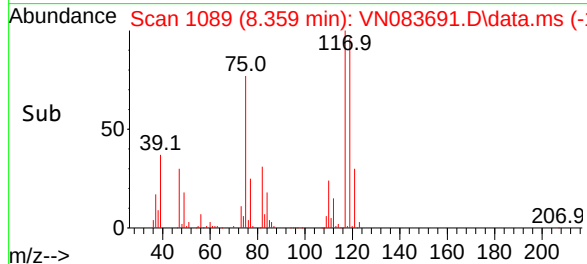
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100



Tgt Ion: 117 Resp: 344923
Ion Ratio Lower Upper
117 100
119 95.5 77.7 116.5
121 29.9 27.0 40.6

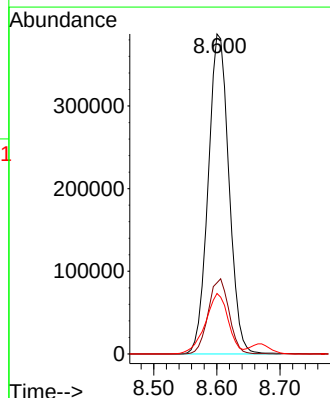
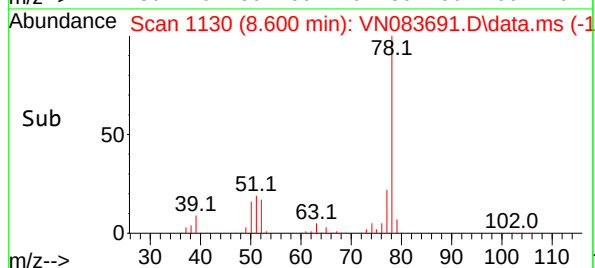
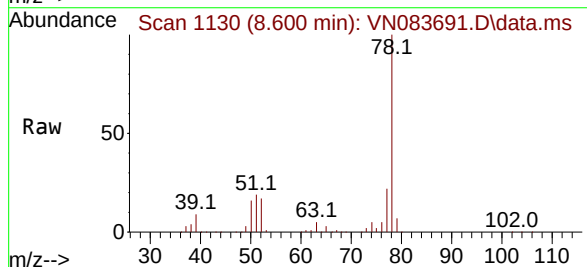
Manual Integrations
APPROVED

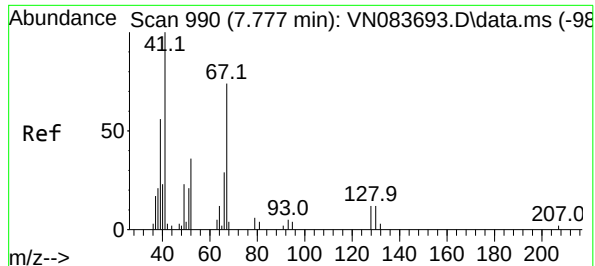
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#34
Benzene
Concen: 105.185 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion: 78 Resp: 883536
Ion Ratio Lower Upper
78 100
77 22.2 19.2 28.8
51 18.7 13.3 19.9





#35

Methacrylonitrile

Concen: 102.570 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 41 Resp: 15216

Ion Ratio Lower Upper

41 100

39 56.5 25.3 75.9

67 74.1 38.7 116.1

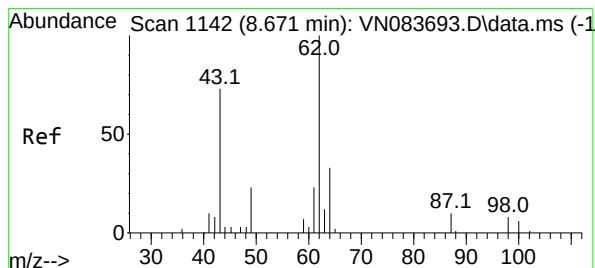
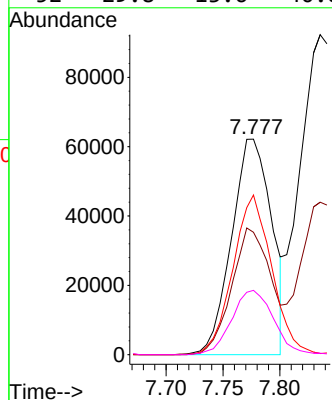
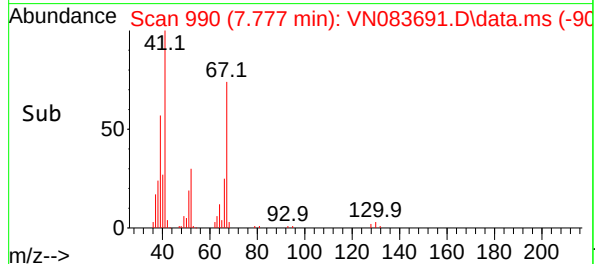
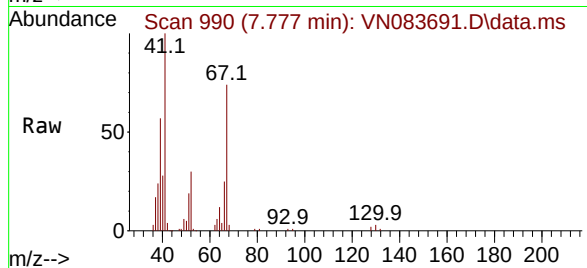
52 29.8 13.6 40.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#36

1,2-Dichloroethane

Concen: 104.175 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.006 min

Lab File: VN083691.D

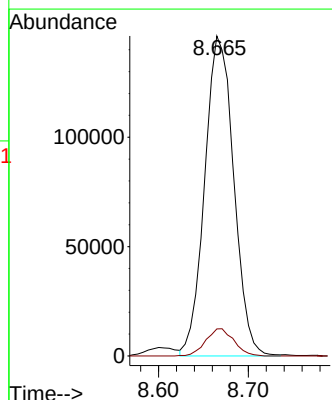
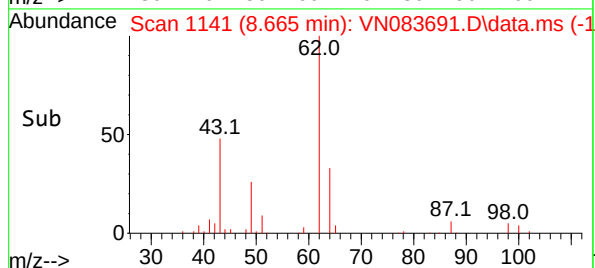
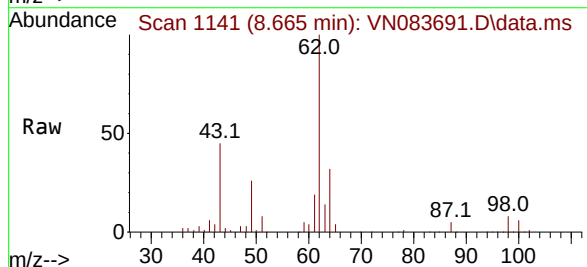
Acq: 06 Sep 2024 12:22

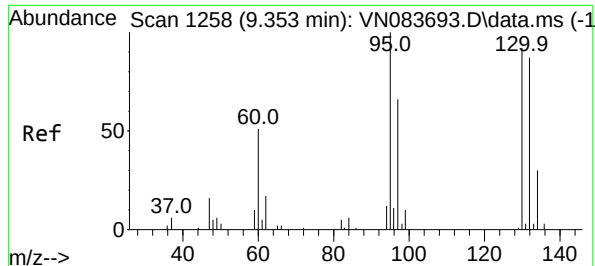
Tgt Ion: 62 Resp: 328967

Ion Ratio Lower Upper

62 100

98 8.2 8.2 12.4#





#37

Trichloroethene

Concen: 106.405 ug/l

RT: 9.347 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:130 Resp: 209884

Ion Ratio Lower Upper

130 100

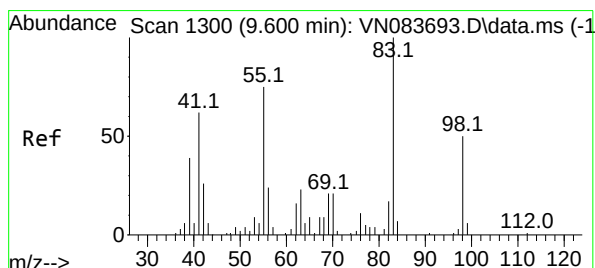
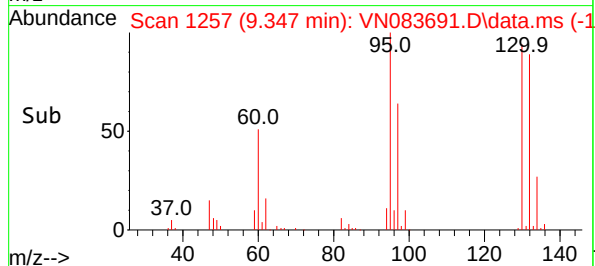
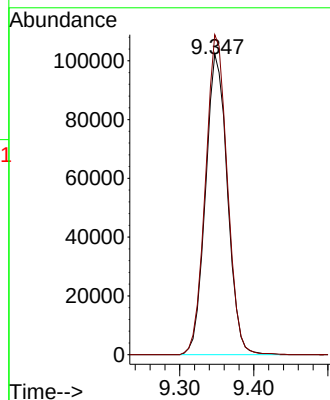
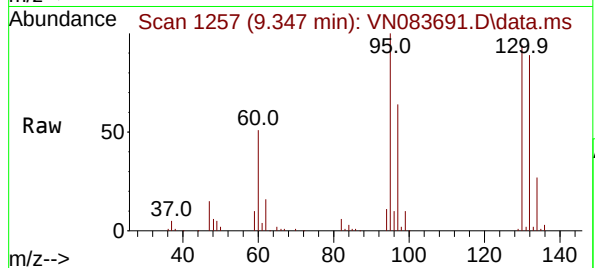
95 106.5 80.2 120.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#38

Methylcyclohexane

Concen: 107.807 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

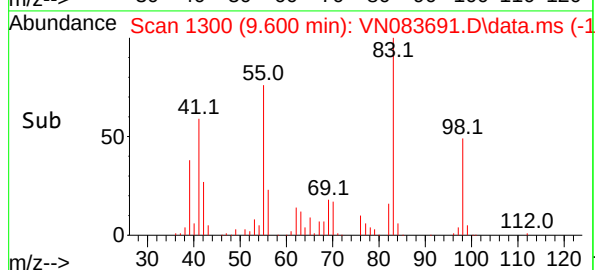
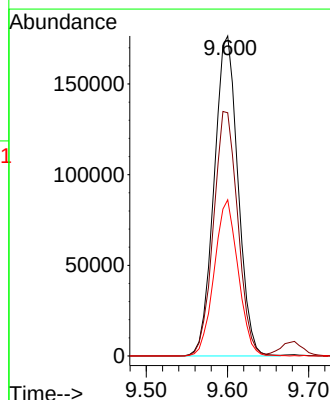
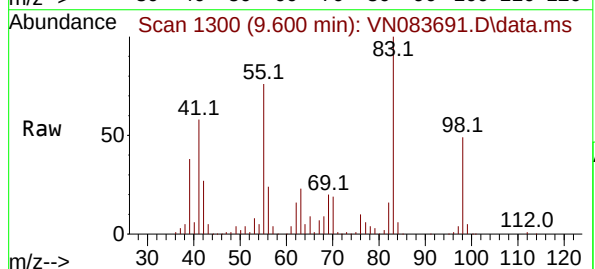
Tgt Ion: 83 Resp: 361334

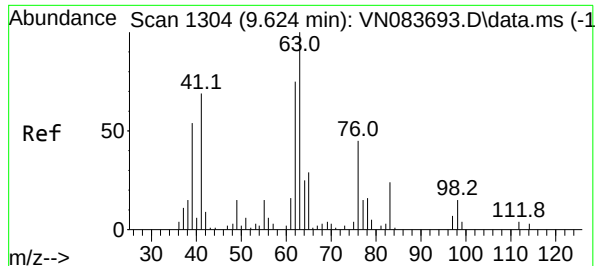
Ion Ratio Lower Upper

83 100

55 77.6 36.6 109.9

98 48.8 23.8 71.5





#39

1,2-Dichloropropane

Concen: 105.397 ug/l

RT: 9.618 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 63 Resp: 213074

Ion Ratio Lower Upper

63 100

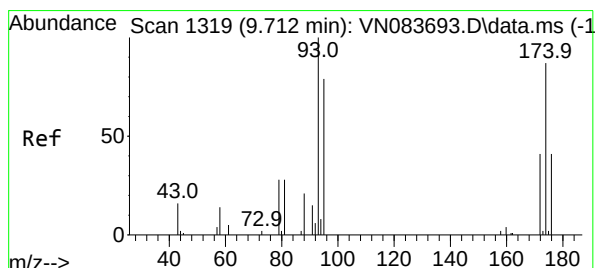
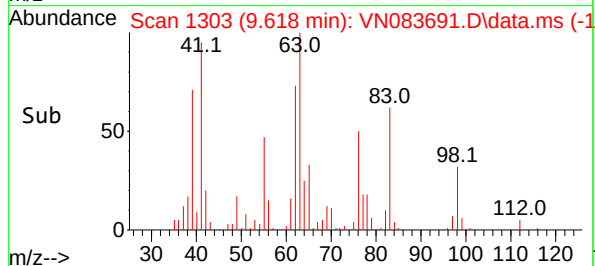
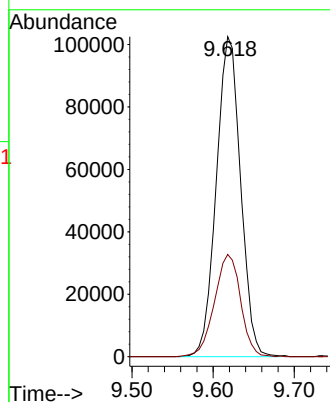
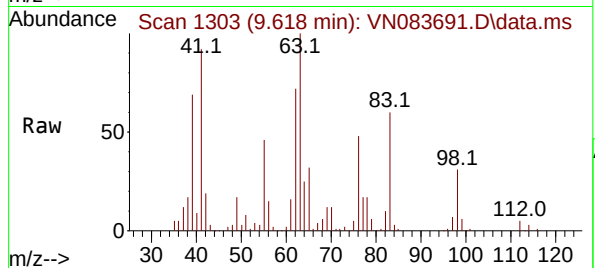
65 31.8 25.0 37.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#40

Dibromomethane

Concen: 104.426 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

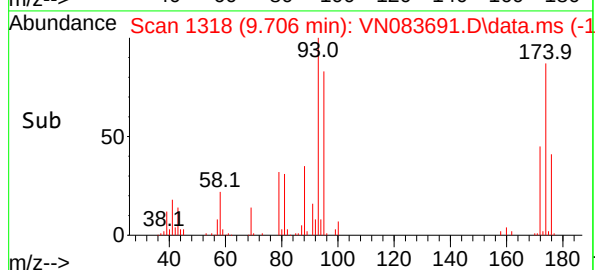
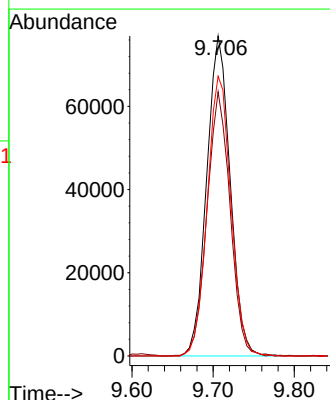
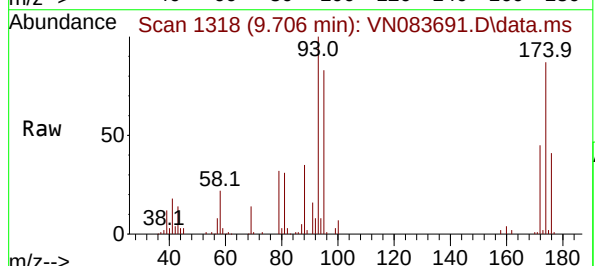
Tgt Ion: 93 Resp: 154362

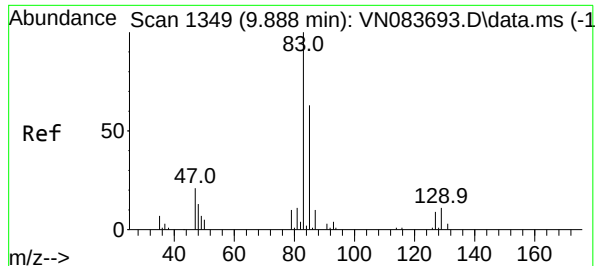
Ion Ratio Lower Upper

93 100

95 81.3 0.0 164.6

174 88.2 0.0 193.2





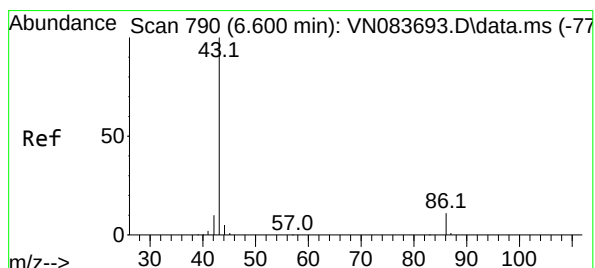
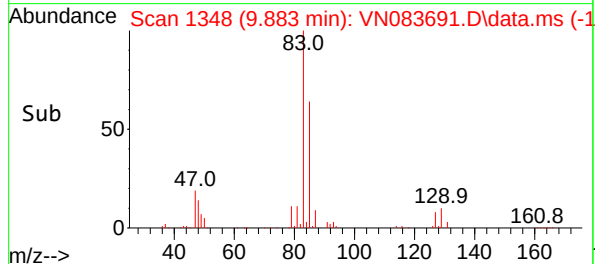
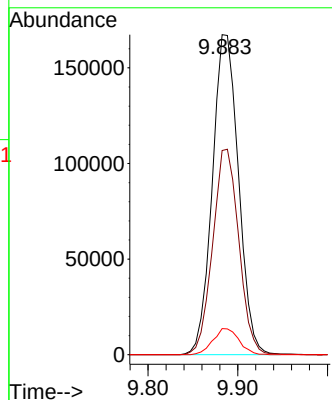
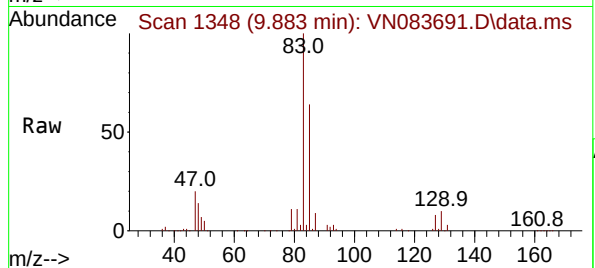
#41
Bromodichloromethane
Concen: 107.873 ug/l
RT: 9.883 min Scan# 1349
Delta R.T. -0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 83 Resp: 339079
Ion Ratio Lower Upper
83 100
85 63.8 49.4 74.2
127 8.2 7.3 10.9

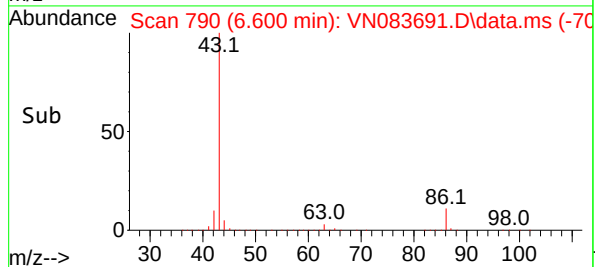
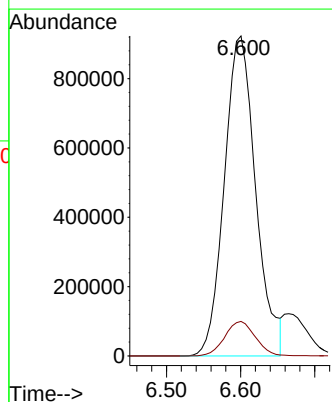
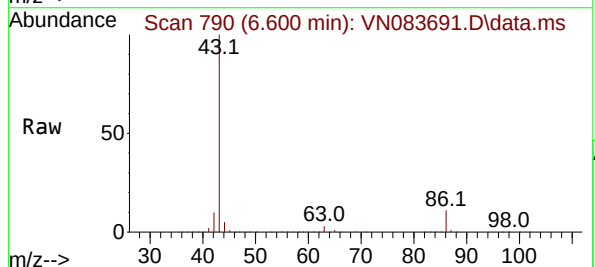
Manual Integrations
APPROVED

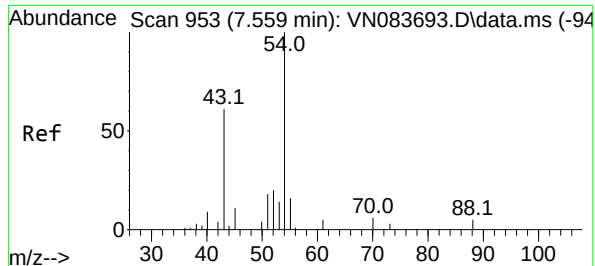
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#42
Vinyl Acetate
Concen: 500.418 ug/l
RT: 6.600 min Scan# 790
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion: 43 Resp: 2715172
Ion Ratio Lower Upper
43 100
86 10.6 9.4 14.2





#43

Ethyl Acetate

Concen: 103.245 ug/l

RT: 7.559 min Scan# 91

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 274239

Ion Ratio Lower Upper

43 100

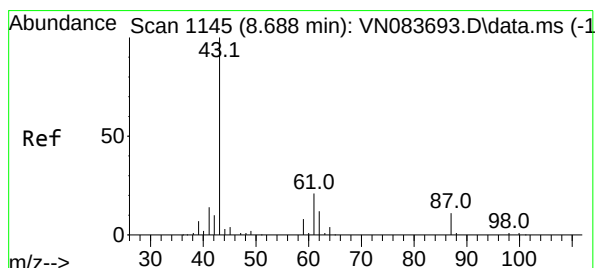
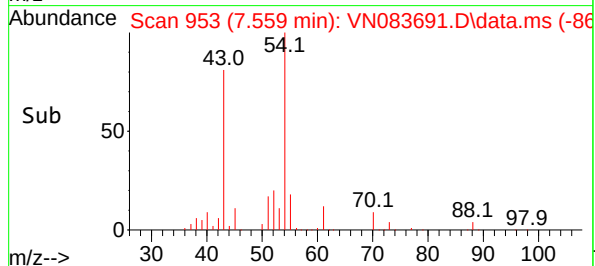
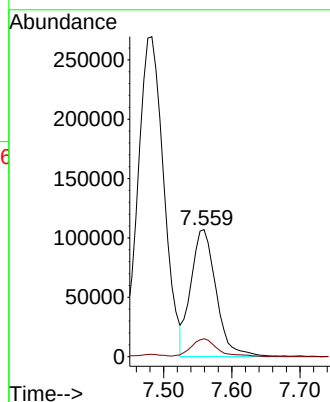
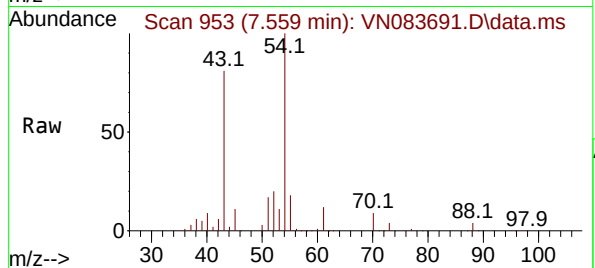
45 14.8 10.6 15.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#44

Isopropyl Acetate

Concen: 107.129 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.000 min

Lab File: VN083691.D

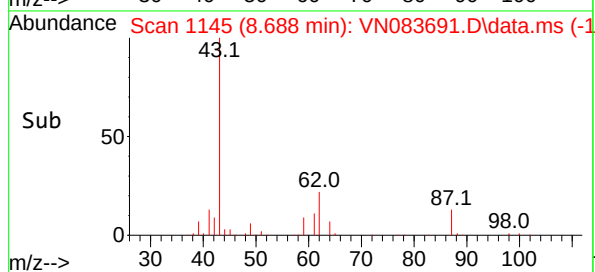
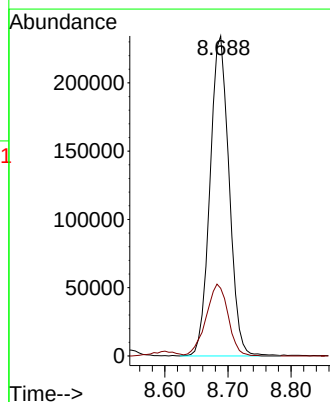
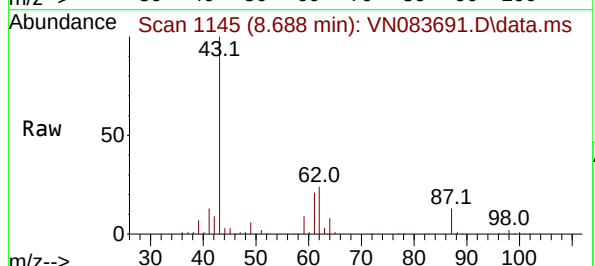
Acq: 06 Sep 2024 12:22

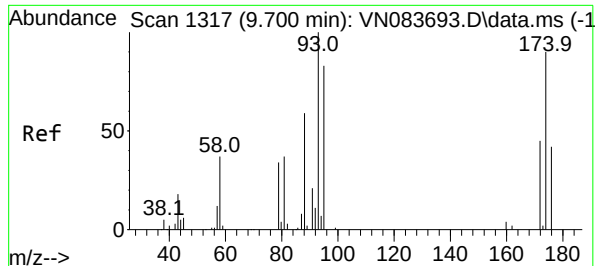
Tgt Ion: 43 Resp: 492170

Ion Ratio Lower Upper

43 100

61 26.0 25.0 37.4





#45

1,4-Dioxane

Concen: 2085.575 ug/l

RT: 9.694 min Scan# 1316

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 88 Resp: 74732

Ion Ratio Lower Upper

88 100

43 27.0 19.8 29.6

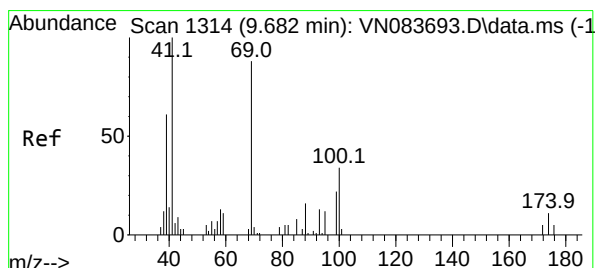
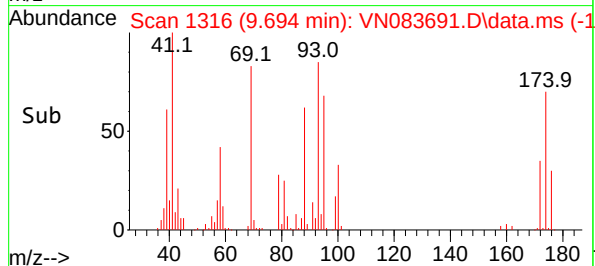
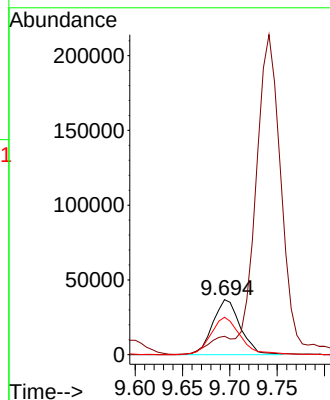
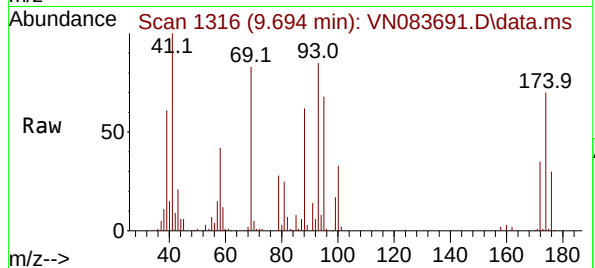
58 72.7 55.4 83.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#46

Methyl methacrylate

Concen: 106.617 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

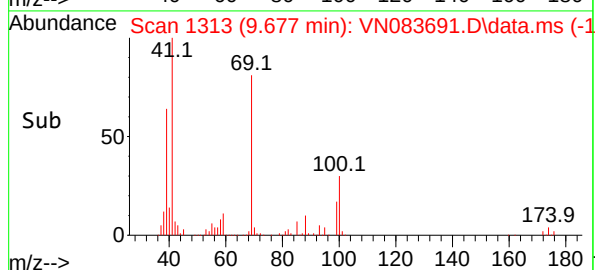
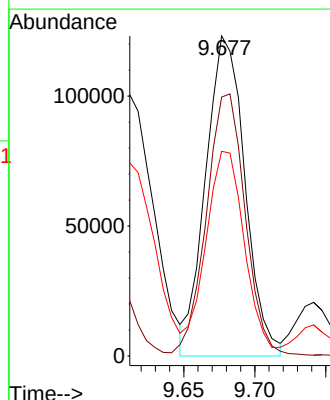
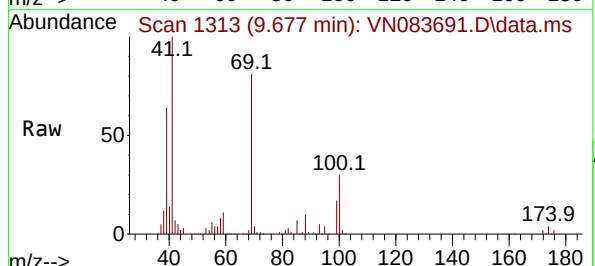
Tgt Ion: 41 Resp: 237084

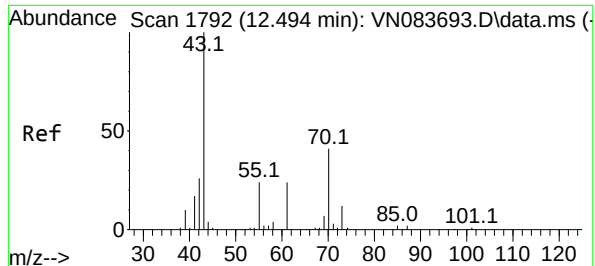
Ion Ratio Lower Upper

41 100

69 82.6 51.1 153.3

39 63.7 25.8 77.3





#47

n-amy1 Acetate

Concen: 111.485 ug/l

RT: 12.494 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 45369

Ion Ratio Lower Upper

43 100

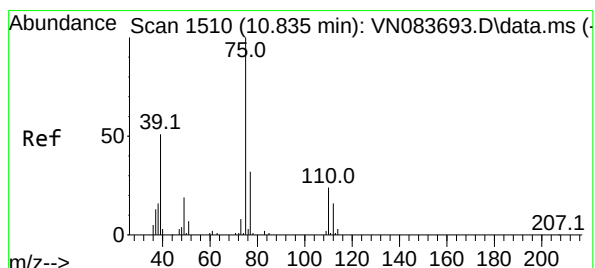
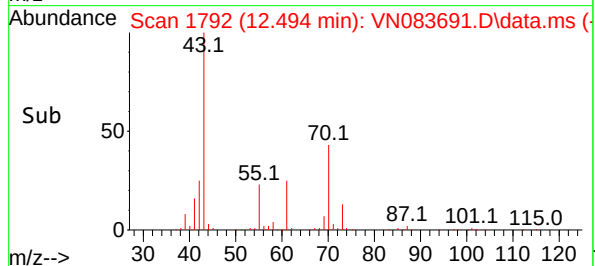
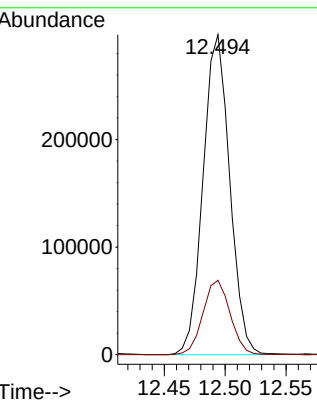
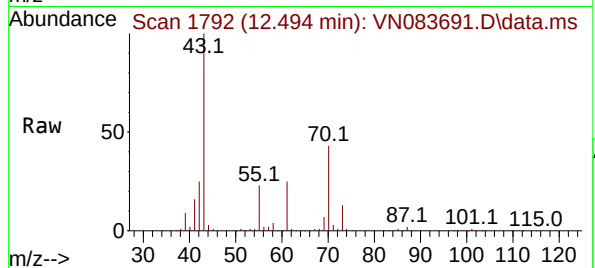
55 23.7 23.4 35.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#48

t-1,3-Dichloropropene

Concen: 108.005 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN083691.D

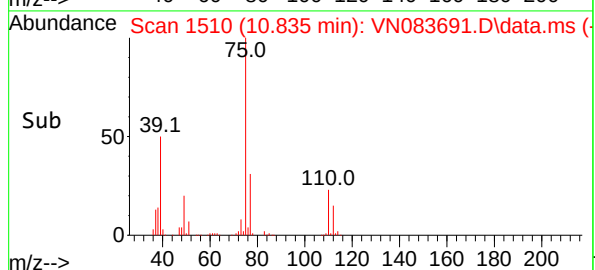
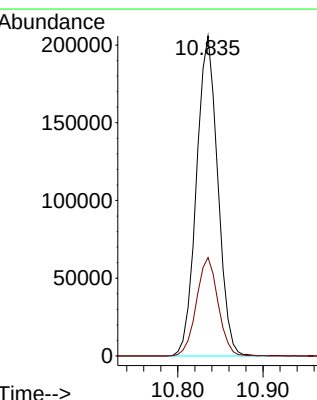
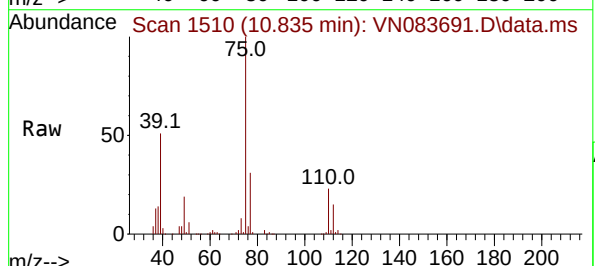
Acq: 06 Sep 2024 12:22

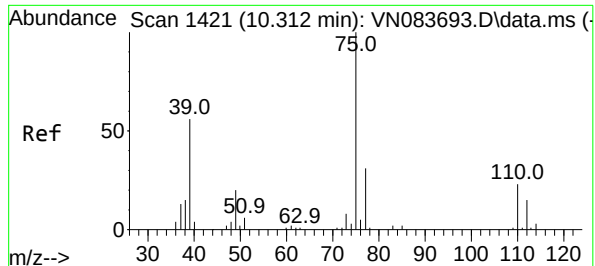
Tgt Ion: 75 Resp: 357101

Ion Ratio Lower Upper

75 100

77 30.7 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 108.678 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 75 Resp: 37370

Ion Ratio Lower Upper

75 100

77 30.5 24.9 37.3

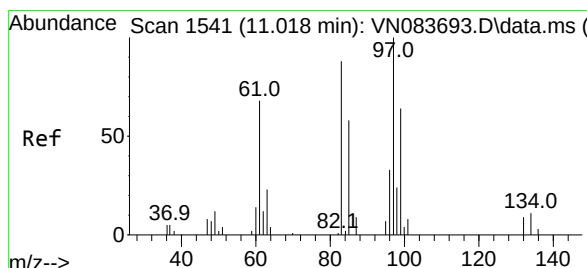
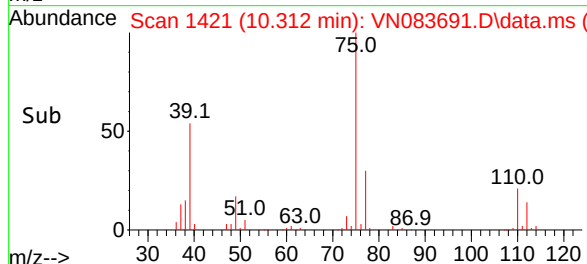
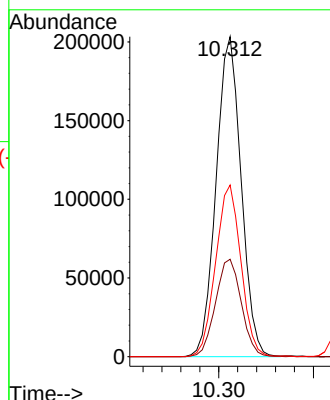
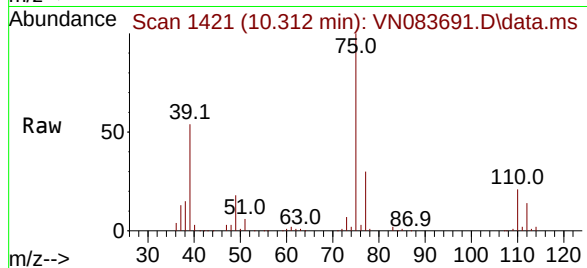
39 53.7 31.0 46.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#50

1,1,2-Trichloroethane

Concen: 106.757 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion: 97 Resp: 200803

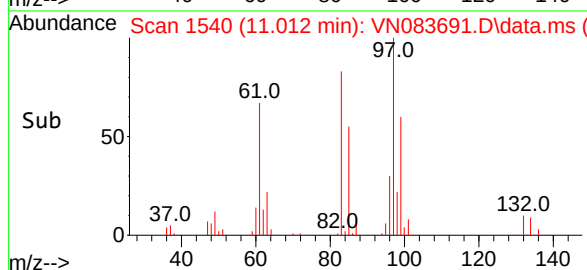
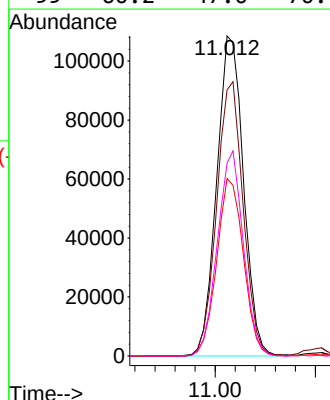
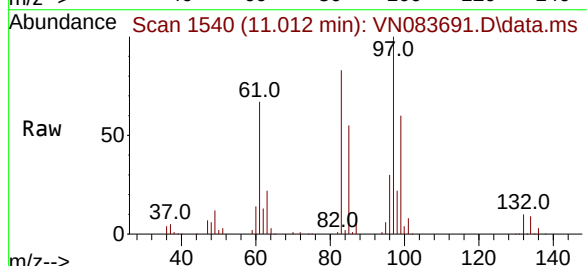
Ion Ratio Lower Upper

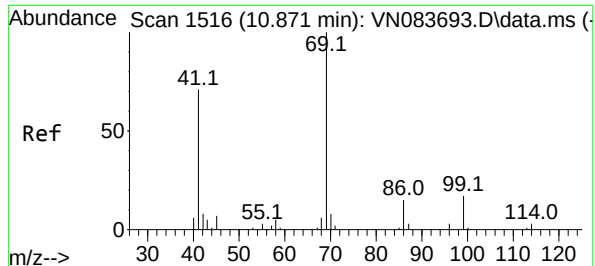
97 100

83 83.1 68.1 102.1

85 55.4 41.8 62.6

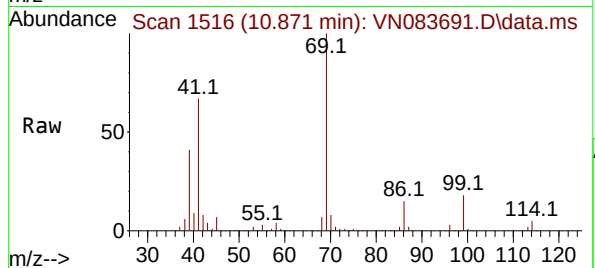
99 60.2 47.0 70.4





#51
Ethyl methacrylate
Concen: 108.672 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

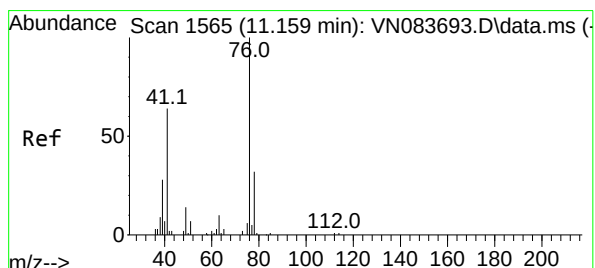
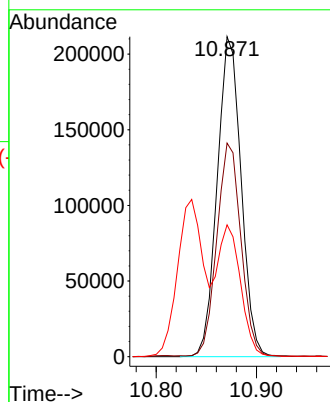
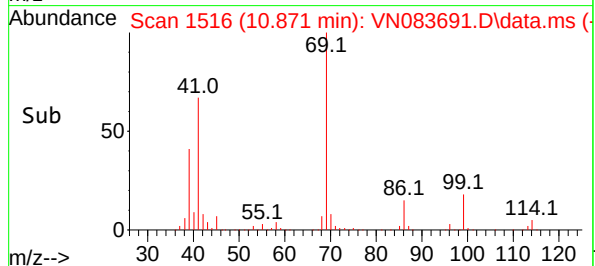
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100



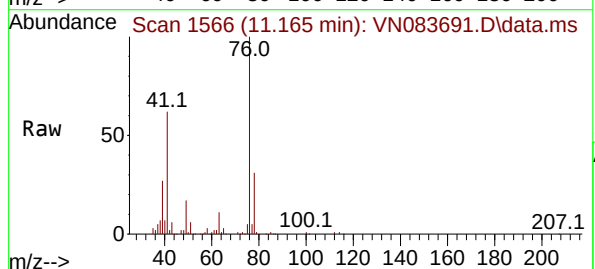
Tgt Ion: 69 Resp: 349215
Ion Ratio Lower Upper
69 100
41 66.5 25.5 76.5
39 41.1 16.0 47.9

Manual Integrations
APPROVED

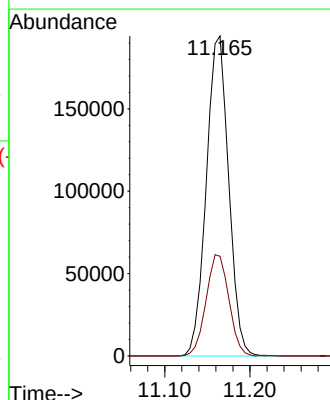
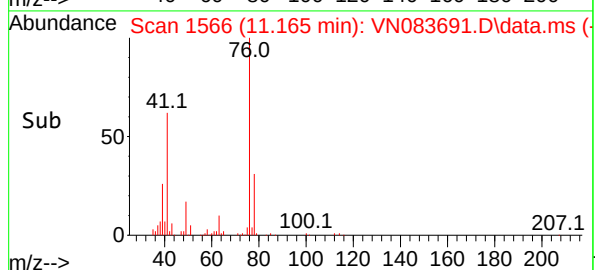
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024

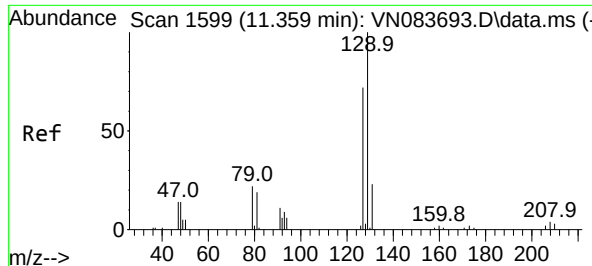


#52
1,3-Dichloropropane
Concen: 104.200 ug/l
RT: 11.165 min Scan# 1566
Delta R.T. 0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22



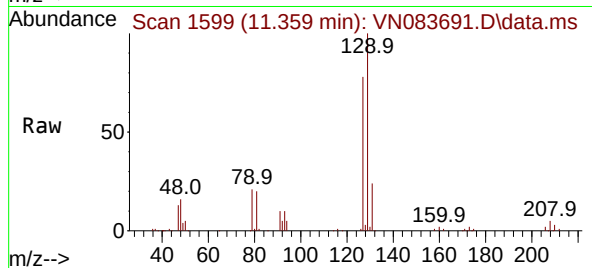
Tgt Ion: 76 Resp: 353943
Ion Ratio Lower Upper
76 100
78 32.3 0.0 65.8





#53
Dibromochloromethane
Concen: 108.901 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

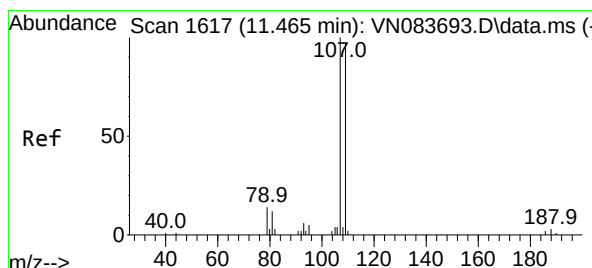
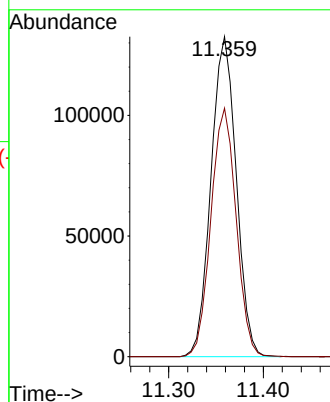
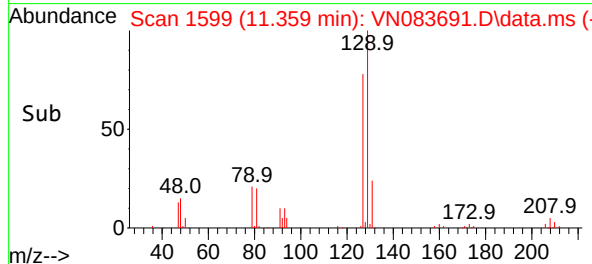
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100



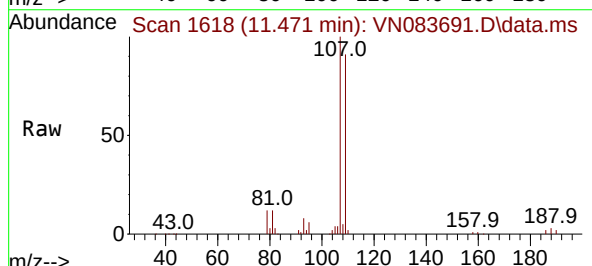
Tgt Ion:129 Resp: 245689
Ion Ratio Lower Upper
129 100
127 77.4 39.4 118.1

Manual Integrations
APPROVED

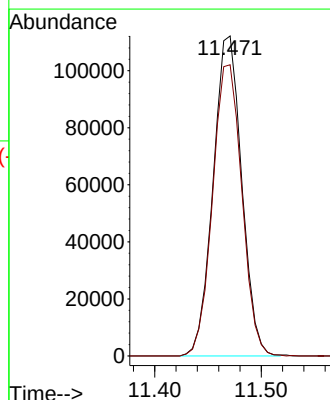
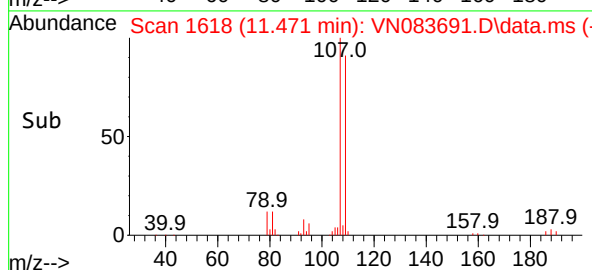
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024

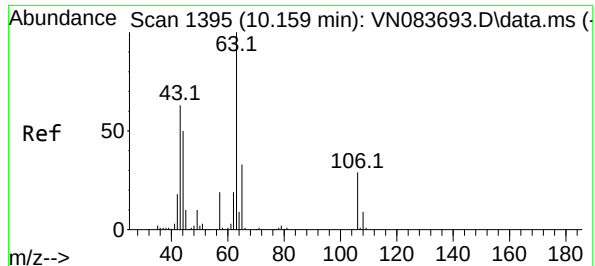


#54
1,2-Dibromoethane
Concen: 107.334 ug/l
RT: 11.471 min Scan# 1618
Delta R.T. 0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22



Tgt Ion:107 Resp: 208856
Ion Ratio Lower Upper
107 100
109 93.2 74.7 112.1





#55

2-Chloroethyl vinyl ether

Concen: 478.222 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 63 Resp: 61244

Ion Ratio Lower Upper

63 100

65 31.9 26.2 39.2

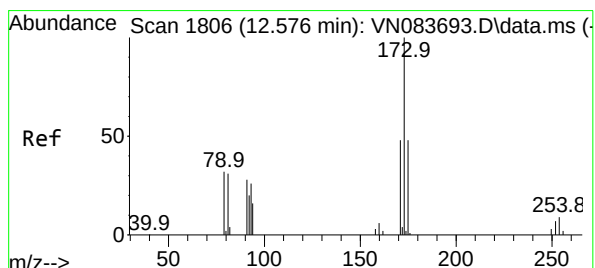
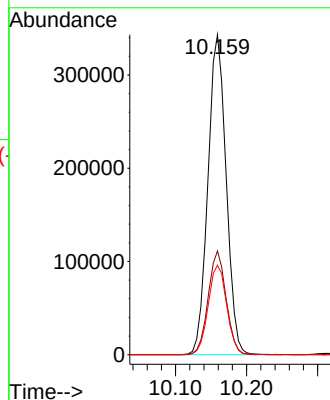
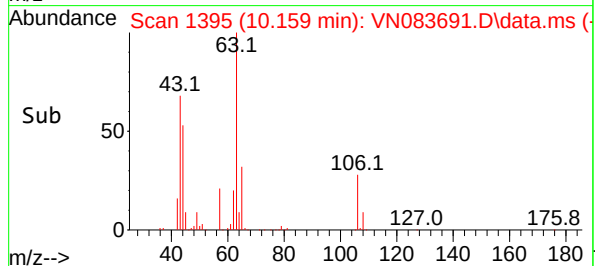
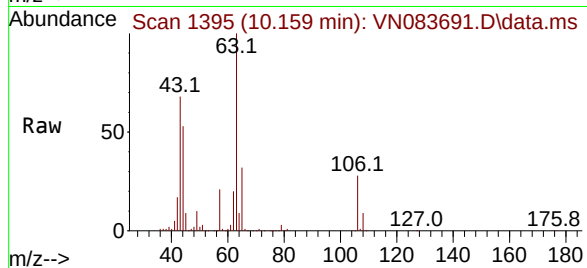
106 28.3 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#56

Bromoform

Concen: 110.393 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

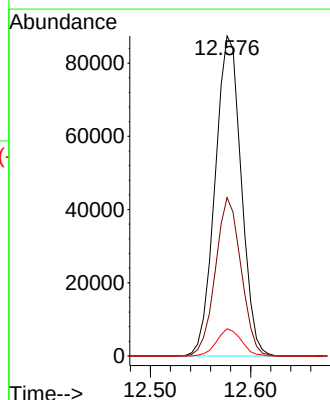
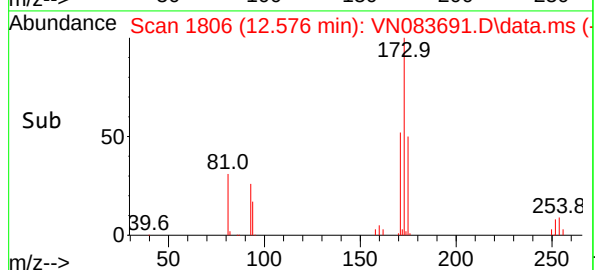
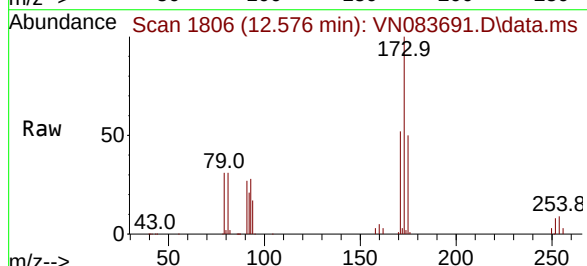
Tgt Ion:173 Resp: 158228

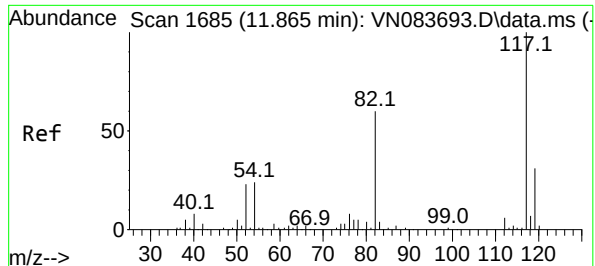
Ion Ratio Lower Upper

173 100

175 48.5 40.0 60.0

254 8.0 8.3 12.5#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:117 Resp: 16243

Ion Ratio Lower Upper

117 100

82 58.4 46.6 69.8

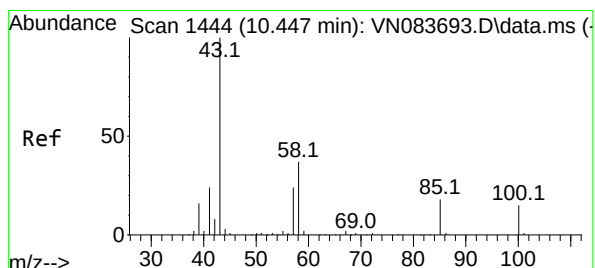
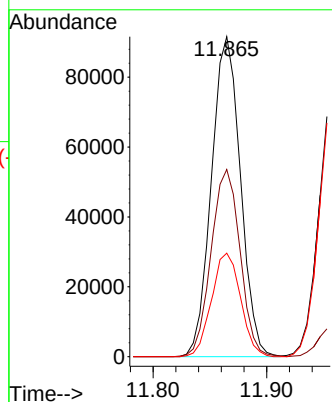
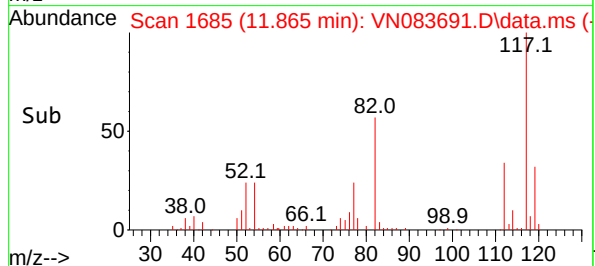
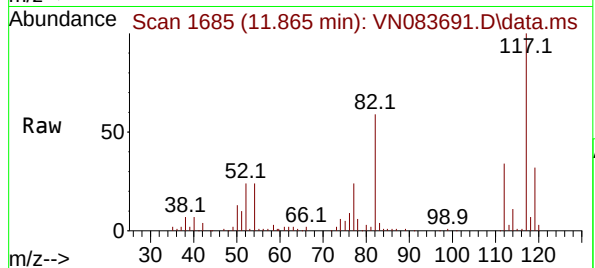
119 32.4 25.4 38.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#58

4-Methyl-2-Pentanone

Concen: 517.461 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. -0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

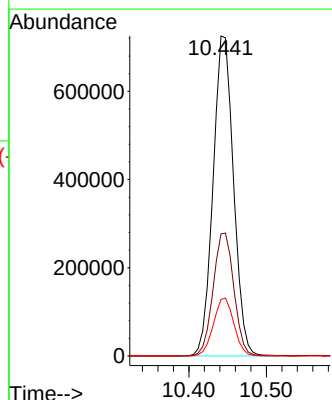
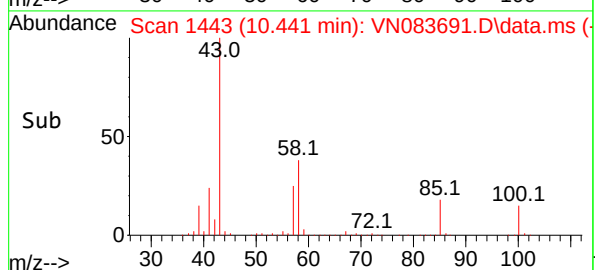
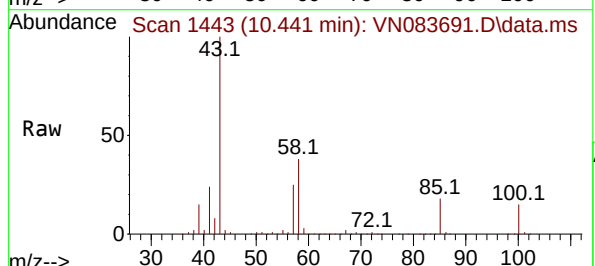
Tgt Ion: 43 Resp: 1332742

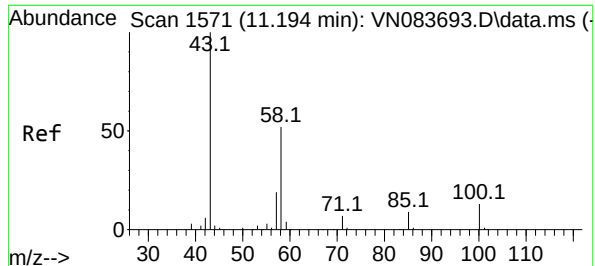
Ion Ratio Lower Upper

43 100

58 38.9 36.5 54.7

85 18.1 19.5 29.3#





#59

2-Hexanone

Concen: 524.351 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 102044

Ion Ratio Lower Upper

43 100

58 53.8 50.4 75.6

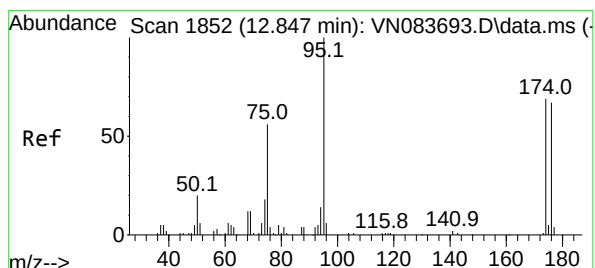
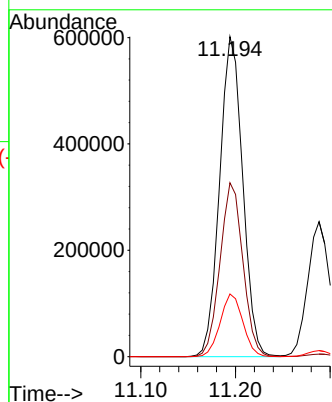
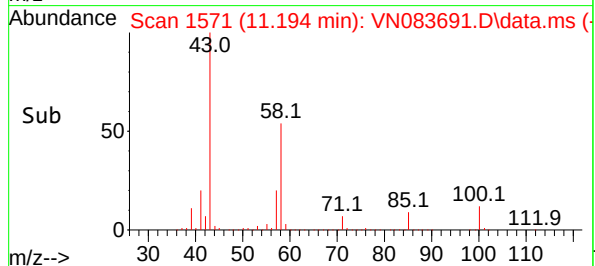
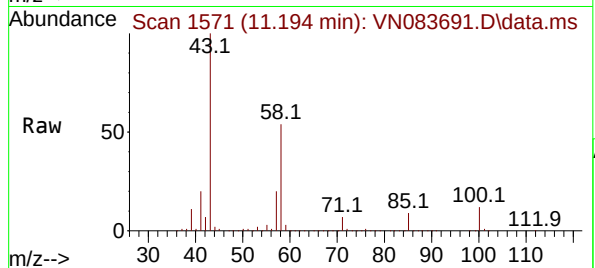
57 19.3 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#60

4-Bromofluorobenzene

Concen: 30.381 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

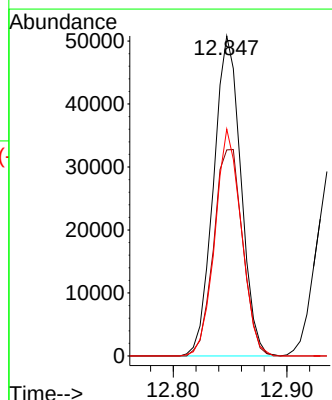
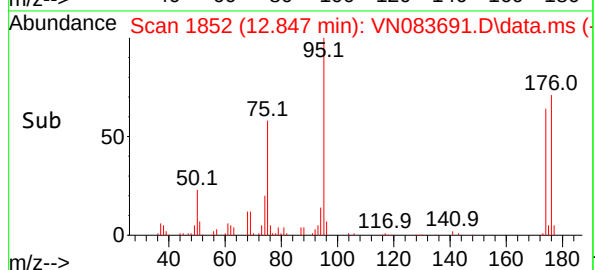
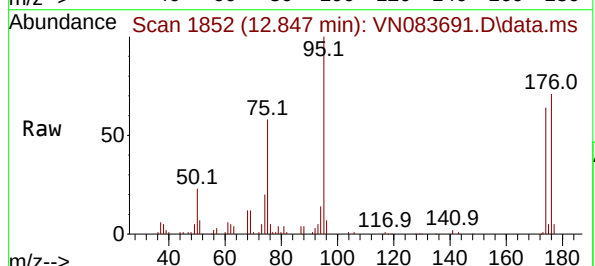
Tgt Ion: 95 Resp: 85052

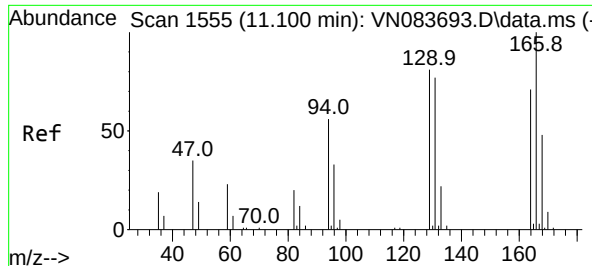
Ion Ratio Lower Upper

95 100

174 68.4 60.5 90.7

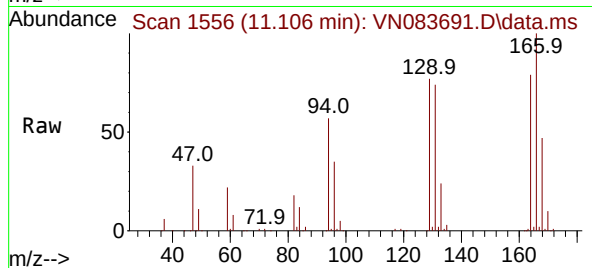
176 68.3 57.8 86.6





#61
Tetrachloroethene
Concen: 103.802 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

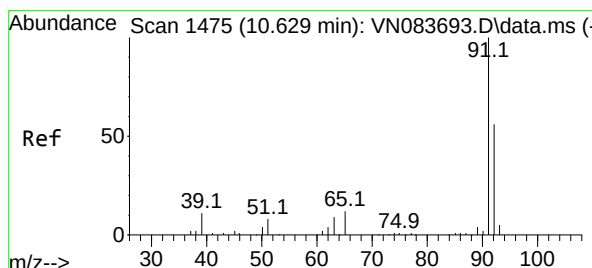
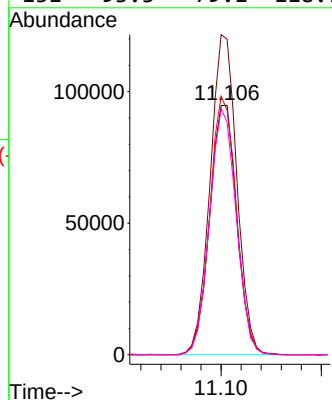
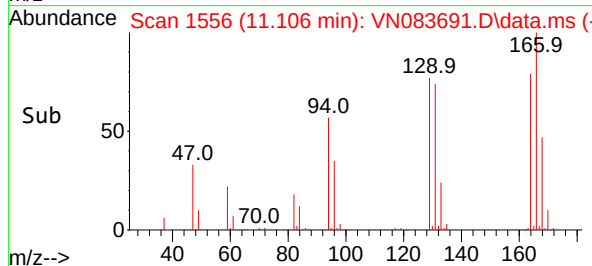
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100



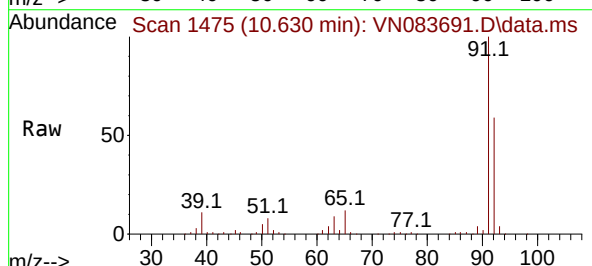
Tgt Ion:164 Resp: 178440
Ion Ratio Lower Upper
164 100
166 126.4 106.7 160.1
129 98.1 85.8 128.6
131 93.3 79.1 118.7

Manual Integrations
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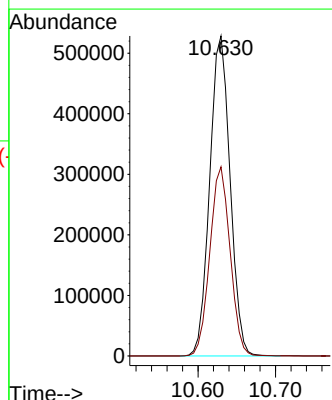
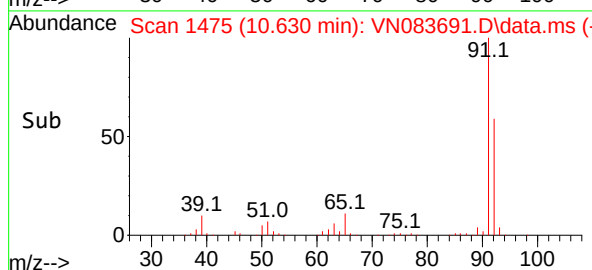
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024

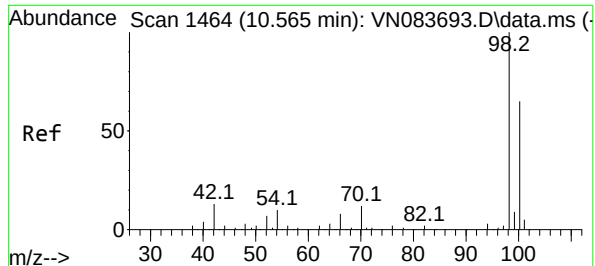


#62
Toluene
Concen: 103.413 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22



Tgt Ion: 91 Resp: 965496
Ion Ratio Lower Upper
91 100
92 58.8 46.5 69.7





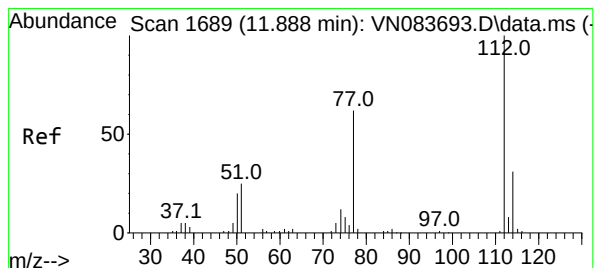
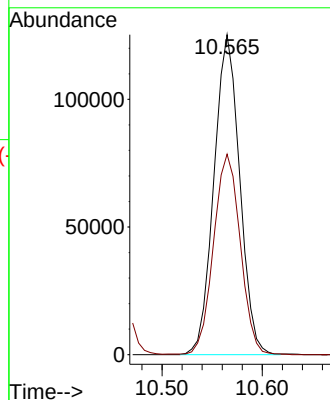
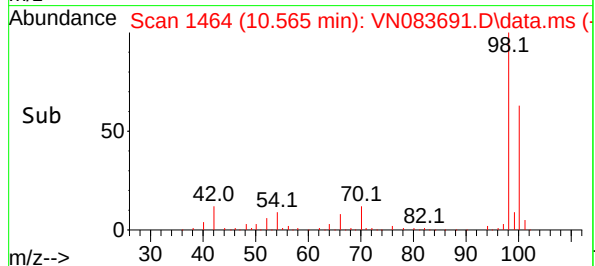
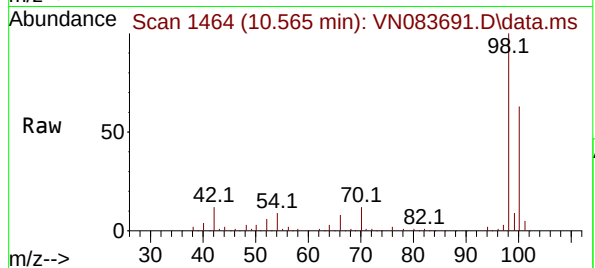
#63
Toluene-d8
Concen: 29.678 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 98 Resp: 223210
Ion Ratio Lower Upper
98 100
100 65.0 52.7 79.1

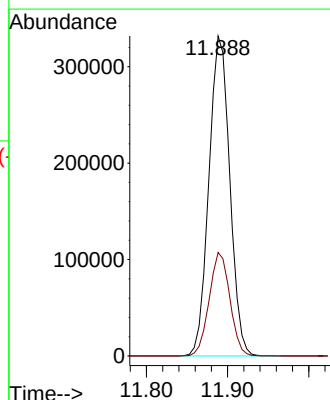
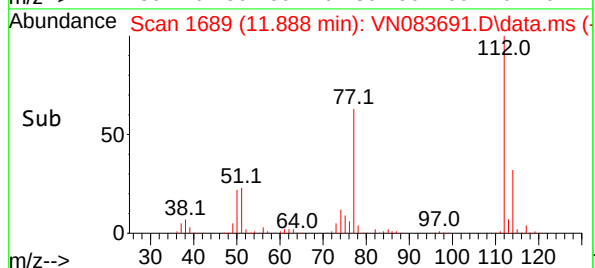
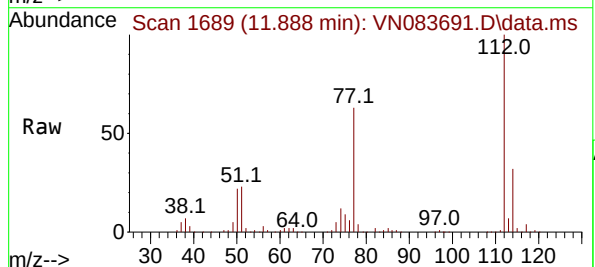
Manual Integrations
APPROVED

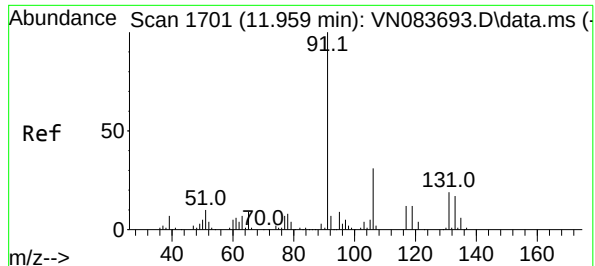
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#64
Chlorobenzene
Concen: 102.474 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion:112 Resp: 592341
Ion Ratio Lower Upper
112 100
114 32.4 26.6 39.8





#65

1,1,1,2-Tetrachloroethane

Concen: 104.475 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:131 Resp: 210370

Ion Ratio Lower Upper

131 100

133 94.8 0.0 188.0

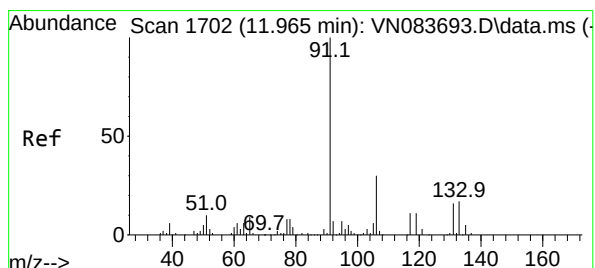
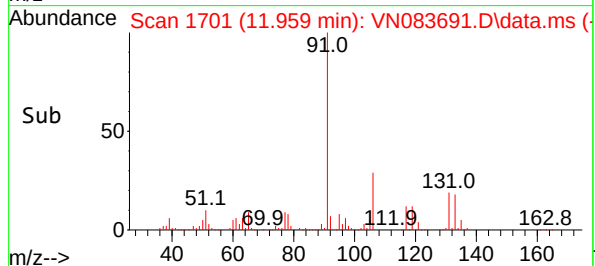
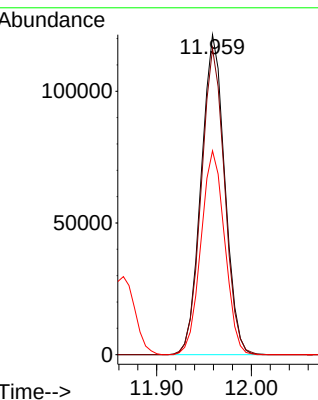
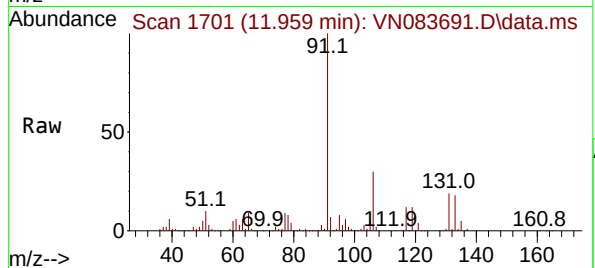
119 64.0 0.0 122.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#66

Ethyl Benzene

Concen: 105.709 ug/l

RT: 11.965 min Scan# 1702

Delta R.T. 0.000 min

Lab File: VN083691.D

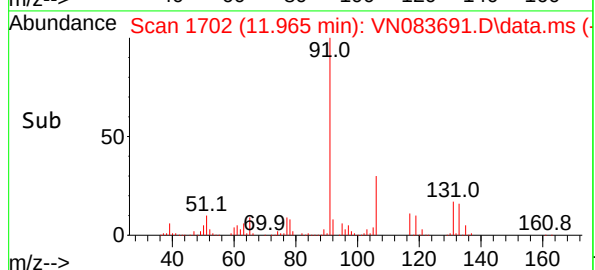
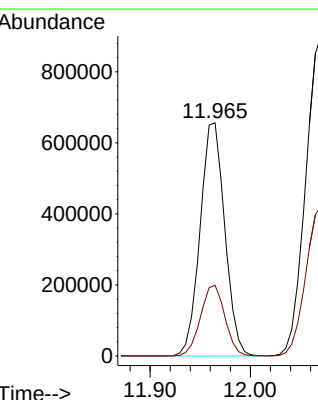
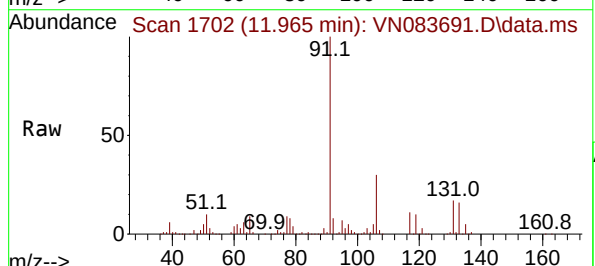
Acq: 06 Sep 2024 12:22

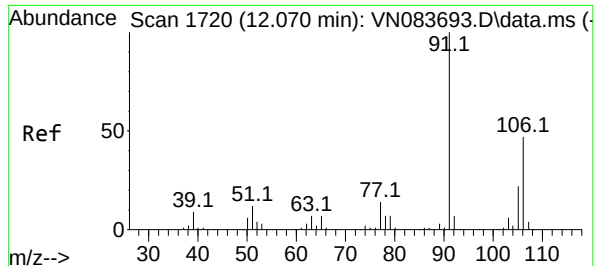
Tgt Ion: 91 Resp: 1122330

Ion Ratio Lower Upper

91 100

106 30.3 24.4 36.6





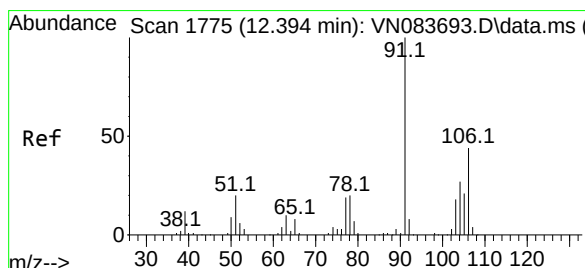
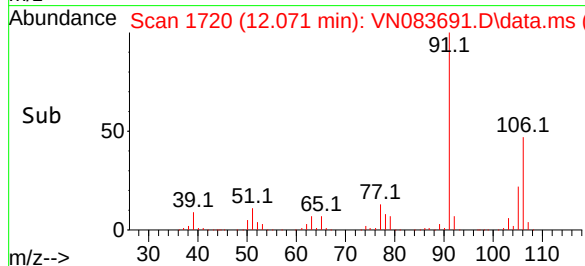
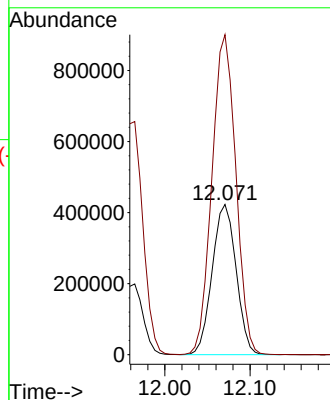
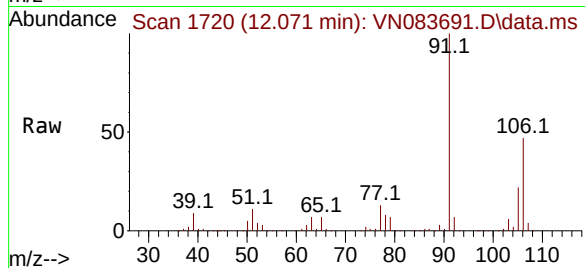
#67
m/p-Xylenes
Concen: 211.258 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion:106 Resp: 82520
Ion Ratio Lower Upper
106 100
91 212.9 166.6 249.8

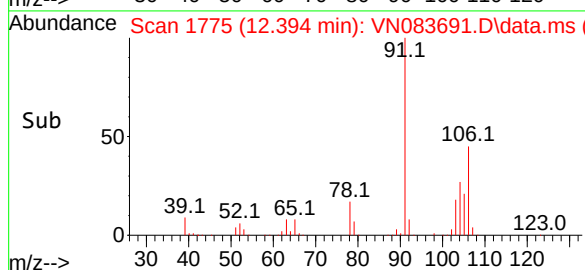
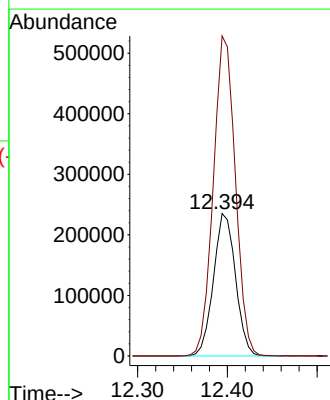
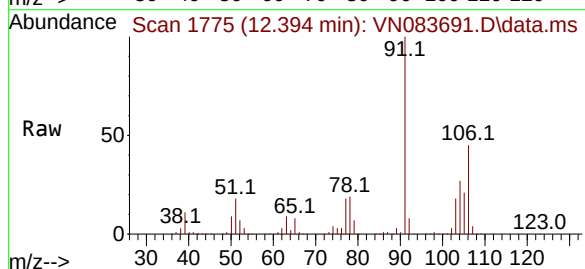
Manual Integrations
APPROVED

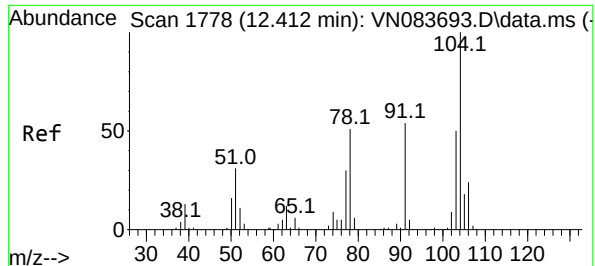
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#68
o-Xylene
Concen: 106.062 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion:106 Resp: 400965
Ion Ratio Lower Upper
106 100
91 224.8 110.0 330.0





#69

Styrene

Concen: 107.784 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

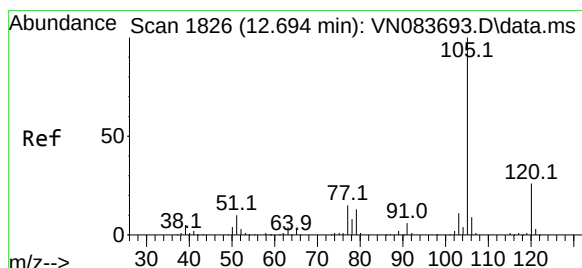
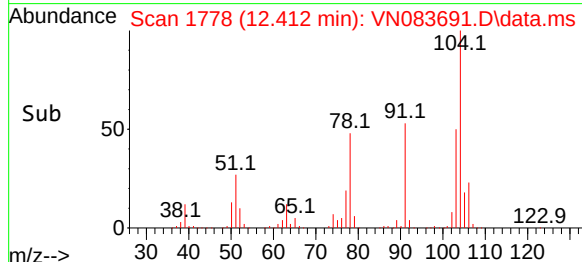
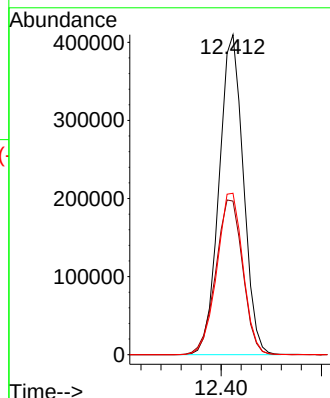
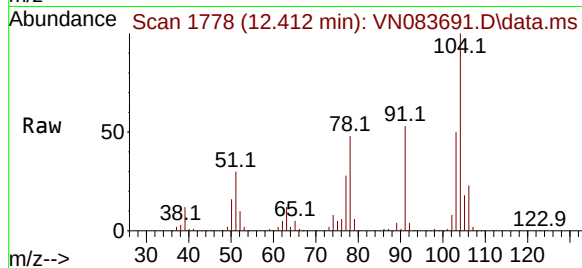
VSTDICC100

Tgt Ion	104	Resp	68849
Ion Ratio	Lower	Upper	
104	100		
78	53.9	42.6	64.0
103	54.4	43.7	65.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#70

Isopropylbenzene

Concen: 107.504 ug/l

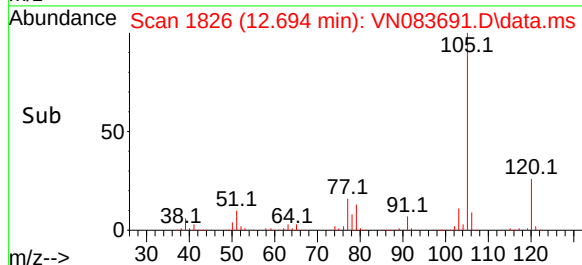
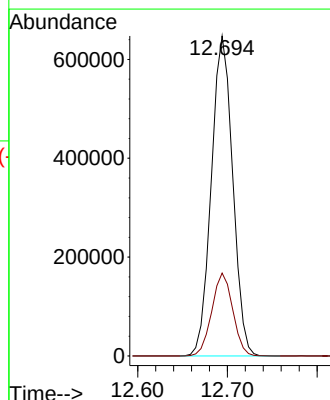
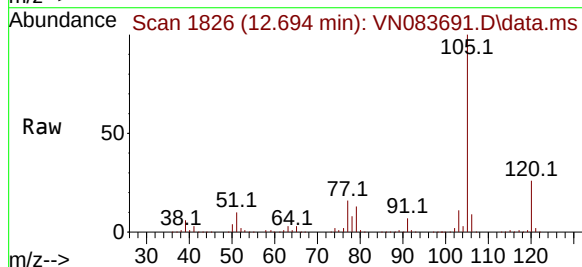
RT: 12.694 min Scan# 1826

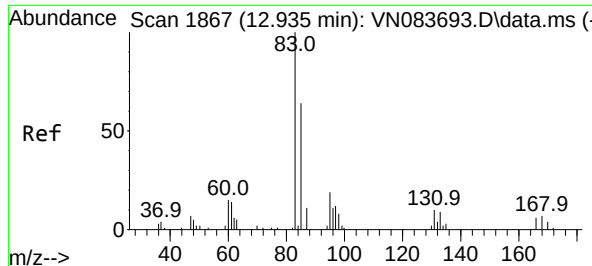
Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion	105	Resp	1072525
Ion Ratio	Lower	Upper	
105	100		
120	25.3	17.8	33.1





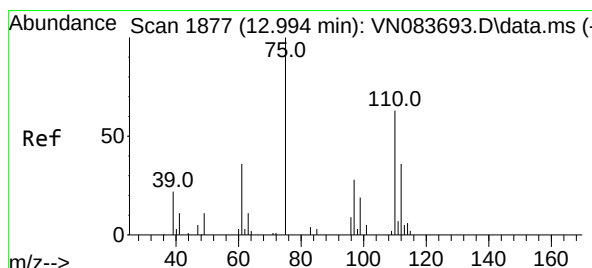
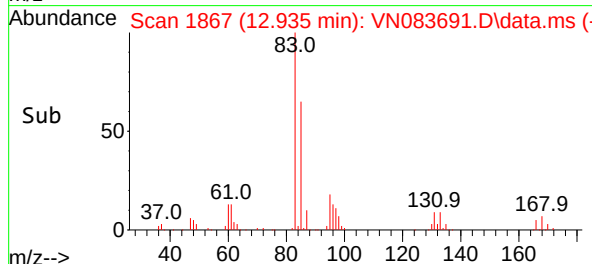
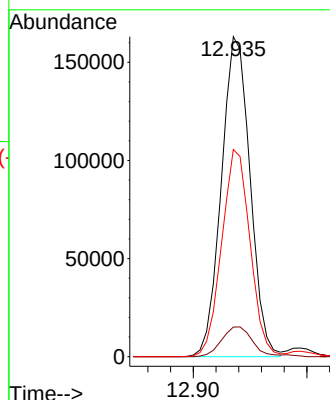
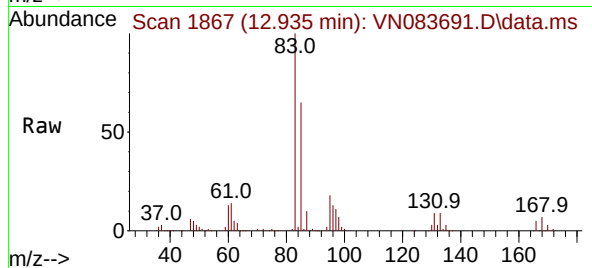
#71
1,1,2,2-Tetrachloroethane
Concen: 105.157 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 83 Resp: 286530
Ion Ratio Lower Upper
83 100
131 9.9 5.2 15.6
85 63.9 32.3 96.8

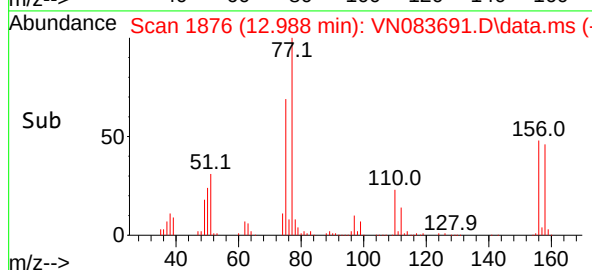
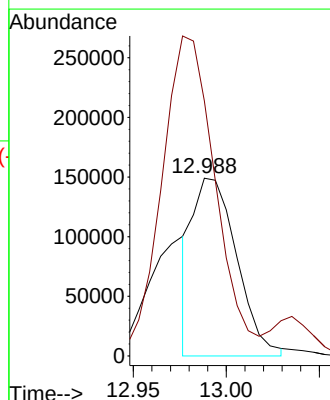
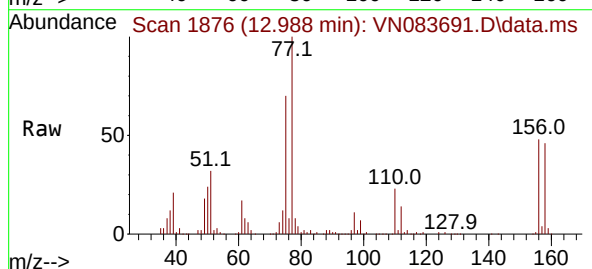
Manual Integrations
APPROVED

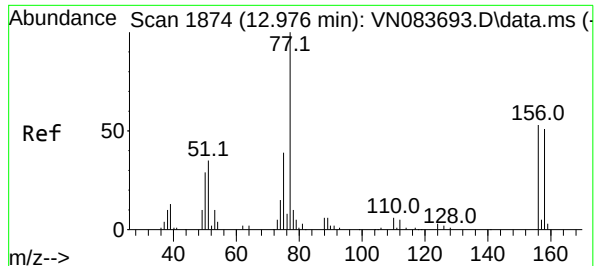
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#72
1,2,3-Trichloropropane
Concen: 103.011 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

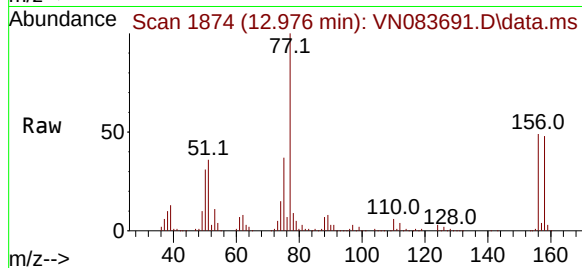
Tgt Ion: 75 Resp: 245619
Ion Ratio Lower Upper
75 100
77 219.3 0.0 367.6





#73
Bromobenzene
Concen: 102.697 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

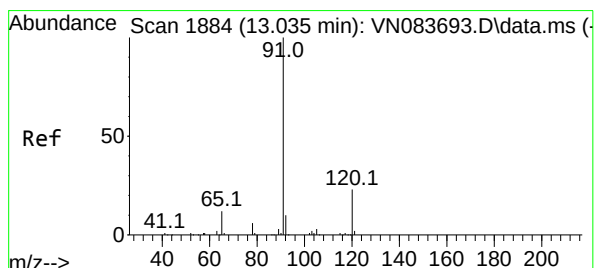
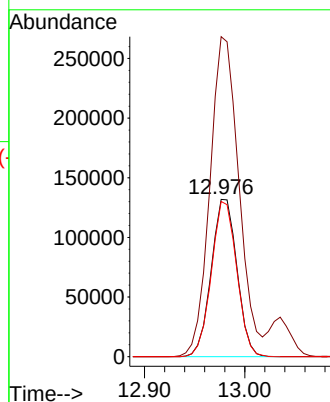
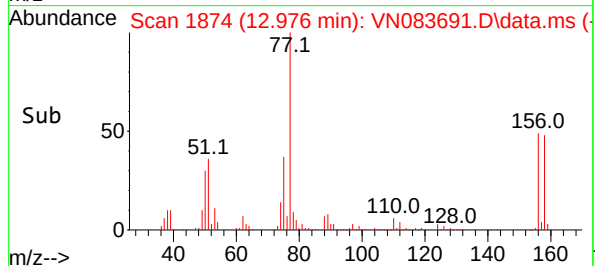
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100



Tgt Ion:156 Resp: 235332
Ion Ratio Lower Upper
156 100
77 228.9 0.0 437.6
158 97.1 0.0 203.8

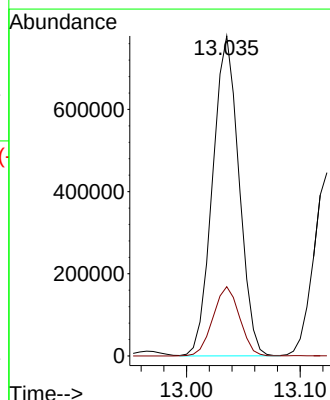
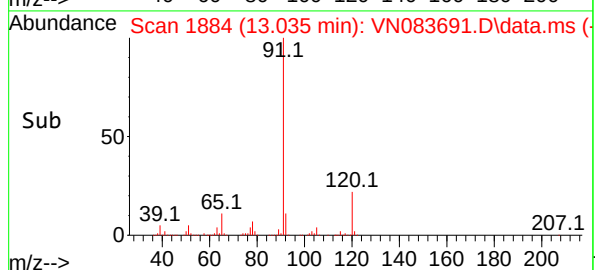
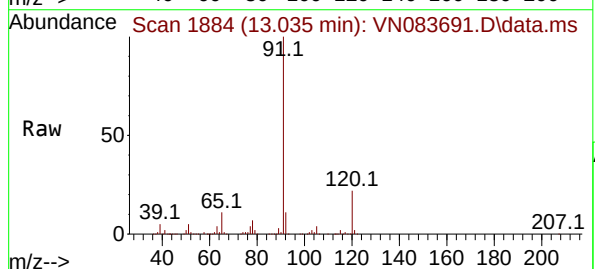
Manual Integrations
APPROVED

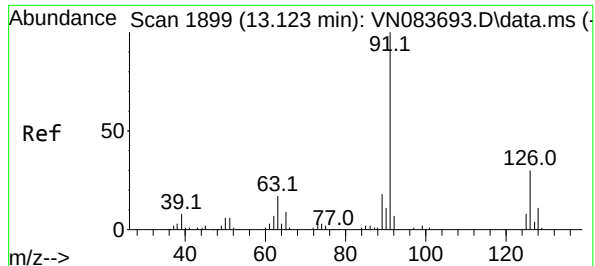
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#74
n-propylbenzene
Concen: 107.692 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion: 91 Resp: 1257711
Ion Ratio Lower Upper
91 100
120 21.7 0.0 43.8





#75

2-Chlorotoluene

Concen: 105.710 ug/l

RT: 13.124 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 91 Resp: 77052

Ion Ratio Lower Upper

91 100

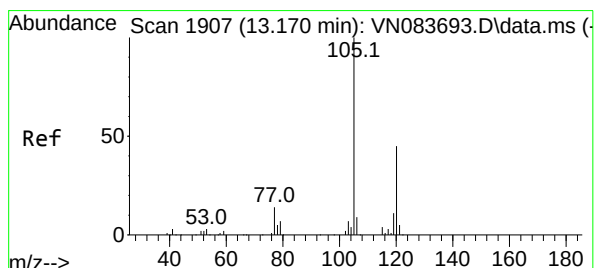
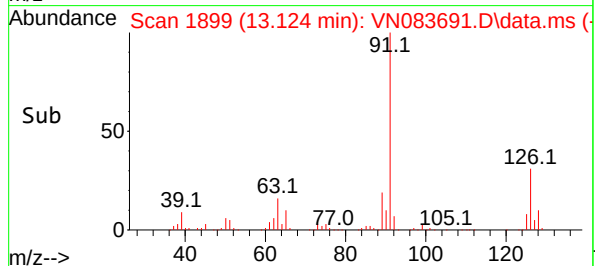
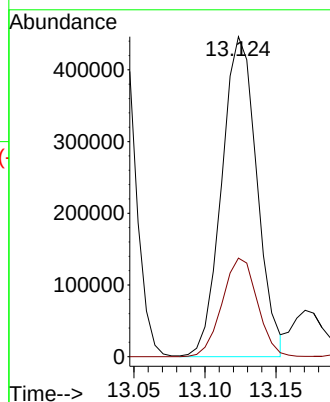
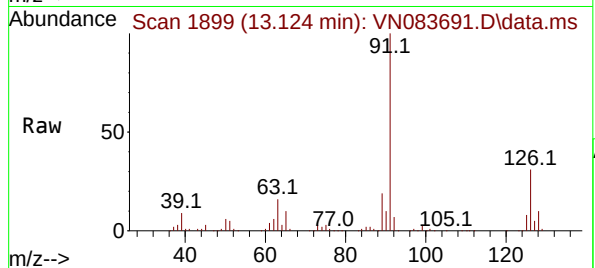
126 30.8 0.0 61.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#76

1,3,5-Trimethylbenzene

Concen: 107.375 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN083691.D

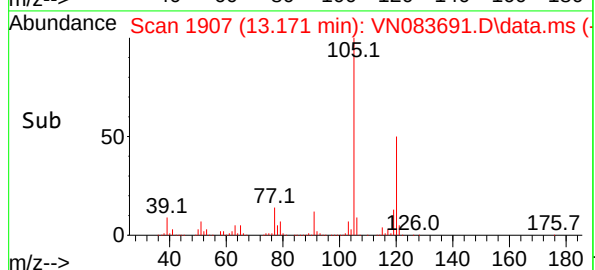
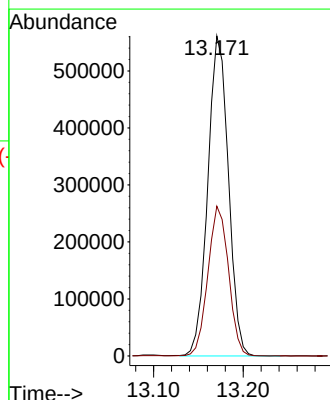
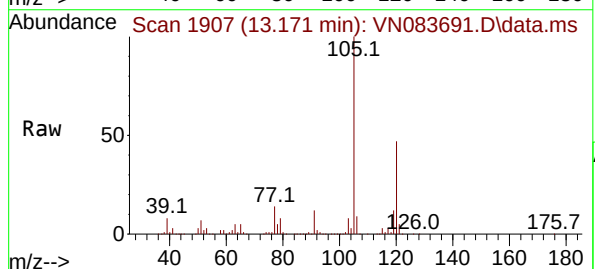
Acq: 06 Sep 2024 12:22

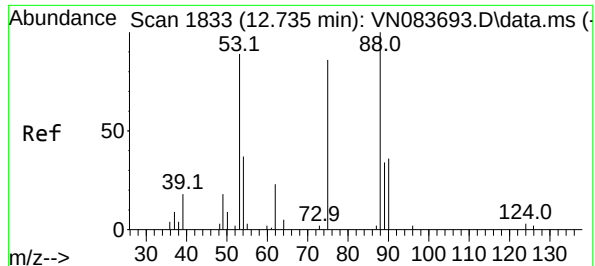
Tgt Ion:105 Resp: 894833

Ion Ratio Lower Upper

105 100

120 46.9 0.0 95.8





#77

t-1,4-Dichloro-2-butene

Concen: 110.656 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 75 Resp: 11174

Ion Ratio Lower Upper

75 100

53 104.0 45.9 137.7

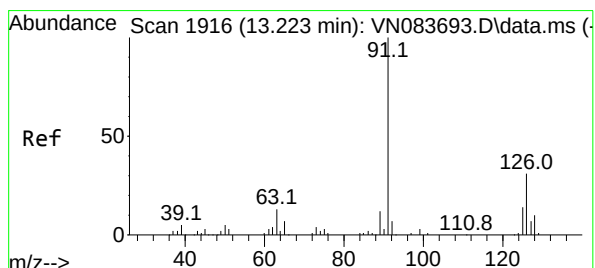
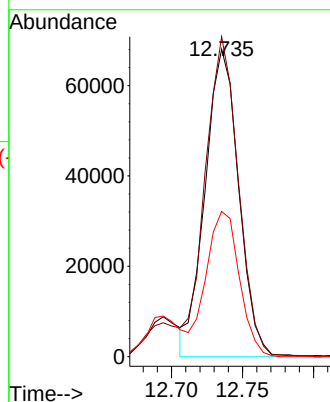
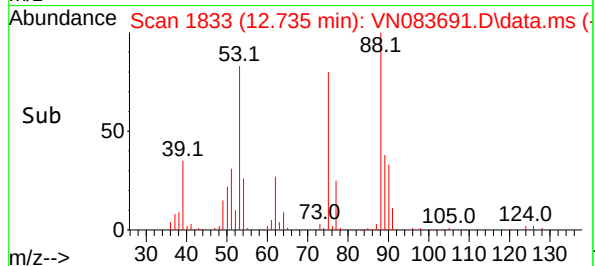
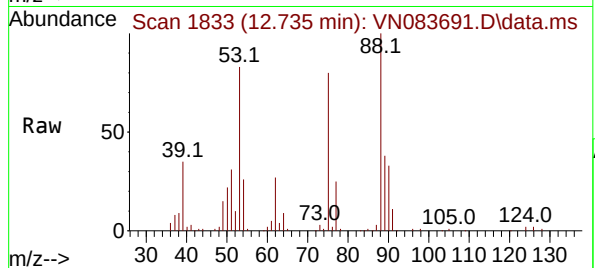
89 47.5 25.9 77.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#78

4-Chlorotoluene

Concen: 104.973 ug/l

RT: 13.218 min Scan# 1915

Delta R.T. -0.006 min

Lab File: VN083691.D

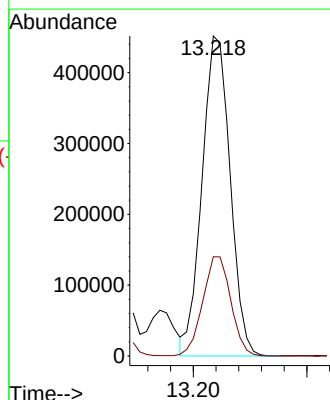
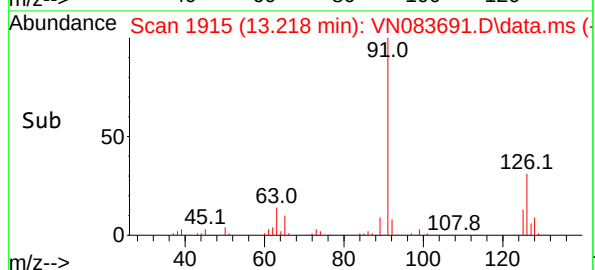
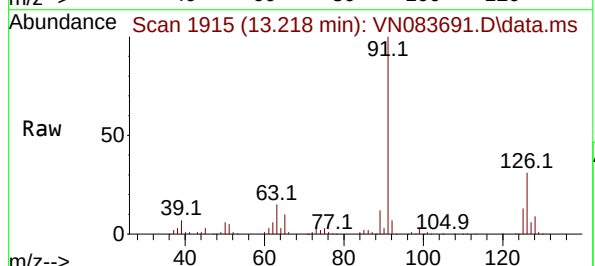
Acq: 06 Sep 2024 12:22

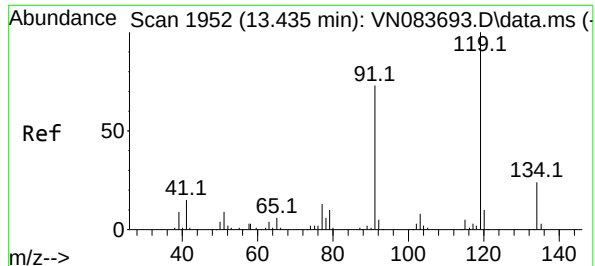
Tgt Ion: 91 Resp: 775962

Ion Ratio Lower Upper

91 100

126 31.1 0.0 62.8





#79

tert-butylbenzene

Concen: 108.154 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

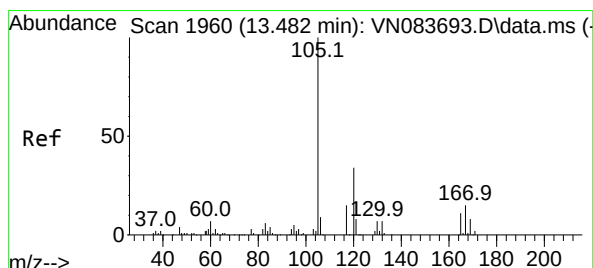
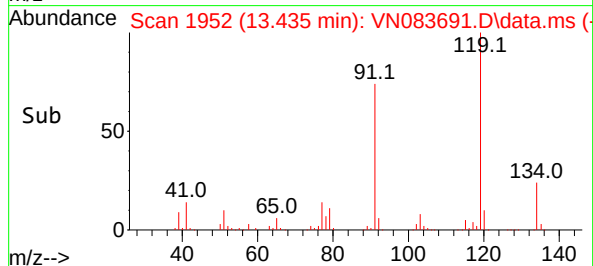
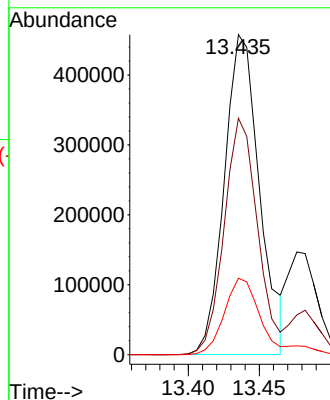
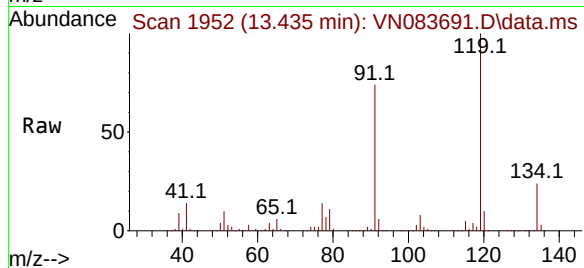
VSTDICC100

Tgt Ion:	119	Resp:	788164
Ion Ratio	Lower	Upper	
119	100		
91	70.3	0.0	138.8
134	23.4	0.0	48.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#80

1,2,4-Trimethylbenzene

Concen: 107.735 ug/l

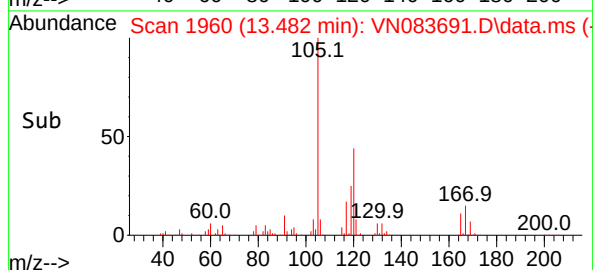
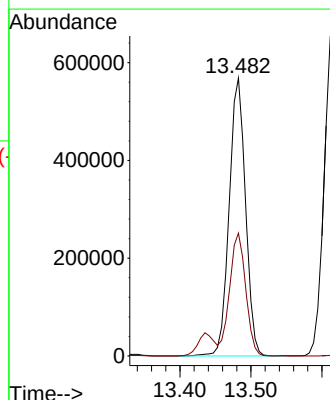
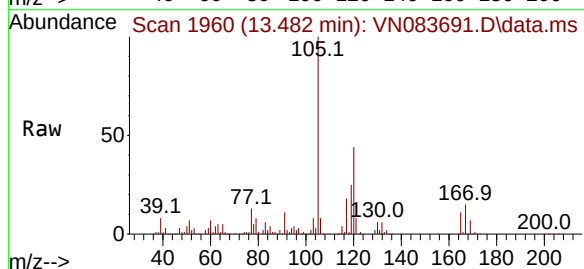
RT: 13.482 min Scan# 1960

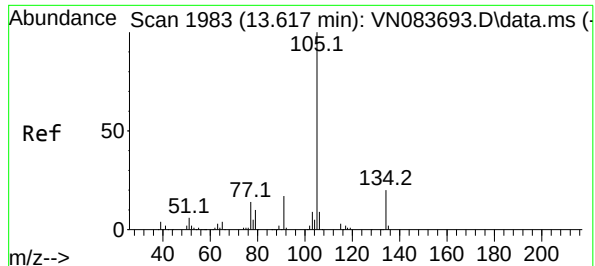
Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion:	105	Resp:	907299
Ion Ratio	Lower	Upper	
105	100		
120	43.7	0.0	86.8





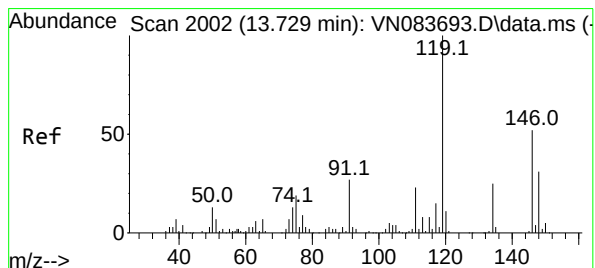
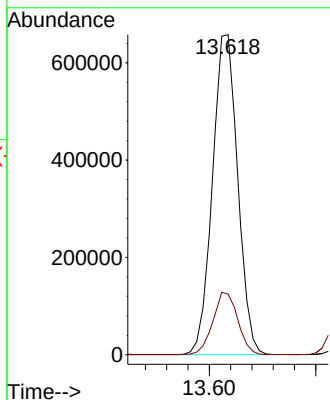
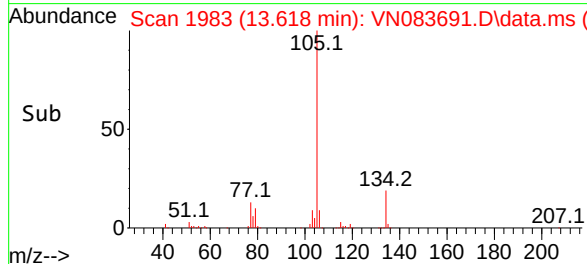
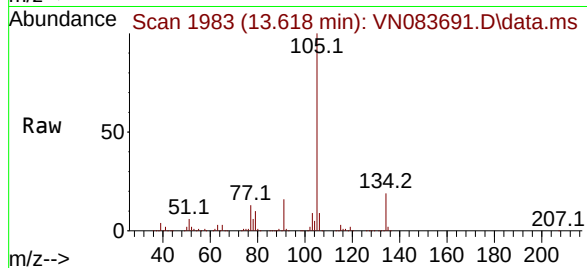
#81
sec-Butylbenzene
Concen: 108.791 ug/l
RT: 13.618 min Scan# 1983
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion:105 Resp: 1083038
Ion Ratio Lower Upper
105 100
134 19.2 0.0 39.0

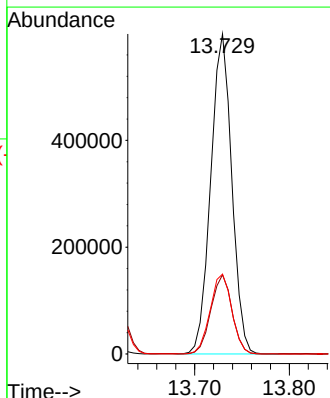
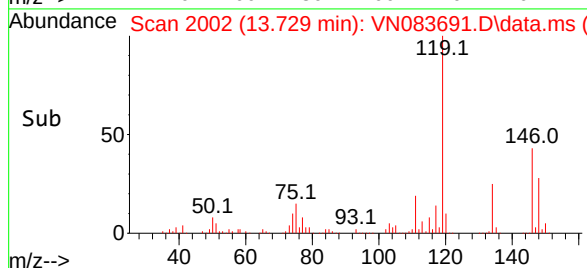
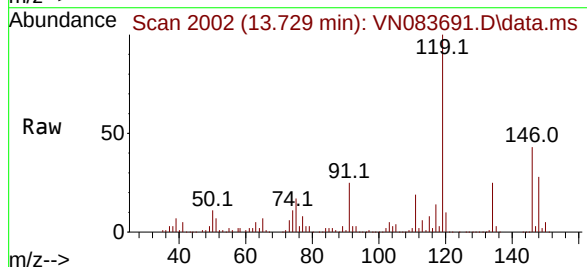
Manual Integrations
APPROVED

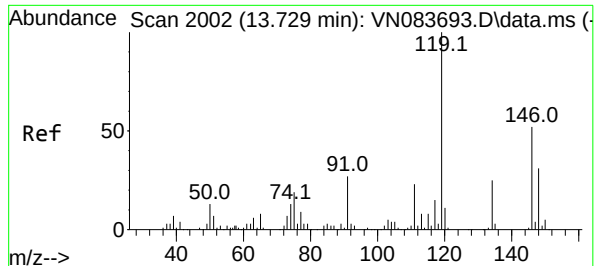
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#82
p-Isopropyltoluene
Concen: 110.170 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

Tgt Ion:119 Resp: 922780
Ion Ratio Lower Upper
119 100
134 24.8 0.0 49.2
91 25.6 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 103.470 ug/l

RT: 13.735 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion:146 Resp: 456338

Ion Ratio Lower Upper

146 100

111 43.5 22.4 67.0

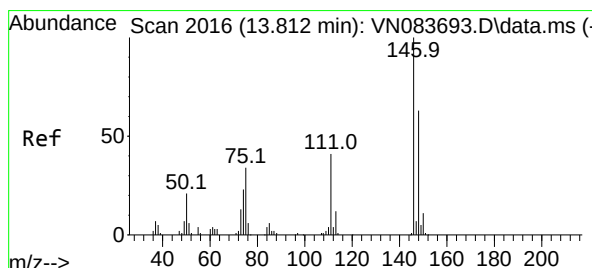
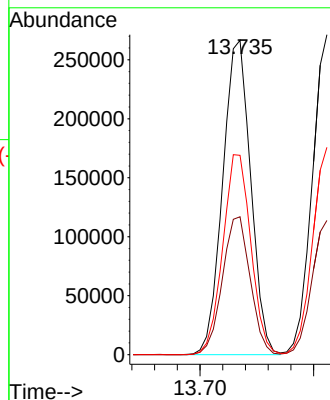
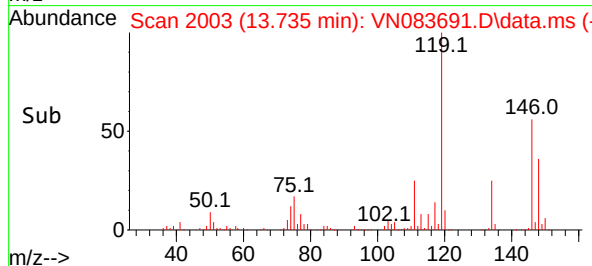
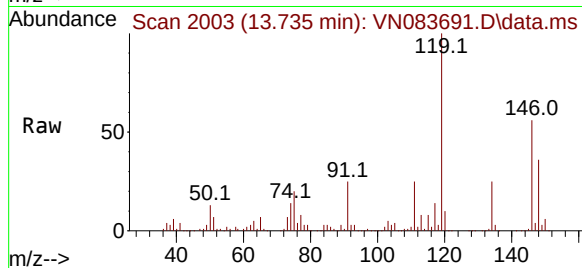
148 63.8 32.1 96.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#84

1,4-Dichlorobenzene

Concen: 103.570 ug/l

RT: 13.812 min Scan# 2016

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

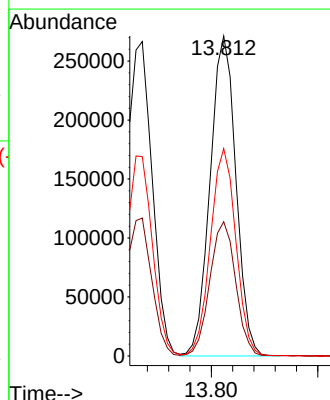
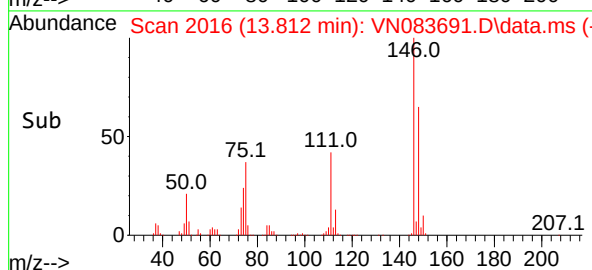
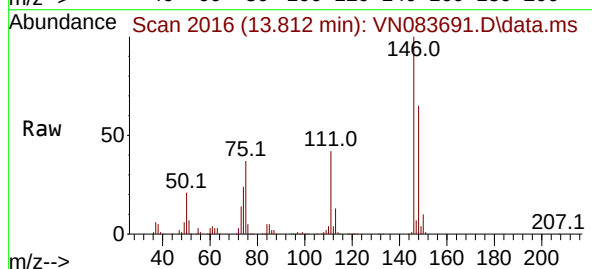
Tgt Ion:146 Resp: 456667

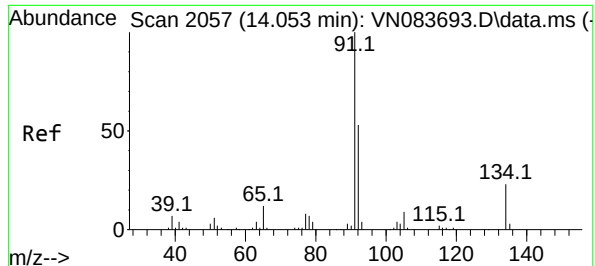
Ion Ratio Lower Upper

146 100

111 42.0 21.3 63.9

148 63.9 31.9 95.5





#85

n-Butylbenzene

Concen: 110.271 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

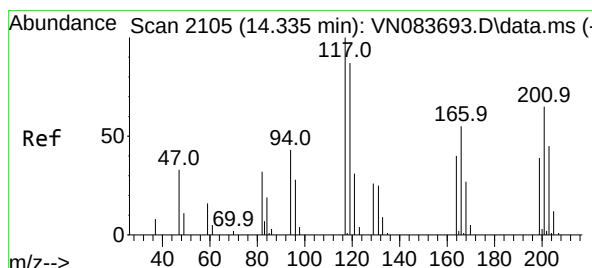
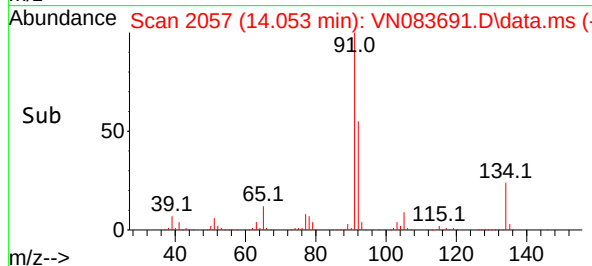
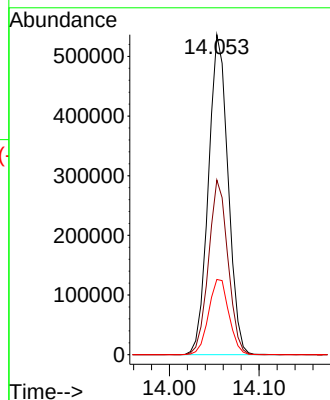
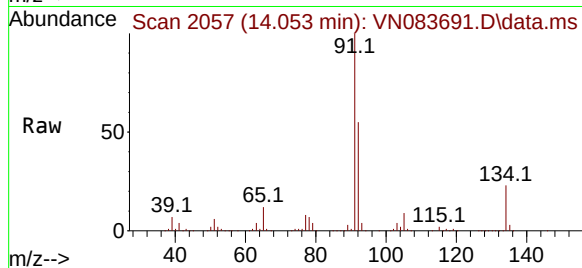
VSTDIC100

Tgt Ion:	91	Resp:	81505
Ion	Ratio	Lower	Upper
91	100		
92	53.9	0.0	105.0
134	24.3	0.0	51.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#86

Hexachloroethane

Concen: 110.673 ug/l

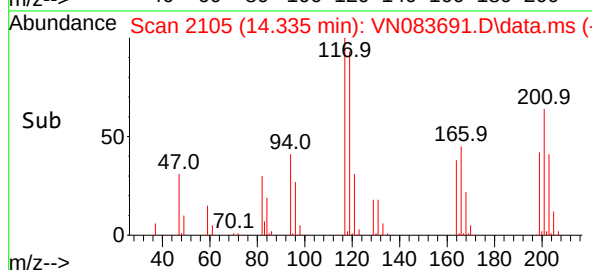
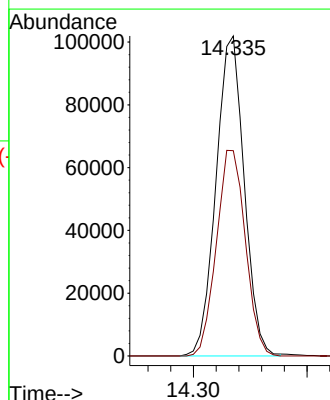
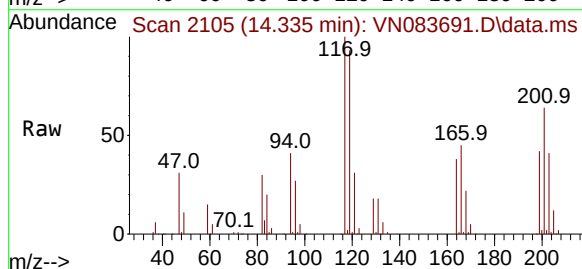
RT: 14.335 min Scan# 2105

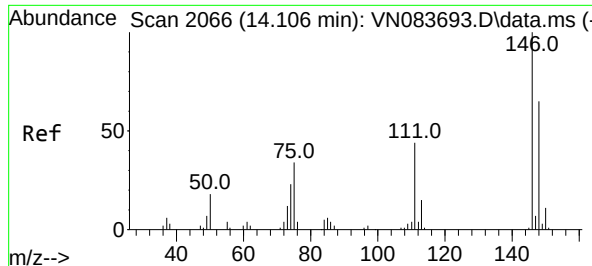
Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Tgt Ion:	117	Resp:	175667
Ion	Ratio	Lower	Upper
117	100		
201	66.0	38.0	114.0





#87

1,2-Dichlorobenzene

Concen: 104.578 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:146 Resp: 447620

Ion Ratio Lower Upper

146 100

111 44.3 22.6 67.8

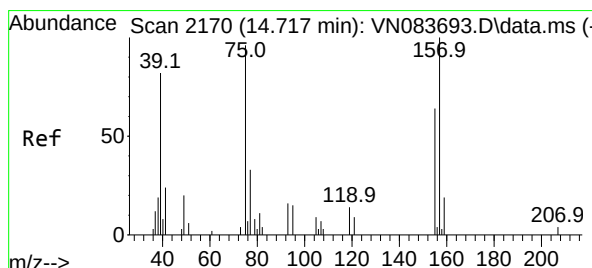
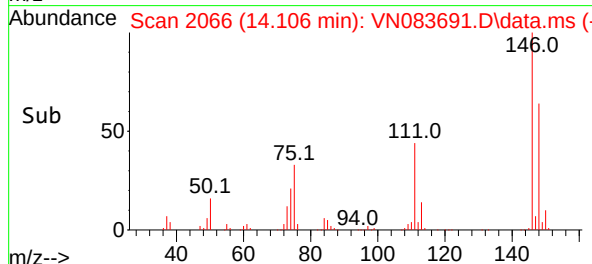
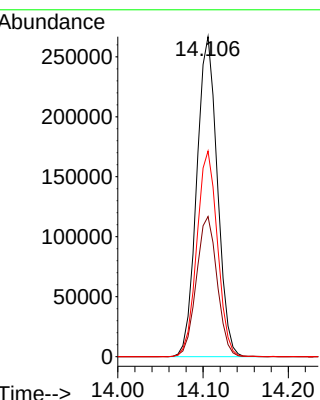
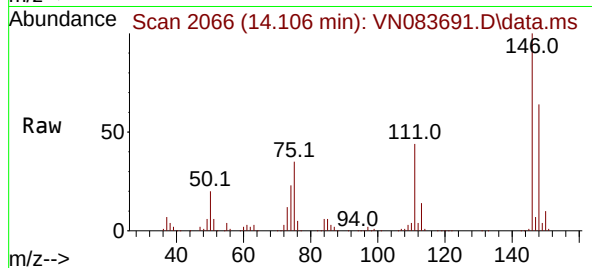
148 64.2 31.3 93.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 103.991 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

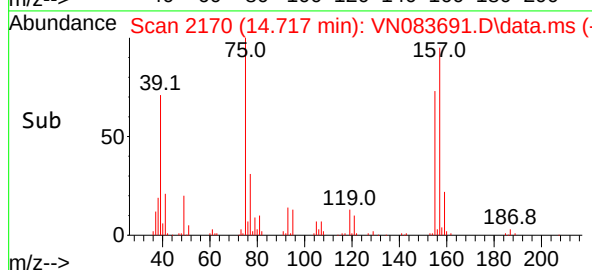
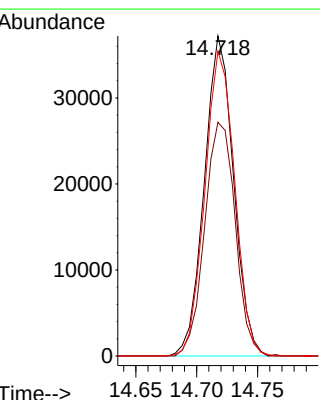
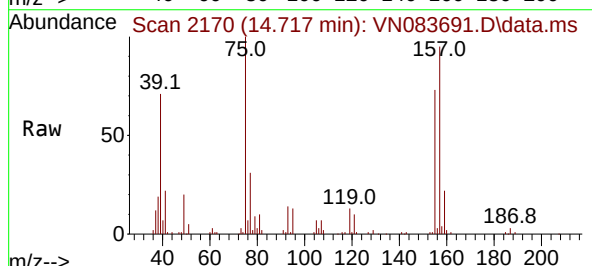
Tgt Ion: 75 Resp: 62273

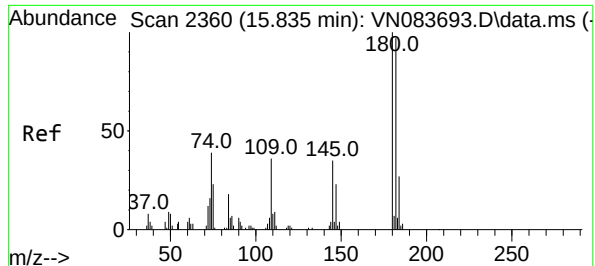
Ion Ratio Lower Upper

75 100

155 76.2 61.7 92.5

157 96.7 83.6 125.4





#89

1,2,4-Trichlorobenzene

Concen: 104.388 ug/l

RT: 15.841 min Scan# 21

Delta R.T. 0.006 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:180 Resp: 24478

Ion Ratio Lower Upper

180 100

182 95.0 76.4 114.6

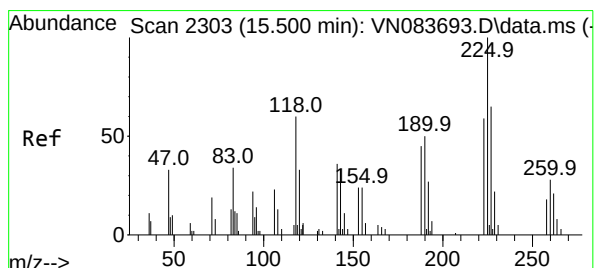
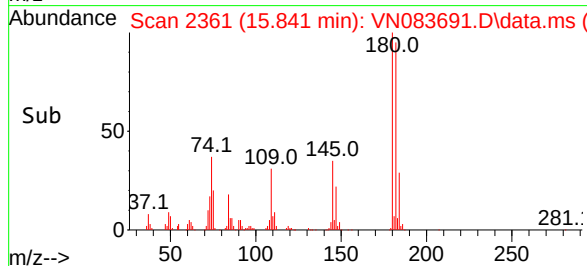
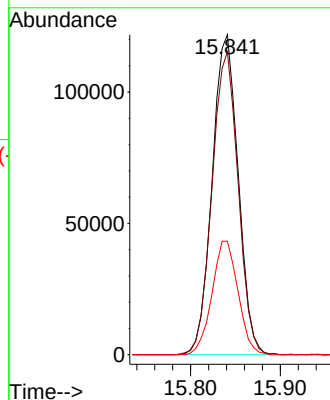
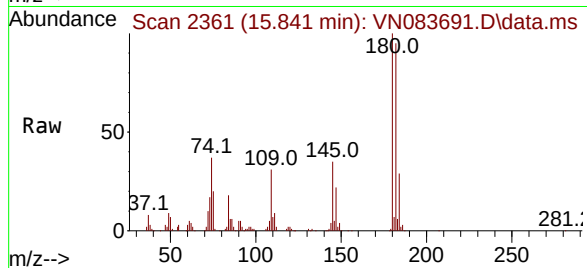
145 35.6 28.4 42.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#90

Hexachlorobutadiene

Concen: 104.537 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN083691.D

Acq: 06 Sep 2024 12:22

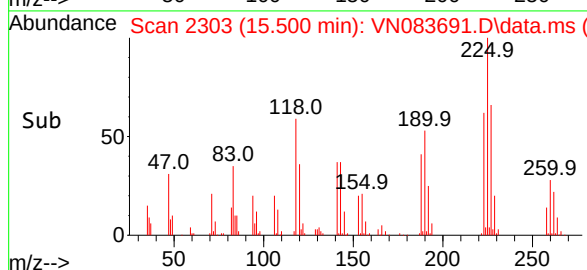
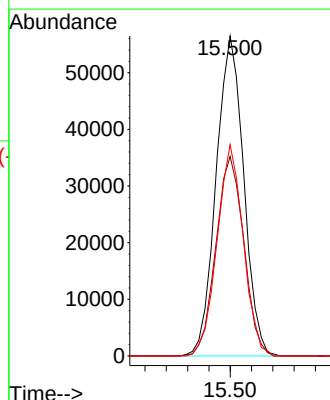
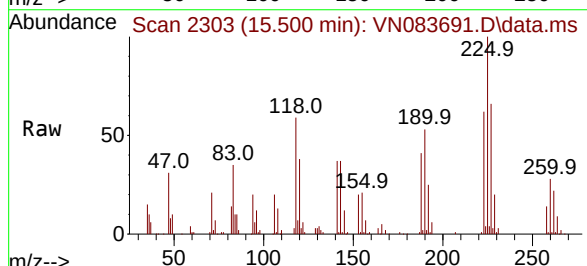
Tgt Ion:225 Resp: 101462

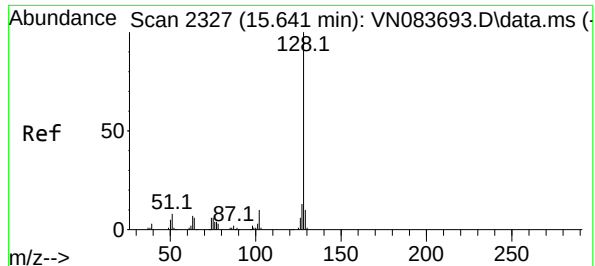
Ion Ratio Lower Upper

225 100

223 63.1 0.0 126.6

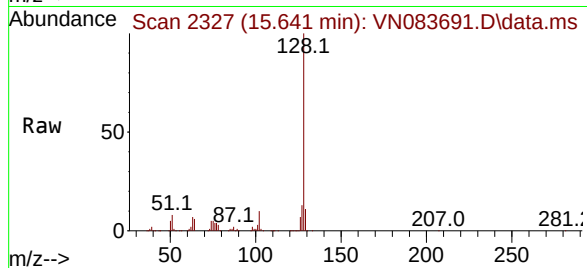
227 62.7 0.0 126.6





#91
Naphthalene
Concen: 107.226 ug/l
RT: 15.641 min Scan# 2327
Delta R.T. 0.000 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22

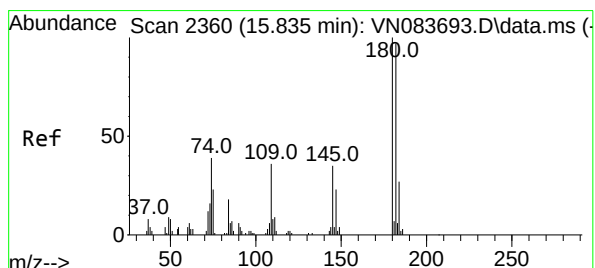
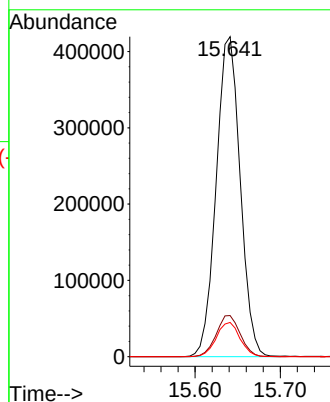
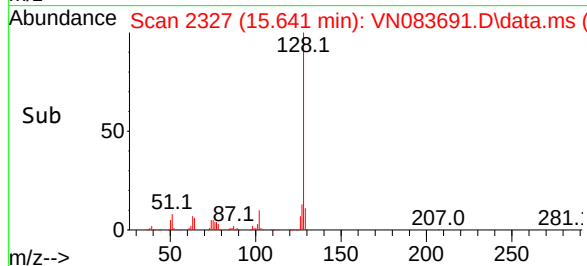
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100



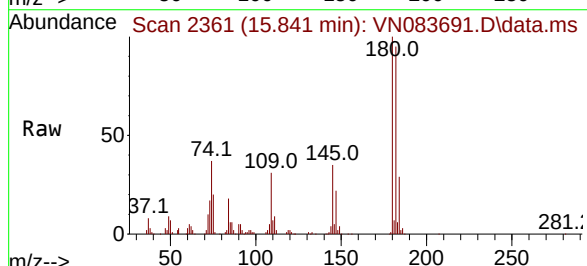
Tgt Ion:128 Resp: 82202
Ion Ratio Lower Upper
128 100
127 12.9 10.6 16.0
129 10.6 8.6 13.0

Manual Integrations
APPROVED

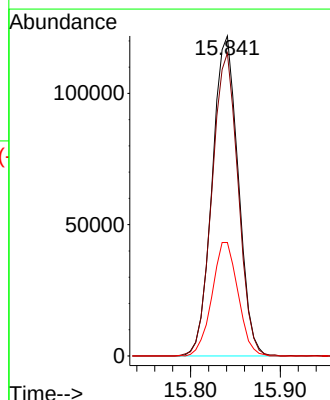
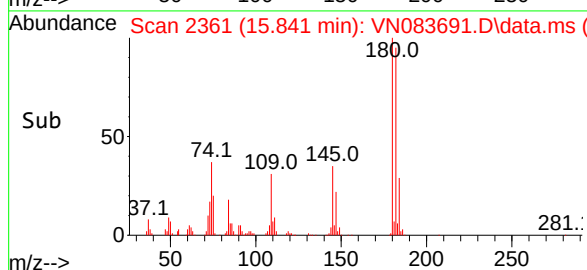
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#92
1,2,3-Trichlorobenzene
Concen: 104.388 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN083691.D
Acq: 06 Sep 2024 12:22



Tgt Ion:180 Resp: 244783
Ion Ratio Lower Upper
180 100
182 95.0 0.0 191.0
145 35.6 0.0 71.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083692.D
 Acq On : 06 Sep 2024 12:46
 Operator : JC\MD
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024

Quant Time: Sep 06 23:32:30 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Sep 06 23:27:49 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.812	128	31184	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	184509	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	165492	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.576	65	85655	30.050	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	= 100.167%	
60) 4-Bromofluorobenzene	12.847	95	85838	30.095	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	= 100.333%	
63) Toluene-d8	10.565	98	228618	29.834	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	= 99.433%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	101651	48.676	ug/l	94
3) Chloromethane	2.359	50	103705	47.795	ug/l	99
4) Vinyl Chloride	2.518	62	107534	48.208	ug/l	97
5) Bromomethane	2.900	94	58251	46.741	ug/l	95
6) Chloroethane	3.077	64	67746	45.354	ug/l	96
7) Trichlorofluoromethane	3.471	101	179139	47.903	ug/l	93
8) Diethyl Ether	3.953	74	60831	47.872	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.359	101	96015	47.798	ug/l	95
10) 1,1-Dichloroethene	4.324	96	92793	47.877	ug/l	89
11) Methyl Iodide	4.577	142	127812	48.550	ug/l	97
12) Methyl Acetate	5.024	43	105723m	45.231	ug/l	
13) Acrolein	4.177	56	86540	253.692	ug/l	95
14) Acrylonitrile	5.718	53	223628	236.416	ug/l	98
15) Acetone	4.430	58	74090	236.122	ug/l	74
16) Carbon Disulfide	4.700	76	262055	47.842	ug/l	99
17) Allyl chloride	5.012	41	164040	48.212	ug/l	86
18) Methylene Chloride	5.271	84	100729	47.504	ug/l	90
19) trans-1,2-Dichloroethene	5.783	96	95911	47.746	ug/l	98
20) Diisopropyl ether	6.671	45	325047	47.356	ug/l	97
21) 1,1-Dichloroethane	6.559	63	185006	47.209	ug/l	96
22) cis-1,2-Dichloroethene	7.482	96	117256	47.960	ug/l	95
23) tert-Butyl Alcohol	5.536	59	82205	236.828	ug/l #	100
24) Methyl tert-Butyl Ether	5.788	73	328857	47.747	ug/l #	87
25) Chloroform	7.965	83	198693	47.843	ug/l	98
26) Cyclohexane	8.253	56	167355	48.487	ug/l #	88
29) 1,1-Dichloropropene	8.365	75	139513	47.671	ug/l	98
30) 2-Butanone	7.482	43	326178	236.438	ug/l	94
31) 2,2-Dichloropropane	7.482	77	178197	47.759	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	187080	47.866	ug/l	98
33) Carbon Tetrachloride	8.359	117	161308	47.659	ug/l	93
34) Benzene	8.600	78	417083	47.498	ug/l	98
35) Methacrylonitrile	7.771	41	72308	46.626	ug/l	93
36) 1,2-Dichloroethane	8.671	62	156520	47.414	ug/l	95
37) Trichloroethene	9.347	130	97099	47.090	ug/l	91
38) Methylcyclohexane	9.600	83	168966	48.224	ug/l	97
39) 1,2-Dichloropropane	9.618	63	100678	47.639	ug/l	96
40) Dibromomethane	9.706	93	73868	47.803	ug/l	93
41) Bromodichloromethane	9.888	83	157563	47.950	ug/l	95
42) Vinyl Acetate	6.600	43	1269865	223.883	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083692.D
 Acq On : 06 Sep 2024 12:46
 Operator : JC\MD
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Manual Integrations

APPROVED

Reviewed By : John Carlone 09/09/2024

Supervised By : Mahesh Dadoda 09/09/2024

Quant Time: Sep 06 23:32:30 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Sep 06 23:27:49 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	130541	47.013	ug/l	97
44) Isopropyl Acetate	8.688	43	229379	47.761	ug/l	91
45) 1,4-Dioxane	9.694	88	35832	956.571	ug/l #	93
46) Methyl methacrylate	9.676	41	111533	47.980	ug/l	82
47) n-amyl Acetate	12.494	43	209735	49.301	ug/l	89
48) t-1,3-Dichloropropene	10.835	75	164230	47.515	ug/l	94
49) cis-1,3-Dichloropropene	10.312	75	171193	47.625	ug/l #	84
50) 1,1,2-Trichloroethane	11.018	97	94024	47.818	ug/l	98
51) Ethyl methacrylate	10.876	69	161552	48.091	ug/l	81
52) 1,3-Dichloropropane	11.165	76	168067	47.331	ug/l	99
53) Dibromochloromethane	11.359	129	114327	48.475	ug/l	99
54) 1,2-Dibromoethane	11.470	107	96308	47.345	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	303185	226.464	ug/l	99
56) Bromoform	12.576	173	72832	48.608	ug/l #	96
58) 4-Methyl-2-Pentanone	10.441	43	628368	239.462	ug/l #	90
59) 2-Hexanone	11.194	43	472821	238.463	ug/l	89
61) Tetrachloroethene	11.100	164	81597	46.589	ug/l	98
62) Toluene	10.629	91	458137	48.163	ug/l	100
64) Chlorobenzene	11.888	112	277997	47.203	ug/l	97
65) 1,1,1,2-Tetrachloroethane	11.959	131	99347	48.424	ug/l	99
66) Ethyl Benzene	11.965	91	518395	47.923	ug/l	100
67) m/p-Xylenes	12.070	106	384641	96.649	ug/l	97
68) o-Xylene	12.394	106	188367	48.905	ug/l	98
69) Styrene	12.412	104	316348	48.608	ug/l	98
70) Isopropylbenzene	12.694	105	498890	49.081	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	132828	47.845	ug/l	99
72) 1,2,3-Trichloropropane	12.988	75	115119m	47.387	ug/l	
73) Bromobenzene	12.982	156	112553	48.209	ug/l	95
74) n-propylbenzene	13.035	91	580804	48.812	ug/l	99
75) 2-Chlorotoluene	13.123	91	357678	48.163	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	419662	49.426	ug/l	97
77) t-1,4-Dichloro-2-butene	12.735	75	49615	48.224	ug/l	90
78) 4-Chlorotoluene	13.217	91	358117	47.550	ug/l	99
79) tert-butylbenzene	13.435	119	353609	47.626	ug/l	97
80) 1,2,4-Trimethylbenzene	13.482	105	423342	49.339	ug/l	99
81) sec-Butylbenzene	13.617	105	495951	48.897	ug/l	100
82) p-Isopropyltoluene	13.729	119	420388	49.262	ug/l	98
83) 1,3-Dichlorobenzene	13.729	146	213041	47.411	ug/l	99
84) 1,4-Dichlorobenzene	13.811	146	212746	47.357	ug/l	99
85) n-Butylbenzene	14.053	91	360329	47.848	ug/l	99
86) Hexachloroethane	14.329	117	80541	49.803	ug/l	87
87) 1,2-Dichlorobenzene	14.106	146	210695	48.315	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	30132	49.388	ug/l	90
89) 1,2,4-Trichlorobenzene	15.841	180	113238	47.397	ug/l	100
90) Hexachlorobutadiene	15.500	225	47864	48.403	ug/l	99
91) Naphthalene	15.635	128	376599	48.216	ug/l	99
92) 1,2,3-Trichlorobenzene	15.841	180	113238	47.397	ug/l	100

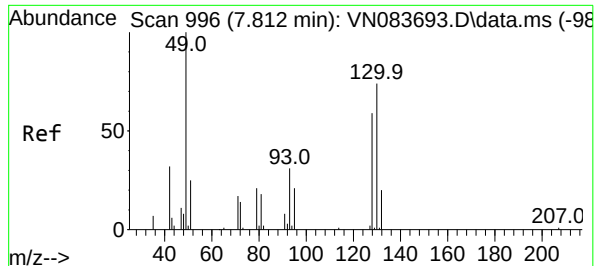
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations

Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024





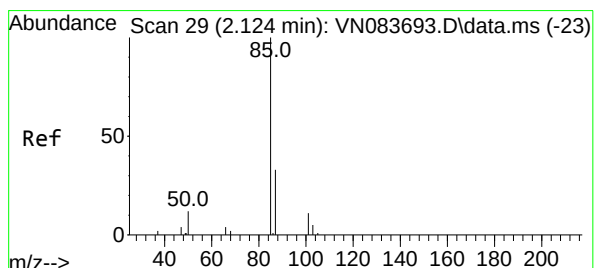
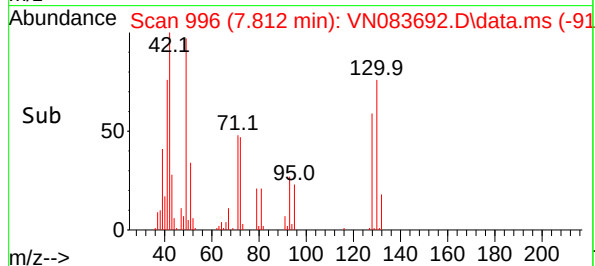
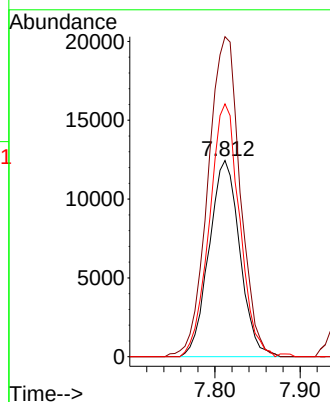
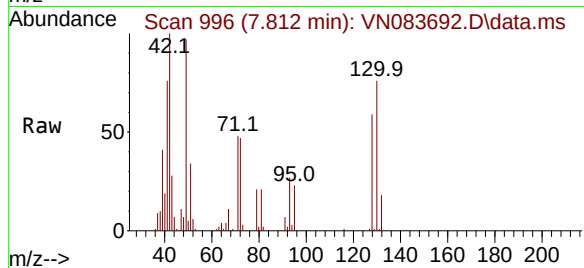
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion	Ratio	Lower	Upper
128	100		
49	171.1	0.0	403.7
130	126.9	0.0	323.3

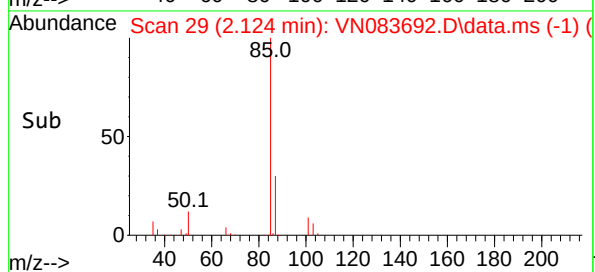
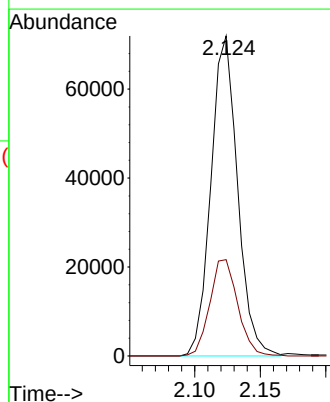
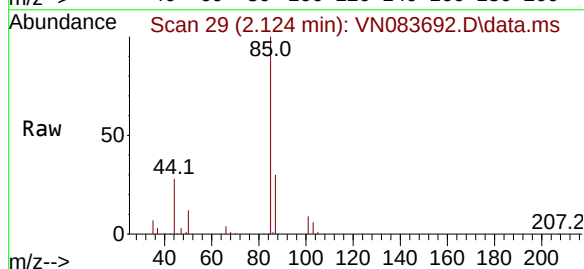
Manual Integrations
APPROVED

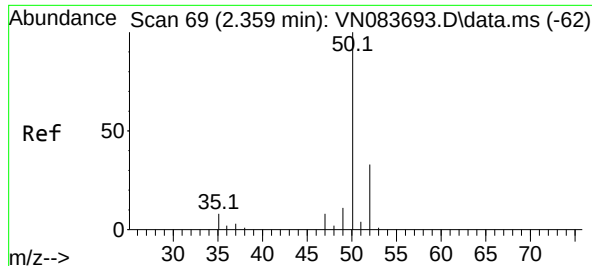
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#2
Dichlorodifluoromethane
Concen: 48.676 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion	Ratio	Lower	Upper
85	100		
87	30.1	16.8	50.3





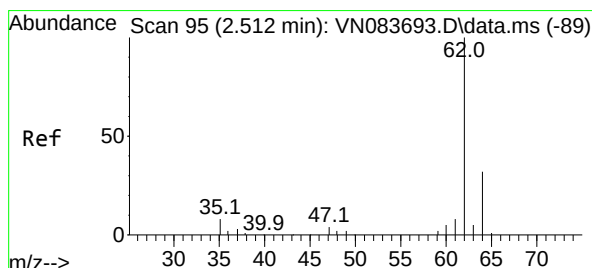
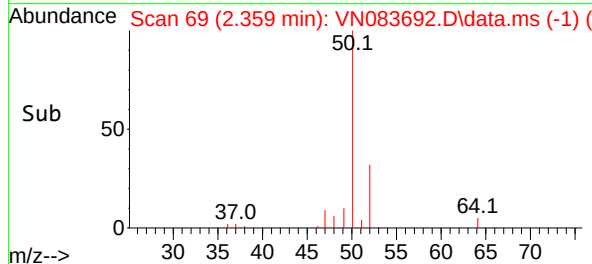
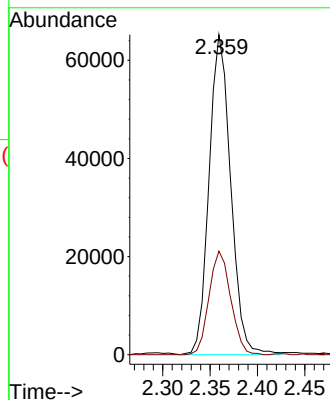
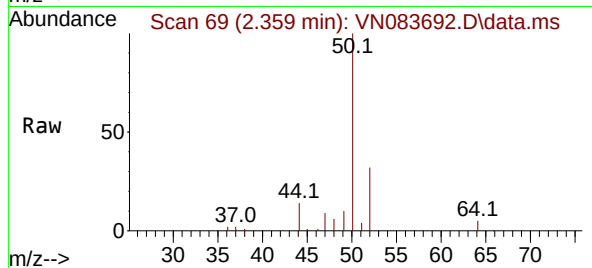
#3
Chloromethane
Concen: 47.795 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 50 Resp: 103709
Ion Ratio Lower Upper
50 100
52 32.3 25.4 38.0

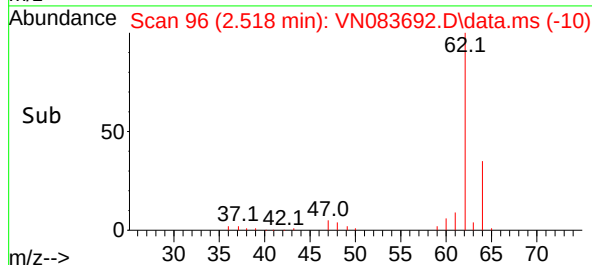
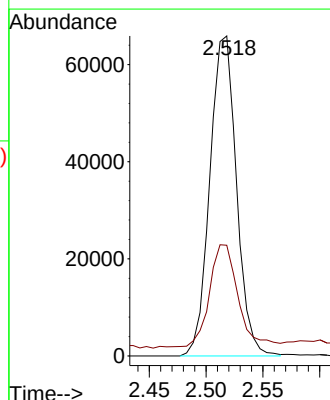
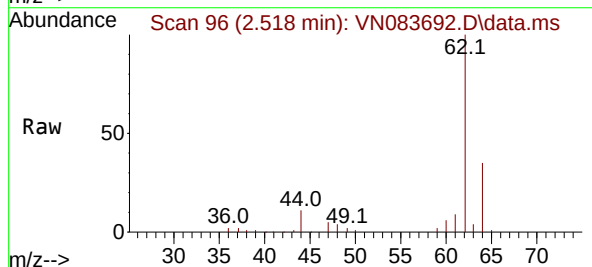
Manual Integrations
APPROVED

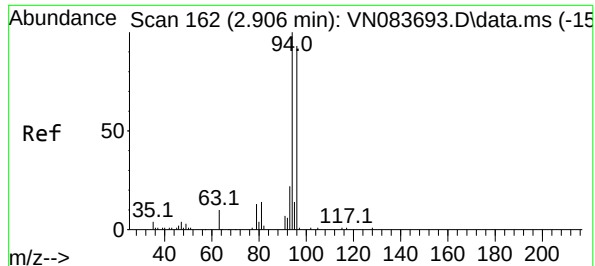
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#4
Vinyl Chloride
Concen: 48.208 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 62 Resp: 107534
Ion Ratio Lower Upper
62 100
64 31.6 24.1 36.1





#5

Bromomethane

Concen: 46.741 ug/l

RT: 2.900 min Scan# 110

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion: 94 Resp: 5825

Ion Ratio Lower Upper

94 100

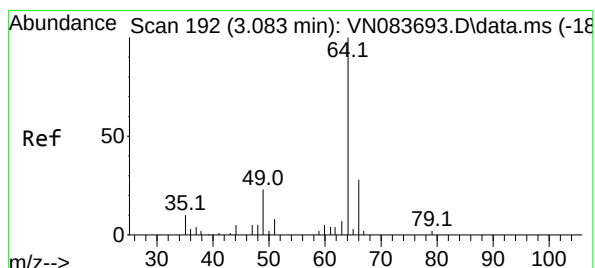
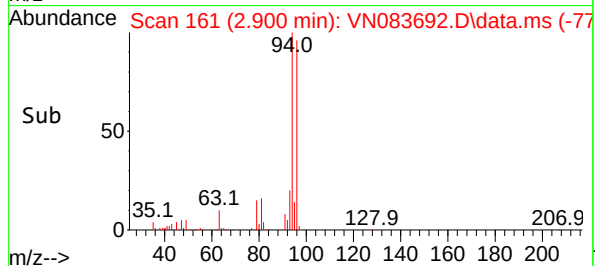
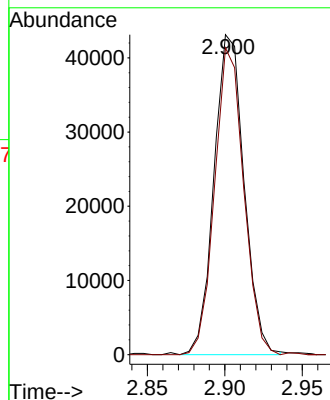
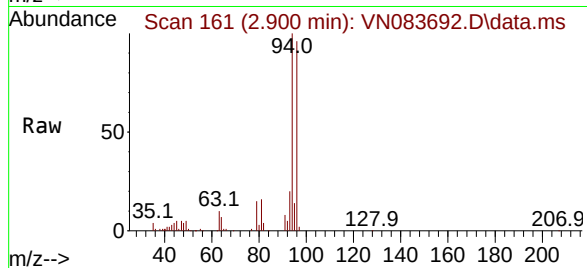
96 95.9 72.8 109.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#6

Chloroethane

Concen: 45.354 ug/l

RT: 3.077 min Scan# 191

Delta R.T. -0.006 min

Lab File: VN083692.D

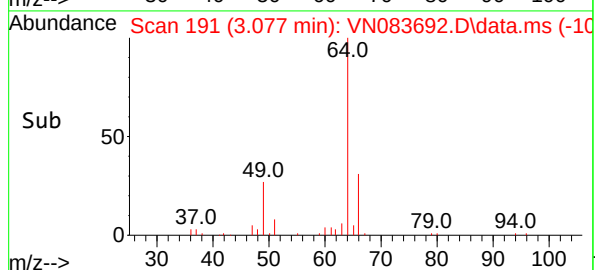
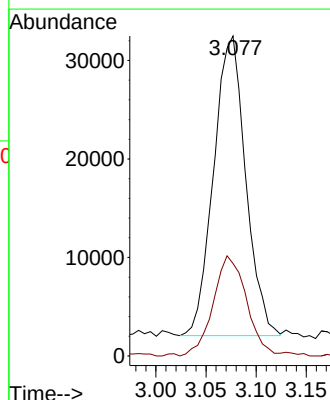
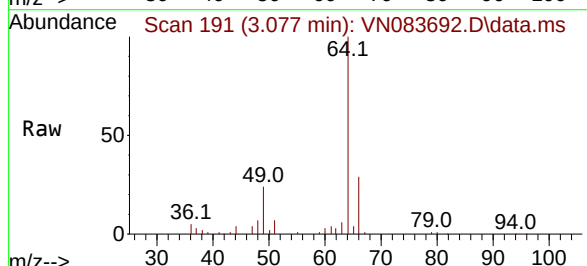
Acq: 06 Sep 2024 12:46

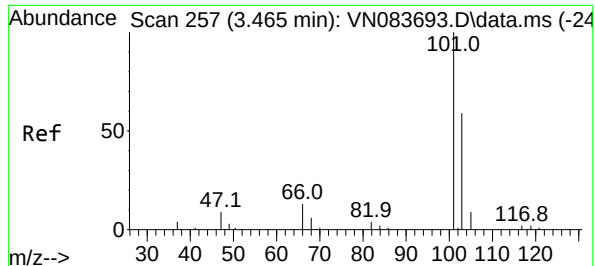
Tgt Ion: 64 Resp: 67746

Ion Ratio Lower Upper

64 100

66 30.9 26.7 40.1





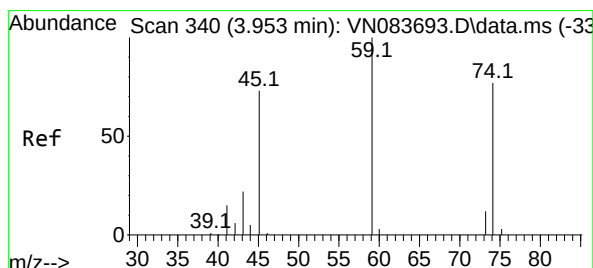
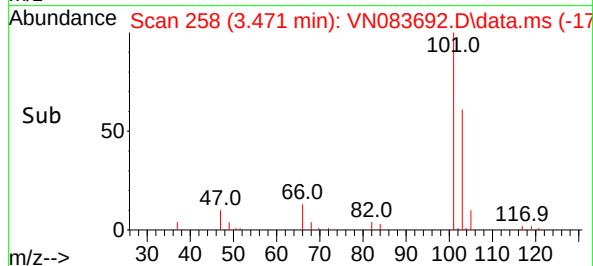
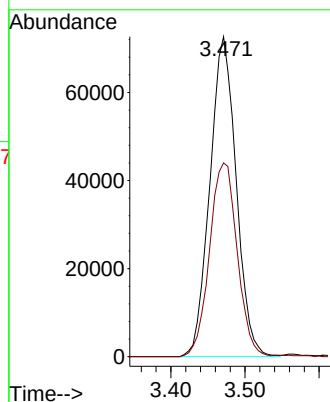
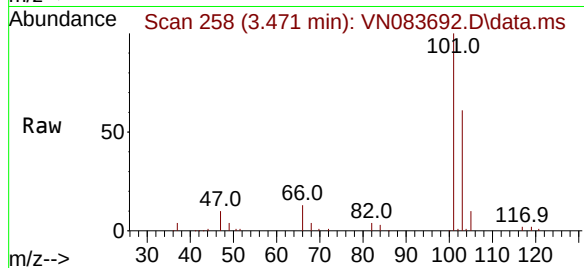
#7
Trichlorofluoromethane
Concen: 47.903 ug/l
RT: 3.471 min Scan# 257
Delta R.T. 0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion:101 Resp: 179139
Ion Ratio Lower Upper
101 100
103 60.5 53.0 79.4

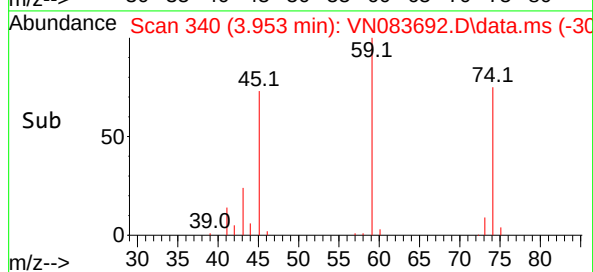
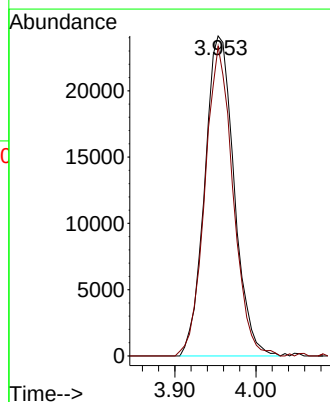
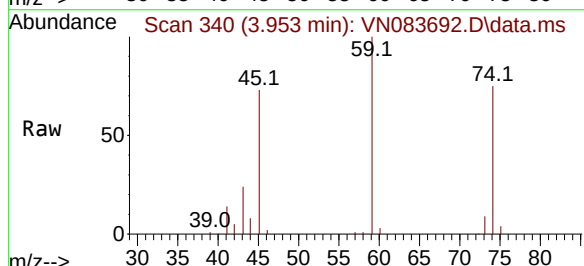
Manual Integrations
APPROVED

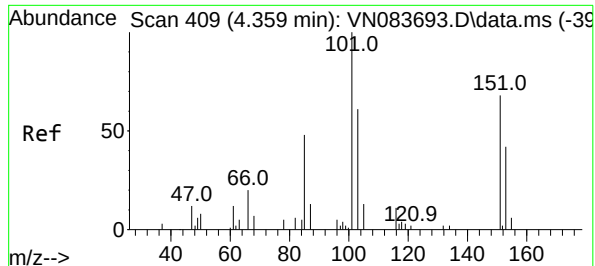
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#8
Diethyl Ether
Concen: 47.872 ug/l
RT: 3.953 min Scan# 340
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 74 Resp: 60831
Ion Ratio Lower Upper
74 100
45 91.8 16.4 147.4





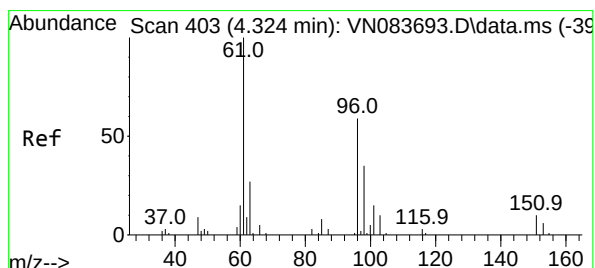
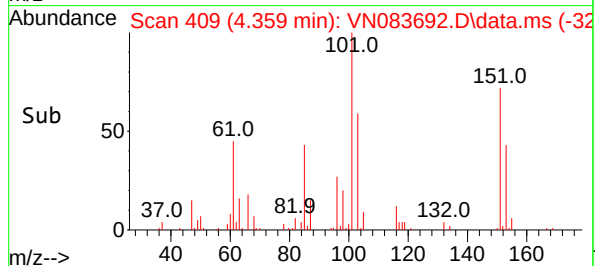
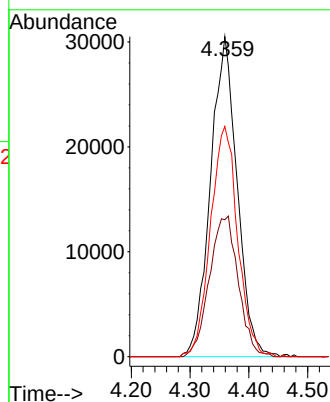
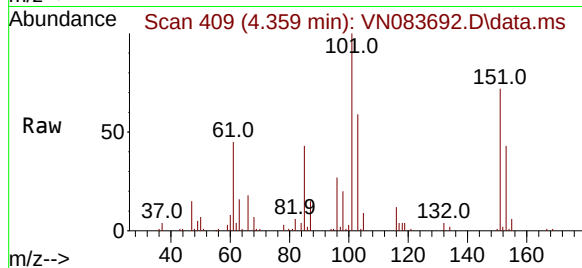
#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.798 ug/l
RT: 4.359 min Scan# 409
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion:101 Resp: 9601
Ion Ratio Lower Upper
101 100
85 47.6 0.0 90.6
151 73.3 0.0 157.6

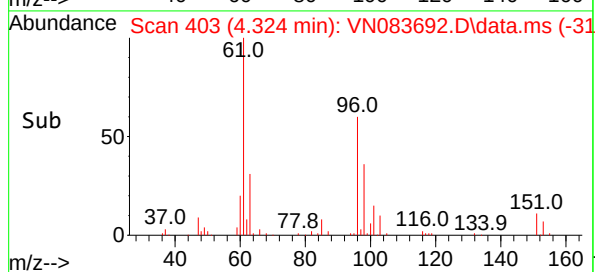
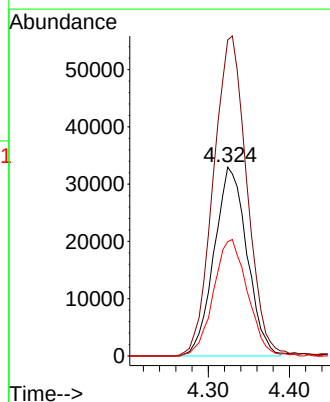
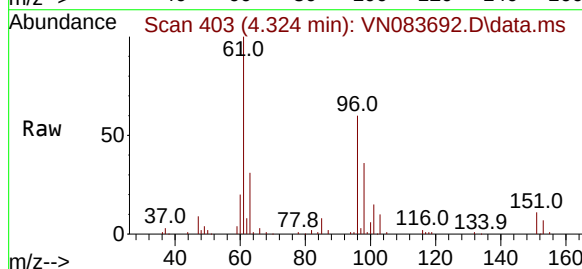
Manual Integrations
APPROVED

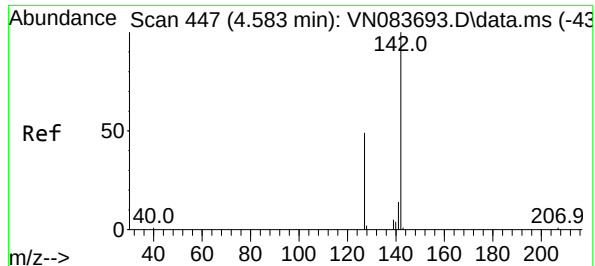
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#10
1,1-Dichloroethene
Concen: 47.877 ug/l
RT: 4.324 min Scan# 403
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 96 Resp: 92793
Ion Ratio Lower Upper
96 100
61 166.8 117.6 176.4
98 60.5 48.4 72.6





#11

Methyl Iodide

Concen: 48.550 ug/l

RT: 4.577 min Scan# 447

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion:142 Resp: 12781

Ion Ratio Lower Upper

142 100

127 51.2 26.3 78.9

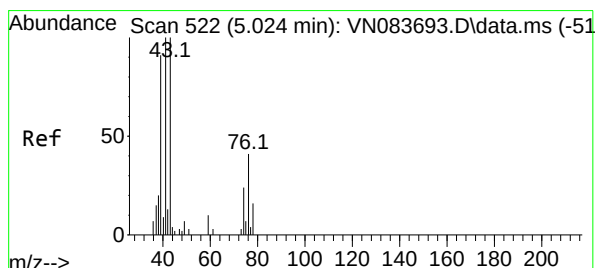
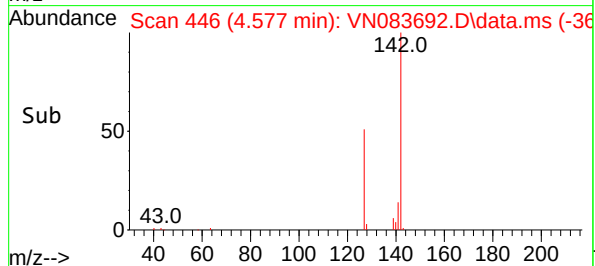
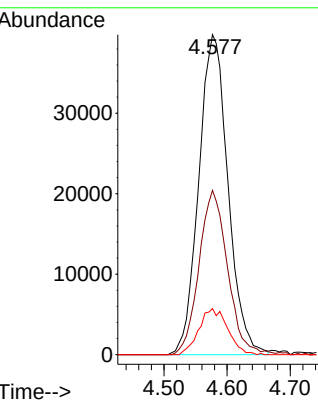
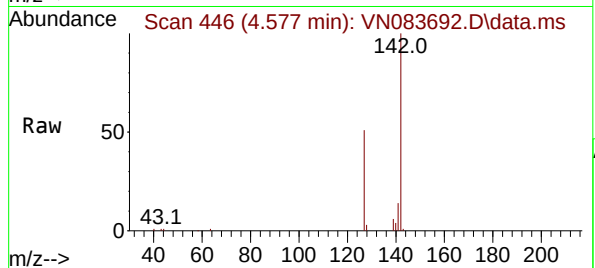
141 14.5 8.3 24.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#12

Methyl Acetate

Concen: 45.231 ug/l m

RT: 5.024 min Scan# 522

Delta R.T. -0.000 min

Lab File: VN083692.D

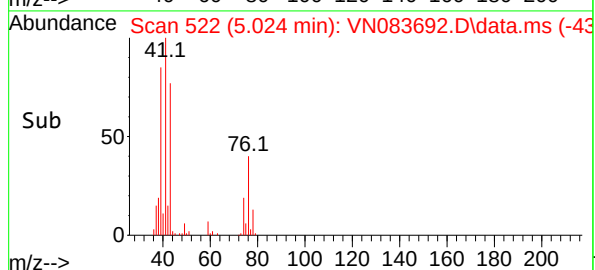
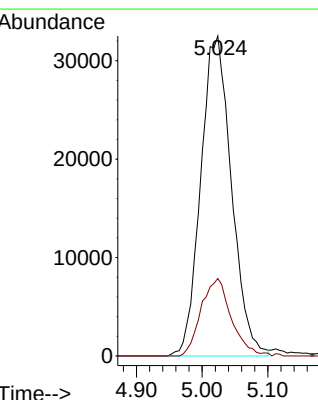
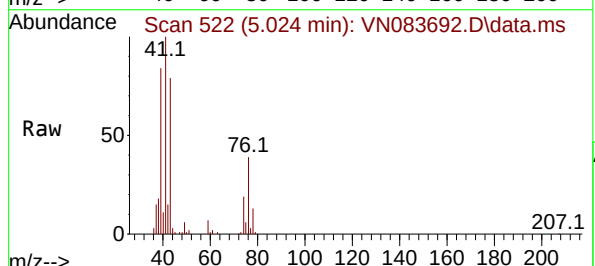
Acq: 06 Sep 2024 12:46

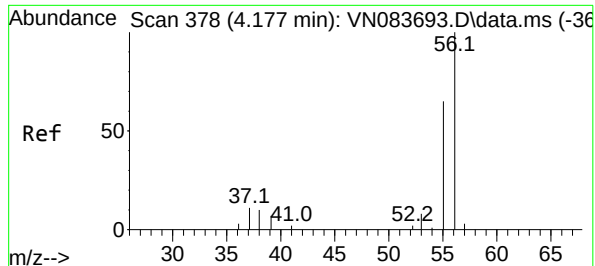
Tgt Ion: 43 Resp: 105723

Ion Ratio Lower Upper

43 100

74 24.2 27.7 41.5#





#13

Acrolein

Concen: 253.692 ug/l

RT: 4.177 min Scan# 31

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 56 Resp: 86540

Ion Ratio Lower Upper

56 100

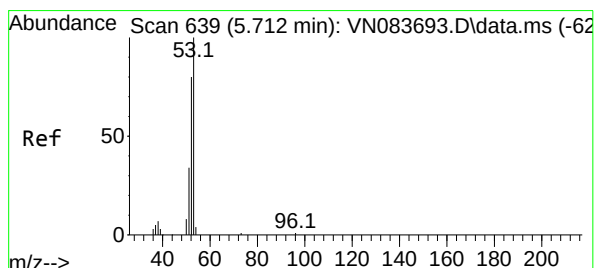
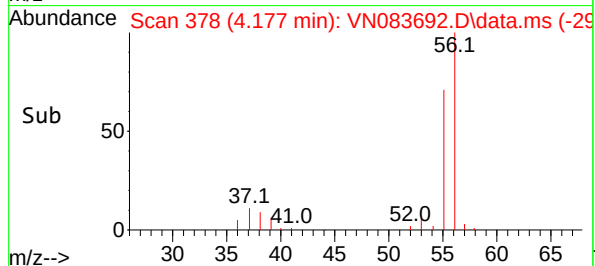
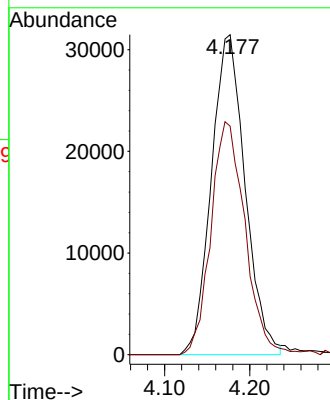
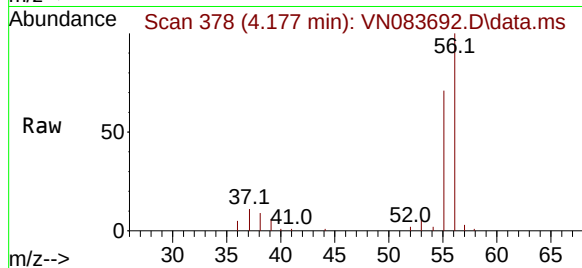
55 73.4 55.5 83.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#14

Acrylonitrile

Concen: 236.416 ug/l

RT: 5.718 min Scan# 640

Delta R.T. 0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

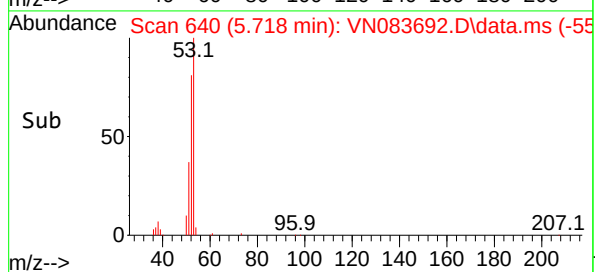
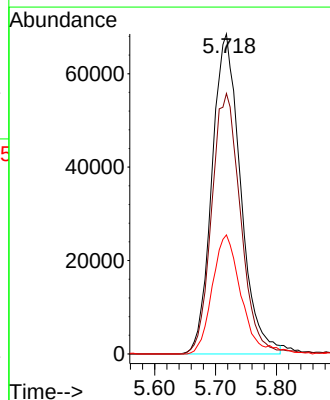
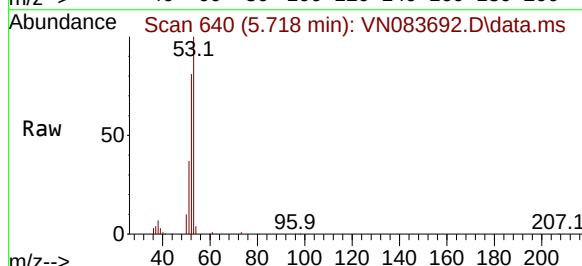
Tgt Ion: 53 Resp: 223628

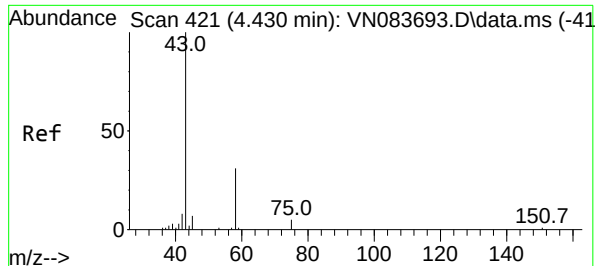
Ion Ratio Lower Upper

53 100

52 81.5 41.3 123.9

51 36.3 16.8 50.3





#15

Acetone

Concen: 236.122 ug/l

RT: 4.430 min Scan# 41

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 58 Resp: 74090

Ion Ratio Lower Upper

58 100

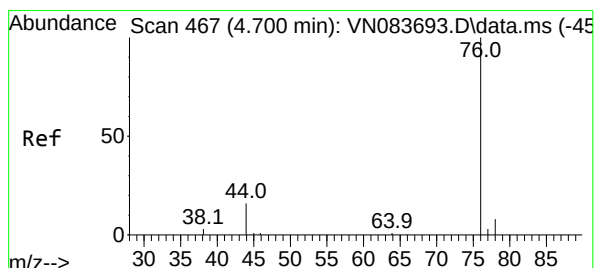
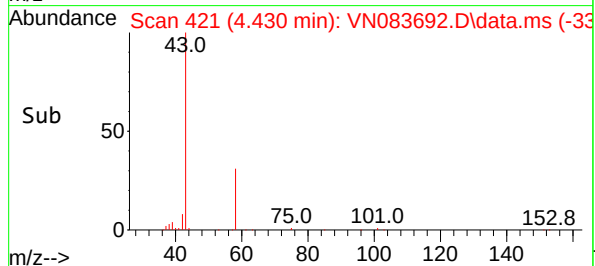
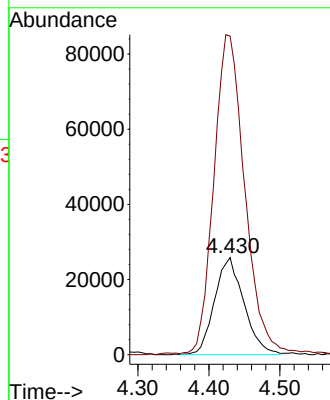
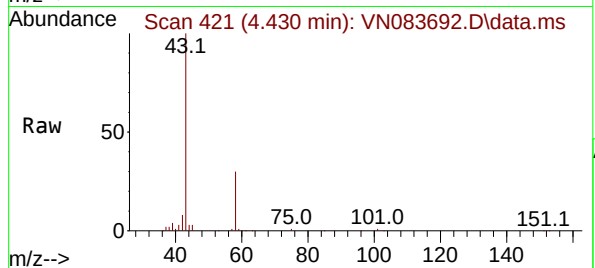
43 326.8 223.1 334.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#16

Carbon Disulfide

Concen: 47.842 ug/l

RT: 4.700 min Scan# 467

Delta R.T. -0.000 min

Lab File: VN083692.D

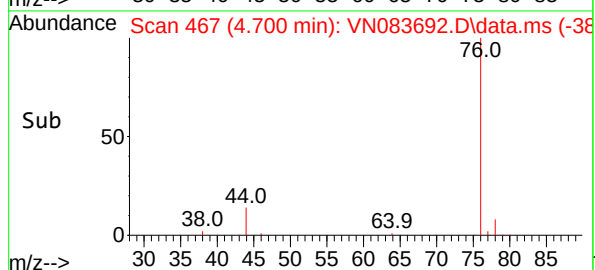
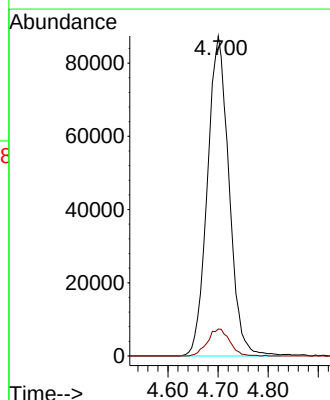
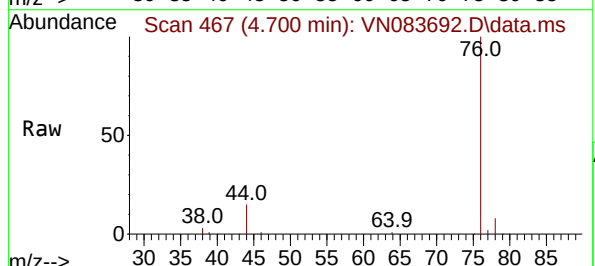
Acq: 06 Sep 2024 12:46

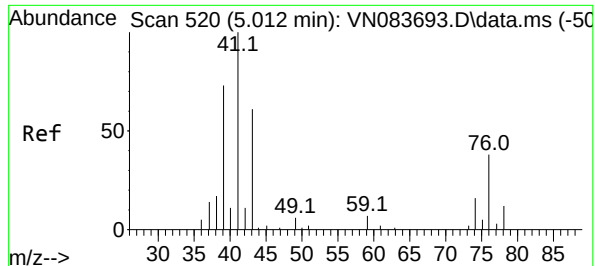
Tgt Ion: 76 Resp: 262055

Ion Ratio Lower Upper

76 100

78 8.4 6.3 9.5





#17

Allyl chloride

Concen: 48.212 ug/l

RT: 5.012 min Scan# 51

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

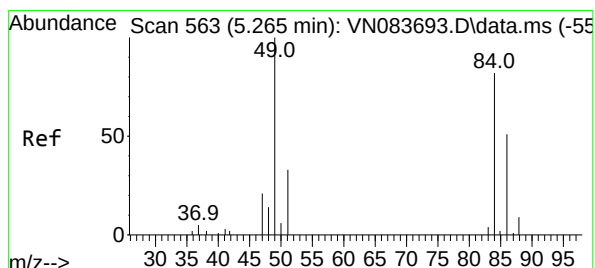
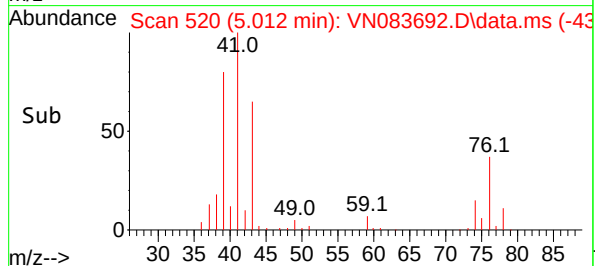
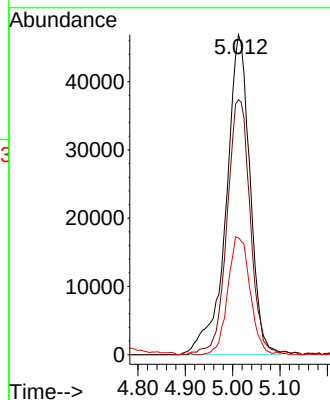
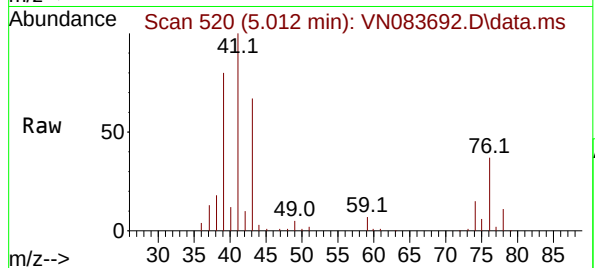
VSTDICC050

Tgt Ion:	41	Resp:	164040
Ion	Ratio	Lower	Upper
41	100		
39	79.7	37.6	112.9
76	36.6	27.8	83.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#18

Methylene Chloride

Concen: 47.504 ug/l

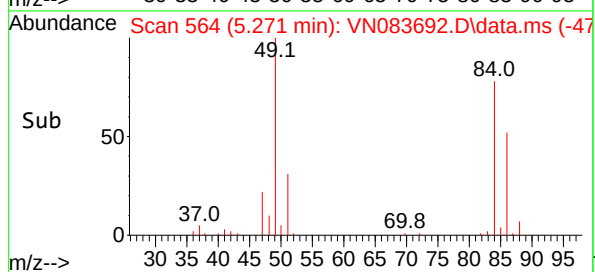
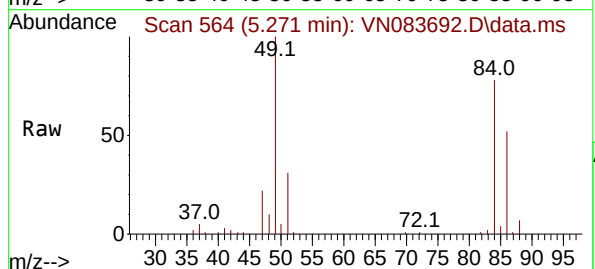
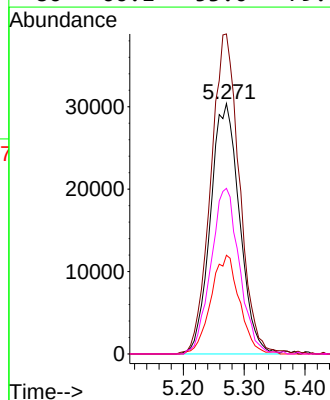
RT: 5.271 min Scan# 564

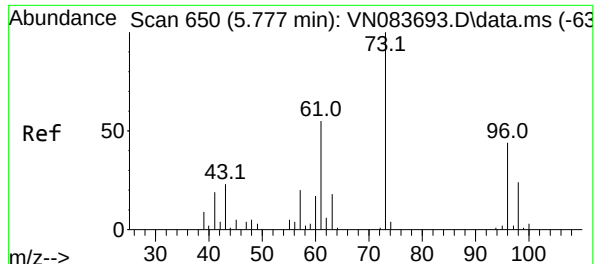
Delta R.T. 0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Tgt Ion:	84	Resp:	100729
Ion	Ratio	Lower	Upper
84	100		
49	127.2	86.0	129.0
51	39.4	30.0	45.0
86	66.1	53.0	79.4





#19

trans-1,2-Dichloroethene

Concen: 47.746 ug/l

RT: 5.783 min Scan# 61

Delta R.T. 0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion: 96 Resp: 9591

Ion Ratio Lower Upper

96 100

61 143.5 111.8 167.6

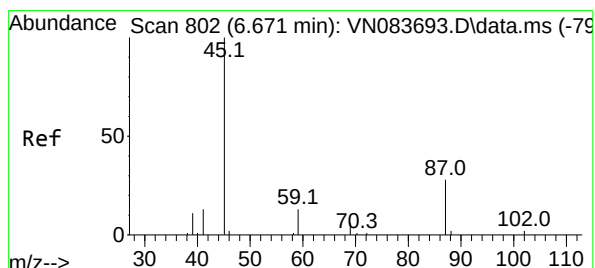
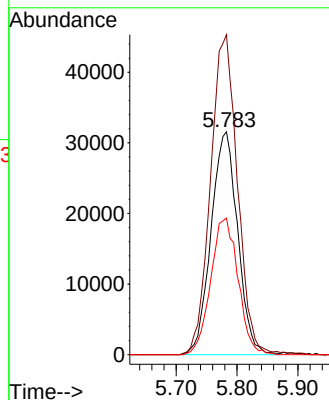
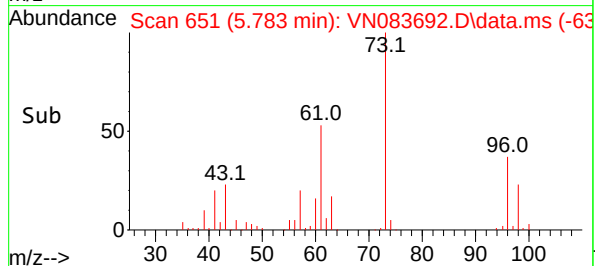
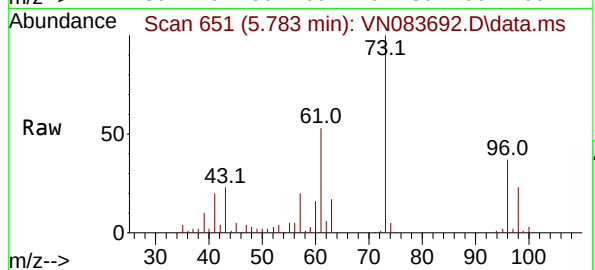
98 61.3 49.2 73.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#20

Diisopropyl ether

Concen: 47.356 ug/l

RT: 6.671 min Scan# 802

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Tgt Ion: 45 Resp: 325047

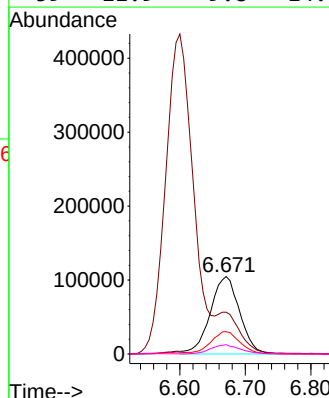
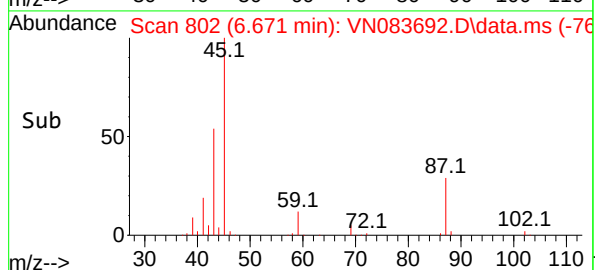
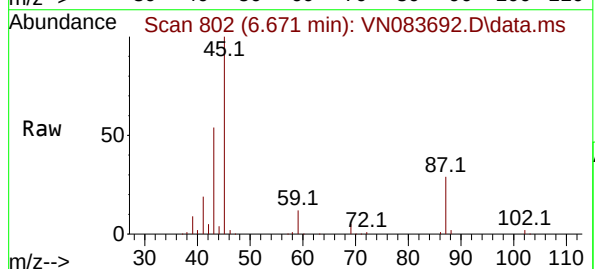
Ion Ratio Lower Upper

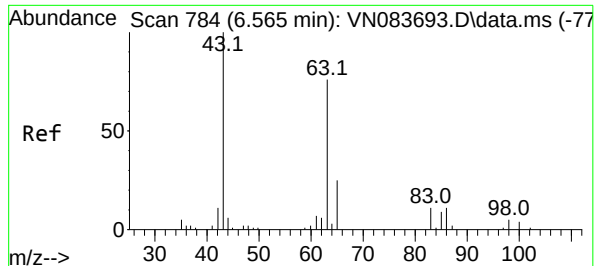
45 100

43 52.9 40.4 60.6

87 28.8 23.8 35.8

59 11.9 9.8 14.6





#21

1,1-Dichloroethane

Concen: 47.209 ug/l

RT: 6.559 min Scan# 71

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 63 Resp: 185000

Ion Ratio Lower Upper

63 100

98 6.8 4.1 12.3

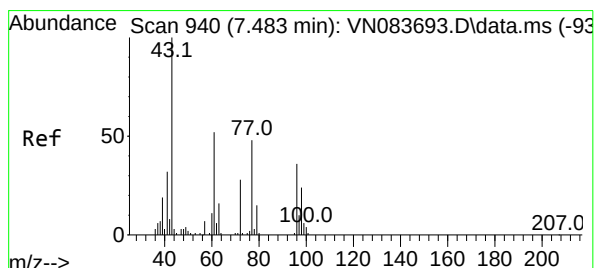
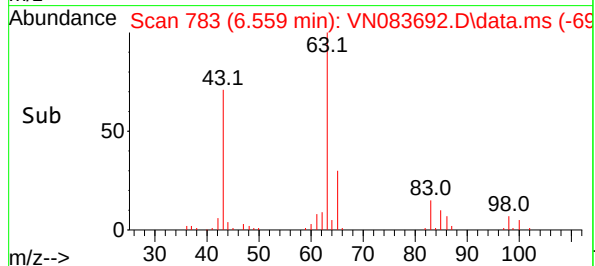
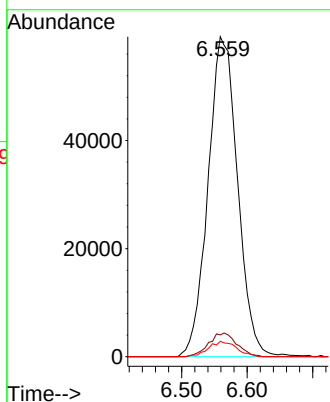
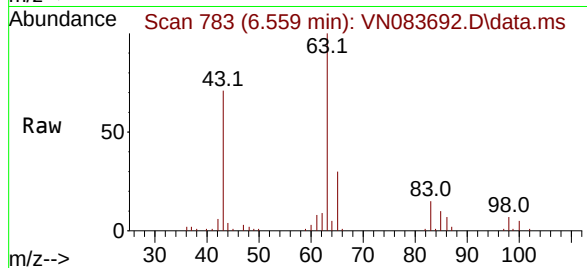
100 4.8 3.0 9.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#22

cis-1,2-Dichloroethene

Concen: 47.960 ug/l

RT: 7.482 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

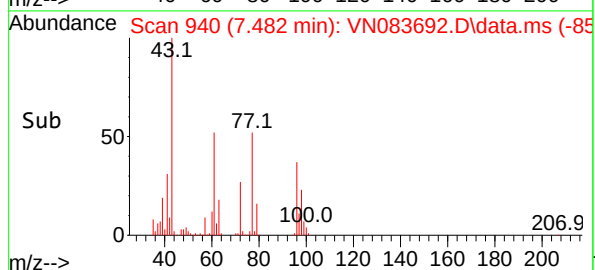
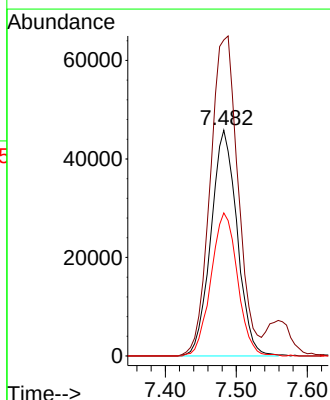
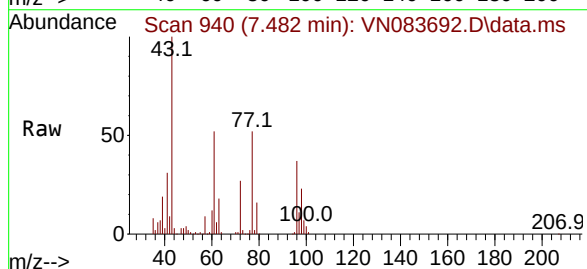
Tgt Ion: 96 Resp: 117256

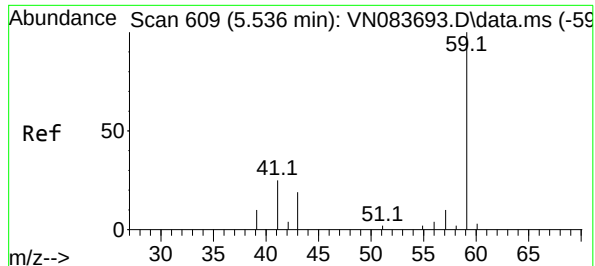
Ion Ratio Lower Upper

96 100

61 151.0 113.5 170.3

98 64.0 52.0 78.0





#23

tert-Butyl Alcohol

Concen: 236.828 ug/l

RT: 5.536 min Scan# 609

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 59 Resp: 8220

Ion Ratio Lower Upper

59 100

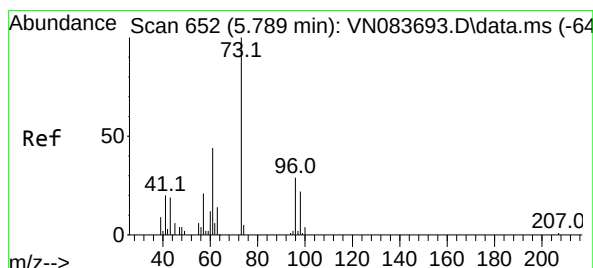
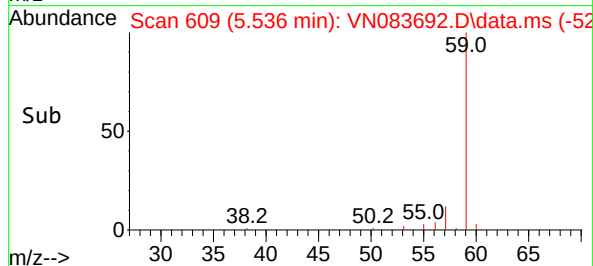
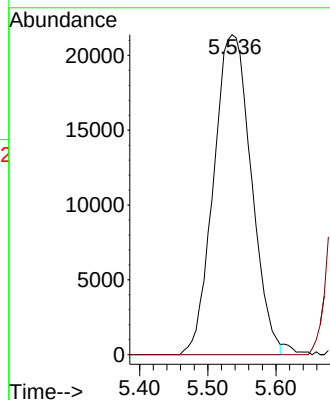
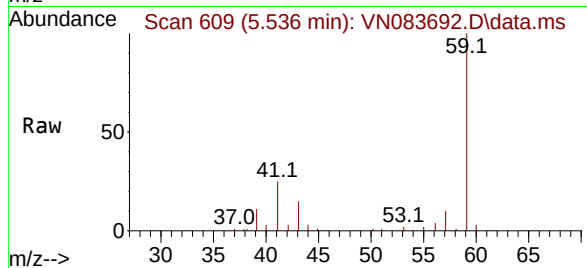
52 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#24

Methyl tert-Butyl Ether

Concen: 47.747 ug/l

RT: 5.788 min Scan# 652

Delta R.T. -0.000 min

Lab File: VN083692.D

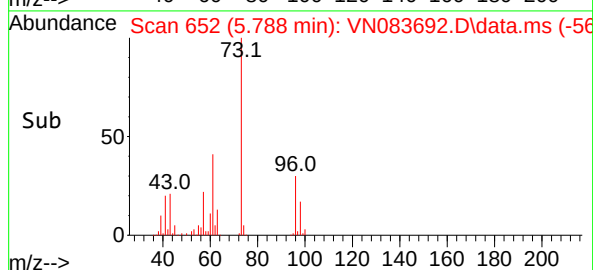
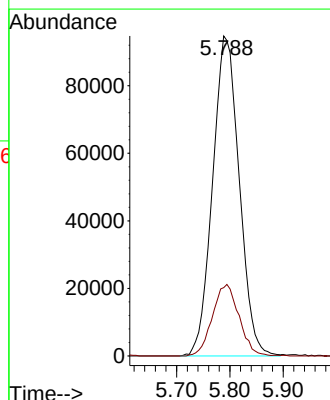
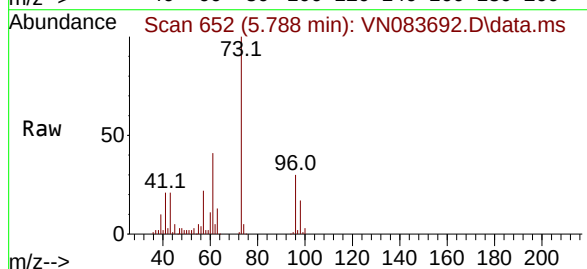
Acq: 06 Sep 2024 12:46

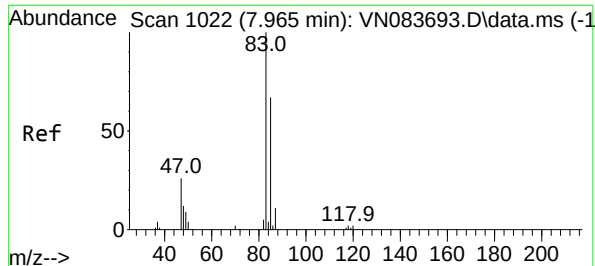
Tgt Ion: 73 Resp: 328857

Ion Ratio Lower Upper

73 100

43 22.3 13.4 20.2#





#25

Chloroform

Concen: 47.843 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion: 83 Resp: 19869

Ion Ratio Lower Upper

83 100

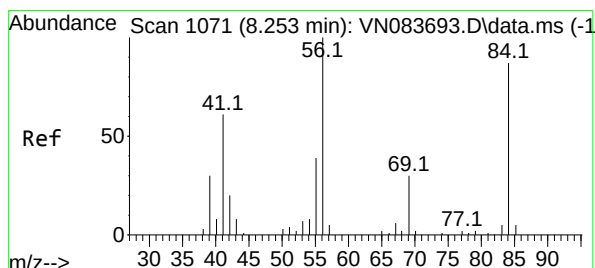
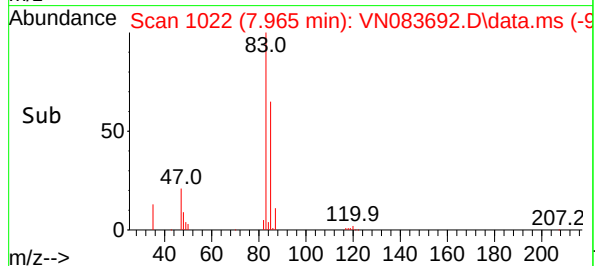
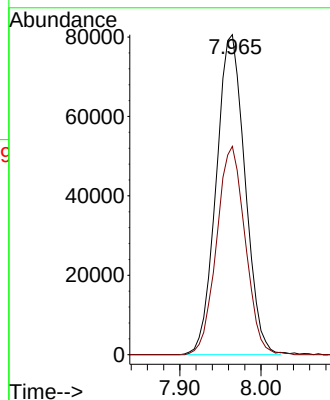
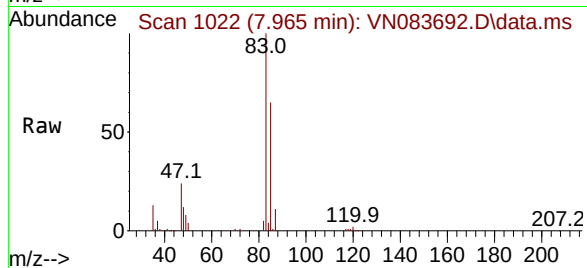
85 65.1 50.9 76.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#26

Cyclohexane

Concen: 48.487 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

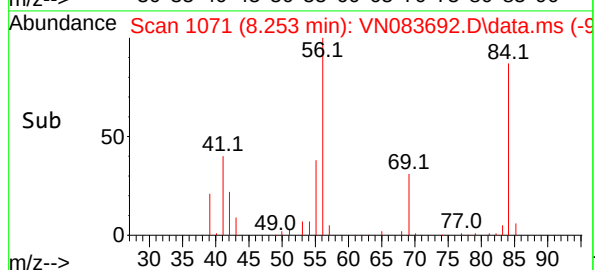
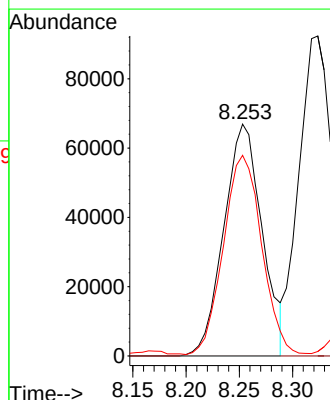
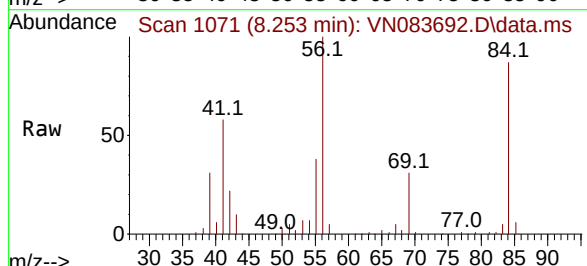
Tgt Ion: 56 Resp: 167355

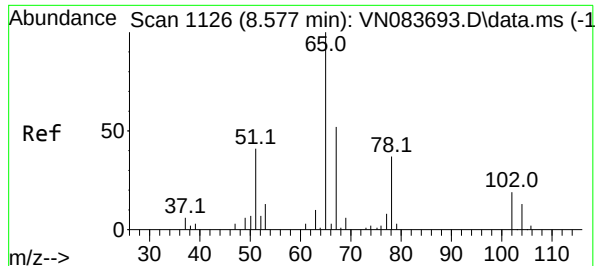
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9

84 87.6 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 30.050 ug/l

RT: 8.576 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion: 65 Resp: 8565

Ion Ratio Lower Upper

65 100

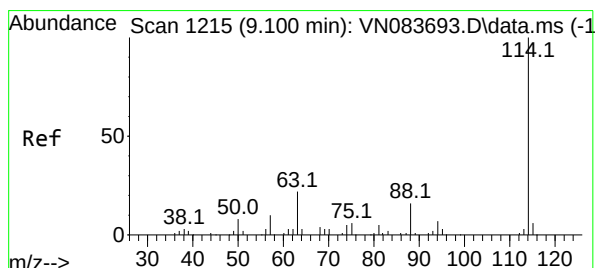
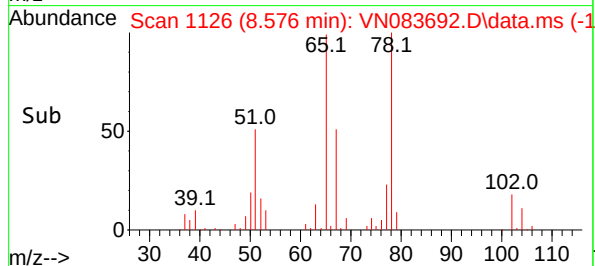
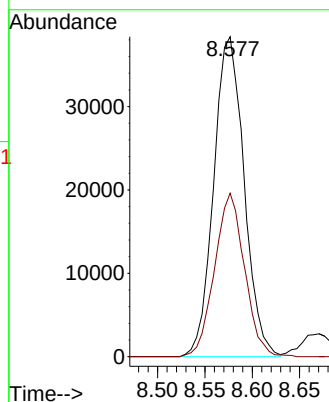
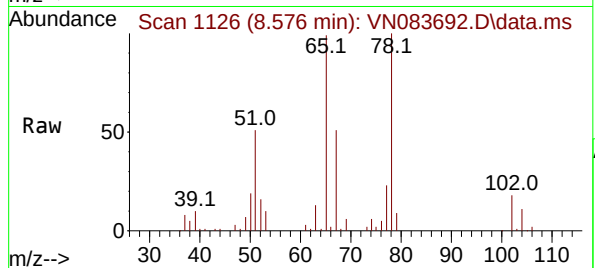
67 50.3 43.2 64.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

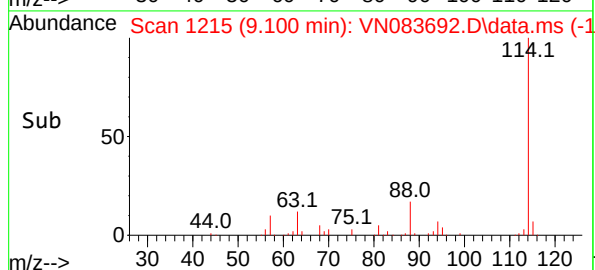
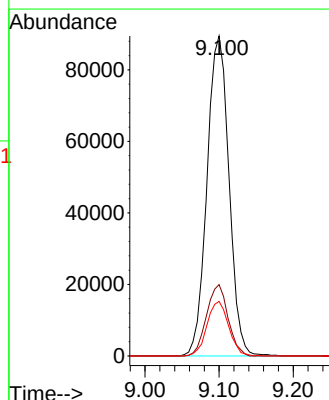
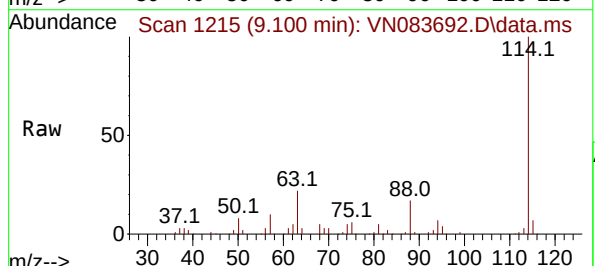
Tgt Ion:114 Resp: 184509

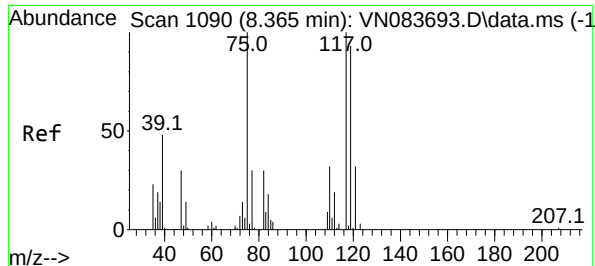
Ion Ratio Lower Upper

114 100

63 21.8 15.9 23.9

88 16.8 12.7 19.1





#29

1,1-Dichloropropene

Concen: 47.671 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

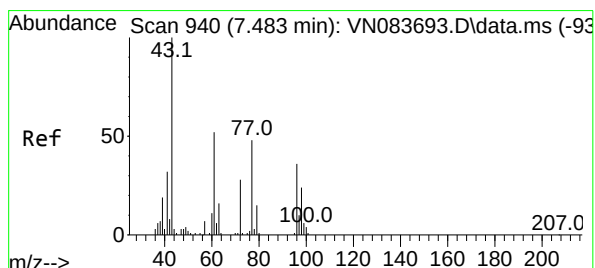
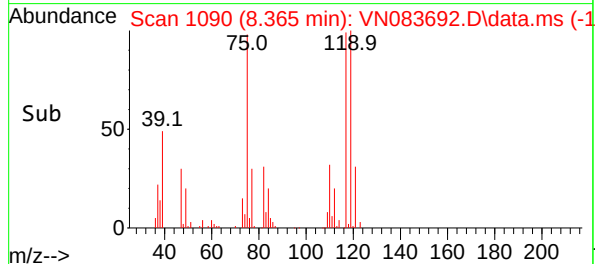
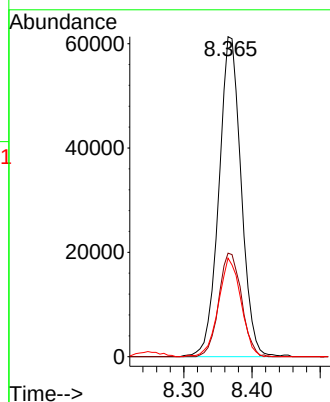
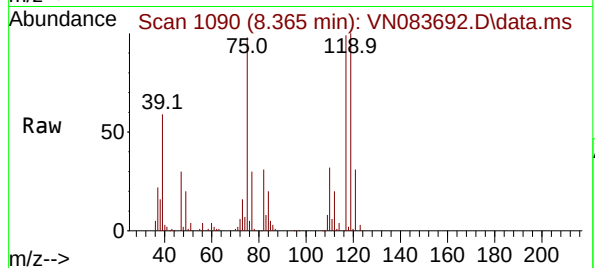
VSTDICC050

Tgt Ion:	75	Resp:	13951
Ion	Ratio	Lower	Upper
75	100		
110	33.0	0.0	70.2
77	31.0	0.0	61.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#30

2-Butanone

Concen: 236.438 ug/l

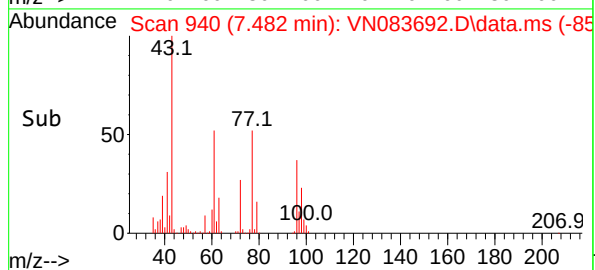
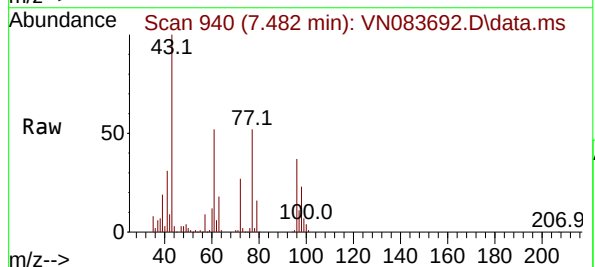
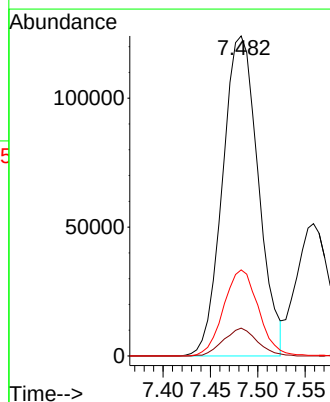
RT: 7.482 min Scan# 940

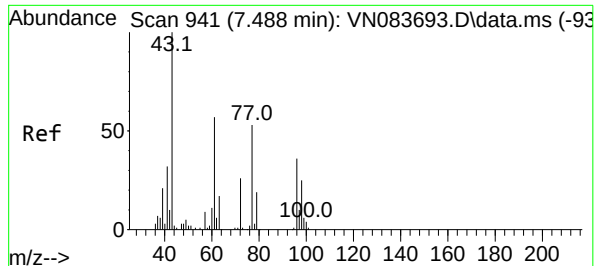
Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Tgt Ion:	43	Resp:	326178
Ion	Ratio	Lower	Upper
43	100		
57	8.2	6.7	10.1
72	26.2	24.0	36.0





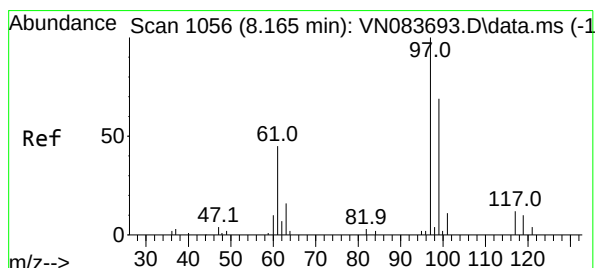
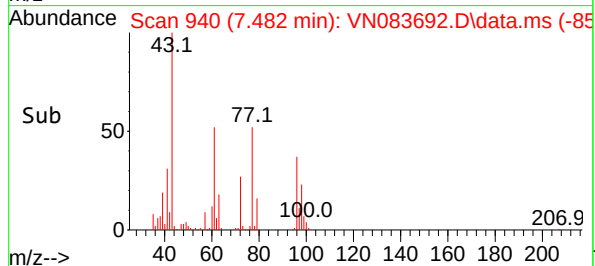
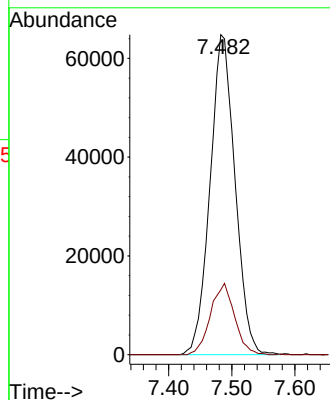
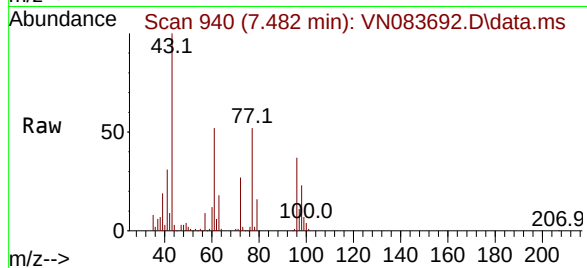
#31
2,2-Dichloropropane
Concen: 47.759 ug/l
RT: 7.482 min Scan# 941
Delta R.T. -0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 77 Resp: 17819
Ion Ratio Lower Upper
77 100
97 21.5 18.3 27.5

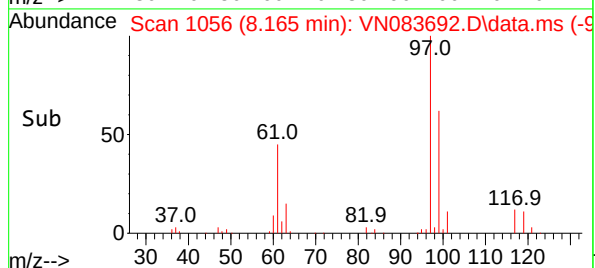
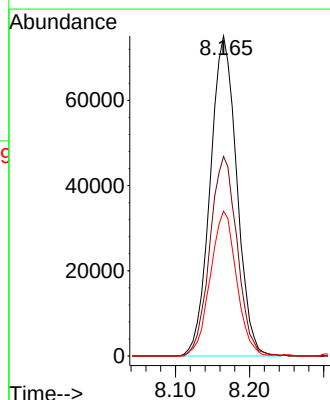
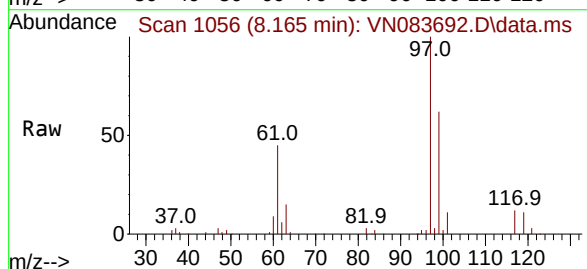
Manual Integrations
APPROVED

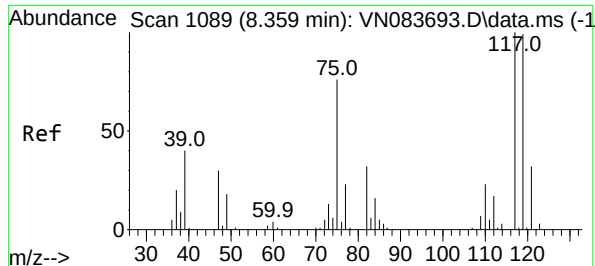
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#32
1,1,1-Trichloroethane
Concen: 47.866 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 97 Resp: 187080
Ion Ratio Lower Upper
97 100
99 64.0 51.0 76.4
61 44.6 33.8 50.8





#33

Carbon Tetrachloride

Concen: 47.659 ug/l

RT: 8.359 min Scan# 1108

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion:117 Resp: 161308

Ion Ratio Lower Upper

117 100

119 91.2 77.7 116.5

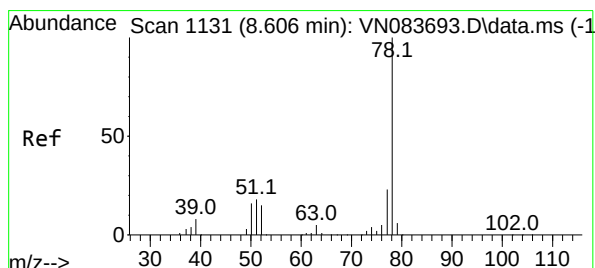
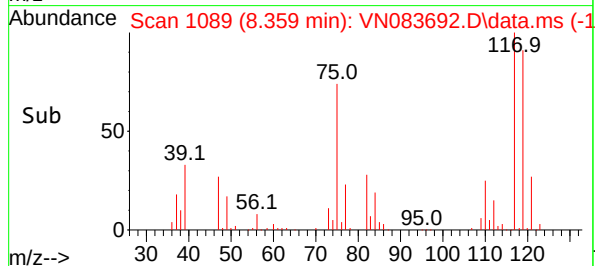
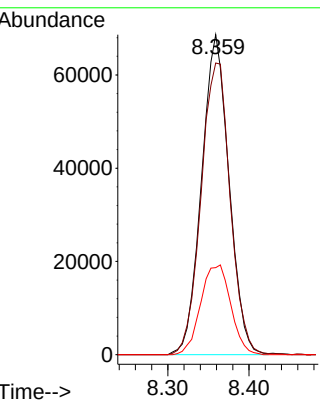
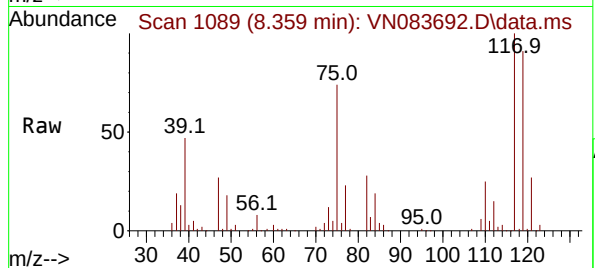
121 27.2 27.0 40.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#34

Benzene

Concen: 47.498 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

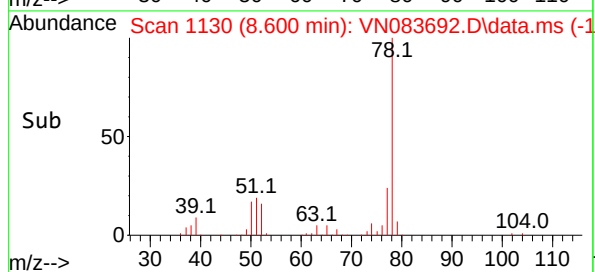
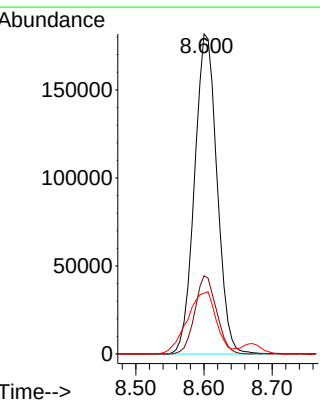
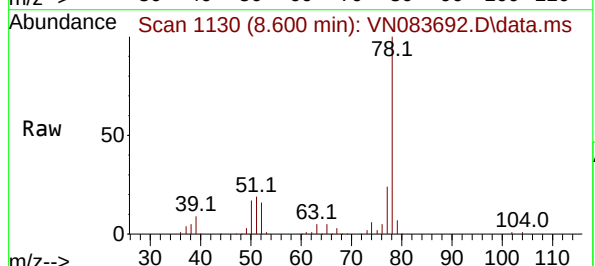
Tgt Ion: 78 Resp: 417083

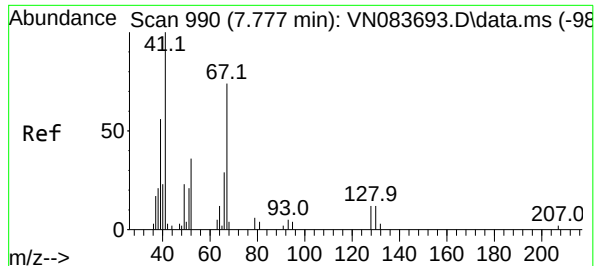
Ion Ratio Lower Upper

78 100

77 24.4 19.2 28.8

51 18.2 13.3 19.9





#35

Methacrylonitrile

Concen: 46.626 ug/l

RT: 7.771 min Scan# 91

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 41 Resp: 72308

Ion Ratio Lower Upper

41 100

39 52.5 25.3 75.9

67 67.5 38.7 116.1

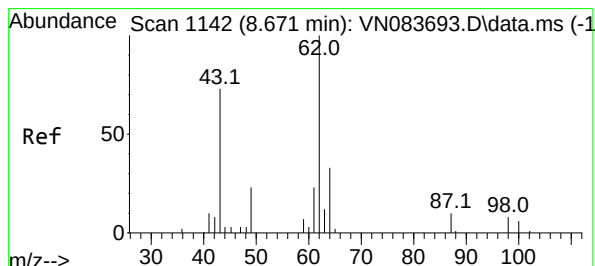
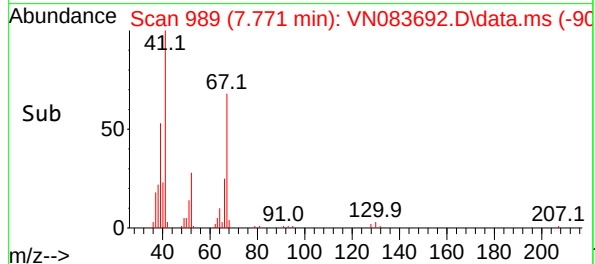
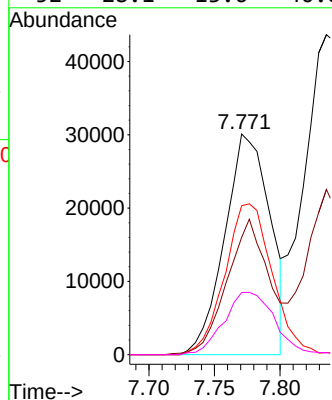
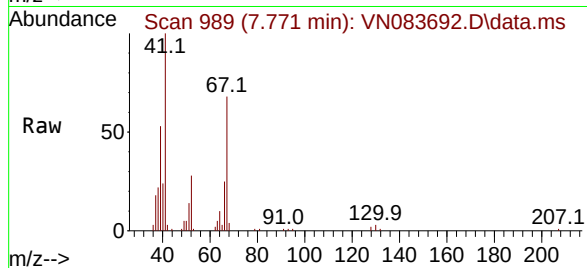
52 28.1 13.6 40.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#36

1,2-Dichloroethane

Concen: 47.414 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. -0.000 min

Lab File: VN083692.D

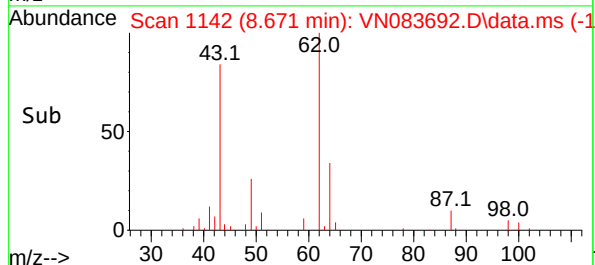
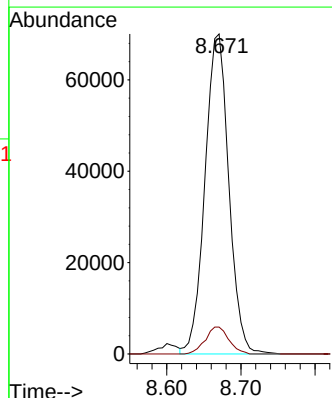
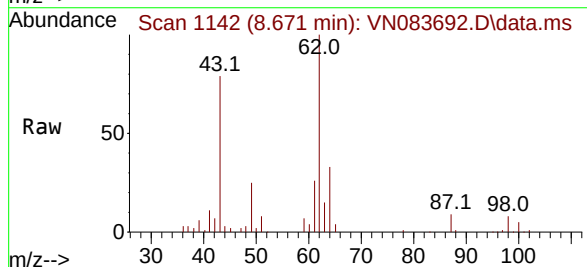
Acq: 06 Sep 2024 12:46

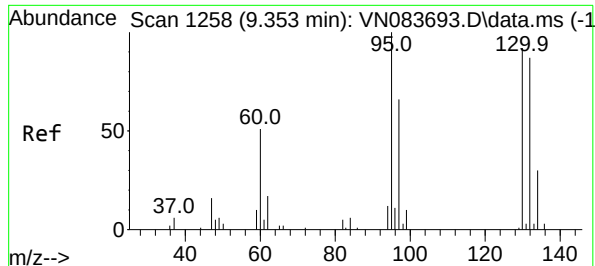
Tgt Ion: 62 Resp: 156520

Ion Ratio Lower Upper

62 100

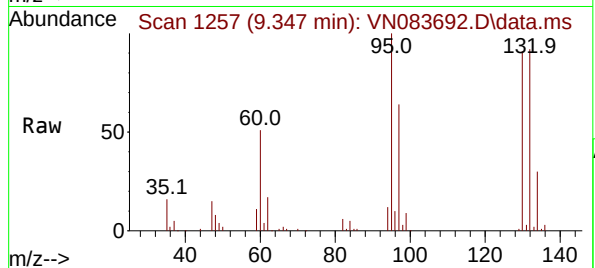
98 8.3 8.2 12.4





#37
Trichloroethene
Concen: 47.090 ug/l
RT: 9.347 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

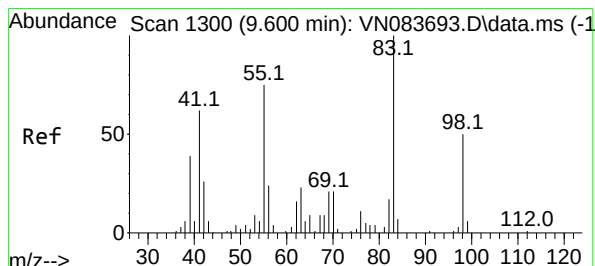
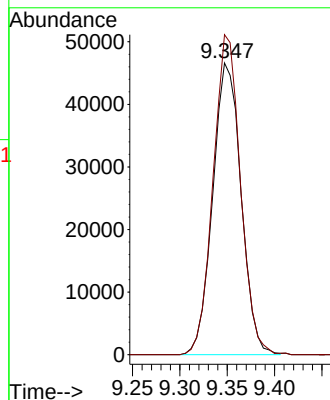
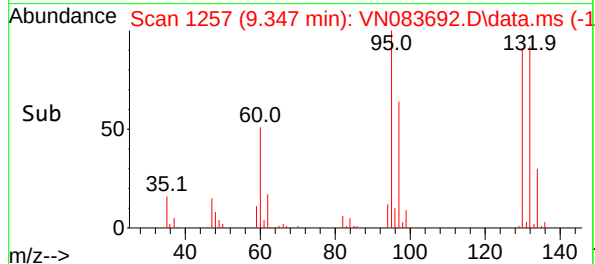
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050



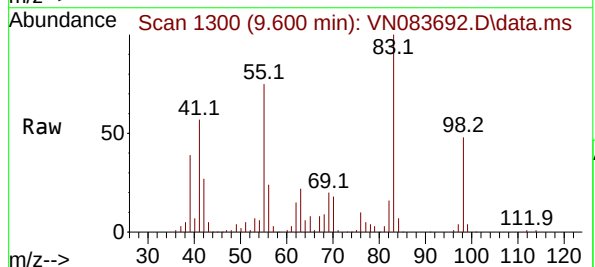
Tgt Ion:130 Resp: 97099
Ion Ratio Lower Upper
130 100
95 109.7 80.2 120.4

Manual Integrations
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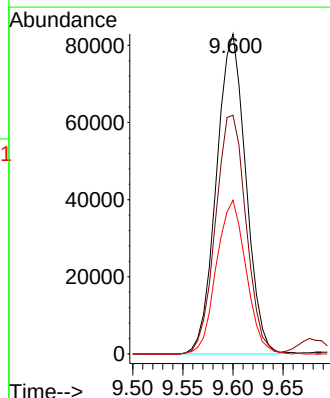
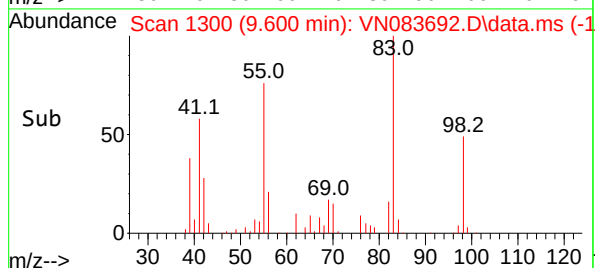
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024

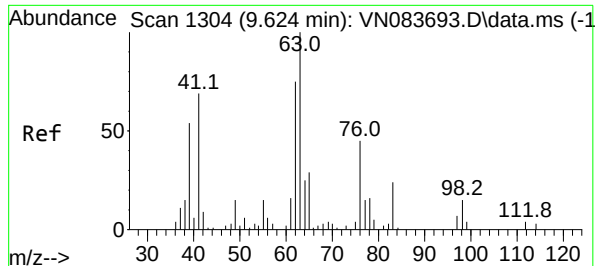


#38
Methylcyclohexane
Concen: 48.224 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46



Tgt Ion: 83 Resp: 168966
Ion Ratio Lower Upper
83 100
55 77.5 36.6 109.9
98 48.5 23.8 71.5





#39

1,2-Dichloropropane

Concen: 47.639 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion: 63 Resp: 100678

Ion Ratio Lower Upper

63 100

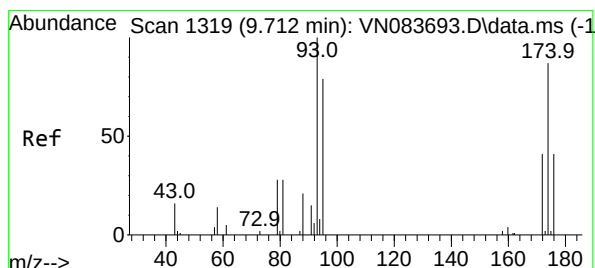
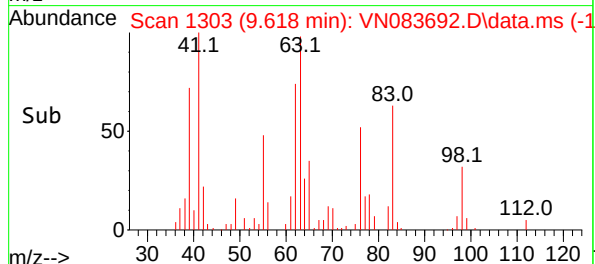
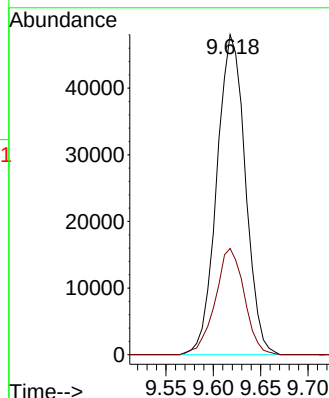
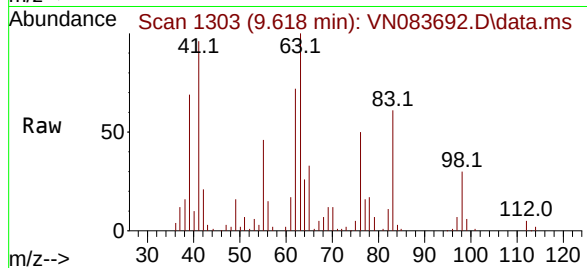
65 33.2 25.0 37.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#40

Dibromomethane

Concen: 47.803 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

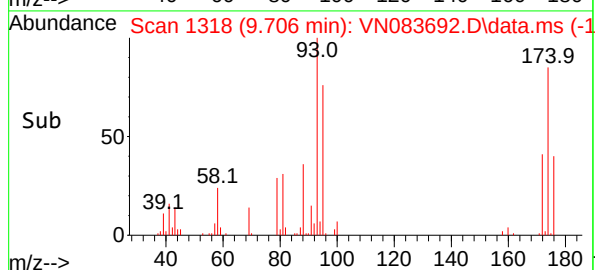
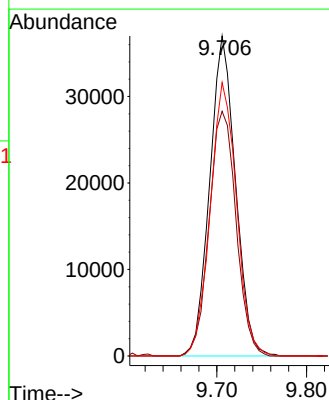
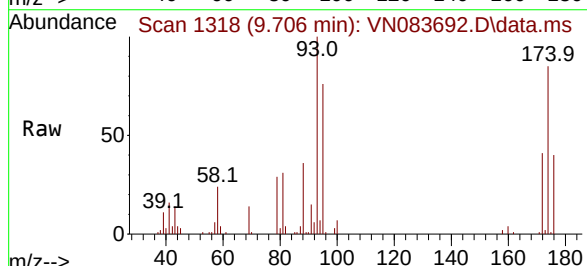
Tgt Ion: 93 Resp: 73868

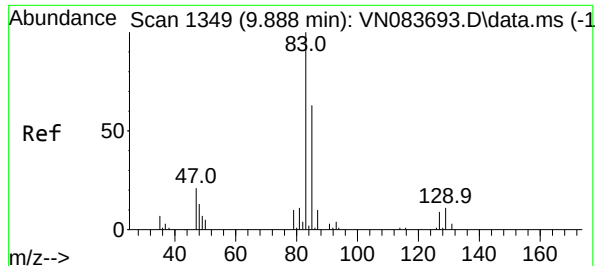
Ion Ratio Lower Upper

93 100

95 79.8 0.0 164.6

174 87.0 0.0 193.2





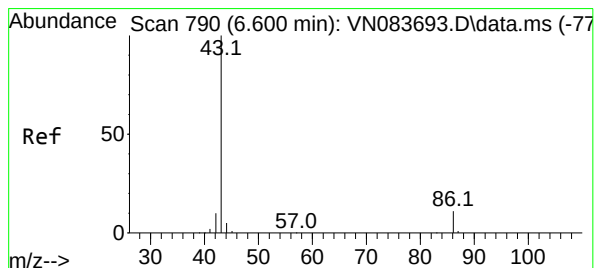
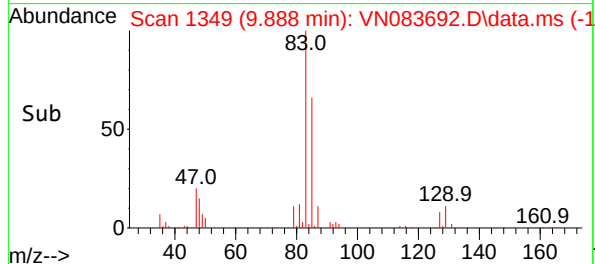
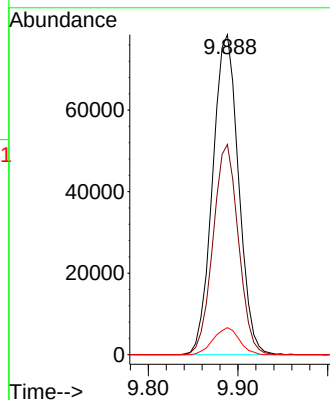
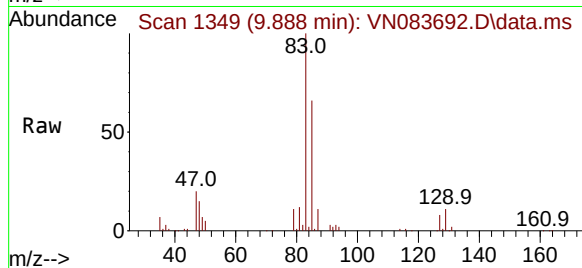
#41
Bromodichloromethane
Concen: 47.950 ug/l
RT: 9.888 min Scan# 1349
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 83 Resp: 15756
Ion Ratio Lower Upper
83 100
85 65.7 49.4 74.2
127 8.5 7.3 10.9

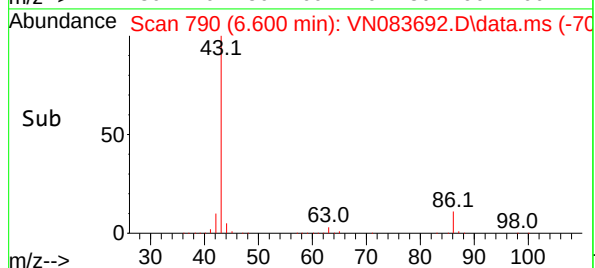
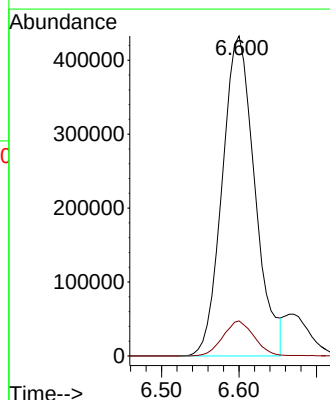
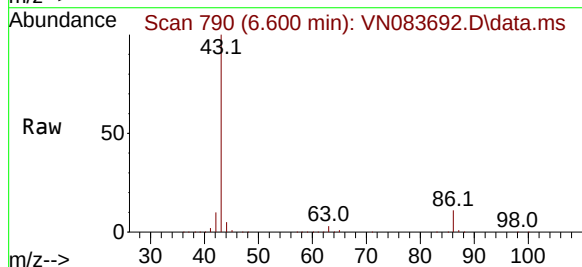
Manual Integrations
APPROVED

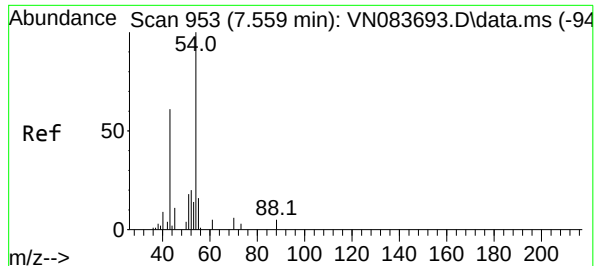
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#42
Vinyl Acetate
Concen: 223.883 ug/l
RT: 6.600 min Scan# 790
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 43 Resp: 1269865
Ion Ratio Lower Upper
43 100
86 10.4 9.4 14.2





#43

Ethyl Acetate

Concen: 47.013 ug/l

RT: 7.559 min Scan# 91

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 43 Resp: 13054

Ion Ratio Lower Upper

43 100

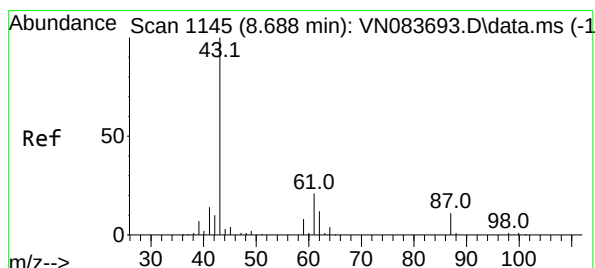
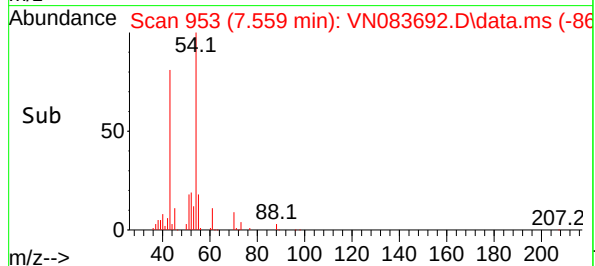
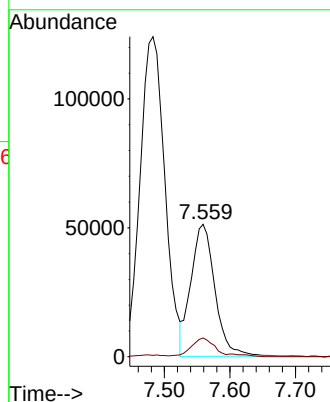
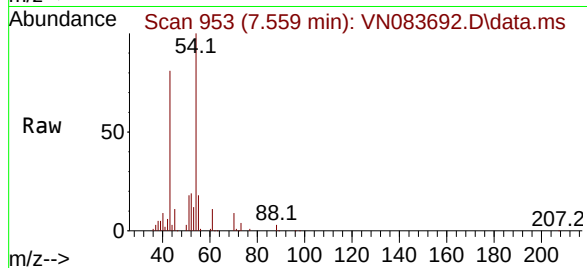
45 12.1 10.6 15.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#44

Isopropyl Acetate

Concen: 47.761 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. -0.000 min

Lab File: VN083692.D

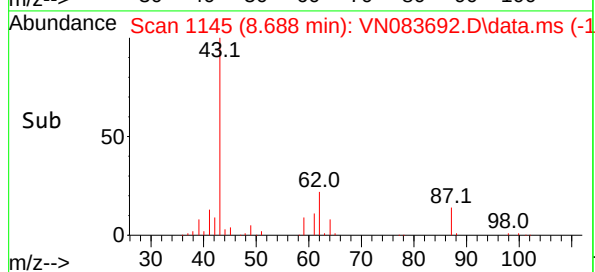
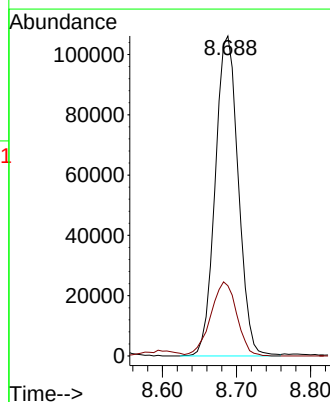
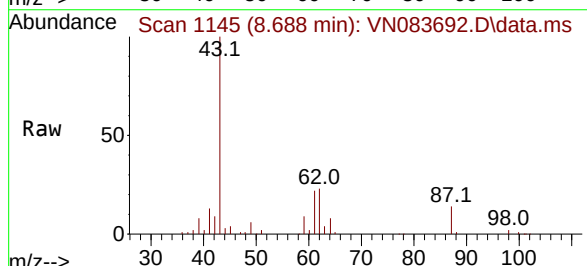
Acq: 06 Sep 2024 12:46

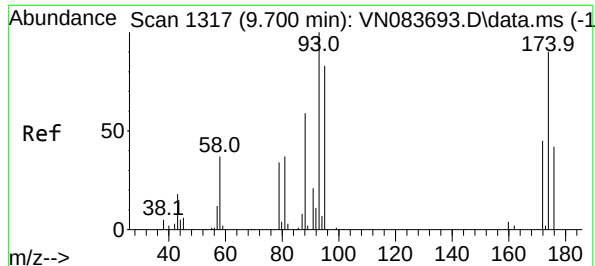
Tgt Ion: 43 Resp: 229379

Ion Ratio Lower Upper

43 100

61 26.3 25.0 37.4





#45

1,4-Dioxane

Concen: 956.571 ug/l

RT: 9.694 min Scan# 1316

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 88 Resp: 3583

Ion Ratio Lower Upper

88 100

43 33.0 19.8 29.6

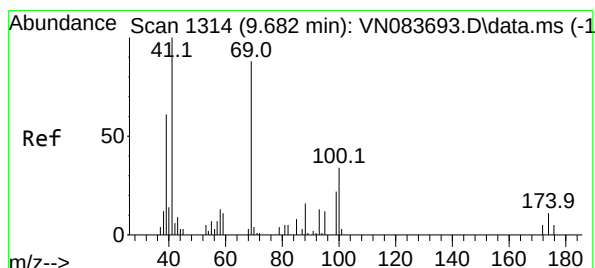
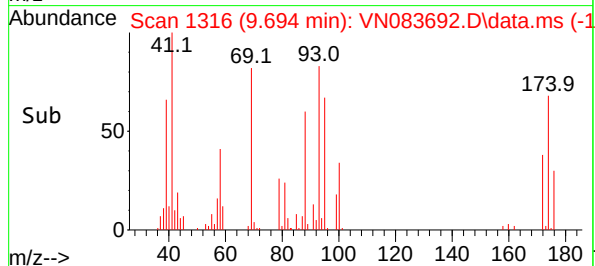
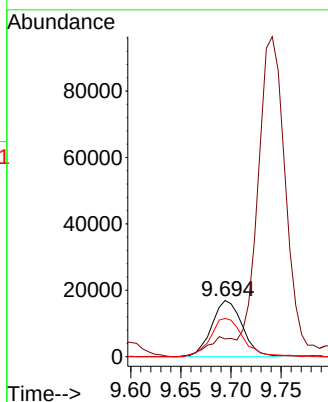
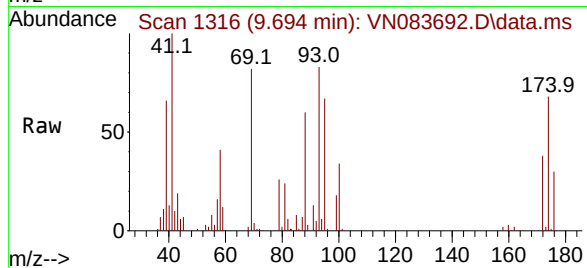
58 72.6 55.4 83.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#46

Methyl methacrylate

Concen: 47.980 ug/l

RT: 9.676 min Scan# 1313

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

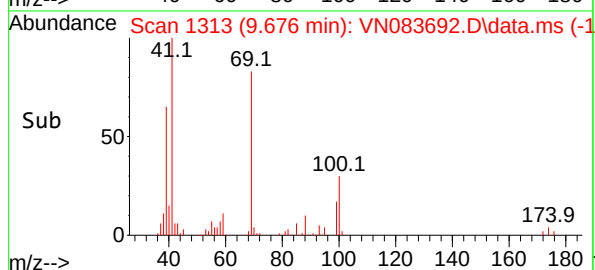
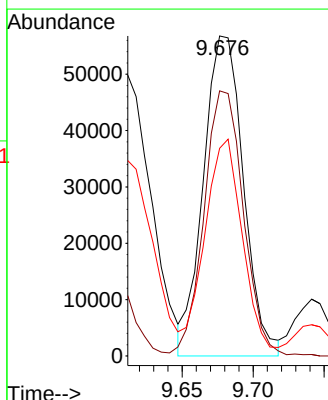
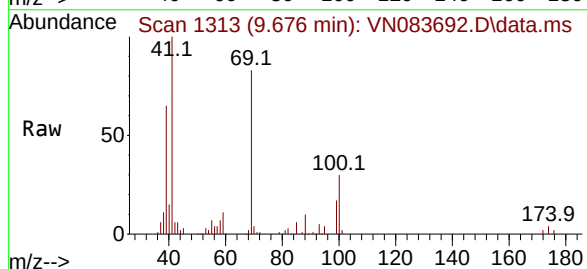
Tgt Ion: 41 Resp: 111533

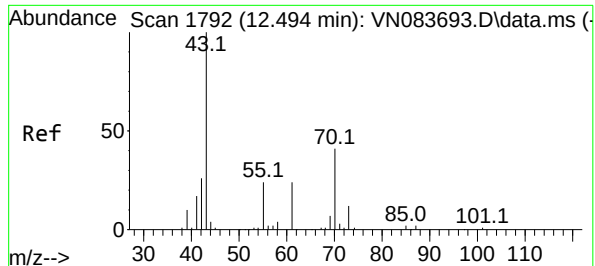
Ion Ratio Lower Upper

41 100

69 85.4 51.1 153.3

39 65.5 25.8 77.3





#47

n-amyl acetate

Concen: 49.301 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 43 Resp: 209735

Ion Ratio Lower Upper

43 100

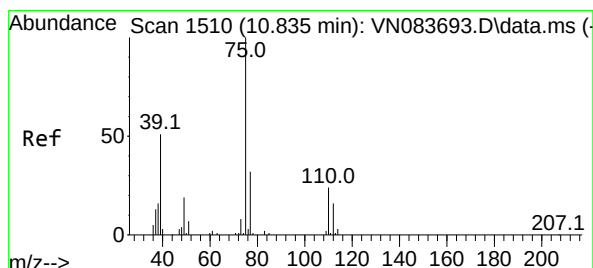
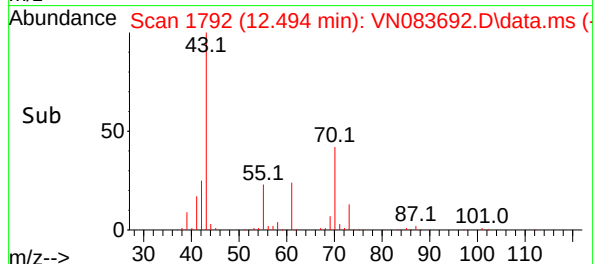
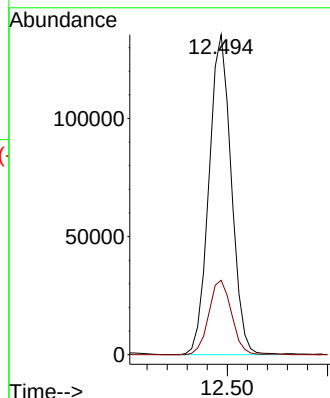
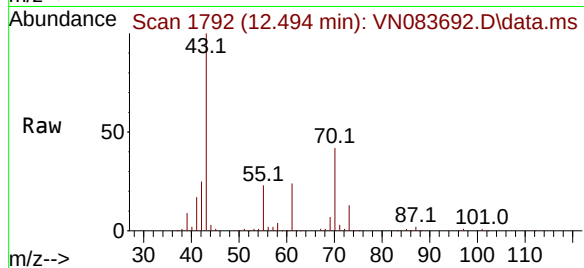
55 23.6 23.4 35.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#48

t-1,3-Dichloropropene

Concen: 47.515 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. -0.000 min

Lab File: VN083692.D

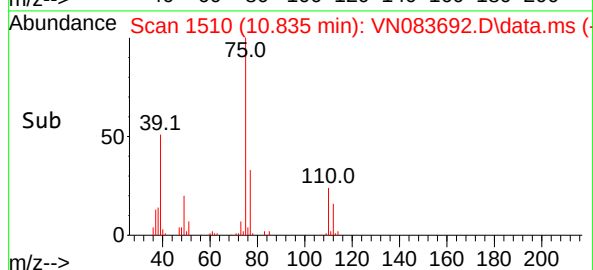
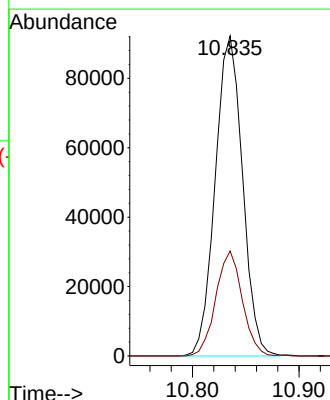
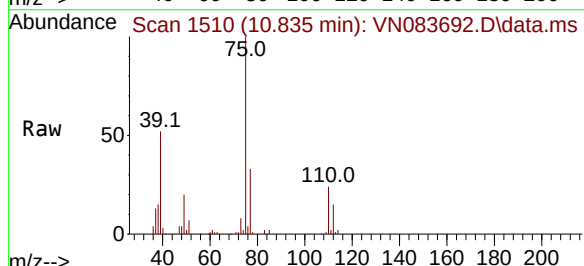
Acq: 06 Sep 2024 12:46

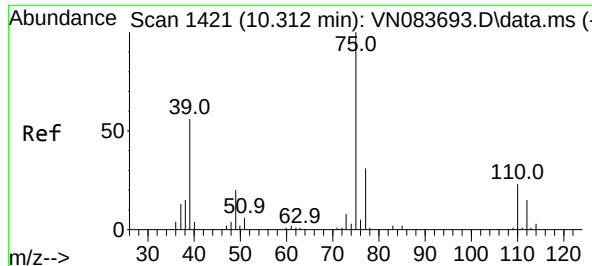
Tgt Ion: 75 Resp: 164230

Ion Ratio Lower Upper

75 100

77 32.8 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 47.625 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 75 Resp: 17119

Ion Ratio Lower Upper

75 100

77 32.5 24.9 37.3

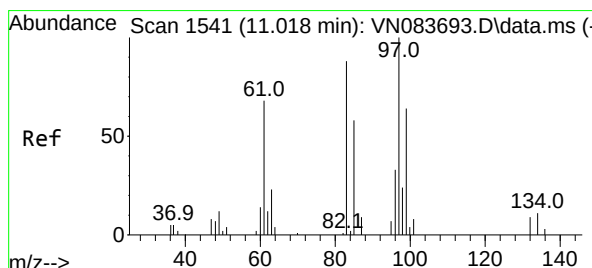
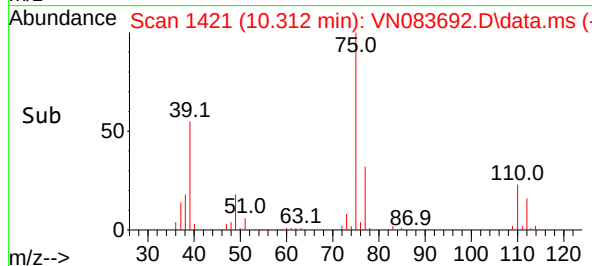
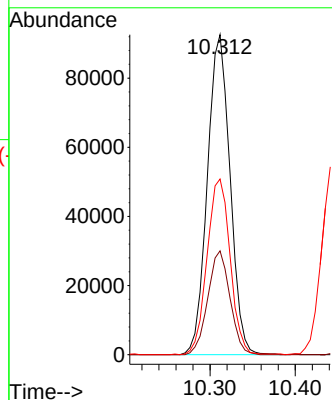
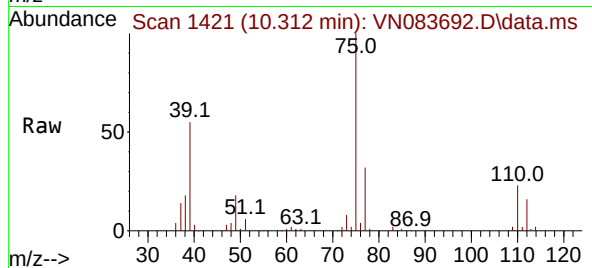
39 54.9 31.0 46.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#50

1,1,2-Trichloroethane

Concen: 47.818 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Tgt Ion: 97 Resp: 94024

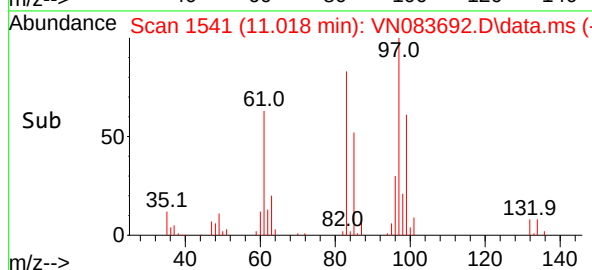
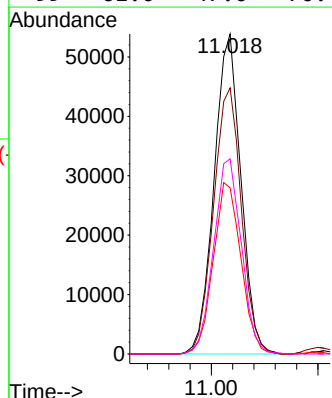
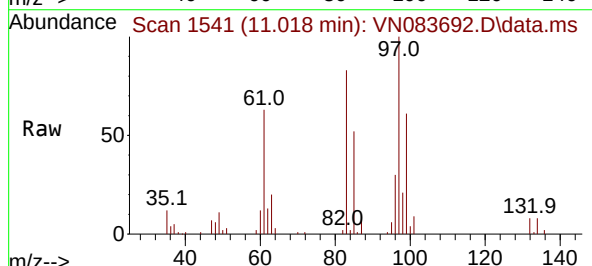
Ion Ratio Lower Upper

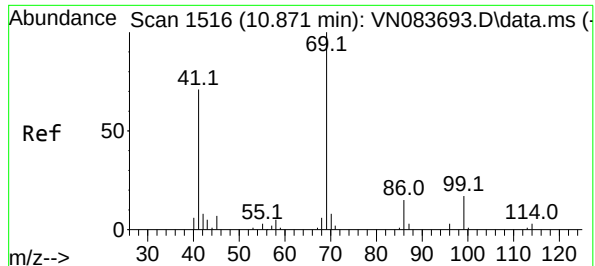
97 100

83 83.1 68.1 102.1

85 51.9 41.8 62.6

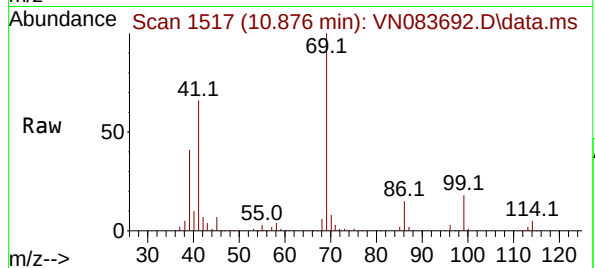
99 61.0 47.0 70.4





#51
Ethyl methacrylate
Concen: 48.091 ug/l
RT: 10.876 min Scan# 1516
Delta R.T. 0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

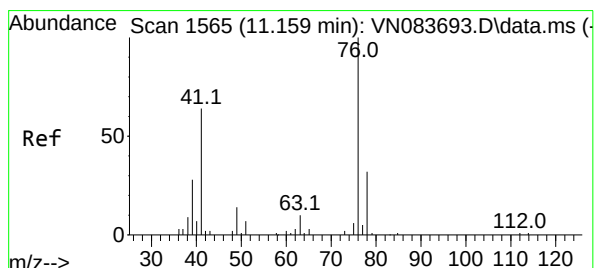
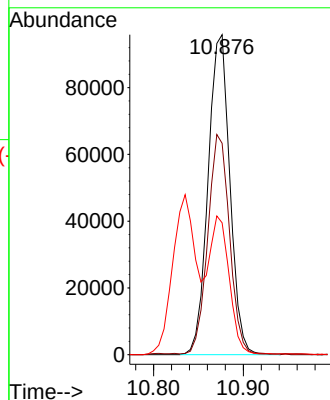
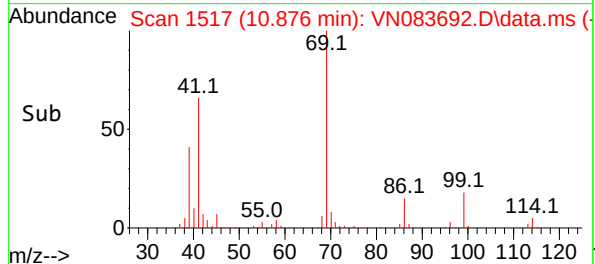
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050



Tgt Ion: 69 Resp: 161552
Ion Ratio Lower Upper
69 100
41 65.8 25.5 76.5
39 41.0 16.0 47.9

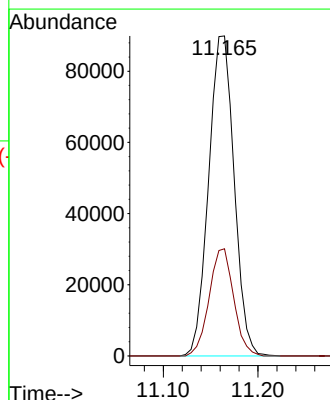
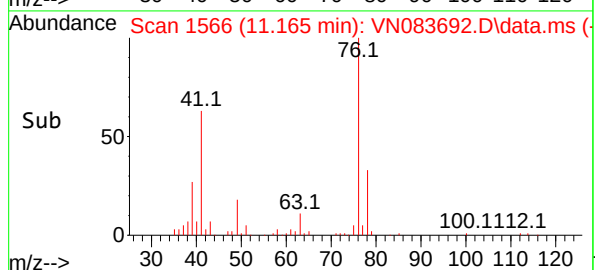
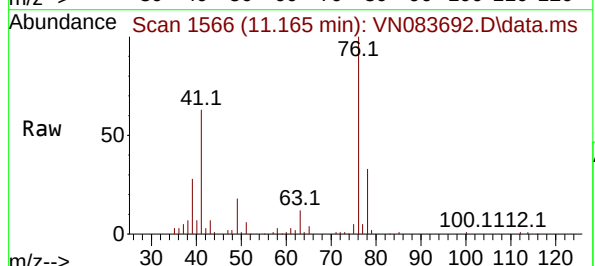
Manual Integrations
APPROVED

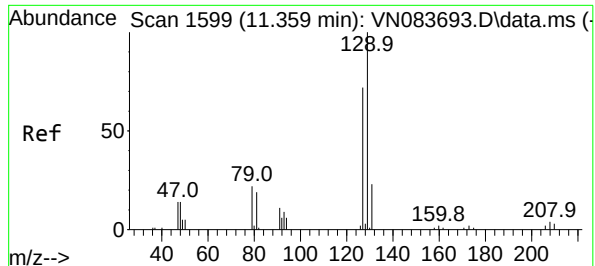
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#52
1,3-Dichloropropane
Concen: 47.331 ug/l
RT: 11.165 min Scan# 1566
Delta R.T. 0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

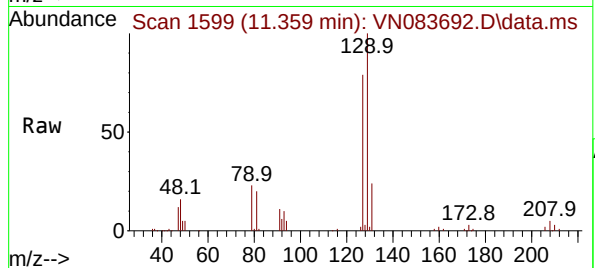
Tgt Ion: 76 Resp: 168067
Ion Ratio Lower Upper
76 100
78 32.2 0.0 65.8





#53
Dibromochloromethane
Concen: 48.475 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

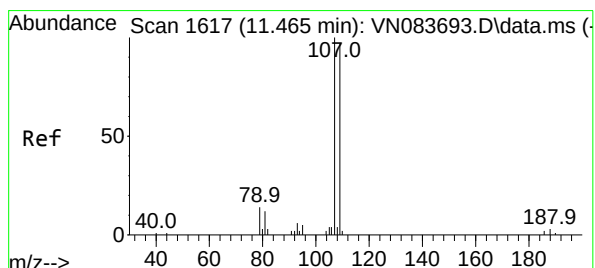
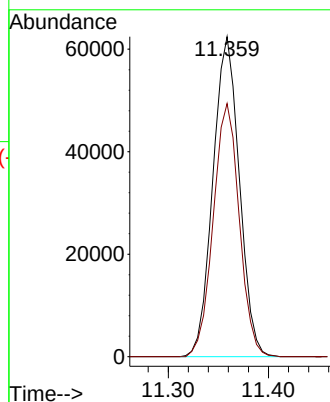
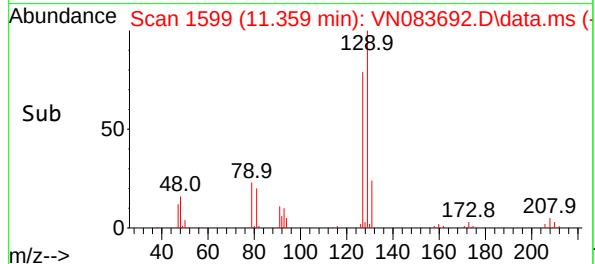
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050



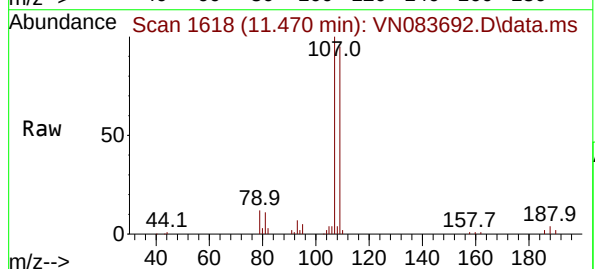
Tgt Ion:129 Resp: 11432
Ion Ratio Lower Upper
129 100
127 77.8 39.4 118.1

Manual Integrations
APPROVED

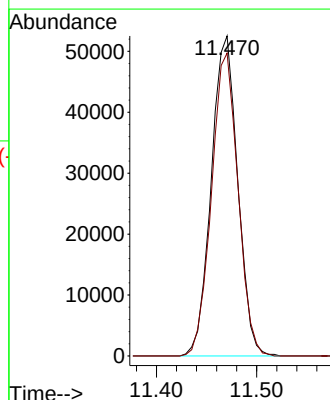
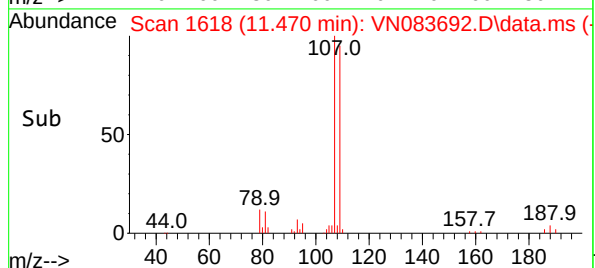
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024

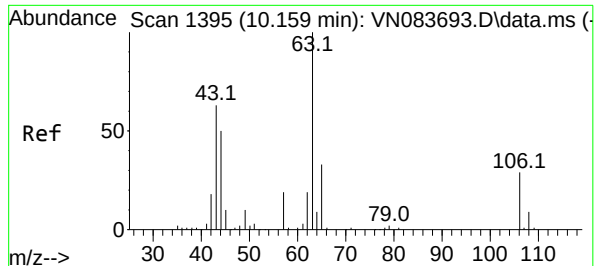


#54
1,2-Dibromoethane
Concen: 47.345 ug/l
RT: 11.470 min Scan# 1618
Delta R.T. 0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46



Tgt Ion:107 Resp: 96308
Ion Ratio Lower Upper
107 100
109 94.7 74.7 112.1





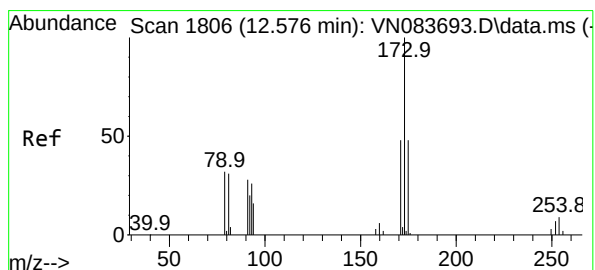
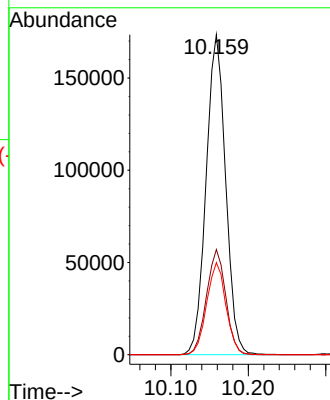
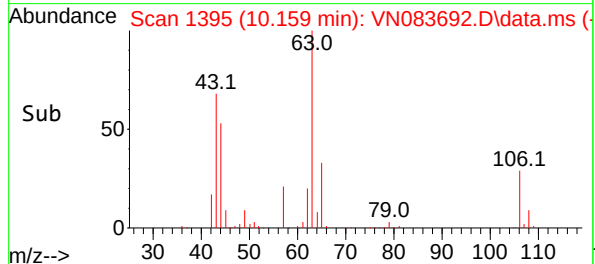
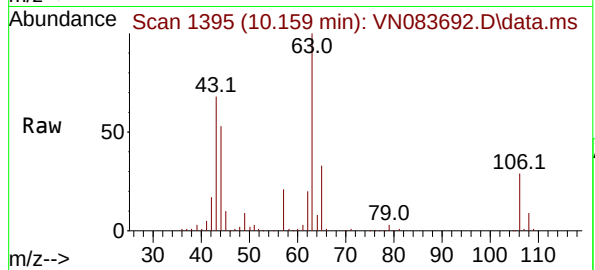
#55
2-Chloroethyl vinyl ether
Concen: 226.464 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 63 Resp: 30318
Ion Ratio Lower Upper
63 100
65 32.5 26.2 39.2
106 28.4 23.8 35.8

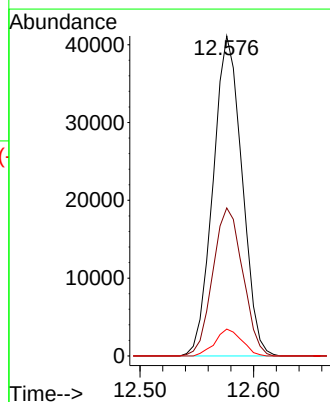
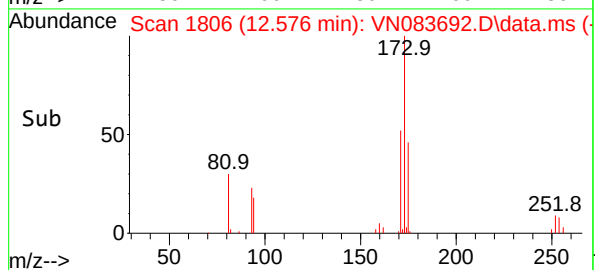
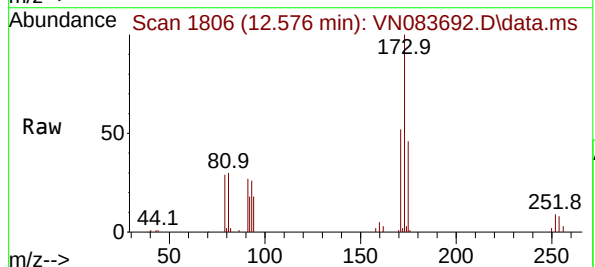
Manual Integrations
APPROVED

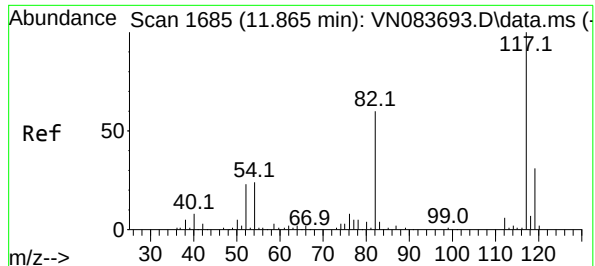
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#56
Bromoform
Concen: 48.608 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion:173 Resp: 72832
Ion Ratio Lower Upper
173 100
175 47.8 40.0 60.0
254 7.8 8.3 12.5#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion:117 Resp: 165492

Ion Ratio Lower Upper

117 100

82 59.1 46.6 69.8

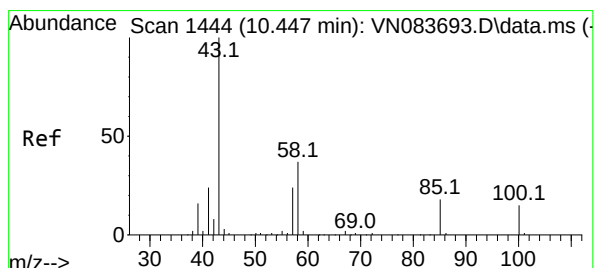
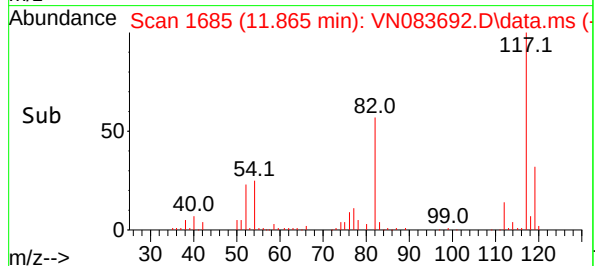
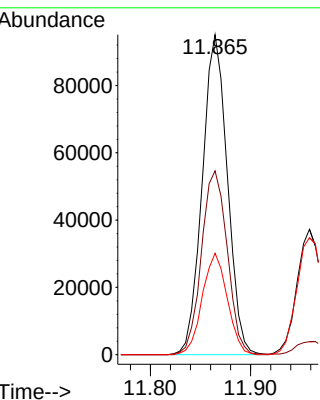
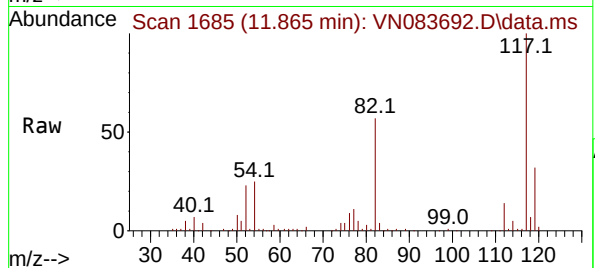
119 31.6 25.4 38.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#58

4-Methyl-2-Pentanone

Concen: 239.462 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. -0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

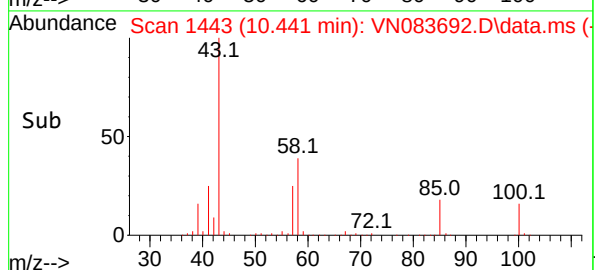
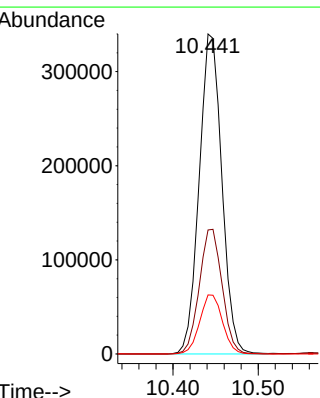
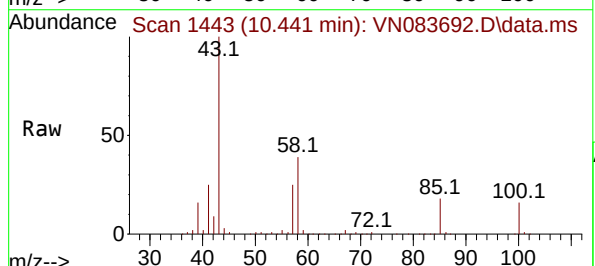
Tgt Ion: 43 Resp: 628368

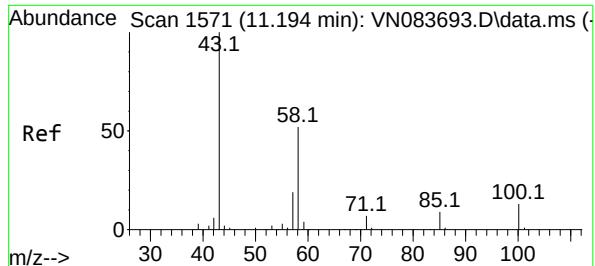
Ion Ratio Lower Upper

43 100

58 39.2 36.5 54.7

85 18.5 19.5 29.3#





#59

2-Hexanone

Concen: 238.463 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 43 Resp: 47282

Ion Ratio Lower Upper

43 100

58 53.7 50.4 75.6

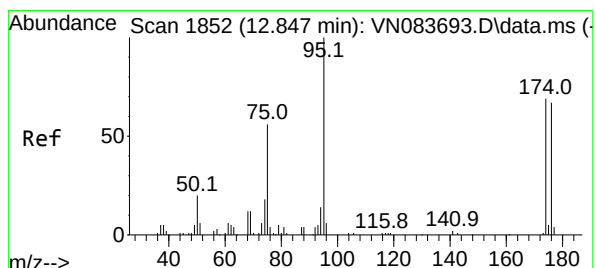
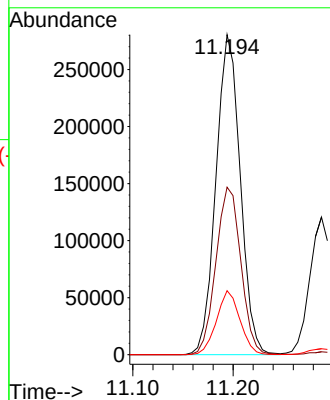
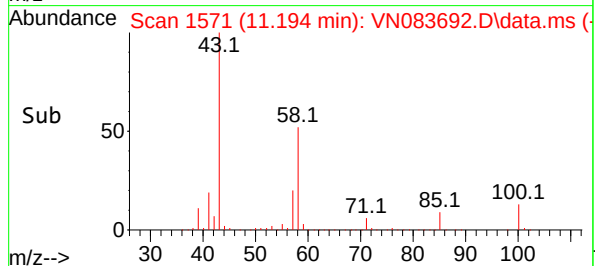
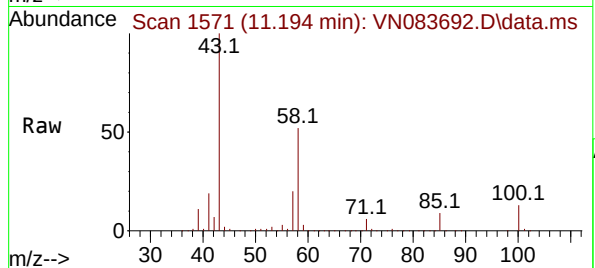
57 19.3 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#60

4-Bromofluorobenzene

Concen: 30.095 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

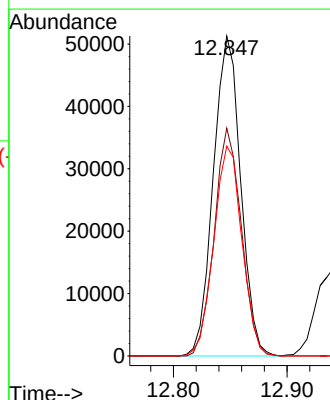
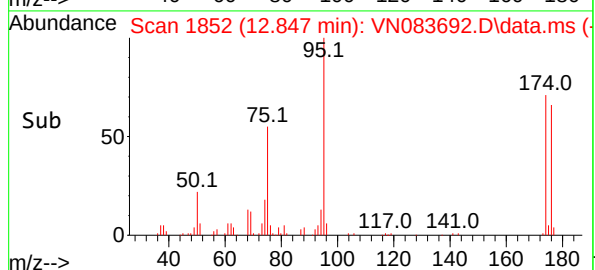
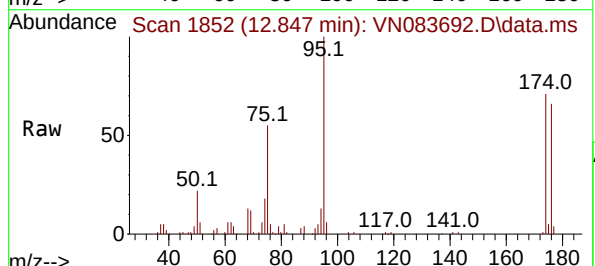
Tgt Ion: 95 Resp: 85838

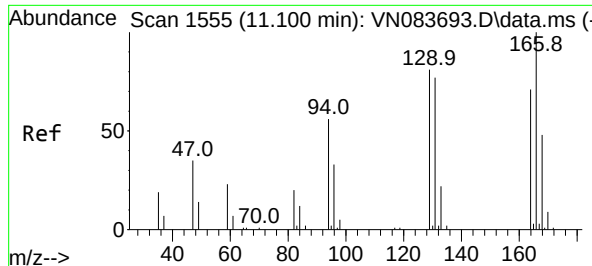
Ion Ratio Lower Upper

95 100

174 70.4 60.5 90.7

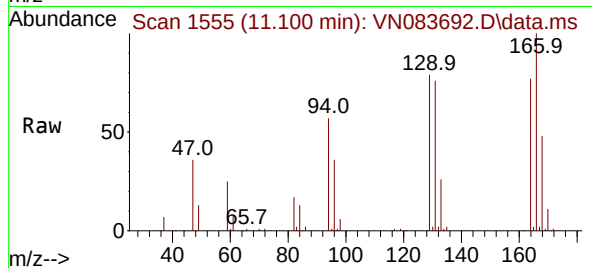
176 67.6 57.8 86.6





#61
Tetrachloroethene
Concen: 46.589 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

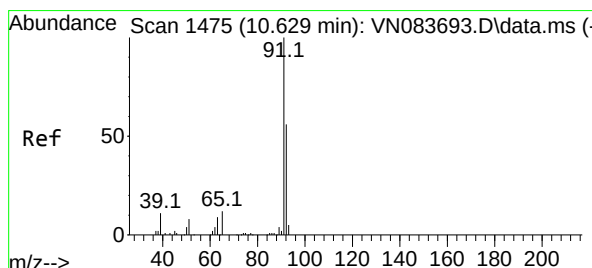
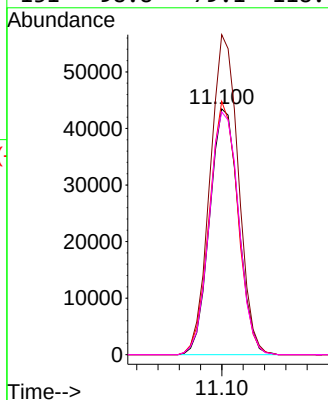
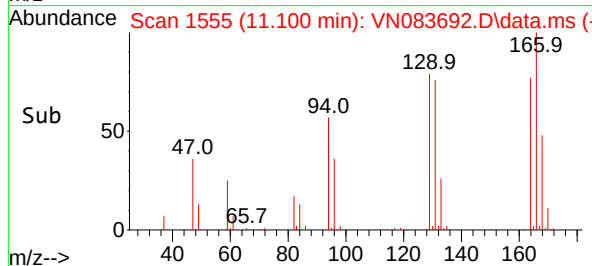
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050



Tgt Ion:164 Resp: 81597
Ion Ratio Lower Upper
164 100
166 130.2 106.7 160.1
129 103.0 85.8 128.6
131 98.8 79.1 118.7

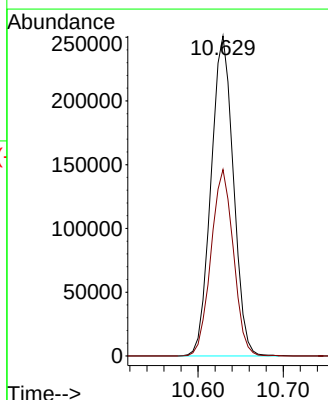
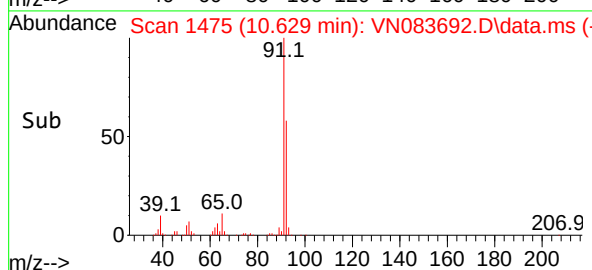
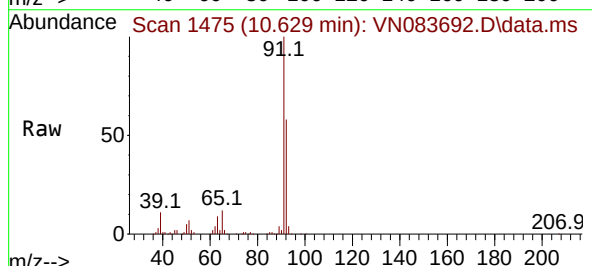
Manual Integrations
APPROVED

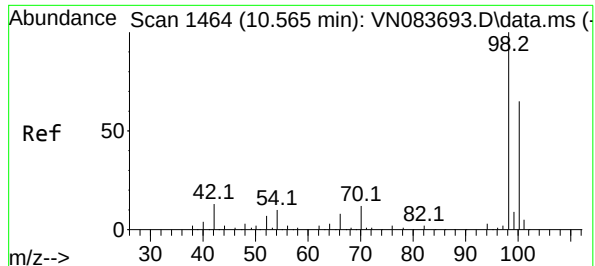
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#62
Toluene
Concen: 48.163 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 91 Resp: 458137
Ion Ratio Lower Upper
91 100
92 58.3 46.5 69.7





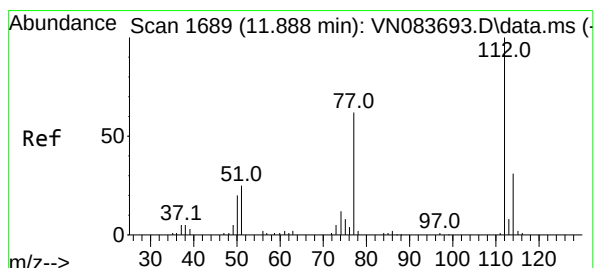
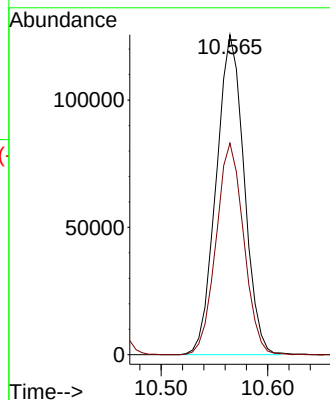
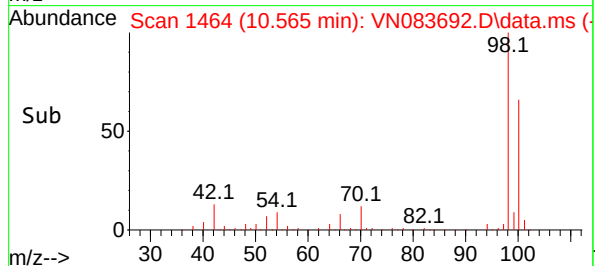
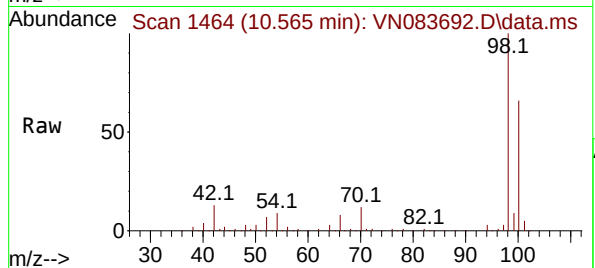
#63
Toluene-d8
Concen: 29.834 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 98 Resp: 228618
Ion Ratio Lower Upper
98 100
100 65.4 52.7 79.1

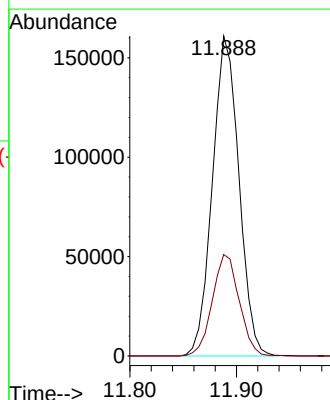
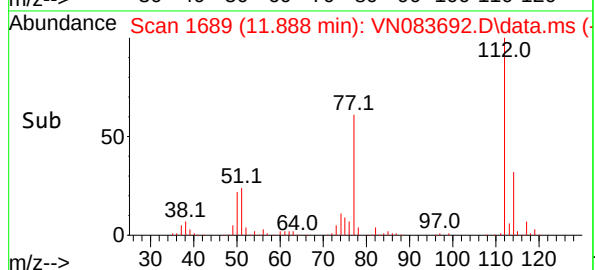
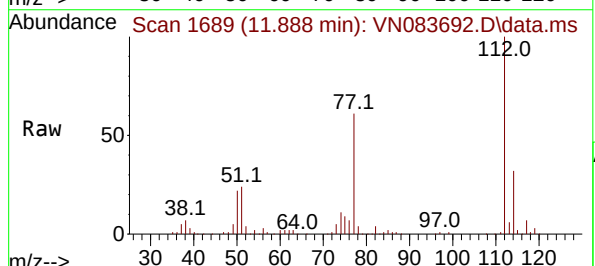
Manual Integrations
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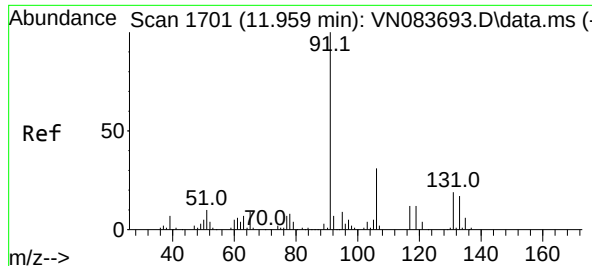
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#64
Chlorobenzene
Concen: 47.203 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion:112 Resp: 277997
Ion Ratio Lower Upper
112 100
114 31.7 26.6 39.8





#65

1,1,1,2-Tetrachloroethane

Concen: 48.424 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

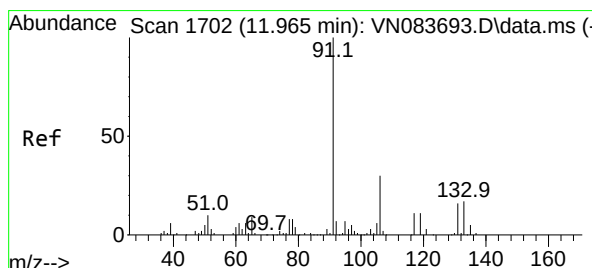
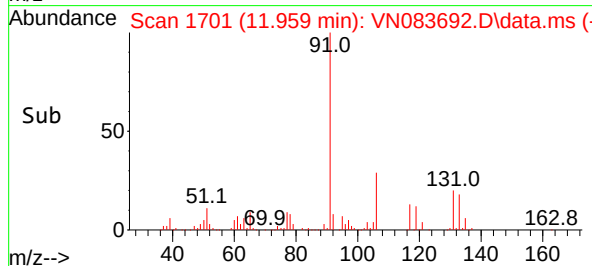
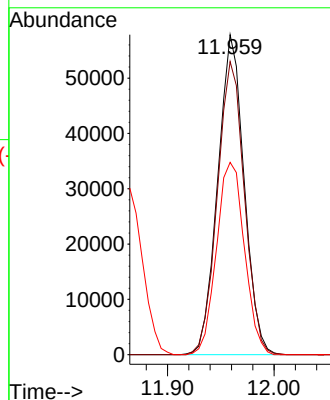
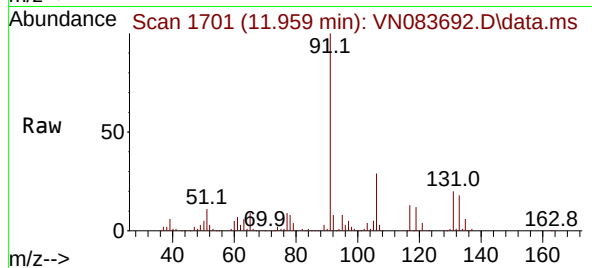
Tgt Ion	Ratio	Lower	Upper
131	100		
133	94.1	0.0	188.0
119	63.7	0.0	122.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#66

Ethyl Benzene

Concen: 47.923 ug/l

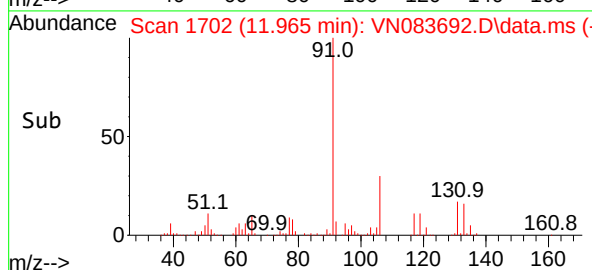
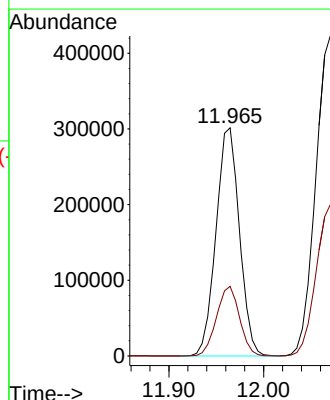
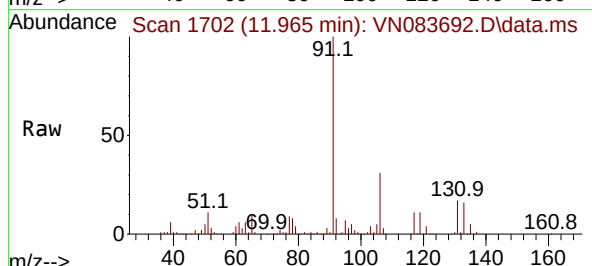
RT: 11.965 min Scan# 1702

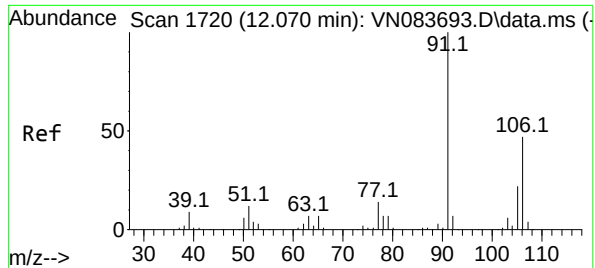
Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Tgt Ion	Ratio	Lower	Upper
91	100		
106	30.5	24.4	36.6





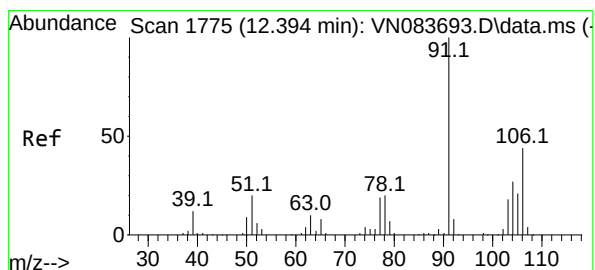
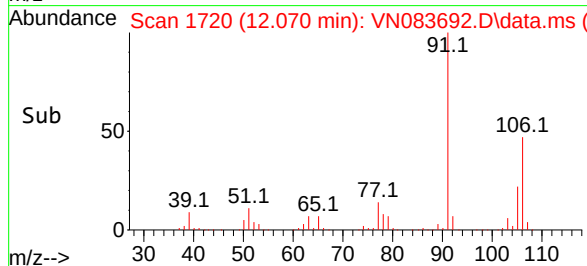
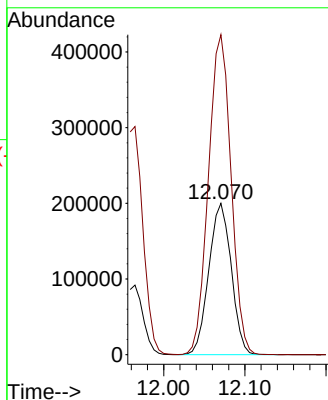
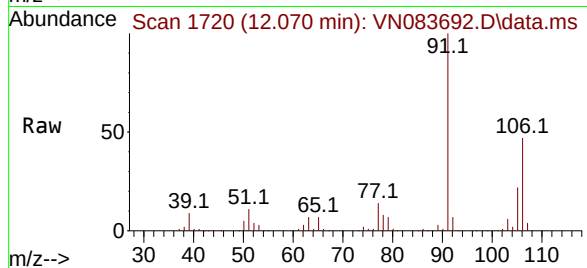
#67
m/p-Xylenes
Concen: 96.649 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion:106 Resp: 38464
Ion Ratio Lower Upper
106 100
91 213.2 166.6 249.8

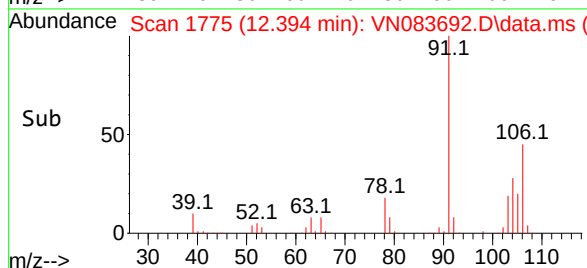
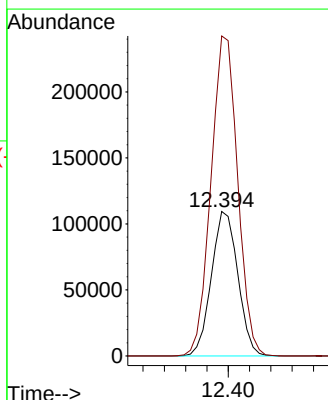
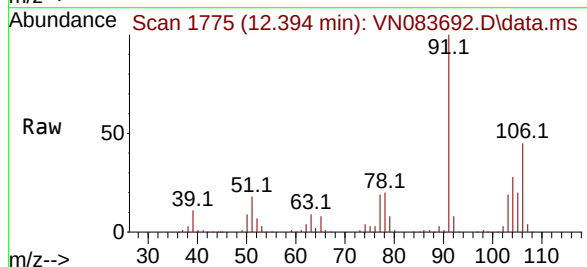
Manual Integrations
APPROVED

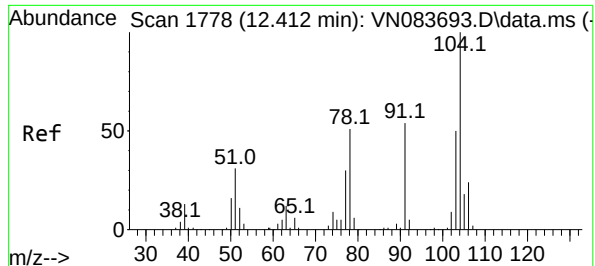
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#68
o-Xylene
Concen: 48.905 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion:106 Resp: 188367
Ion Ratio Lower Upper
106 100
91 223.5 110.0 330.0





#69

Styrene

Concen: 48.608 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion:104 Resp: 31634

Ion Ratio Lower Upper

104 100

78 55.0 42.6 64.0

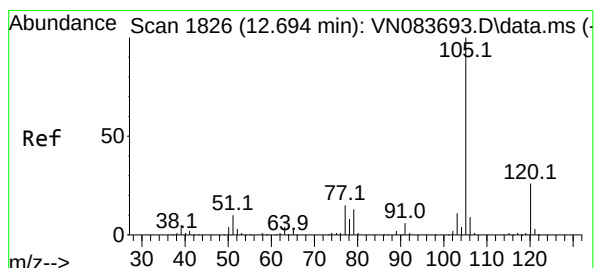
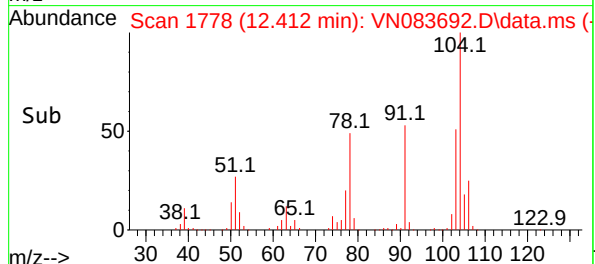
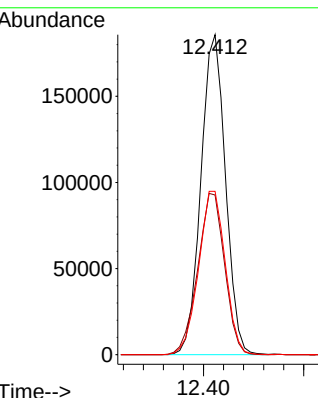
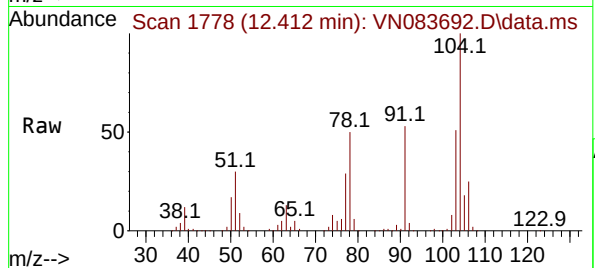
103 55.3 43.7 65.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#70

Isopropylbenzene

Concen: 49.081 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. -0.000 min

Lab File: VN083692.D

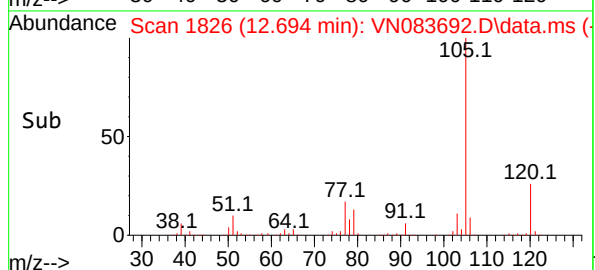
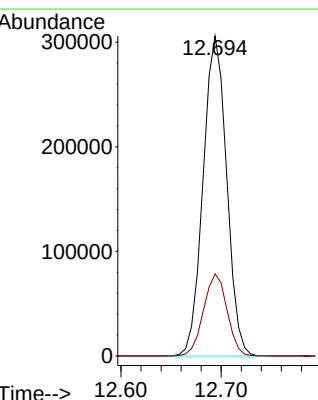
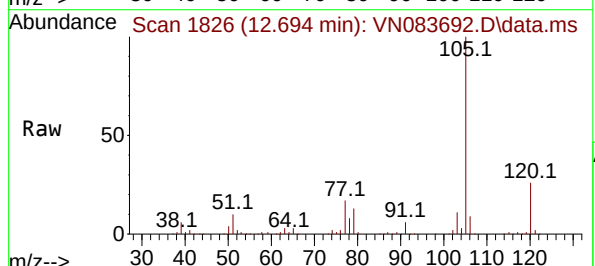
Acq: 06 Sep 2024 12:46

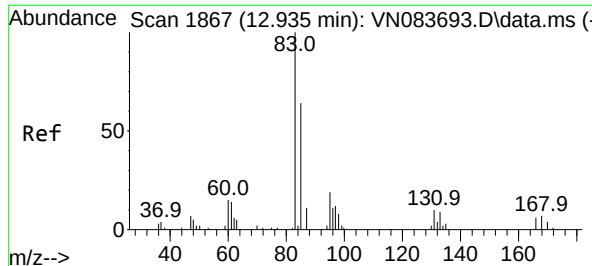
Tgt Ion:105 Resp: 498890

Ion Ratio Lower Upper

105 100

120 25.6 17.8 33.1





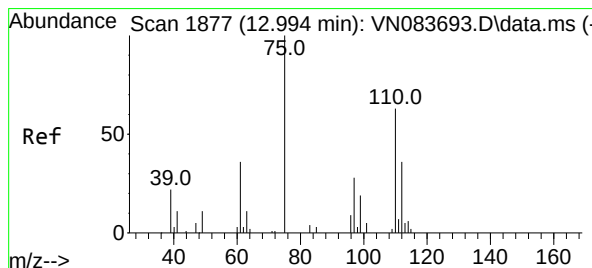
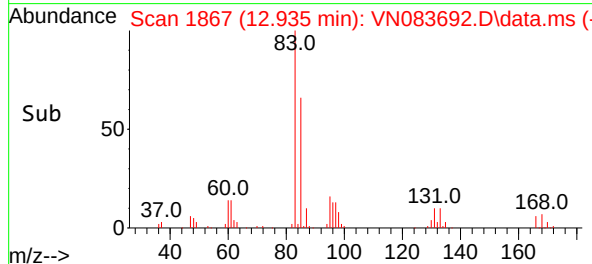
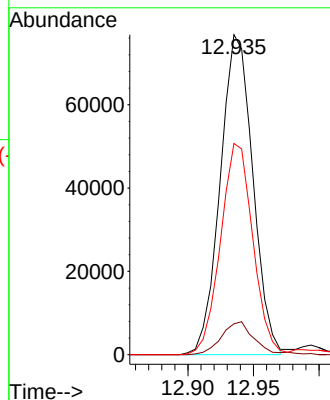
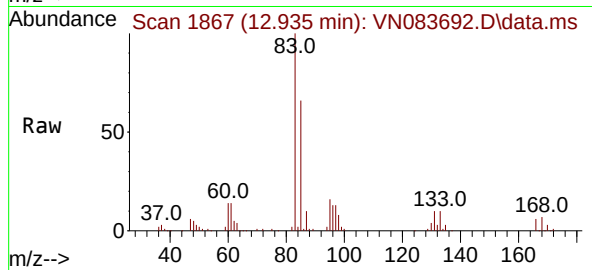
#71
1,1,2,2-Tetrachloroethane
Concen: 47.845 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 83 Resp: 132828
Ion Ratio Lower Upper
83 100
131 10.1 5.2 15.6
85 65.4 32.3 96.8

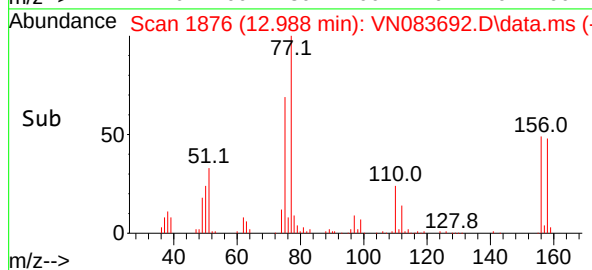
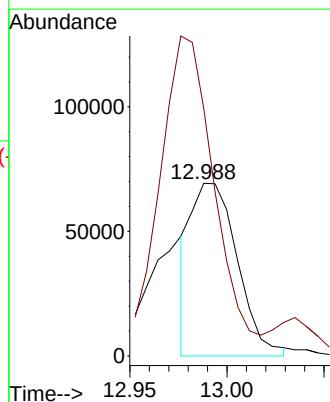
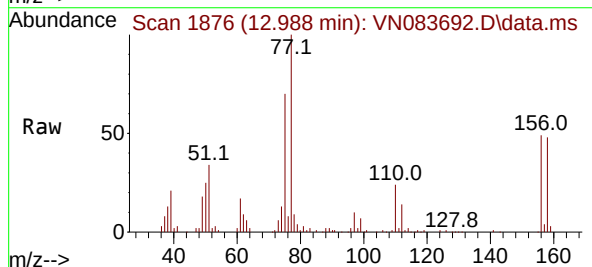
Manual Integrations
APPROVED

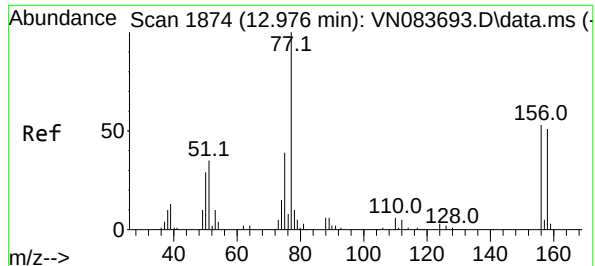
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#72
1,2,3-Trichloropropane
Concen: 47.387 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

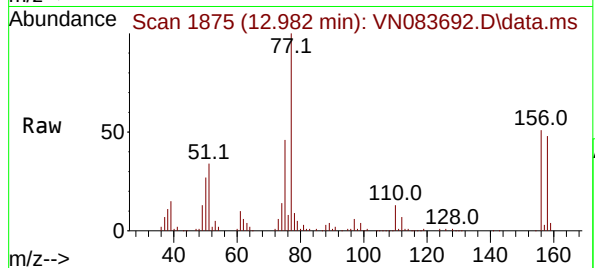
Tgt Ion: 75 Resp: 115119
Ion Ratio Lower Upper
75 100
77 220.4 0.0 367.6





#73
Bromobenzene
Concen: 48.209 ug/l
RT: 12.982 min Scan# 1875
Delta R.T. 0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

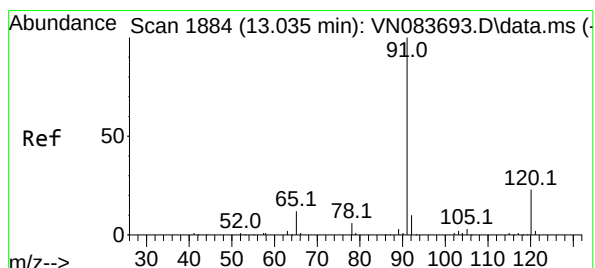
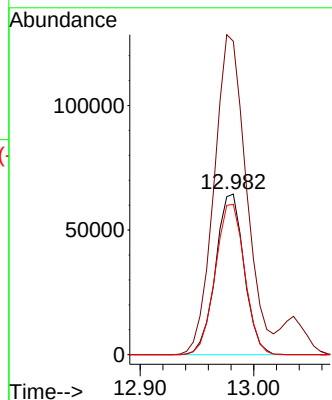
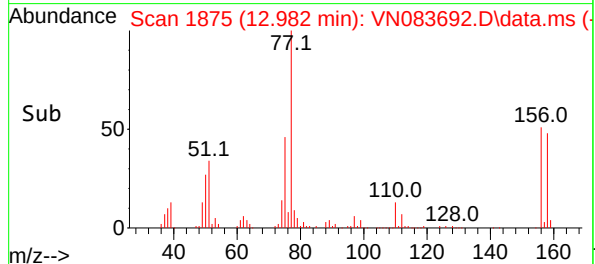
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050



Tgt Ion:156 Resp: 11255
Ion Ratio Lower Upper
156 100
77 225.5 0.0 437.6
158 96.3 0.0 203.8

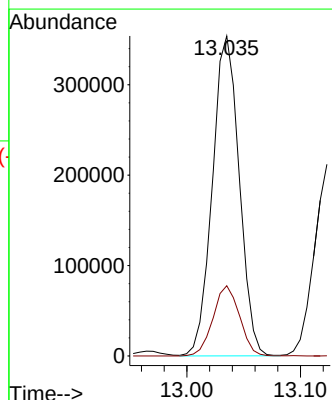
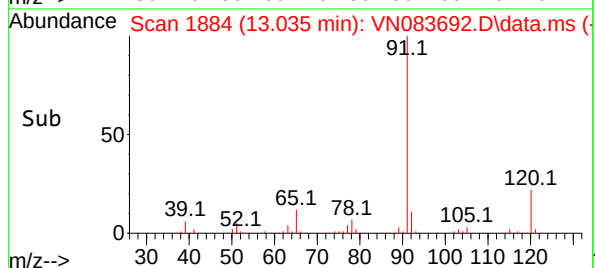
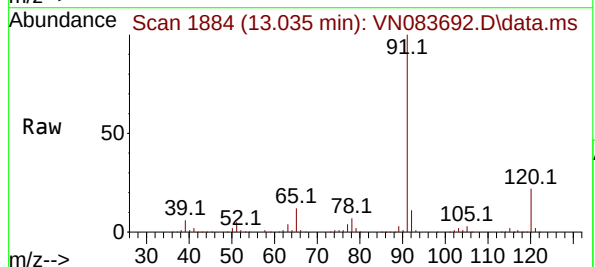
Manual Integrations
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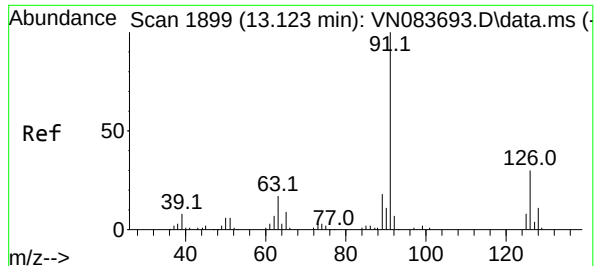
Reviewed By :John Carbone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#74
n-propylbenzene
Concen: 48.812 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 91 Resp: 580804
Ion Ratio Lower Upper
91 100
120 21.6 0.0 43.8





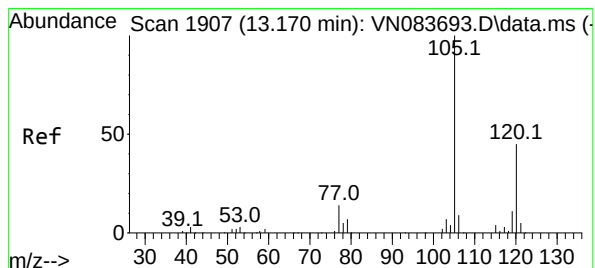
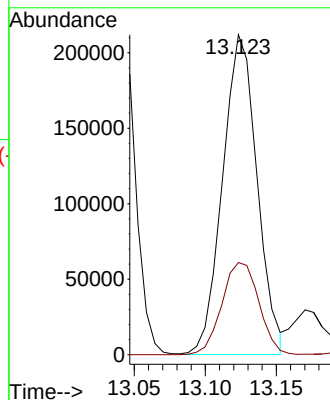
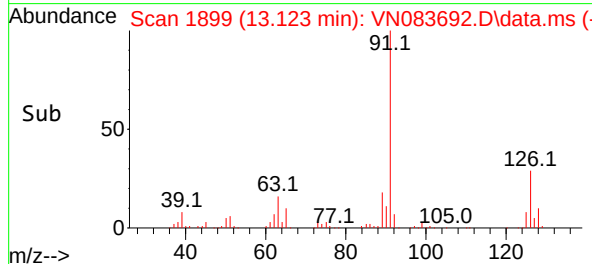
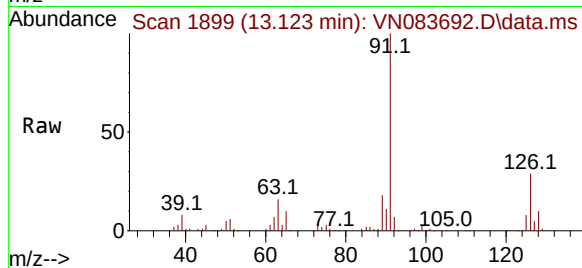
#75
2-Chlorotoluene
Concen: 48.163 ug/l
RT: 13.123 min Scan# 1899
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 91 Resp: 357678
Ion Ratio Lower Upper
91 100
126 30.8 0.0 61.2

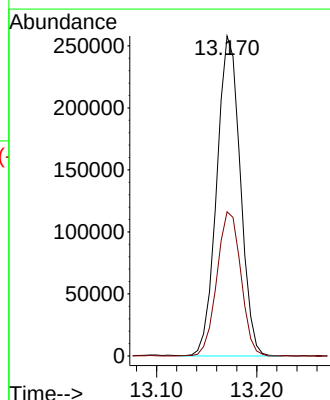
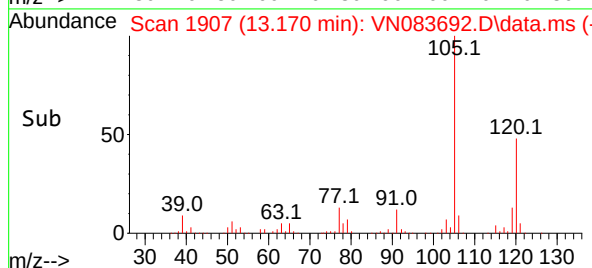
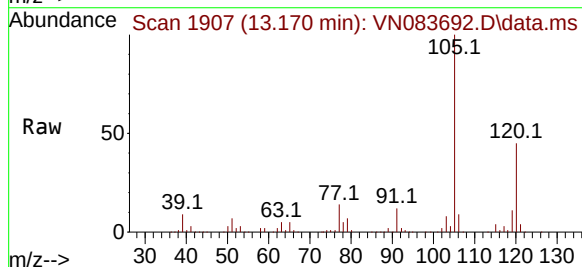
Manual Integrations
APPROVED

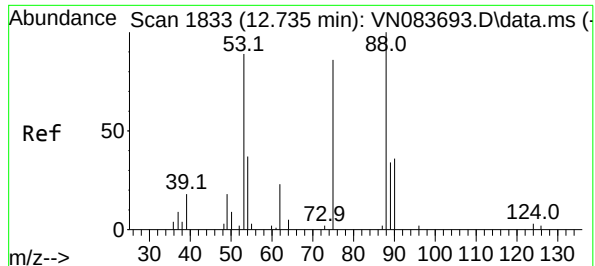
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#76
1,3,5-Trimethylbenzene
Concen: 49.426 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion:105 Resp: 419662
Ion Ratio Lower Upper
105 100
120 45.9 0.0 95.8





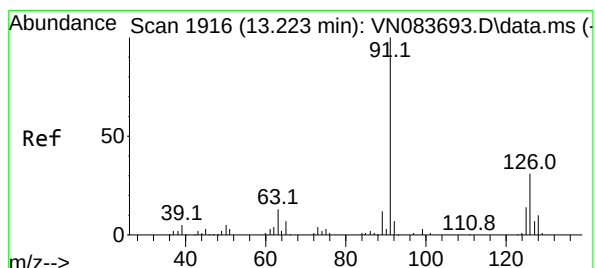
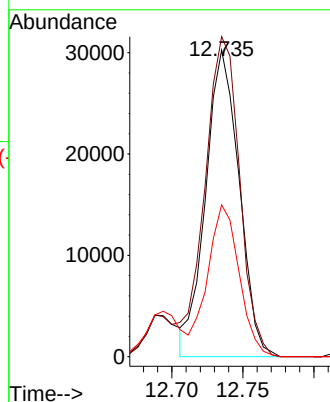
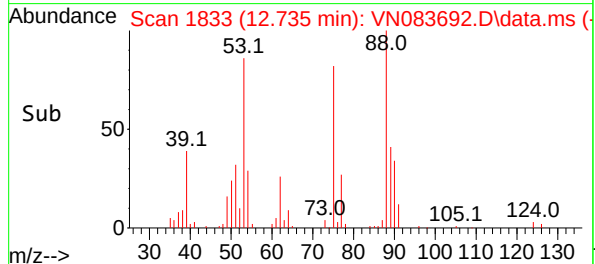
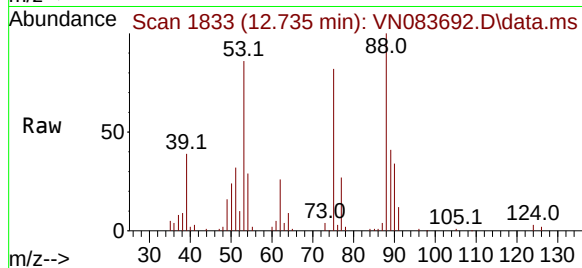
#77
t-1,4-Dichloro-2-butene
Concen: 48.224 ug/l
RT: 12.735 min Scan# 1833
Delta R.T. -0.000 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion: 75 Resp: 4961
Ion Ratio Lower Upper
75 100
53 104.4 45.9 137.7
89 49.5 25.9 77.7

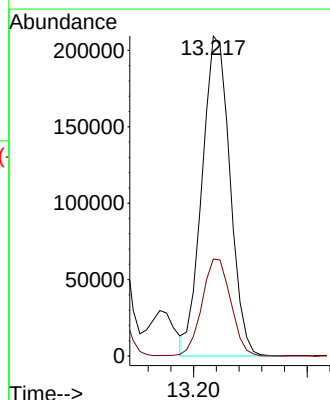
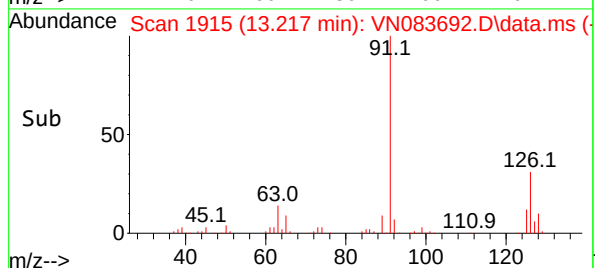
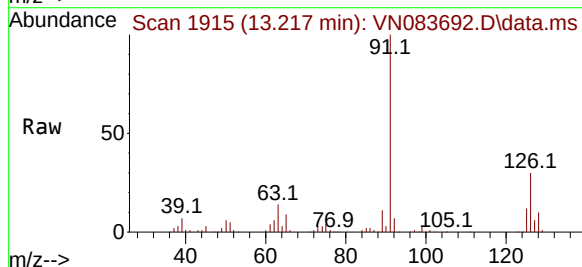
Manual Integrations
APPROVED

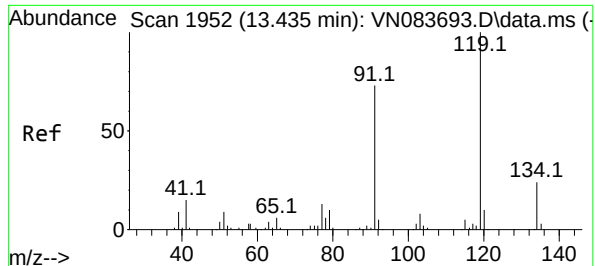
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#78
4-Chlorotoluene
Concen: 47.550 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion: 91 Resp: 358117
Ion Ratio Lower Upper
91 100
126 31.1 0.0 62.8





#79

tert-butylbenzene

Concen: 47.626 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion:119 Resp: 353609

Ion Ratio Lower Upper

119 100

91 73.0 0.0 138.8

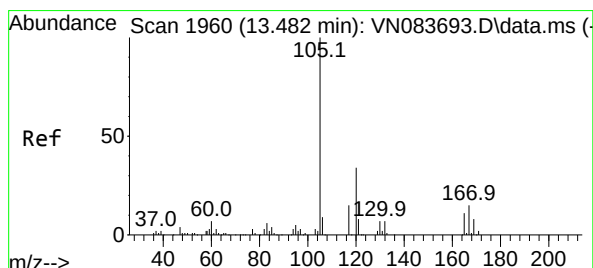
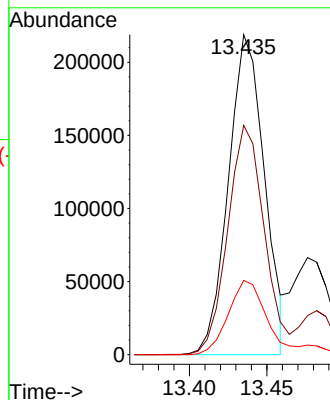
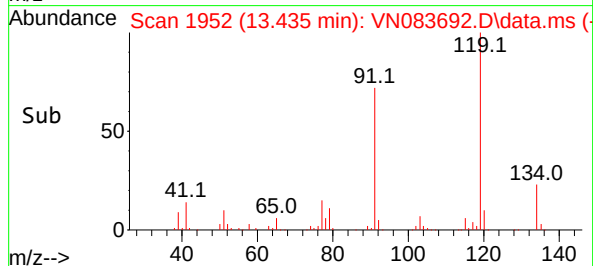
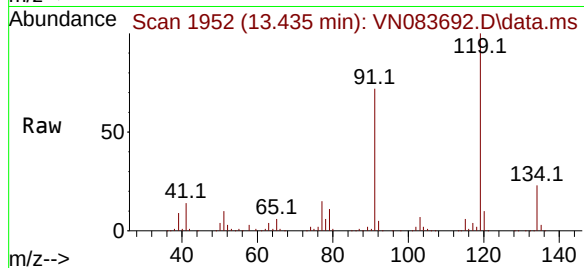
134 24.6 0.0 48.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#80

1,2,4-Trimethylbenzene

Concen: 49.339 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. -0.000 min

Lab File: VN083692.D

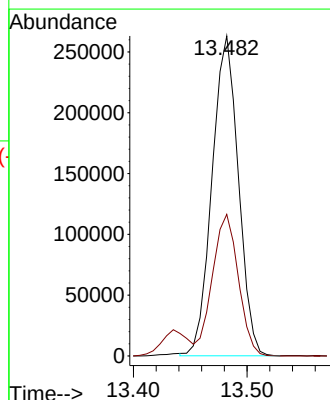
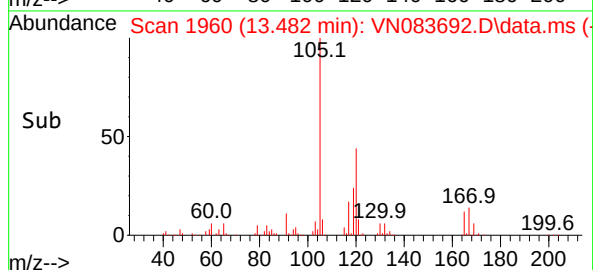
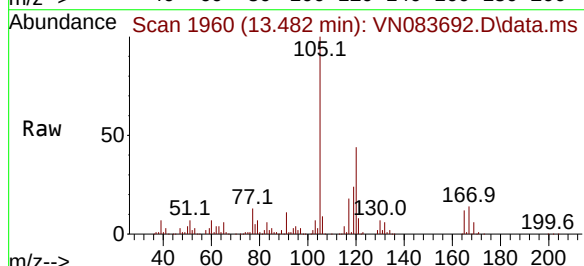
Acq: 06 Sep 2024 12:46

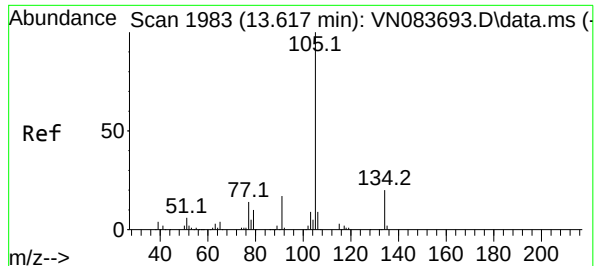
Tgt Ion:105 Resp: 423342

Ion Ratio Lower Upper

105 100

120 43.8 0.0 86.8





#81

sec-Butylbenzene

Concen: 48.897 ug/l

RT: 13.617 min Scan# 1983

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion:105 Resp: 49595

Ion Ratio Lower Upper

105 100

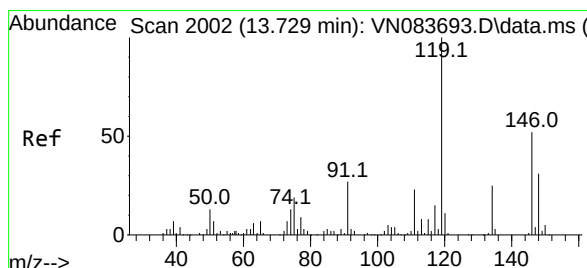
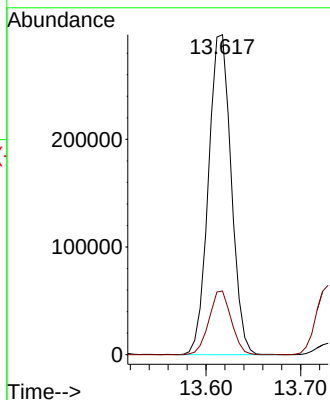
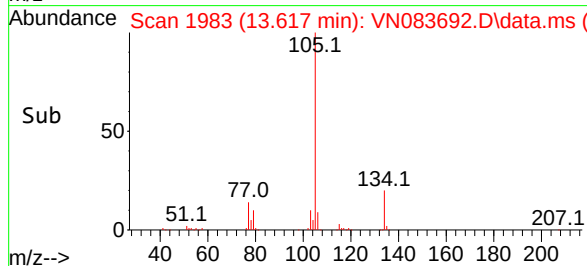
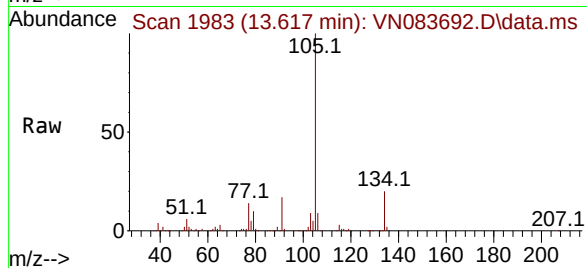
134 19.4 0.0 39.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#82

p-Isopropyltoluene

Concen: 49.262 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

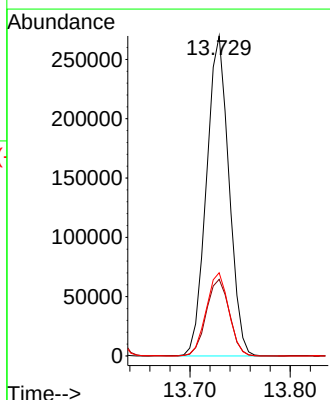
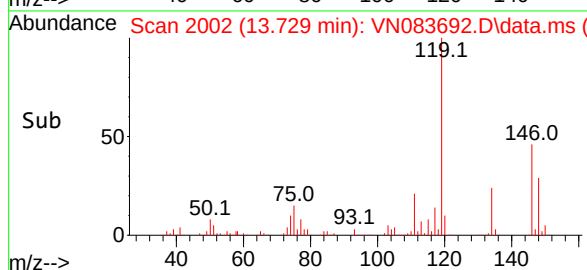
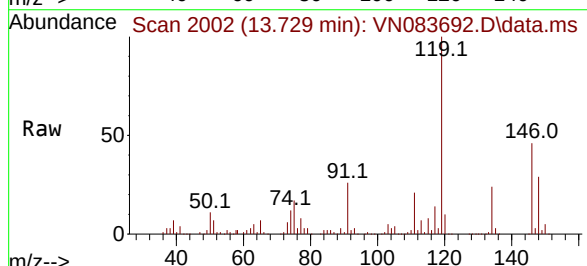
Tgt Ion:119 Resp: 420388

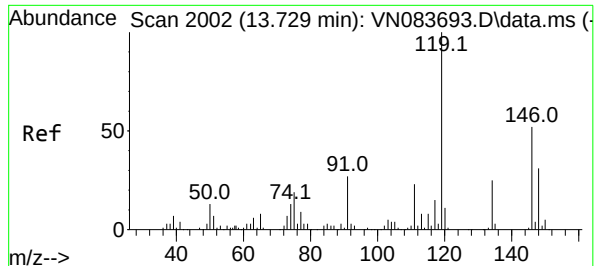
Ion Ratio Lower Upper

119 100

134 24.6 0.0 49.2

91 26.1 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 47.411 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion:146 Resp: 21304

Ion Ratio Lower Upper

146 100

111 43.4 22.4 67.0

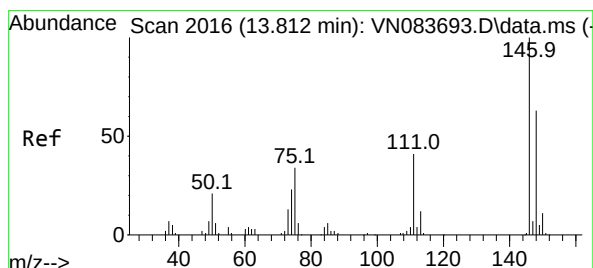
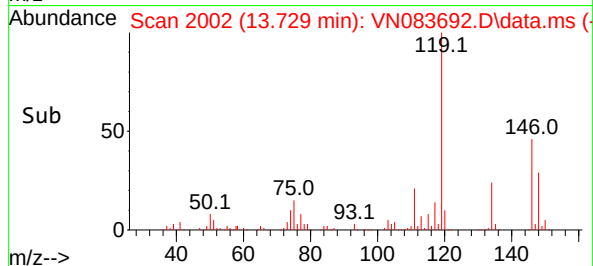
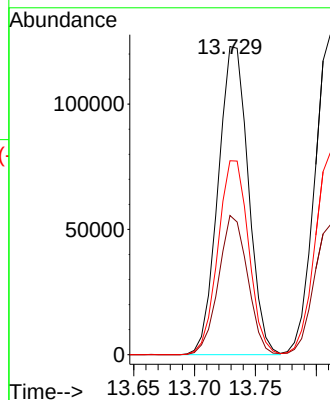
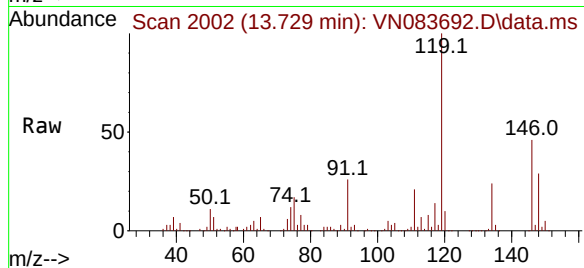
148 63.7 32.1 96.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#84

1,4-Dichlorobenzene

Concen: 47.357 ug/l

RT: 13.811 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

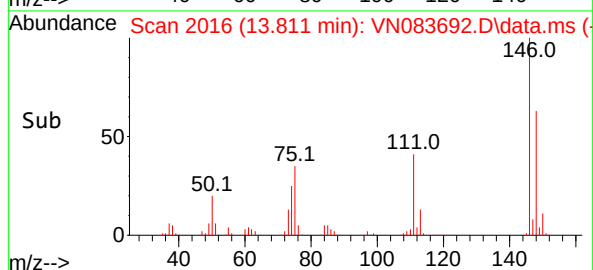
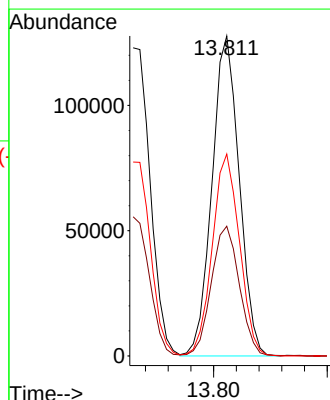
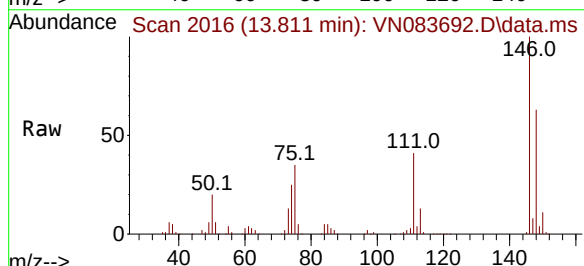
Tgt Ion:146 Resp: 212746

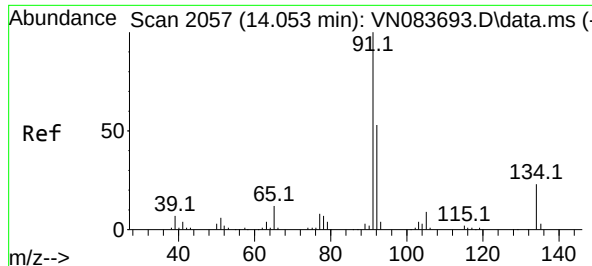
Ion Ratio Lower Upper

146 100

111 41.8 21.3 63.9

148 63.1 31.9 95.5





#85

n-Butylbenzene

Concen: 47.848 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Tgt Ion: 91 Resp: 360329

Ion Ratio Lower Upper

91 100

92 53.2 0.0 105.0

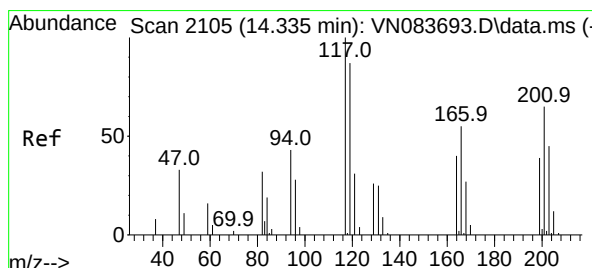
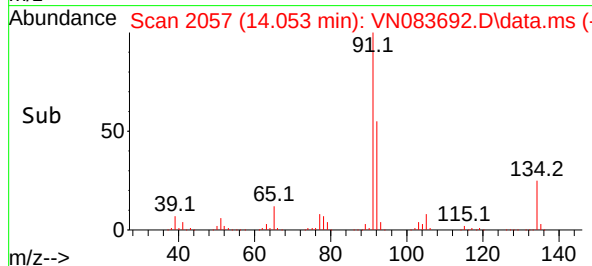
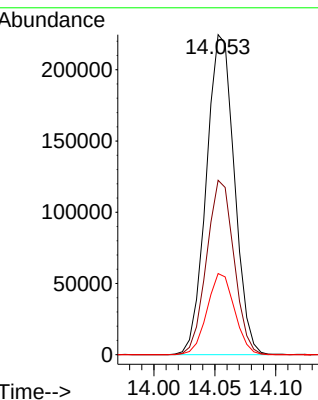
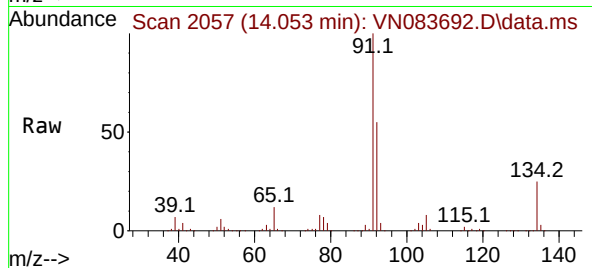
134 24.8 0.0 51.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#86

Hexachloroethane

Concen: 49.803 ug/l

RT: 14.329 min Scan# 2104

Delta R.T. -0.006 min

Lab File: VN083692.D

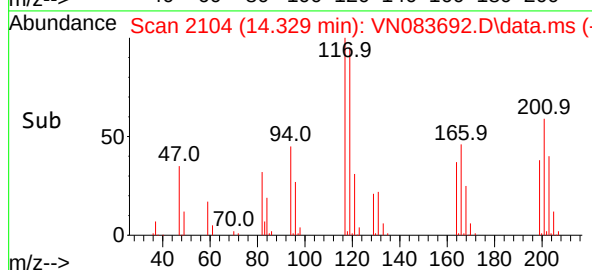
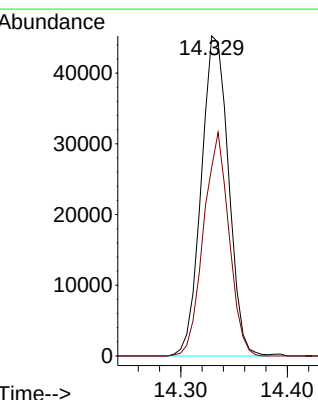
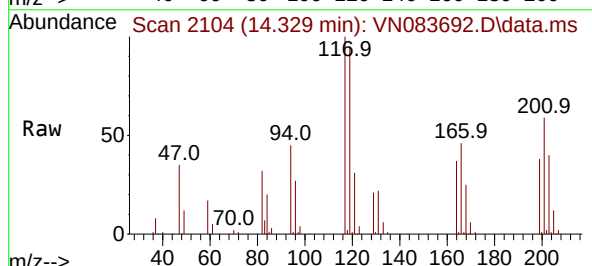
Acq: 06 Sep 2024 12:46

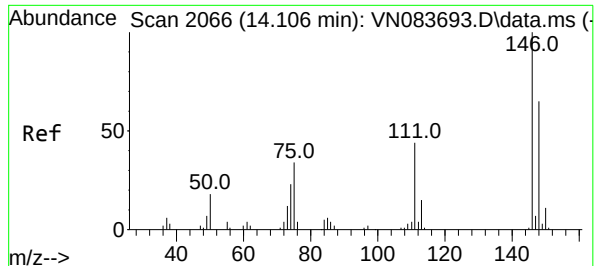
Tgt Ion:117 Resp: 80541

Ion Ratio Lower Upper

117 100

201 65.0 38.0 114.0





#87

1,2-Dichlorobenzene

Concen: 48.315 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion:146 Resp: 21069

Ion Ratio Lower Upper

146 100

111 44.9 22.6 67.8

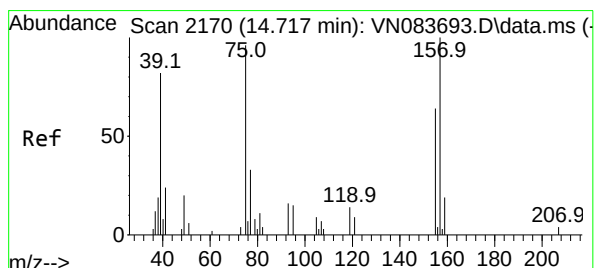
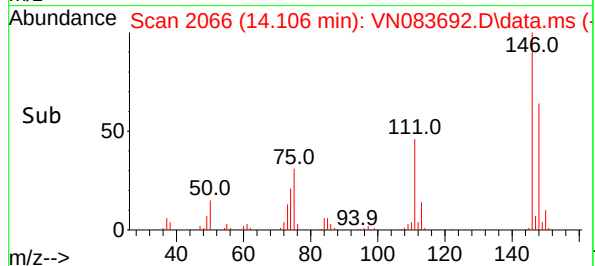
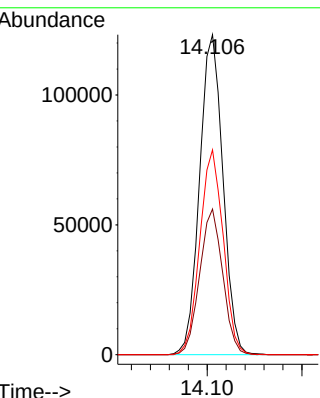
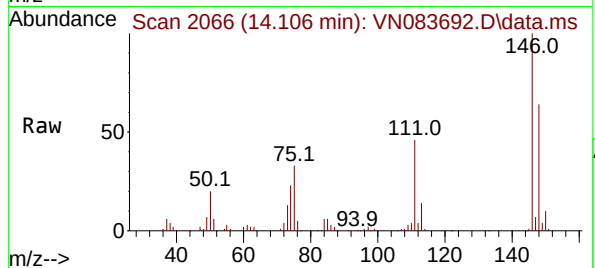
148 64.0 31.3 93.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 49.388 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

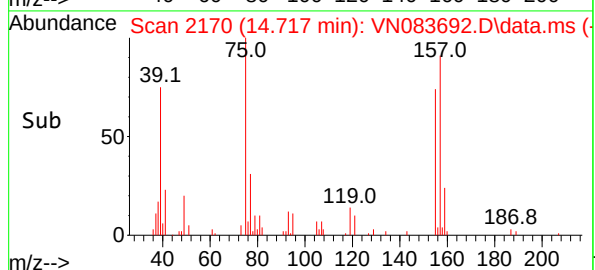
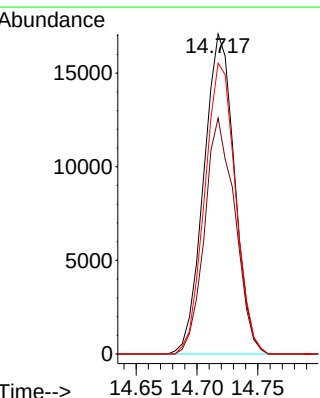
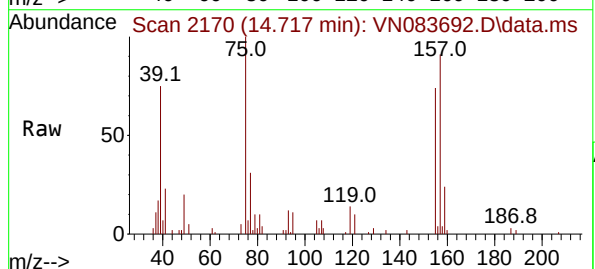
Tgt Ion: 75 Resp: 30132

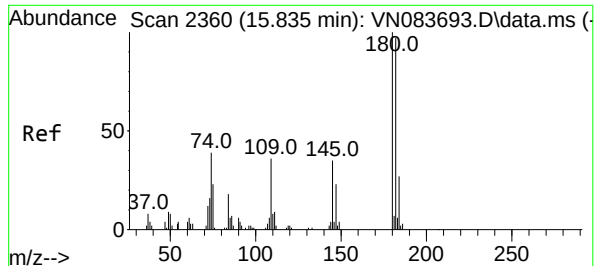
Ion Ratio Lower Upper

75 100

155 72.7 61.7 92.5

157 90.8 83.6 125.4





#89

1,2,4-Trichlorobenzene

Concen: 47.397 ug/l

RT: 15.841 min Scan# 2360

Delta R.T. 0.006 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC050

Tgt Ion:180 Resp: 113238

Ion Ratio Lower Upper

180 100

182 95.3 76.4 114.6

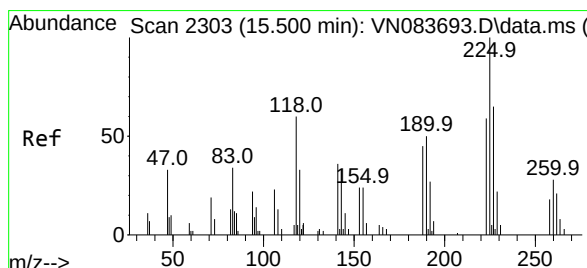
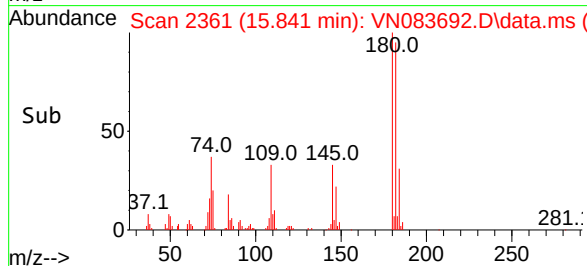
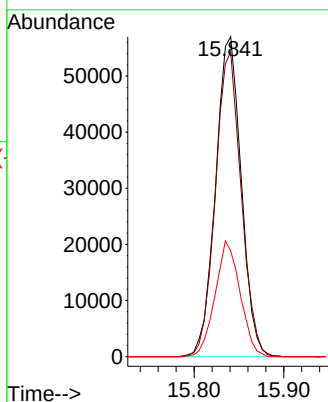
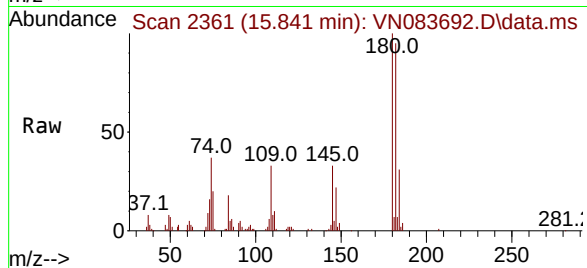
145 35.2 28.4 42.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#90

Hexachlorobutadiene

Concen: 48.403 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN083692.D

Acq: 06 Sep 2024 12:46

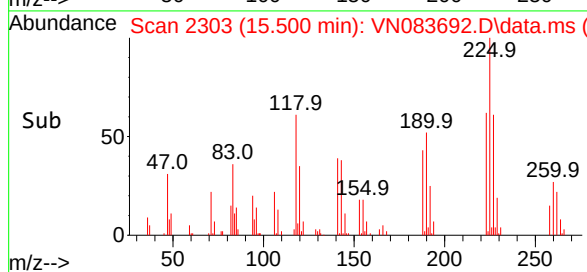
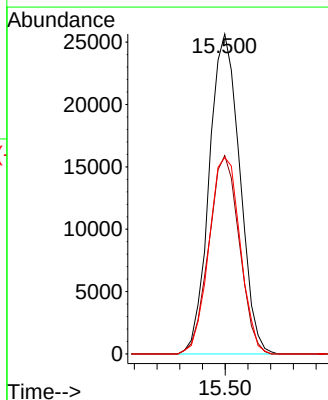
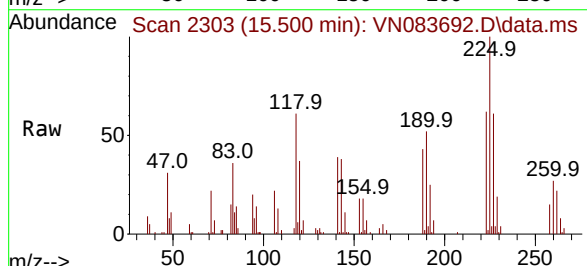
Tgt Ion:225 Resp: 47864

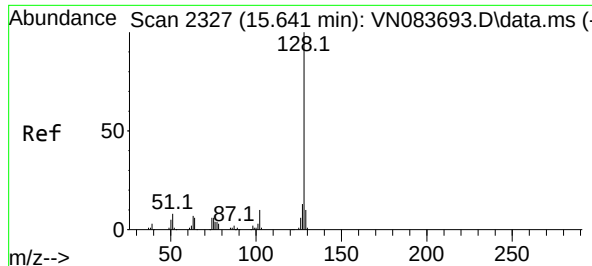
Ion Ratio Lower Upper

225 100

223 61.8 0.0 126.6

227 62.8 0.0 126.6





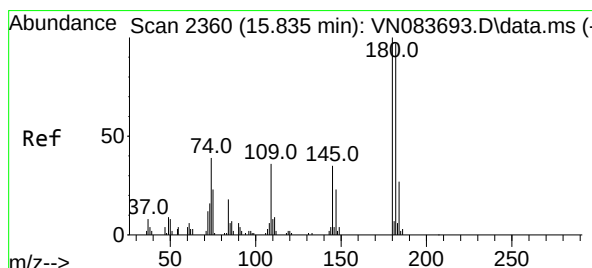
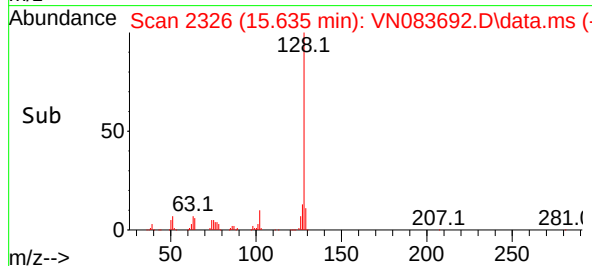
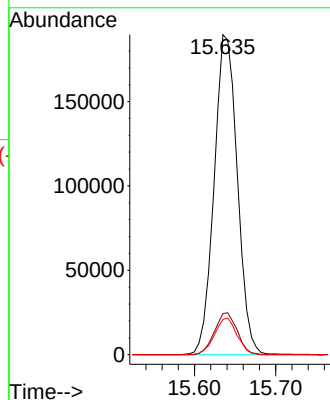
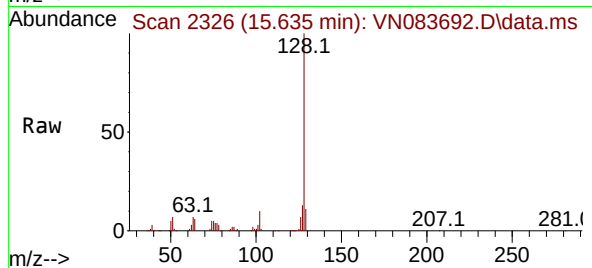
#91
Naphthalene
Concen: 48.216 ug/l
RT: 15.635 min Scan# 2326
Delta R.T. -0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Tgt Ion:128 Resp: 376599
Ion Ratio Lower Upper
128 100
127 12.9 10.6 16.0
129 11.1 8.6 13.0

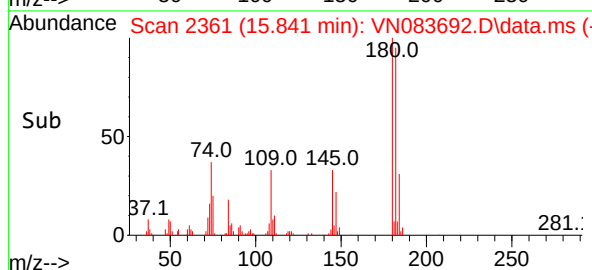
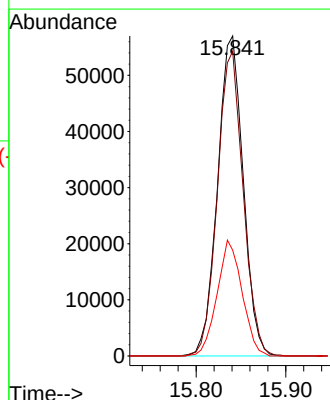
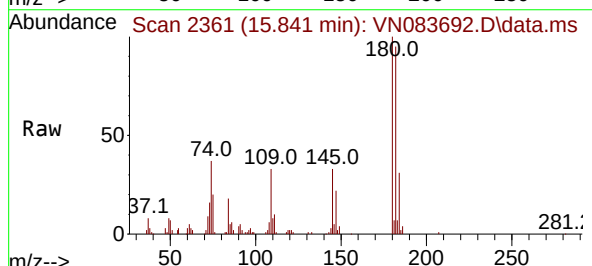
Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#92
1,2,3-Trichlorobenzene
Concen: 47.397 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN083692.D
Acq: 06 Sep 2024 12:46

Tgt Ion:180 Resp: 113238
Ion Ratio Lower Upper
180 100
182 95.3 0.0 191.0
145 35.2 0.0 71.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083693.D
 Acq On : 06 Sep 2024 13:10
 Operator : JC\MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC020

Quant Time: Sep 06 23:33:59 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:27:49 2024
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 09/09/2024
 Supervised By : Mahesh Dadoda 09/09/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.812	128	29544	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	176233	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	158496	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	81774	30.281	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.933%			
60) 4-Bromofluorobenzene	12.847	95	79655	29.160	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 97.200%			
63) Toluene-d8	10.565	98	219528	29.913	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 99.700%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.124	85	39089	19.757	ug/l	99
3) Chloromethane	2.359	50	40384	19.645	ug/l	97
4) Vinyl Chloride	2.512	62	41377	19.579	ug/l	96
5) Bromomethane	2.906	94	23544	19.940	ug/l	96
6) Chloroethane	3.083	64	27107	19.155	ug/l	91
7) Trichlorofluoromethane	3.465	101	68040	19.204	ug/l	91
8) Diethyl Ether	3.953	74	23371	19.413	ug/l	85
9) 1,1,2-Trichlorotrifluo...	4.359	101	36179	19.010	ug/l	95
10) 1,1-Dichloroethene	4.324	96	35100	19.115	ug/l	87
11) Methyl Iodide	4.583	142	48017	19.252	ug/l	96
12) Methyl Acetate	5.024	43	40812	18.430	ug/l #	83
13) Acrolein	4.177	56	34448	106.590	ug/l	99
14) Acrylonitrile	5.712	53	85727	95.660	ug/l	98
15) Acetone	4.430	58	26817	90.209	ug/l	74
16) Carbon Disulfide	4.700	76	100907	19.445	ug/l	100
17) Allyl chloride	5.012	41	61310	19.019	ug/l	88
18) Methylene Chloride	5.265	84	39051	19.439	ug/l	91
19) trans-1,2-Dichloroethene	5.777	96	37248	19.572	ug/l	90
20) Diisopropyl ether	6.671	45	121252	18.646	ug/l	96
21) 1,1-Dichloroethane	6.565	63	71266	19.195	ug/l	96
22) cis-1,2-Dichloroethene	7.483	96	45278	19.548	ug/l	94
23) tert-Butyl Alcohol	5.536	59	32406	98.542	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	127165	19.488	ug/l #	80
25) Chloroform	7.965	83	76545	19.454	ug/l	96
26) Cyclohexane	8.253	56	62769	19.195	ug/l #	89
29) 1,1-Dichloropropene	8.365	75	52691	18.850	ug/l	98
30) 2-Butanone	7.483	43	122833	93.220	ug/l	95
31) 2,2-Dichloropropane	7.488	77	66330	18.612	ug/l #	81
32) 1,1,1-Trichloroethane	8.165	97	70442	18.870	ug/l	98
33) Carbon Tetrachloride	8.359	117	60200	18.621	ug/l	98
34) Benzene	8.606	78	161311	19.233	ug/l	97
35) Methacrylonitrile	7.777	41	28693	19.371	ug/l	93
36) 1,2-Dichloroethane	8.671	62	59759	18.953	ug/l #	94
37) Trichloroethene	9.353	130	36370	18.466	ug/l	92
38) Methylcyclohexane	9.600	83	61729	18.445	ug/l	95
39) 1,2-Dichloropropane	9.624	63	38032	18.841	ug/l	96
40) Dibromomethane	9.712	93	28687	19.436	ug/l	93
41) Bromodichloromethane	9.888	83	58417	18.613	ug/l	98
42) Vinyl Acetate	6.600	43	474357	87.559	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083693.D
 Acq On : 06 Sep 2024 13:10
 Operator : JC\MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC020

Quant Time: Sep 06 23:33:59 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:27:49 2024
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 09/09/2024
 Supervised By : Mahesh Dadoda 09/09/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	50568	19.067	ug/l	98
44) Isopropyl Acetate	8.688	43	86297	18.813	ug/l	92
45) 1,4-Dioxane	9.700	88	14381	401.944	ug/l #	91
46) Methyl methacrylate	9.682	41	40975	18.454	ug/l	82
47) n-amyl Acetate	12.494	43	75311	18.534	ug/l	90
48) t-1,3-Dichloropropene	10.835	75	61220	18.544	ug/l	96
49) cis-1,3-Dichloropropene	10.312	75	63240	18.419	ug/l #	83
50) 1,1,2-Trichloroethane	11.018	97	35468	18.885	ug/l	94
51) Ethyl methacrylate	10.871	69	61759	19.248	ug/l	74
52) 1,3-Dichloropropane	11.159	76	64193	18.927	ug/l	98
53) Dibromochloromethane	11.359	129	41381	18.370	ug/l	99
54) 1,2-Dibromoethane	11.465	107	36461	18.766	ug/l	97
55) 2-Chloroethyl vinyl ether	10.159	63	134587	105.251	ug/l	98
56) Bromoform	12.576	173	26256	18.346	ug/l #	97
58) 4-Methyl-2-Pentanone	10.447	43	241862	96.239	ug/l #	88
59) 2-Hexanone	11.194	43	179424	94.485	ug/l	88
61) Tetrachloroethene	11.100	164	30715	18.311	ug/l	92
62) Toluene	10.629	91	172549	18.940	ug/l	100
64) Chlorobenzene	11.888	112	107119	18.991	ug/l	97
65) 1,1,1,2-Tetrachloroethane	11.959	131	36844	18.751	ug/l	98
66) Ethyl Benzene	11.965	91	190134	18.353	ug/l	99
67) m/p-Xylenes	12.070	106	142126	37.289	ug/l	96
68) o-Xylene	12.394	106	70297	19.056	ug/l	97
69) Styrene	12.412	104	116436	18.681	ug/l	99
70) Isopropylbenzene	12.694	105	179621	18.451	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	51111	19.223	ug/l	99
72) 1,2,3-Trichloropropane	12.994	75	44699m	19.212	ug/l	
73) Bromobenzene	12.976	156	41815	18.701	ug/l	97
74) n-propylbenzene	13.035	91	210183	18.444	ug/l	100
75) 2-Chlorotoluene	13.123	91	132707	18.658	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	153570	18.885	ug/l	97
77) t-1,4-Dichloro-2-butene	12.735	75	18032	18.300	ug/l	88
78) 4-Chlorotoluene	13.223	91	133498	18.508	ug/l	98
79) tert-butylbenzene	13.435	119	135515	19.057	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	152609	18.571	ug/l	100
81) sec-Butylbenzene	13.617	105	176163	18.135	ug/l	99
82) p-Isopropyltoluene	13.729	119	148197	18.132	ug/l	98
83) 1,3-Dichlorobenzene	13.729	146	79779	18.538	ug/l	98
84) 1,4-Dichlorobenzene	13.812	146	79934	18.579	ug/l	99
85) n-Butylbenzene	14.053	91	127684	17.704	ug/l	97
86) Hexachloroethane	14.335	117	28237	18.231	ug/l	90
87) 1,2-Dichlorobenzene	14.106	146	77004	18.437	ug/l	97
88) 1,2-Dibromo-3-Chloropr...	14.717	75	10937	18.717	ug/l	94
89) 1,2,4-Trichlorobenzene	15.835	180	41851	18.290	ug/l	99
90) Hexachlorobutadiene	15.500	225	16856	17.798	ug/l	95
91) Naphthalene	15.641	128	137355	18.362	ug/l	99
92) 1,2,3-Trichlorobenzene	15.835	180	41851	18.290	ug/l	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083693.D
 Acq On : 06 Sep 2024 13:10
 Operator : JC\MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024

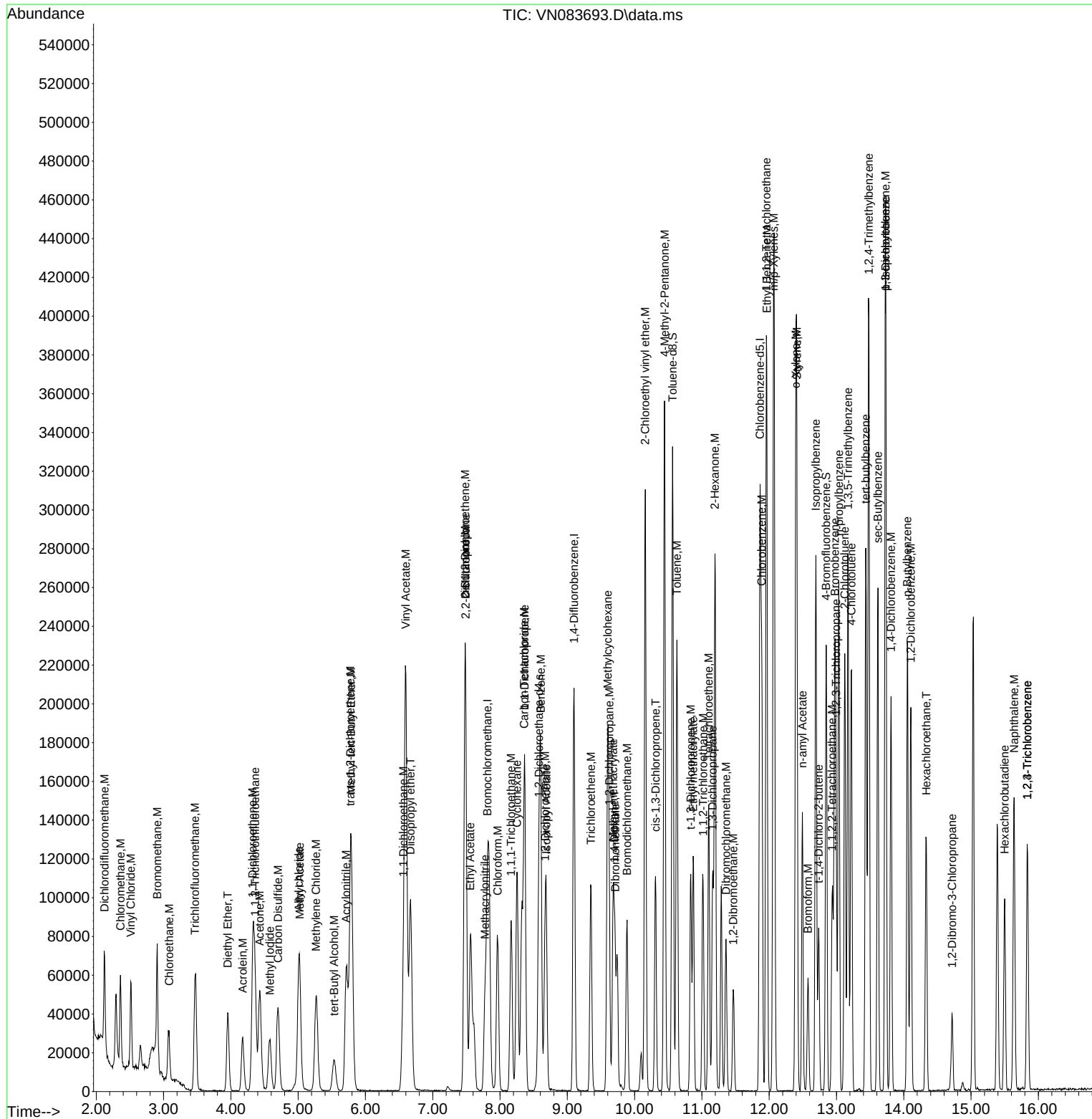
Quant Time: Sep 06 23:33:59 2024

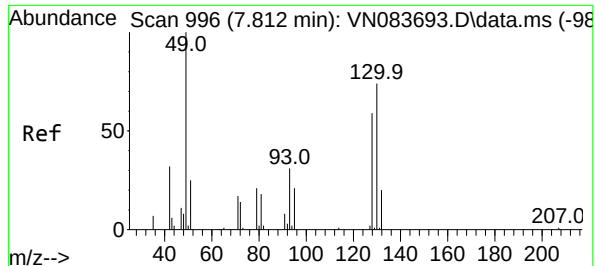
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Sep 06 23:27:49 2024

Response via : Initial Calibration





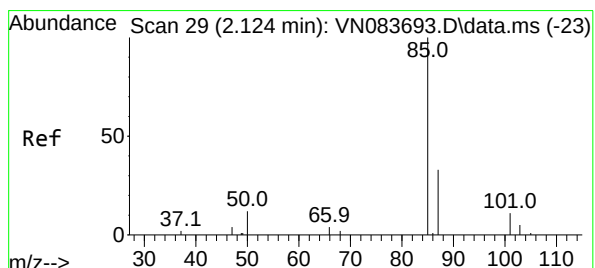
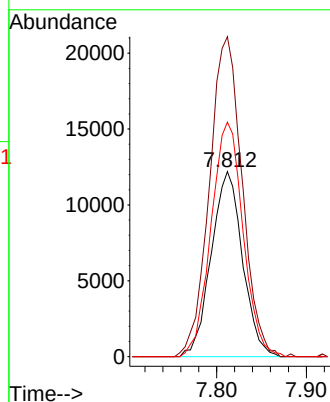
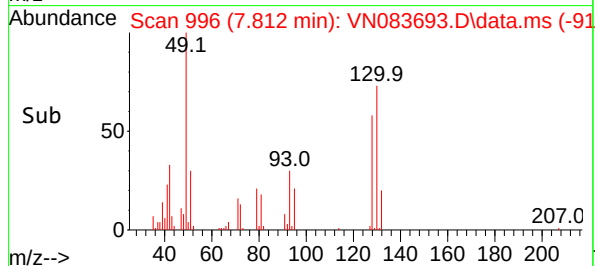
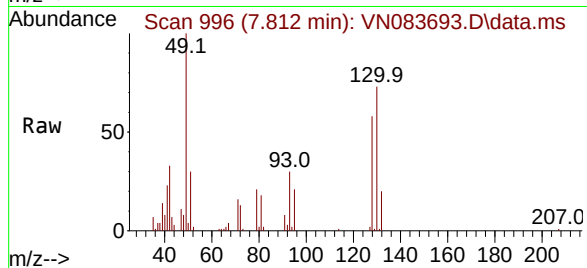
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion	Ratio	Lower	Upper
128	100		
49	180.2	0.0	403.7
130	129.8	0.0	323.3

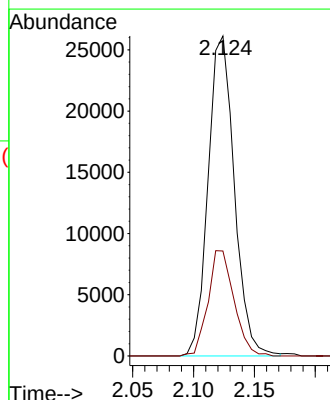
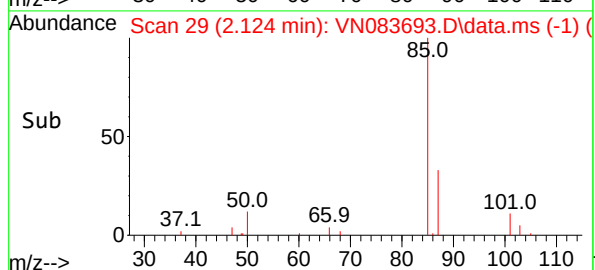
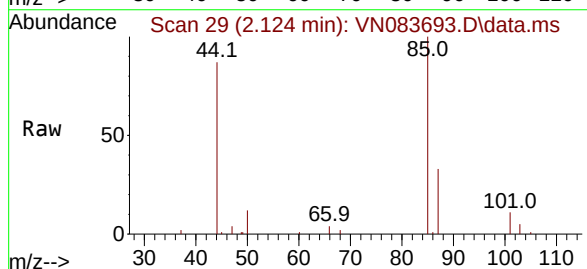
Manual Integrations
APPROVED

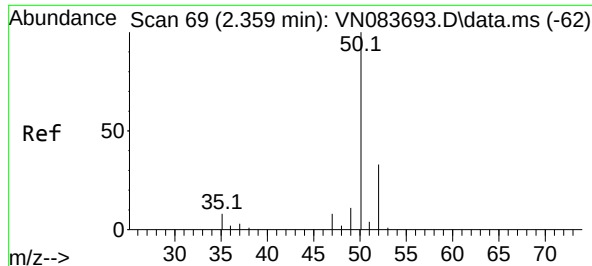
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#2
Dichlorodifluoromethane
Concen: 19.757 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.8	16.8	50.3





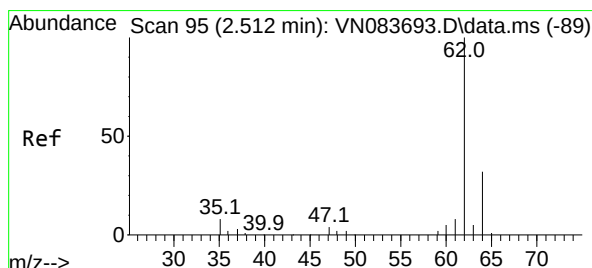
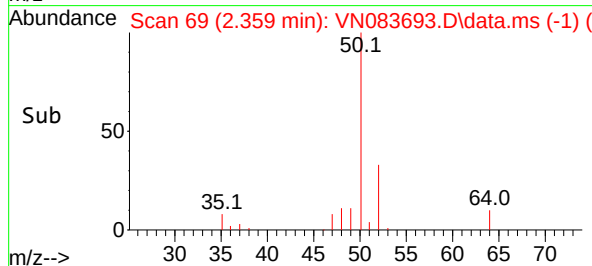
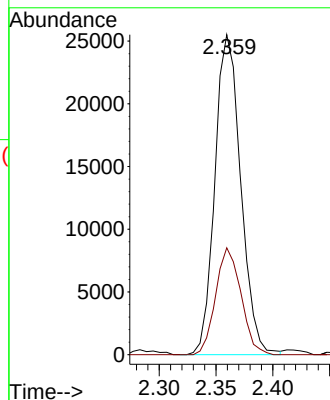
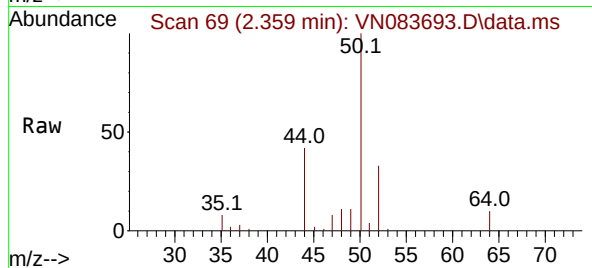
#3
Chloromethane
Concen: 19.645 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion: 50 Resp: 40384
Ion Ratio Lower Upper
50 100
52 33.4 25.4 38.0

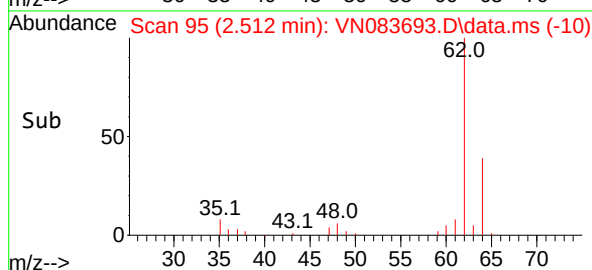
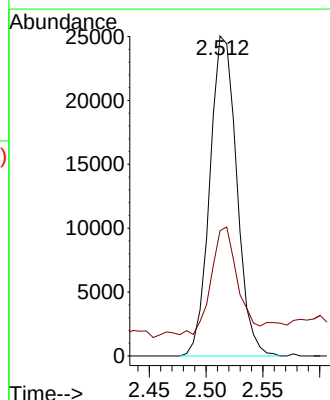
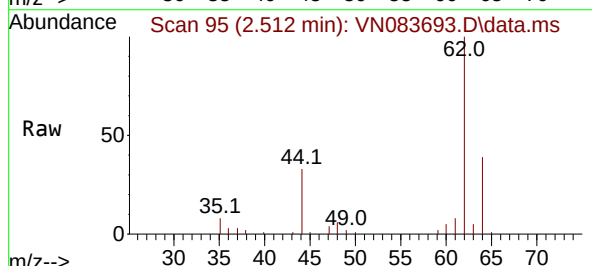
Manual Integrations
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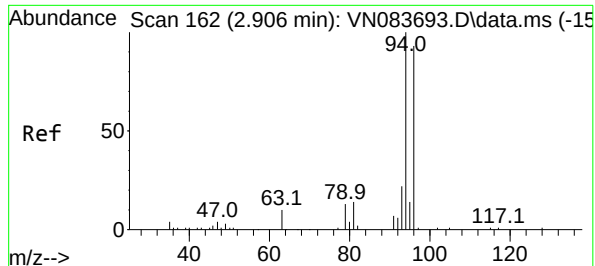
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#4
Vinyl Chloride
Concen: 19.579 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion: 62 Resp: 41377
Ion Ratio Lower Upper
62 100
64 32.5 24.1 36.1





#5

Bromomethane

Concen: 19.940 ug/l

RT: 2.906 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 94 Resp: 23544

Ion Ratio Lower Upper

94 100

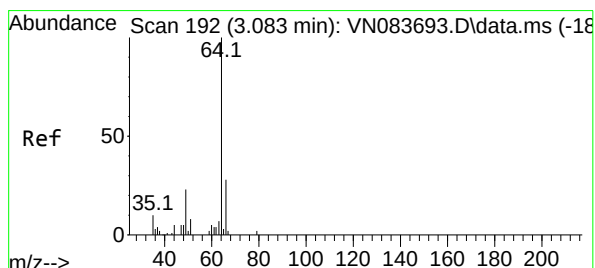
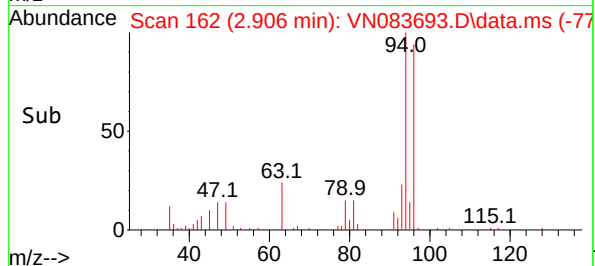
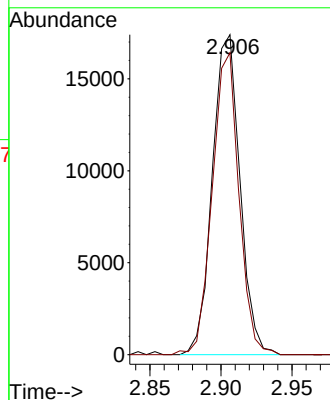
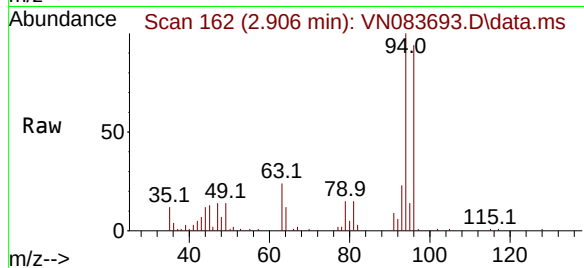
96 94.3 72.8 109.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#6

Chloroethane

Concen: 19.155 ug/l

RT: 3.083 min Scan# 192

Delta R.T. 0.000 min

Lab File: VN083693.D

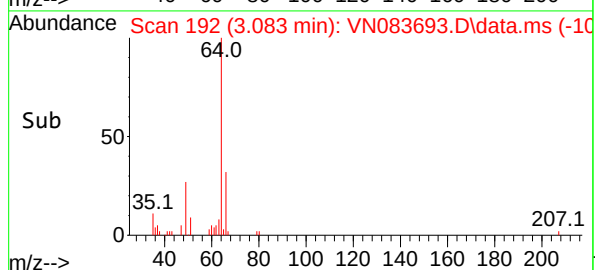
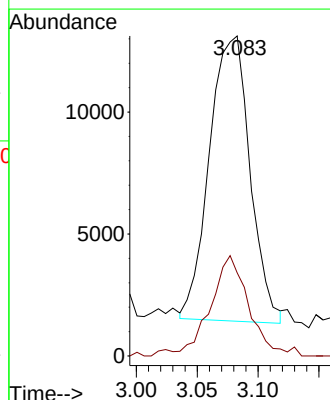
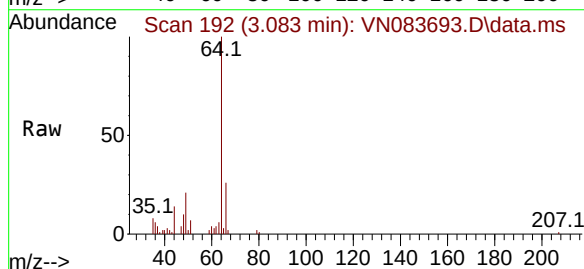
Acq: 06 Sep 2024 13:10

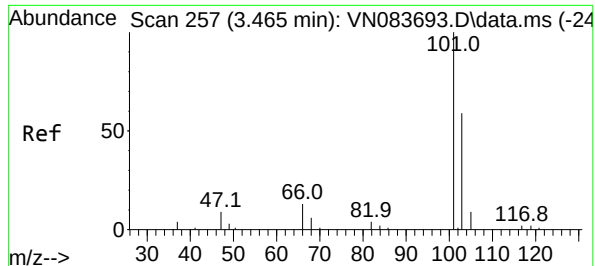
Tgt Ion: 64 Resp: 27107

Ion Ratio Lower Upper

64 100

66 28.4 26.7 40.1





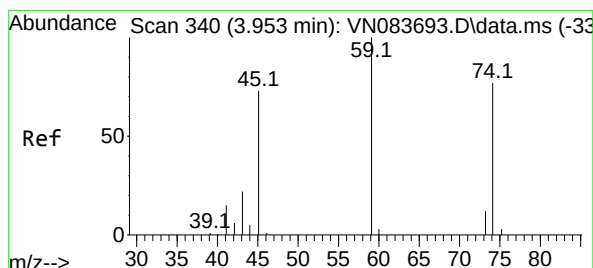
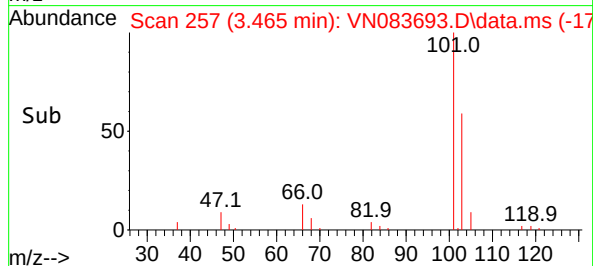
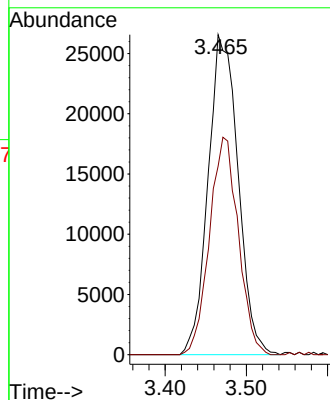
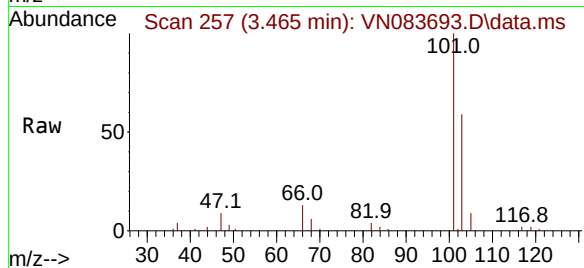
#7
Trichlorofluoromethane
Concen: 19.204 ug/l
RT: 3.465 min Scan# 257
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion:101 Resp: 68040
Ion Ratio Lower Upper
101 100
103 58.9 53.0 79.4

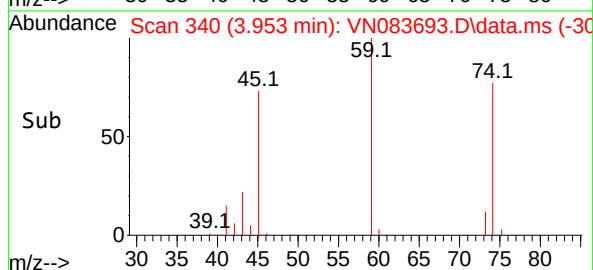
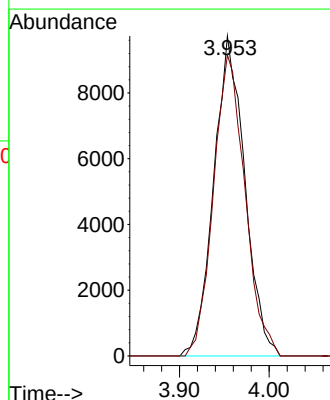
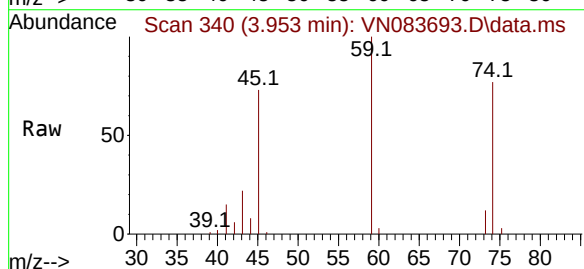
Manual Integrations
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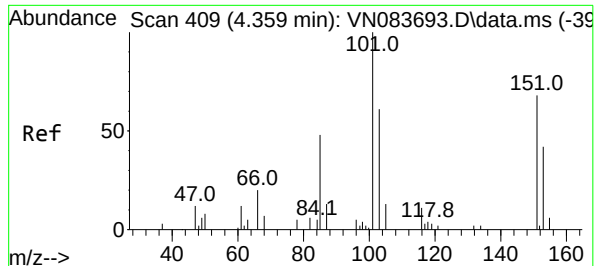
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#8
Diethyl Ether
Concen: 19.413 ug/l
RT: 3.953 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion: 74 Resp: 23371
Ion Ratio Lower Upper
74 100
45 95.3 16.4 147.4





#9

1,1,2-Trichlorotrifluoroethane

Concen: 19.010 ug/l

RT: 4.359 min Scan# 409

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

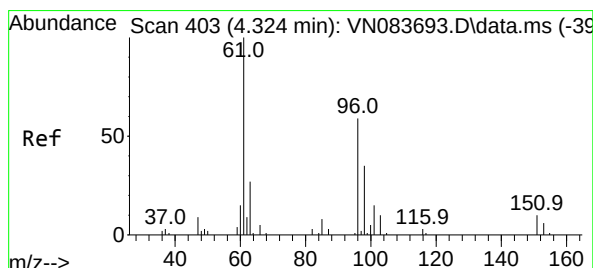
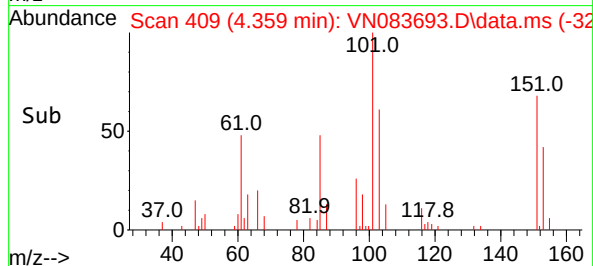
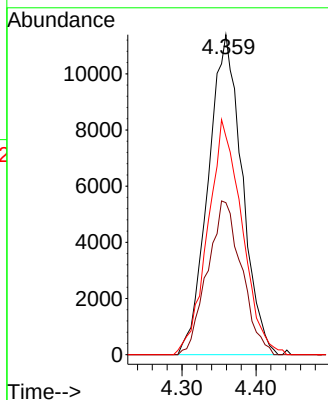
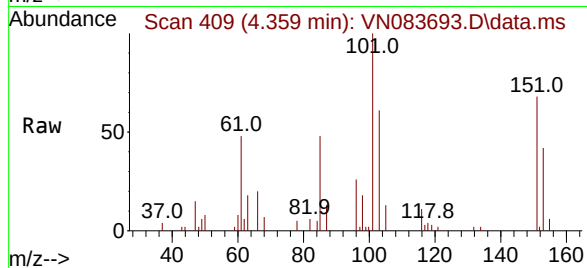
Tgt Ion	101	Resp	36179
Ion Ratio	Lower	Upper	
101	100		
85	48.4	0.0	90.6
151	74.1	0.0	157.6

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#10

1,1-Dichloroethene

Concen: 19.115 ug/l

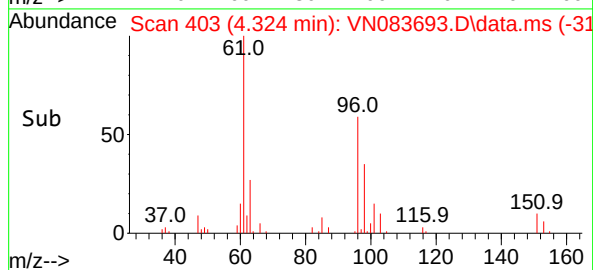
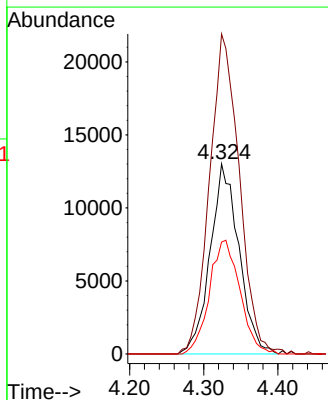
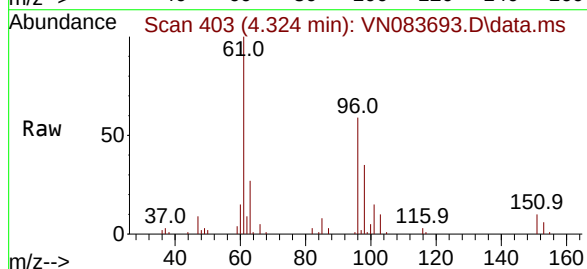
RT: 4.324 min Scan# 403

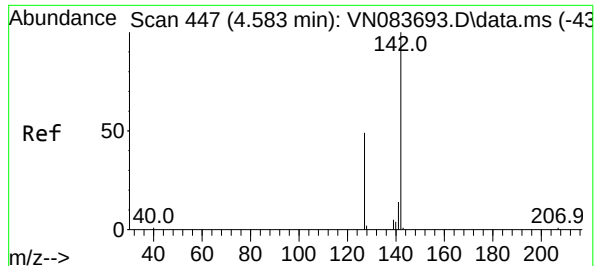
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion	96	Resp	35100
Ion Ratio	Lower	Upper	
96	100		
61	168.3	117.6	176.4
98	58.8	48.4	72.6





#11

Methyl Iodide

Concen: 19.252 ug/l

RT: 4.583 min Scan# 447

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

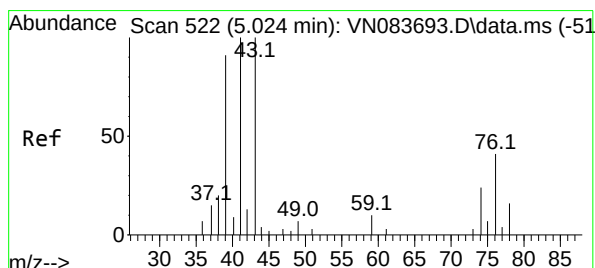
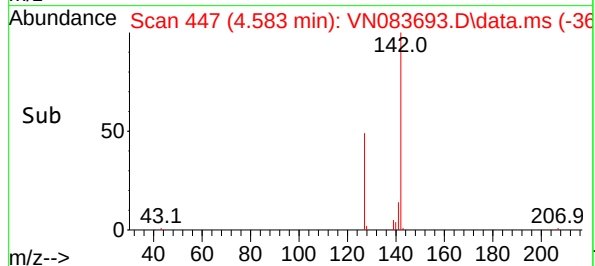
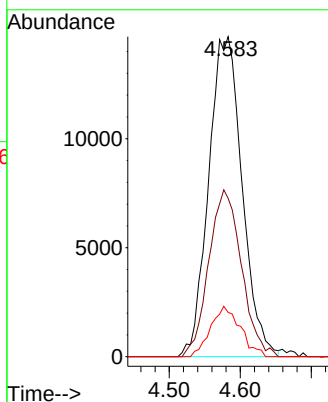
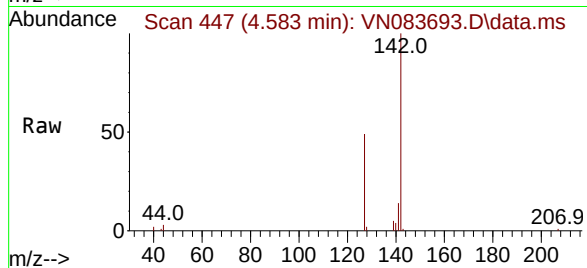
VSTDICCC020

Tgt Ion:	142	Resp:	4801
Ion	Ratio	Lower	Upper
142	100		
127	50.0	26.3	78.9
141	14.0	8.3	24.9

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#12

Methyl Acetate

Concen: 18.430 ug/l

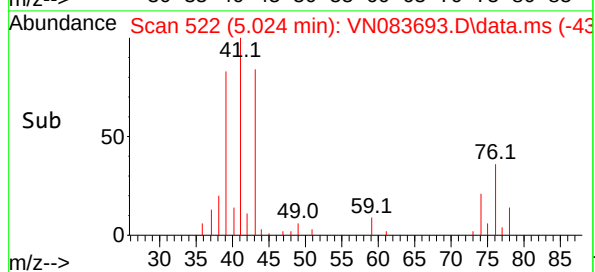
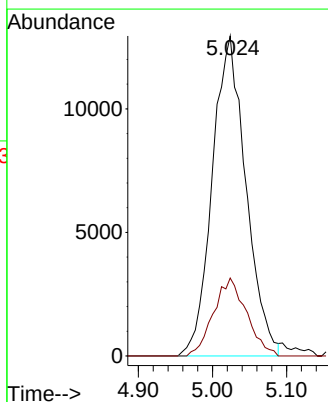
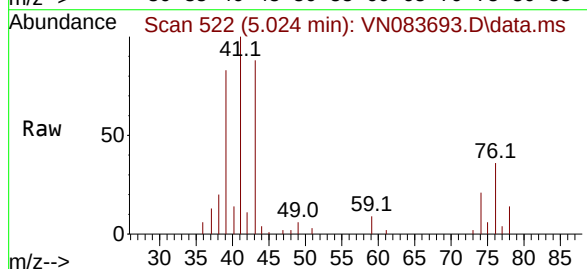
RT: 5.024 min Scan# 522

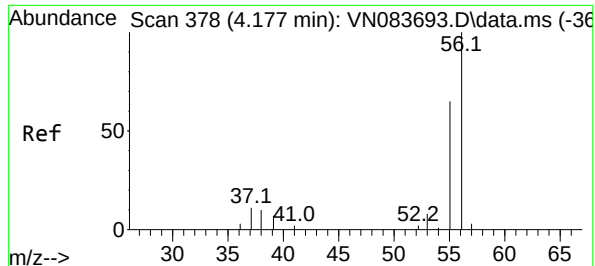
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	43	Resp:	40812
Ion	Ratio	Lower	Upper
43	100		
74	24.8	27.7	41.5#





#13

Acrolein

Concen: 106.590 ug/l

RT: 4.177 min Scan# 31

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 56 Resp: 3444

Ion Ratio Lower Upper

56 100

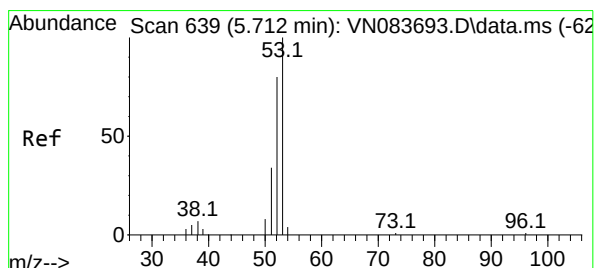
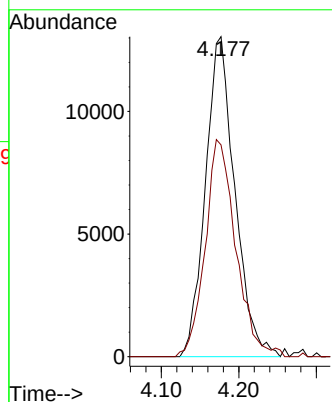
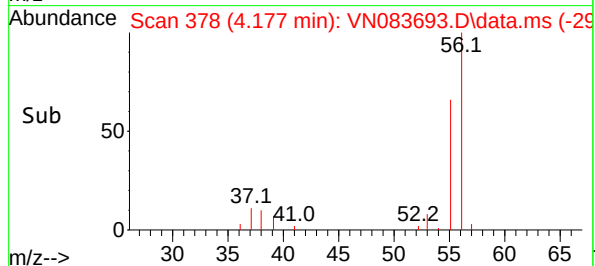
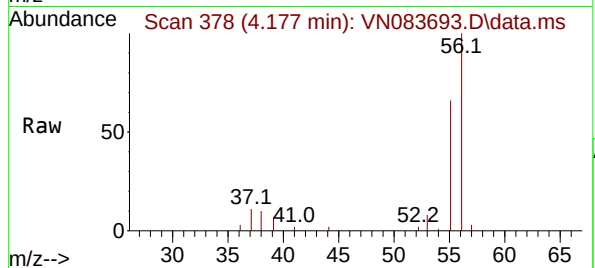
55 69.9 55.5 83.3

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#14

Acrylonitrile

Concen: 95.660 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

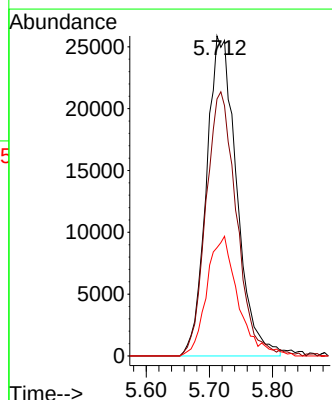
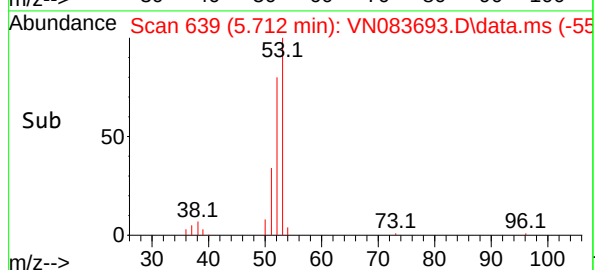
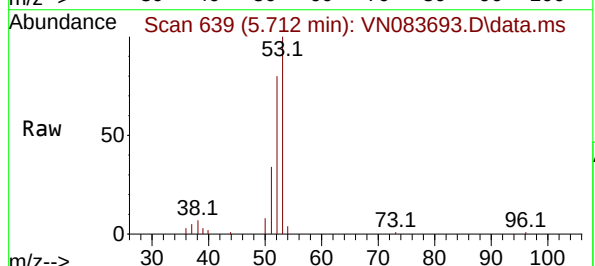
Tgt Ion: 53 Resp: 85727

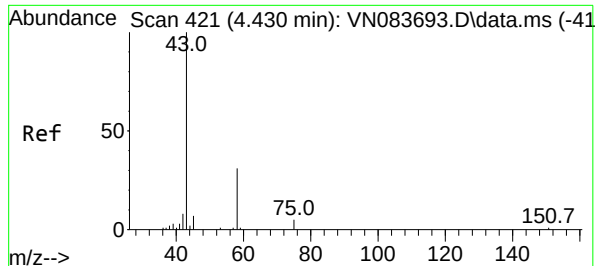
Ion Ratio Lower Upper

53 100

52 83.1 41.3 123.9

51 37.0 16.8 50.3





#15

Acetone

Concen: 90.209 ug/l

RT: 4.430 min Scan# 41

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 58 Resp: 2681

Ion Ratio Lower Upper

58 100

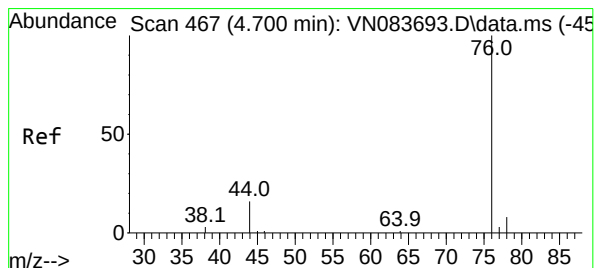
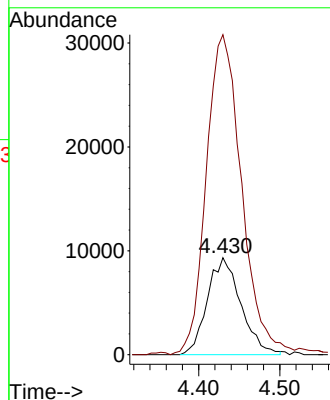
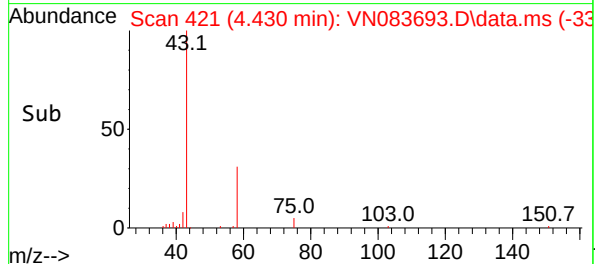
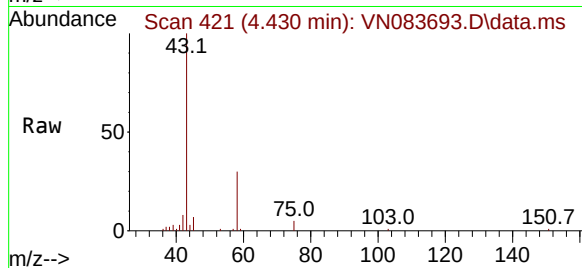
43 326.7 223.1 334.7

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#16

Carbon Disulfide

Concen: 19.445 ug/l

RT: 4.700 min Scan# 467

Delta R.T. 0.000 min

Lab File: VN083693.D

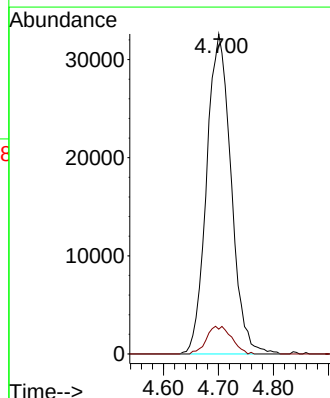
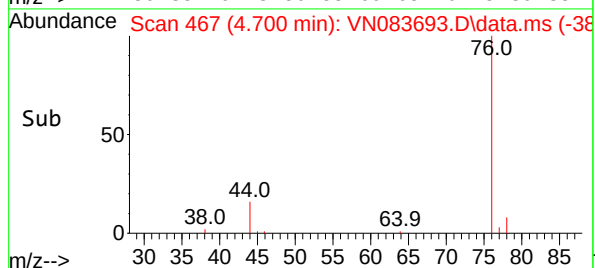
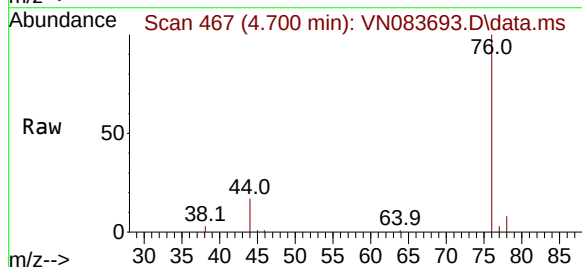
Acq: 06 Sep 2024 13:10

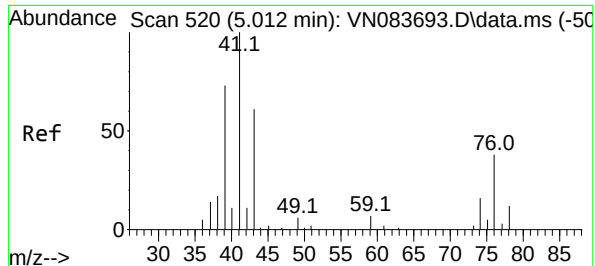
Tgt Ion: 76 Resp: 100907

Ion Ratio Lower Upper

76 100

78 7.8 6.3 9.5





#17

Allyl chloride

Concen: 19.019 ug/l

RT: 5.012 min Scan# 51

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

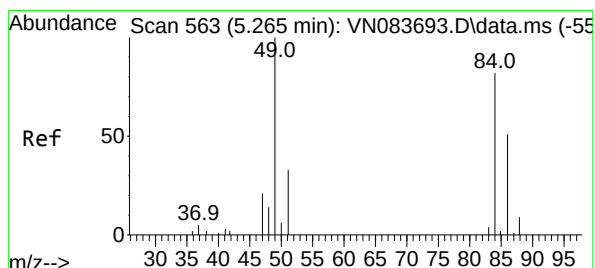
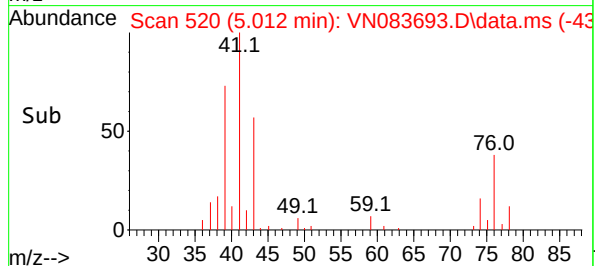
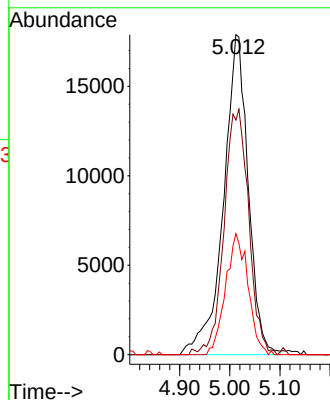
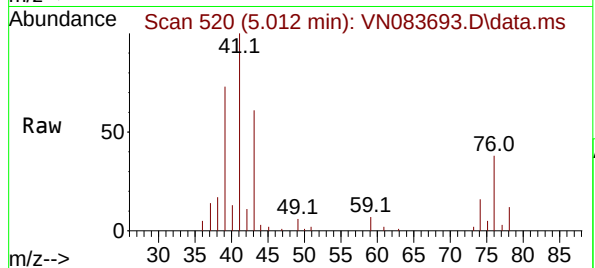
VSTDICCC020

Tgt Ion:	41	Resp:	61310
Ion	Ratio	Lower	Upper
41	100		
39	73.3	37.6	112.9
76	37.8	27.8	83.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#18

Methylene Chloride

Concen: 19.439 ug/l

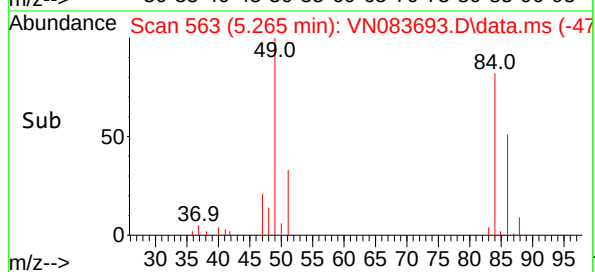
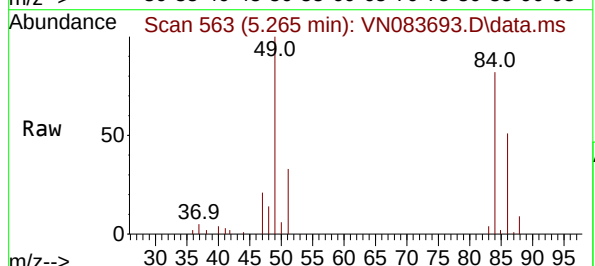
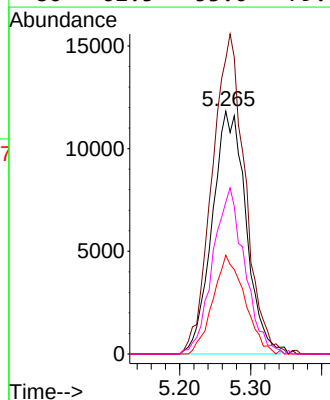
RT: 5.265 min Scan# 563

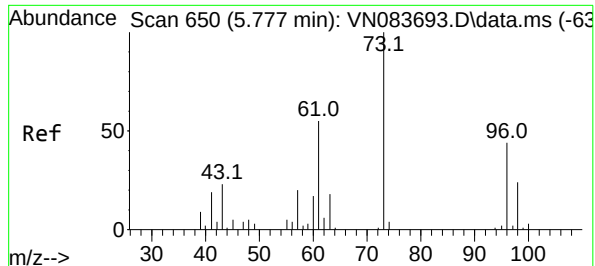
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	84	Resp:	39051
Ion	Ratio	Lower	Upper
84	100		
49	121.6	86.0	129.0
51	40.7	30.0	45.0
86	62.5	53.0	79.4





#19

trans-1,2-Dichloroethene

Concen: 19.572 ug/l

RT: 5.777 min Scan# 650

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 96 Resp: 3724

Ion Ratio Lower Upper

96 100

61 126.5 111.8 167.6

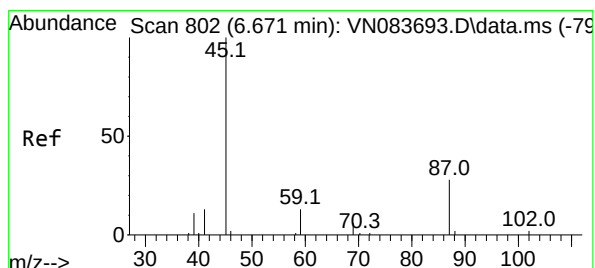
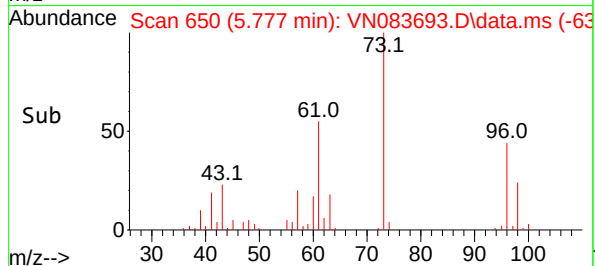
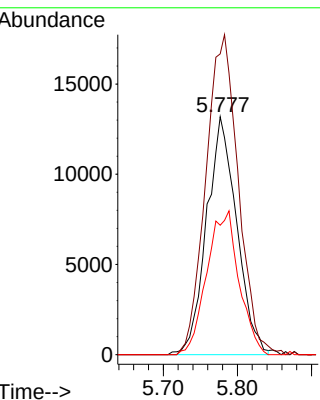
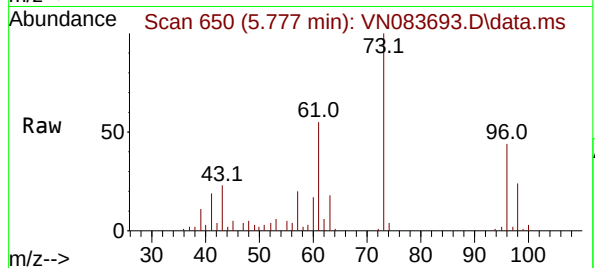
98 54.4 49.2 73.8

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#20

Diisopropyl ether

Concen: 18.646 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion: 45 Resp: 121252

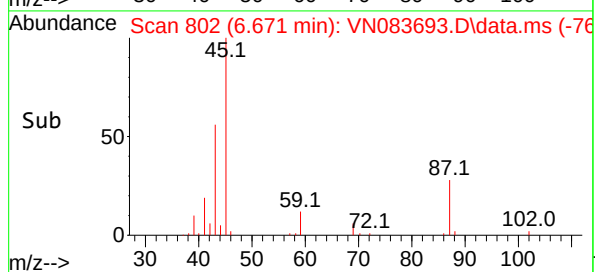
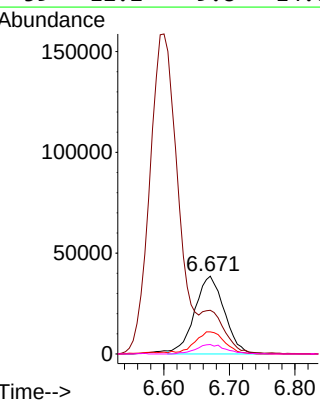
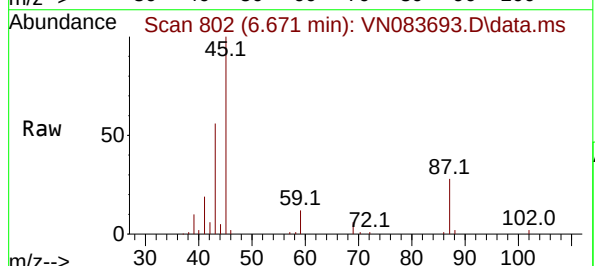
Ion Ratio Lower Upper

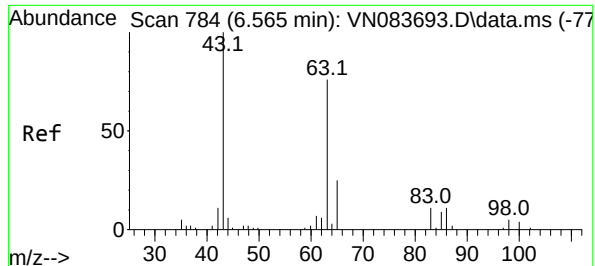
45 100

43 55.1 40.4 60.6

87 28.6 23.8 35.8

59 12.2 9.8 14.6





#21

1,1-Dichloroethane

Concen: 19.195 ug/l

RT: 6.565 min Scan# 7126

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

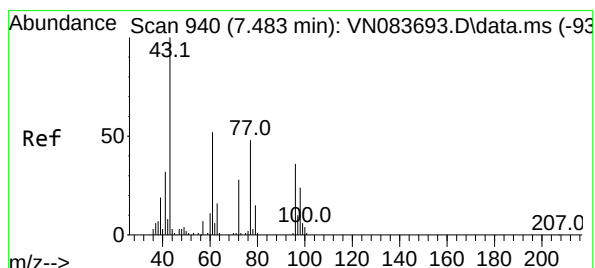
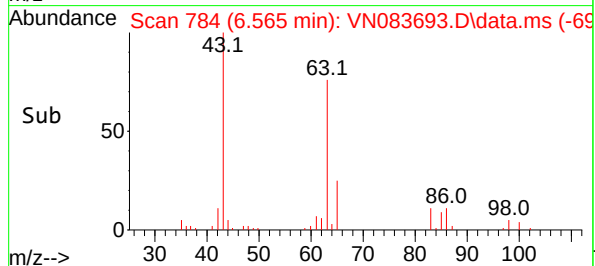
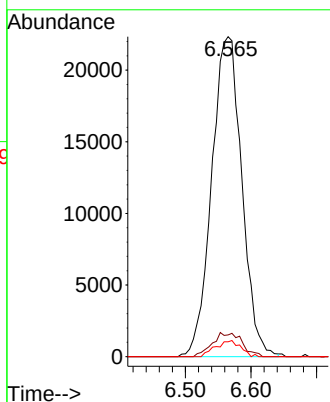
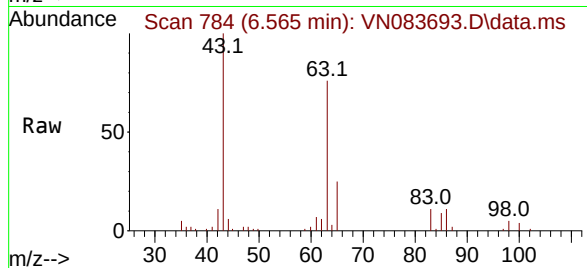
VSTDICCC020

Tgt Ion:	63	Resp:	7126
Ion Ratio	Lower	Upper	
63	100		
98	6.8	4.1	12.3
100	4.6	3.0	9.0

Manual Integrations
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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#22

cis-1,2-Dichloroethene

Concen: 19.548 ug/l

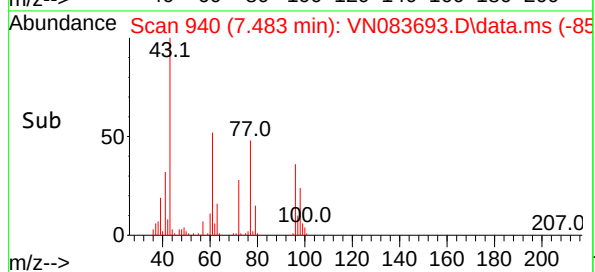
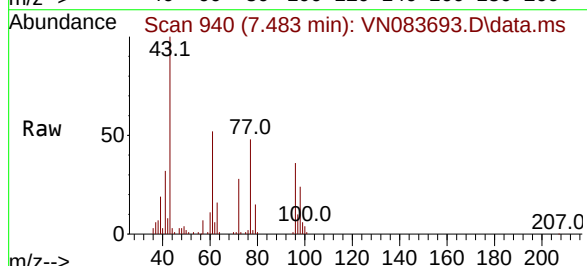
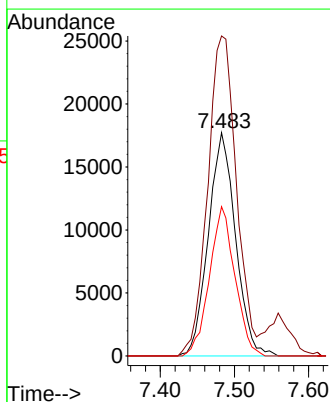
RT: 7.483 min Scan# 940

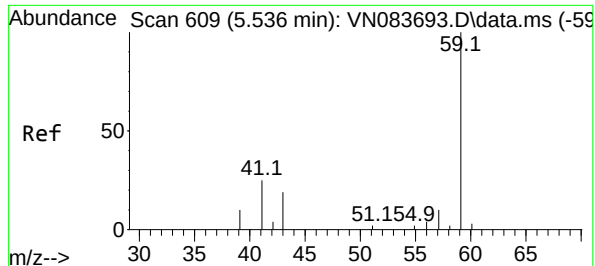
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	96	Resp:	45278
Ion Ratio	Lower	Upper	
96	100		
61	151.1	113.5	170.3
98	62.6	52.0	78.0





#23

tert-Butyl Alcohol

Concen: 98.542 ug/l

RT: 5.536 min Scan# 609

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 59 Resp: 32400

Ion Ratio Lower Upper

59 100

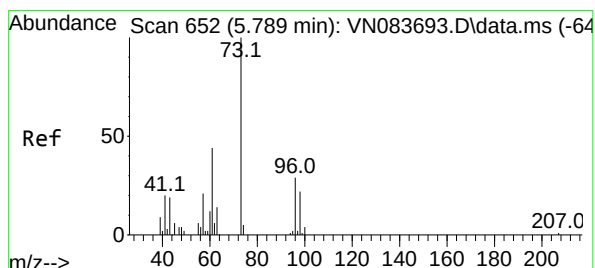
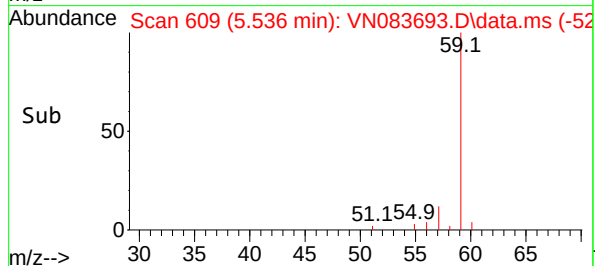
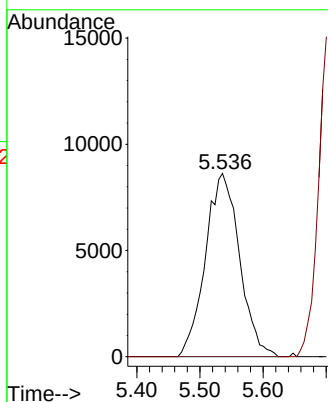
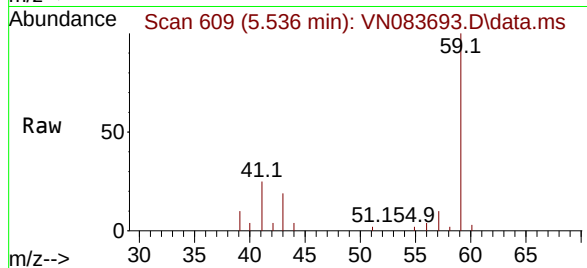
52 219.8 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#24

Methyl tert-Butyl Ether

Concen: 19.488 ug/l

RT: 5.789 min Scan# 652

Delta R.T. 0.000 min

Lab File: VN083693.D

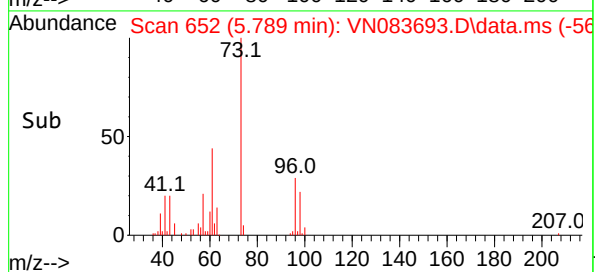
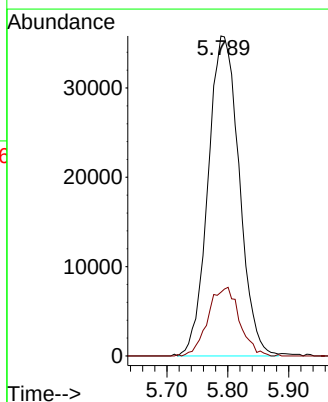
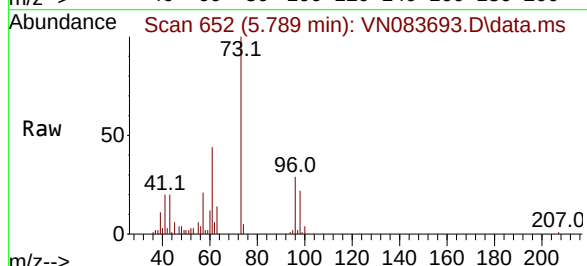
Acq: 06 Sep 2024 13:10

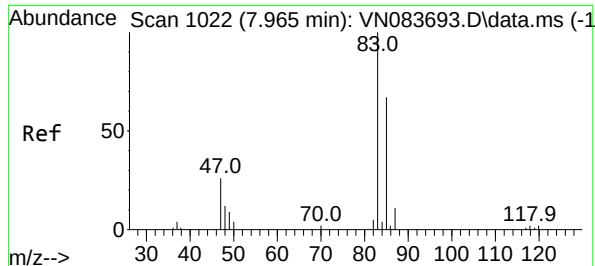
Tgt Ion: 73 Resp: 127165

Ion Ratio Lower Upper

73 100

43 8.1 13.4 20.2





#25

Chloroform

Concen: 19.454 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 83 Resp: 7654

Ion Ratio Lower Upper

83 100

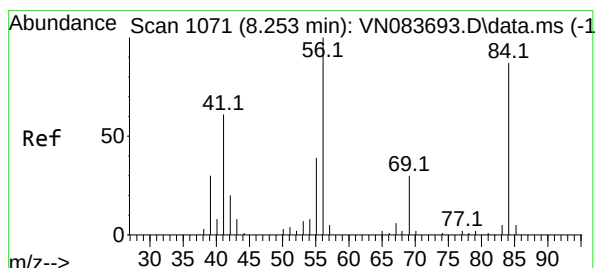
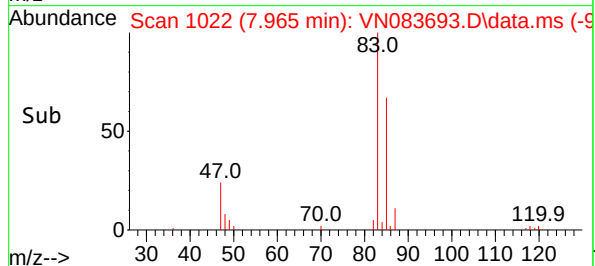
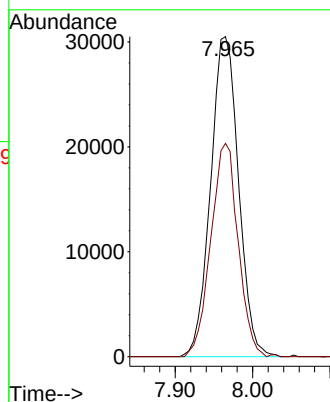
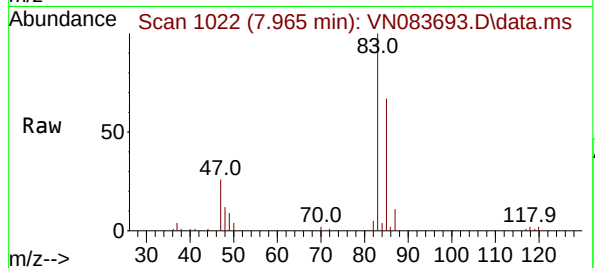
85 66.6 50.9 76.3

Manual Integrations

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#26

Cyclohexane

Concen: 19.195 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

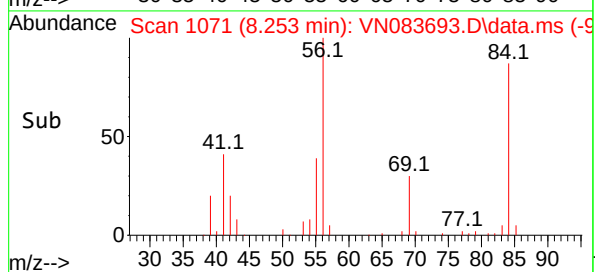
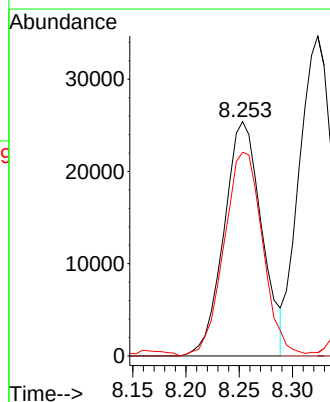
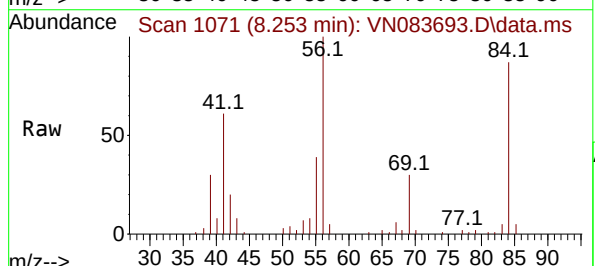
Tgt Ion: 56 Resp: 62769

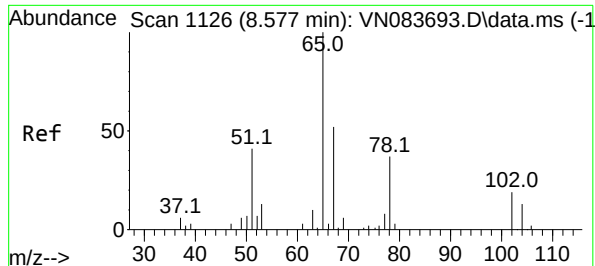
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9

84 88.9 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 30.281 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 65 Resp: 81774

Ion Ratio Lower Upper

65 100

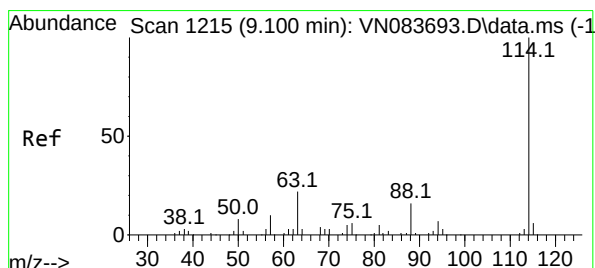
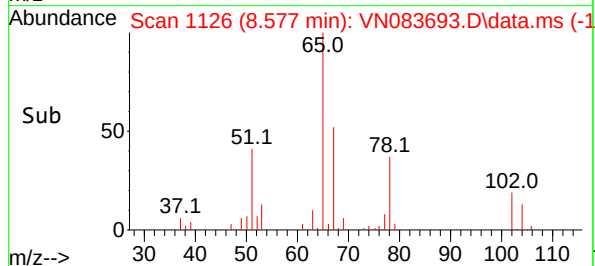
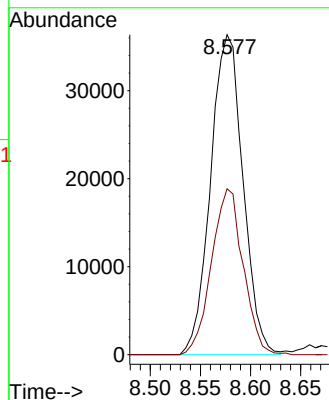
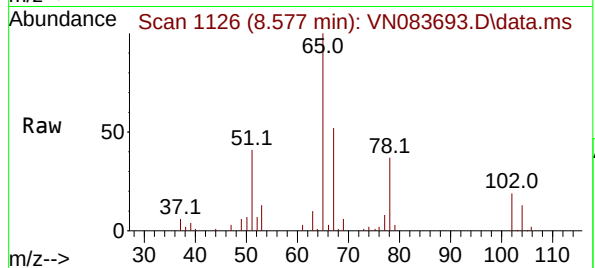
67 50.5 43.2 64.8

Manual Integrations

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Supervised By :Mahesh Dadoda 09/09/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

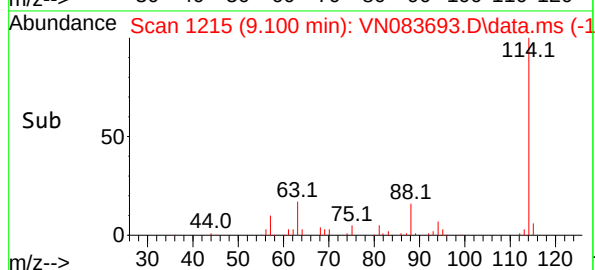
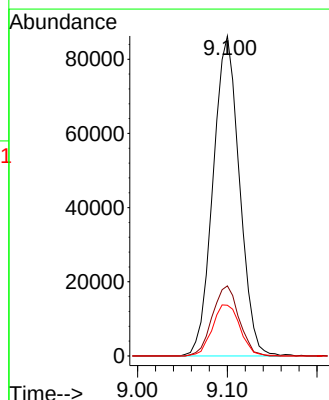
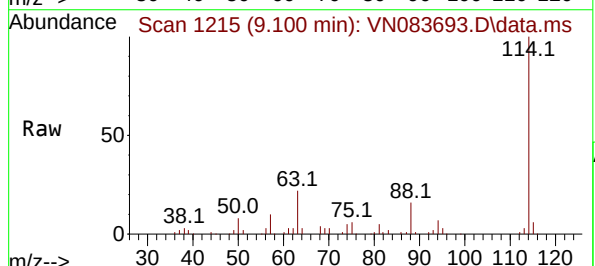
Tgt Ion:114 Resp: 176233

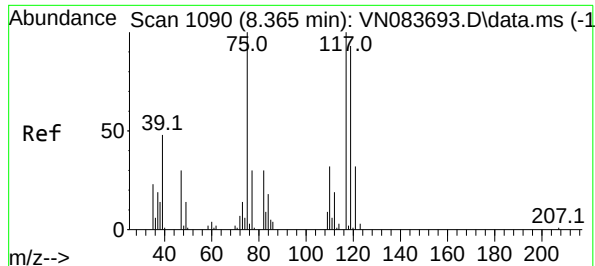
Ion Ratio Lower Upper

114 100

63 22.1 15.9 23.9

88 16.8 12.7 19.1





#29

1,1-Dichloropropene

Concen: 18.850 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

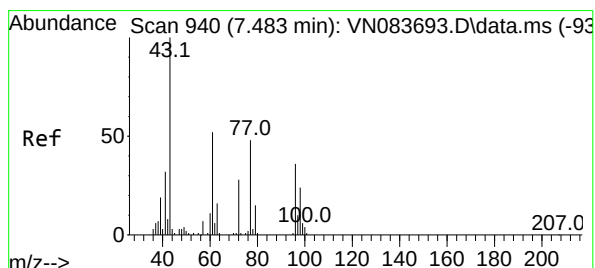
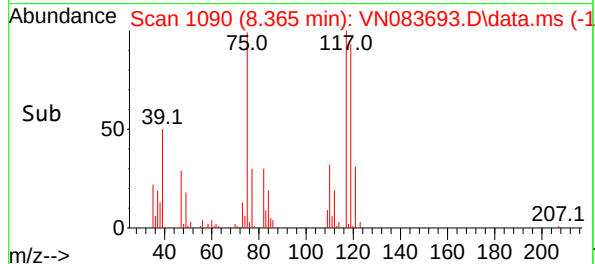
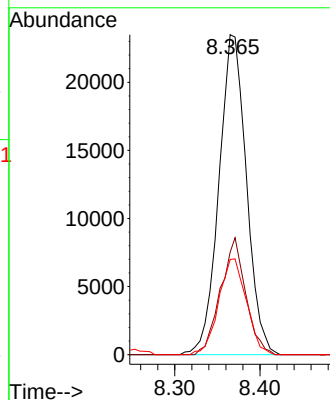
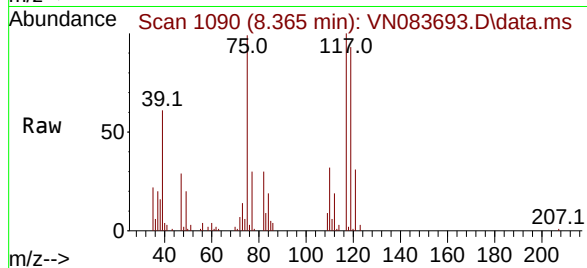
VSTDICCC020

Tgt Ion:	75	Resp:	5269
Ion Ratio	Lower	Upper	
75	100		
110	33.4	0.0	70.2
77	30.2	0.0	61.4

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#30

2-Butanone

Concen: 93.220 ug/l

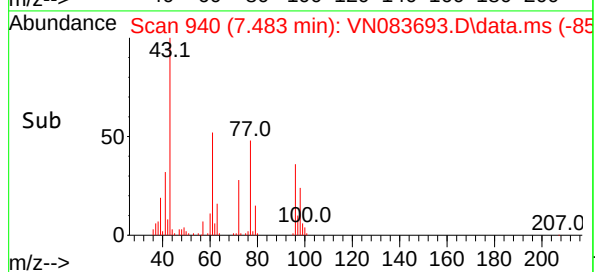
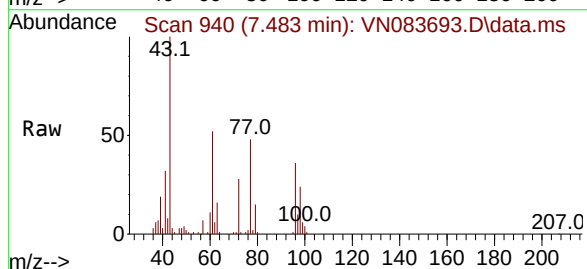
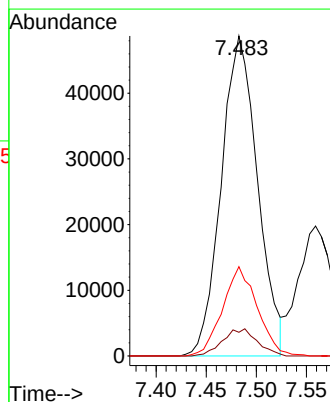
RT: 7.483 min Scan# 940

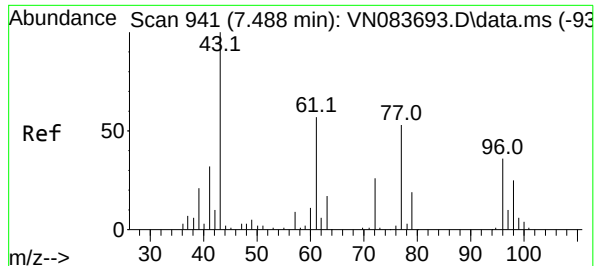
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	43	Resp:	122833
Ion Ratio	Lower	Upper	
43	100		
57	8.1	6.7	10.1
72	26.7	24.0	36.0





#31

2,2-Dichloropropane

Concen: 18.612 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 77 Resp: 66330

Ion Ratio Lower Upper

77 100

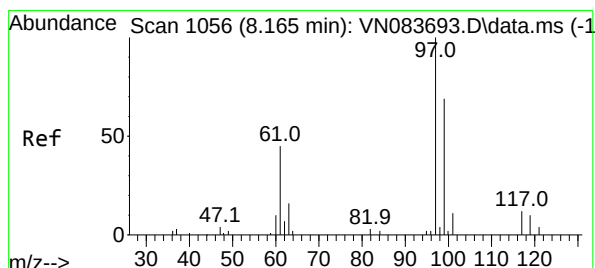
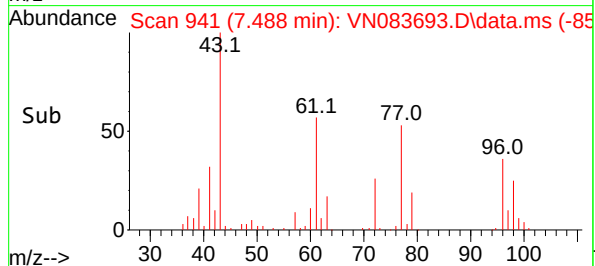
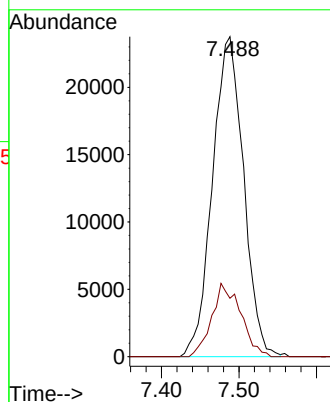
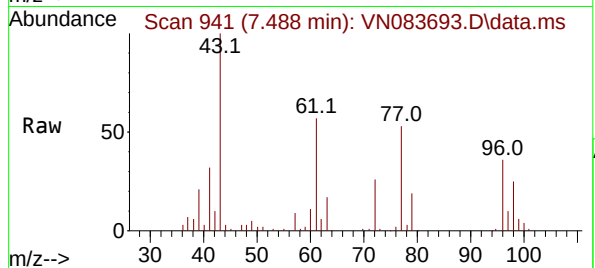
97 13.5 18.3 27.5

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#32

1,1,1-Trichloroethane

Concen: 18.870 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

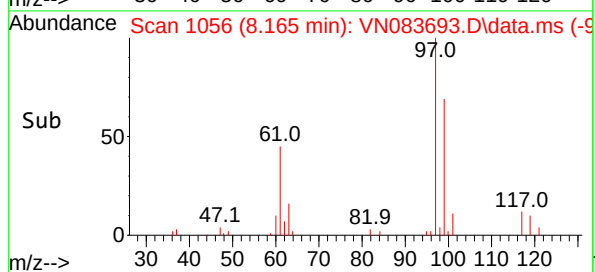
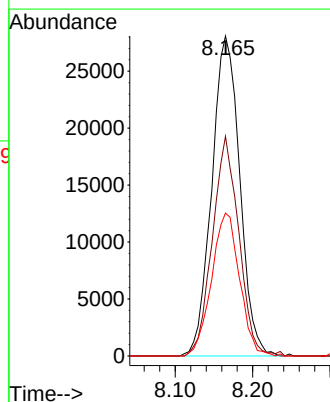
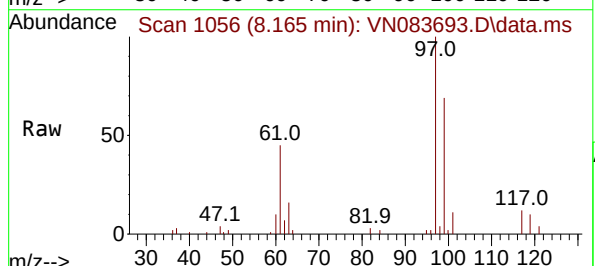
Tgt Ion: 97 Resp: 70442

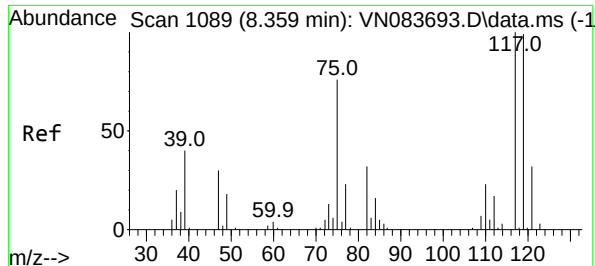
Ion Ratio Lower Upper

97 100

99 64.6 51.0 76.4

61 44.7 33.8 50.8





#33

Carbon Tetrachloride

Concen: 18.621 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion:117 Resp: 60200

Ion Ratio Lower Upper

117 100

119 99.0 77.7 116.5

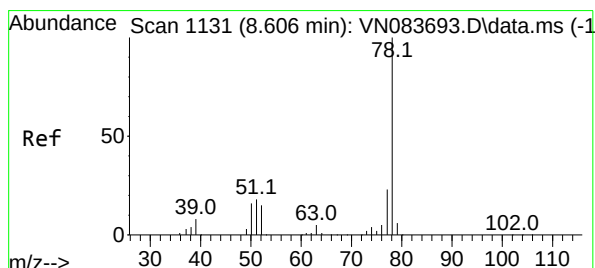
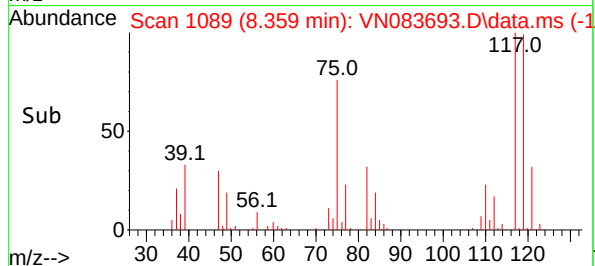
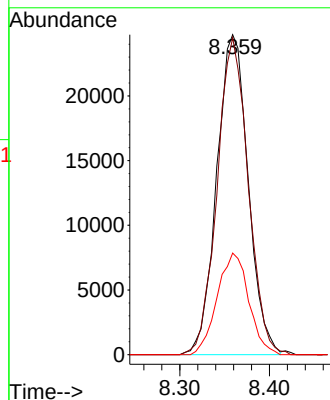
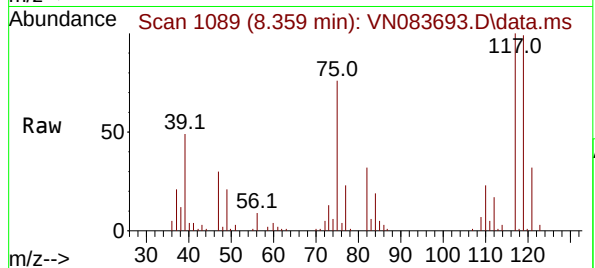
121 31.8 27.0 40.6

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#34

Benzene

Concen: 19.233 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

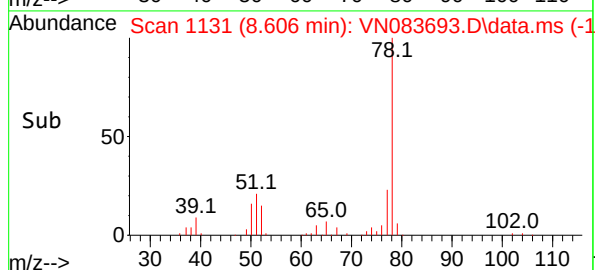
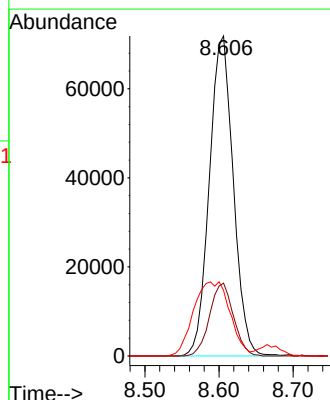
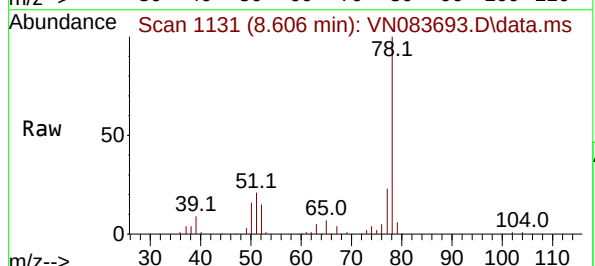
Tgt Ion: 78 Resp: 161311

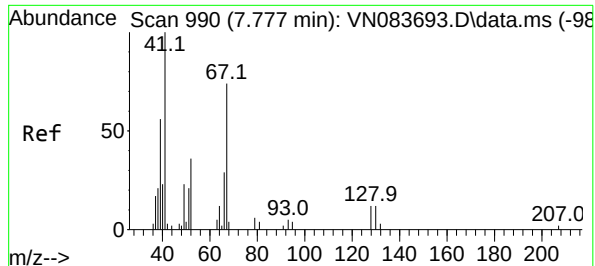
Ion Ratio Lower Upper

78 100

77 22.7 19.2 28.8

51 18.6 13.3 19.9





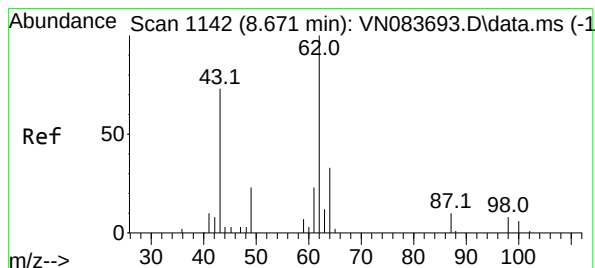
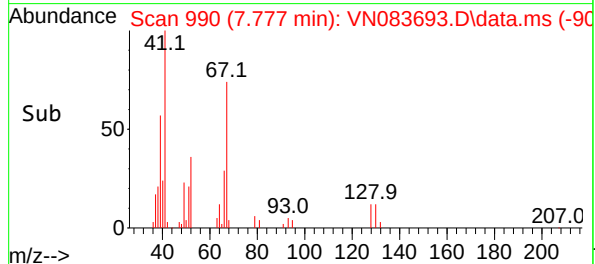
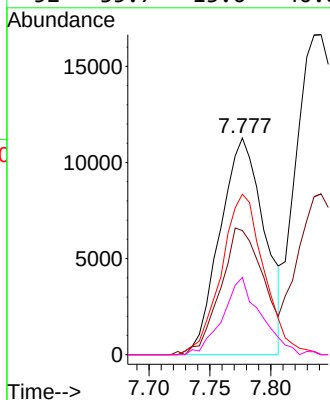
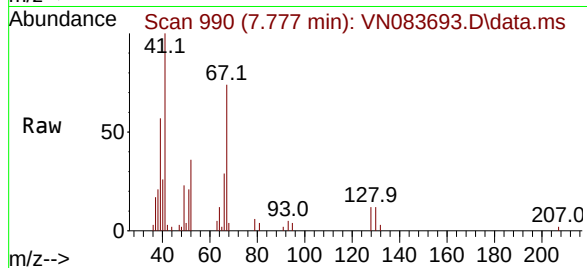
#35
Methacrylonitrile
Concen: 19.371 ug/l
RT: 7.777 min Scan# 990
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion:	41	Resp:	2869
Ion Ratio	Lower	Upper	
41	100		
39	55.8	25.3	75.9
67	74.1	38.7	116.1
52	35.7	13.6	40.8

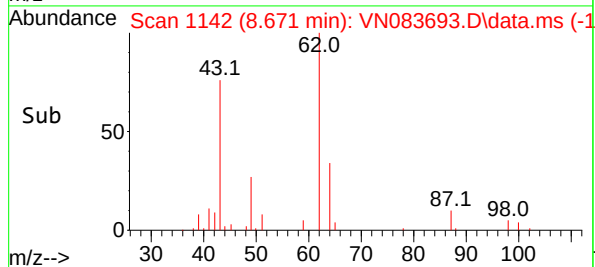
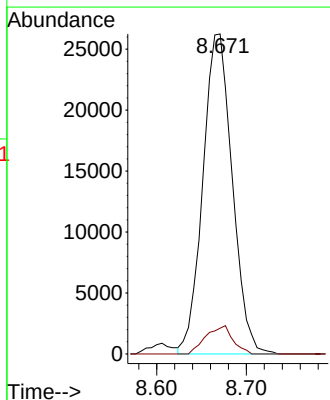
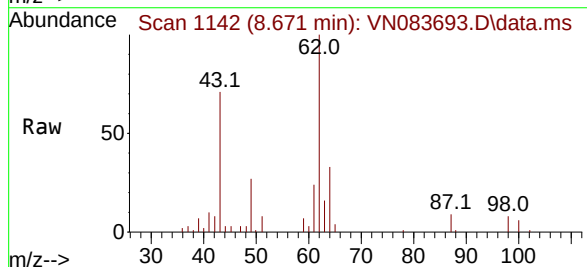
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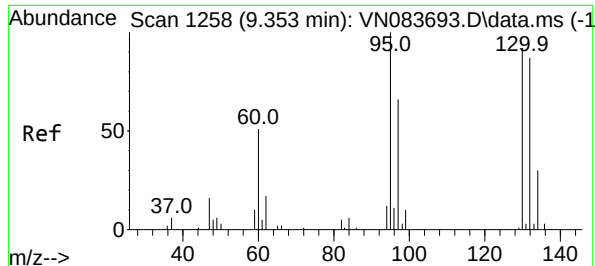
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#36
1,2-Dichloroethane
Concen: 18.953 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion:	62	Resp:	59759
Ion Ratio	Lower	Upper	
62	100		
98	8.1	8.2	12.4#





#37

Trichloroethene

Concen: 18.466 ug/l

RT: 9.353 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion:130 Resp: 36370

Ion Ratio Lower Upper

130 100

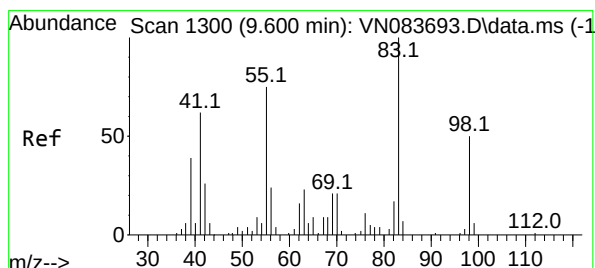
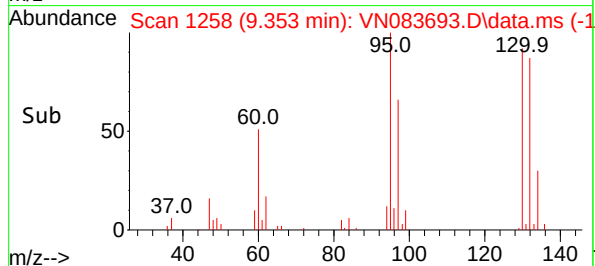
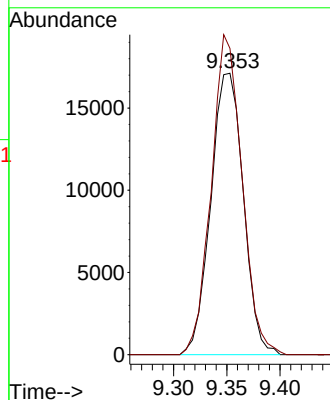
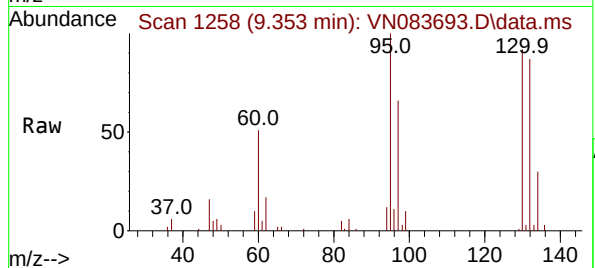
95 108.8 80.2 120.4

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#38

Methylcyclohexane

Concen: 18.445 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

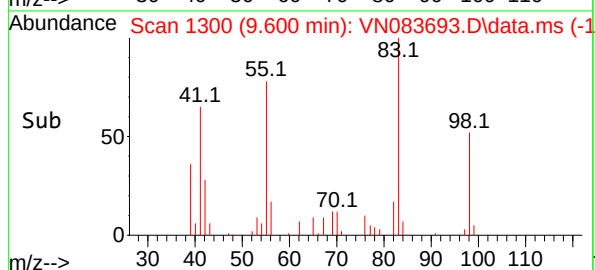
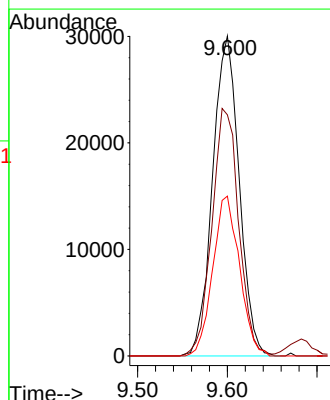
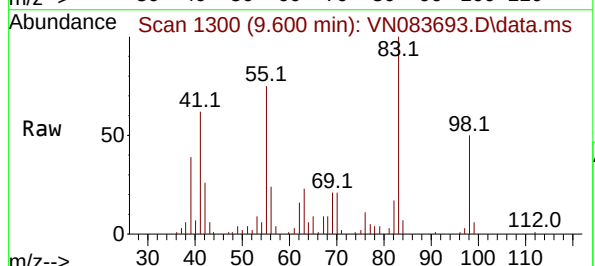
Tgt Ion: 83 Resp: 61729

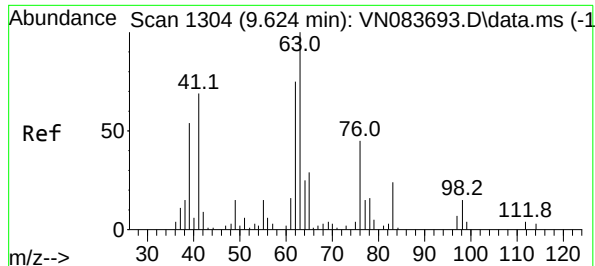
Ion Ratio Lower Upper

83 100

55 77.9 36.6 109.9

98 50.3 23.8 71.5





#39

1,2-Dichloropropane

Concen: 18.841 ug/l

RT: 9.624 min Scan# 1304

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 63 Resp: 3803

Ion Ratio Lower Upper

63 100

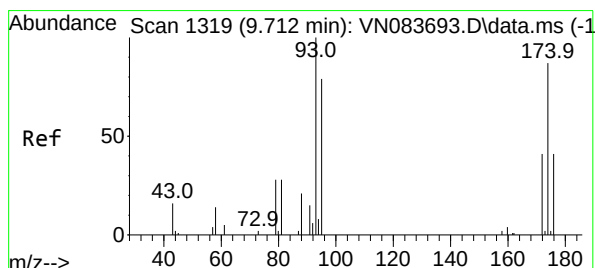
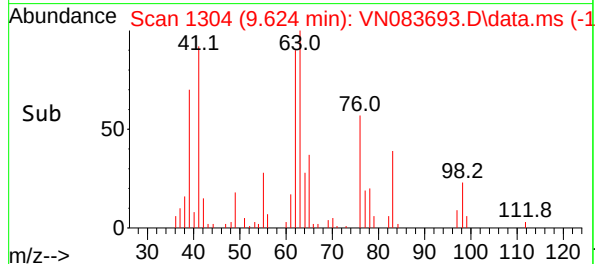
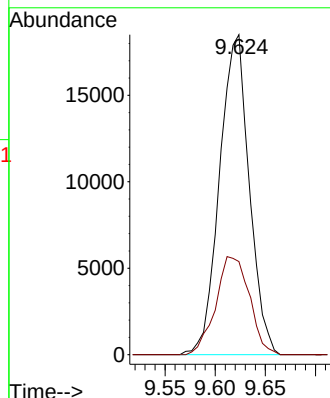
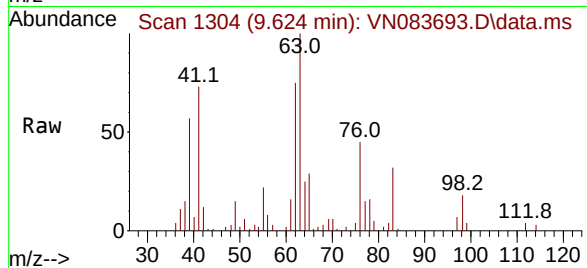
65 29.1 25.0 37.4

Manual Integrations

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Supervised By :Mahesh Dadoda 09/09/2024



#40

Dibromomethane

Concen: 19.436 ug/l

RT: 9.712 min Scan# 1319

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

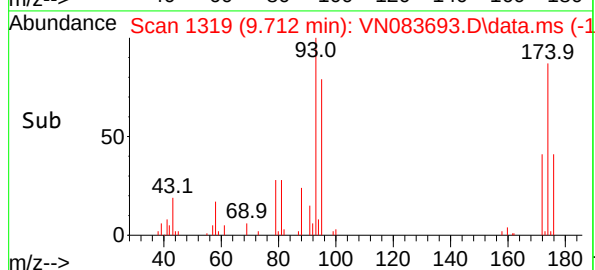
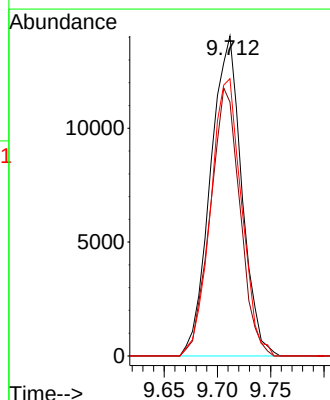
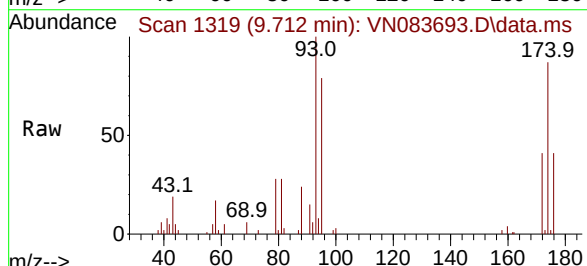
Tgt Ion: 93 Resp: 28687

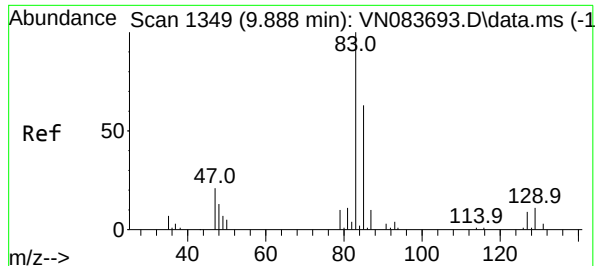
Ion Ratio Lower Upper

93 100

95 79.7 0.0 164.6

174 85.7 0.0 193.2





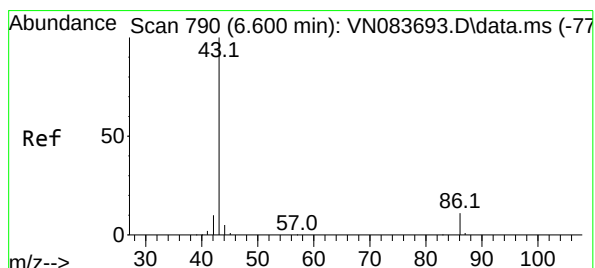
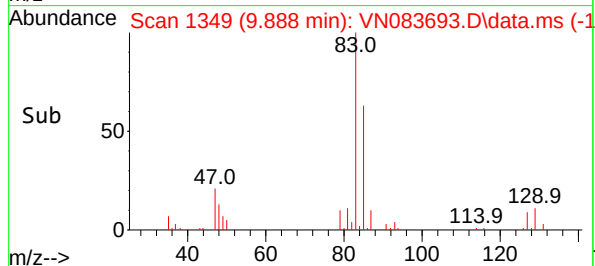
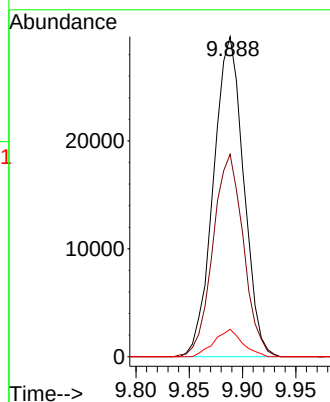
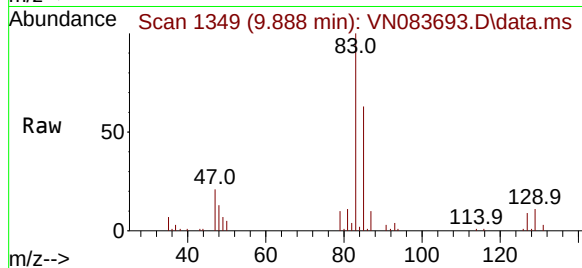
#41
Bromodichloromethane
Concen: 18.613 ug/l
RT: 9.888 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion: 83 Resp: 5841
Ion Ratio Lower Upper
83 100
85 63.2 49.4 74.2
127 8.6 7.3 10.9

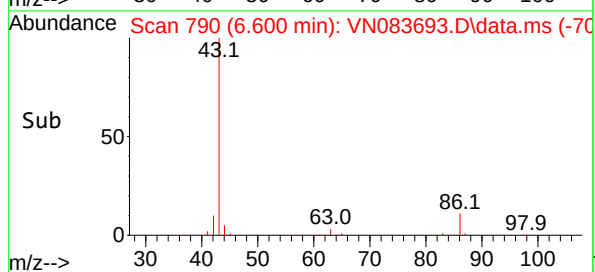
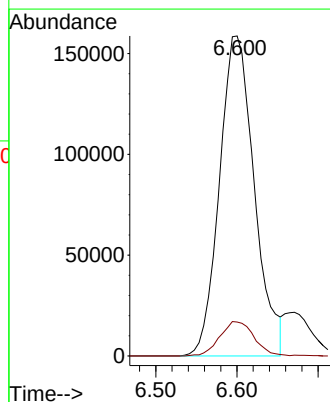
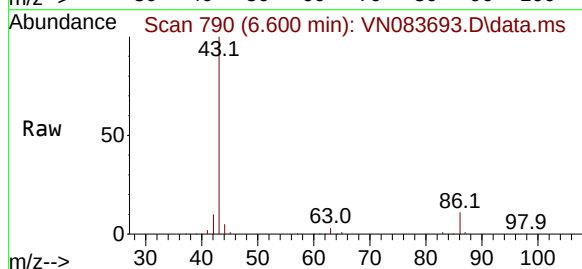
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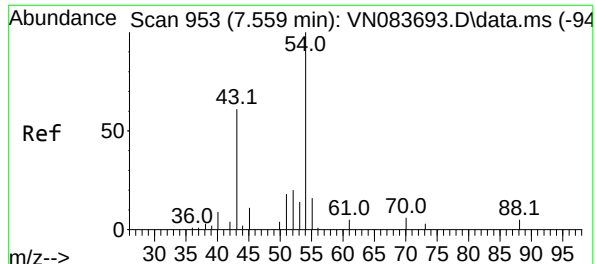
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#42
Vinyl Acetate
Concen: 87.559 ug/l
RT: 6.600 min Scan# 790
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion: 43 Resp: 474357
Ion Ratio Lower Upper
43 100
86 10.5 9.4 14.2





#43

Ethyl Acetate

Concen: 19.067 ug/l

RT: 7.559 min Scan# 91

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 43 Resp: 5056

Ion Ratio Lower Upper

43 100

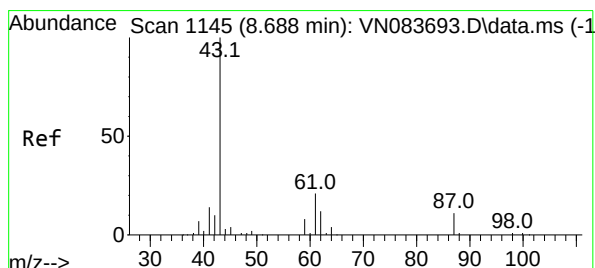
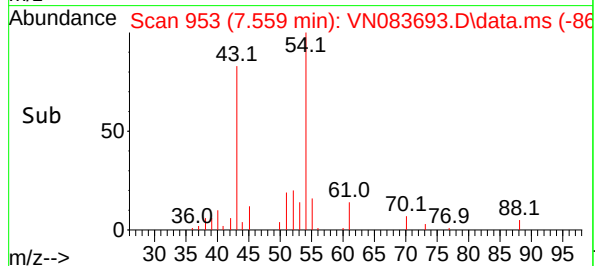
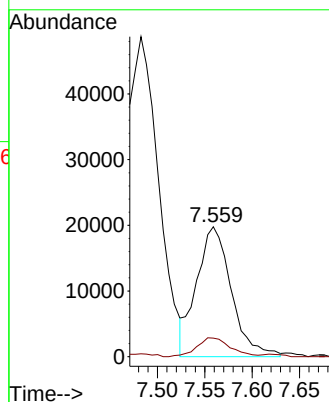
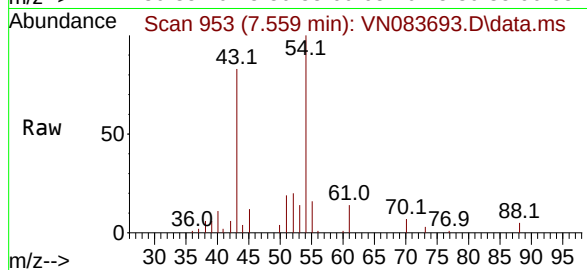
45 13.9 10.6 15.8

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#44

Isopropyl Acetate

Concen: 18.813 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.000 min

Lab File: VN083693.D

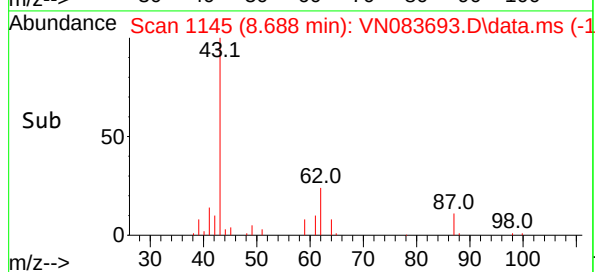
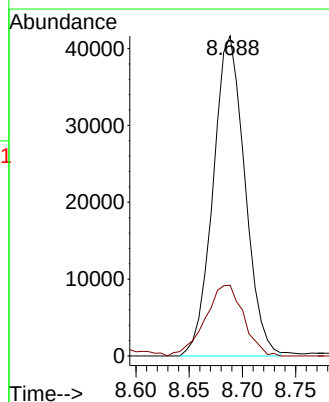
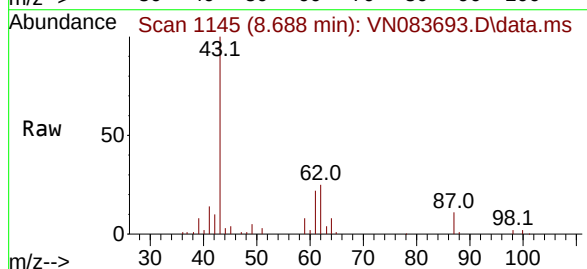
Acq: 06 Sep 2024 13:10

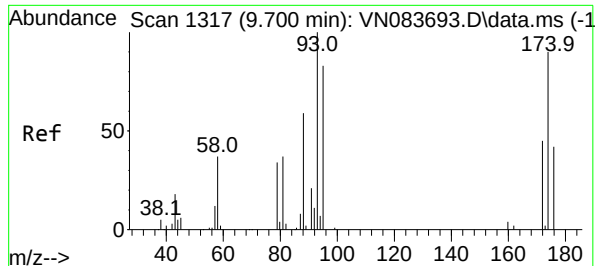
Tgt Ion: 43 Resp: 86297

Ion Ratio Lower Upper

43 100

61 26.6 25.0 37.4





#45

1,4-Dioxane

Concen: 401.944 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 88 Resp: 1438

Ion Ratio Lower Upper

88 100

43 32.5 19.8 29.6

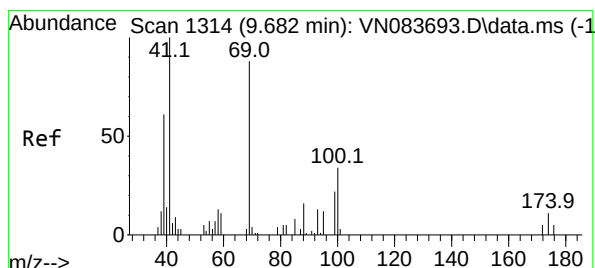
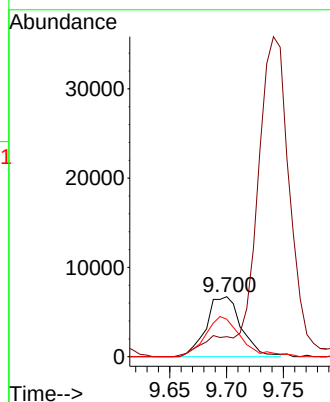
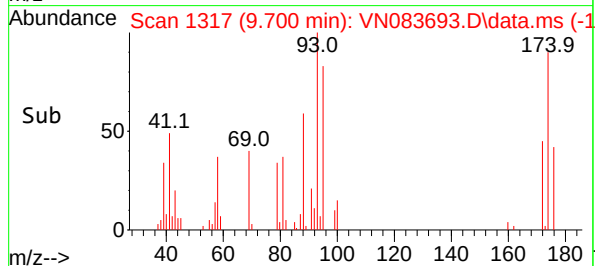
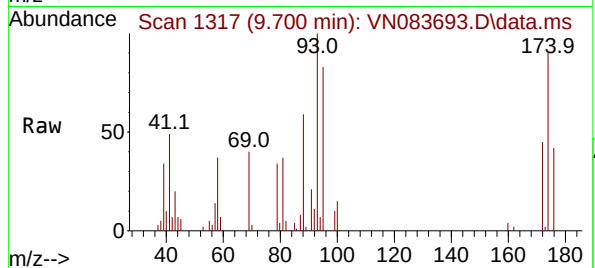
58 63.9 55.4 83.0

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#46

Methyl methacrylate

Concen: 18.454 ug/l

RT: 9.682 min Scan# 1314

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

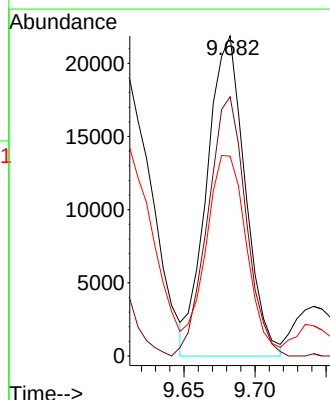
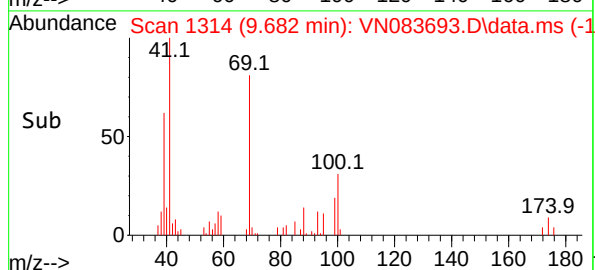
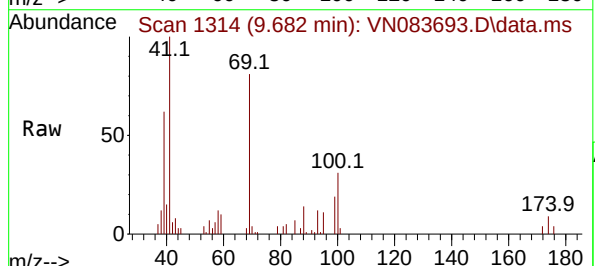
Tgt Ion: 41 Resp: 40975

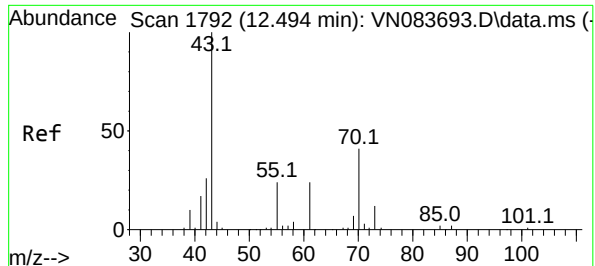
Ion Ratio Lower Upper

41 100

69 82.6 51.1 153.3

39 62.0 25.8 77.3





#47

n-amy1 Acetate

Concen: 18.534 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 43 Resp: 7531

Ion Ratio Lower Upper

43 100

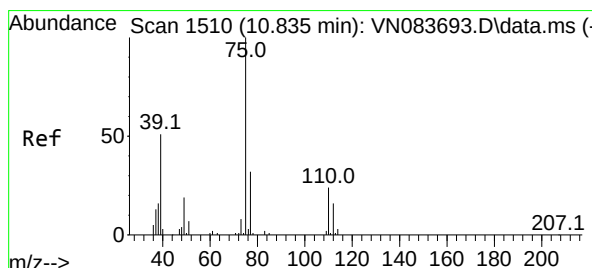
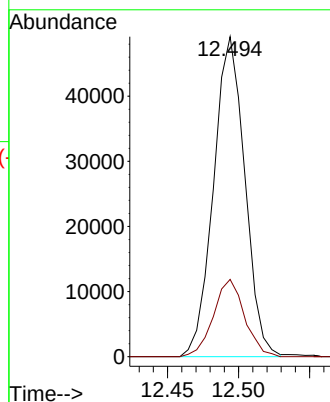
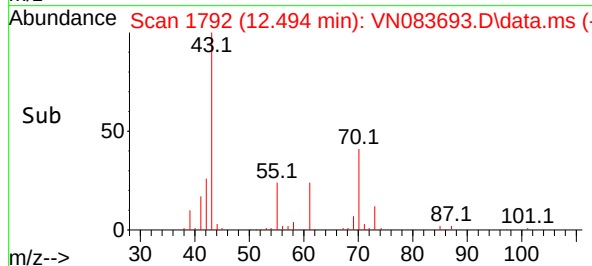
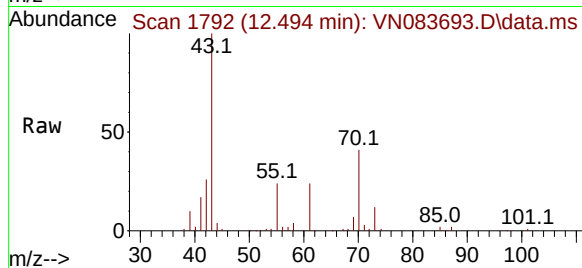
55 24.0 23.4 35.2

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#48

t-1,3-Dichloropropene

Concen: 18.544 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN083693.D

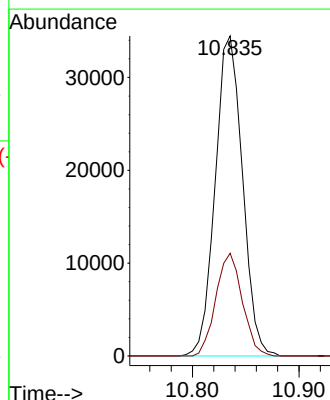
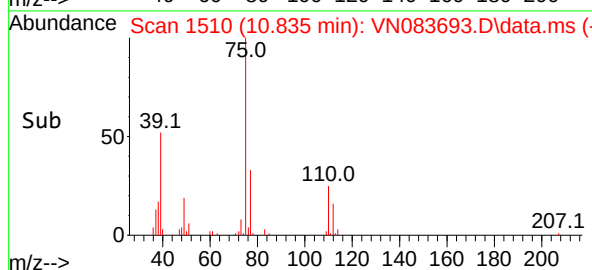
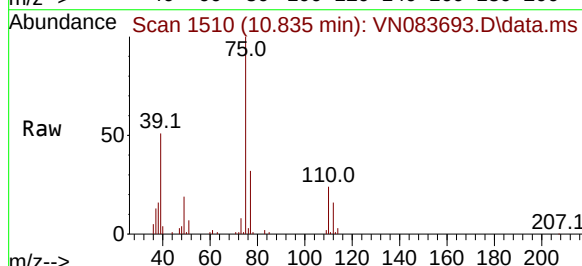
Acq: 06 Sep 2024 13:10

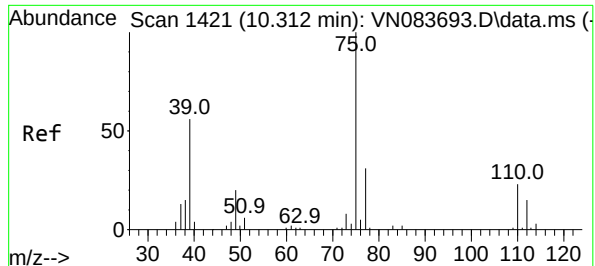
Tgt Ion: 75 Resp: 61220

Ion Ratio Lower Upper

75 100

77 32.1 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 18.419 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

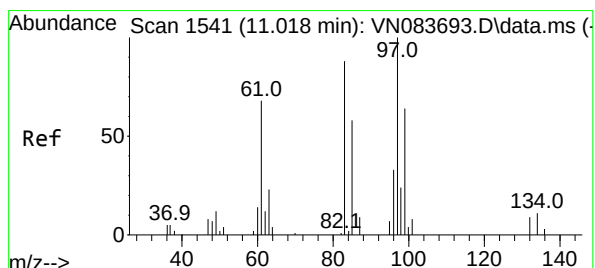
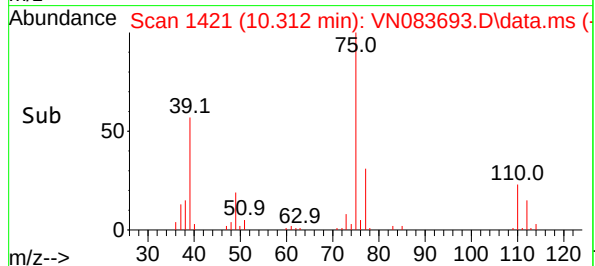
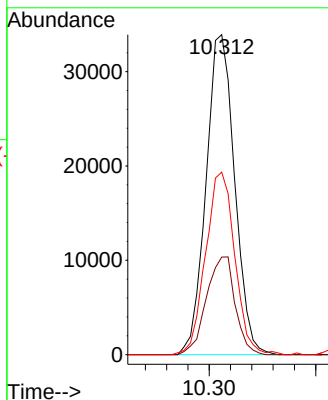
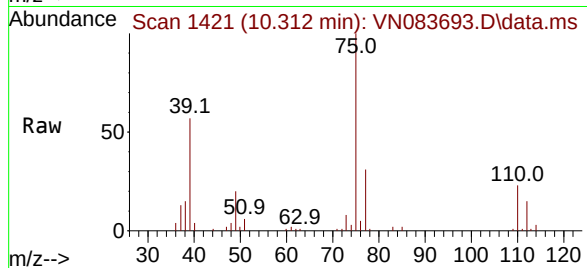
ClientSampleId :

VSTDICCC020

Tgt Ion:	75	Resp:	63240
Ion	Ratio	Lower	Upper
75	100		
77	30.5	24.9	37.3
39	56.5	31.0	46.6

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Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#50

1,1,2-Trichloroethane

Concen: 18.885 ug/l

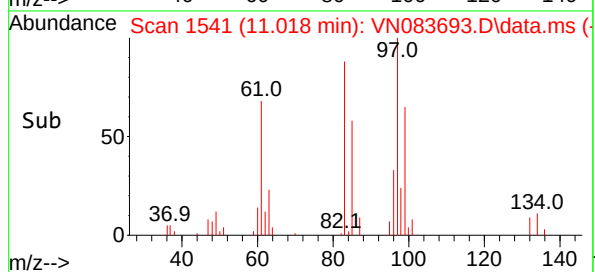
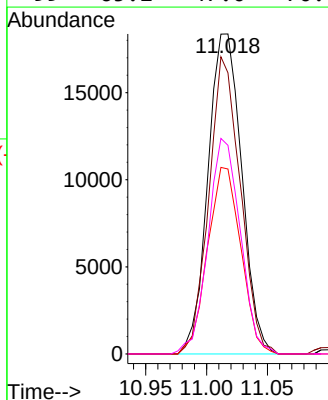
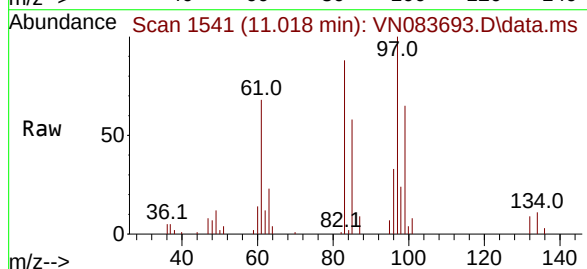
RT: 11.018 min Scan# 1541

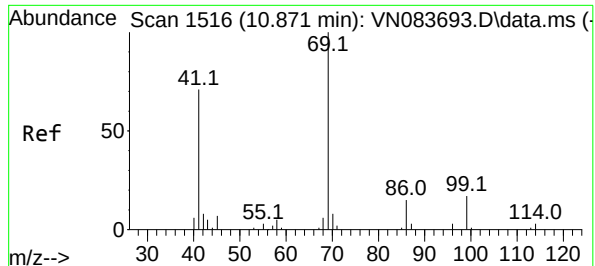
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	97	Resp:	35468
Ion	Ratio	Lower	Upper
97	100		
83	87.8	68.1	102.1
85	57.8	41.8	62.6
99	65.2	47.0	70.4





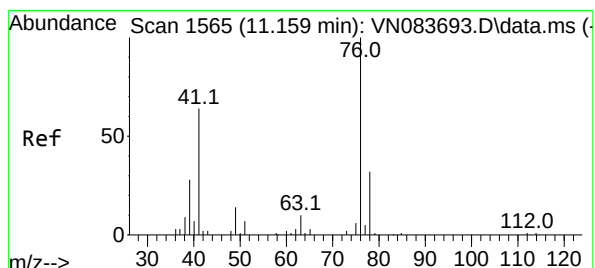
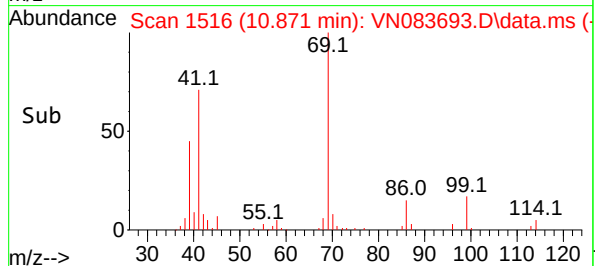
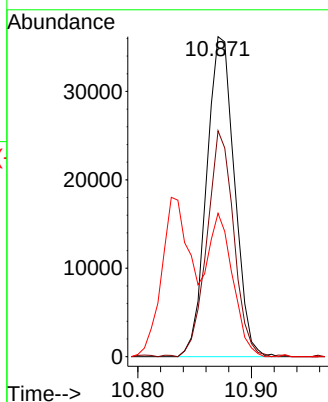
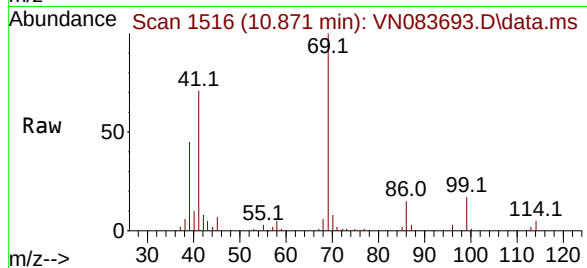
#51
Ethyl methacrylate
Concen: 19.248 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion: 69 Resp: 61759
Ion Ratio Lower Upper
69 100
41 70.6 25.5 76.5
39 44.8 16.0 47.9

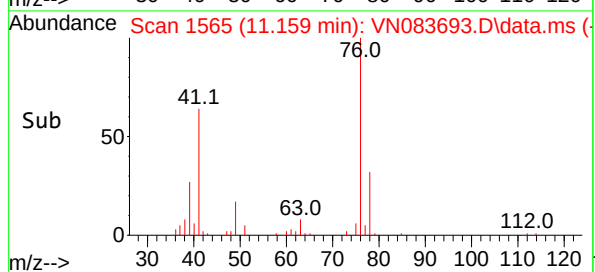
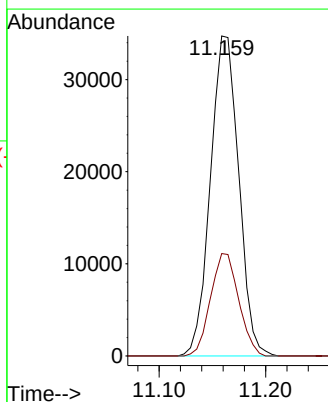
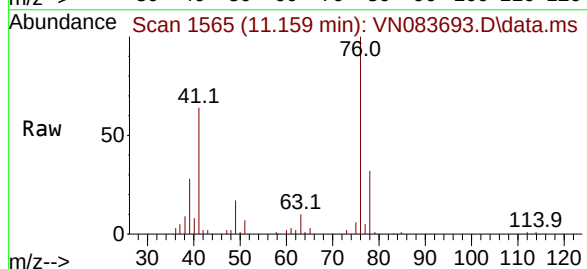
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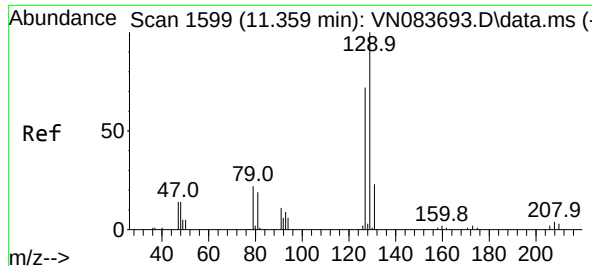
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#52
1,3-Dichloropropane
Concen: 18.927 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion: 76 Resp: 64193
Ion Ratio Lower Upper
76 100
78 31.7 0.0 65.8





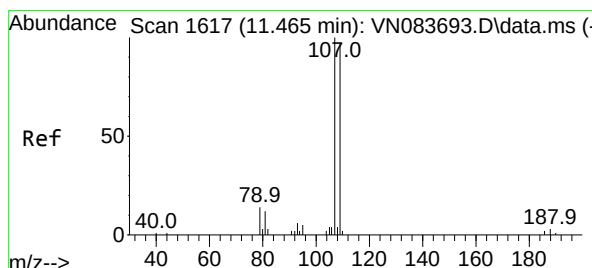
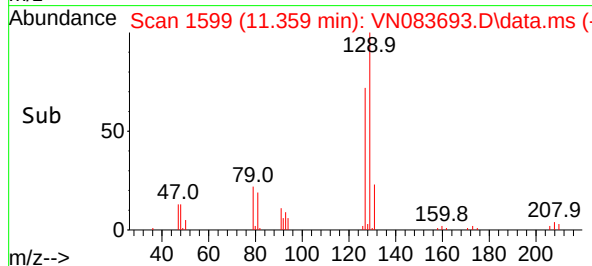
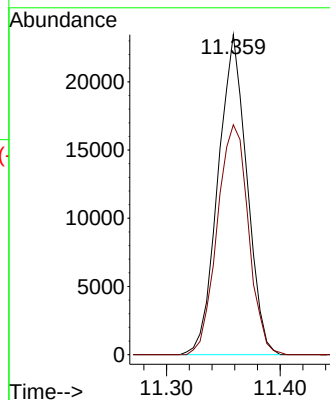
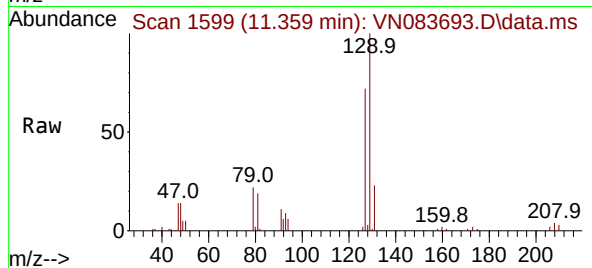
#53
Dibromochloromethane
Concen: 18.370 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion:129 Resp: 4138
Ion Ratio Lower Upper
129 100
127 77.6 39.4 118.1

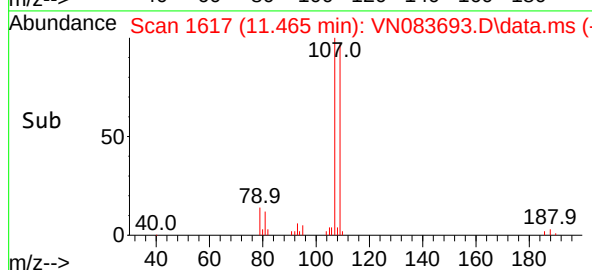
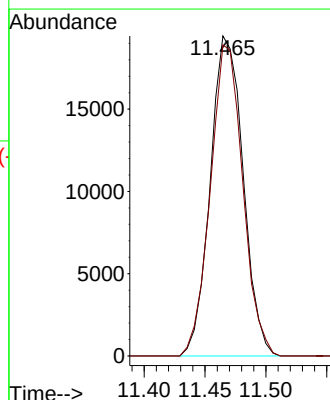
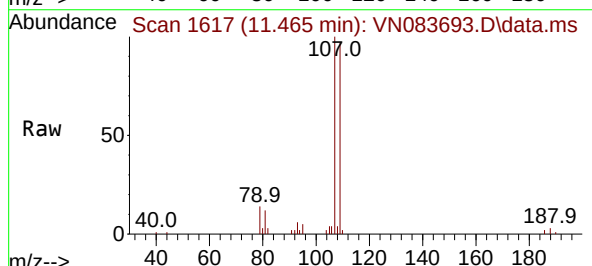
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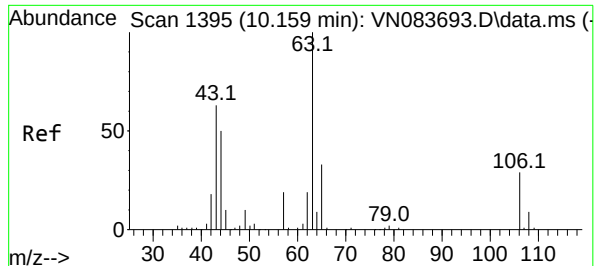
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#54
1,2-Dibromoethane
Concen: 18.766 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion:107 Resp: 36461
Ion Ratio Lower Upper
107 100
109 96.1 74.7 112.1





#55

2-Chloroethyl vinyl ether

Concen: 105.251 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

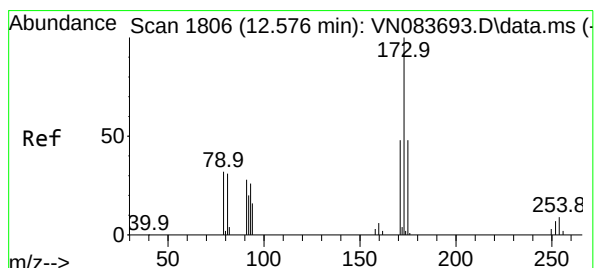
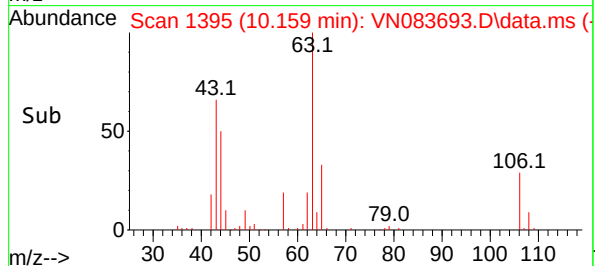
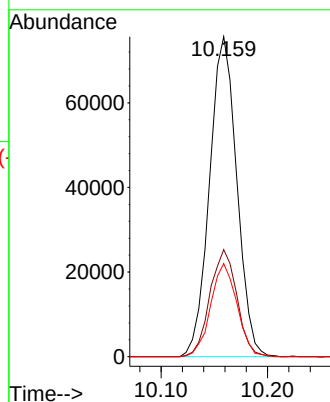
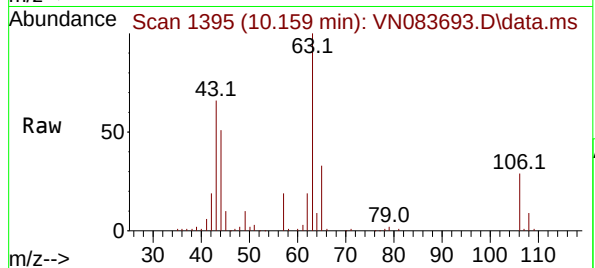
Tgt Ion:	63	Resp:	13458
Ion Ratio	Lower	Upper	
63	100		
65	33.1	26.2	39.2
106	28.1	23.8	35.8

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#56

Bromoform

Concen: 18.346 ug/l

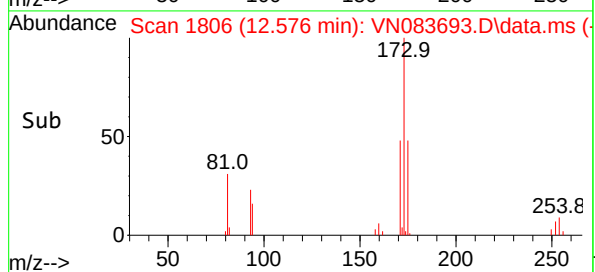
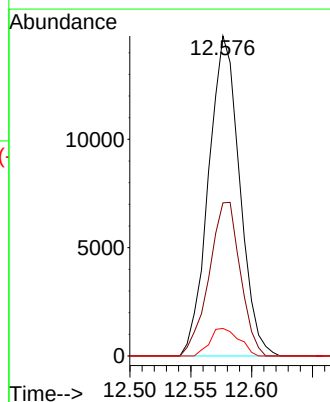
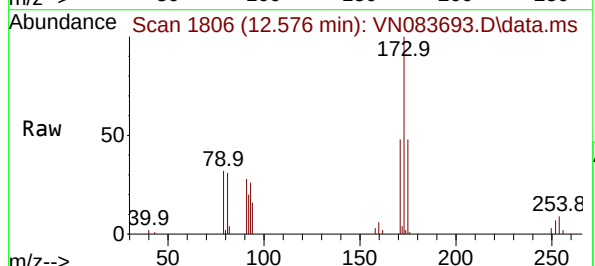
RT: 12.576 min Scan# 1806

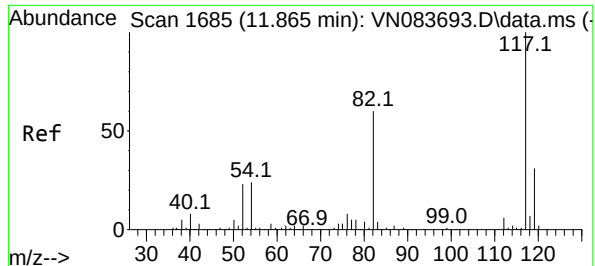
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	173	Resp:	26256
Ion Ratio	Lower	Upper	
173	100		
175	48.2	40.0	60.0
254	8.1	8.3	12.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion:117 Resp: 158490

Ion Ratio Lower Upper

117 100

82 59.7 46.6 69.8

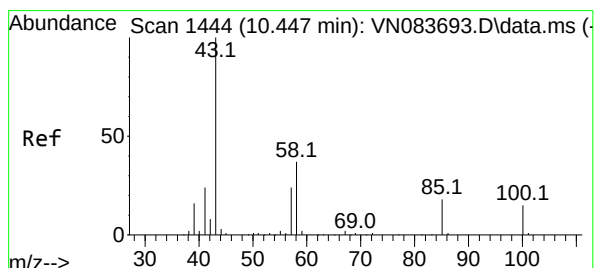
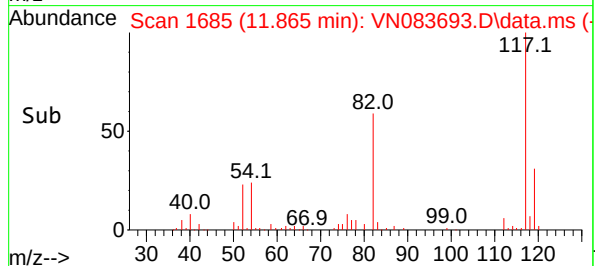
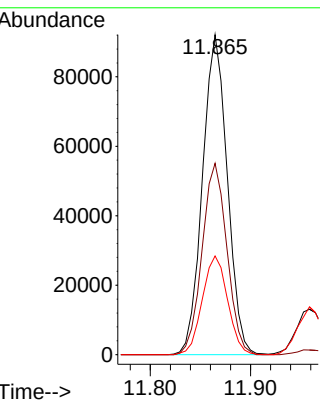
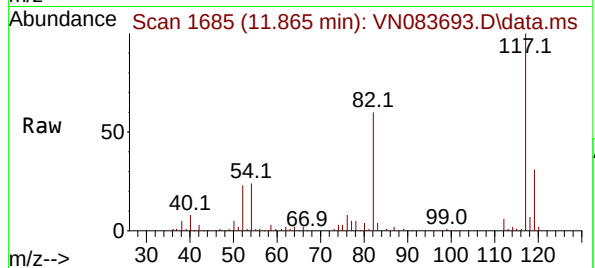
119 31.4 25.4 38.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#58

4-Methyl-2-Pentanone

Concen: 96.239 ug/l

RT: 10.447 min Scan# 1444

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

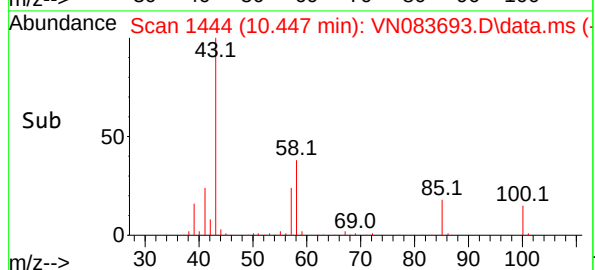
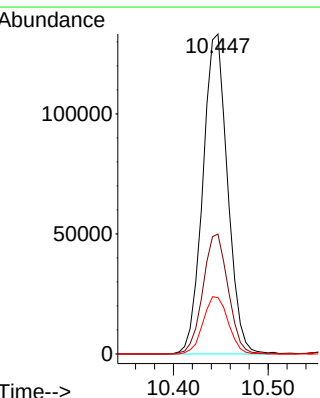
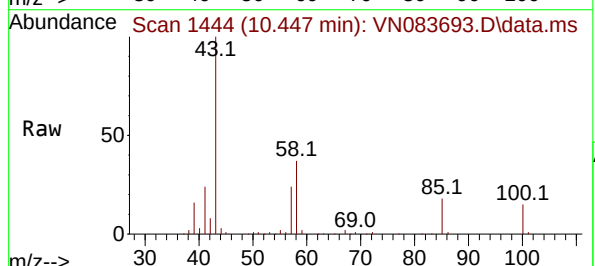
Tgt Ion: 43 Resp: 241862

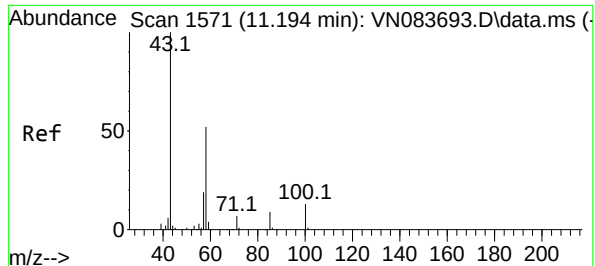
Ion Ratio Lower Upper

43 100

58 38.2 36.5 54.7

85 18.2 19.5 29.3#





#59

2-Hexanone

Concen: 94.485 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 43 Resp: 179424

Ion Ratio Lower Upper

43 100

58 52.6 50.4 75.6

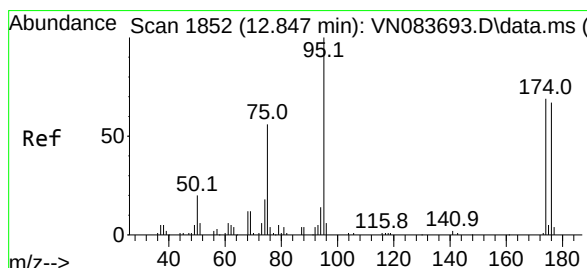
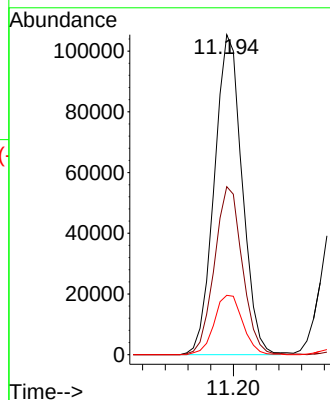
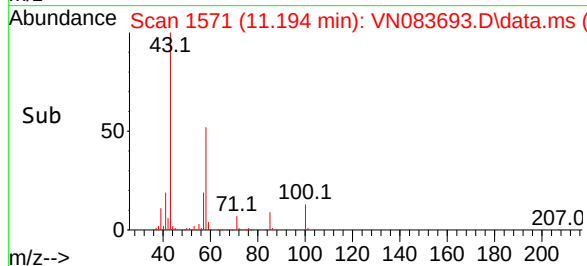
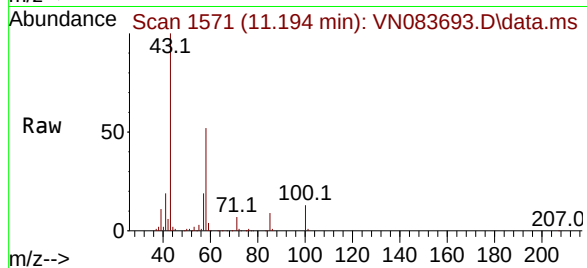
57 19.0 18.6 27.8

Manual Integrations

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#60

4-Bromofluorobenzene

Concen: 29.160 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

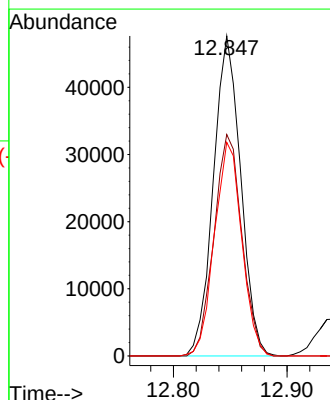
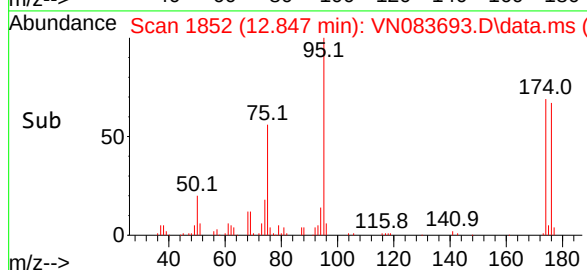
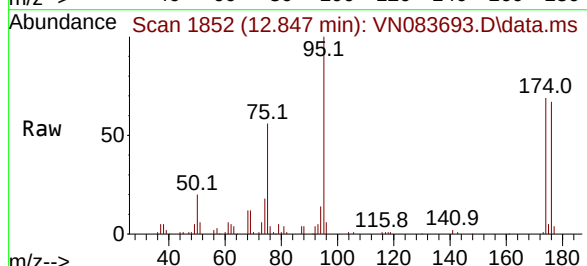
Tgt Ion: 95 Resp: 79655

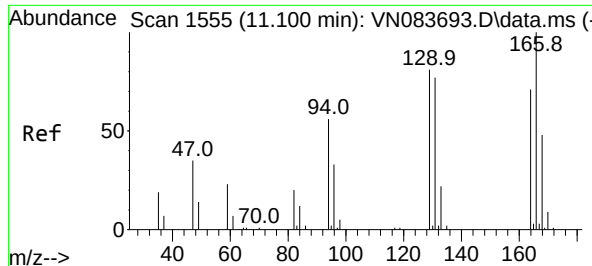
Ion Ratio Lower Upper

95 100

174 70.7 60.5 90.7

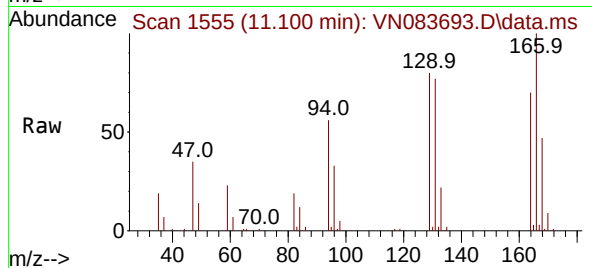
176 66.8 57.8 86.6





#61
Tetrachloroethene
Concen: 18.311 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

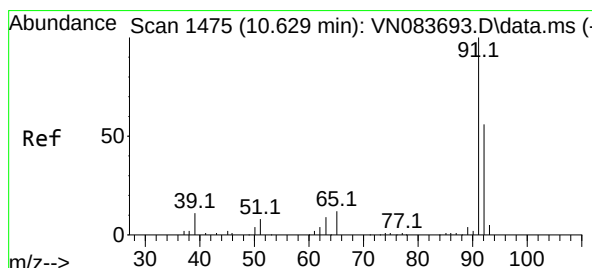
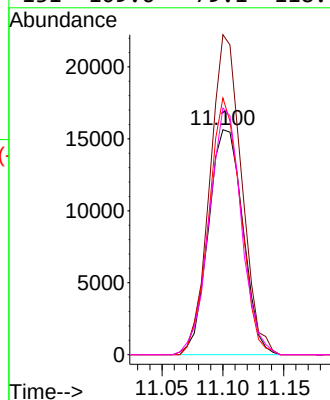
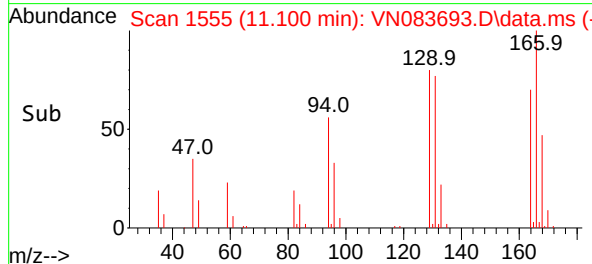
Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020



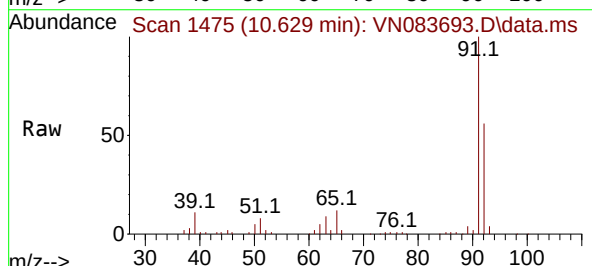
Tgt Ion:164 Resp: 30715
Ion Ratio Lower Upper
164 100
166 142.2 106.7 160.1
129 114.0 85.8 128.6
131 109.6 79.1 118.7

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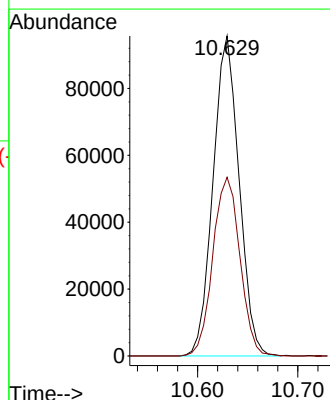
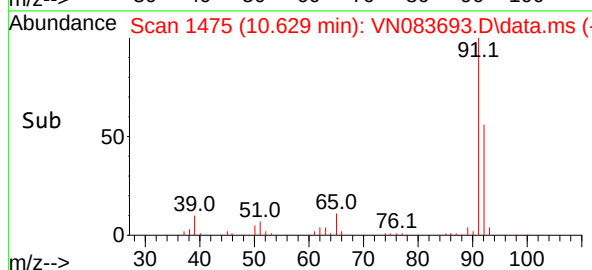
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024

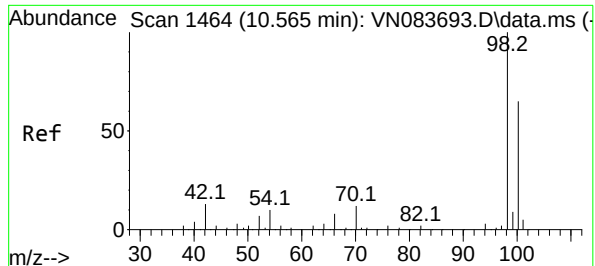


#62
Toluene
Concen: 18.940 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10



Tgt Ion: 91 Resp: 172549
Ion Ratio Lower Upper
91 100
92 58.1 46.5 69.7





#63

Toluene-d8

Concen: 29.913 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 98 Resp: 219528

Ion Ratio Lower Upper

98 100

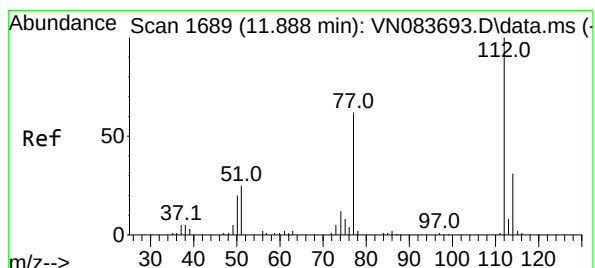
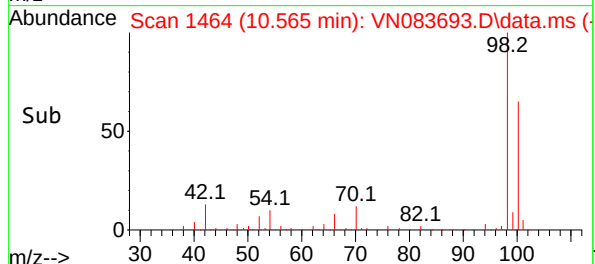
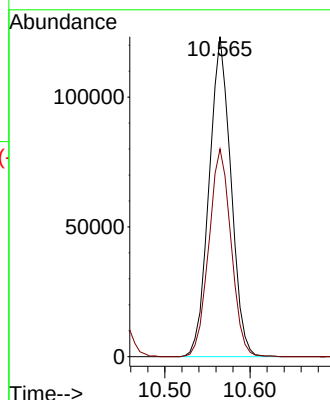
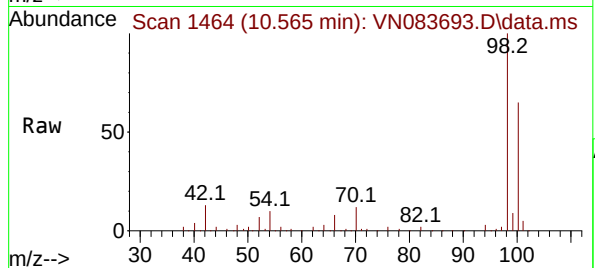
100 66.0 52.7 79.1

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#64

Chlorobenzene

Concen: 18.991 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN083693.D

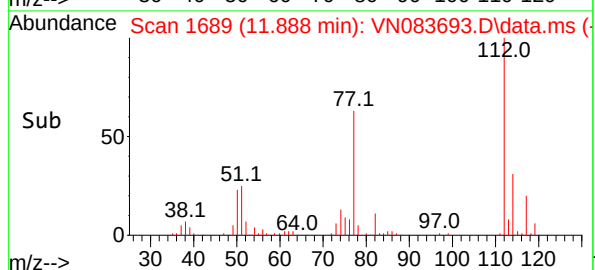
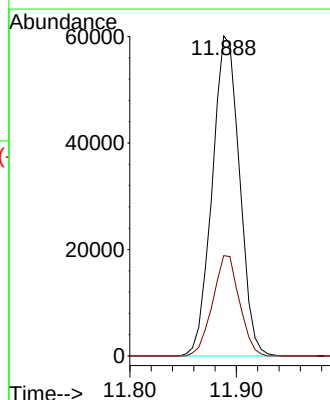
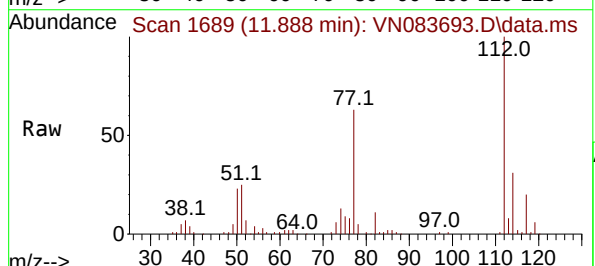
Acq: 06 Sep 2024 13:10

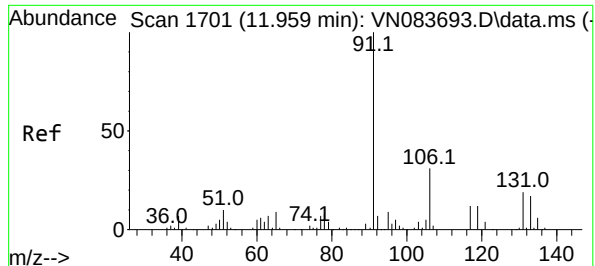
Tgt Ion:112 Resp: 107119

Ion Ratio Lower Upper

112 100

114 31.3 26.6 39.8





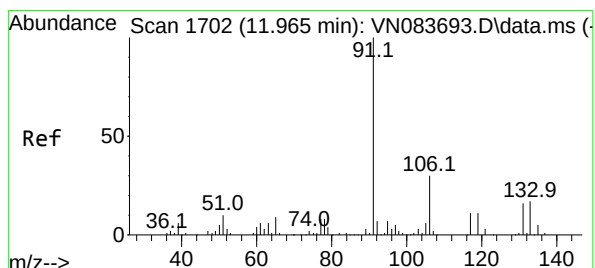
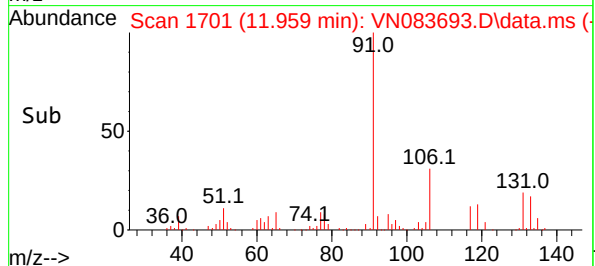
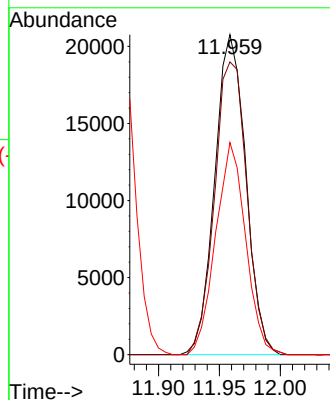
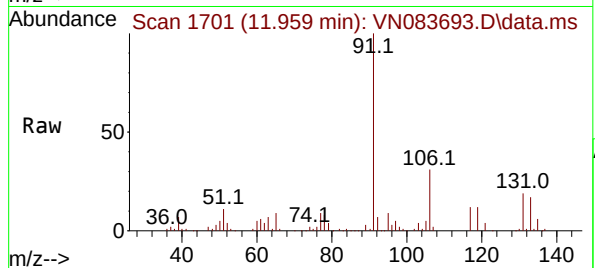
#65
1,1,1,2-Tetrachloroethane
Concen: 18.751 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion:131 Resp: 36844
Ion Ratio Lower Upper
131 100
133 95.6 0.0 188.0
119 64.1 0.0 122.8

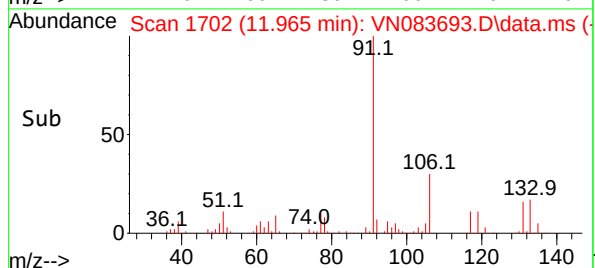
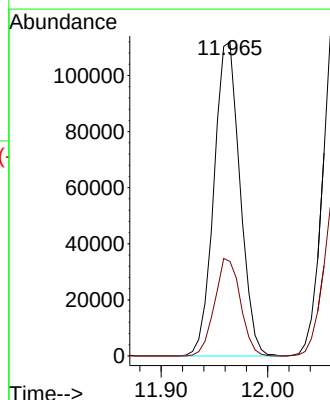
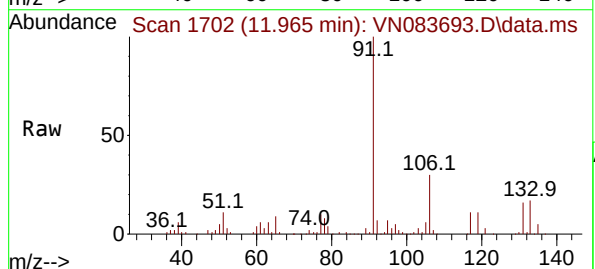
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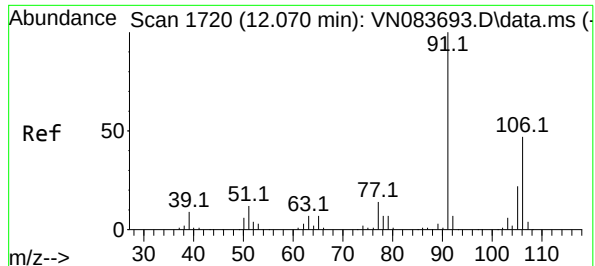
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#66
Ethyl Benzene
Concen: 18.353 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion: 91 Resp: 190134
Ion Ratio Lower Upper
91 100
106 30.1 24.4 36.6





#67

m/p-Xylenes

Concen: 37.289 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion:106 Resp: 142120

Ion Ratio Lower Upper

106 100

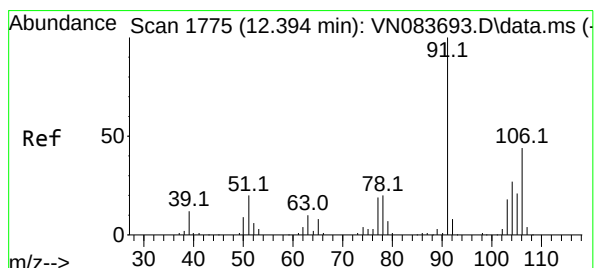
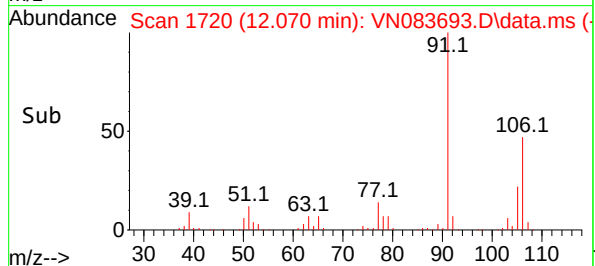
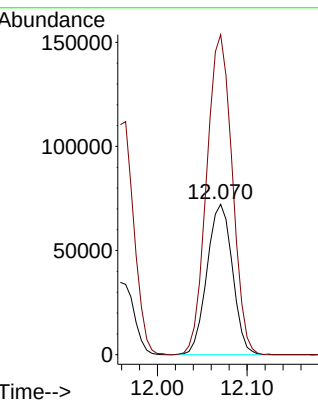
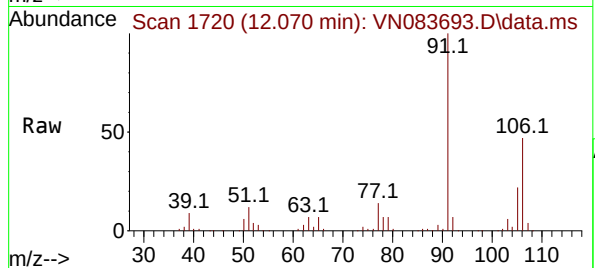
91 213.8 166.6 249.8

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#68

o-Xylene

Concen: 19.056 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN083693.D

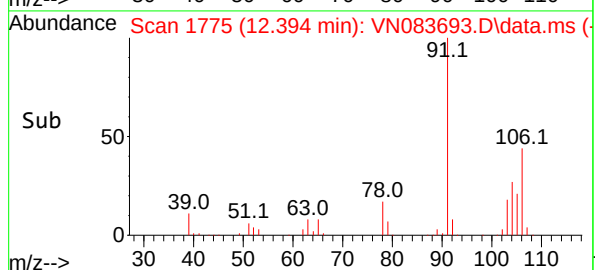
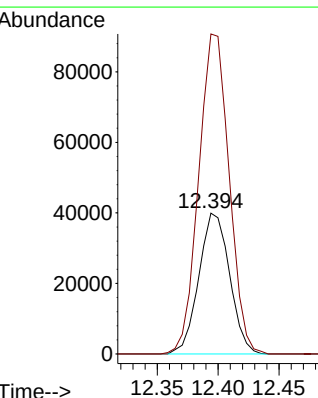
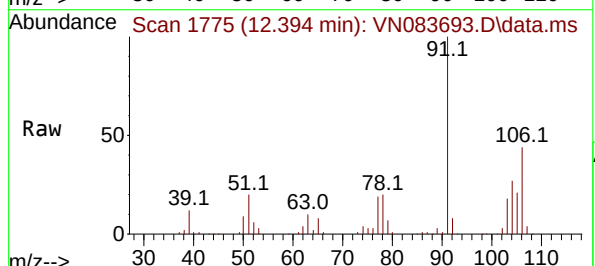
Acq: 06 Sep 2024 13:10

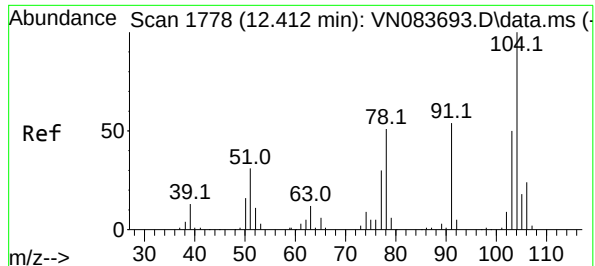
Tgt Ion:106 Resp: 70297

Ion Ratio Lower Upper

106 100

91 224.7 110.0 330.0





#69

Styrene

Concen: 18.681 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion:104 Resp: 116430

Ion Ratio Lower Upper

104 100

78 54.2 42.6 64.0

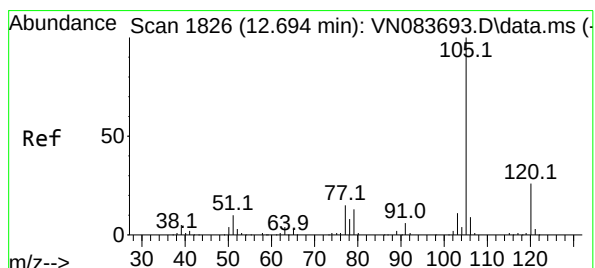
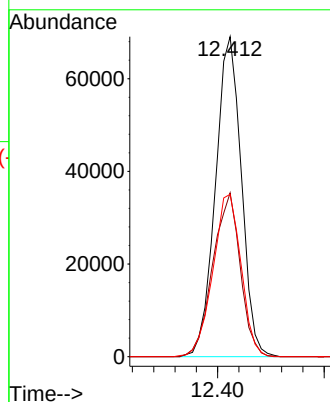
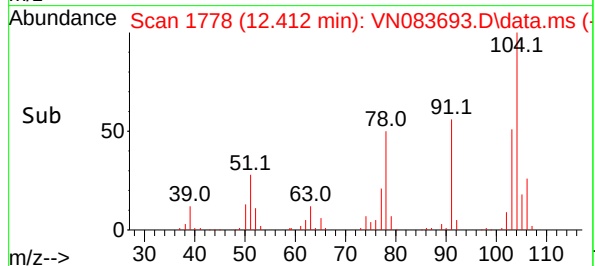
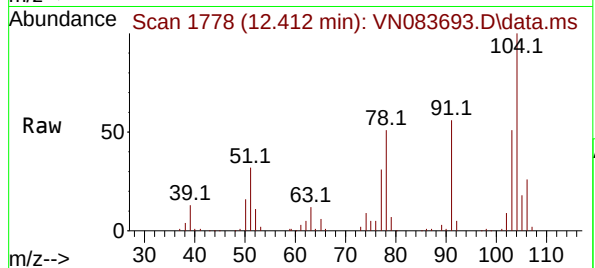
103 55.1 43.7 65.5

Manual Integrations

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Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#70

Isopropylbenzene

Concen: 18.451 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.000 min

Lab File: VN083693.D

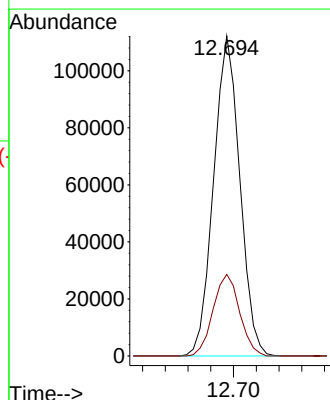
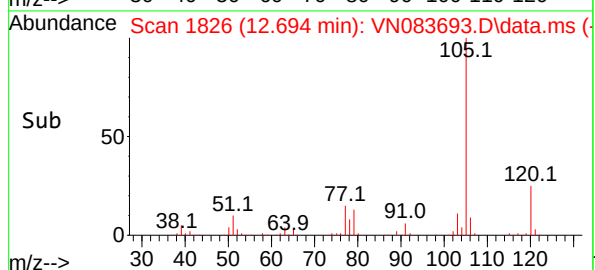
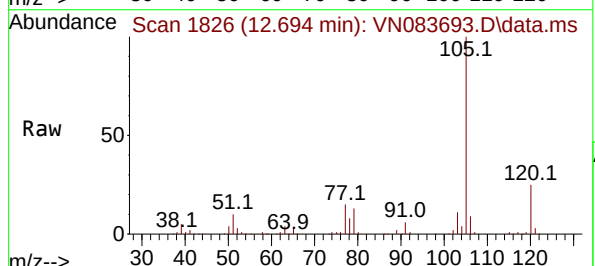
Acq: 06 Sep 2024 13:10

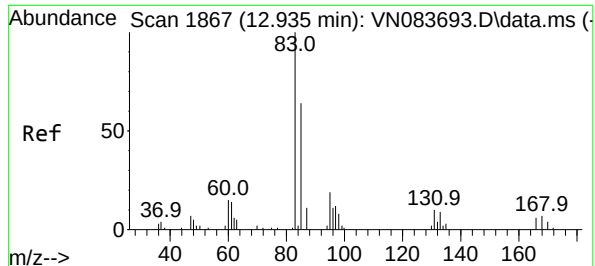
Tgt Ion:105 Resp: 179621

Ion Ratio Lower Upper

105 100

120 25.8 17.8 33.1





#71

1,1,2,2-Tetrachloroethane

Concen: 19.223 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

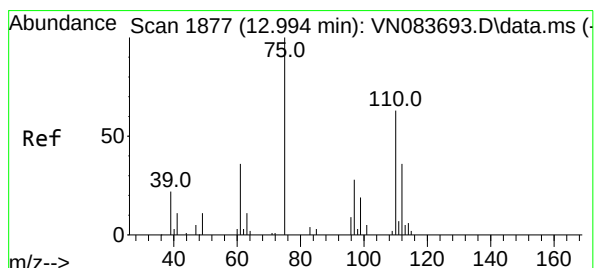
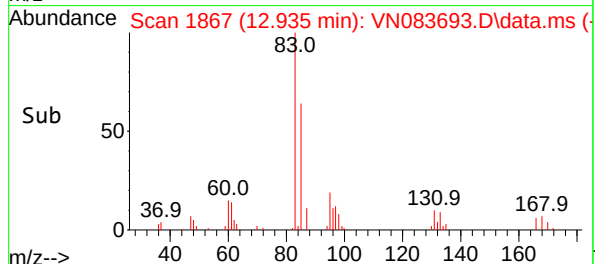
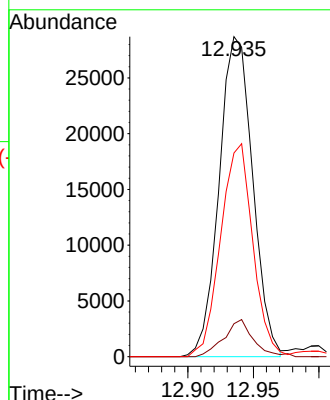
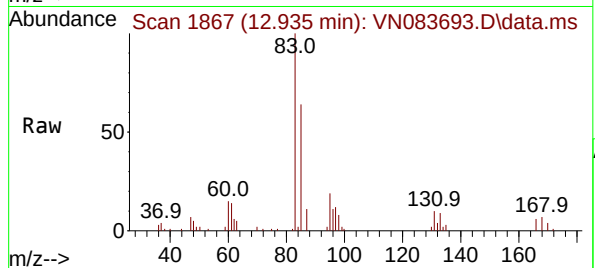
Tgt Ion:	83	Resp:	5111
Ion Ratio	Lower	Upper	
83	100		
131	10.2	5.2	15.6
85	63.8	32.3	96.8

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Supervised By :Mahesh Dadoda 09/09/2024



#72

1,2,3-Trichloropropane

Concen: 19.212 ug/l m

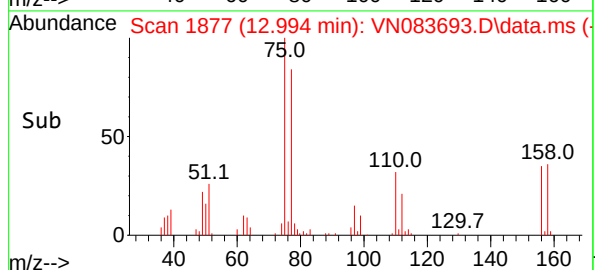
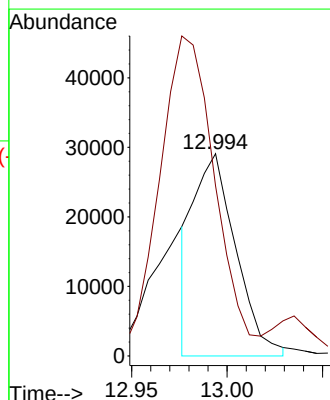
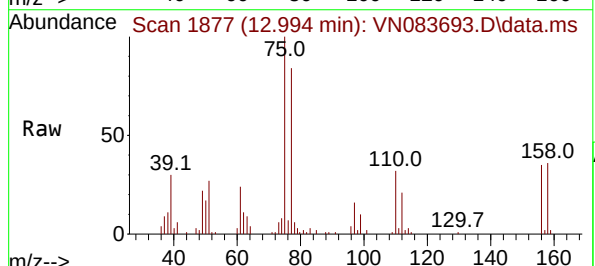
RT: 12.994 min Scan# 1877

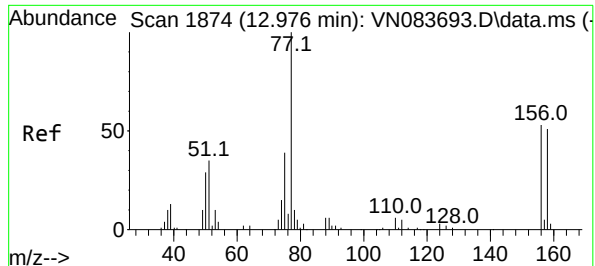
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	75	Resp:	44699
Ion Ratio	Lower	Upper	
75	100		
77	209.7	0.0	367.6





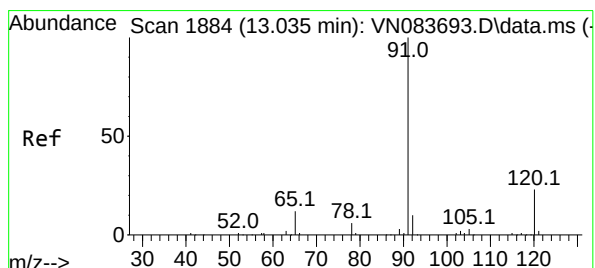
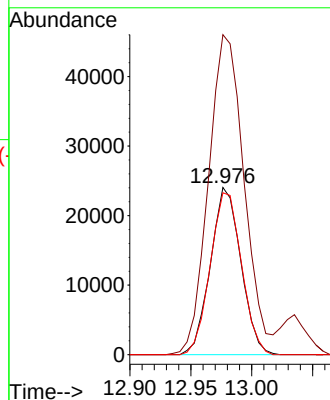
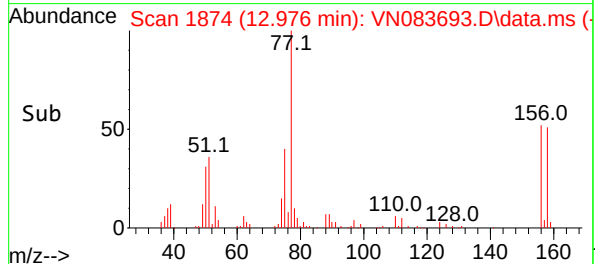
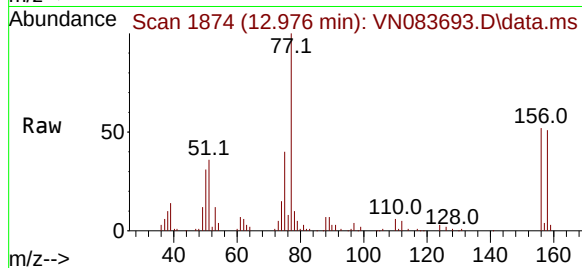
#73
Bromobenzene
Concen: 18.701 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion:156 Resp: 41815
Ion Ratio Lower Upper
156 100
77 224.2 0.0 437.6
158 99.4 0.0 203.8

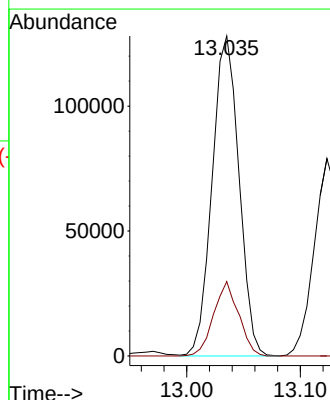
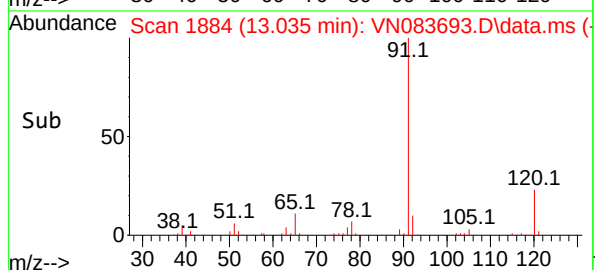
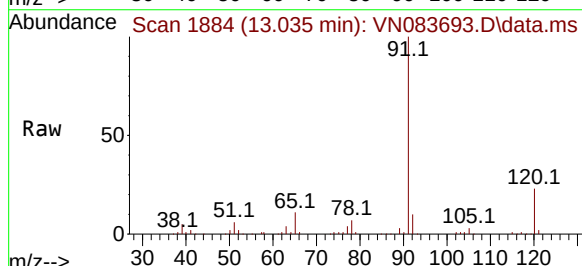
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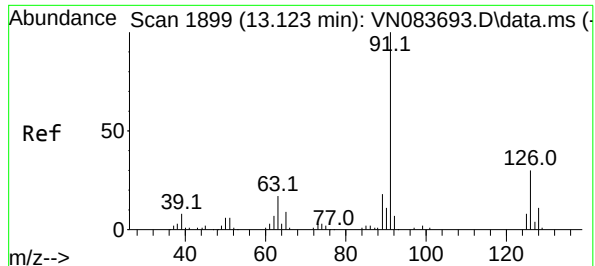
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#74
n-propylbenzene
Concen: 18.444 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion: 91 Resp: 210183
Ion Ratio Lower Upper
91 100
120 21.7 0.0 43.8





#75

2-Chlorotoluene

Concen: 18.658 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 91 Resp: 13270

Ion Ratio Lower Upper

91 100

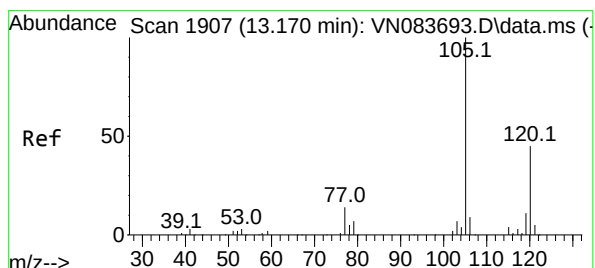
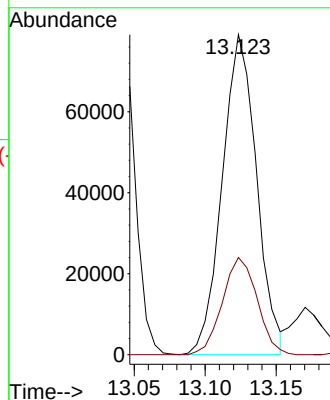
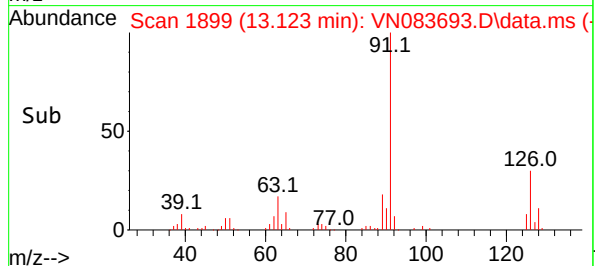
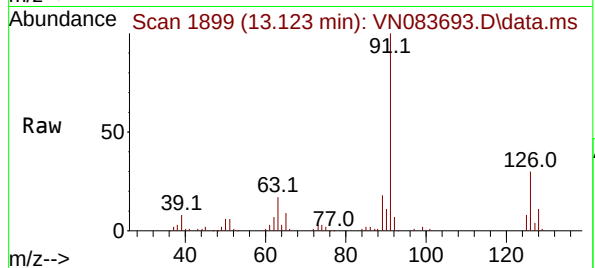
126 30.7 0.0 61.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#76

1,3,5-Trimethylbenzene

Concen: 18.885 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN083693.D

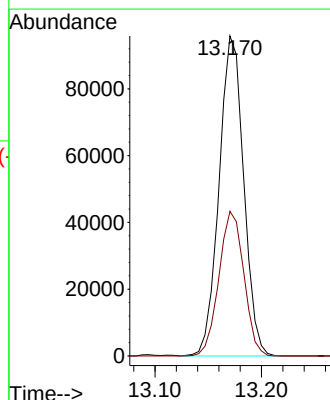
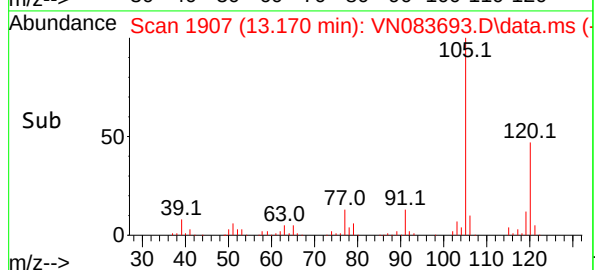
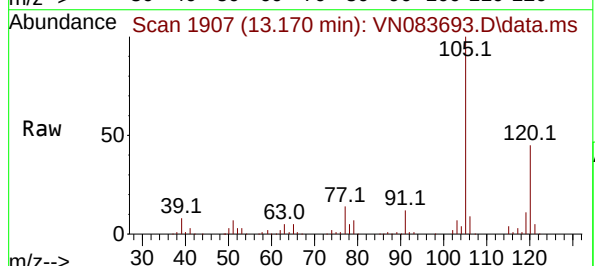
Acq: 06 Sep 2024 13:10

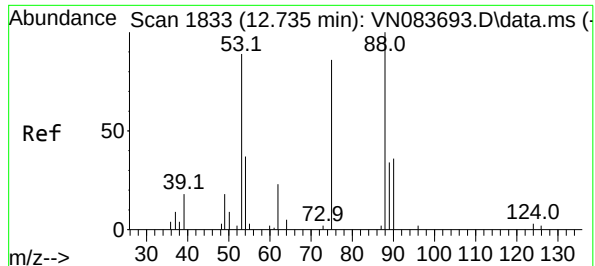
Tgt Ion:105 Resp: 153570

Ion Ratio Lower Upper

105 100

120 45.8 0.0 95.8





#77

t-1,4-Dichloro-2-butene

Concen: 18.300 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

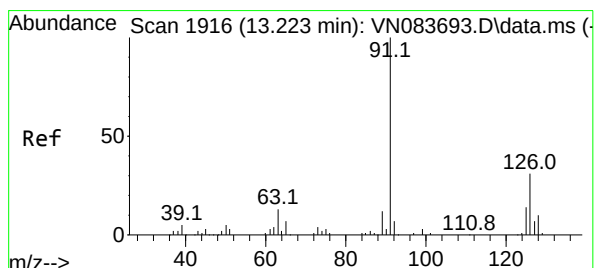
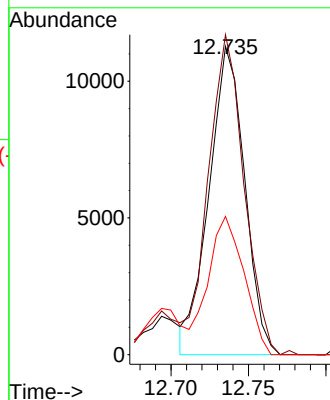
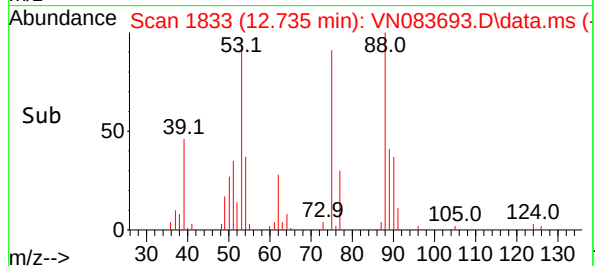
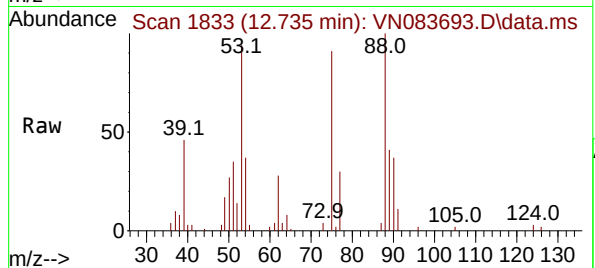
VSTDICCC020

Tgt Ion:	75	Resp:	1803
Ion	Ratio	Lower	Upper
75	100		
53	103.8	45.9	137.7
89	44.8	25.9	77.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#78

4-Chlorotoluene

Concen: 18.508 ug/l

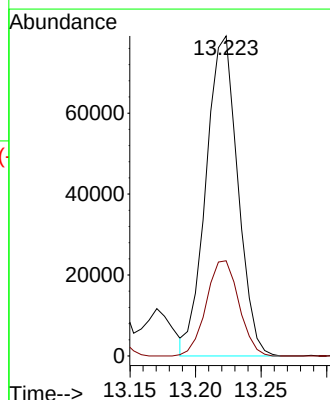
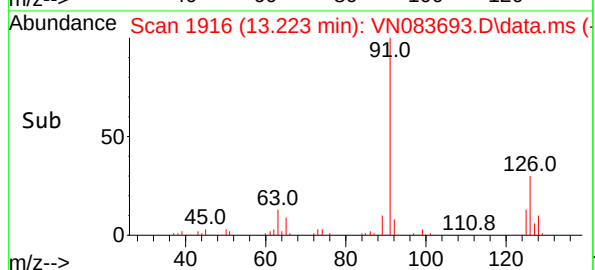
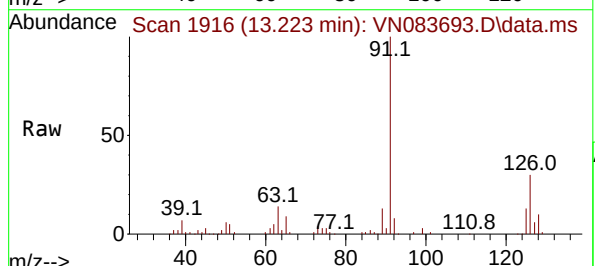
RT: 13.223 min Scan# 1916

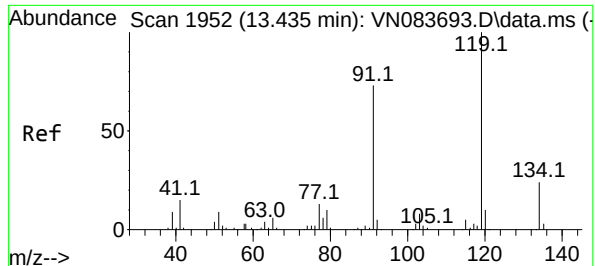
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	91	Resp:	133498
Ion	Ratio	Lower	Upper
91	100		
126	30.5	0.0	62.8





#79

tert-butylbenzene

Concen: 19.057 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

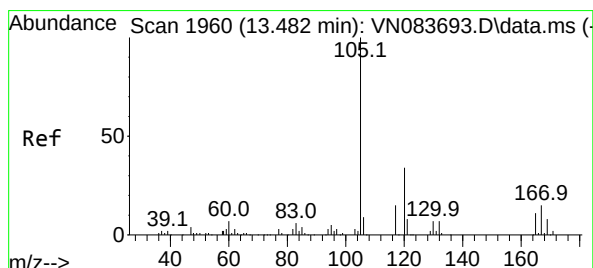
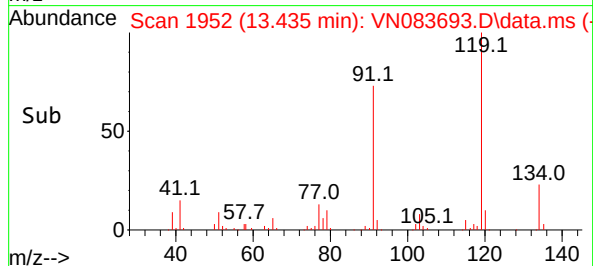
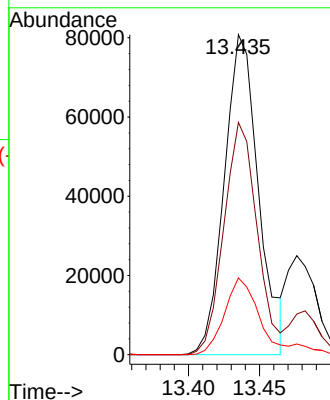
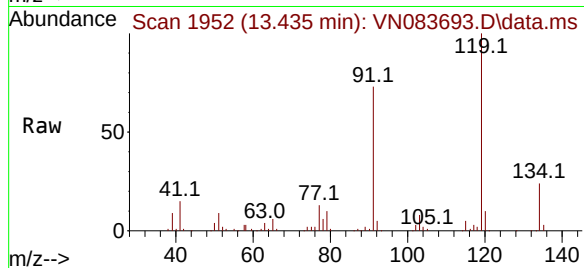
Tgt Ion:	119	Resp:	13551
Ion Ratio	Lower	Upper	
119	100		
91	70.6	0.0	138.8
134	23.9	0.0	48.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#80

1,2,4-Trimethylbenzene

Concen: 18.571 ug/l

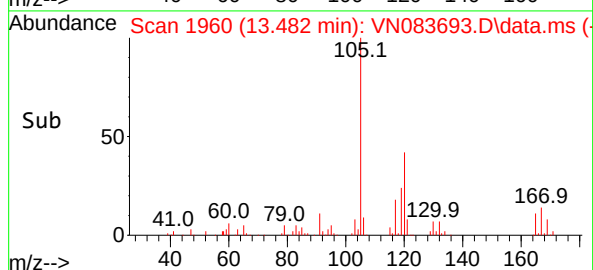
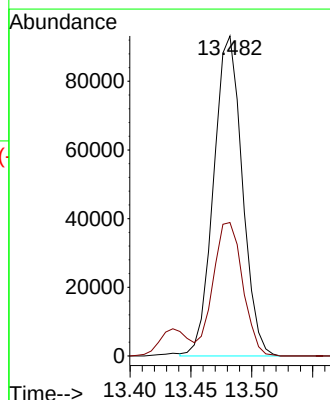
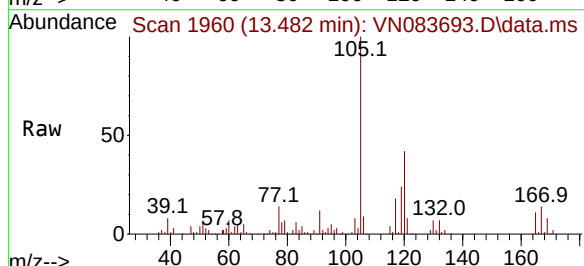
RT: 13.482 min Scan# 1960

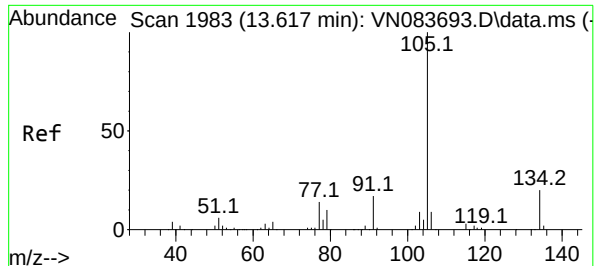
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:	105	Resp:	152609
Ion Ratio	Lower	Upper	
105	100		
120	43.1	0.0	86.8





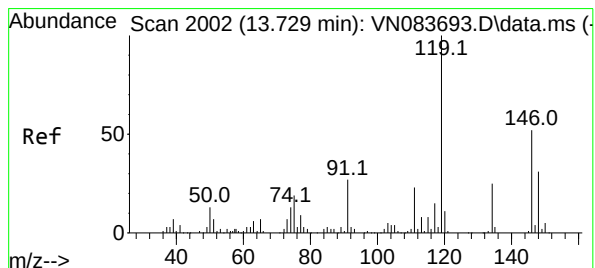
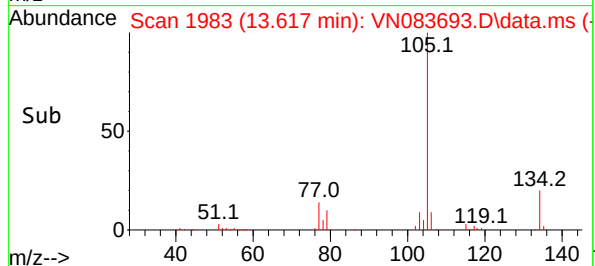
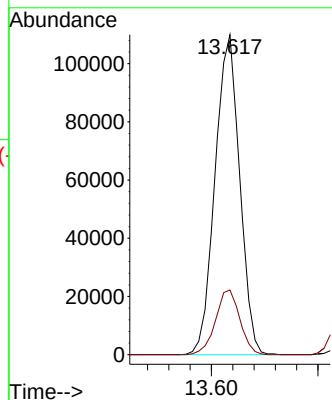
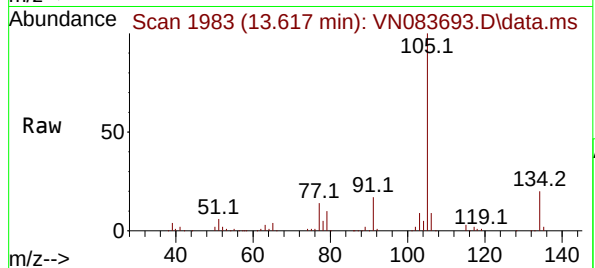
#81
sec-Butylbenzene
Concen: 18.135 ug/l
RT: 13.617 min Scan# 1983
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion:105 Resp: 17616
Ion Ratio Lower Upper
105 100
134 20.0 0.0 39.0

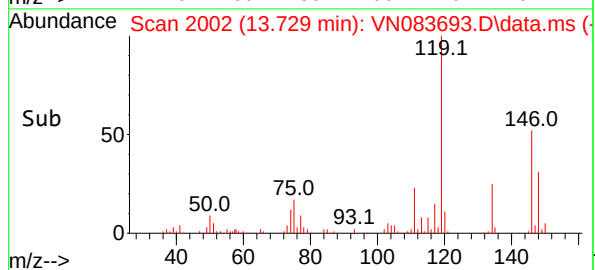
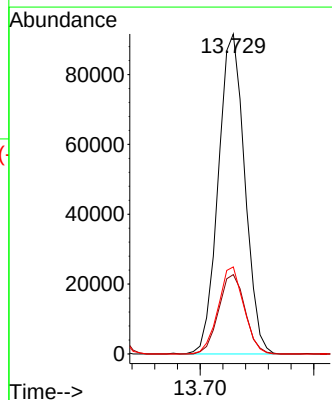
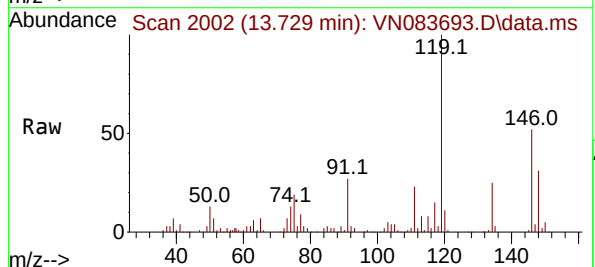
Manual Integrations
APPROVED

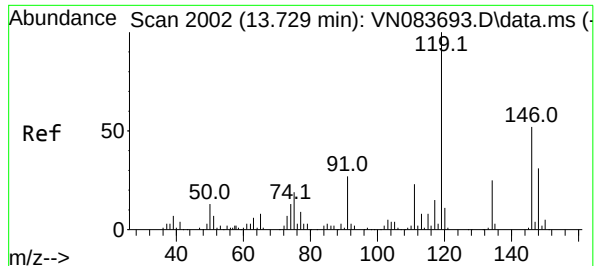
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#82
p-Isopropyltoluene
Concen: 18.132 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion:119 Resp: 148197
Ion Ratio Lower Upper
119 100
134 24.8 0.0 49.2
91 26.3 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 18.538 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

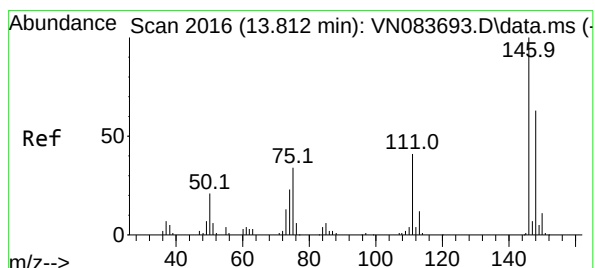
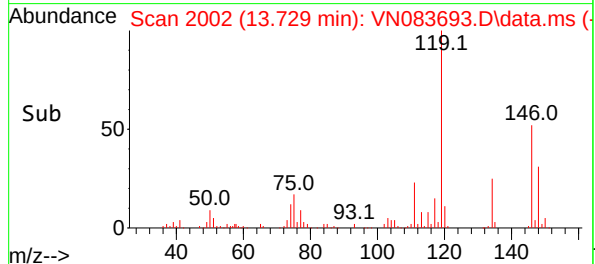
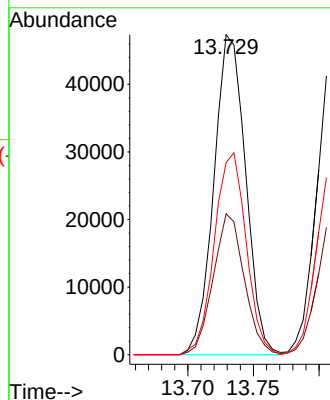
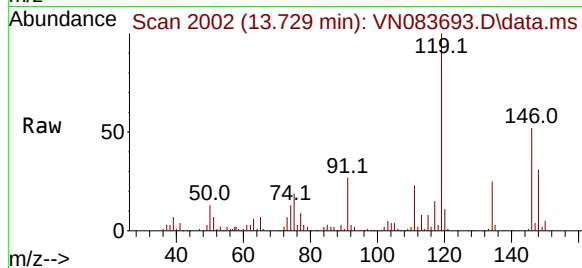
Tgt Ion:146	Resp:	79779
Ion Ratio	Lower	Upper
146	100	
111	43.1	22.4 67.0
148	63.2	32.1 96.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#84

1,4-Dichlorobenzene

Concen: 18.579 ug/l

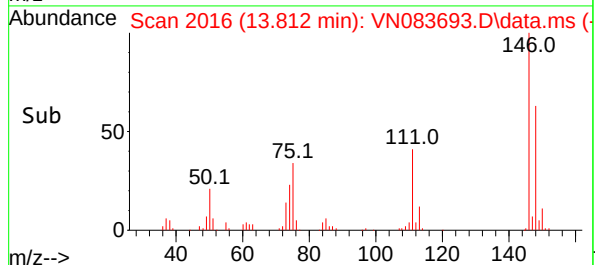
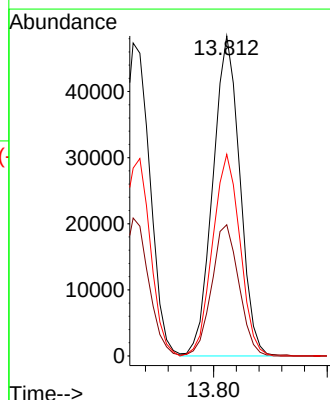
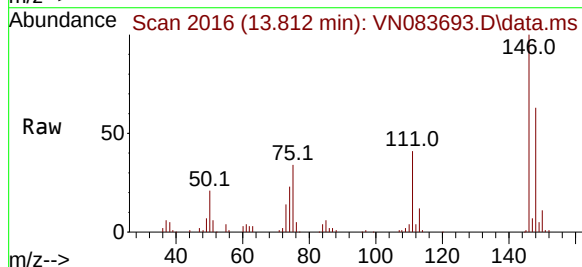
RT: 13.812 min Scan# 2016

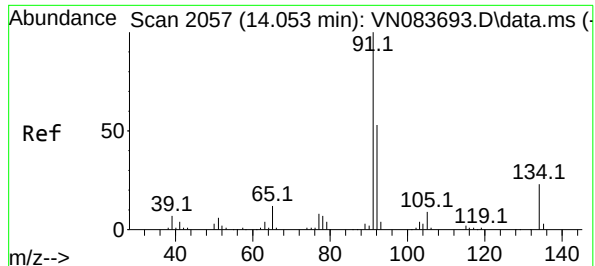
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:146	Resp:	79934
Ion Ratio	Lower	Upper
146	100	
111	41.3	21.3 63.9
148	64.0	31.9 95.5





#85

n-Butylbenzene

Concen: 17.704 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

Tgt Ion: 91 Resp: 127684

Ion Ratio Lower Upper

91 100

92 53.8 0.0 105.0

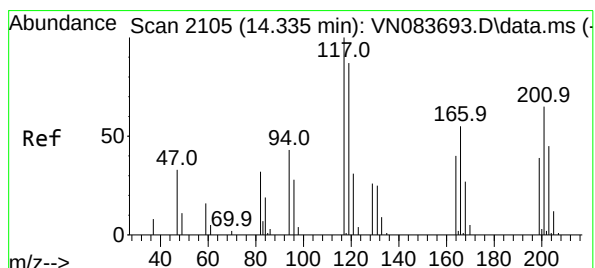
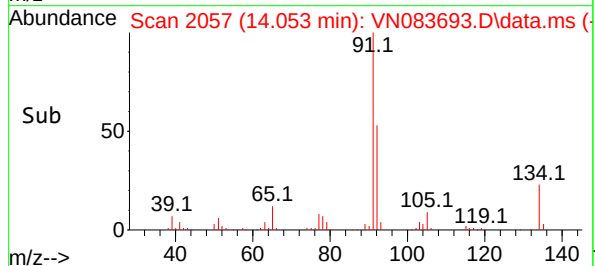
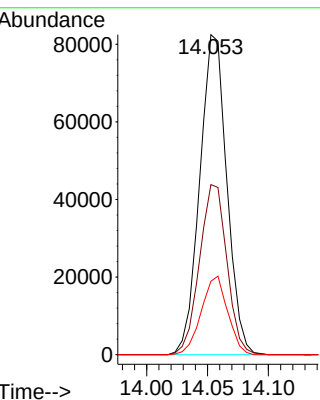
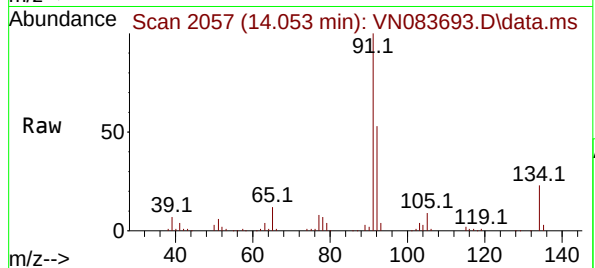
134 23.9 0.0 51.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#86

Hexachloroethane

Concen: 18.231 ug/l

RT: 14.335 min Scan# 2105

Delta R.T. 0.000 min

Lab File: VN083693.D

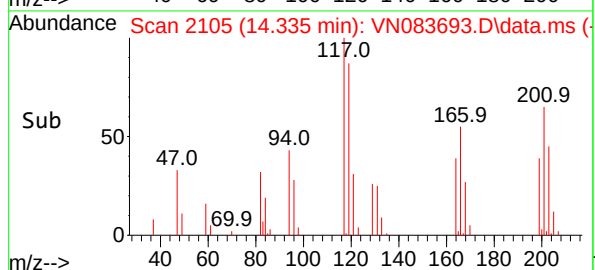
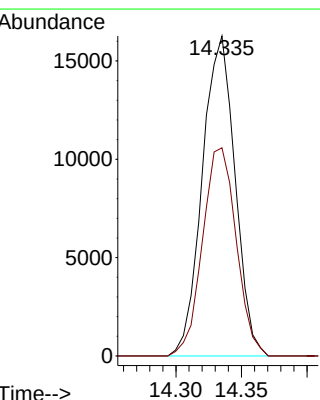
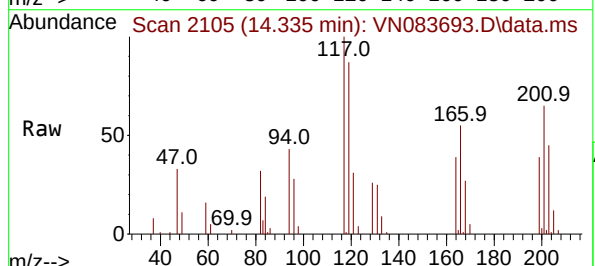
Acq: 06 Sep 2024 13:10

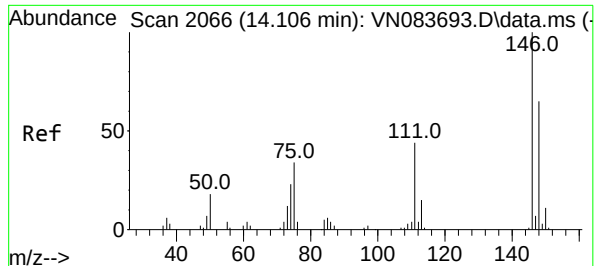
Tgt Ion:117 Resp: 28237

Ion Ratio Lower Upper

117 100

201 67.0 38.0 114.0





#87

1,2-Dichlorobenzene

Concen: 18.437 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC020

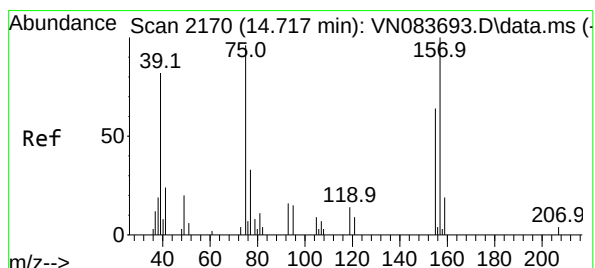
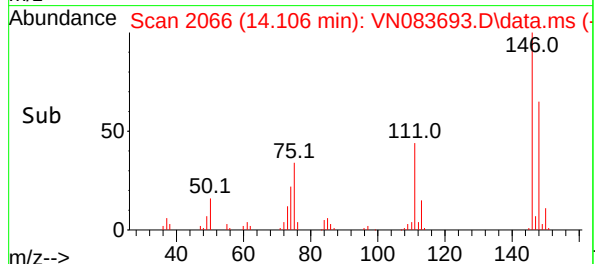
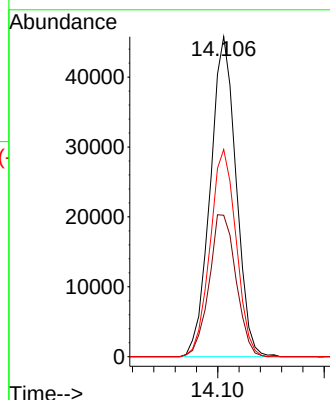
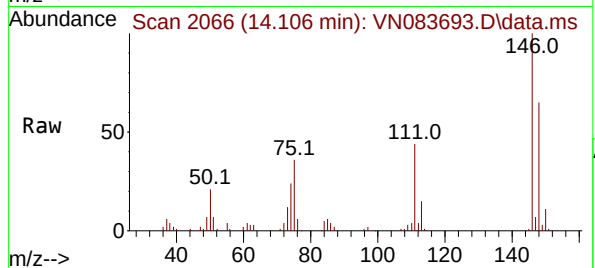
Tgt Ion:146	Resp:	77004
Ion Ratio	Lower	Upper
146	100	
111	46.2	22.6 67.8
148	65.2	31.3 93.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 18.717 ug/l

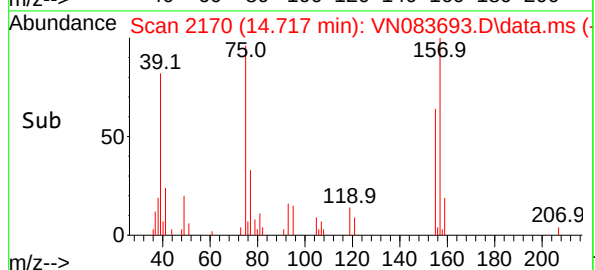
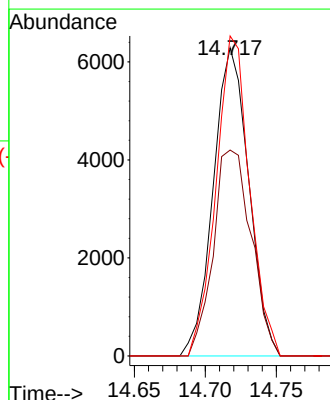
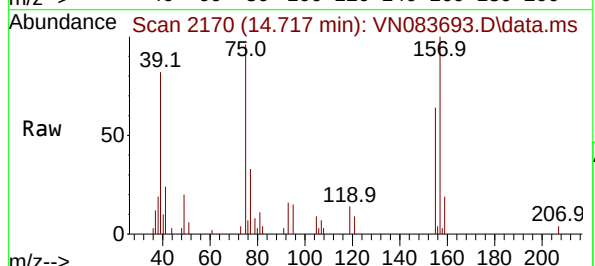
RT: 14.717 min Scan# 2170

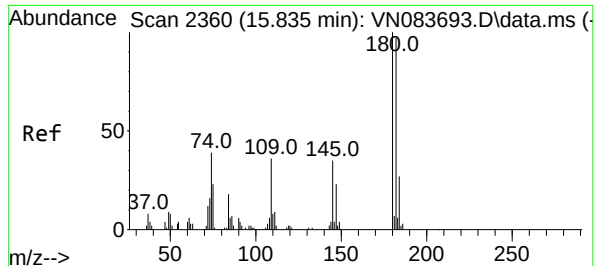
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion: 75	Resp:	10937
Ion Ratio	Lower	Upper
75	100	
155	71.3	61.7 92.5
157	98.0	83.6 125.4





#89

1,2,4-Trichlorobenzene

Concen: 18.290 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Instrument :

MSVOA_N

ClientSampleId :

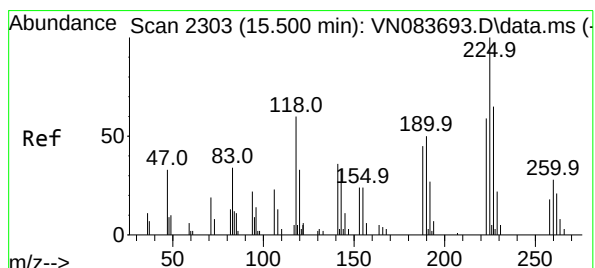
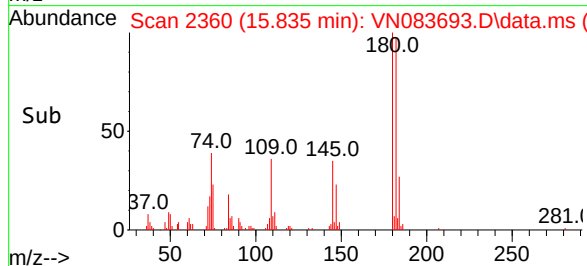
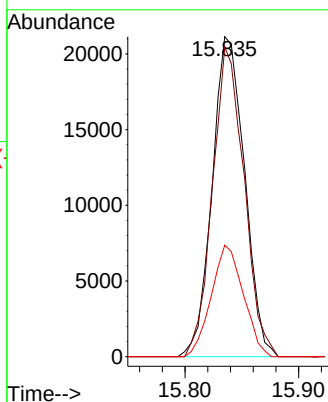
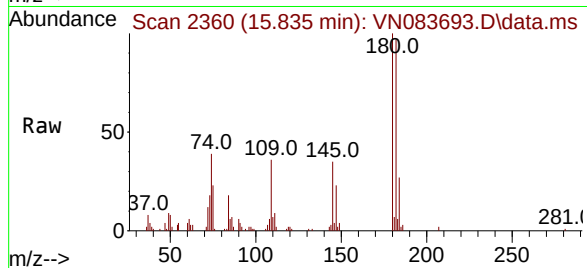
VSTDICCC020

Tgt Ion:180	Resp: 4185
Ion Ratio	Lower Upper
180	100
182	94.3 76.4 114.6
145	34.6 28.4 42.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#90

Hexachlorobutadiene

Concen: 17.798 ug/l

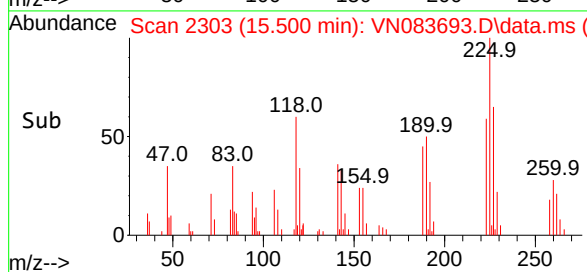
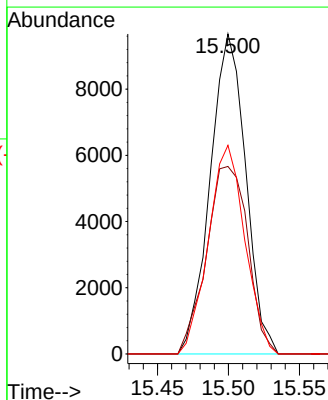
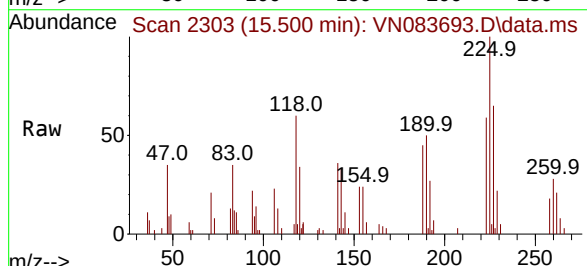
RT: 15.500 min Scan# 2303

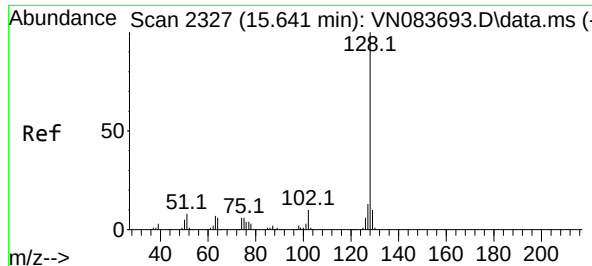
Delta R.T. 0.000 min

Lab File: VN083693.D

Acq: 06 Sep 2024 13:10

Tgt Ion:225	Resp: 16856
Ion Ratio	Lower Upper
225	100
223	68.0 0.0 126.6
227	66.9 0.0 126.6





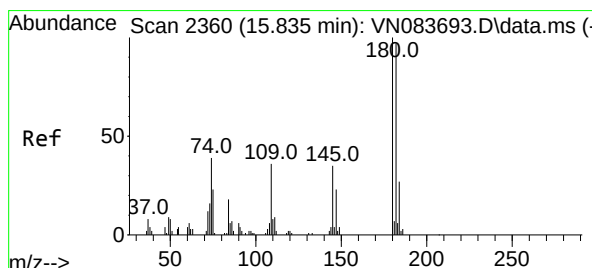
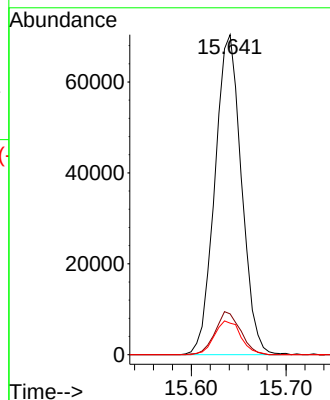
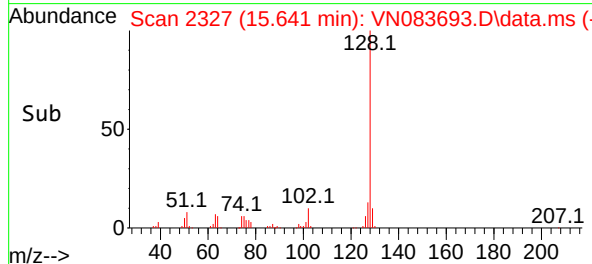
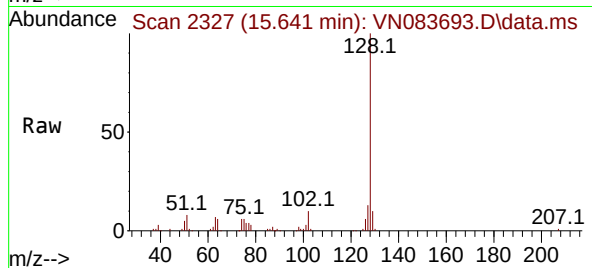
#91
Naphthalene
Concen: 18.362 ug/l
RT: 15.641 min Scan# 2327
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Tgt Ion:128 Resp: 13735
Ion Ratio Lower Upper
128 100
127 12.8 10.6 16.0
129 10.6 8.6 13.0

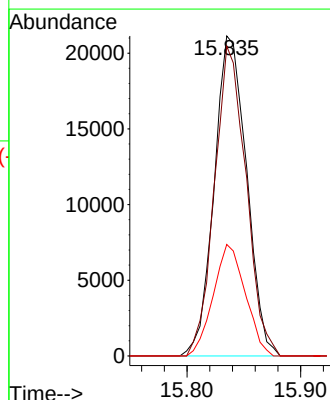
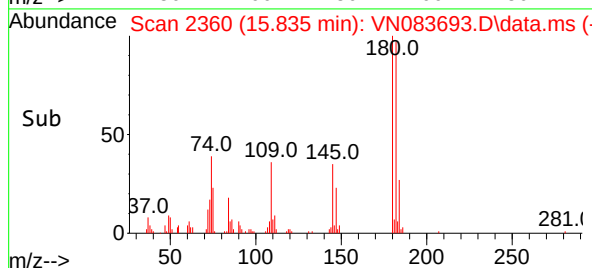
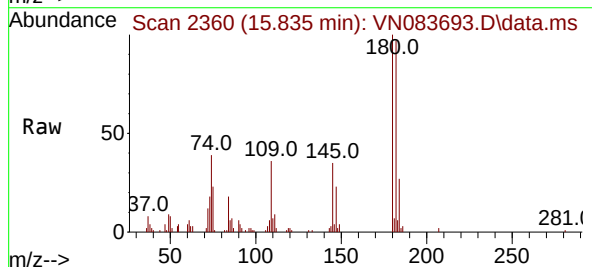
Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#92
1,2,3-Trichlorobenzene
Concen: 18.290 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN083693.D
Acq: 06 Sep 2024 13:10

Tgt Ion:180 Resp: 41851
Ion Ratio Lower Upper
180 100
182 94.3 0.0 191.0
145 34.6 0.0 71.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083694.D
 Acq On : 06 Sep 2024 13:33
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC005

Quant Time: Sep 06 23:34:51 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:27:49 2024
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John
 Carlone

09/09/2024
 Supervised By :Mahesh
 Dadoda

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.812	128	30350	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	170437	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	147783	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.583	65	80885	29.156	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	97.200%
60) 4-Bromofluorobenzene	12.847	95	74346	29.190	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	97.300%
63) Toluene-d8	10.565	98	211226	30.868	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	102.900%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.118	85	9429	4.639	ug/l	92
3) Chloromethane	2.359	50	10500	4.972	ug/l	91
4) Vinyl Chloride	2.512	62	10517	4.844	ug/l	97
5) Bromomethane	2.906	94	6112	5.039	ug/l	94
6) Chloroethane	3.071	64	7843	5.395	ug/l	92
7) Trichlorofluoromethane	3.471	101	18303	5.029	ug/l	86
8) Diethyl Ether	3.959	74	5867	4.744	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.359	101	9497	4.858	ug/l #	32
10) 1,1-Dichloroethene	4.330	96	9209	4.882	ug/l	96
11) Methyl Iodide	4.577	142	11768	4.593	ug/l	98
12) Methyl Acetate	5.024	43	13637	5.995	ug/l #	66
13) Acrolein	4.177	56	6383m	19.226	ug/l	
14) Acrylonitrile	5.724	53	23305	25.315	ug/l	97
15) Acetone	4.430	58	5723m	18.740	ug/l	
16) Carbon Disulfide	4.700	76	26484	4.968	ug/l #	87
17) Allyl chloride	5.018	41	15469m	4.671	ug/l	
18) Methylene Chloride	5.265	84	10072	4.881	ug/l	90
19) trans-1,2-Dichloroethene	5.783	96	9461	4.839	ug/l	94
20) Diisopropyl ether	6.671	45	32451	4.858	ug/l	96
21) 1,1-Dichloroethane	6.559	63	18617m	4.881	ug/l	
22) cis-1,2-Dichloroethene	7.483	96	11350	4.770	ug/l	92
23) tert-Butyl Alcohol	5.536	59	8086m	23.935	ug/l	
24) Methyl tert-Butyl Ether	5.795	73	31527	4.703	ug/l #	86
25) Chloroform	7.965	83	19387	4.796	ug/l	92
26) Cyclohexane	8.253	56	15678	4.667	ug/l #	83
29) 1,1-Dichloropropene	8.365	75	13579	5.023	ug/l	96
30) 2-Butanone	7.483	43	29808	23.391	ug/l	96
31) 2,2-Dichloropropane	7.483	77	16409	4.761	ug/l #	88
32) 1,1,1-Trichloroethane	8.165	97	18056	5.001	ug/l	96
33) Carbon Tetrachloride	8.365	117	15688	5.018	ug/l	99
34) Benzene	8.600	78	40249	4.962	ug/l #	80
35) Methacrylonitrile	7.777	41	7551	5.271	ug/l	89
36) 1,2-Dichloroethane	8.665	62	15883	5.209	ug/l #	77
37) Trichloroethene	9.347	130	9867	5.180	ug/l	93
38) Methylcyclohexane	9.600	83	15301	4.728	ug/l	96
39) 1,2-Dichloropropane	9.618	63	9926	5.085	ug/l	90
40) Dibromomethane	9.706	93	7111	4.982	ug/l	95
41) Bromodichloromethane	9.883	83	14747	4.858	ug/l	92
42) Vinyl Acetate	6.594	43	158467	30.245	ug/l	95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083694.D
 Acq On : 06 Sep 2024 13:33
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Manual Integrations

APPROVED

Reviewed By :John
 Carlone

09/09/2024

Supervised By :Mahesh
 Dadoda

09/09/2024

Quant Time: Sep 06 23:34:51 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:27:49 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
43) Ethyl Acetate	7.559	43	13134	5.121	ug/l #	90	
44) Isopropyl Acetate	8.688	43	21530	4.853	ug/l	94	
45) 1,4-Dioxane	9.700	88	3419	98.810	ug/l #	93	
46) Methyl methacrylate	9.677	41	10480	4.881	ug/l	80	
47) n-amyl Acetate	12.494	43	16969	4.318	ug/l	95	
48) t-1,3-Dichloropropene	10.835	75	15652	4.902	ug/l	96	
49) cis-1,3-Dichloropropene	10.312	75	16087	4.845	ug/l #	87	
50) 1,1,2-Trichloroethane	11.012	97	8983	4.946	ug/l	95	
51) Ethyl methacrylate	10.871	69	14165	4.565	ug/l	79	
52) 1,3-Dichloropropane	11.165	76	17264	5.263	ug/l	96	
53) Dibromochloromethane	11.359	129	10280	4.719	ug/l	98	
54) 1,2-Dibromoethane	11.465	107	9173	4.882	ug/l	100	
55) 2-Chloroethyl vinyl ether	10.159	63	31844	25.750	ug/l	99	
56) Bromoform	12.582	173	6367	4.600	ug/l #	95	
58) 4-Methyl-2-Pentanone	10.447	43	59789	25.515	ug/l #	88	
59) 2-Hexanone	11.194	43	43379	24.499	ug/l	90	
61) Tetrachloroethene	11.100	164	8572	5.481	ug/l #	80	
62) Toluene	10.630	91	43895	5.168	ug/l	97	
64) Chlorobenzene	11.888	112	28468	5.413	ug/l	95	
65) 1,1,1,2-Tetrachloroethane	11.959	131	9342	5.099	ug/l	98	
66) Ethyl Benzene	11.965	91	49501	5.124	ug/l	97	
67) m/p-Xylenes	12.071	106	35390	9.958	ug/l	95	
68) o-Xylene	12.400	106	16557	4.814	ug/l	87	
69) Styrene	12.412	104	28202	4.853	ug/l	96	
70) Isopropylbenzene	12.694	105	44138	4.863	ug/l	99	
71) 1,1,2,2-Tetrachloroethane	12.935	83	12572	5.071	ug/l	99	
72) 1,2,3-Trichloropropane	12.994	75	11376m	5.244	ug/l		
73) Bromobenzene	12.976	156	11265	5.403	ug/l	97	
74) n-propylbenzene	13.035	91	51761	4.871	ug/l	100	
75) 2-Chlorotoluene	13.123	91	34301	5.172	ug/l	99	
76) 1,3,5-Trimethylbenzene	13.171	105	36414	4.803	ug/l	100	
77) t-1,4-Dichloro-2-butene	12.735	75	4164	4.532	ug/l	90	
78) 4-Chlorotoluene	13.218	91	35595	5.293	ug/l	99	
79) tert-butylbenzene	13.441	119	32540	4.908	ug/l	96	
80) 1,2,4-Trimethylbenzene	13.482	105	37167	4.851	ug/l	97	
81) sec-Butylbenzene	13.618	105	44144	4.874	ug/l	99	
82) p-Isopropyltoluene	13.729	119	35731	4.689	ug/l	98	
83) 1,3-Dichlorobenzene	13.735	146	22005	5.484	ug/l	98	
84) 1,4-Dichlorobenzene	13.812	146	21795	5.433	ug/l	100	
85) n-Butylbenzene	14.053	91	32362	4.812	ug/l	98	
86) Hexachloroethane	14.335	117	6635	4.594	ug/l	89	
87) 1,2-Dichlorobenzene	14.106	146	20347	5.225	ug/l	96	
88) 1,2-Dibromo-3-Chloropr...	14.723	75	2717	4.987	ug/l #	86	
89) 1,2,4-Trichlorobenzene	15.841	180	11428	5.357	ug/l	96	
90) Hexachlorobutadiene	15.506	225	4688	5.309	ug/l	96	
91) Naphthalene	15.641	128	35168	5.042	ug/l	99	
92) 1,2,3-Trichlorobenzene	15.841	180	11428	5.357	ug/l	96	

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

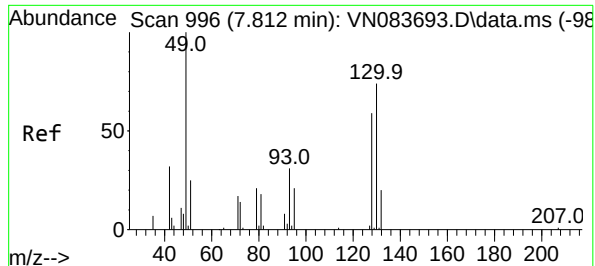
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations

09/09/2024
Supervised By :Mahesh
Dadoda

09/09/2024





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.812 min Scan# 996

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

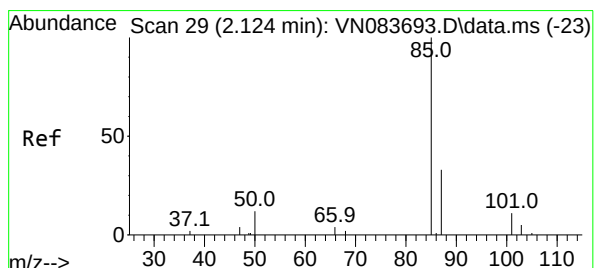
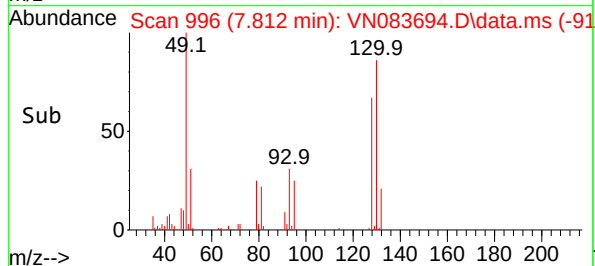
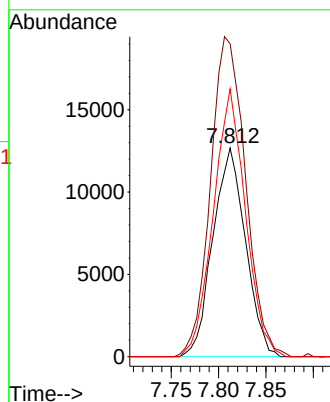
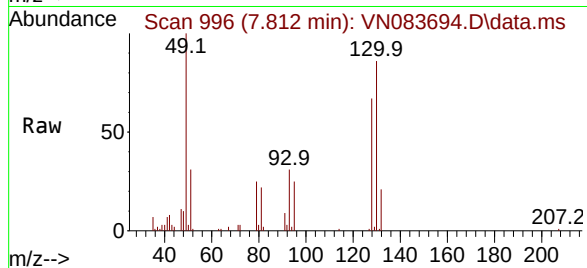
Tgt Ion:	128	Resp:	30350
Ion	Ratio	Lower	Upper
128	100		
49	164.5	0.0	403.7
130	126.6	0.0	323.3

Manual Integrations
APPROVEDReviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#2

Dichlorodifluoromethane

Concen: 4.639 ug/l

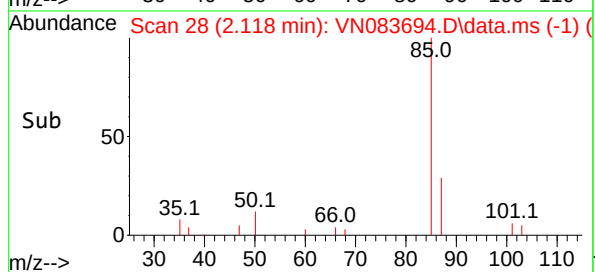
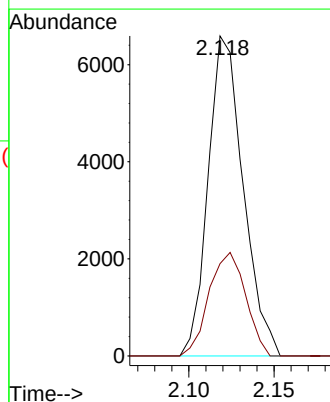
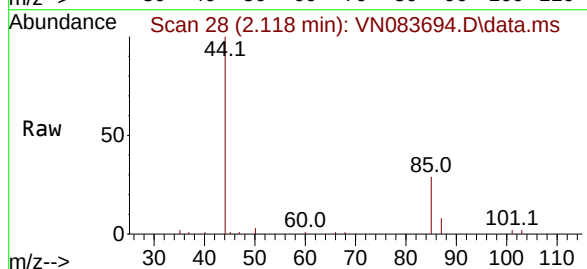
RT: 2.118 min Scan# 28

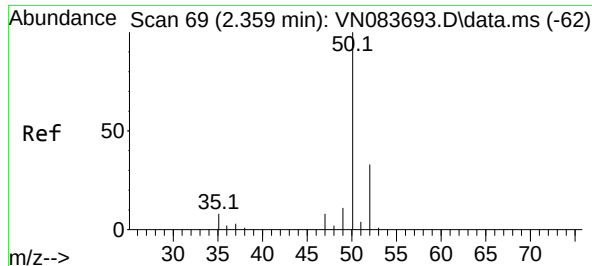
Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	85	Resp:	9429
Ion	Ratio	Lower	Upper
85	100		
87	28.9	16.8	50.3





#3
Chloromethane
Concen: 4.972 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

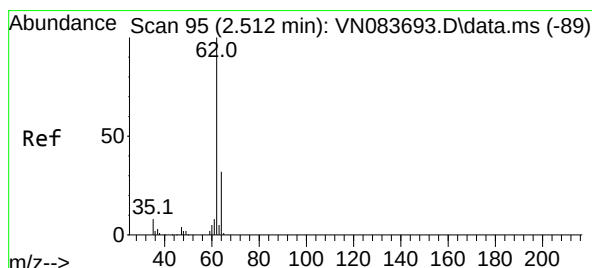
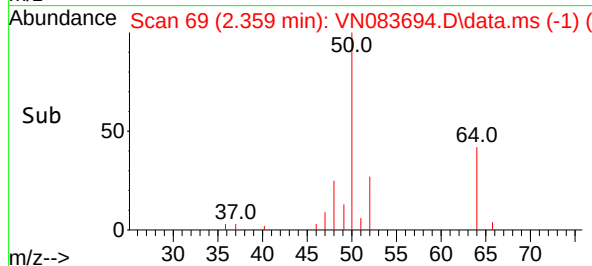
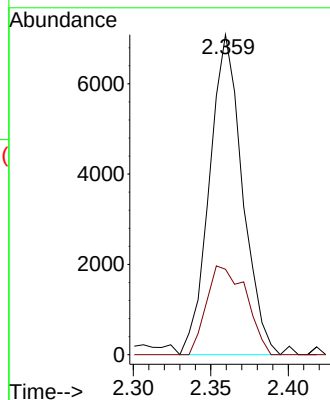
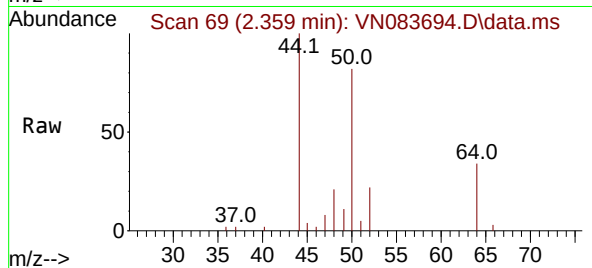
Tgt Ion: 50 Resp: 10500
Ion Ratio Lower Upper
50 100
52 26.7 25.4 38.0

Manual Integrations
APPROVED

Reviewed By :John
Carlone

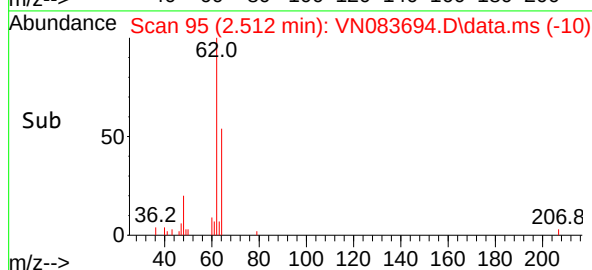
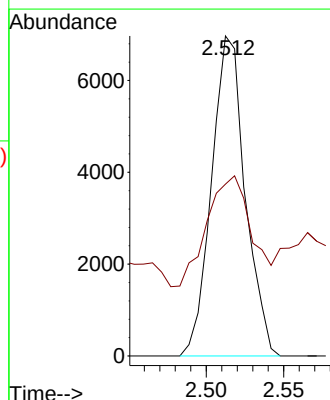
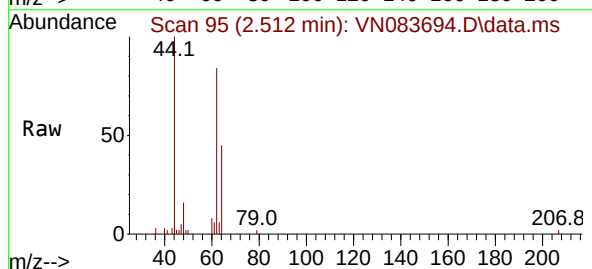
09/09/2024
Supervised By :Mahesh
Dadoda

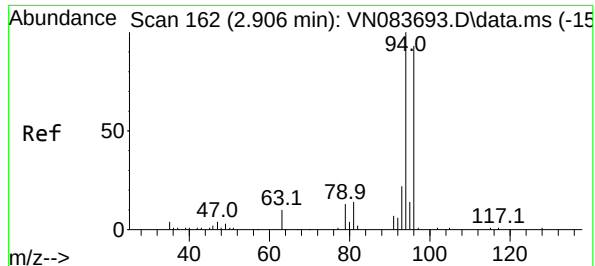
09/09/2024



#4
Vinyl Chloride
Concen: 4.844 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion: 62 Resp: 10517
Ion Ratio Lower Upper
62 100
64 31.9 24.1 36.1





#5

Bromomethane

Concen: 5.039 ug/l

RT: 2.906 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 94 Resp: 611

Ion Ratio Lower Upper

94 100

96 96.5 72.8 109.2

Manual Integrations

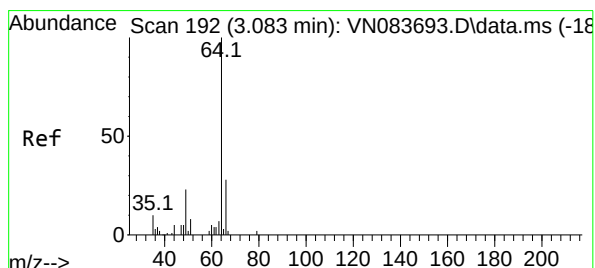
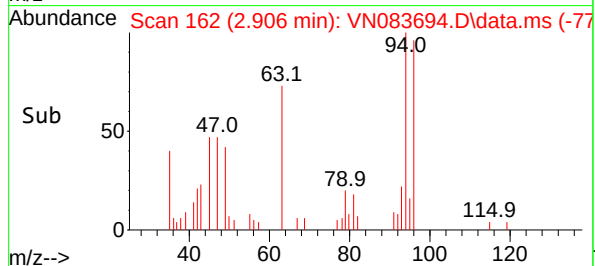
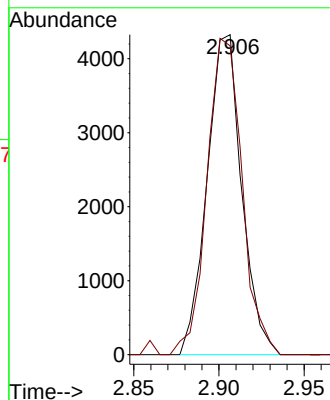
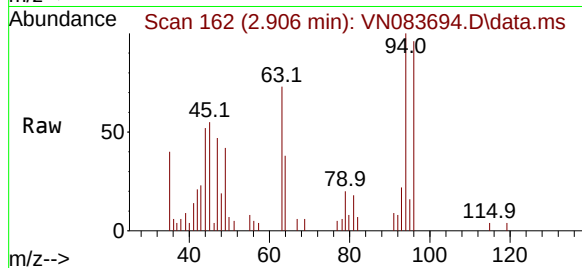
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#6

Chloroethane

Concen: 5.395 ug/l

RT: 3.071 min Scan# 190

Delta R.T. -0.012 min

Lab File: VN083694.D

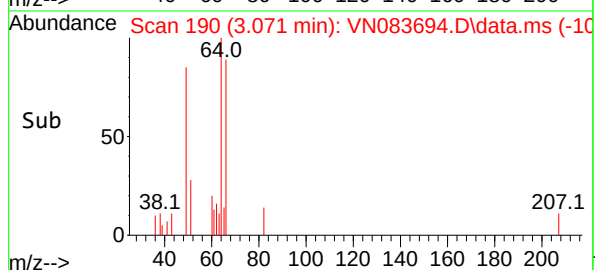
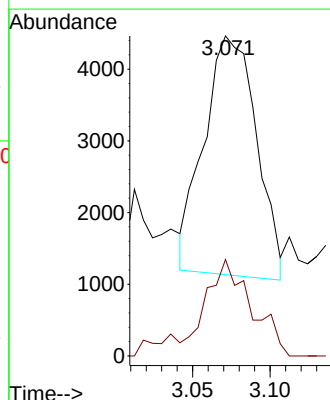
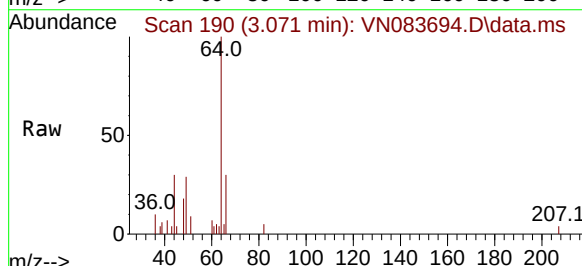
Acq: 06 Sep 2024 13:33

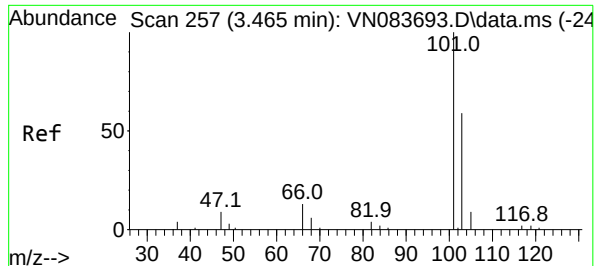
Tgt Ion: 64 Resp: 7843

Ion Ratio Lower Upper

64 100

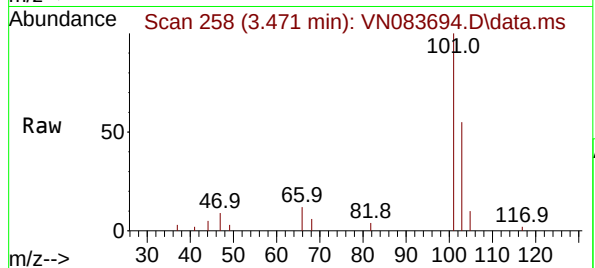
66 38.0 26.7 40.1





#7
Trichlorofluoromethane
Concen: 5.029 ug/l
RT: 3.471 min Scan# 210
Delta R.T. 0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



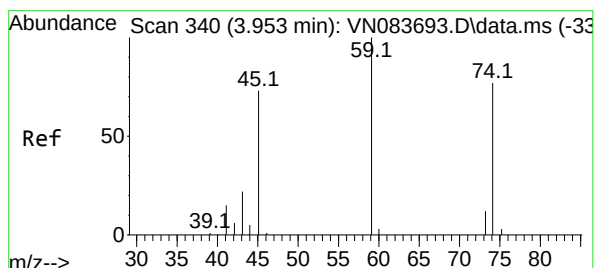
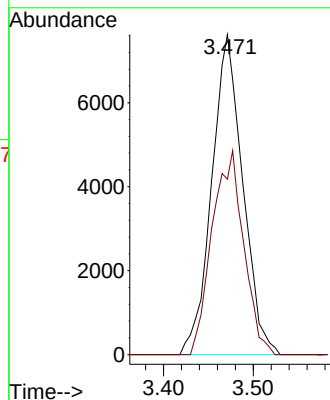
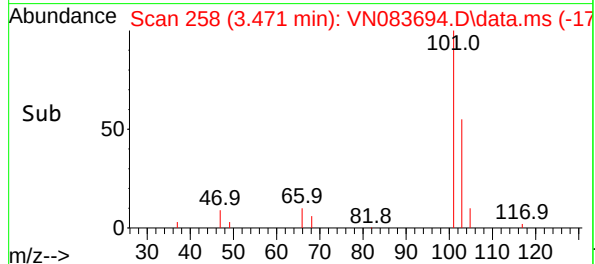
Tgt Ion:101 Resp: 1830
Ion Ratio Lower Upper
101 100
103 54.9 53.0 79.4

Manual Integrations
APPROVED

Reviewed By :John
Carlone

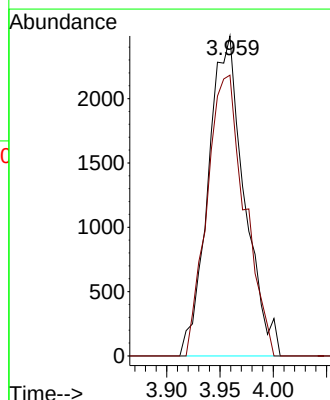
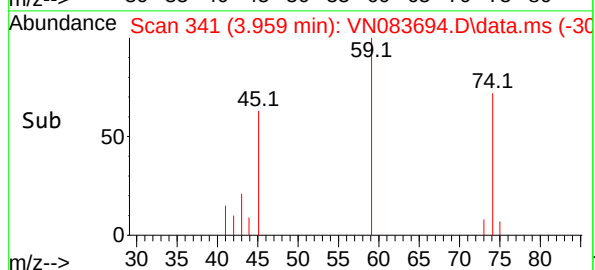
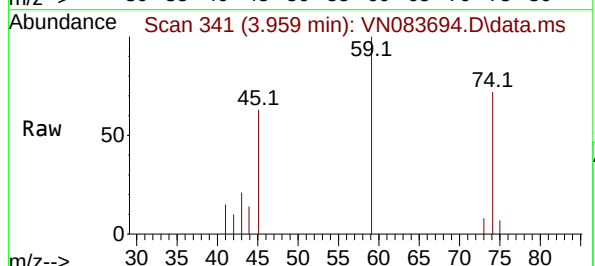
09/09/2024
Supervised By :Mahesh
Dadoda

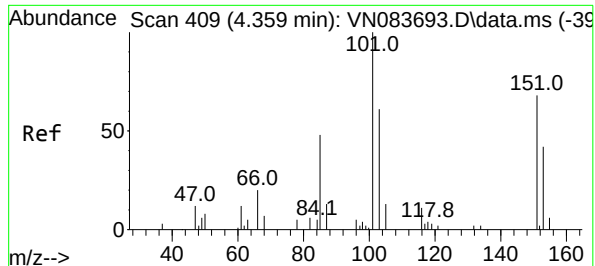
09/09/2024



#8
Diethyl Ether
Concen: 4.744 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion: 74 Resp: 5867
Ion Ratio Lower Upper
74 100
45 91.4 16.4 147.4





#9

1,1,2-Trichlorotrifluoroethane

Concen: 4.858 ug/l

RT: 4.359 min Scan# 409

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	101	Resp:	949
Ion	Ratio	Lower	Upper
101	100		
85	26.7	0.0	90.6
151	0.0	0.0	157.6

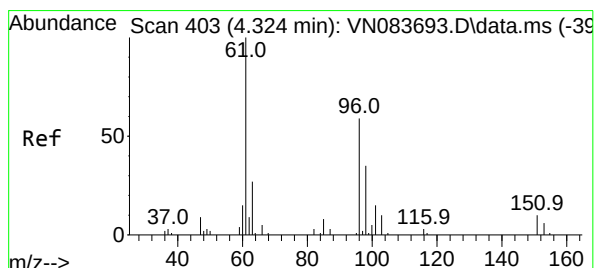
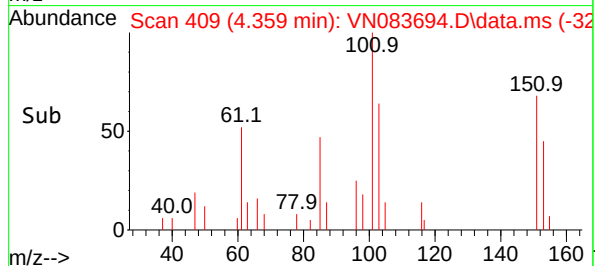
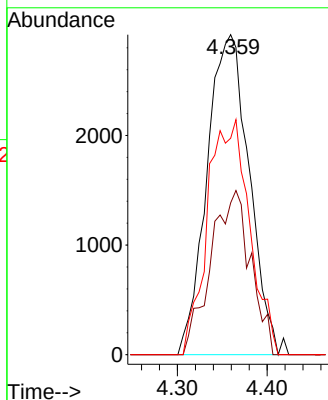
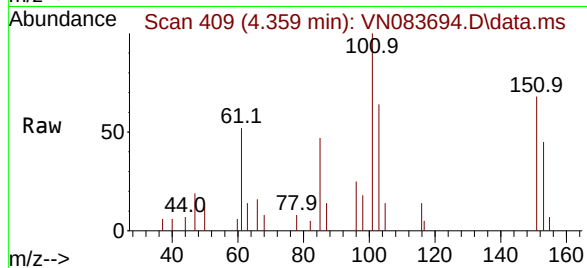
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#10

1,1-Dichloroethene

Concen: 4.882 ug/l

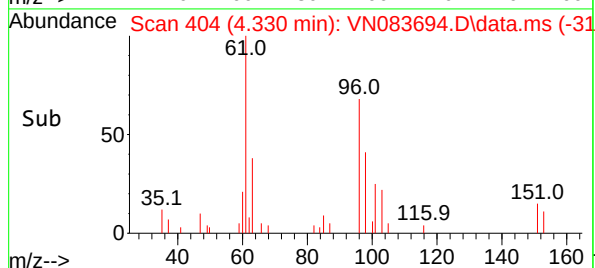
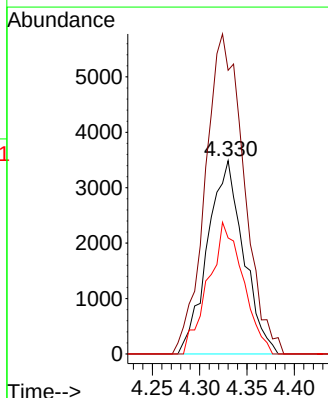
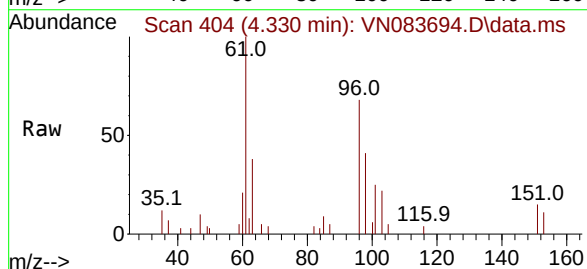
RT: 4.330 min Scan# 404

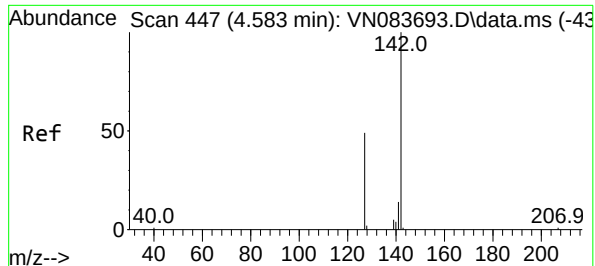
Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

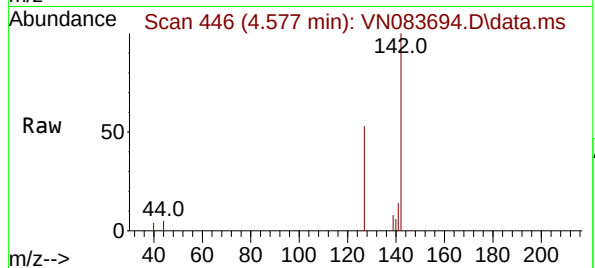
Tgt Ion:	96	Resp:	9209
Ion	Ratio	Lower	Upper
96	100		
61	141.1	117.6	176.4
98	60.0	48.4	72.6





#11
Methyl Iodide
Concen: 4.593 ug/l
RT: 4.577 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



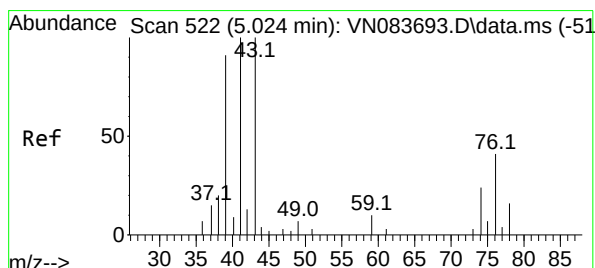
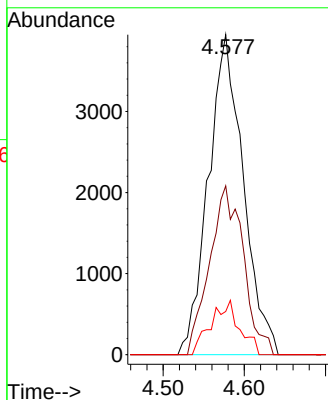
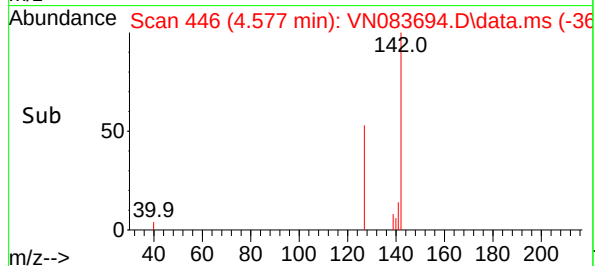
Tgt Ion:142 Resp: 11768
Ion Ratio Lower Upper
142 100
127 52.7 26.3 78.9
141 13.5 8.3 24.9

Manual Integrations
APPROVED

Reviewed By :John
Carlone

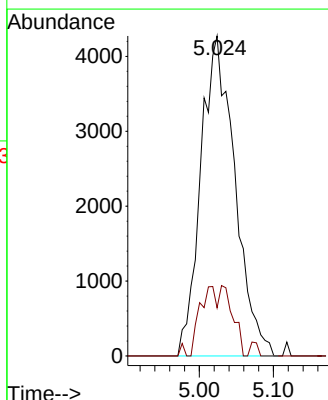
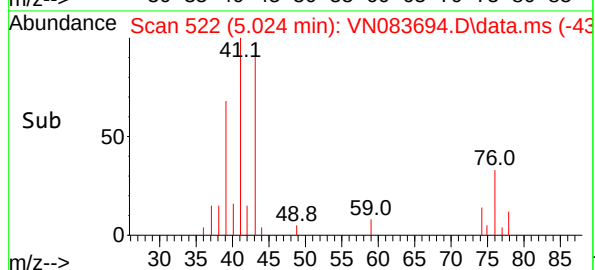
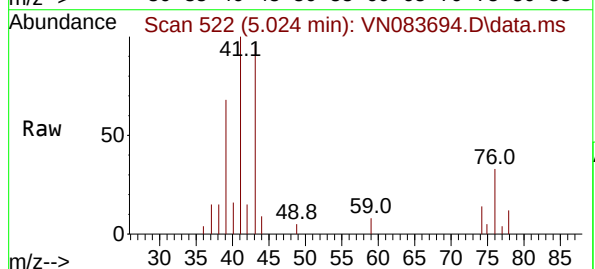
09/09/2024
Supervised By :Mahesh
Dadoda

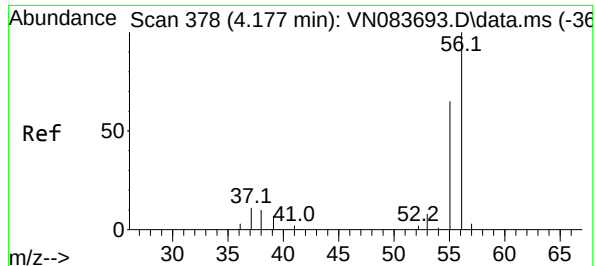
09/09/2024



#12
Methyl Acetate
Concen: 5.995 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion: 43 Resp: 13637
Ion Ratio Lower Upper
43 100
74 15.0 27.7 41.5#





#13

Acrolein

Concen: 19.226 ug/l m

RT: 4.177 min Scan# 31

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 56 Resp: 638

Ion Ratio Lower Upper

56 100

55 73.0 55.5 83.3

Manual Integrations

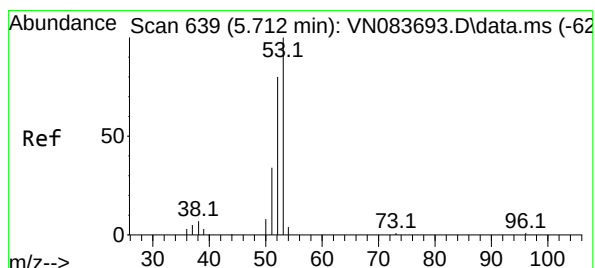
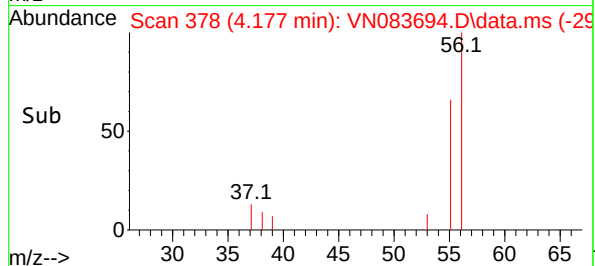
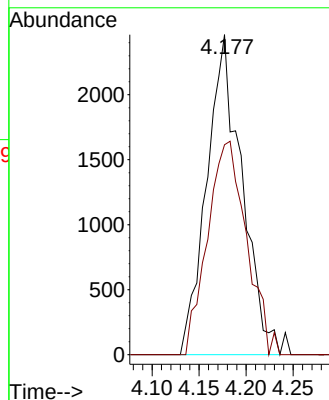
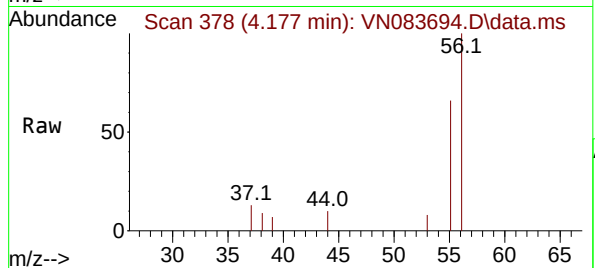
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#14

Acrylonitrile

Concen: 25.315 ug/l

RT: 5.724 min Scan# 641

Delta R.T. 0.012 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

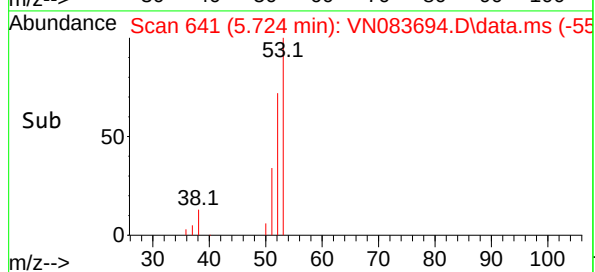
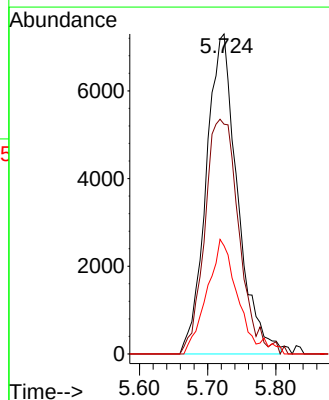
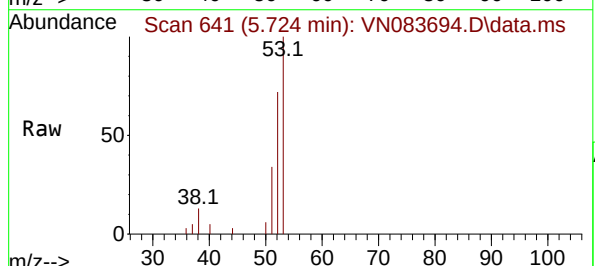
Tgt Ion: 53 Resp: 23305

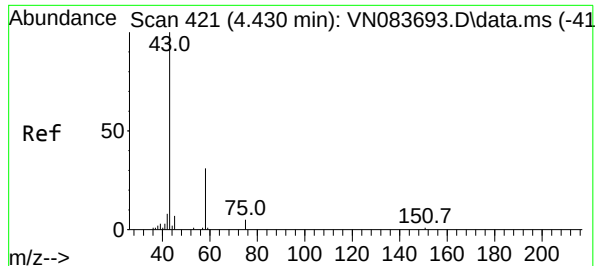
Ion Ratio Lower Upper

53 100

52 79.1 41.3 123.9

51 33.7 16.8 50.3





#15

Acetone

Concen: 18.740 ug/l m

RT: 4.430 min Scan# 421

Delta R.T. 0.000 min

Lab File: VN083694.D

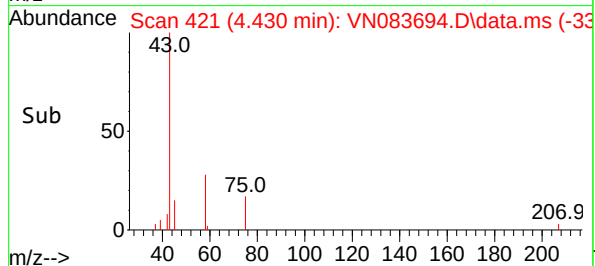
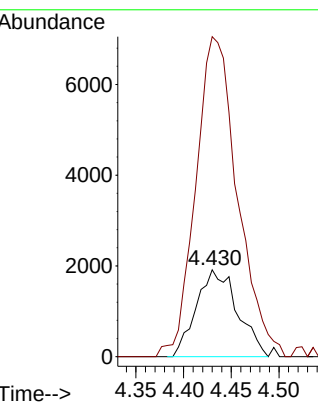
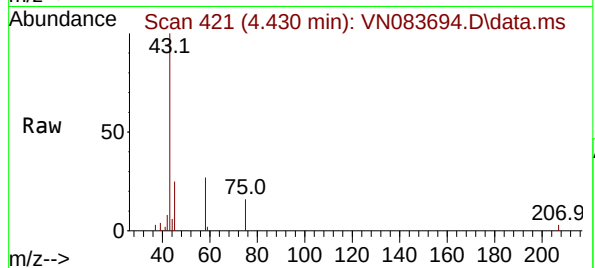
Acq: 06 Sep 2024 13:33

Tgt Ion: 58 Resp: 572

Ion Ratio Lower Upper

58 100

43 368.5 223.1 334.7



Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Manual Integrations

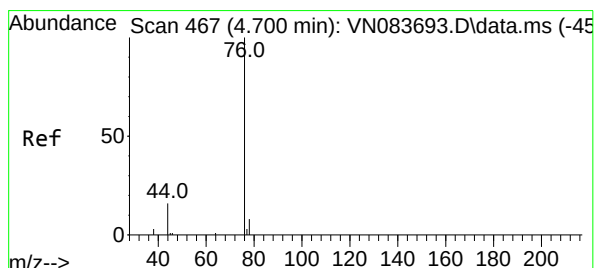
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#16

Carbon Disulfide

Concen: 4.968 ug/l

RT: 4.700 min Scan# 467

Delta R.T. 0.000 min

Lab File: VN083694.D

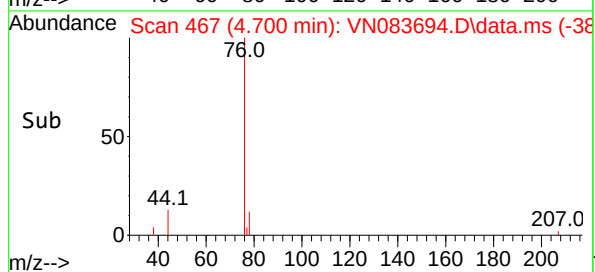
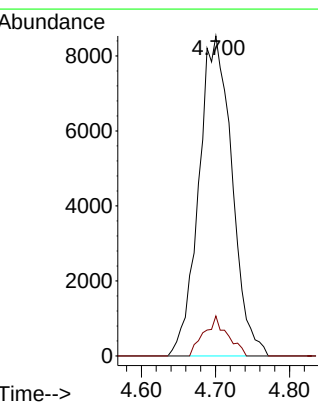
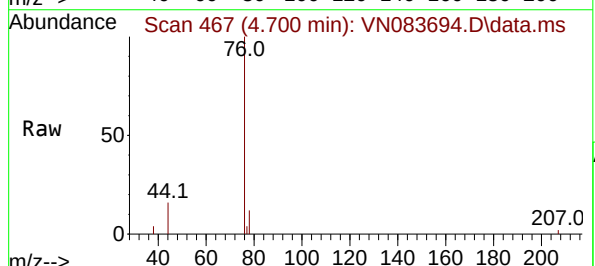
Acq: 06 Sep 2024 13:33

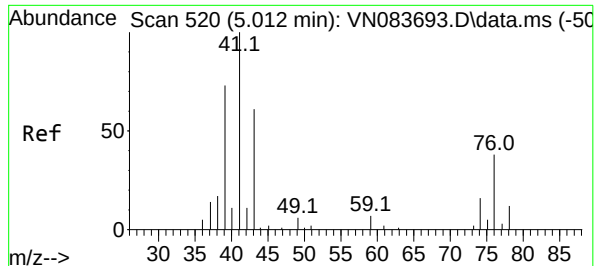
Tgt Ion: 76 Resp: 26484

Ion Ratio Lower Upper

76 100

78 12.5 6.3 9.5#





#17

Allyl chloride

Concen: 4.671 ug/l m

RT: 5.018 min Scan# 51

Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	41	Resp:	1546
Ion	Ratio	Lower	Upper
41	100		
39	82.0	37.6	112.9
76	38.1	27.8	83.4

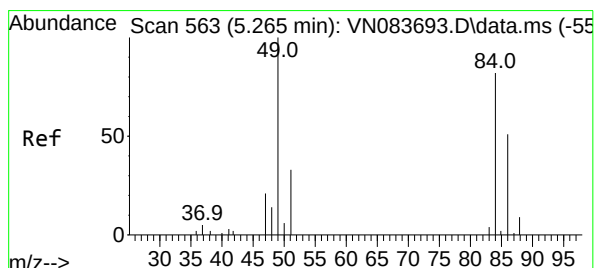
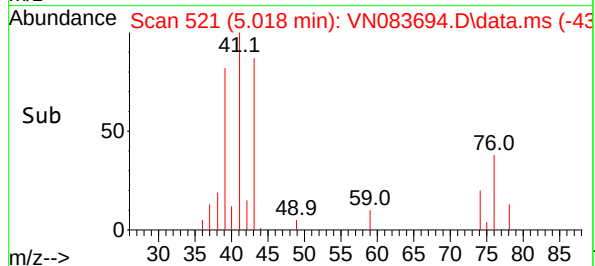
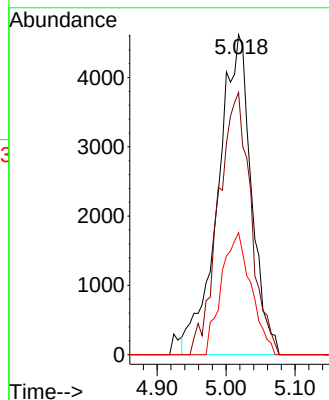
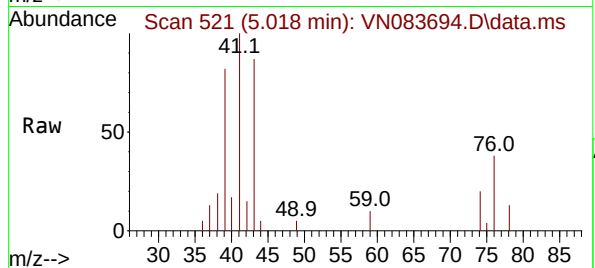
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#18

Methylene Chloride

Concen: 4.881 ug/l

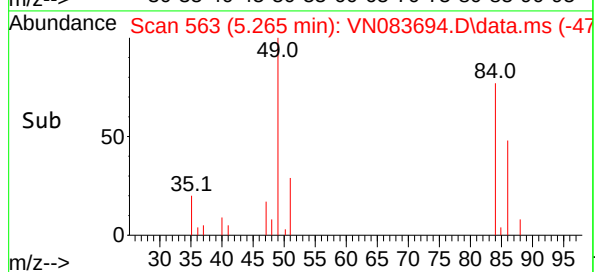
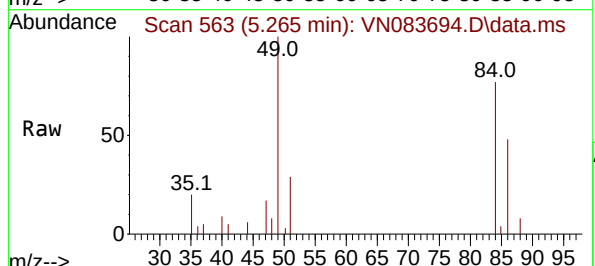
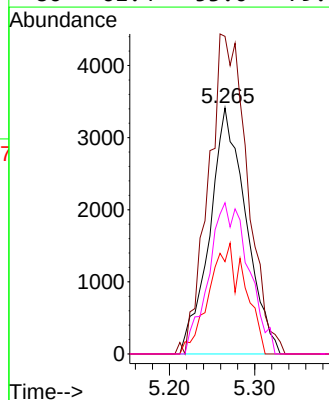
RT: 5.265 min Scan# 563

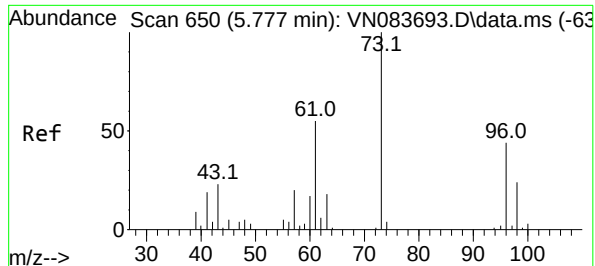
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	84	Resp:	10072
Ion	Ratio	Lower	Upper
84	100		
49	124.4	86.0	129.0
51	37.5	30.0	45.0
86	61.4	53.0	79.4





#19

trans-1,2-Dichloroethene

Concen: 4.839 ug/l

RT: 5.783 min Scan# 61

Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 96 Resp: 946

Ion Ratio Lower Upper

96 100

61 135.8 111.8 167.6

98 53.2 49.2 73.8

Manual Integrations

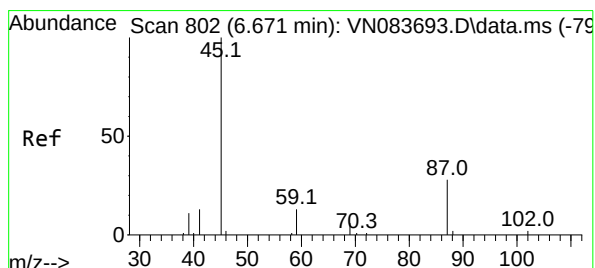
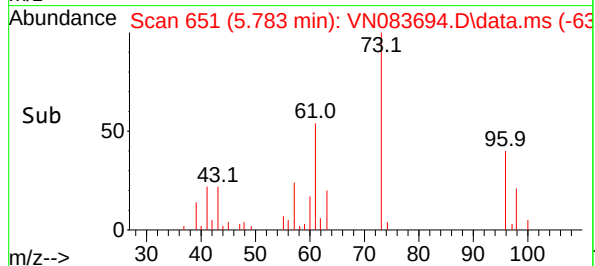
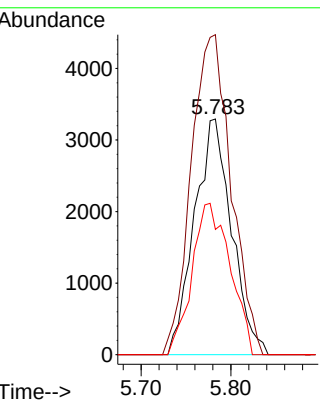
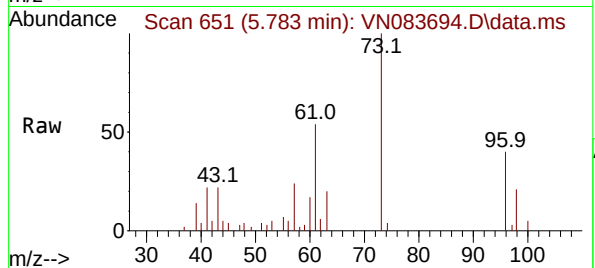
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#20

Diisopropyl ether

Concen: 4.858 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion: 45 Resp: 32451

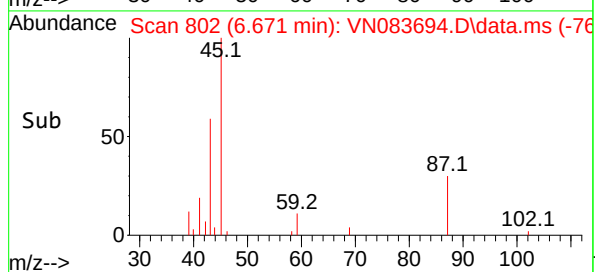
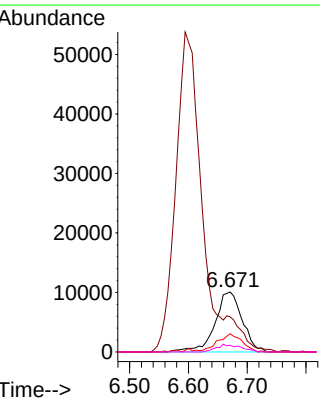
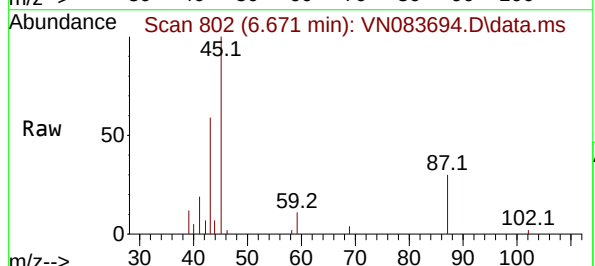
Ion Ratio Lower Upper

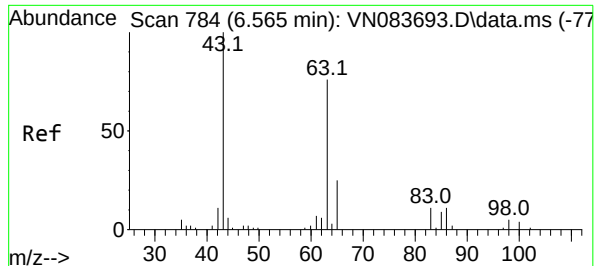
45 100

43 54.4 40.4 60.6

87 30.4 23.8 35.8

59 11.3 9.8 14.6





#21

1,1-Dichloroethane

Concen: 4.881 ug/l m

RT: 6.559 min Scan# 784

Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	63	Resp:	1861
Ion Ratio	Lower	Upper	
63	100		
98	6.4	4.1	12.3
100	2.8	3.0	9.0

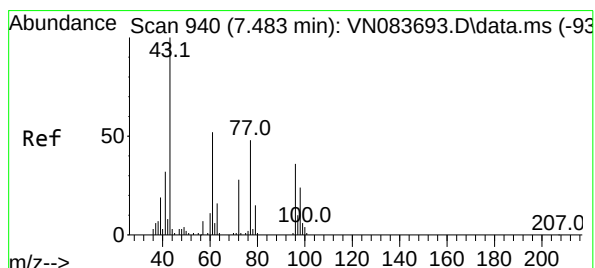
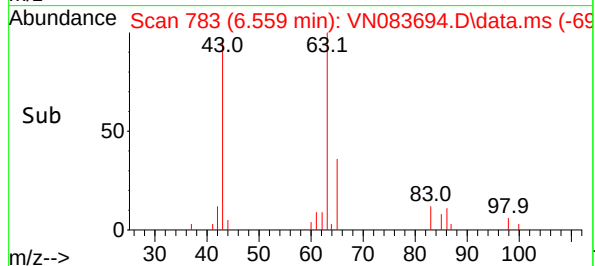
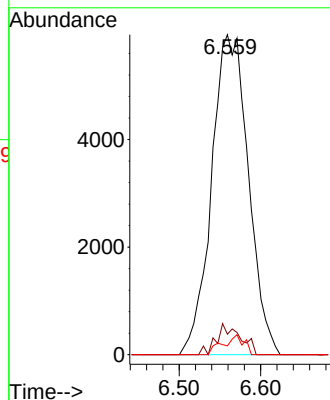
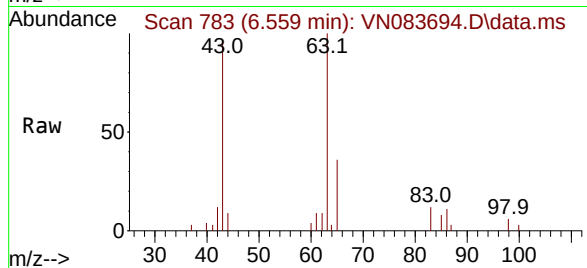
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#22

cis-1,2-Dichloroethene

Concen: 4.770 ug/l

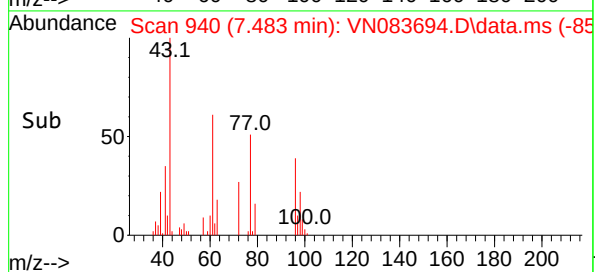
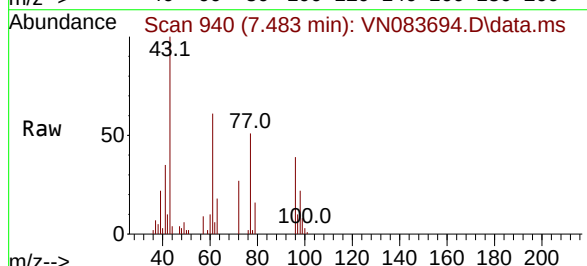
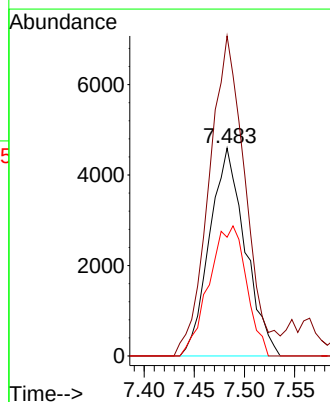
RT: 7.483 min Scan# 940

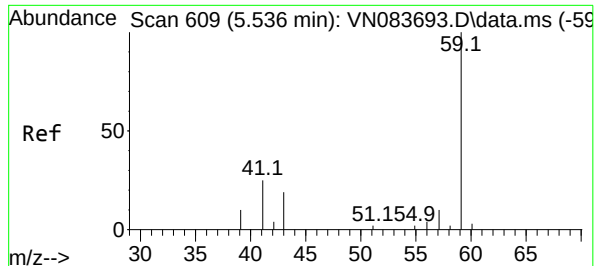
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	96	Resp:	11350
Ion Ratio	Lower	Upper	
96	100		
61	156.4	113.5	170.3
98	65.8	52.0	78.0





#23

tert-Butyl Alcohol

Concen: 23.935 ug/l m

RT: 5.536 min Scan# 609

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 59 Resp: 808

Ion Ratio Lower Upper

59 100

52 228.0 0.0 0.0

Manual Integrations

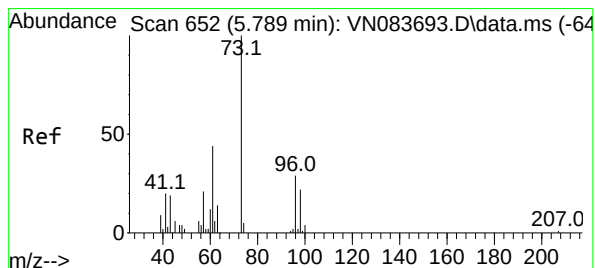
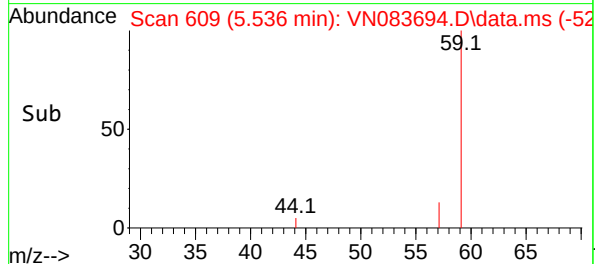
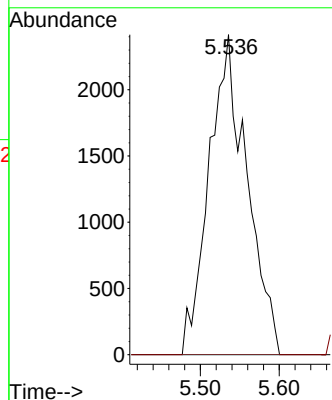
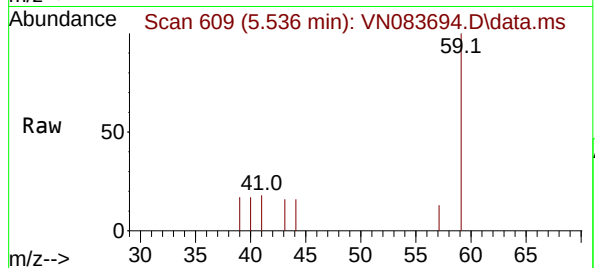
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#24

Methyl tert-Butyl Ether

Concen: 4.703 ug/l

RT: 5.795 min Scan# 653

Delta R.T. 0.006 min

Lab File: VN083694.D

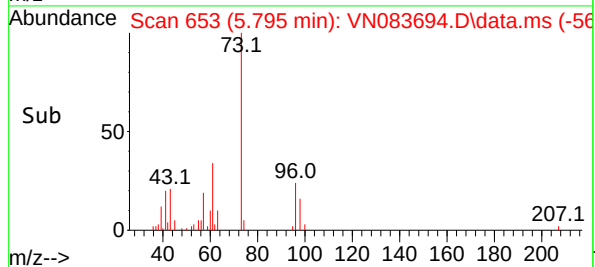
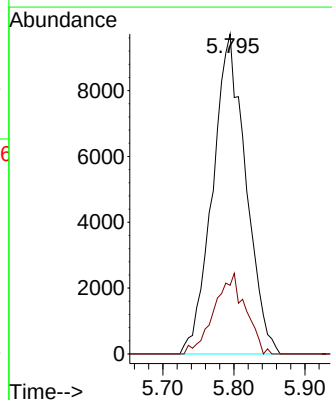
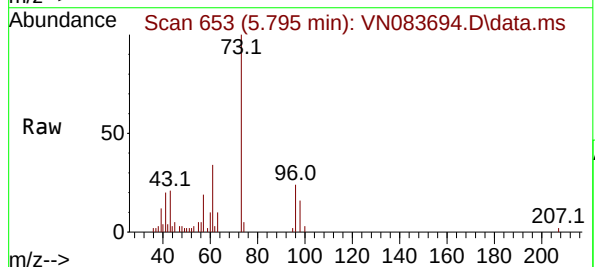
Acq: 06 Sep 2024 13:33

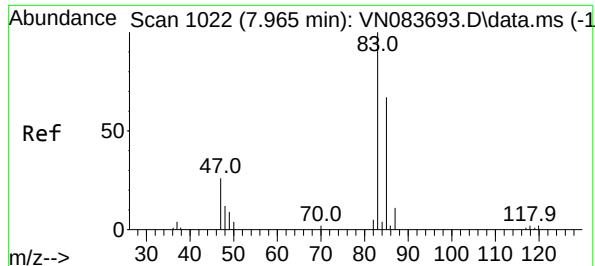
Tgt Ion: 73 Resp: 31527

Ion Ratio Lower Upper

73 100

43 23.0 13.4 20.2





#25

Chloroform

Concen: 4.796 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 83 Resp: 1938

Ion Ratio Lower Upper

83 100

85 57.5 50.9 76.3

Manual Integrations

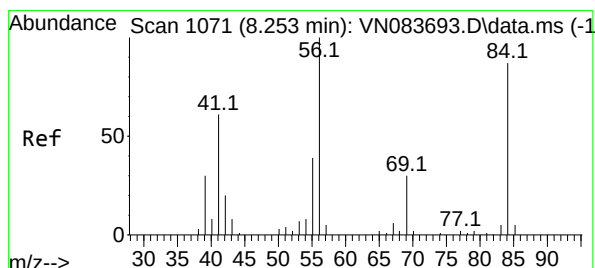
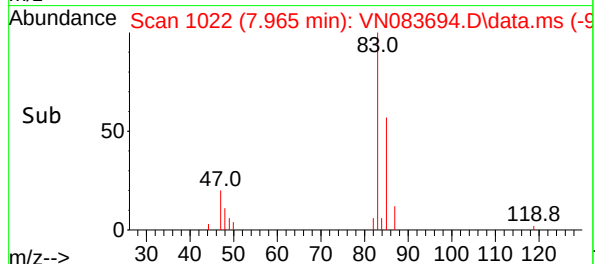
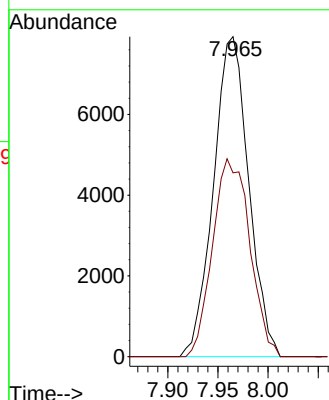
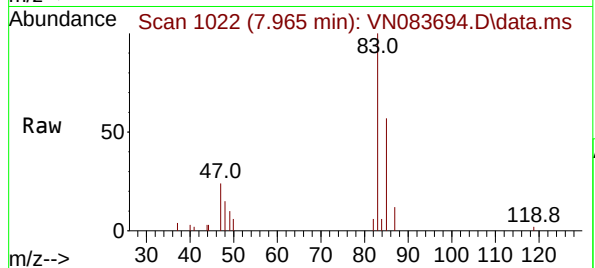
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#26

Cyclohexane

Concen: 4.667 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

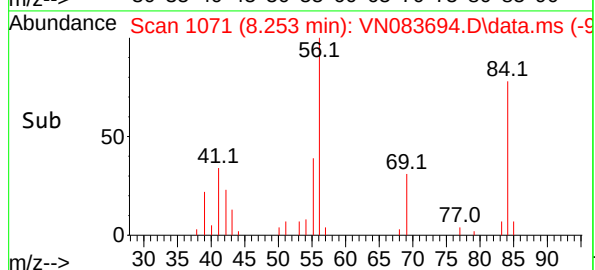
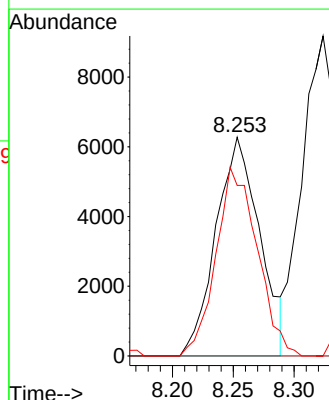
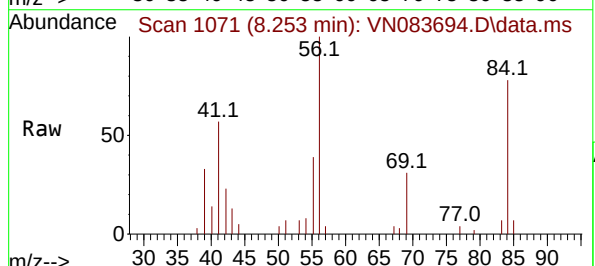
Tgt Ion: 56 Resp: 15678

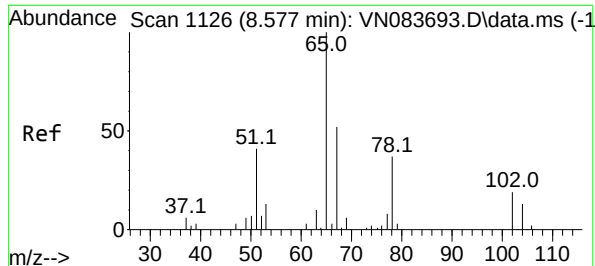
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9#

84 81.4 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 29.156 ug/l

RT: 8.583 min Scan# 1127

Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 65 Resp: 8088

Ion Ratio Lower Upper

65 100

67 49.6 43.2 64.8

Manual Integrations

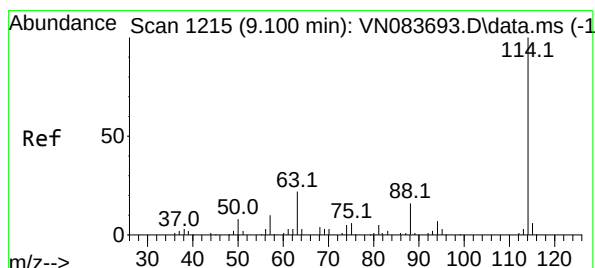
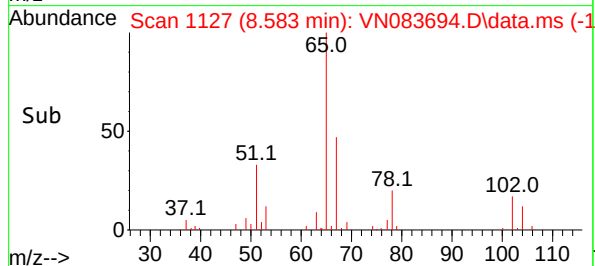
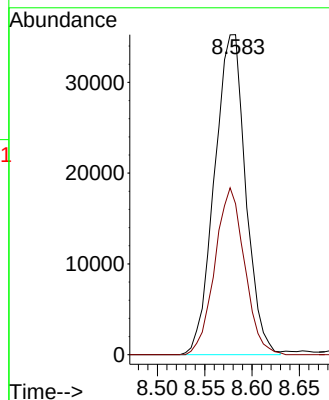
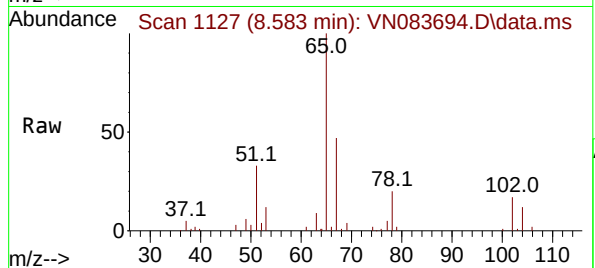
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

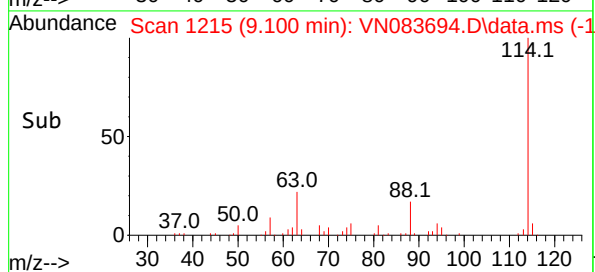
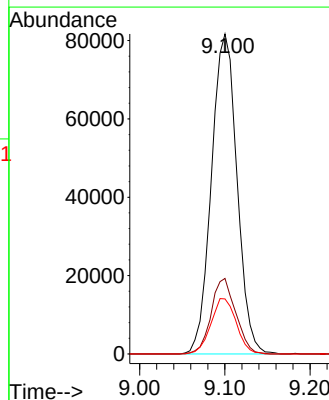
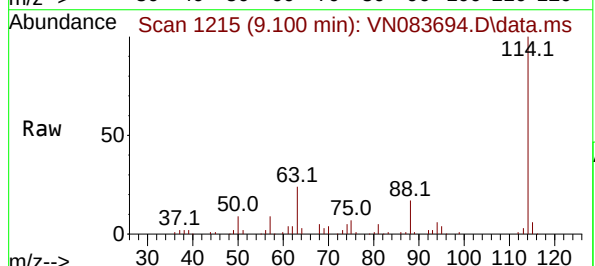
Tgt Ion:114 Resp: 170437

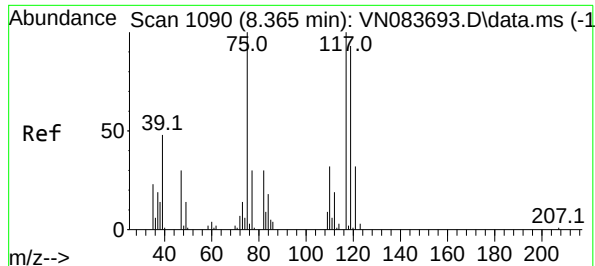
Ion Ratio Lower Upper

114 100

63 22.7 15.9 23.9

88 17.2 12.7 19.1





#29

1,1-Dichloropropene

Concen: 5.023 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	75	Resp:	13579
Ion	Ratio	Lower	Upper
75	100		
110	32.1	0.0	70.2
77	32.6	0.0	61.4

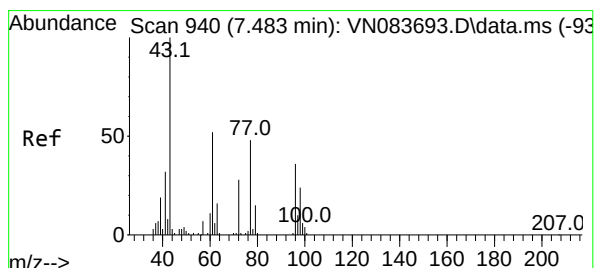
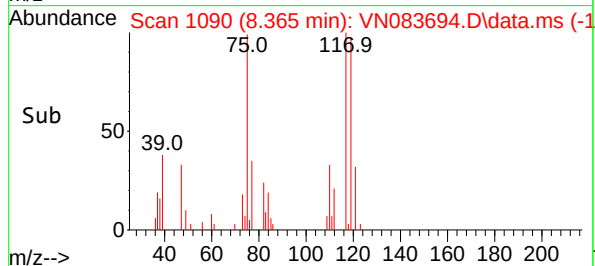
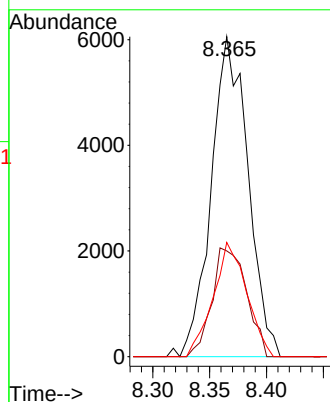
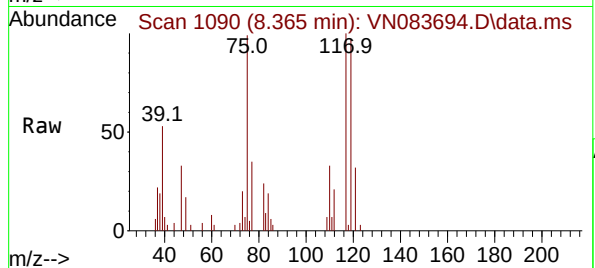
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#30

2-Butanone

Concen: 23.391 ug/l

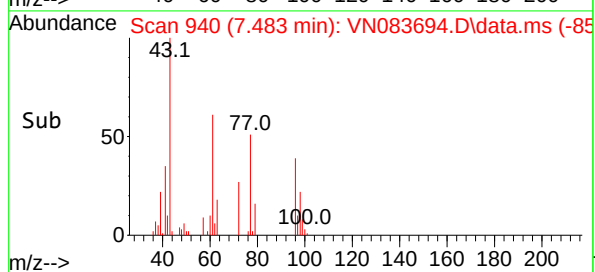
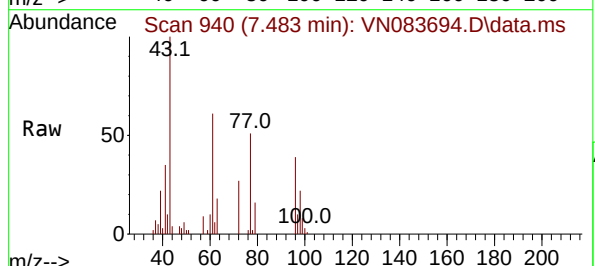
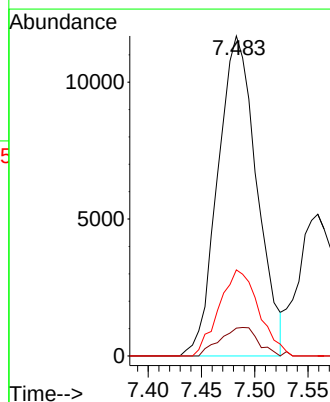
RT: 7.483 min Scan# 940

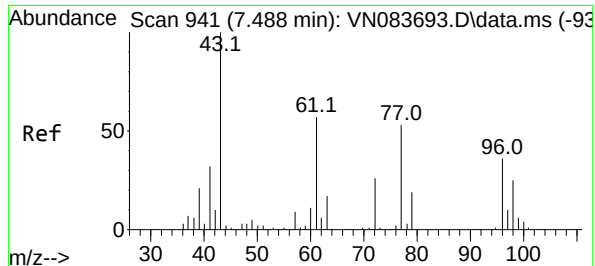
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	43	Resp:	29808
Ion	Ratio	Lower	Upper
43	100		
57	8.6	6.7	10.1
72	27.3	24.0	36.0





#31

2,2-Dichloropropane

Concen: 4.761 ug/l

RT: 7.483 min Scan# 941

Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 77 Resp: 16409

Ion Ratio Lower Upper

77 100

97 17.0 18.3 27.5

Manual Integrations

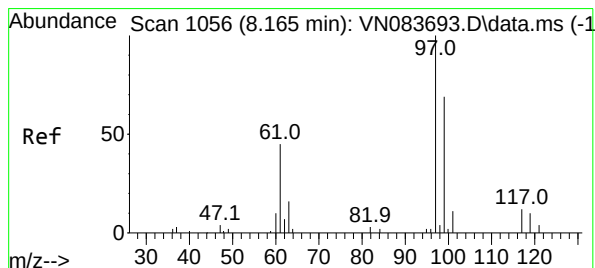
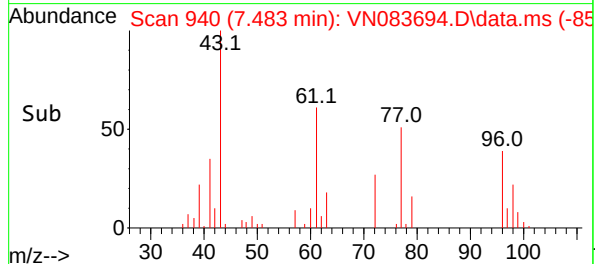
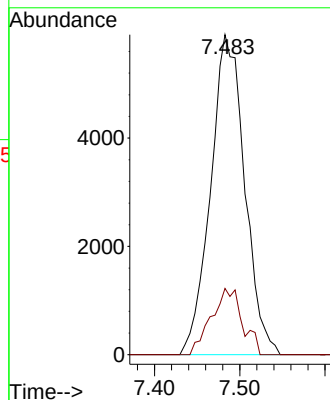
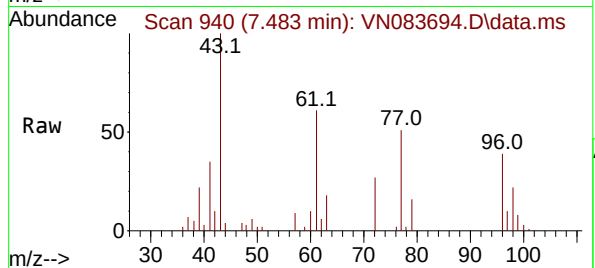
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#32

1,1,1-Trichloroethane

Concen: 5.001 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

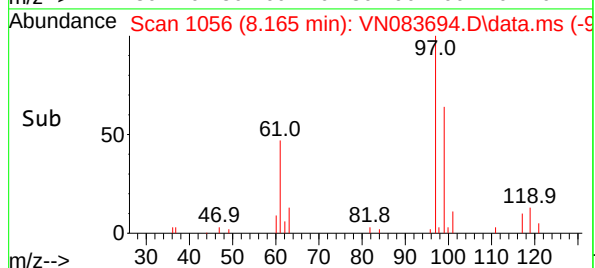
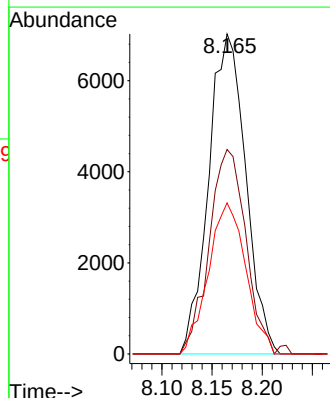
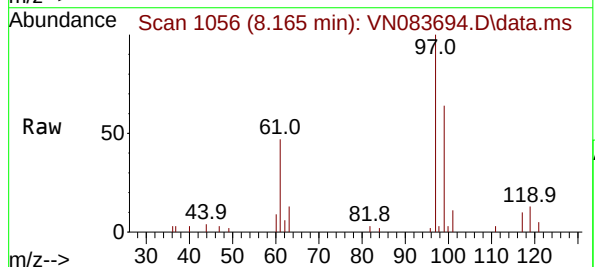
Tgt Ion: 97 Resp: 18056

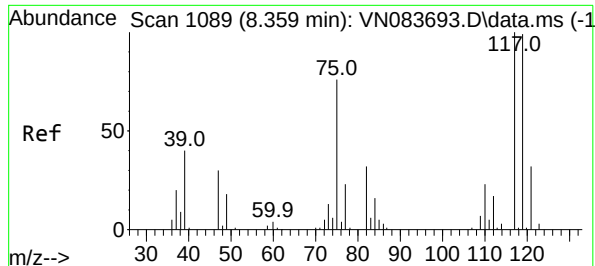
Ion Ratio Lower Upper

97 100

99 63.0 51.0 76.4

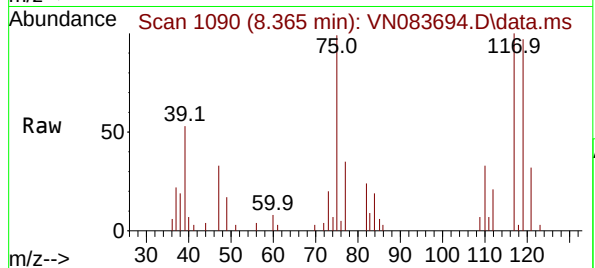
61 47.7 33.8 50.8





#33
Carbon Tetrachloride
Concen: 5.018 ug/l
RT: 8.365 min Scan# 1109
Delta R.T. 0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



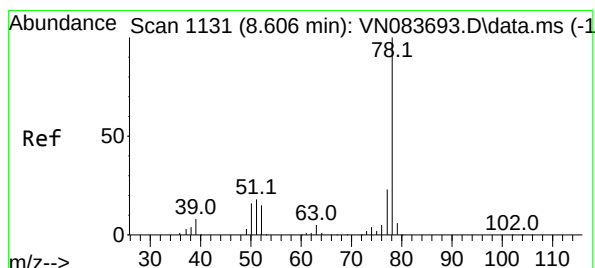
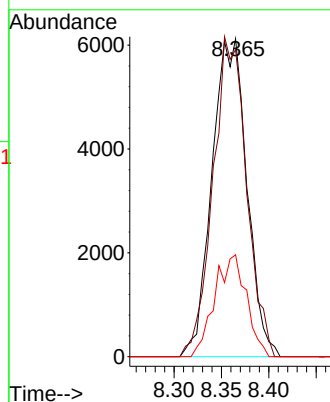
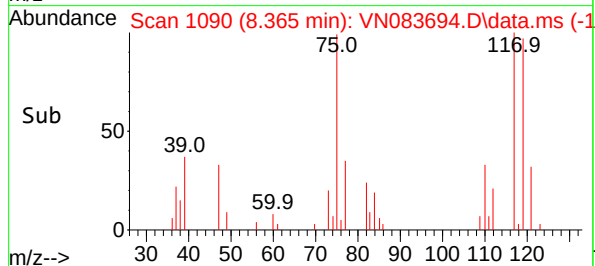
Tgt Ion:117 Resp: 1568
Ion Ratio Lower Upper
117 100
119 96.6 77.7 116.5
121 32.1 27.0 40.6

Manual Integrations
APPROVED

Reviewed By :John
Carlone

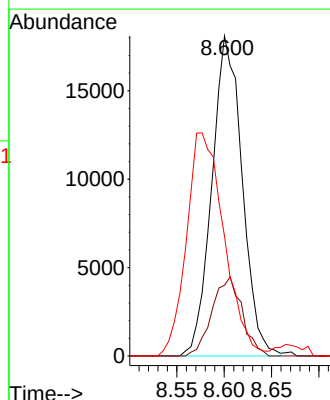
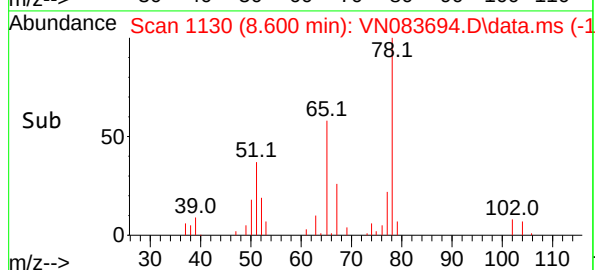
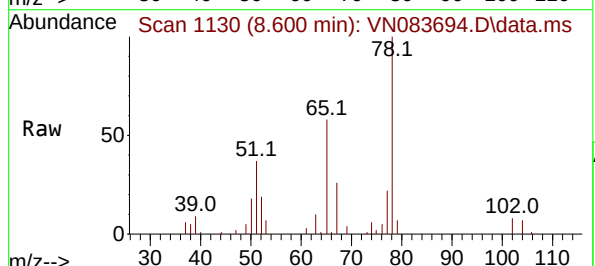
09/09/2024
Supervised By :Mahesh
Dadoda

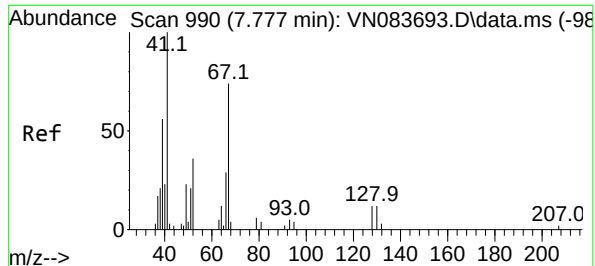
09/09/2024



#34
Benzene
Concen: 4.962 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion: 78 Resp: 40249
Ion Ratio Lower Upper
78 100
77 22.1 19.2 28.8
51 34.7 13.3 19.9#





#35

Methacrylonitrile

Concen: 5.271 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 41 Resp: 755

Ion Ratio Lower Upper

41 100

39 54.5 25.3 75.9

67 63.7 38.7 116.1

52 23.9 13.6 40.8

Manual Integrations

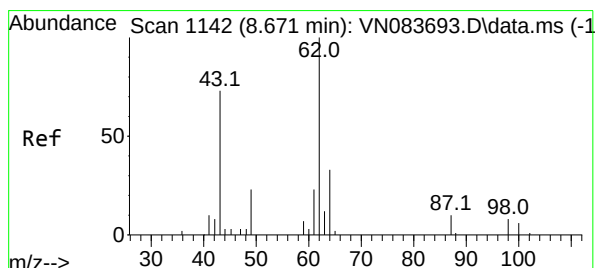
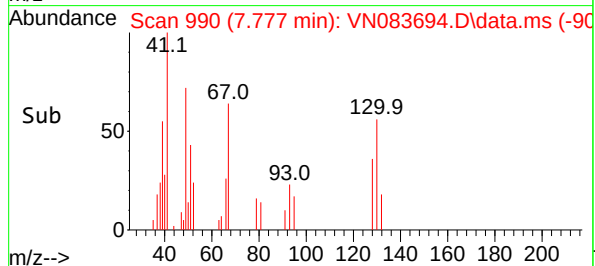
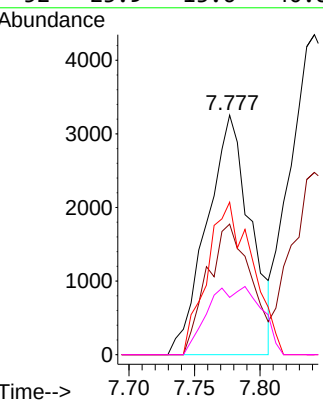
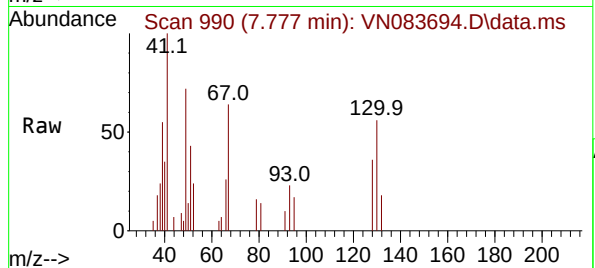
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#36

1,2-Dichloroethane

Concen: 5.209 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.006 min

Lab File: VN083694.D

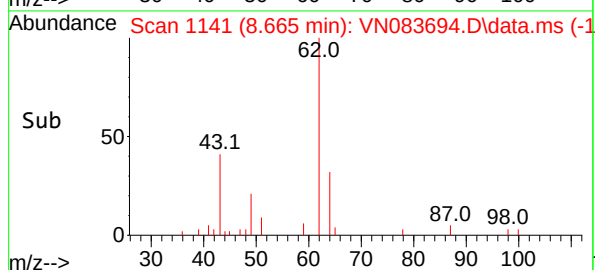
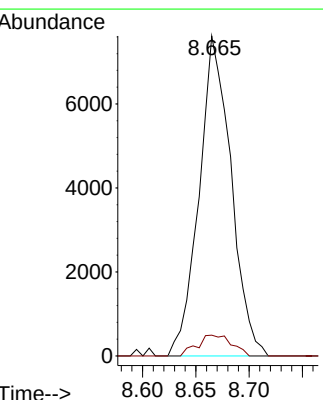
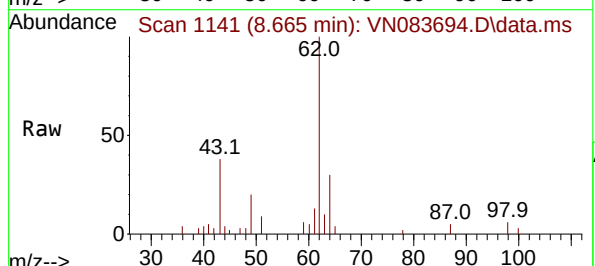
Acq: 06 Sep 2024 13:33

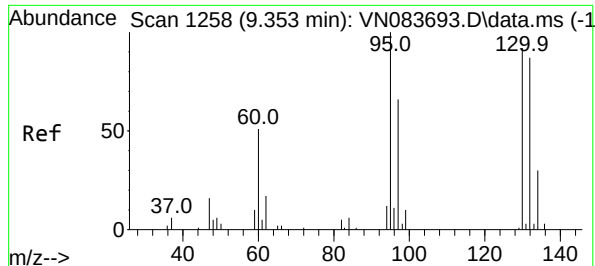
Tgt Ion: 62 Resp: 15883

Ion Ratio Lower Upper

62 100

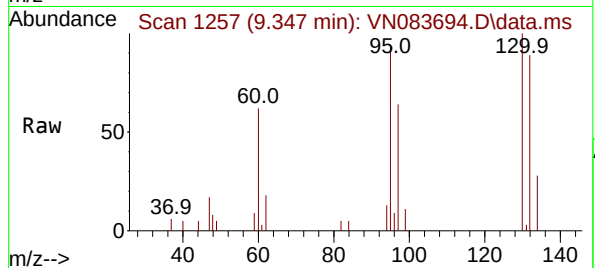
98 1.9 8.2 12.4#





#37
Trichloroethene
Concen: 5.180 ug/l
RT: 9.347 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



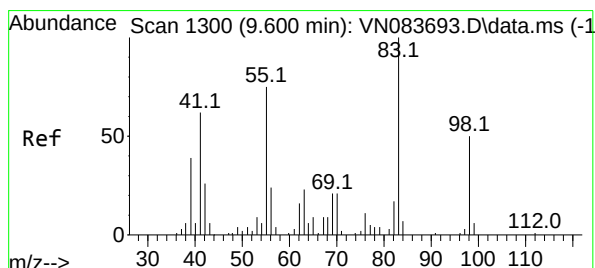
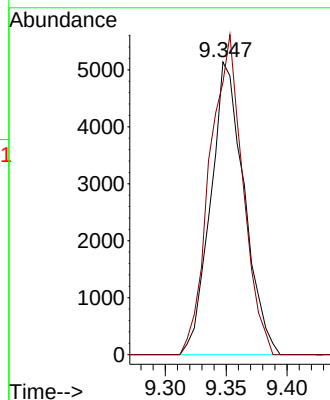
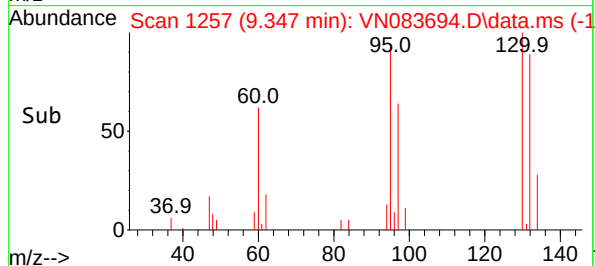
Tgt Ion:130 Resp: 986
Ion Ratio Lower Upper
130 100
95 93.0 80.2 120.4

Manual Integrations
APPROVED

Reviewed By :John
Carlone

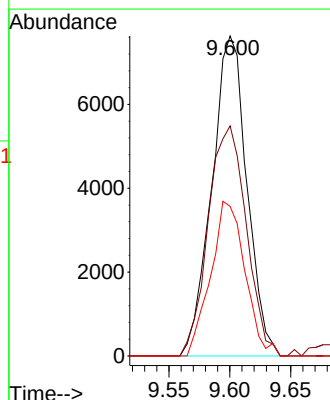
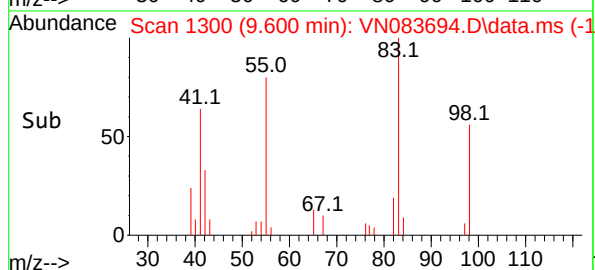
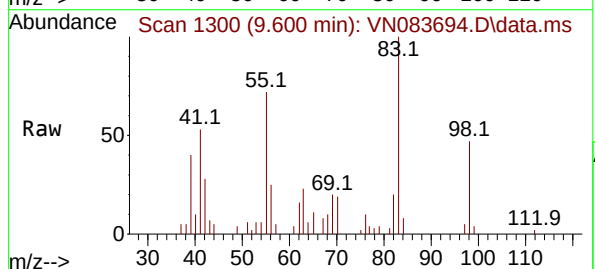
09/09/2024
Supervised By :Mahesh
Dadoda

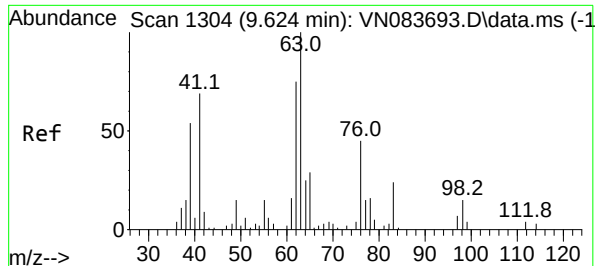
09/09/2024



#38
Methylcyclohexane
Concen: 4.728 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion: 83 Resp: 15301
Ion Ratio Lower Upper
83 100
55 78.0 36.6 109.9
98 47.3 23.8 71.5





#39

1,2-Dichloropropane

Concen: 5.085 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion: 63 Resp: 9920

Ion Ratio Lower Upper

63 100

65 36.9 25.0 37.4

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Manual Integrations

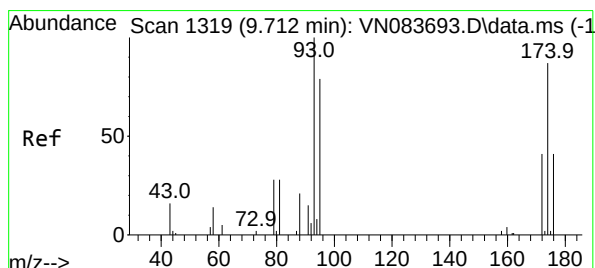
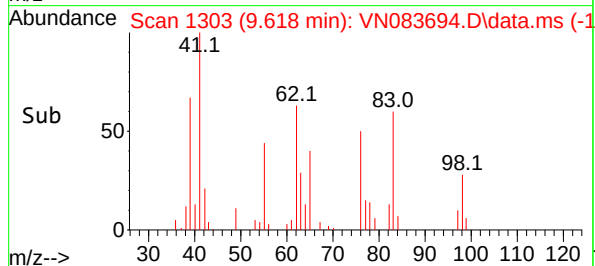
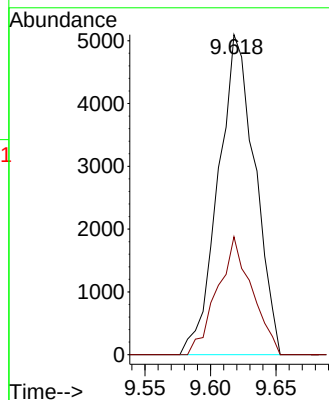
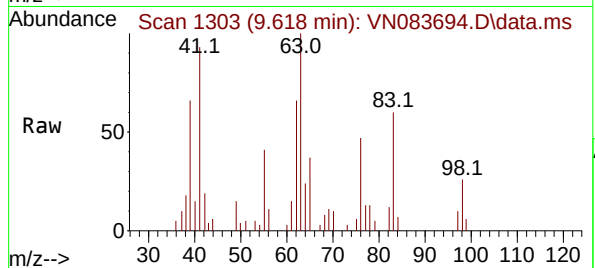
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#40

Dibromomethane

Concen: 4.982 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

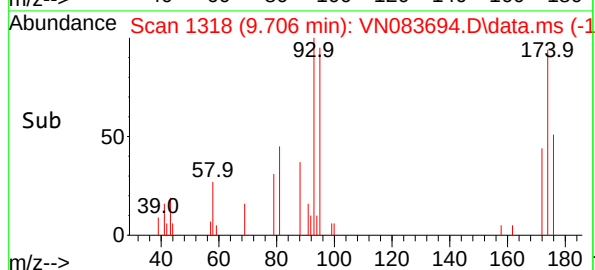
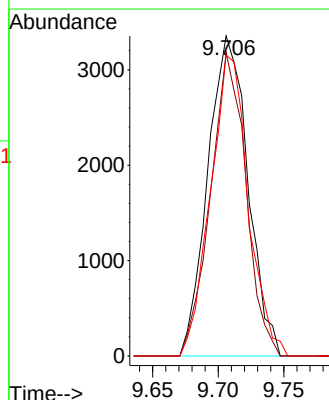
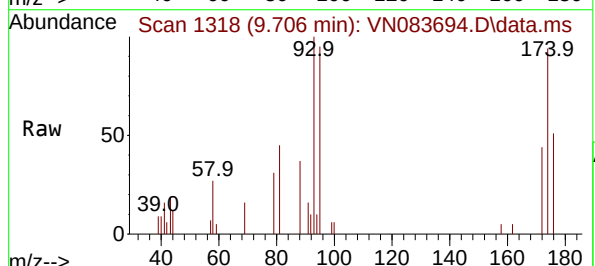
Tgt Ion: 93 Resp: 7111

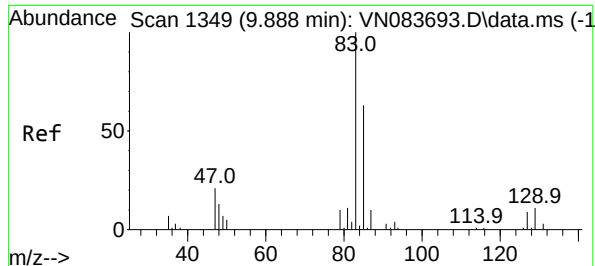
Ion Ratio Lower Upper

93 100

95 83.8 0.0 164.6

174 88.6 0.0 193.2





#41

Bromodichloromethane

Concen: 4.858 ug/l

RT: 9.883 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	83	Resp:	1474
Ion	Ratio	Lower	Upper
83	100		
85	55.1	49.4	74.2
127	7.8	7.3	10.9

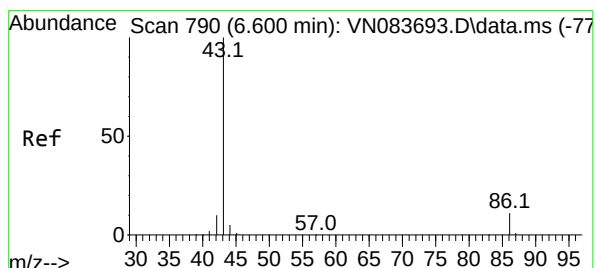
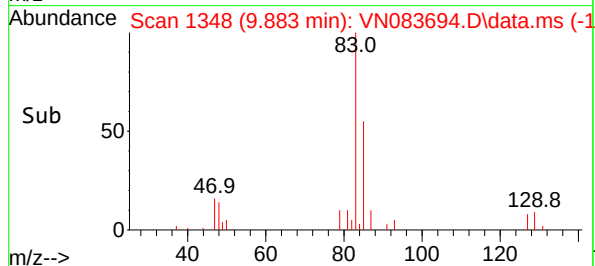
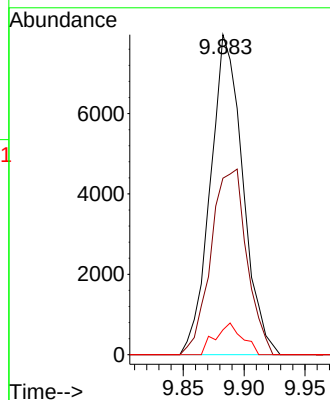
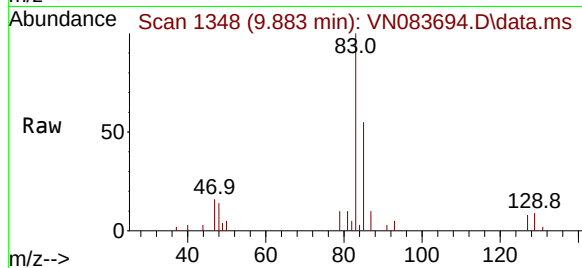
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#42

Vinyl Acetate

Concen: 30.245 ug/l

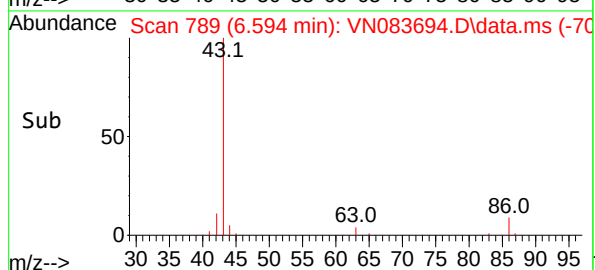
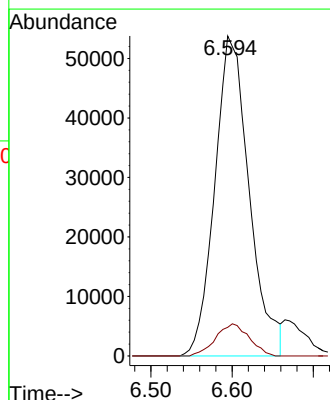
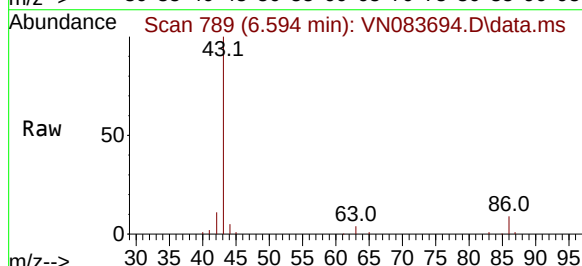
RT: 6.594 min Scan# 789

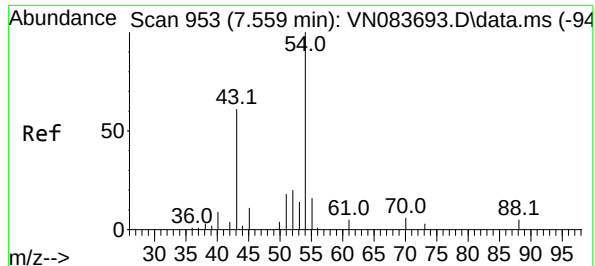
Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	43	Resp:	158467
Ion	Ratio	Lower	Upper
43	100		
86	9.8	9.4	14.2





#43

Ethyl Acetate

Concen: 5.121 ug/l

RT: 7.559 min Scan# 91

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 43 Resp: 13134

Ion Ratio Lower Upper

43 100

45 9.1 10.6 15.8

Manual Integrations

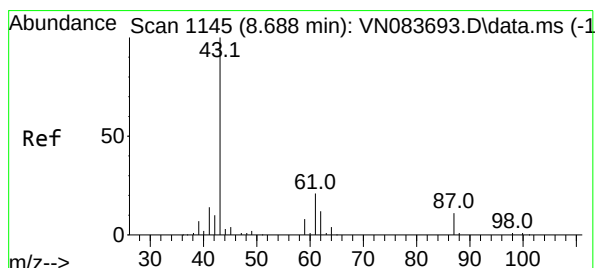
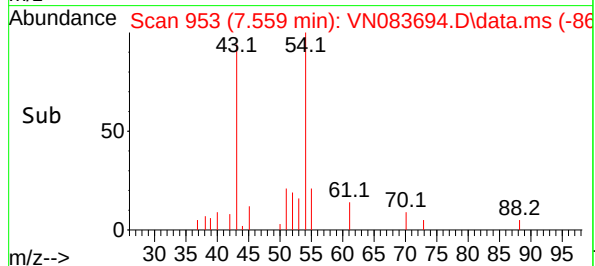
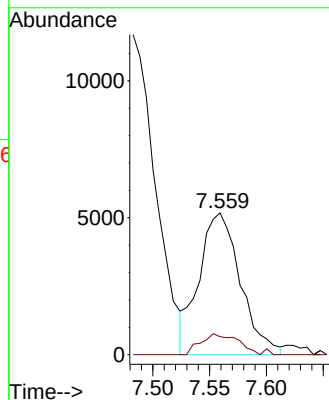
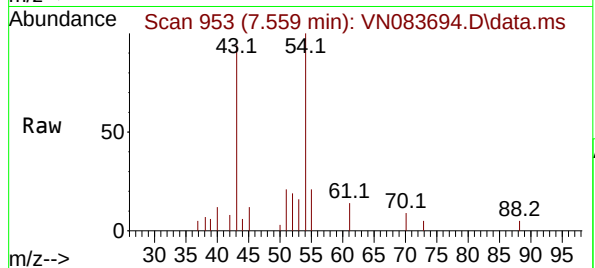
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#44

Isopropyl Acetate

Concen: 4.853 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.000 min

Lab File: VN083694.D

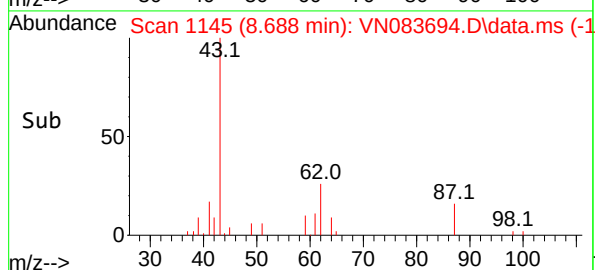
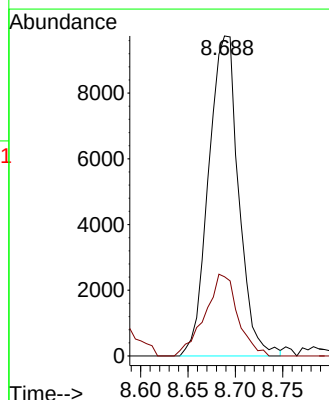
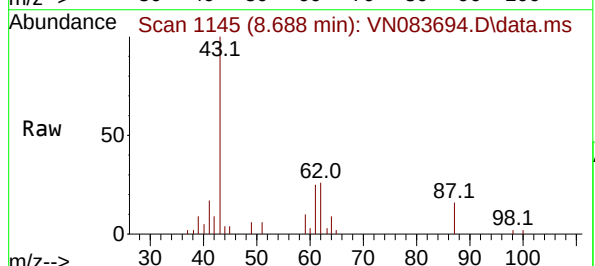
Acq: 06 Sep 2024 13:33

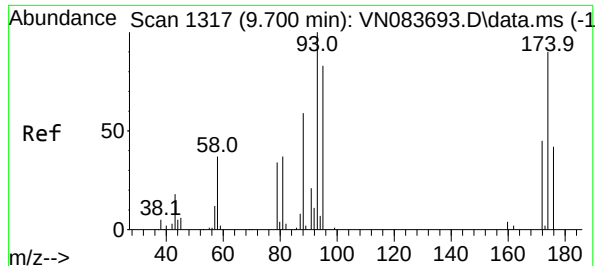
Tgt Ion: 43 Resp: 21530

Ion Ratio Lower Upper

43 100

61 27.7 25.0 37.4





#45

1,4-Dioxane

Concen: 98.810 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 88	Resp: 3419
Ion Ratio	Lower Upper
88 100	
43 34.4	19.8 29.6
58 71.5	55.4 83.0

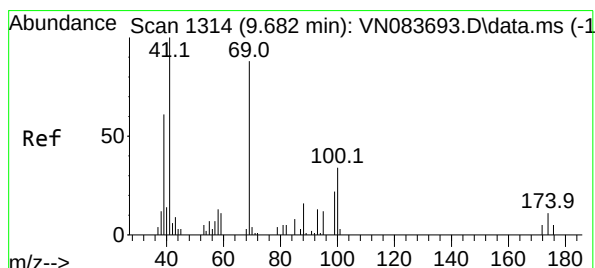
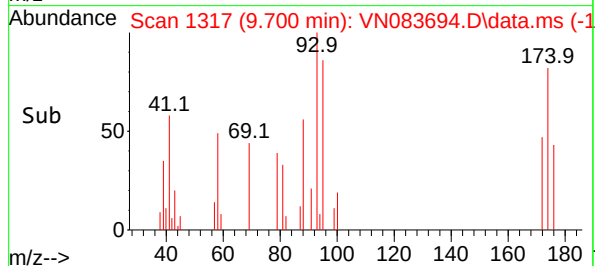
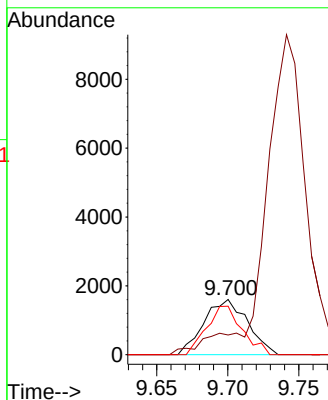
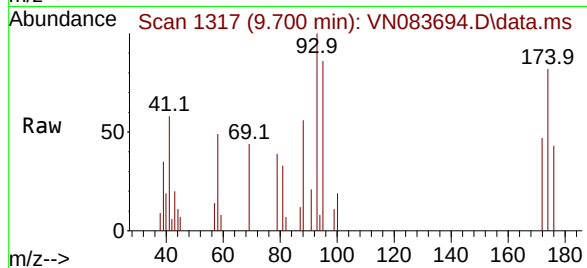
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#46

Methyl methacrylate

Concen: 4.881 ug/l

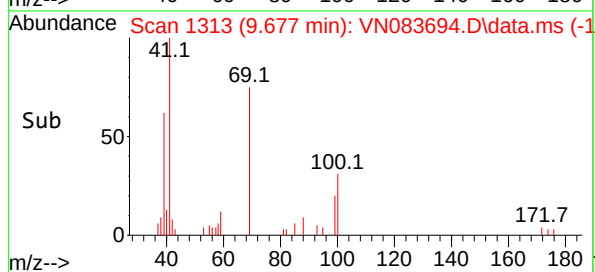
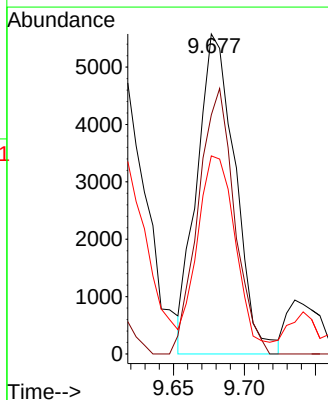
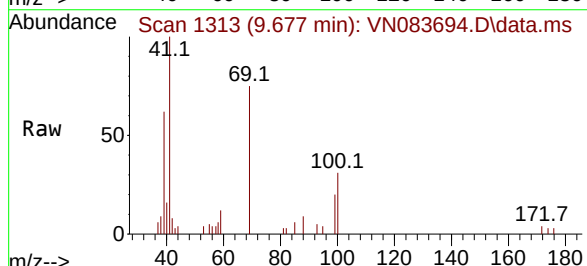
RT: 9.677 min Scan# 1313

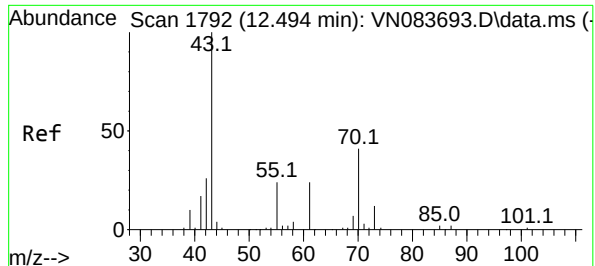
Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion: 41	Resp: 10480
Ion Ratio	Lower Upper
41 100	
69 78.1	51.1 153.3
39 60.2	25.8 77.3





#47

n-amyl acetate

Concen: 4.318 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 43 Resp: 1696

Ion Ratio Lower Upper

43 100

55 26.4 23.4 35.2

Manual Integrations

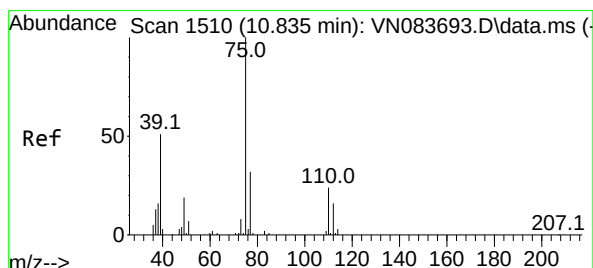
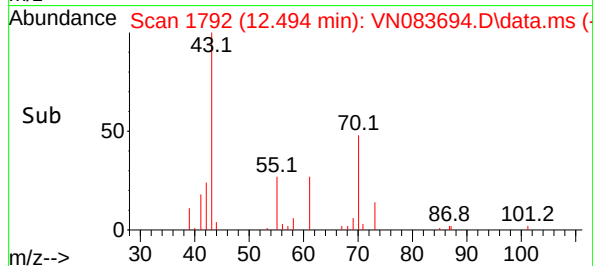
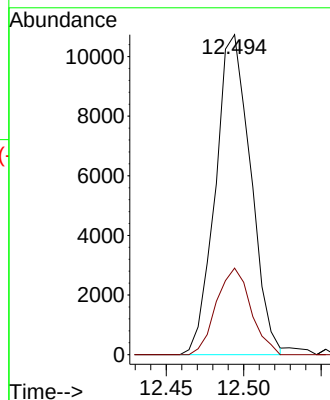
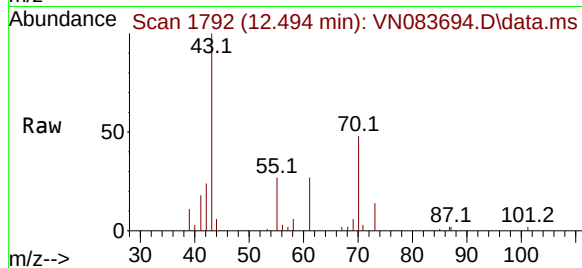
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#48

t-1,3-Dichloropropene

Concen: 4.902 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN083694.D

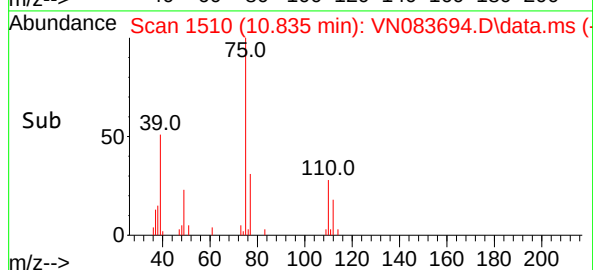
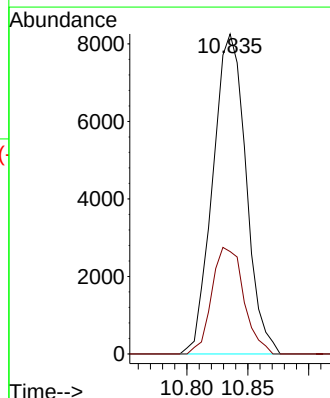
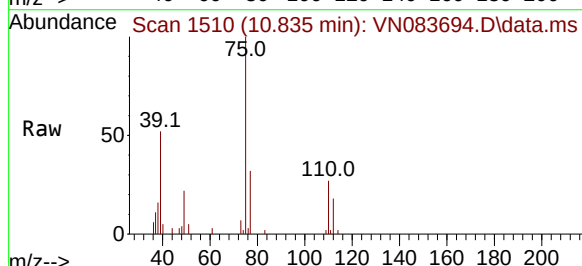
Acq: 06 Sep 2024 13:33

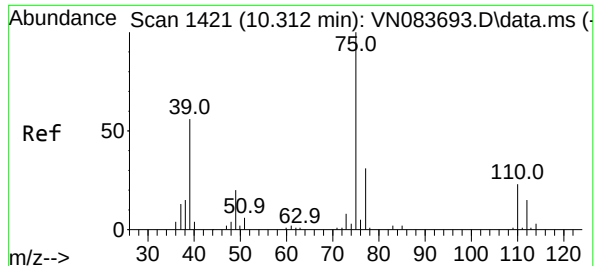
Tgt Ion: 75 Resp: 15652

Ion Ratio Lower Upper

75 100

77 32.0 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 4.845 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 75	Resp: 1608
Ion Ratio	Lower Upper
75 100	
77 31.8	24.9 37.3
39 53.0	31.0 46.6

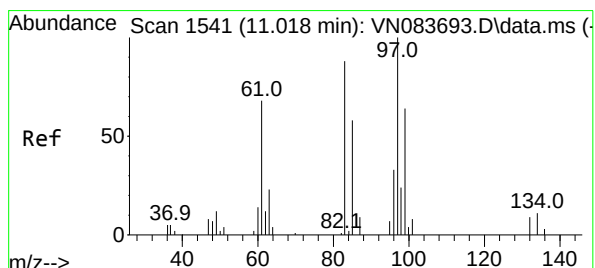
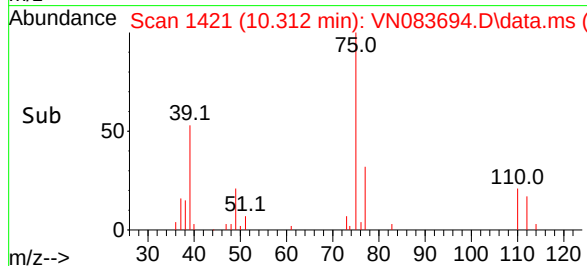
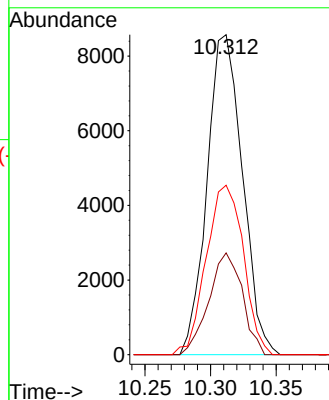
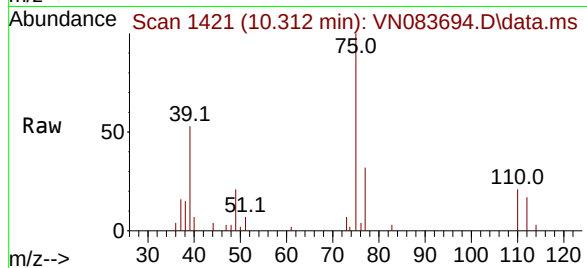
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#50

1,1,2-Trichloroethane

Concen: 4.946 ug/l

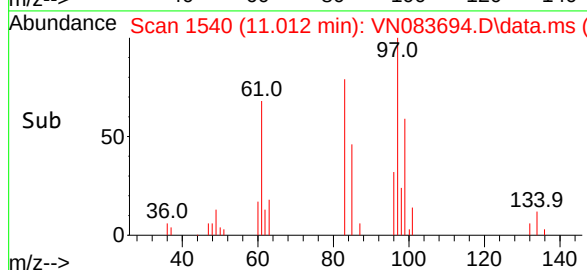
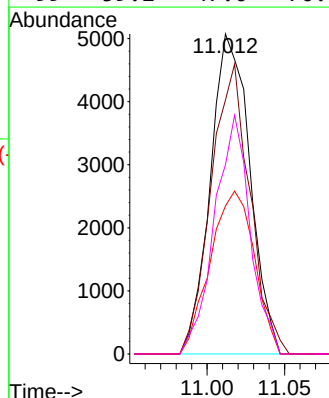
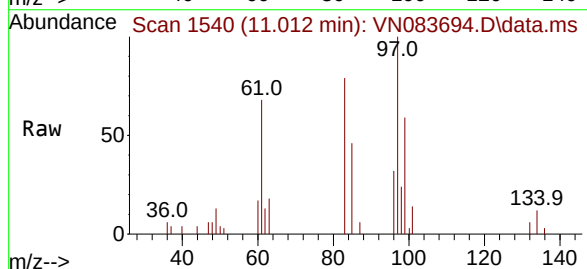
RT: 11.012 min Scan# 1540

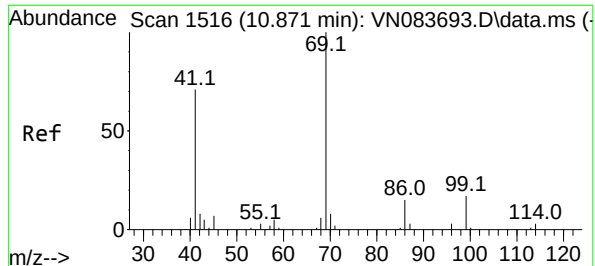
Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion: 97	Resp: 8983
Ion Ratio	Lower Upper
97 100	
83 79.3	68.1 102.1
85 46.2	41.8 62.6
99 59.2	47.0 70.4





#51
Ethyl methacrylate
Concen: 4.565 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

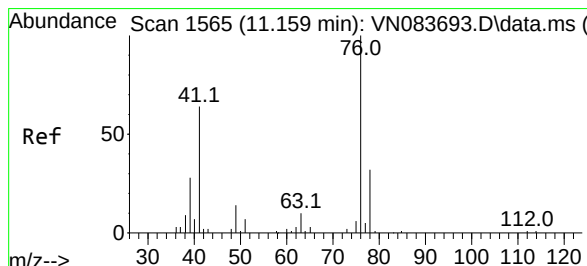
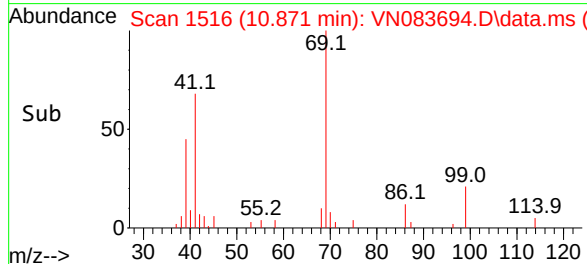
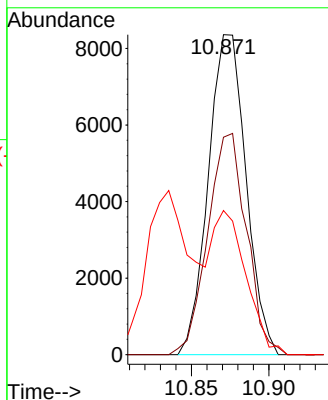
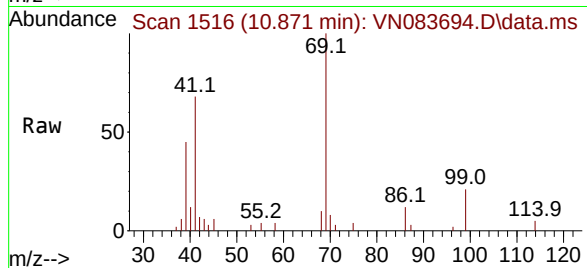
Tgt Ion: 69 Resp: 1416
Ion Ratio Lower Upper
69 100
41 66.1 25.5 76.5
39 42.3 16.0 47.9

Manual Integrations
APPROVED

Reviewed By :John
Carlone

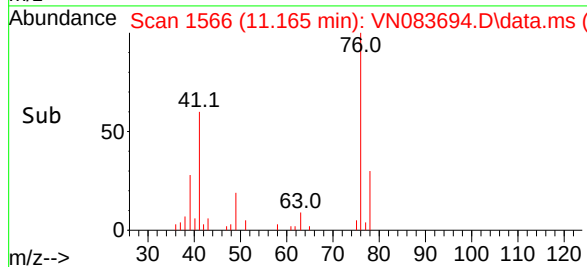
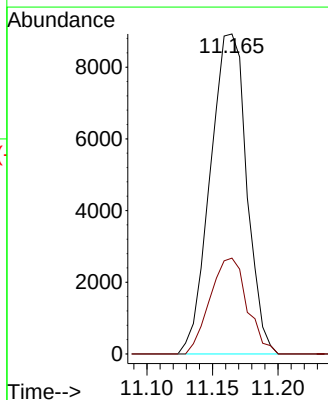
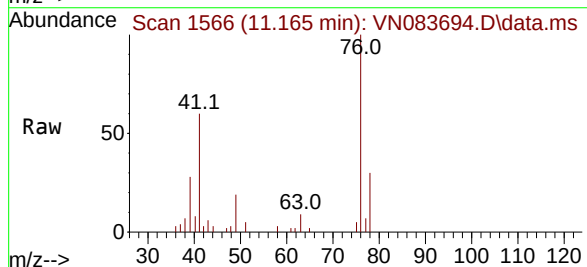
09/09/2024
Supervised By :Mahesh
Dadoda

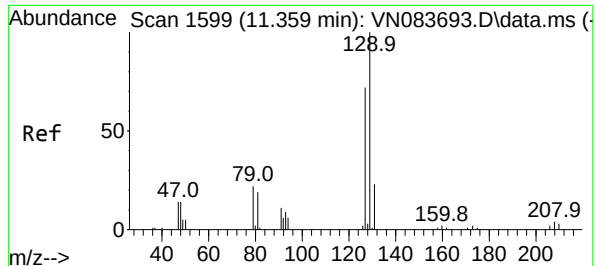
09/09/2024



#52
1,3-Dichloropropane
Concen: 5.263 ug/l
RT: 11.165 min Scan# 1566
Delta R.T. 0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

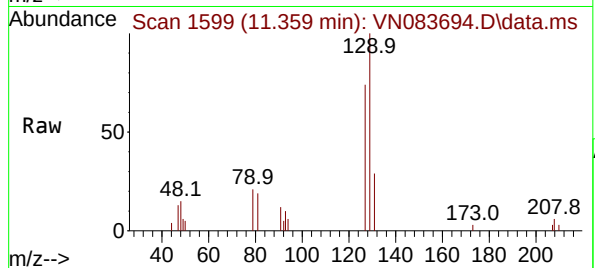
Tgt Ion: 76 Resp: 17264
Ion Ratio Lower Upper
76 100
78 30.5 0.0 65.8





#53
Dibromochloromethane
Concen: 4.719 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



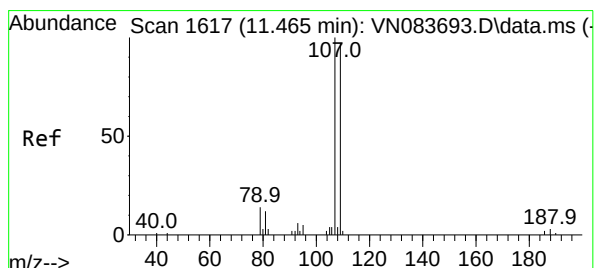
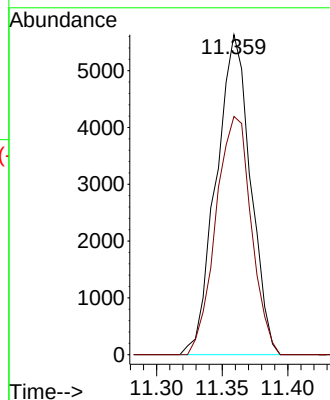
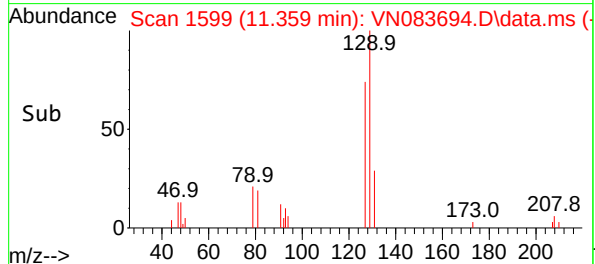
Tgt Ion:129 Resp: 10280
Ion Ratio Lower Upper
129 100
127 76.6 39.4 118.1

Manual Integrations
APPROVED

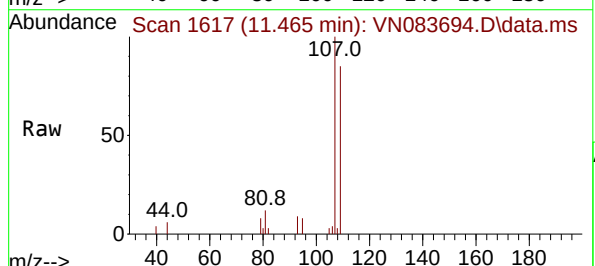
Reviewed By :John
Carlone

09/09/2024
Supervised By :Mahesh
Dadoda

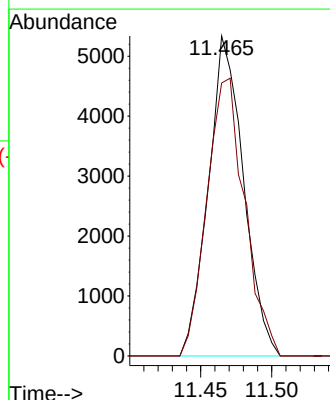
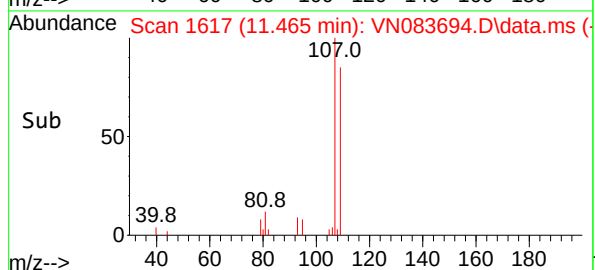
09/09/2024

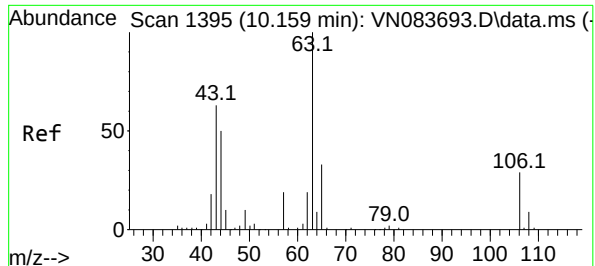


#54
1,2-Dibromoethane
Concen: 4.882 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33



Tgt Ion:107 Resp: 9173
Ion Ratio Lower Upper
107 100
109 93.5 74.7 112.1





#55
2-Chloroethyl vinyl ether
Concen: 25.750 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

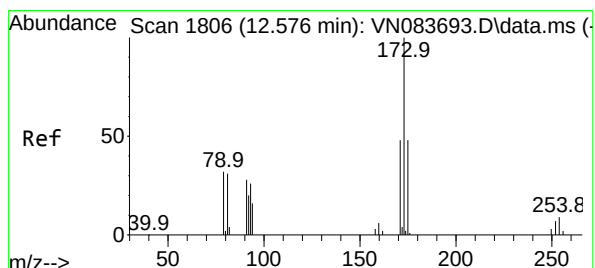
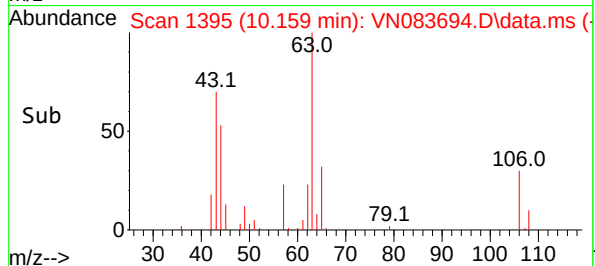
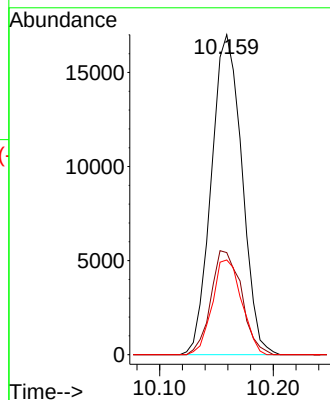
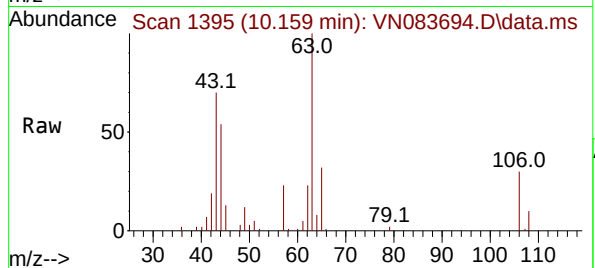
Tgt Ion: 63 Resp: 3184
Ion Ratio Lower Upper
63 100
65 32.4 26.2 39.2
106 28.5 23.8 35.8

Manual Integrations
APPROVED

Reviewed By :John
Carlone

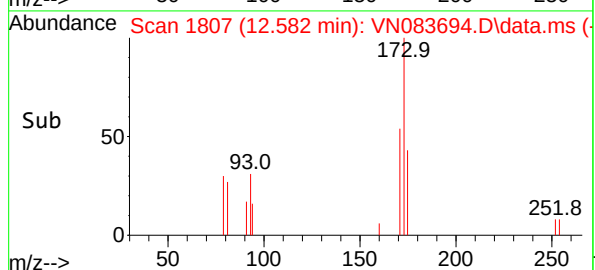
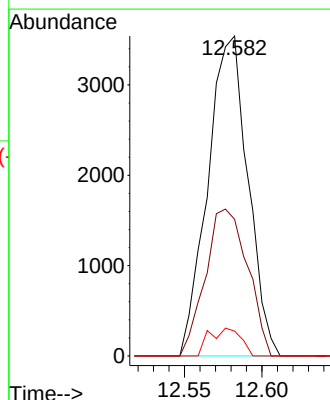
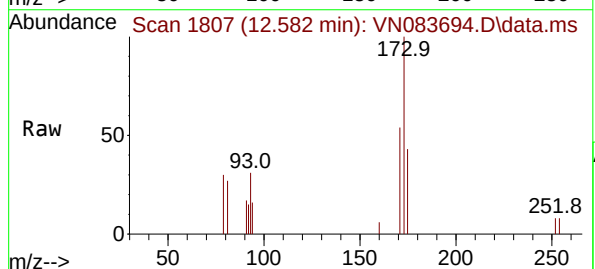
09/09/2024
Supervised By :Mahesh
Dadoda

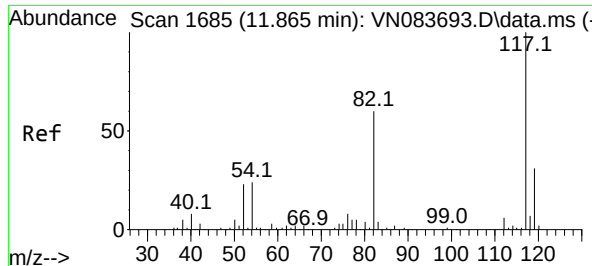
09/09/2024



#56
Bromoform
Concen: 4.600 ug/l
RT: 12.582 min Scan# 1807
Delta R.T. 0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion:173 Resp: 6367
Ion Ratio Lower Upper
173 100
175 48.3 40.0 60.0
254 4.2 8.3 12.5#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:117 Resp: 14778

Ion Ratio Lower Upper

117 100

82 60.3 46.6 69.8

119 32.0 25.4 38.2

Manual Integrations

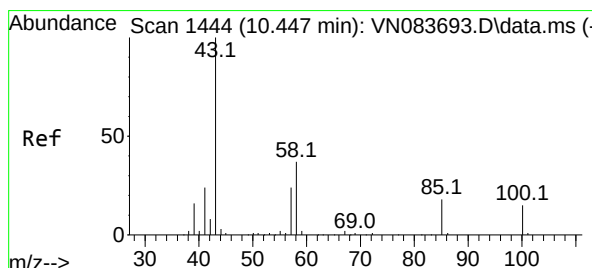
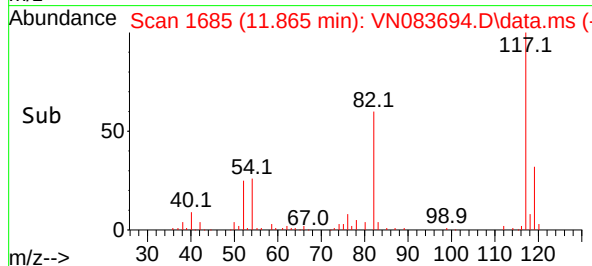
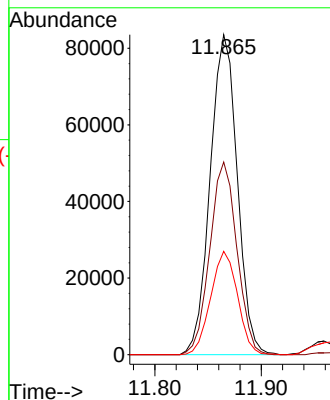
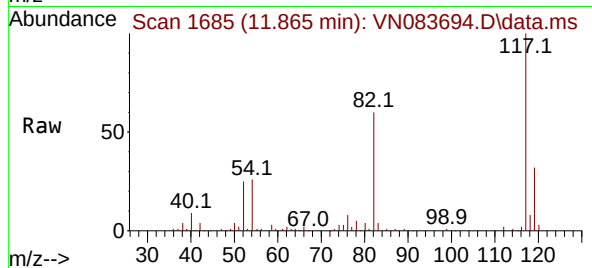
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#58

4-Methyl-2-Pentanone

Concen: 25.515 ug/l

RT: 10.447 min Scan# 1444

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

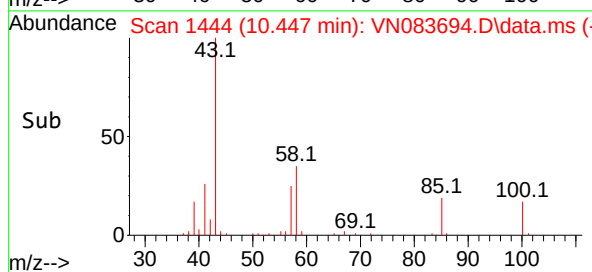
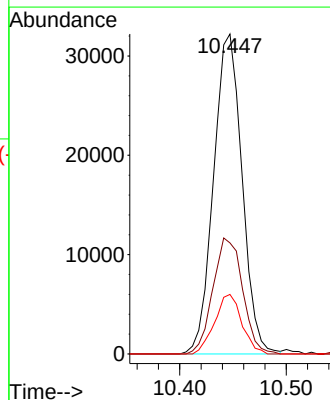
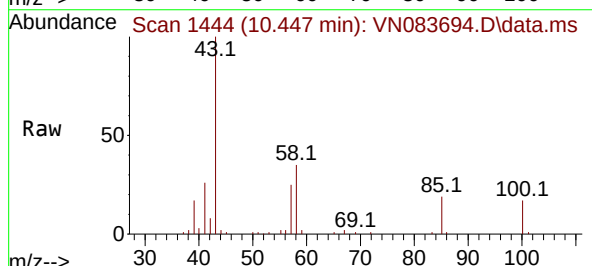
Tgt Ion: 43 Resp: 59789

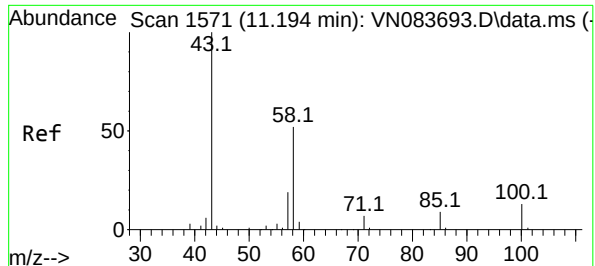
Ion Ratio Lower Upper

43 100

58 37.8 36.5 54.7

85 17.8 19.5 29.3#





#59

2-Hexanone

Concen: 24.499 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	43	Resp:	43379
Ion	Ratio	Lower	Upper
43	100		
58	54.5	50.4	75.6
57	20.4	18.6	27.8

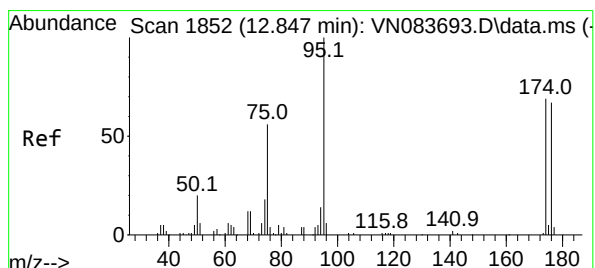
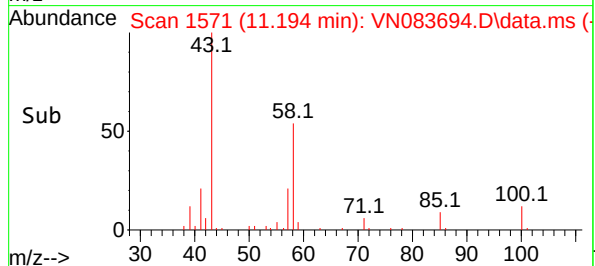
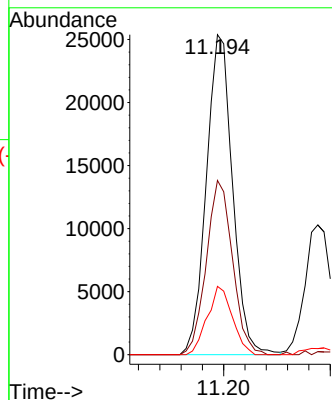
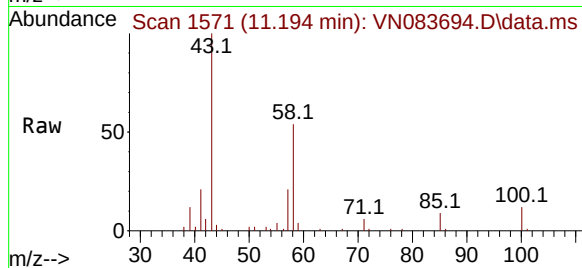
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#60

4-Bromofluorobenzene

Concen: 29.190 ug/l

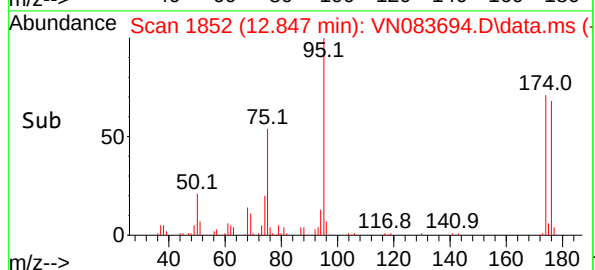
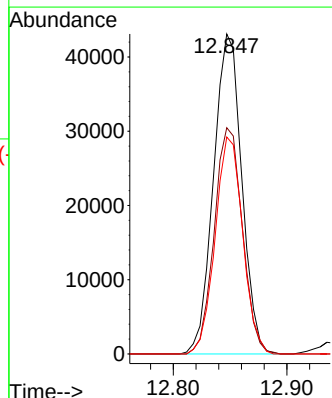
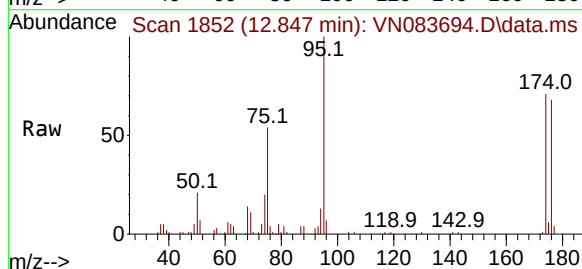
RT: 12.847 min Scan# 1852

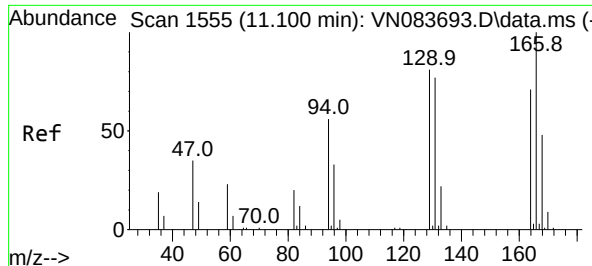
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

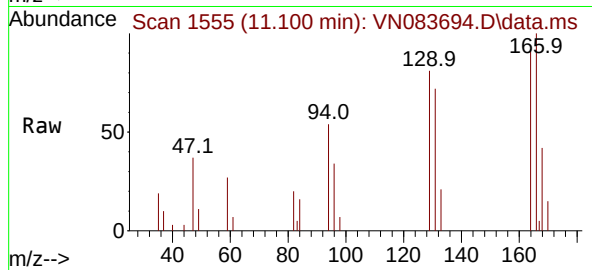
Tgt Ion:	95	Resp:	74346
Ion	Ratio	Lower	Upper
95	100		
174	70.4	60.5	90.7
176	66.4	57.8	86.6





#61
Tetrachloroethene
Concen: 5.481 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



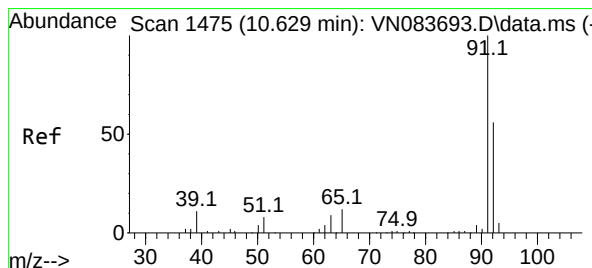
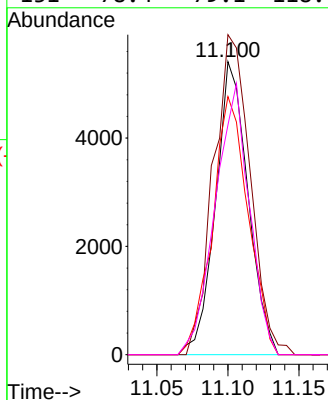
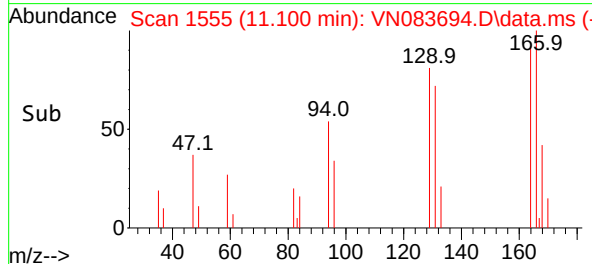
Tgt Ion:164 Resp: 8572
Ion Ratio Lower Upper
164 100
166 109.2 106.7 160.1
129 88.1 85.8 128.6
131 78.4 79.1 118.7#

Manual Integrations
APPROVED

Reviewed By :John
Carlone

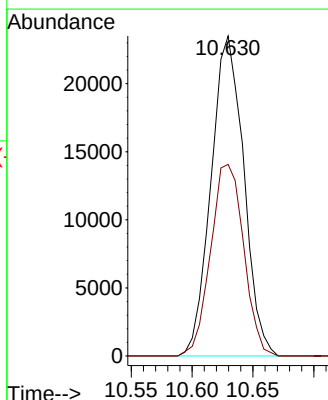
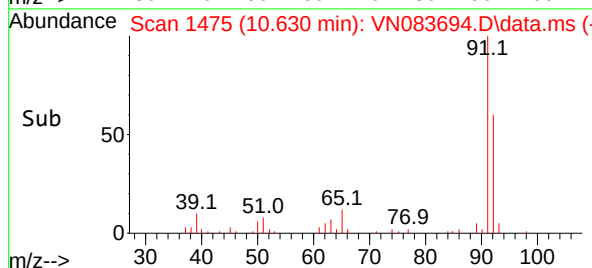
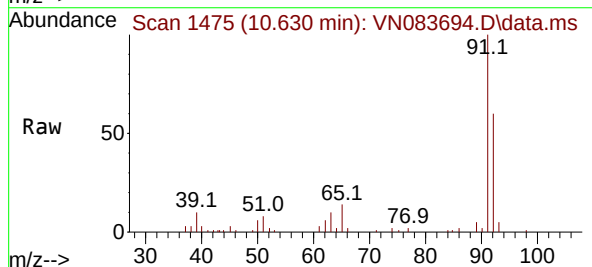
09/09/2024
Supervised By :Mahesh
Dadoda

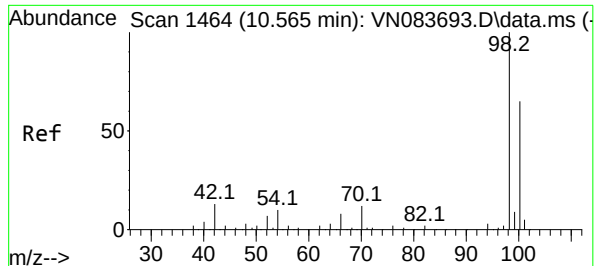
09/09/2024



#62
Toluene
Concen: 5.168 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

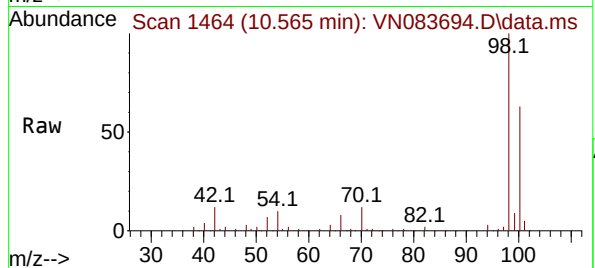
Tgt Ion: 91 Resp: 43895
Ion Ratio Lower Upper
91 100
92 60.6 46.5 69.7





#63
Toluene-d8
Concen: 30.868 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



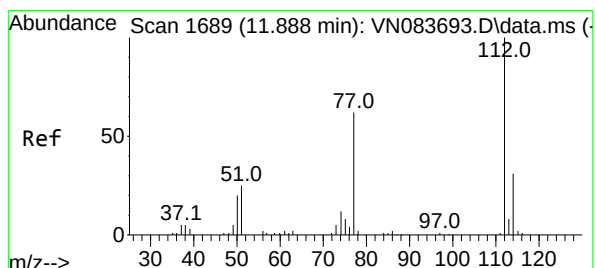
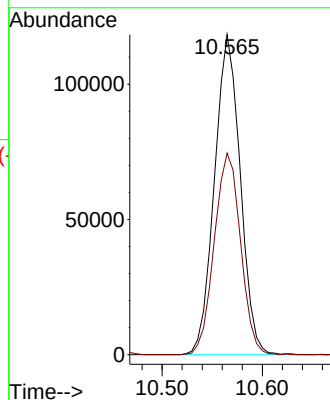
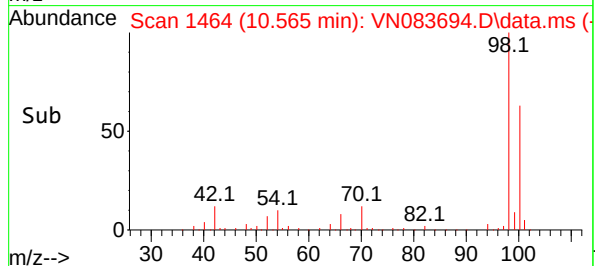
Tgt Ion: 98 Resp: 211220
Ion Ratio Lower Upper
98 100
100 64.2 52.7 79.1

Manual Integrations
APPROVED

Reviewed By :John
Carlone

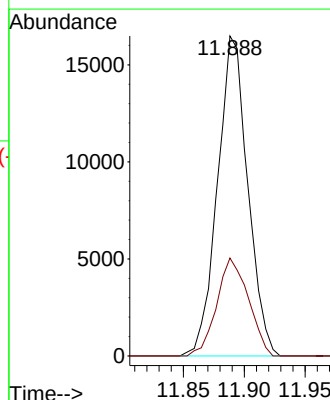
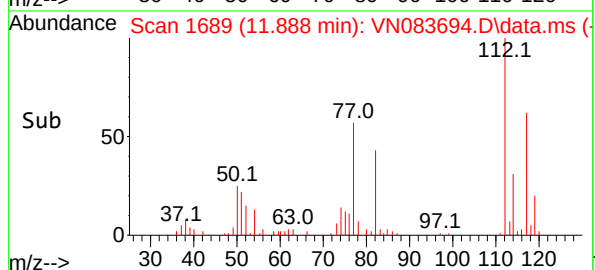
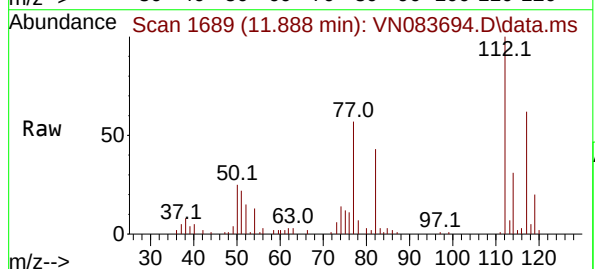
09/09/2024
Supervised By :Mahesh
Dadoda

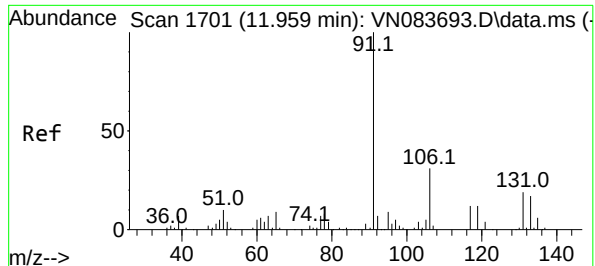
09/09/2024



#64
Chlorobenzene
Concen: 5.413 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion:112 Resp: 28468
Ion Ratio Lower Upper
112 100
114 30.6 26.6 39.8





#65

1,1,1,2-Tetrachloroethane

Concen: 5.099 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	131	Resp:	934
Ion	Ratio	Lower	Upper
131	100		
133	93.2	0.0	188.0
119	64.3	0.0	122.8

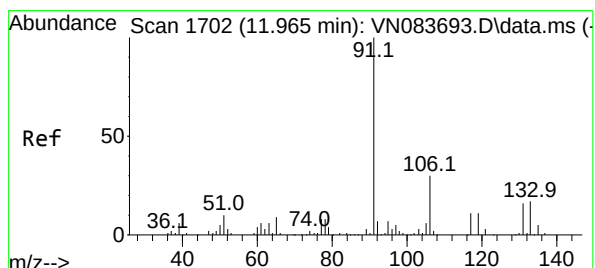
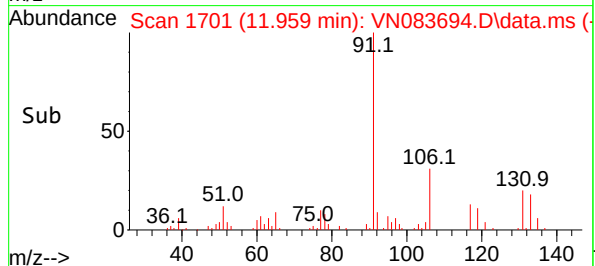
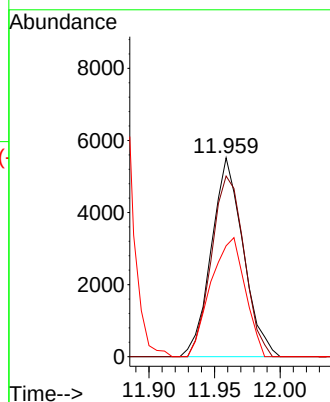
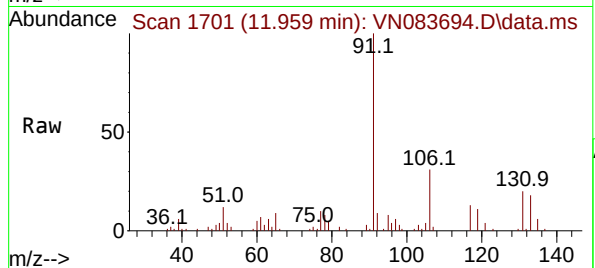
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#66

Ethyl Benzene

Concen: 5.124 ug/l

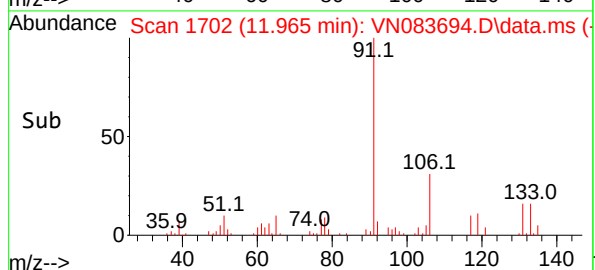
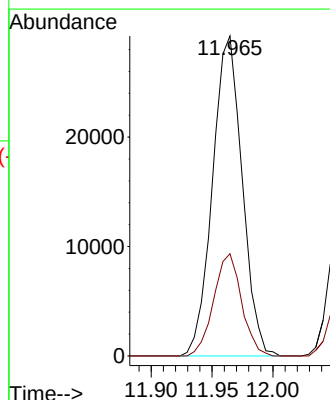
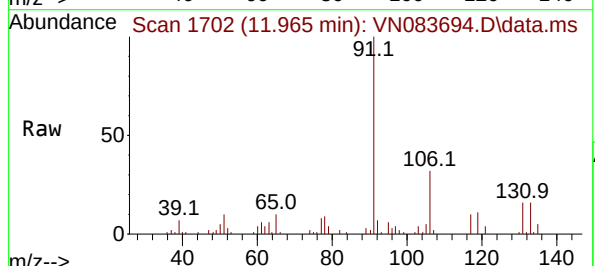
RT: 11.965 min Scan# 1702

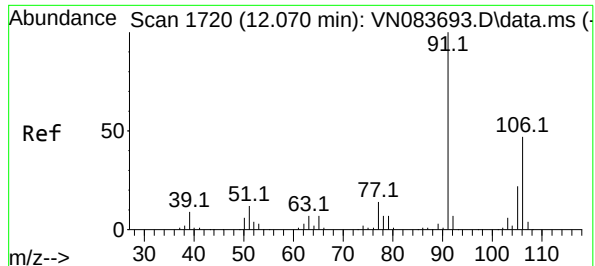
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	91	Resp:	49501
Ion	Ratio	Lower	Upper
91	100		
106	31.9	24.4	36.6





#67
m/p-Xylenes
Concen: 9.958 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

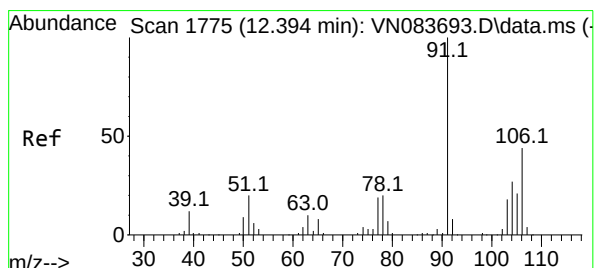
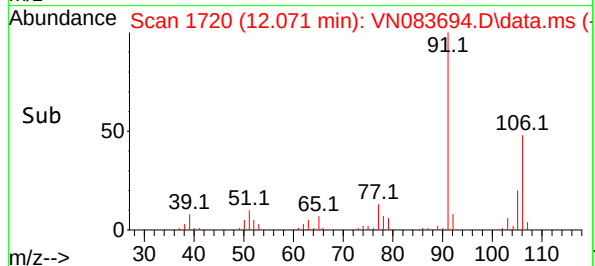
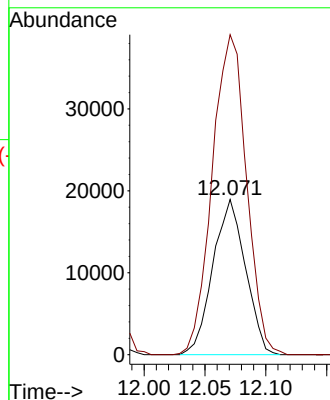
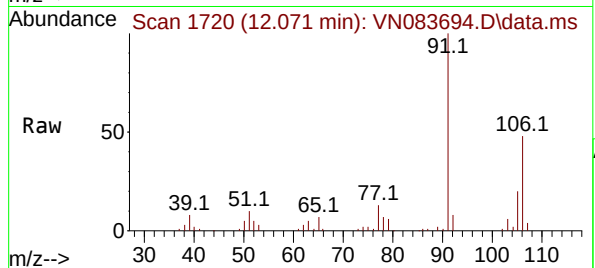
Tgt Ion:106 Resp: 35390
Ion Ratio Lower Upper
106 100
91 216.2 166.6 249.8

Manual Integrations
APPROVED

Reviewed By :John
Carlone

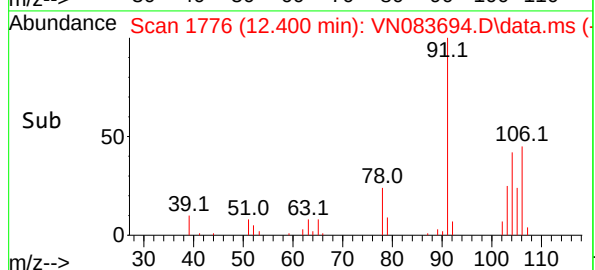
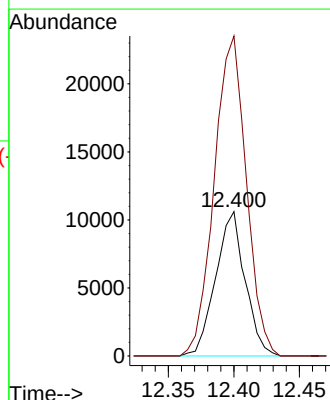
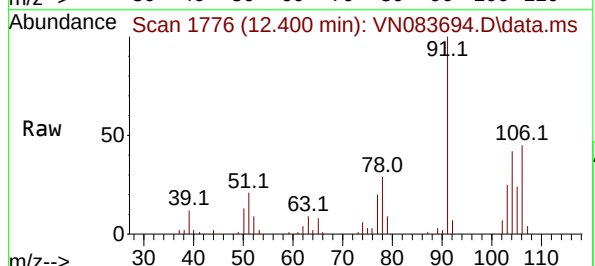
09/09/2024
Supervised By :Mahesh
Dadoda

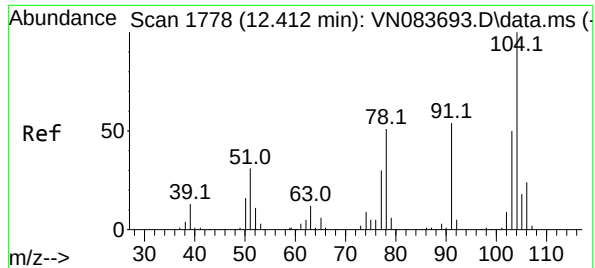
09/09/2024



#68
o-Xylene
Concen: 4.814 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. 0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion:106 Resp: 16557
Ion Ratio Lower Upper
106 100
91 241.4 110.0 330.0





#69

Styrene

Concen: 4.853 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

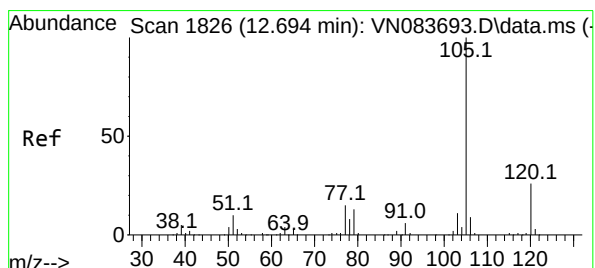
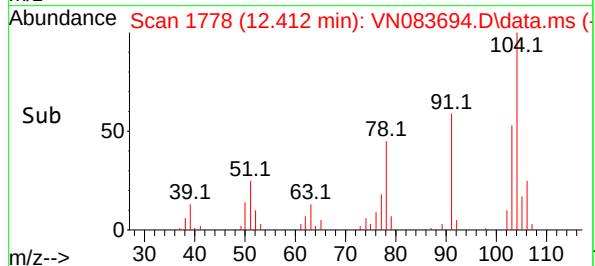
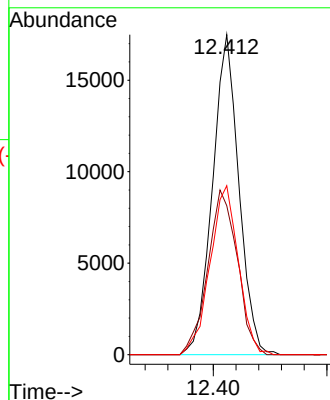
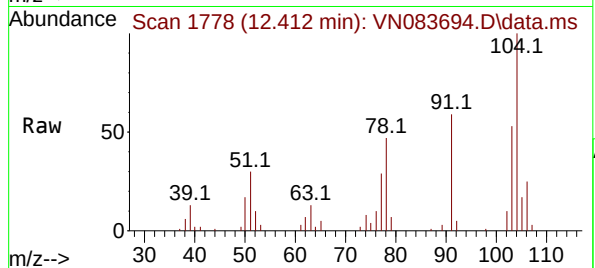
Tgt Ion:104	Resp:	2820
Ion Ratio	Lower	Upper
104	100	
78	57.4	42.6 64.0
103	56.8	43.7 65.5

Manual Integrations
APPROVEDReviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#70

Isopropylbenzene

Concen: 4.863 ug/l

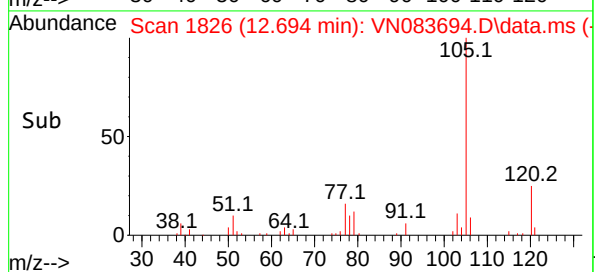
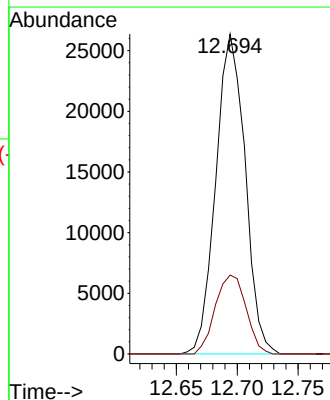
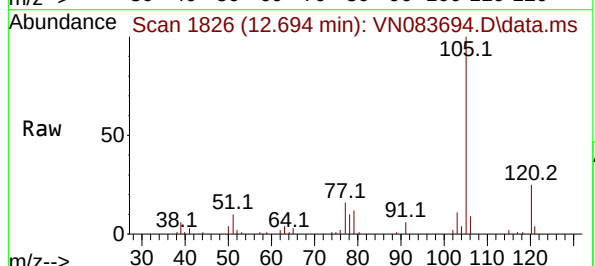
RT: 12.694 min Scan# 1826

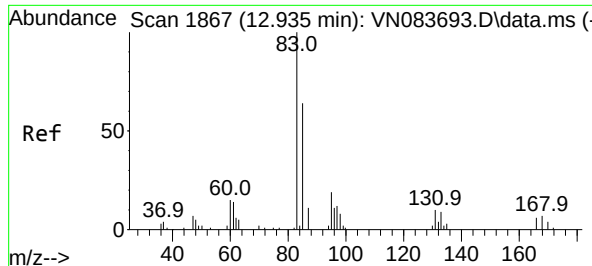
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:105	Resp:	44138
Ion Ratio	Lower	Upper
105	100	
120	25.9	17.8 33.1





#71
1,1,2,2-Tetrachloroethane
Concen: 5.071 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

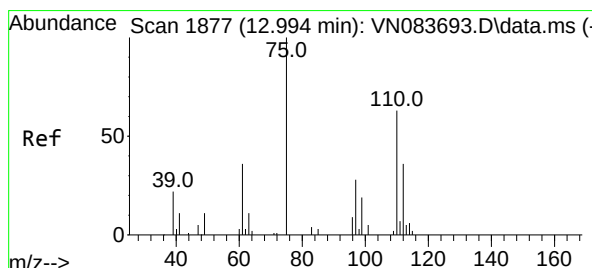
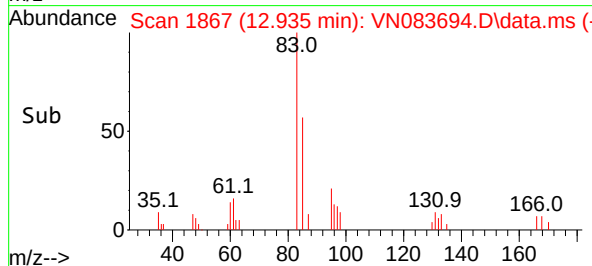
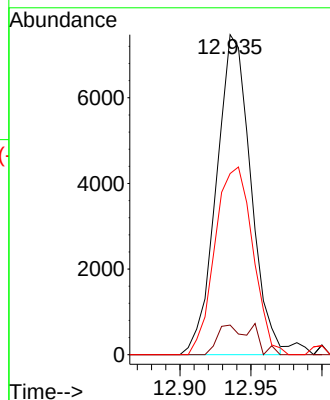
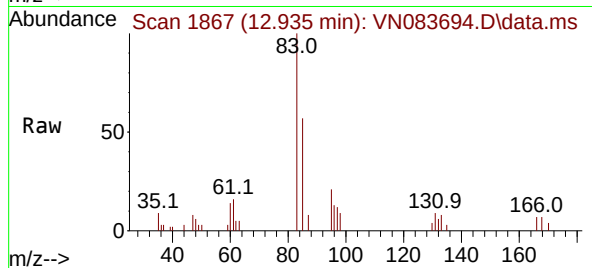
Tgt Ion: 83 Resp: 12572
Ion Ratio Lower Upper
83 100
131 7.0 5.2 15.6
85 64.7 32.3 96.8

Manual Integrations
APPROVED

Reviewed By :John
Carlone

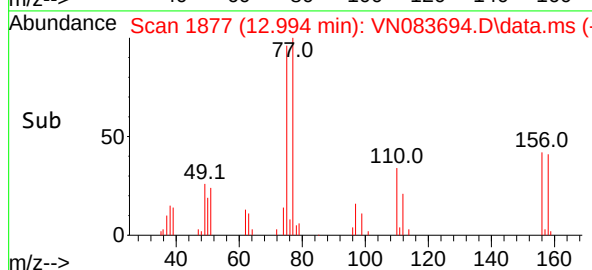
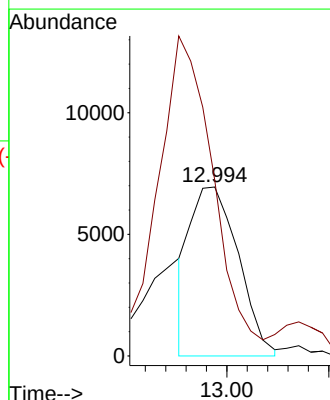
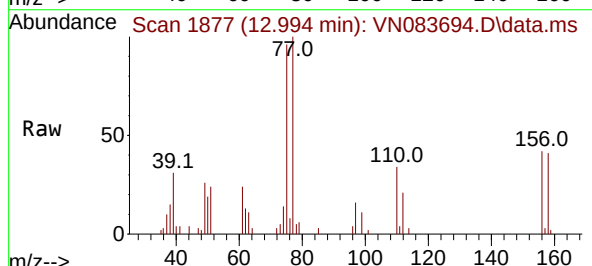
09/09/2024
Supervised By :Mahesh
Dadoda

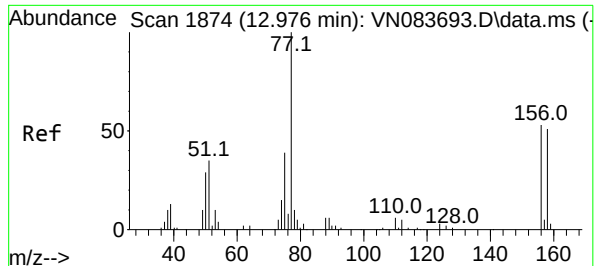
09/09/2024



#72
1,2,3-Trichloropropane
Concen: 5.244 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion: 75 Resp: 11376
Ion Ratio Lower Upper
75 100
77 219.2 0.0 367.6





#73
Bromobenzene
Concen: 5.403 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

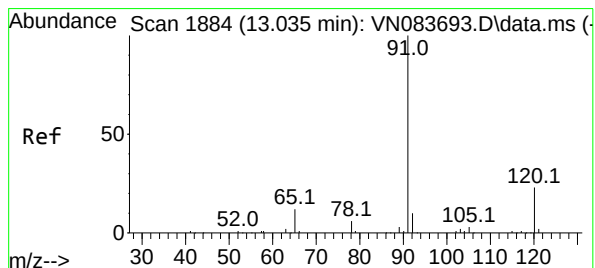
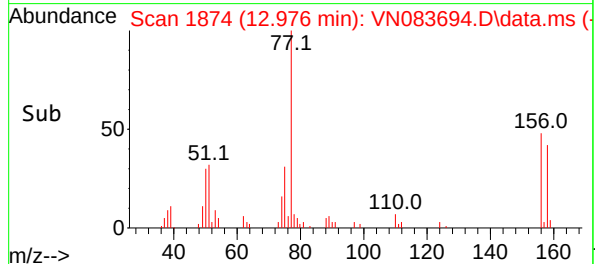
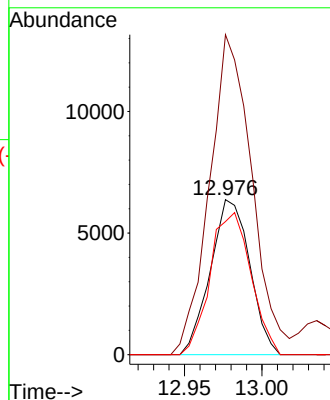
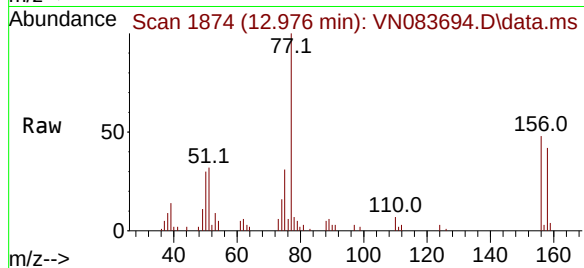
Tgt Ion:156 Resp: 1126
Ion Ratio Lower Upper
156 100
77 221.4 0.0 437.6
158 95.0 0.0 203.8

Manual Integrations
APPROVED

Reviewed By :John
Carlone

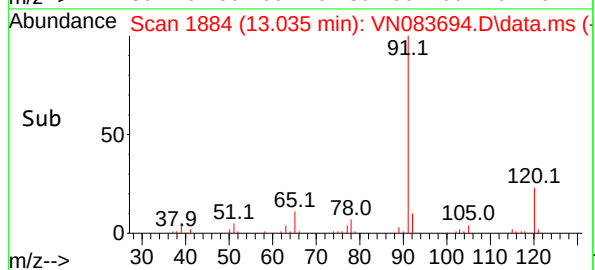
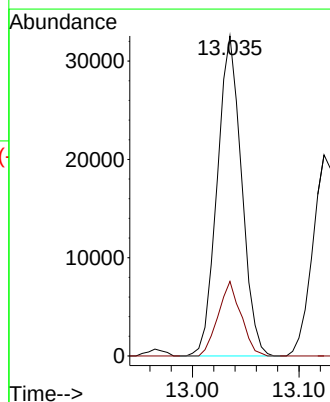
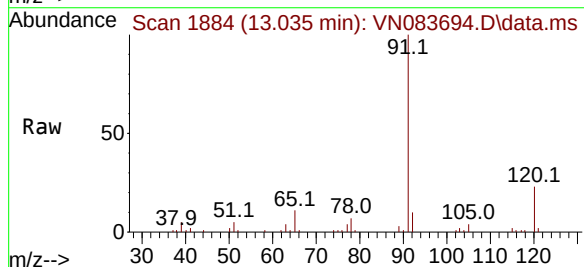
09/09/2024
Supervised By :Mahesh
Dadoda

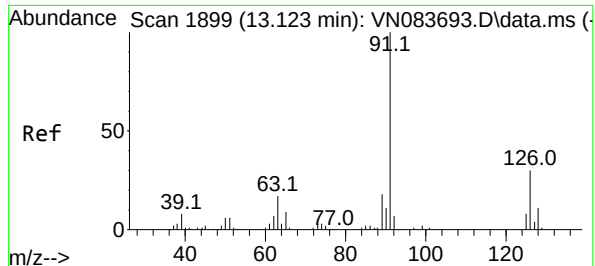
09/09/2024



#74
n-propylbenzene
Concen: 4.871 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion: 91 Resp: 51761
Ion Ratio Lower Upper
91 100
120 21.9 0.0 43.8





#75

2-Chlorotoluene

Concen: 5.172 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 91 Resp: 3430

Ion Ratio Lower Upper

91 100

126 30.1 0.0 61.2

Manual Integrations

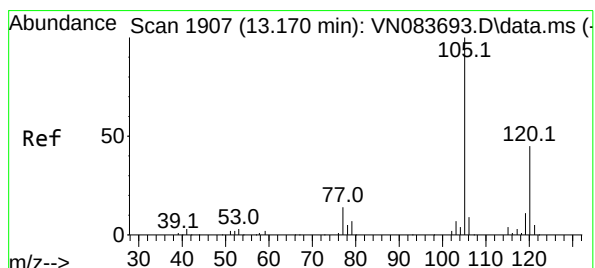
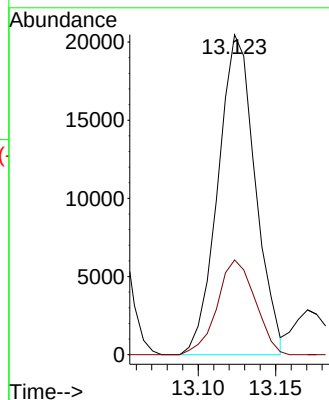
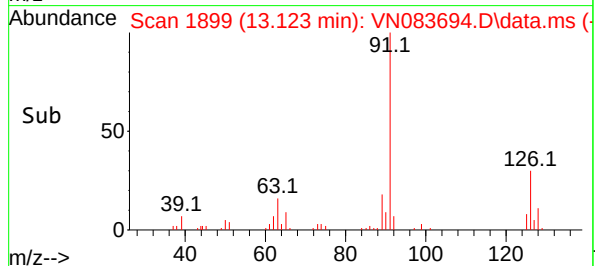
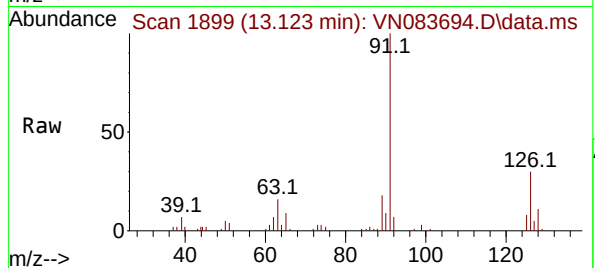
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#76

1,3,5-Trimethylbenzene

Concen: 4.803 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN083694.D

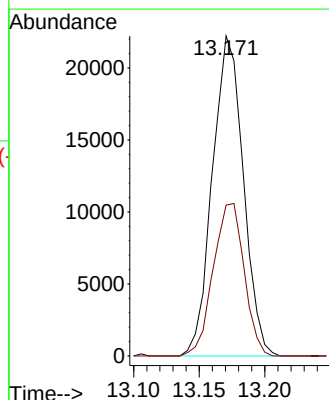
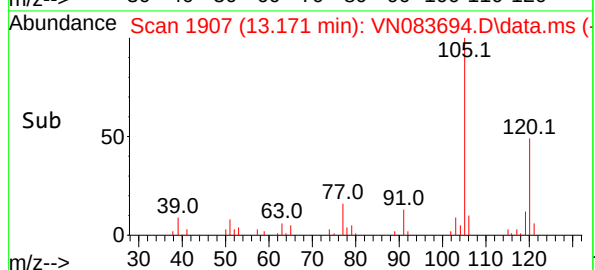
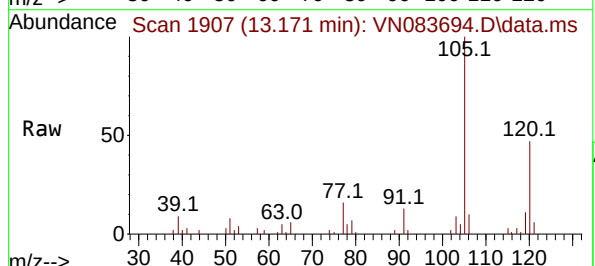
Acq: 06 Sep 2024 13:33

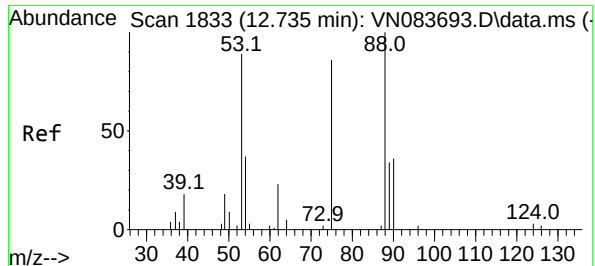
Tgt Ion:105 Resp: 36414

Ion Ratio Lower Upper

105 100

120 47.6 0.0 95.8





#77

t-1,4-Dichloro-2-butene

Concen: 4.532 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	75	Resp:	416
Ion	Ratio	Lower	Upper
75	100		
53	105.1	45.9	137.7
89	50.1	25.9	77.7

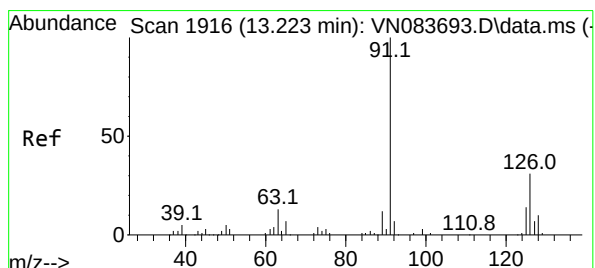
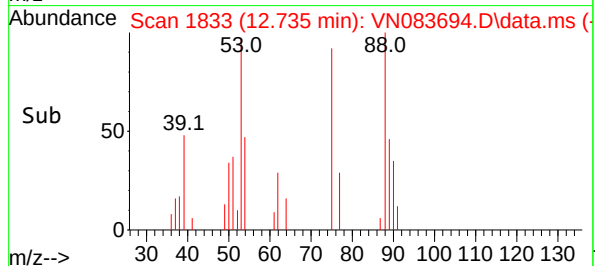
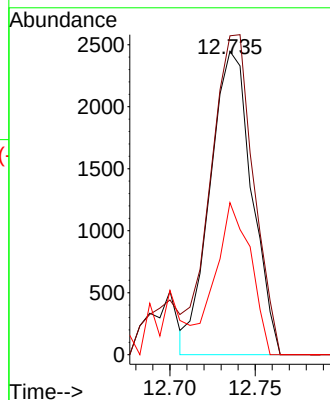
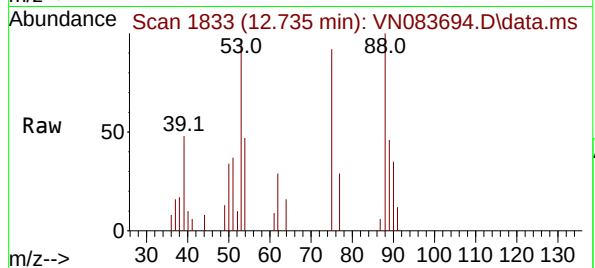
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#78

4-Chlorotoluene

Concen: 5.293 ug/l

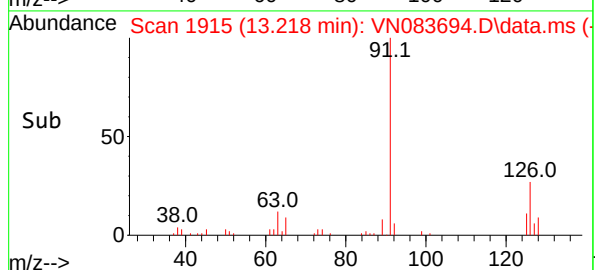
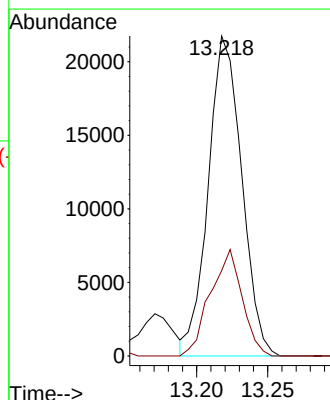
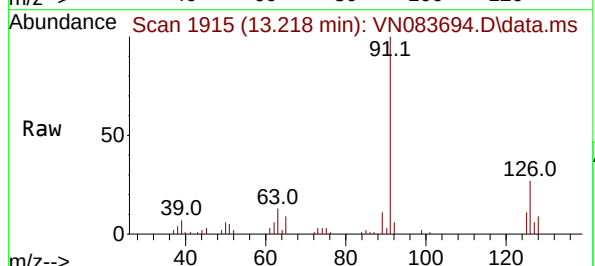
RT: 13.218 min Scan# 1915

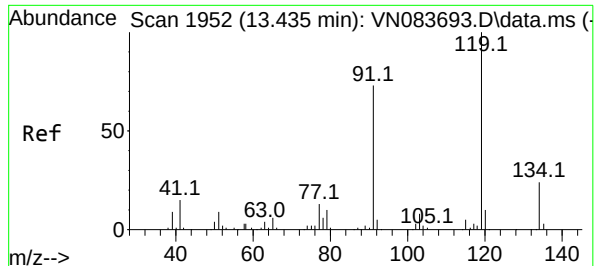
Delta R.T. -0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	91	Resp:	35595
Ion	Ratio	Lower	Upper
91	100		
126	31.7	0.0	62.8





#79

tert-butylbenzene

Concen: 4.908 ug/l

RT: 13.441 min Scan# 1952

Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:119	Resp: 32540
Ion Ratio	Lower Upper
119 100	
91 73.4	0.0 138.8
134 23.6	0.0 48.6

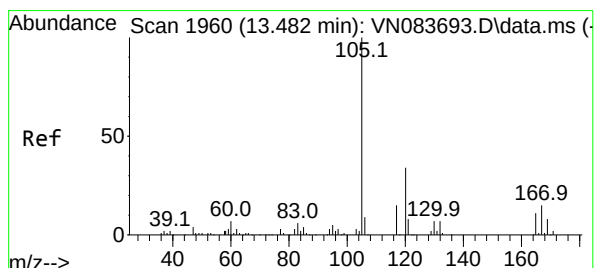
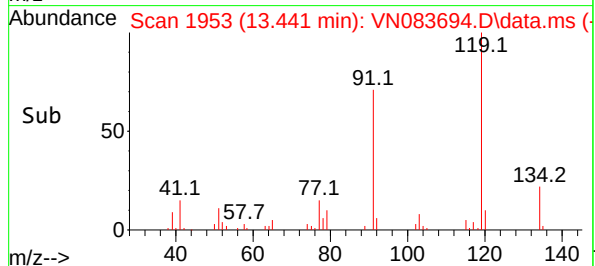
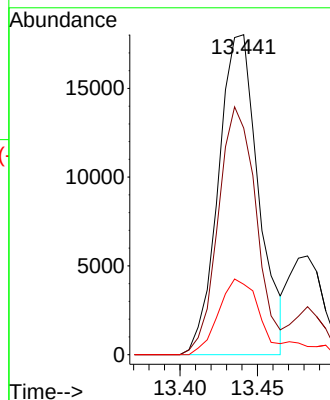
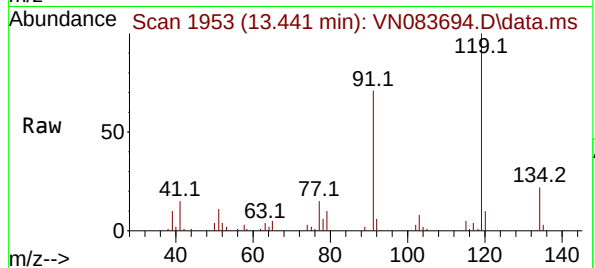
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#80

1,2,4-Trimethylbenzene

Concen: 4.851 ug/l

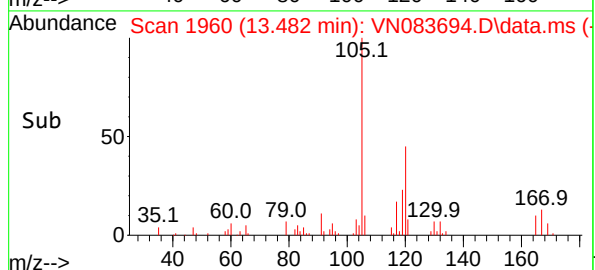
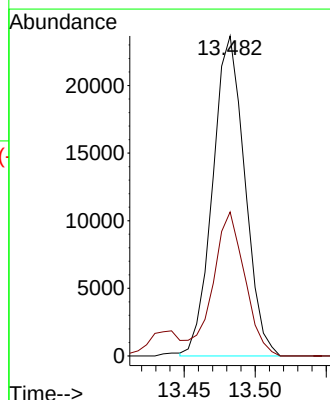
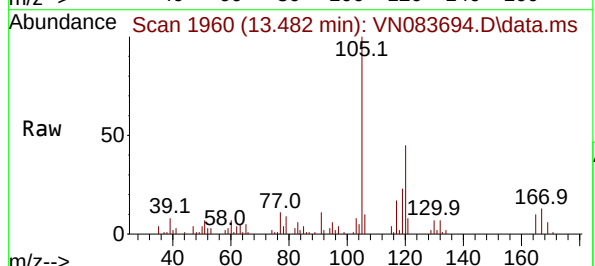
RT: 13.482 min Scan# 1960

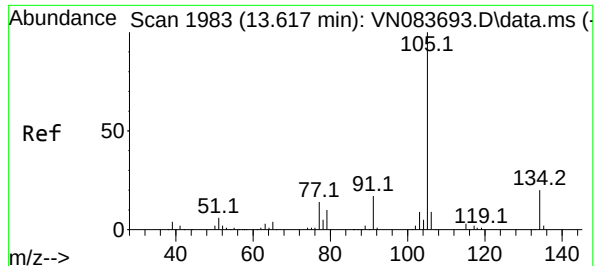
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:105	Resp: 37167
Ion Ratio	Lower Upper
105 100	
120 45.2	0.0 86.8





#81
sec-Butylbenzene
Concen: 4.874 ug/l
RT: 13.618 min Scan# 1983
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

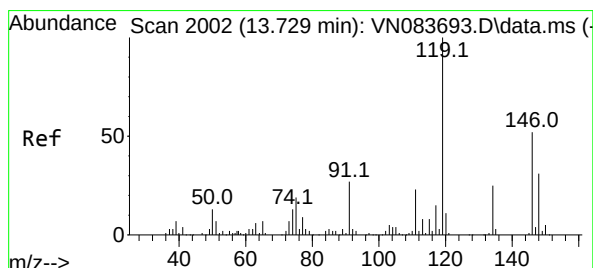
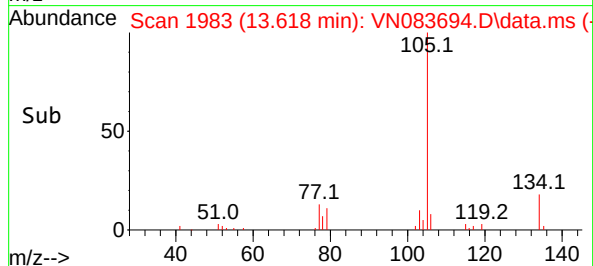
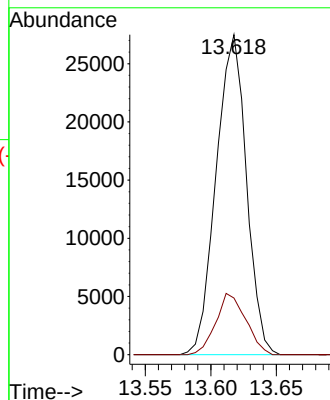
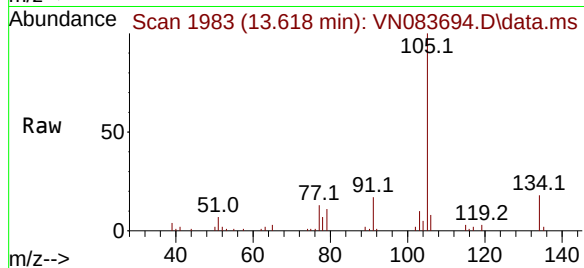
Tgt Ion:105 Resp: 4414
Ion Ratio Lower Upper
105 100
134 19.0 0.0 39.0

Manual Integrations
APPROVED

Reviewed By :John
Carlone

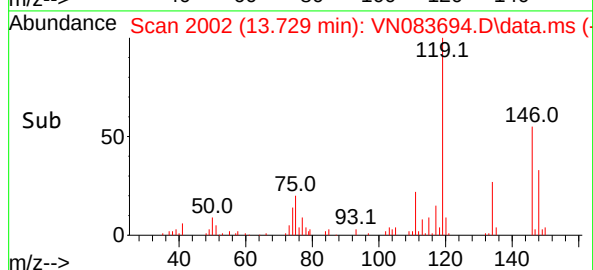
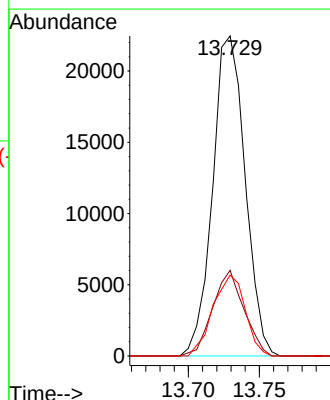
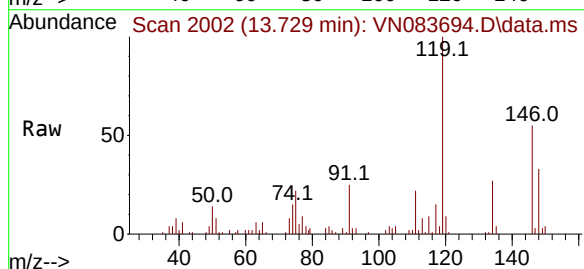
09/09/2024
Supervised By :Mahesh
Dadoda

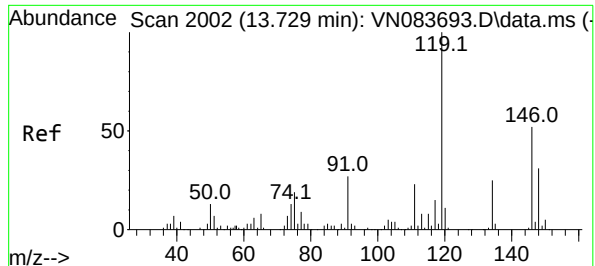
09/09/2024



#82
p-Isopropyltoluene
Concen: 4.689 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Tgt Ion:119 Resp: 35731
Ion Ratio Lower Upper
119 100
134 25.8 0.0 49.2
91 25.2 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 5.484 ug/l

RT: 13.735 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:146	Resp:	2200
Ion Ratio	Lower	Upper
146	100	
111	41.6	22.4 67.0
148	63.6	32.1 96.5

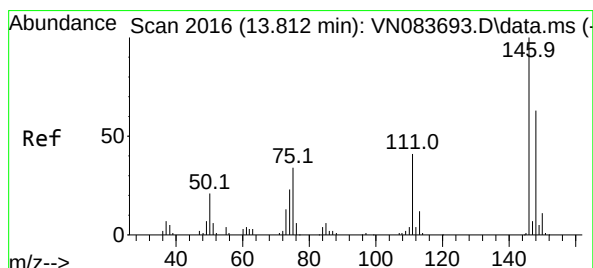
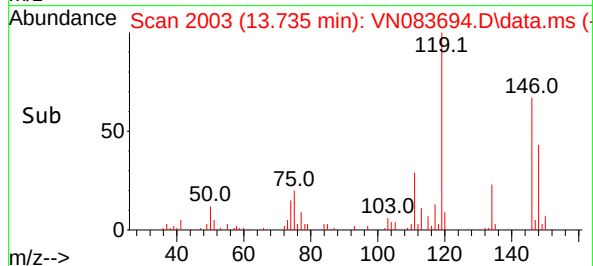
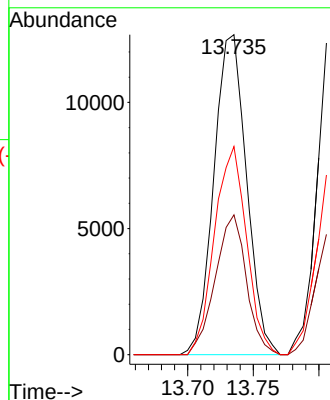
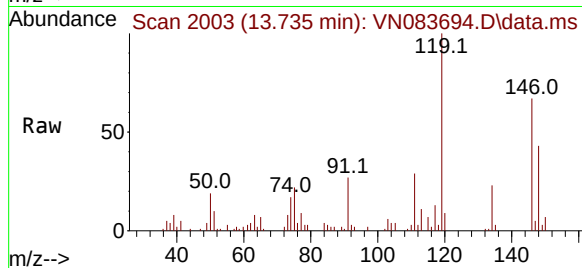
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#84

1,4-Dichlorobenzene

Concen: 5.433 ug/l

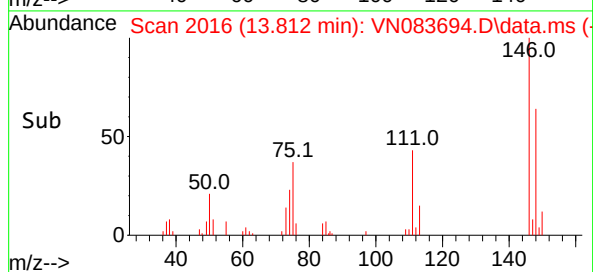
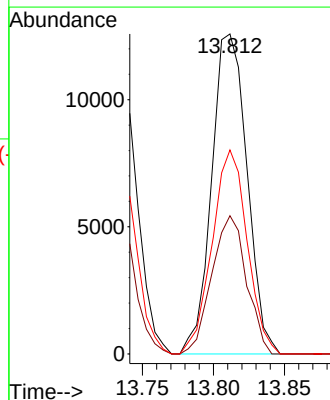
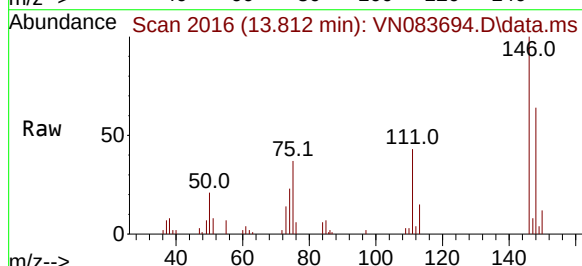
RT: 13.812 min Scan# 2016

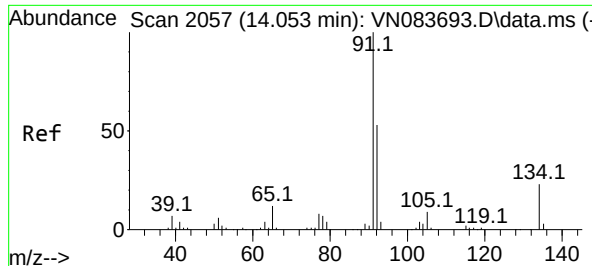
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:146	Resp:	21795
Ion Ratio	Lower	Upper
146	100	
111	42.4	21.3 63.9
148	63.3	31.9 95.5





#85

n-Butylbenzene

Concen: 4.812 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

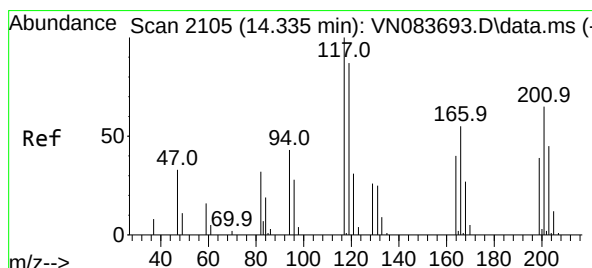
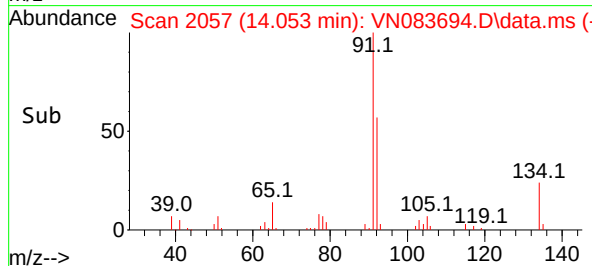
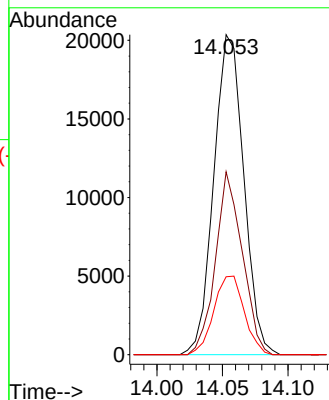
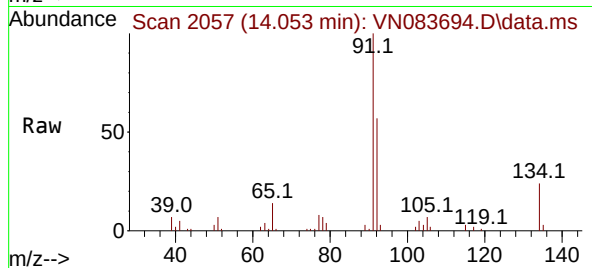
Tgt Ion:	91	Resp:	3236
Ion	Ratio	Lower	Upper
91	100		
92	51.1	0.0	105.0
134	25.0	0.0	51.8

Manual Integrations
APPROVEDReviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#86

Hexachloroethane

Concen: 4.594 ug/l

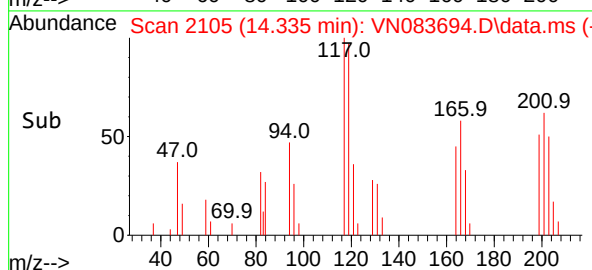
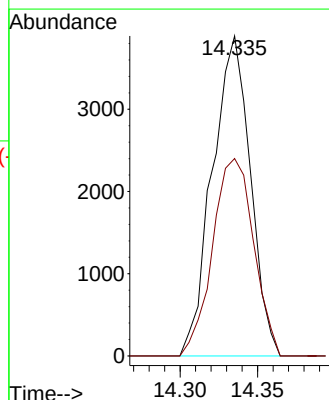
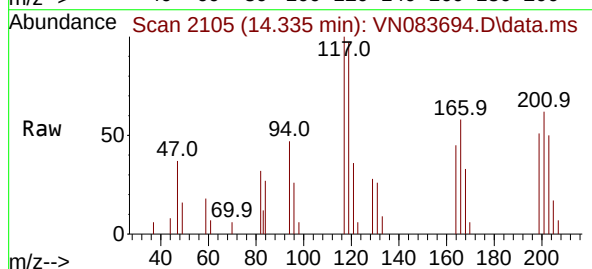
RT: 14.335 min Scan# 2105

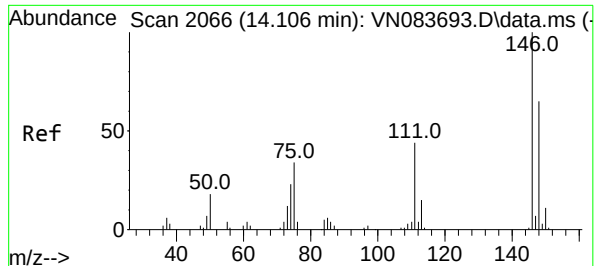
Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	117	Resp:	6635
Ion	Ratio	Lower	Upper
117	100		
201	66.8	38.0	114.0





#87

1,2-Dichlorobenzene

Concen: 5.225 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.000 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:	146	Resp:	2034
Ion Ratio	Lower	Upper	
146	100		
111	43.3	22.6	67.8
148	66.3	31.3	93.8

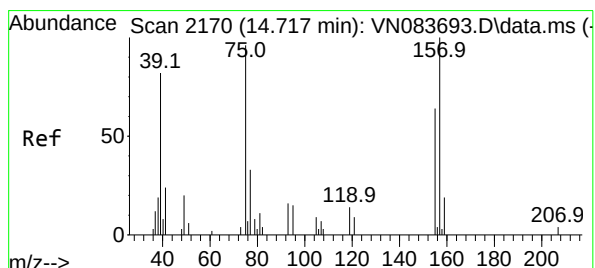
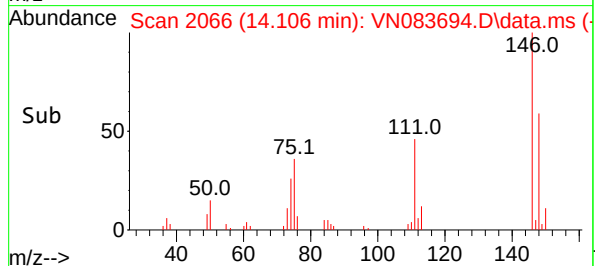
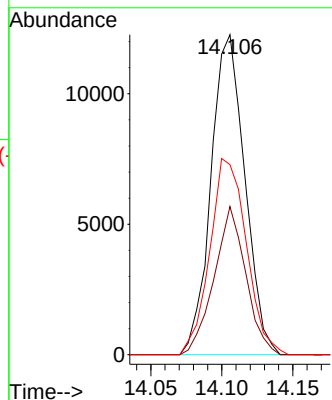
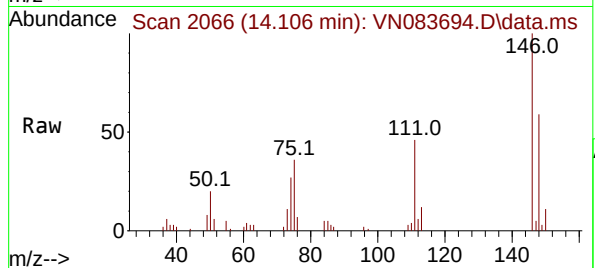
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 4.987 ug/l

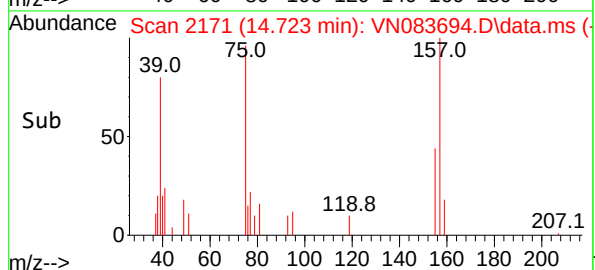
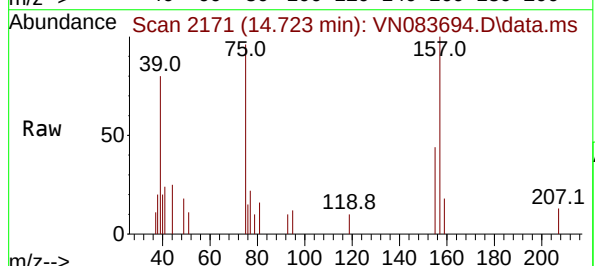
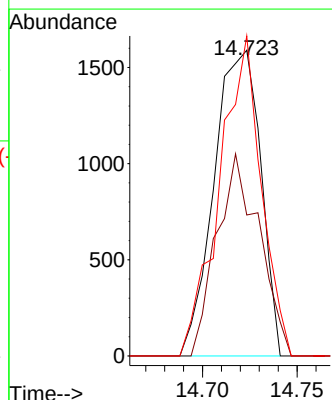
RT: 14.723 min Scan# 2171

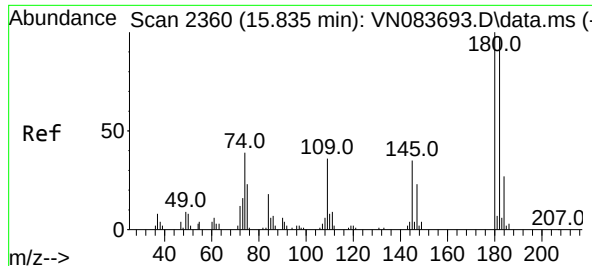
Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Tgt Ion:	75	Resp:	2717
Ion Ratio	Lower	Upper	
75	100		
155	60.4	61.7	92.5
157	93.4	83.6	125.4





#89

1,2,4-Trichlorobenzene

Concen: 5.357 ug/l

RT: 15.841 min Scan# 21

Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:180	Resp:	11428
Ion Ratio	Lower	Upper
180	100	
182	100.0	76.4 114.6
145	37.3	28.4 42.6

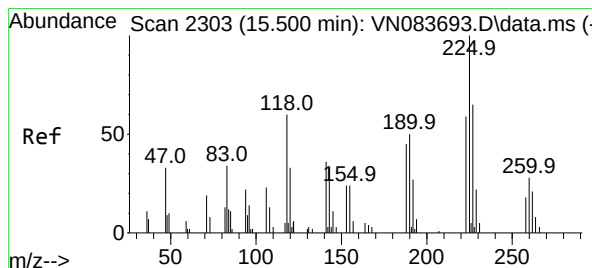
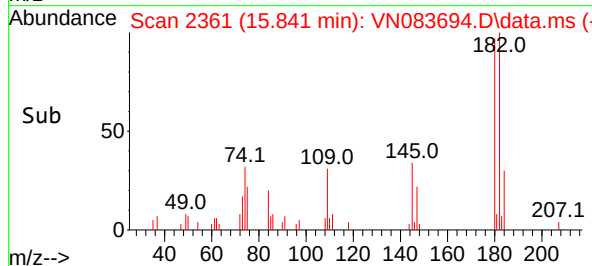
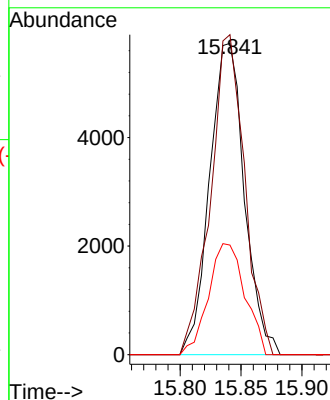
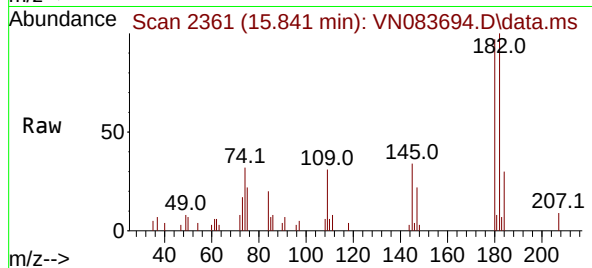
Manual Integrations
APPROVED

Reviewed By :John
Carlone

09/09/2024

Supervised By :Mahesh
Dadoda

09/09/2024



#90

Hexachlorobutadiene

Concen: 5.309 ug/l

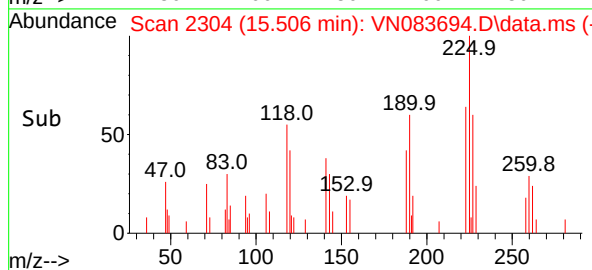
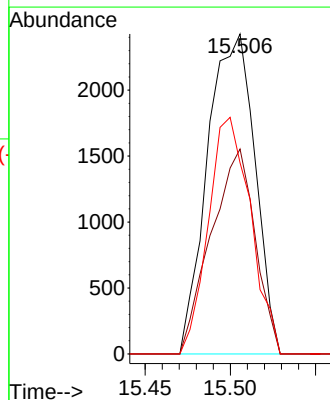
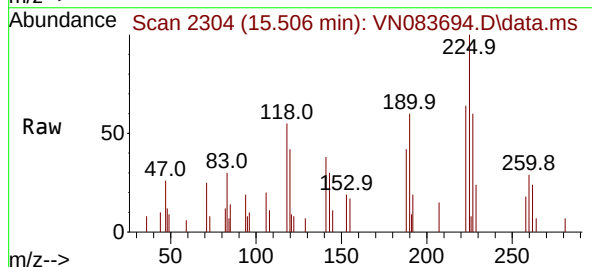
RT: 15.506 min Scan# 2304

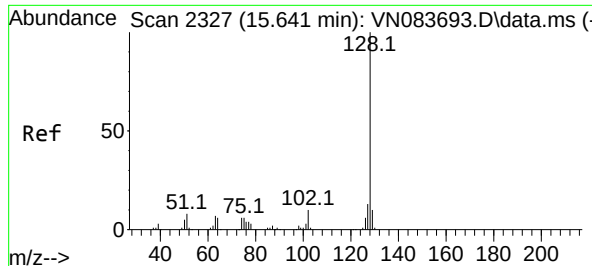
Delta R.T. 0.006 min

Lab File: VN083694.D

Acq: 06 Sep 2024 13:33

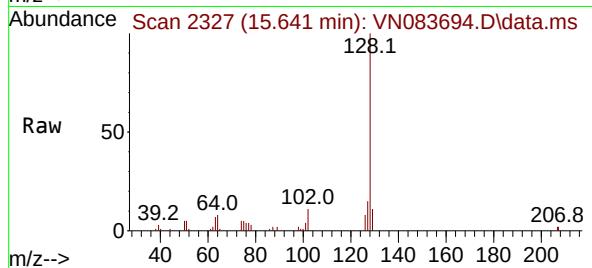
Tgt Ion:225	Resp:	4688
Ion Ratio	Lower	Upper
225	100	
223	59.6	0.0 126.6
227	66.1	0.0 126.6





#91
Naphthalene
Concen: 5.042 ug/l
RT: 15.641 min Scan# 2327
Delta R.T. 0.000 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005



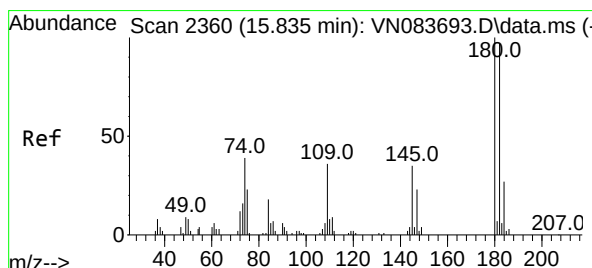
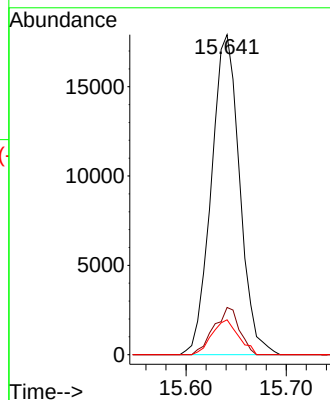
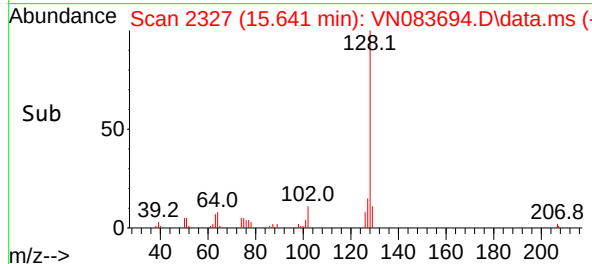
Tgt Ion:128 Resp: 3516
Ion Ratio Lower Upper
128 100
127 13.3 10.6 16.0
129 10.2 8.6 13.0

Manual Integrations
APPROVED

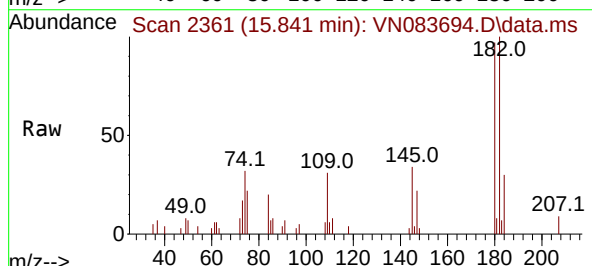
Reviewed By :John
Carlone

09/09/2024
Supervised By :Mahesh
Dadoda

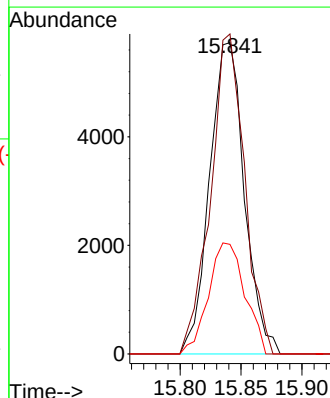
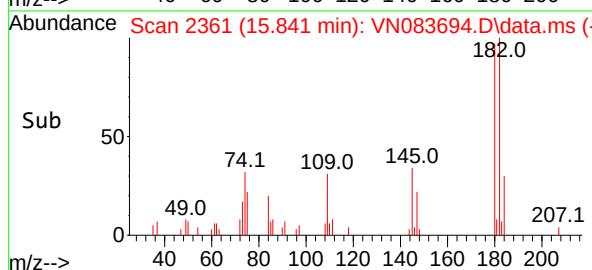
09/09/2024



#92
1,2,3-Trichlorobenzene
Concen: 5.357 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN083694.D
Acq: 06 Sep 2024 13:33



Tgt Ion:180 Resp: 11428
Ion Ratio Lower Upper
180 100
182 100.0 0.0 191.0
145 37.3 0.0 71.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083695.D
 Acq On : 06 Sep 2024 14:35
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN090624

Quant Time: Sep 06 23:45:57 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 09/09/2024
 Supervised By : Mahesh Dadoda 09/09/2024

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

Internal Standards						
1) Bromochloromethane	7.812	128	30147	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	175573	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	157735	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	83838	30.424	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	101.400%
60) 4-Bromofluorobenzene	12.847	95	79825	29.363	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	97.867%
63) Toluene-d8	10.565	98	219216	30.014	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	100.033%
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	36955	18.305	ug/l	94
3) Chloromethane	2.360	50	39149	18.663	ug/l	97
4) Vinyl Chloride	2.512	62	40156	18.622	ug/l	96
5) Bromomethane	2.901	94	21581	17.912	ug/l	99
6) Chloroethane	3.071	64	27094	18.763	ug/l	94
7) Trichlorofluoromethane	3.471	101	66776	18.470	ug/l	96
8) Diethyl Ether	3.959	74	23084	18.791	ug/l	88
9) 1,1,2-Trichlorotrifluo...	4.365	101	35885	18.479	ug/l	94
10) 1,1-Dichloroethene	4.324	96	34434	18.378	ug/l	89
11) Methyl Iodide	4.571	142	46693	18.347	ug/l	93
12) Methyl Acetate	5.018	43	41127	18.200	ug/l #	77
13) Acrolein	4.177	56	34606	104.937	ug/l	99
14) Acrylonitrile	5.718	53	83024	90.791	ug/l	98
15) Acetone	4.436	58	25862	85.256	ug/l	80
16) Carbon Disulfide	4.701	76	92190	17.410	ug/l	98
17) Allyl chloride	5.018	41	57795	17.590	ug/l	87
18) Methylene Chloride	5.271	84	37276	18.184	ug/l	93
19) trans-1,2-Dichloroethene	5.783	96	34945	17.995	ug/l	90
20) Diisopropyl ether	6.665	45	117975	17.779	ug/l	95
21) 1,1-Dichloroethane	6.565	63	69490	18.342	ug/l	97
22) cis-1,2-Dichloroethene	7.483	96	42879	18.142	ug/l	94
23) tert-Butyl Alcohol	5.542	59	31493	93.850	ug/l #	100
24) Methyl tert-Butyl Ether	5.795	73	122458	18.391	ug/l #	87
25) Chloroform	7.965	83	72937	18.167	ug/l	91
26) Cyclohexane	8.253	56	60615	18.166	ug/l #	88
29) 1,1-Dichloropropene	8.371	75	49709	17.850	ug/l	97
30) 2-Butanone	7.477	43	116443	88.703	ug/l	96
31) 2,2-Dichloropropane	7.489	77	64665	18.213	ug/l	95
32) 1,1,1-Trichloroethane	8.165	97	67462	18.139	ug/l	97
33) Carbon Tetrachloride	8.359	117	58625	18.202	ug/l	97
34) Benzene	8.600	78	154080	18.440	ug/l #	94
35) Methacrylonitrile	7.777	41	27774	18.821	ug/l	90
36) 1,2-Dichloroethane	8.671	62	58520	18.630	ug/l	95
37) Trichloroethene	9.347	130	35995	18.345	ug/l	96
38) Methylcyclohexane	9.600	83	59506	17.848	ug/l	96
39) 1,2-Dichloropropane	9.618	63	37998	18.895	ug/l	97
40) Dibromomethane	9.706	93	26868	18.272	ug/l	94
41) Bromodichloromethane	9.888	83	56589	18.098	ug/l #	98
42) Vinyl Acetate	6.600	43	447762	82.960	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
 Data File : VN083695.D
 Acq On : 06 Sep 2024 14:35
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024

Quant Time: Sep 06 23:45:57 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Sep 06 23:42:47 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	48726	18.441	ug/l	99
44) Isopropyl Acetate	8.689	43	83095	18.183	ug/l	91
45) 1,4-Dioxane	9.694	88	13881	389.428	ug/l #	95
46) Methyl methacrylate	9.683	41	41140	18.598	ug/l	80
47) n-amyl Acetate	12.494	43	74413	18.382	ug/l #	88
48) t-1,3-Dichloropropene	10.835	75	55950	17.011	ug/l	96
49) cis-1,3-Dichloropropene	10.312	75	60780	17.769	ug/l #	84
50) 1,1,2-Trichloroethane	11.018	97	34549	18.465	ug/l	97
51) Ethyl methacrylate	10.871	69	57196	17.893	ug/l	76
52) 1,3-Dichloropropane	11.159	76	60931	18.033	ug/l	99
53) Dibromochloromethane	11.359	129	40391	17.998	ug/l	97
54) 1,2-Dibromoethane	11.465	107	34942	18.052	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	113687	89.240	ug/l	99
56) Bromoform	12.576	173	24751	17.360	ug/l #	97
58) 4-Methyl-2-Pentanone	10.447	43	234399	93.719	ug/l #	89
59) 2-Hexanone	11.194	43	172578	91.318	ug/l	89
61) Tetrachloroethene	11.100	164	29454	17.644	ug/l	96
62) Toluene	10.630	91	164945	18.193	ug/l	99
64) Chlorobenzene	11.888	112	100355	17.878	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	36551	18.692	ug/l	97
66) Ethyl Benzene	11.965	91	183486	17.796	ug/l	97
67) m/p-Xylenes	12.071	106	136830	36.072	ug/l	98
68) o-Xylene	12.400	106	66805	18.197	ug/l	97
69) Styrene	12.412	104	108426	17.479	ug/l	97
70) Isopropylbenzene	12.694	105	176773	18.246	ug/l	98
71) 1,1,2,2-Tetrachloroethane	12.935	83	48547	18.347	ug/l	98
72) 1,2,3-Trichloropropane	12.988	75	42935m	18.507	ug/l	
73) Bromobenzene	12.982	156	38434	17.272	ug/l	91
74) n-propylbenzene	13.035	91	198876	17.536	ug/l	99
75) 2-Chlorotoluene	13.124	91	127557	18.021	ug/l	100
76) 1,3,5-Trimethylbenzene	13.171	105	145043	17.923	ug/l	99
77) t-1,4-Dichloro-2-butene	12.735	75	16359	16.682	ug/l	88
78) 4-Chlorotoluene	13.224	91	125678	17.508	ug/l	99
79) tert-butylbenzene	13.435	119	124104	17.537	ug/l	95
80) 1,2,4-Trimethylbenzene	13.482	105	145402	17.779	ug/l	99
81) sec-Butylbenzene	13.618	105	171738	17.765	ug/l	100
82) p-Isopropyltoluene	13.729	119	143309	17.619	ug/l	98
83) 1,3-Dichlorobenzene	13.729	146	75417	17.609	ug/l	97
84) 1,4-Dichlorobenzene	13.812	146	70917	16.562	ug/l	99
85) n-Butylbenzene	14.053	91	119488	16.647	ug/l	99
86) Hexachloroethane	14.335	117	27292	17.706	ug/l	86
87) 1,2-Dichlorobenzene	14.106	146	72952	17.551	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.718	75	10491	18.041	ug/l	87
89) 1,2,4-Trichlorobenzene	15.841	180	36058	15.835	ug/l	100
90) Hexachlorobutadiene	15.500	225	15748	16.708	ug/l	98
91) Naphthalene	15.641	128	120645	16.206	ug/l	99
92) 1,2,3-Trichlorobenzene	15.841	180	36058	15.835	ug/l	100

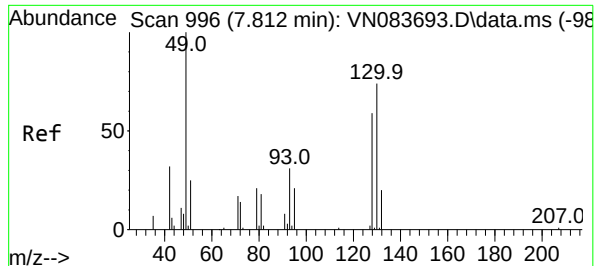
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Manual Integrations APPROVED

Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024





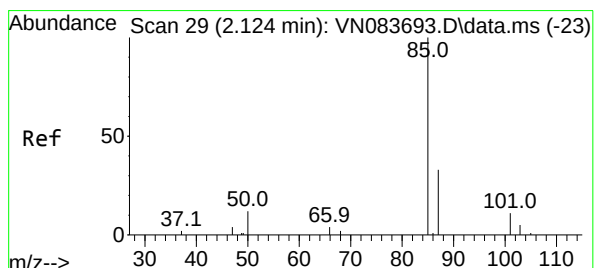
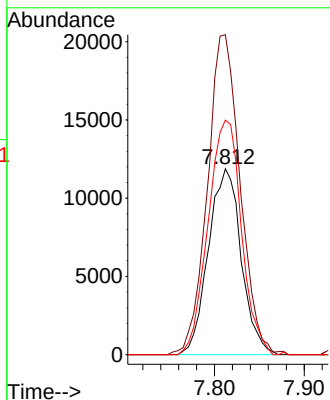
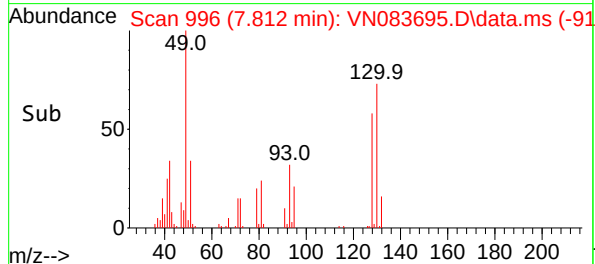
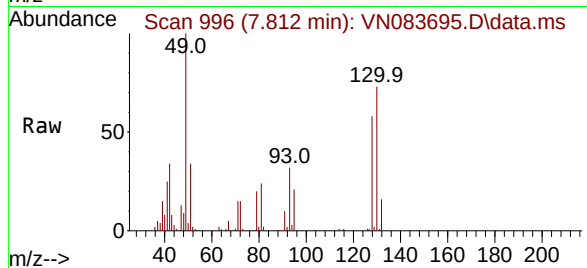
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVNVN090624

Tgt Ion	Ratio	Lower	Upper
128	100		
49	171.3	0.0	403.7
130	128.5	0.0	323.3

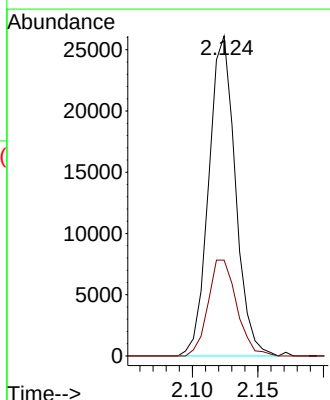
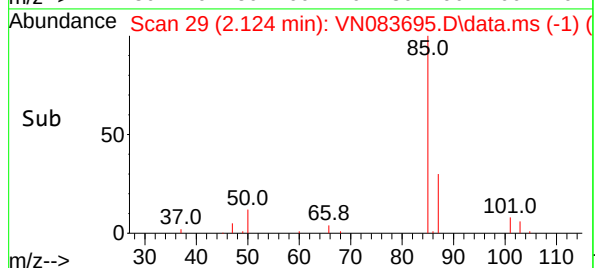
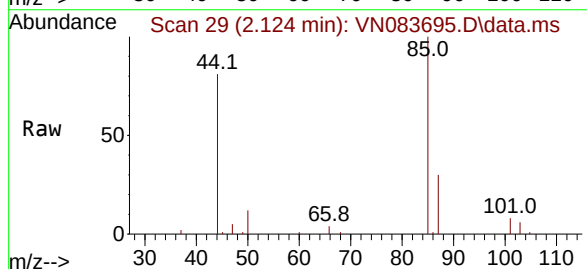
Manual Integrations
APPROVED

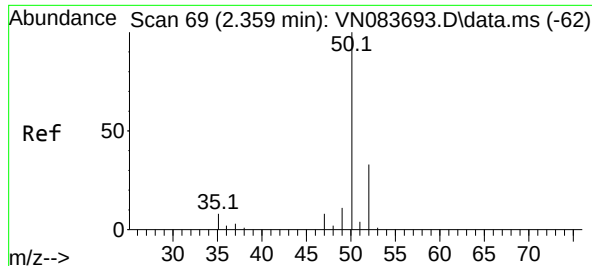
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#2
Dichlorodifluoromethane
Concen: 18.305 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion	Ratio	Lower	Upper
85	100		
87	30.0	16.8	50.3





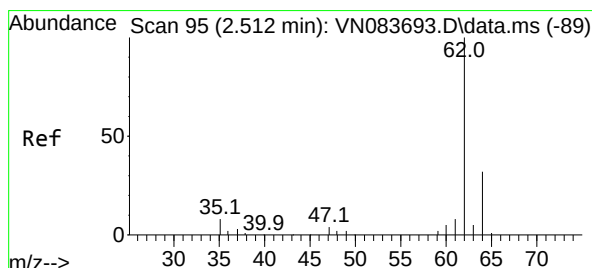
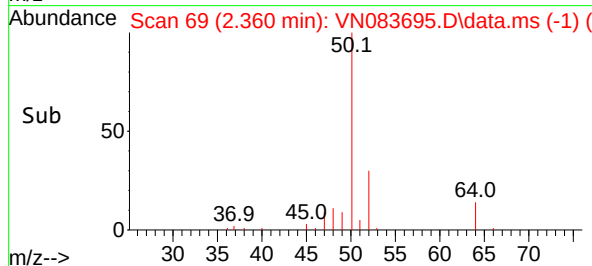
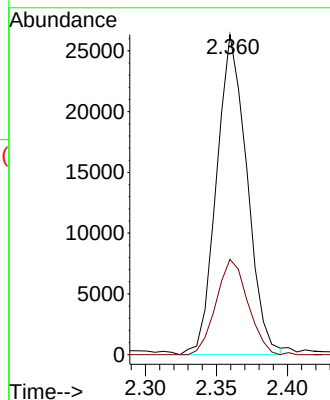
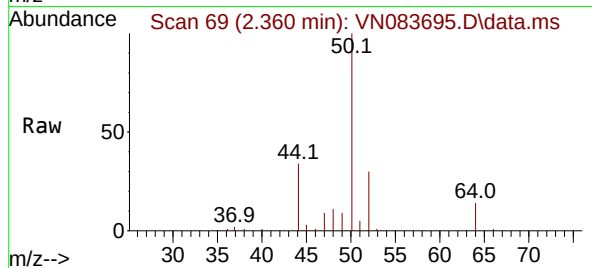
#3
Chloromethane
Concen: 18.663 ug/l
RT: 2.360 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion: 50 Resp: 39149
Ion Ratio Lower Upper
50 100
52 29.8 25.4 38.0

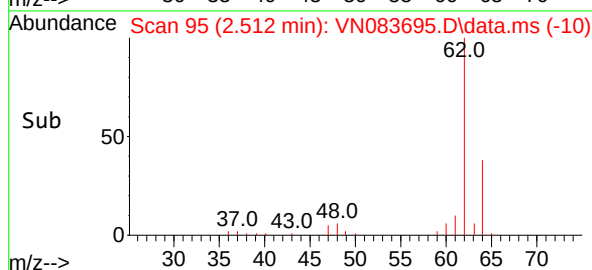
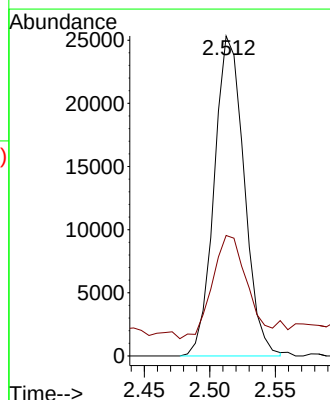
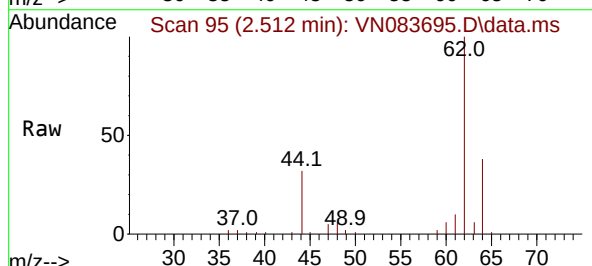
Manual Integrations
APPROVED

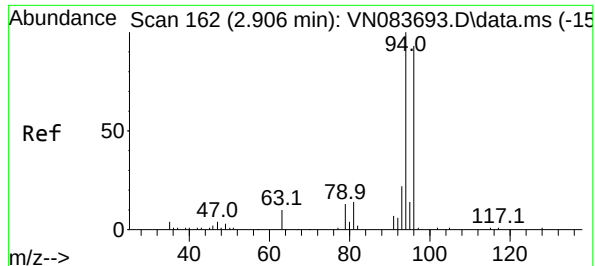
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#4
Vinyl Chloride
Concen: 18.622 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 62 Resp: 40156
Ion Ratio Lower Upper
62 100
64 32.3 24.1 36.1





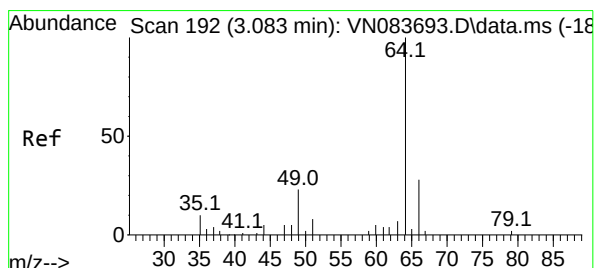
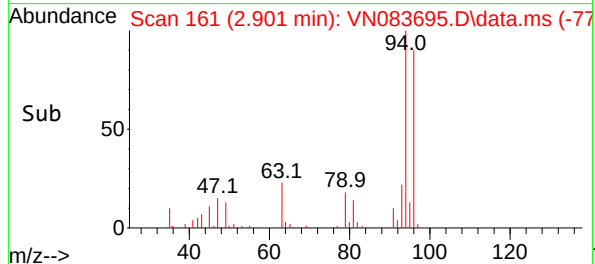
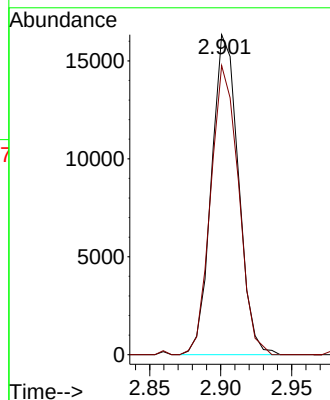
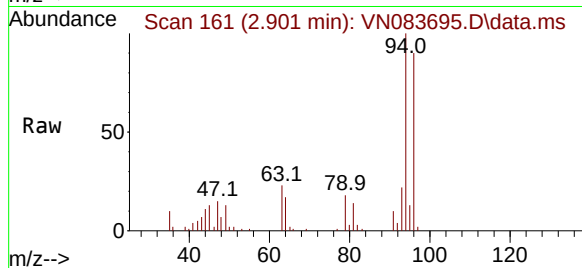
#5
Bromomethane
Concen: 17.912 ug/l
RT: 2.901 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion: 94 Resp: 2158
Ion Ratio Lower Upper
94 100
96 90.3 72.8 109.2

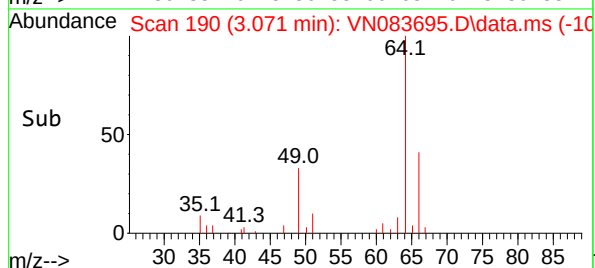
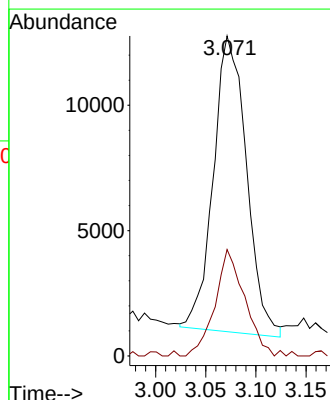
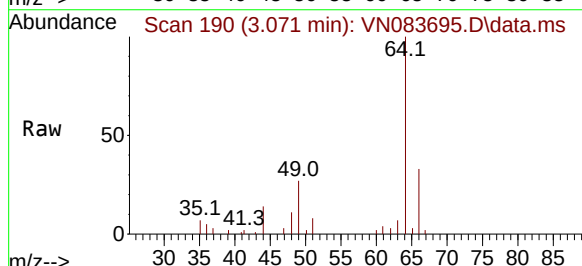
Manual Integrations
APPROVED

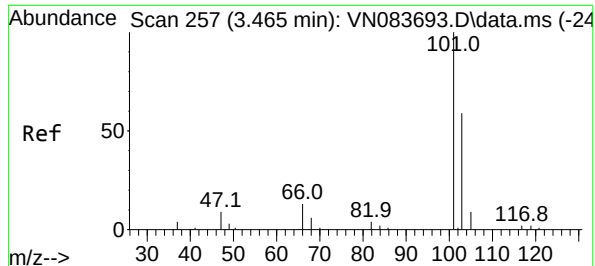
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#6
Chloroethane
Concen: 18.763 ug/l
RT: 3.071 min Scan# 190
Delta R.T. -0.012 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 64 Resp: 27094
Ion Ratio Lower Upper
64 100
66 36.6 26.7 40.1





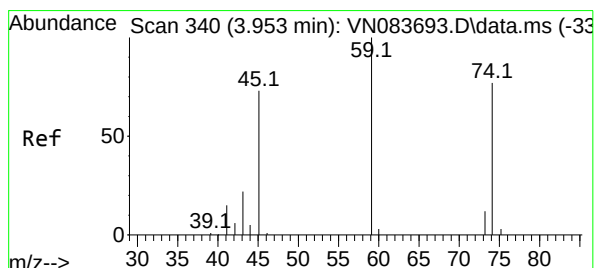
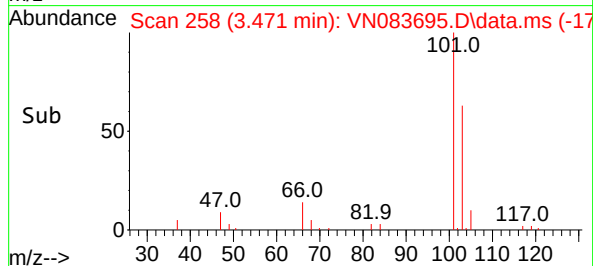
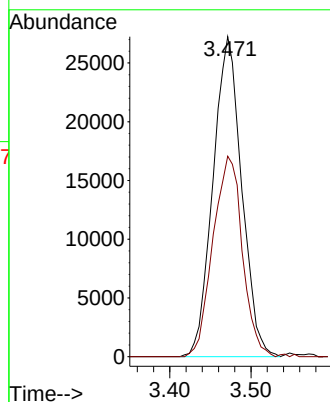
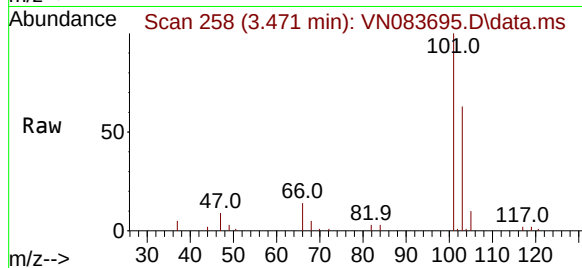
#7
Trichlorofluoromethane
Concen: 18.470 ug/l
RT: 3.471 min Scan# 21
Delta R.T. 0.006 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion:101 Resp: 66770
Ion Ratio Lower Upper
101 100
103 62.7 53.0 79.4

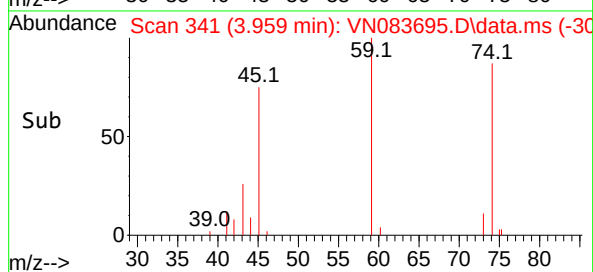
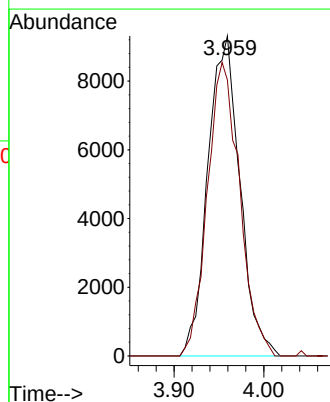
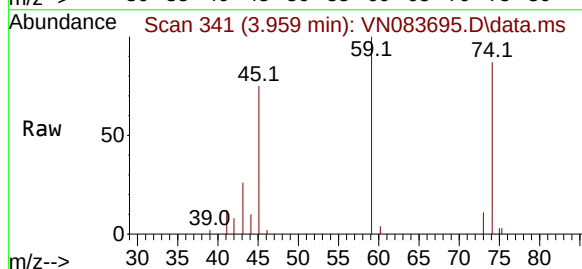
Manual Integrations
APPROVED

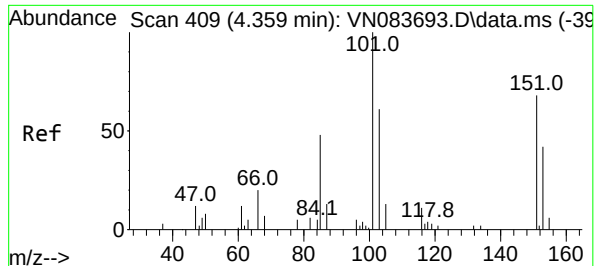
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#8
Diethyl Ether
Concen: 18.791 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 74 Resp: 23084
Ion Ratio Lower Upper
74 100
45 92.3 16.4 147.4





#9

1,1,2-Trichlorotrifluoroethane

Concen: 18.479 ug/l

RT: 4.365 min Scan# 410

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNV090624

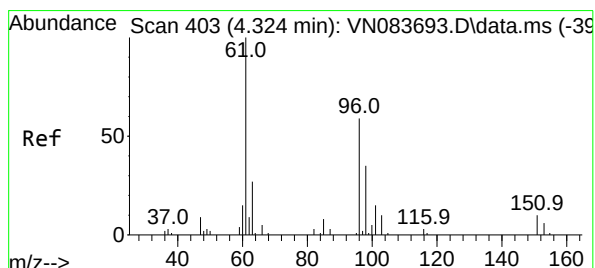
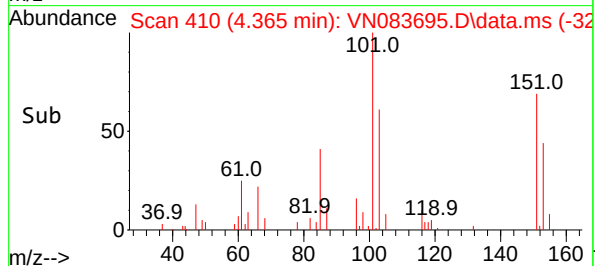
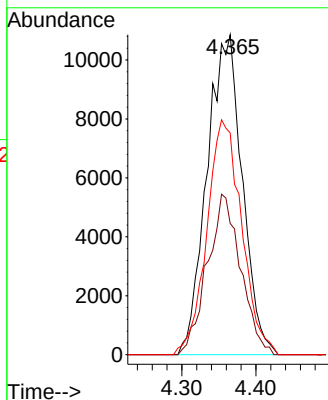
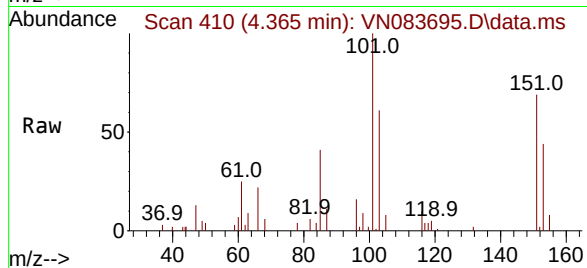
Tgt Ion:	101	Resp:	3588
Ion Ratio	Lower	Upper	
101	100		
85	47.4	0.0	90.6
151	72.4	0.0	157.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#10

1,1-Dichloroethene

Concen: 18.378 ug/l

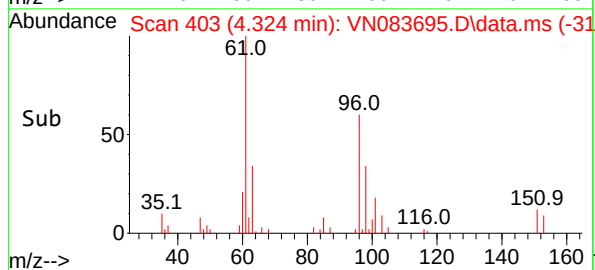
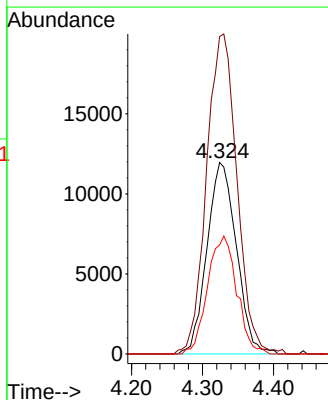
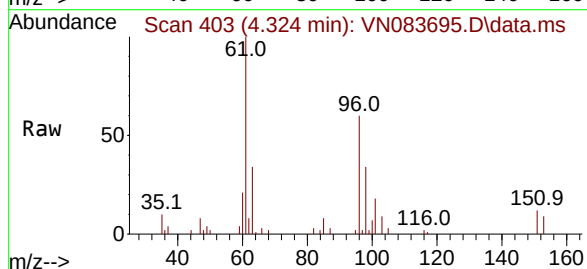
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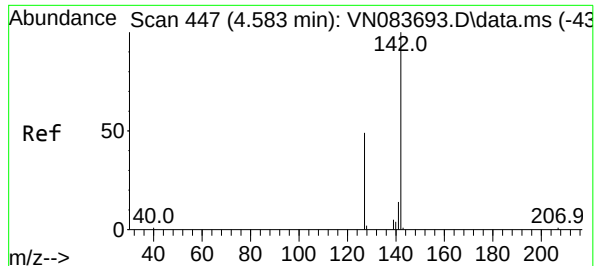
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	96	Resp:	34434
Ion Ratio	Lower	Upper	
96	100		
61	164.3	117.6	176.4
98	57.0	48.4	72.6





#11

Methyl Iodide

Concen: 18.347 ug/l

RT: 4.571 min Scan# 447

Delta R.T. -0.012 min

Lab File: VN083695.D

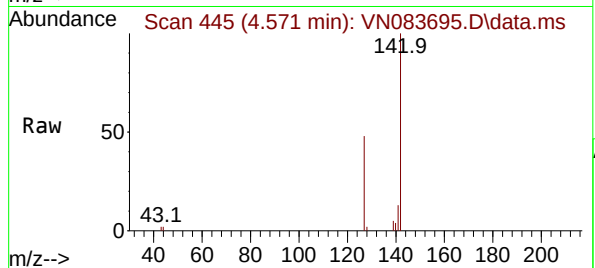
Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNV090624



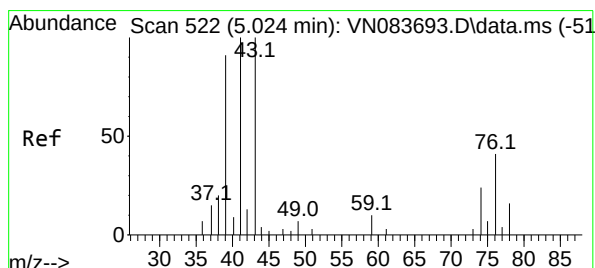
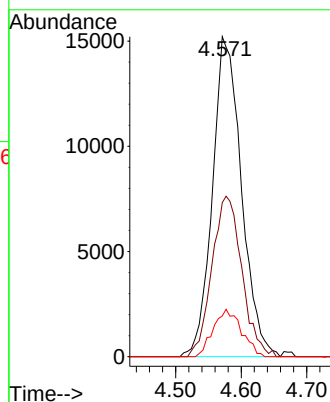
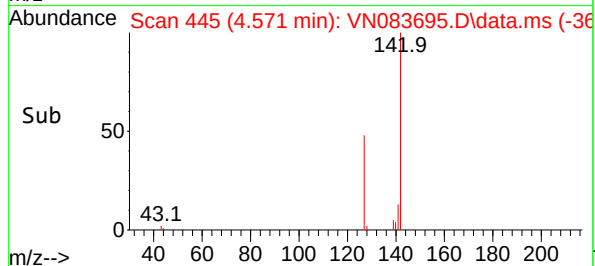
Tgt Ion:	142	Resp:	4669
Ion	Ratio	Lower	Upper
142	100		
127	48.1	26.3	78.9
141	12.7	8.3	24.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#12

Methyl Acetate

Concen: 18.200 ug/l

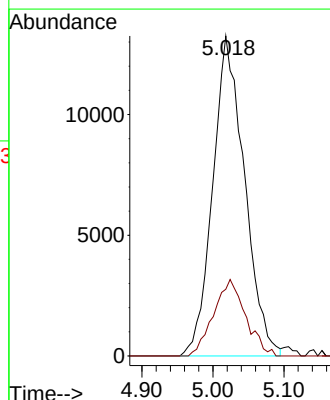
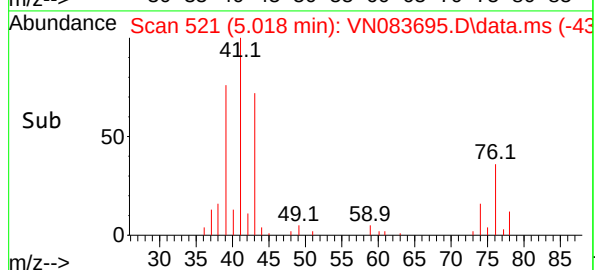
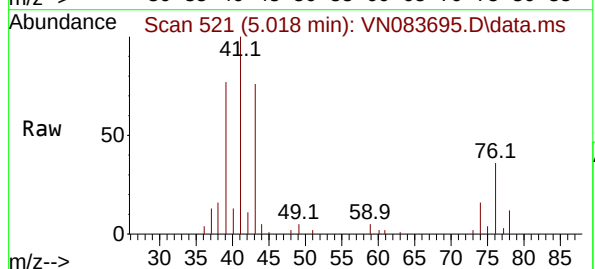
RT: 5.018 min Scan# 521

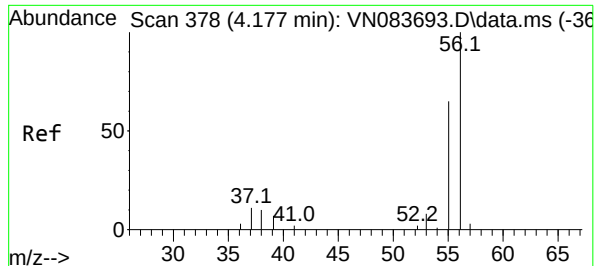
Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	43	Resp:	41127
Ion	Ratio	Lower	Upper
43	100		
74	21.1	27.7	41.5#





#13

Acrolein

Concen: 104.937 ug/l

RT: 4.177 min Scan# 31

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 56 Resp: 34600

Ion Ratio Lower Upper

56 100

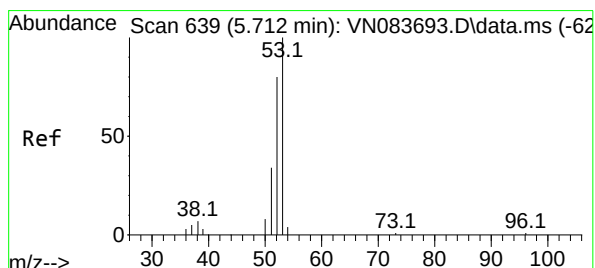
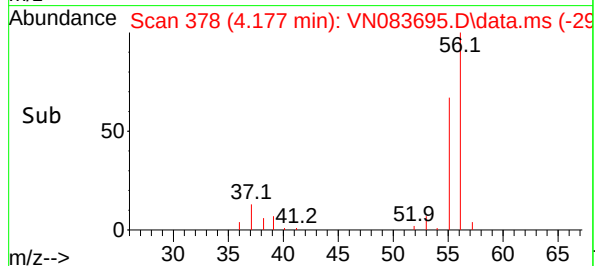
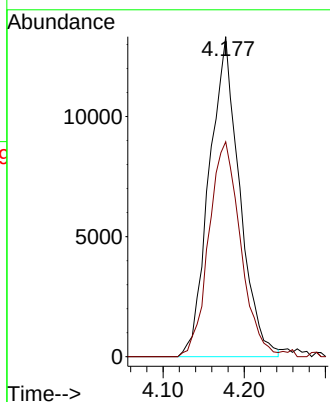
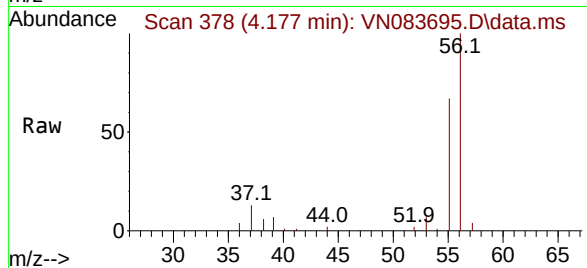
55 70.3 55.5 83.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#14

Acrylonitrile

Concen: 90.791 ug/l

RT: 5.718 min Scan# 640

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

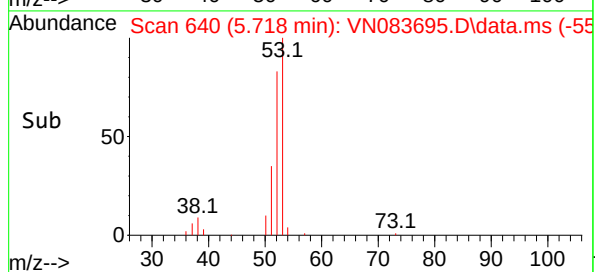
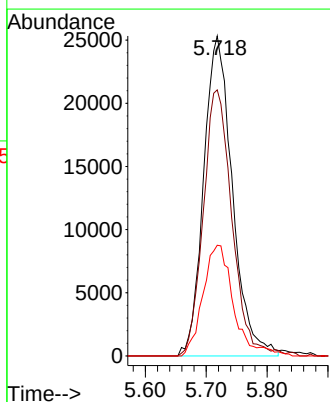
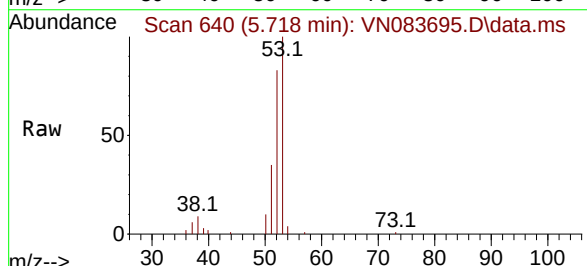
Tgt Ion: 53 Resp: 83024

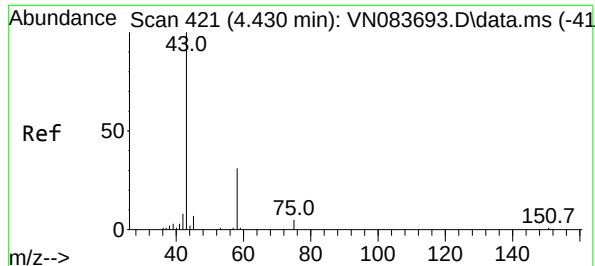
Ion Ratio Lower Upper

53 100

52 81.5 41.3 123.9

51 35.2 16.8 50.3





#15

Acetone

Concen: 85.256 ug/l

RT: 4.436 min Scan# 41

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 58 Resp: 2586

Ion Ratio Lower Upper

58 100

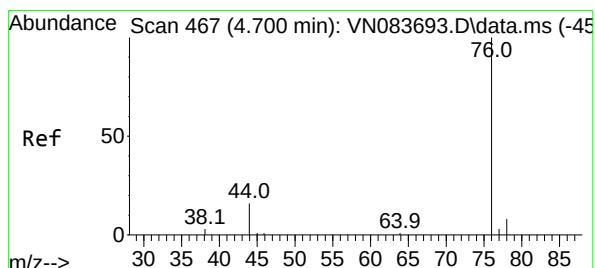
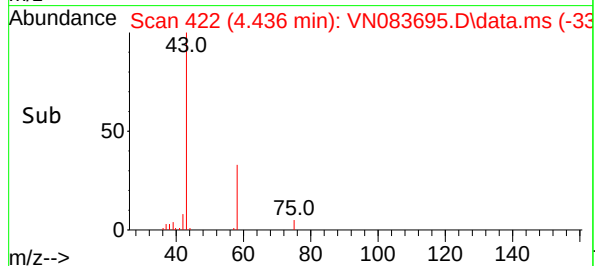
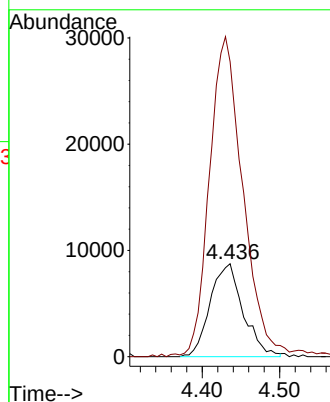
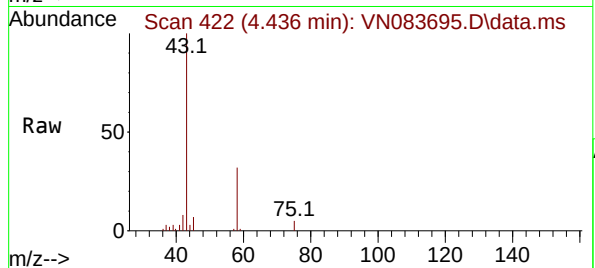
43 315.4 223.1 334.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#16

Carbon Disulfide

Concen: 17.410 ug/l

RT: 4.701 min Scan# 467

Delta R.T. 0.000 min

Lab File: VN083695.D

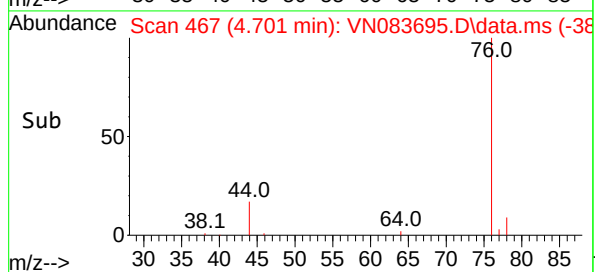
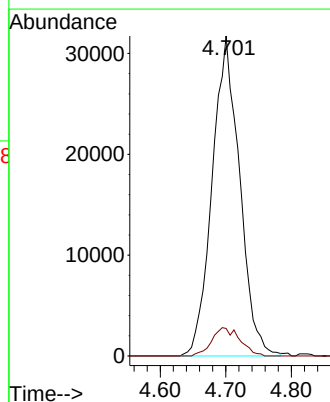
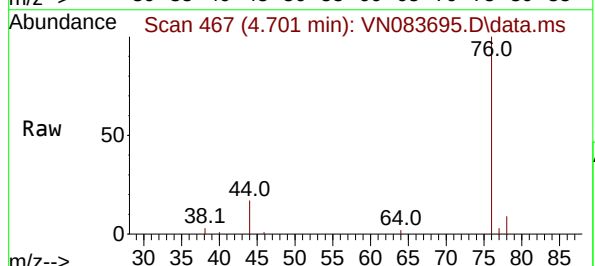
Acq: 06 Sep 2024 14:35

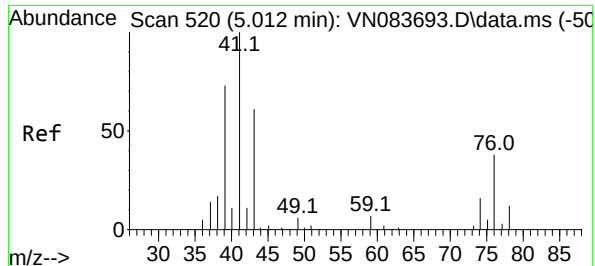
Tgt Ion: 76 Resp: 92190

Ion Ratio Lower Upper

76 100

78 8.6 6.3 9.5





#17

Allyl chloride

Concen: 17.590 ug/l

RT: 5.018 min Scan# 51

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

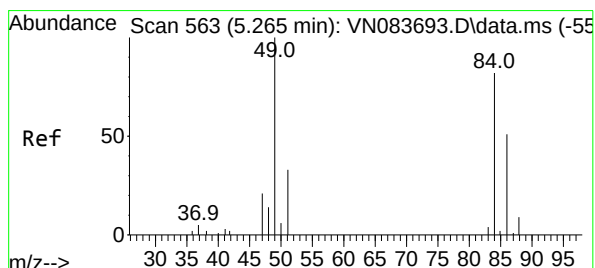
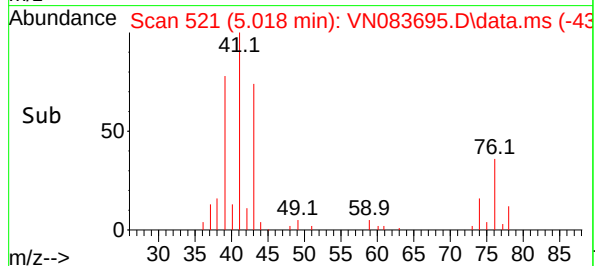
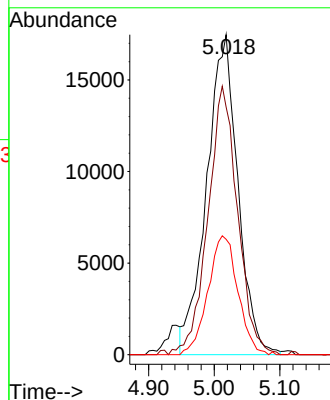
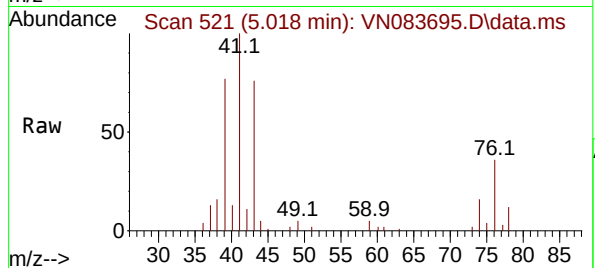
ICVNVN090624

Tgt Ion:	41	Resp:	5779
Ion	Ratio	Lower	Upper
41	100		
39	78.2	37.6	112.9
76	36.4	27.8	83.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#18

Methylene Chloride

Concen: 18.184 ug/l

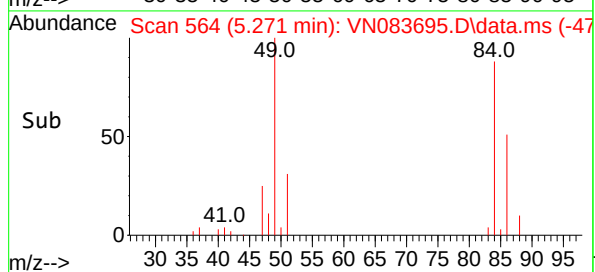
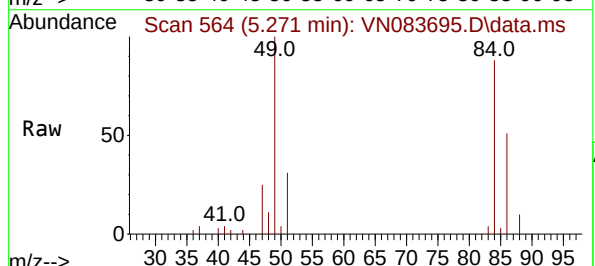
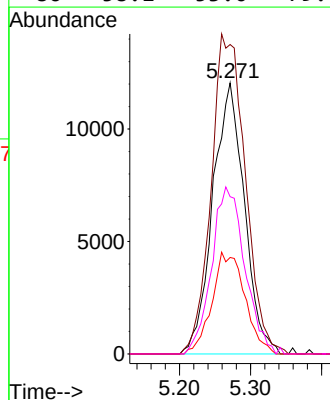
RT: 5.271 min Scan# 564

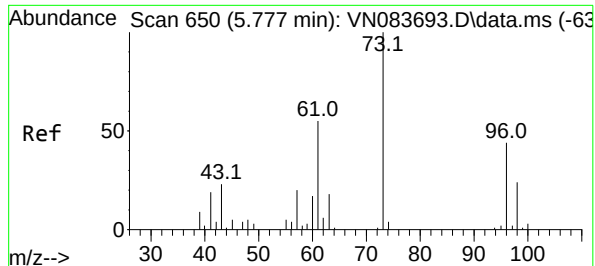
Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	84	Resp:	37276
Ion	Ratio	Lower	Upper
84	100		
49	114.2	86.0	129.0
51	35.6	30.0	45.0
86	58.1	53.0	79.4





#19

trans-1,2-Dichloroethene

Concen: 17.995 ug/l

RT: 5.783 min Scan# 61

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 96 Resp: 3494

Ion Ratio Lower Upper

96 100

61 123.9 111.8 167.6

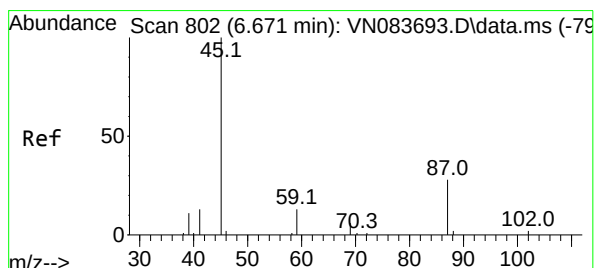
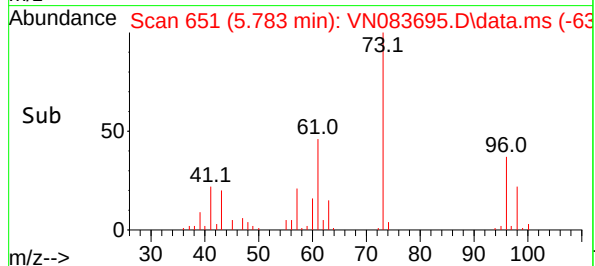
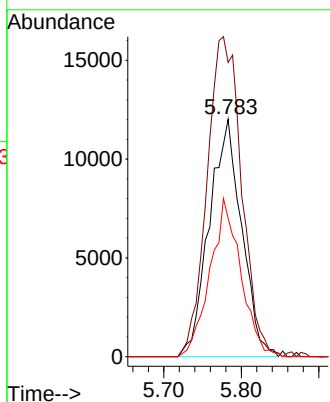
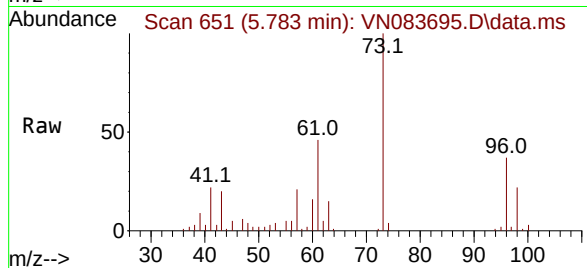
98 58.3 49.2 73.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#20

Diisopropyl ether

Concen: 17.779 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion: 45 Resp: 117975

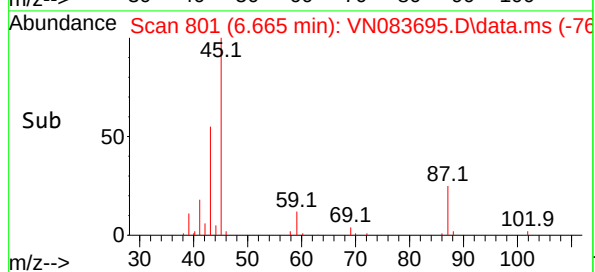
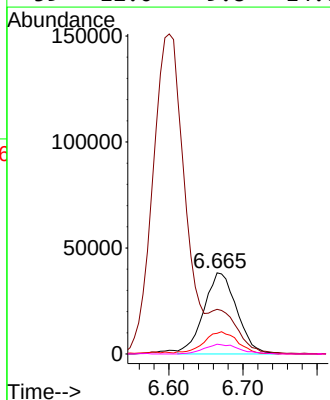
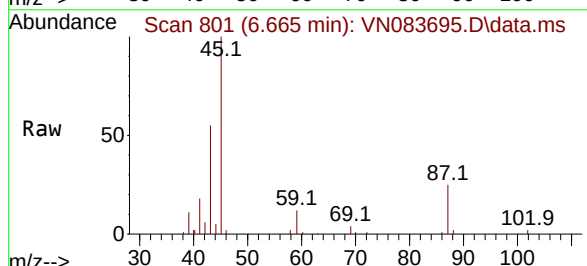
Ion Ratio Lower Upper

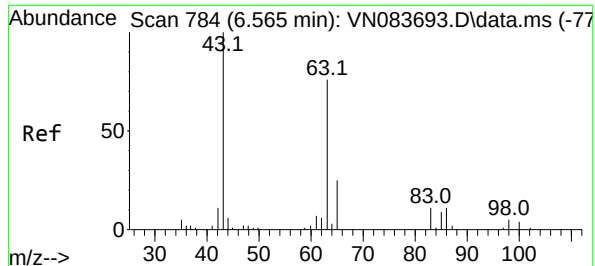
45 100

43 53.4 40.4 60.6

87 25.6 23.8 35.8

59 12.0 9.8 14.6





#21

1,1-Dichloroethane

Concen: 18.342 ug/l

RT: 6.565 min Scan# 71

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

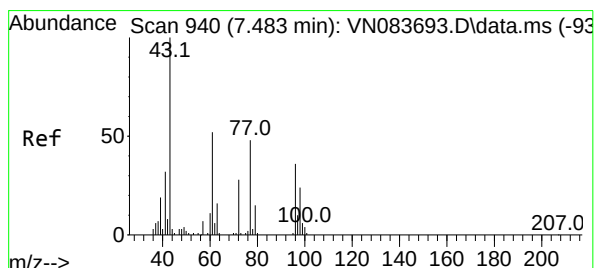
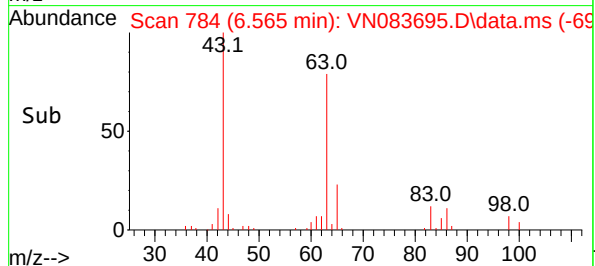
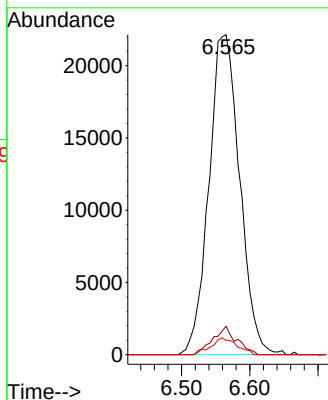
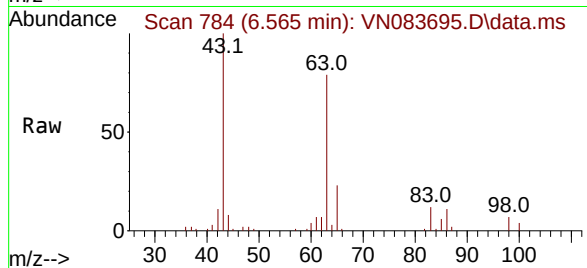
ICV090624

Tgt Ion:	63	Resp:	69490
Ion Ratio	Lower	Upper	
63	100		
98	8.9	4.1	12.3
100	4.5	3.0	9.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#22

cis-1,2-Dichloroethene

Concen: 18.142 ug/l

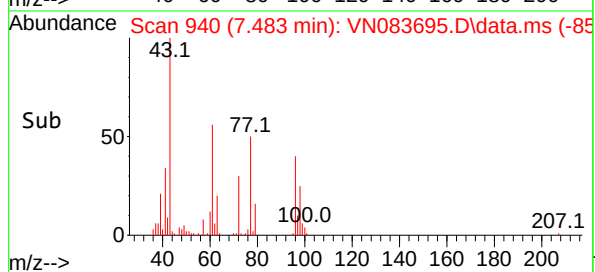
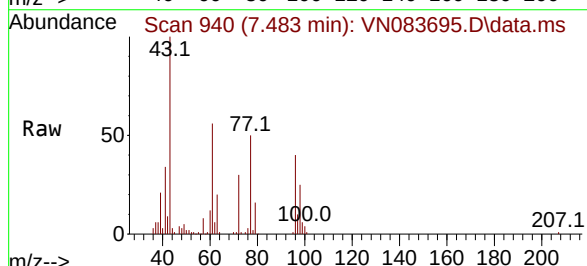
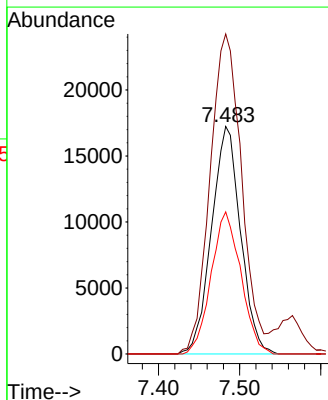
RT: 7.483 min Scan# 940

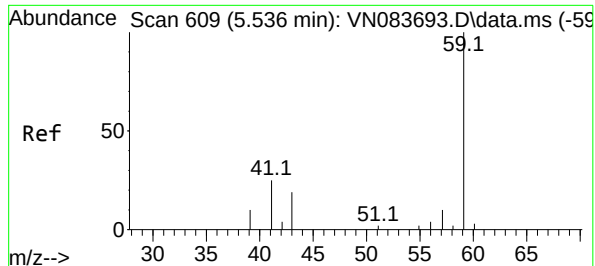
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	96	Resp:	42879
Ion Ratio	Lower	Upper	
96	100		
61	152.3	113.5	170.3
98	64.0	52.0	78.0





#23

tert-Butyl Alcohol

Concen: 93.850 ug/l

RT: 5.542 min Scan# 610

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNV090624

Tgt Ion: 59 Resp: 3149

Ion Ratio Lower Upper

59 100

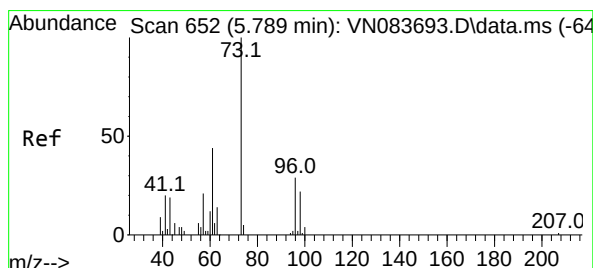
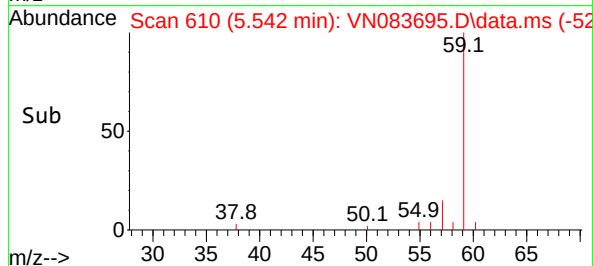
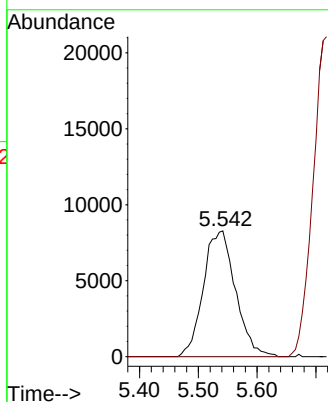
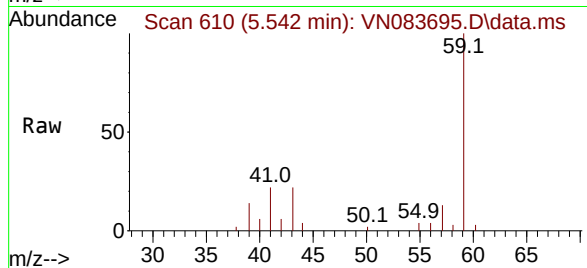
52 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#24

Methyl tert-Butyl Ether

Concen: 18.391 ug/l

RT: 5.795 min Scan# 653

Delta R.T. 0.006 min

Lab File: VN083695.D

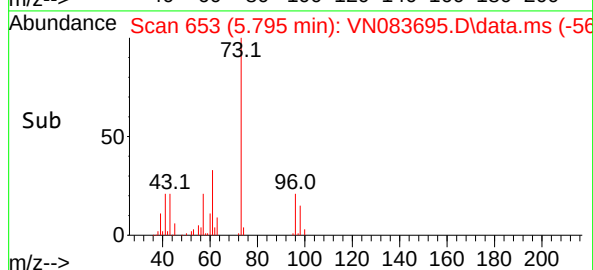
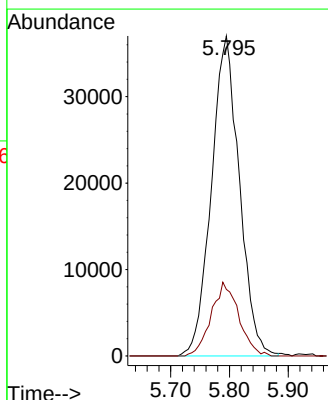
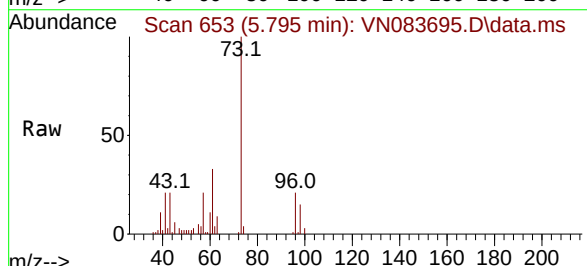
Acq: 06 Sep 2024 14:35

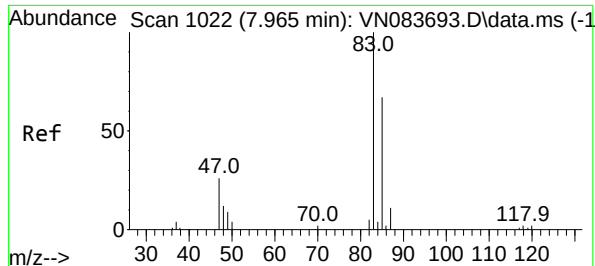
Tgt Ion: 73 Resp: 122458

Ion Ratio Lower Upper

73 100

43 22.4 13.4 20.2#





#25

Chloroform

Concen: 18.167 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNVN090624

Tgt Ion: 83 Resp: 7293

Ion Ratio Lower Upper

83 100

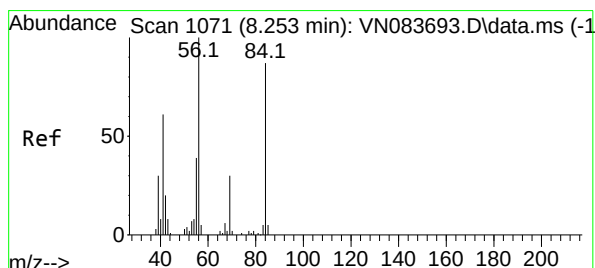
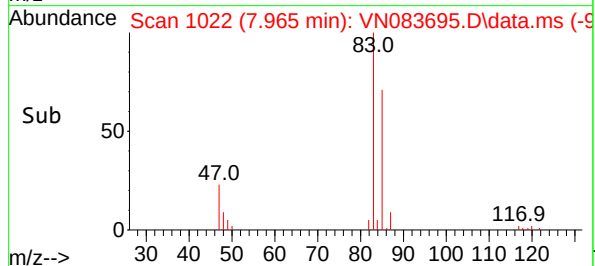
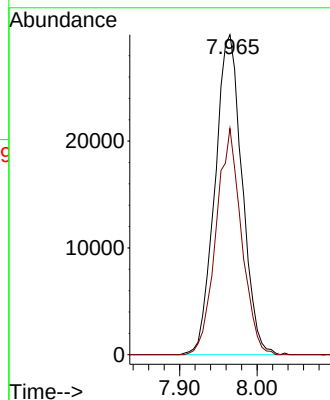
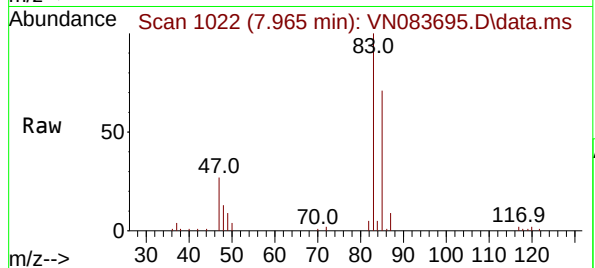
85 70.7 50.9 76.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#26

Cyclohexane

Concen: 18.166 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

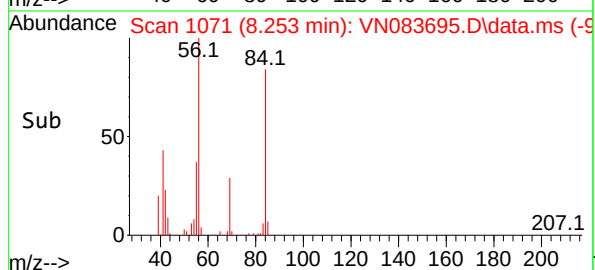
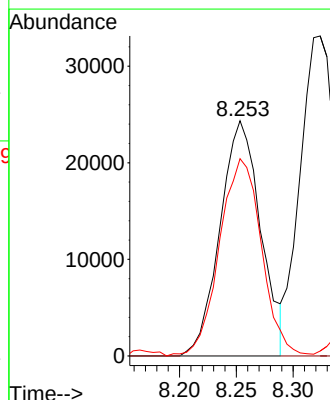
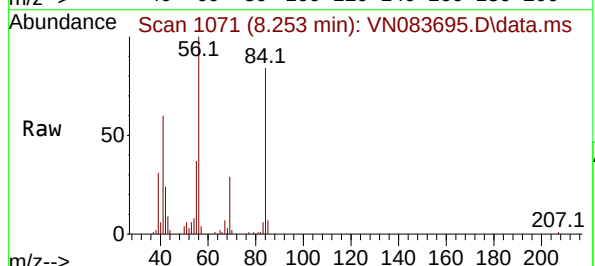
Tgt Ion: 56 Resp: 60615

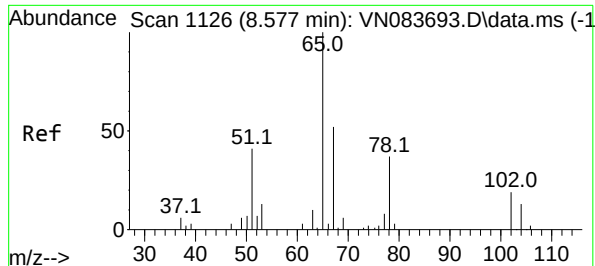
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9#

84 86.6 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 30.424 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 65 Resp: 83838

Ion Ratio Lower Upper

65 100

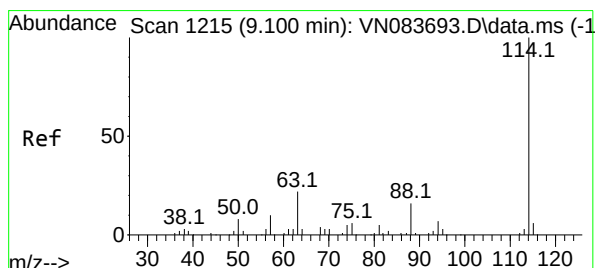
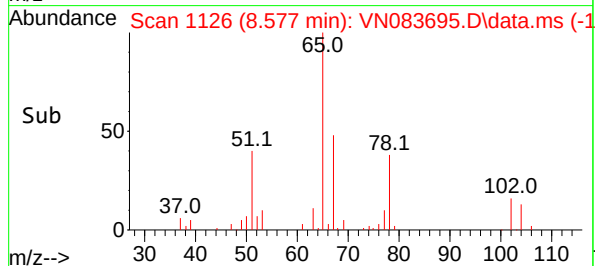
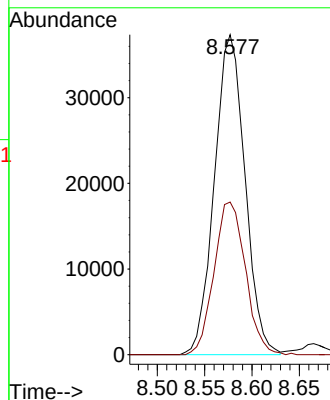
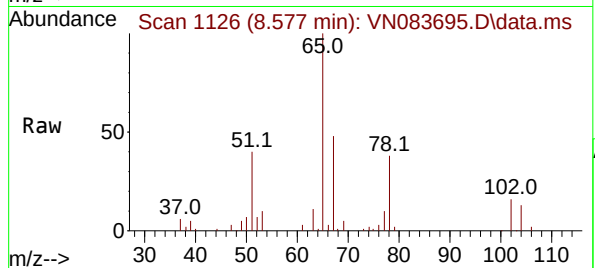
67 48.9 43.2 64.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

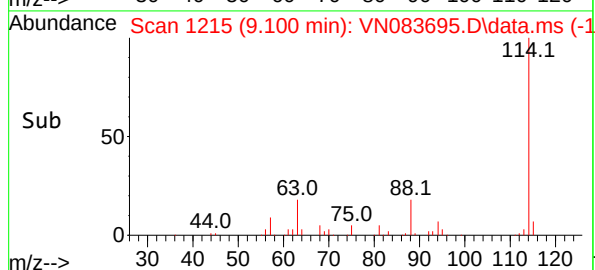
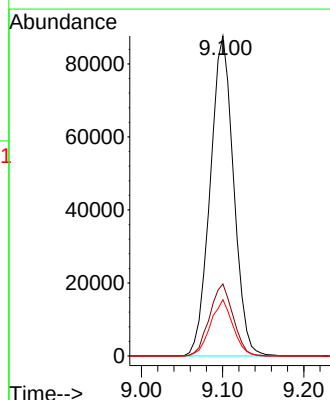
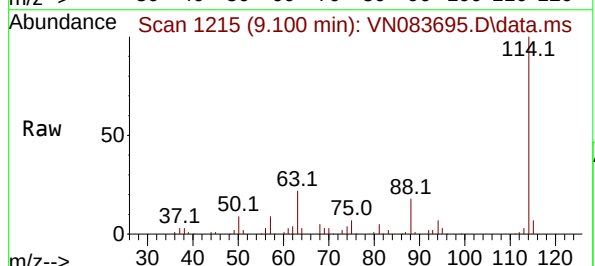
Tgt Ion:114 Resp: 175573

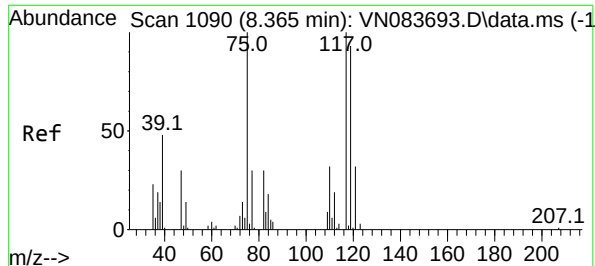
Ion Ratio Lower Upper

114 100

63 22.6 15.9 23.9

88 16.9 12.7 19.1





#29

1,1-Dichloropropene

Concen: 17.850 ug/l

RT: 8.371 min Scan# 1090

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

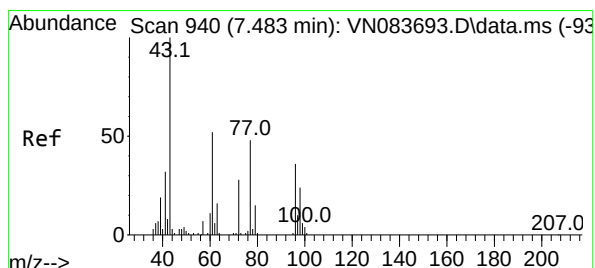
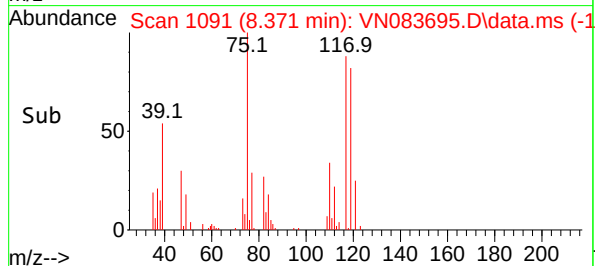
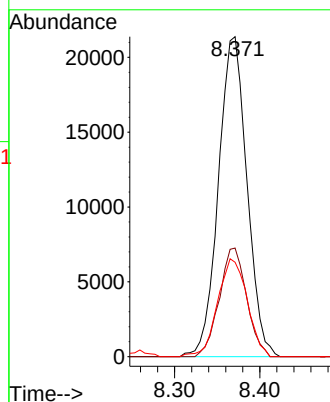
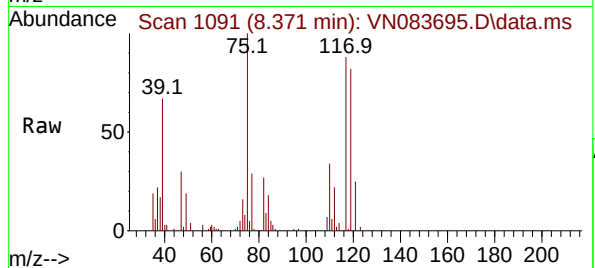
ICVNV090624

Tgt Ion:	75	Resp:	49709
Ion	Ratio	Lower	Upper
75	100		
110	32.5	0.0	70.2
77	31.7	0.0	61.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#30

2-Butanone

Concen: 88.703 ug/l

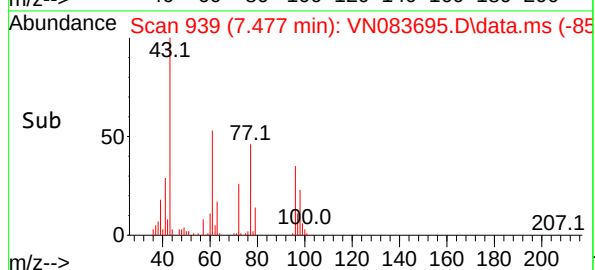
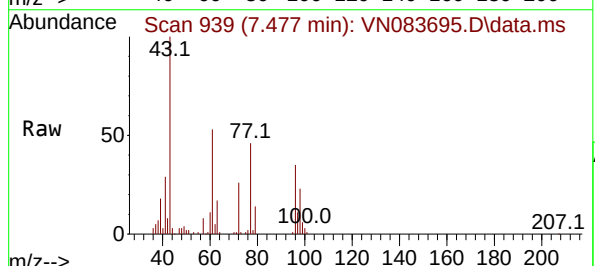
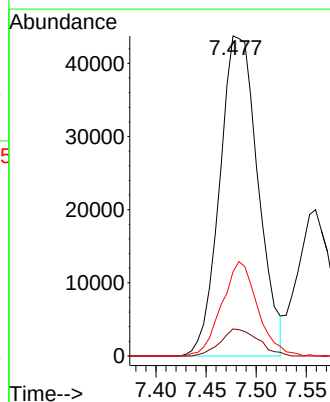
RT: 7.477 min Scan# 939

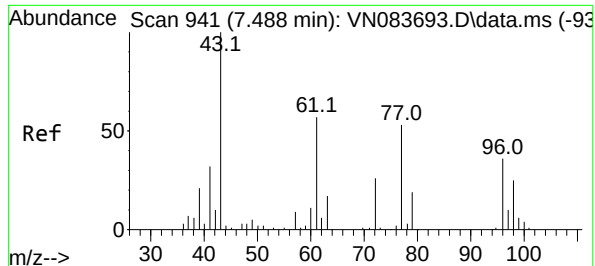
Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	43	Resp:	116443
Ion	Ratio	Lower	Upper
43	100		
57	8.4	6.7	10.1
72	27.4	24.0	36.0





#31

2,2-Dichloropropane

Concen: 18.213 ug/l

RT: 7.489 min Scan# 941

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICNVN090624

Tgt Ion: 77 Resp: 6466

Ion Ratio Lower Upper

77 100

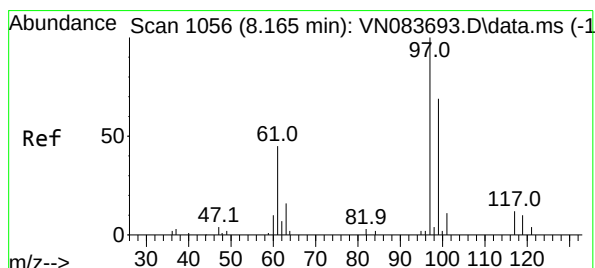
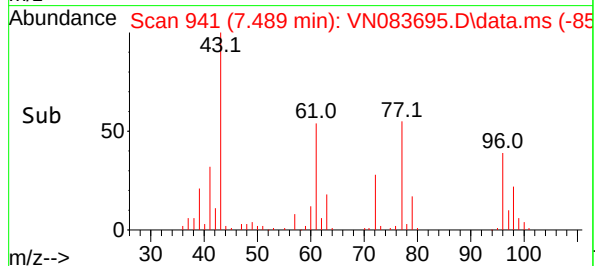
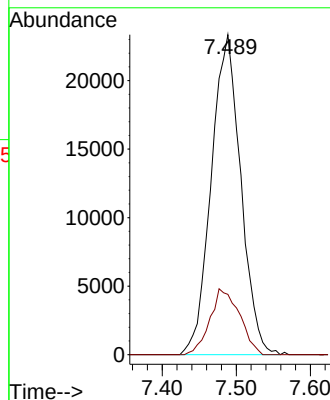
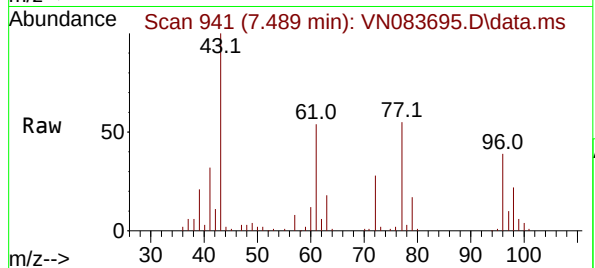
97 20.6 18.3 27.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#32

1,1,1-Trichloroethane

Concen: 18.139 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

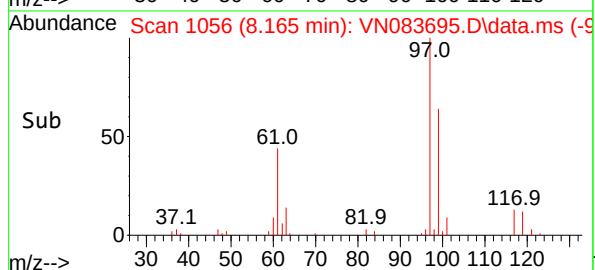
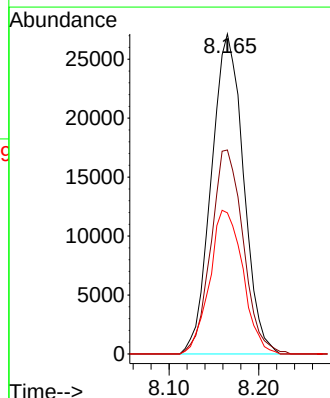
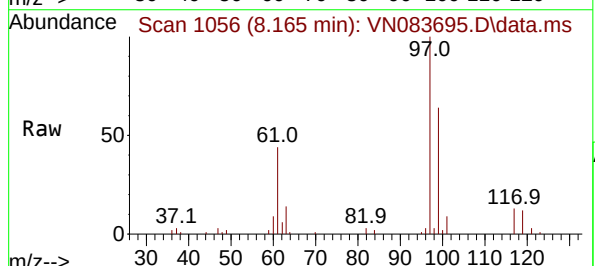
Tgt Ion: 97 Resp: 67462

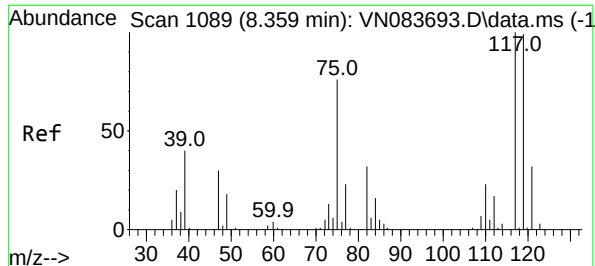
Ion Ratio Lower Upper

97 100

99 64.2 51.0 76.4

61 46.4 33.8 50.8





#33

Carbon Tetrachloride

Concen: 18.202 ug/l

RT: 8.359 min Scan# 1109

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

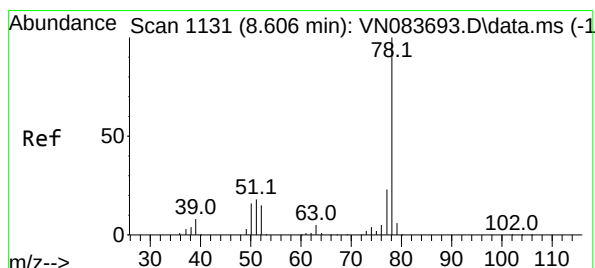
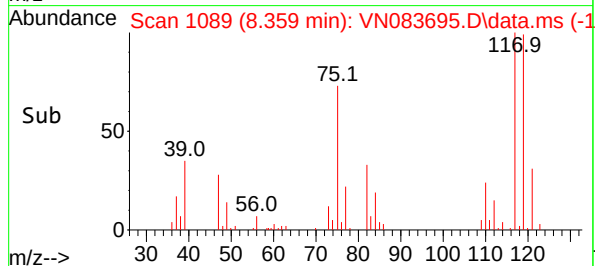
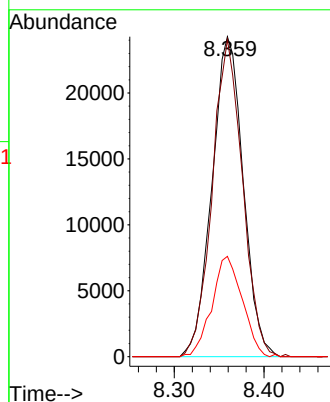
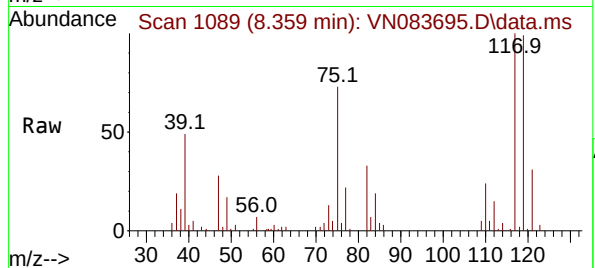
ICV090624

Tgt Ion:	117	Resp:	5862
Ion	Ratio	Lower	Upper
117	100		
119	99.2	77.7	116.5
121	31.4	27.0	40.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#34

Benzene

Concen: 18.440 ug/l

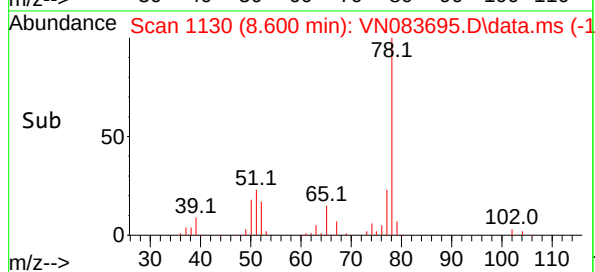
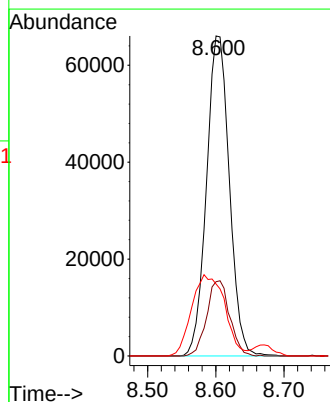
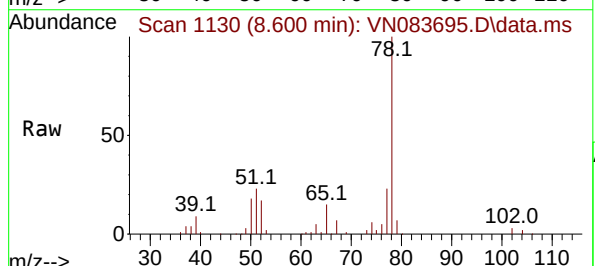
RT: 8.600 min Scan# 1130

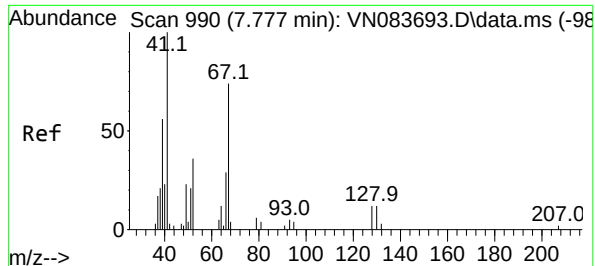
Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	78	Resp:	154080
Ion	Ratio	Lower	Upper
78	100		
77	23.2	19.2	28.8
51	21.5	13.3	19.9





#35

Methacrylonitrile

Concen: 18.821 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNVN090624

Tgt Ion: 41 Resp: 27774

Ion Ratio Lower Upper

41 100

39 52.3 25.3 75.9

67 63.8 38.7 116.1

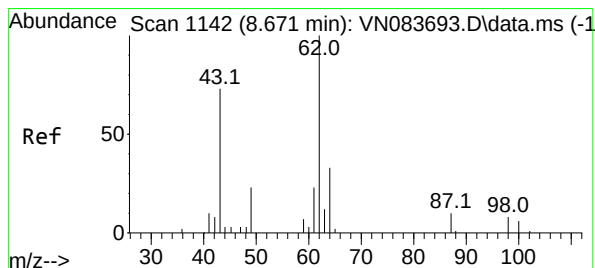
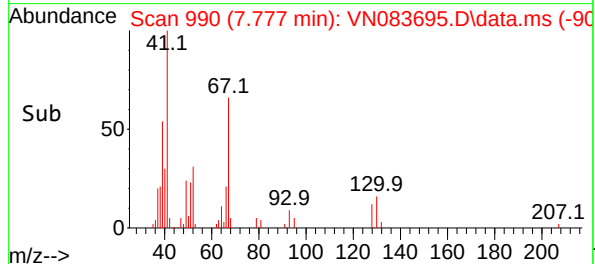
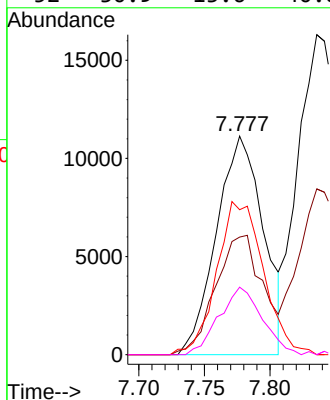
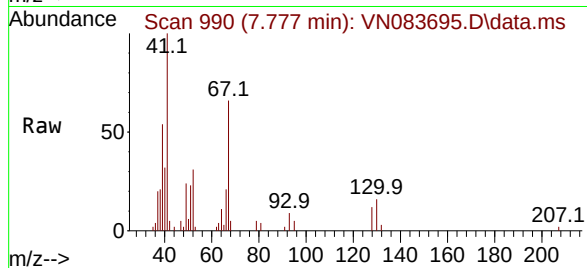
52 30.9 13.6 40.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#36

1,2-Dichloroethane

Concen: 18.630 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. 0.000 min

Lab File: VN083695.D

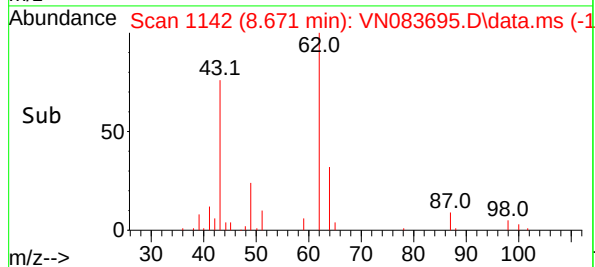
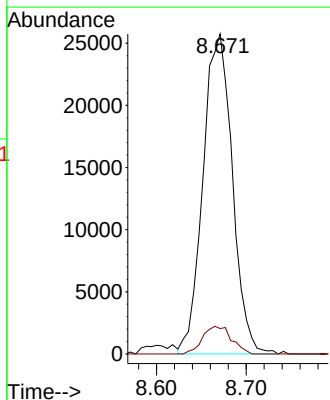
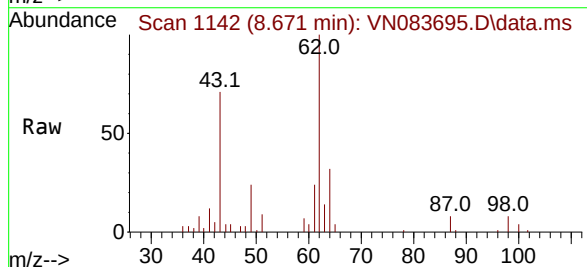
Acq: 06 Sep 2024 14:35

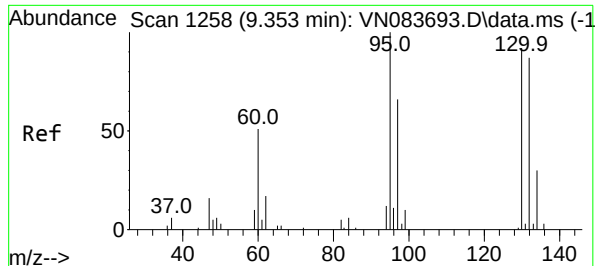
Tgt Ion: 62 Resp: 58520

Ion Ratio Lower Upper

62 100

98 8.5 8.2 12.4





#37

Trichloroethene

Concen: 18.345 ug/l

RT: 9.347 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion:130 Resp: 3599

Ion Ratio Lower Upper

130 100

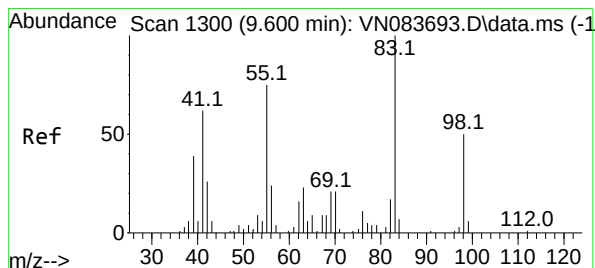
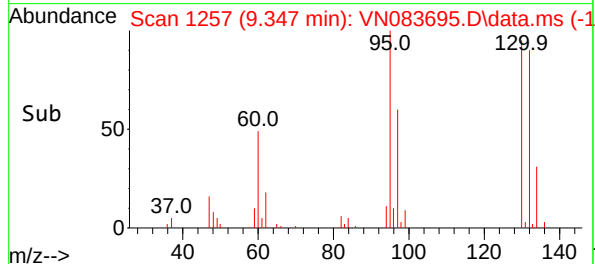
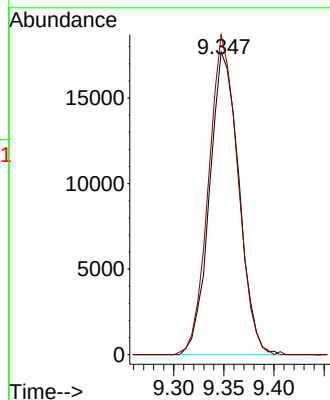
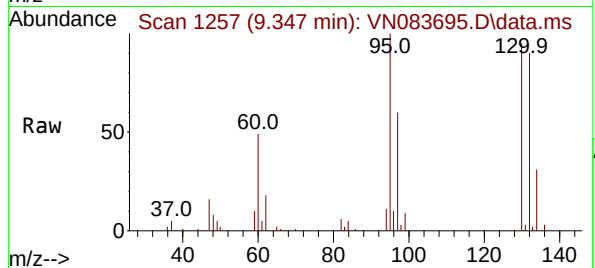
95 104.8 80.2 120.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#38

Methylcyclohexane

Concen: 17.848 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

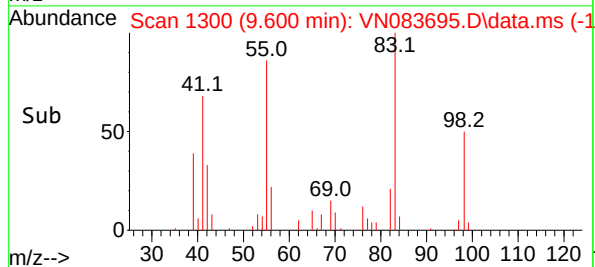
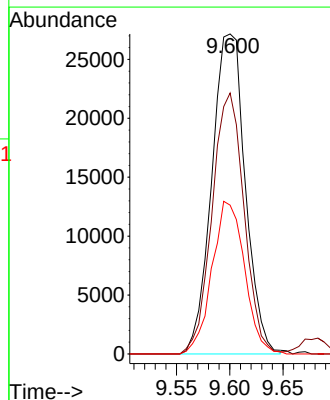
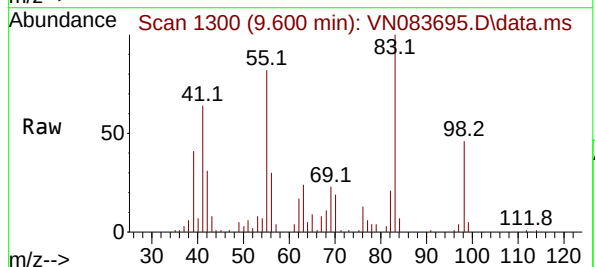
Tgt Ion: 83 Resp: 59506

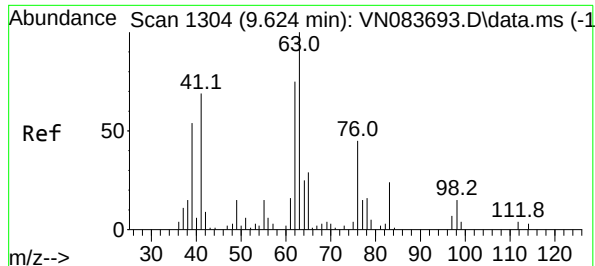
Ion Ratio Lower Upper

83 100

55 77.7 36.6 109.9

98 46.2 23.8 71.5





#39

1,2-Dichloropropane

Concen: 18.895 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 63 Resp: 37998

Ion Ratio Lower Upper

63 100

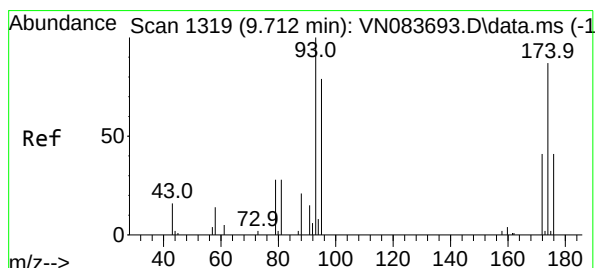
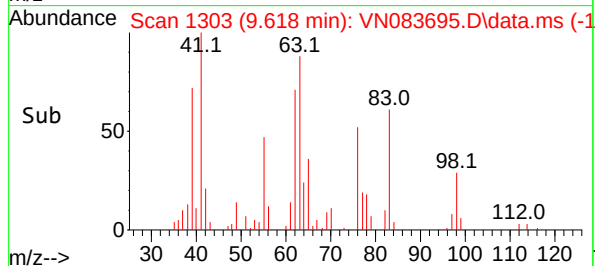
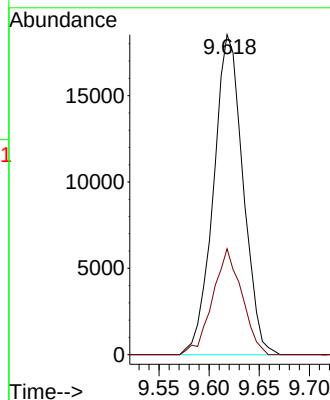
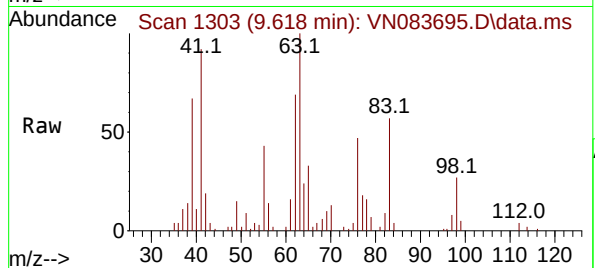
65 33.1 25.0 37.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#40

Dibromomethane

Concen: 18.272 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

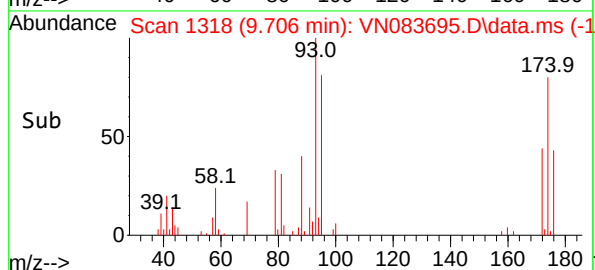
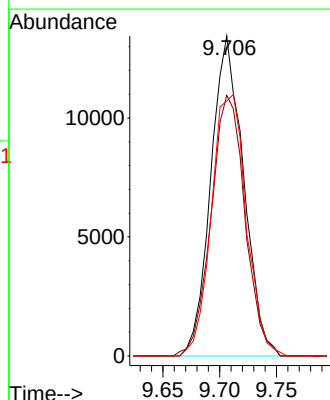
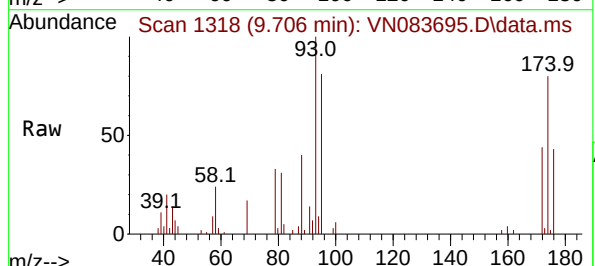
Tgt Ion: 93 Resp: 26868

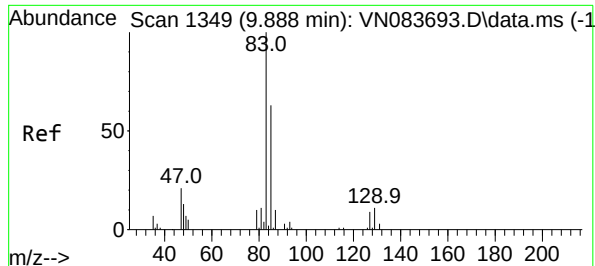
Ion Ratio Lower Upper

93 100

95 84.4 0.0 164.6

174 87.0 0.0 193.2





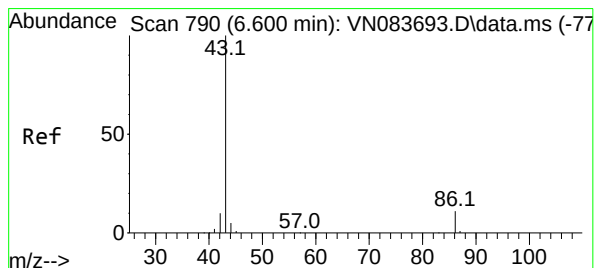
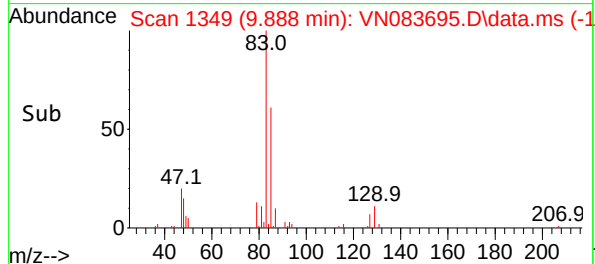
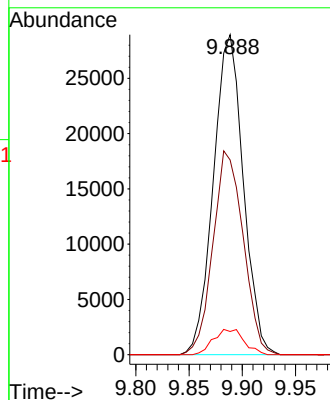
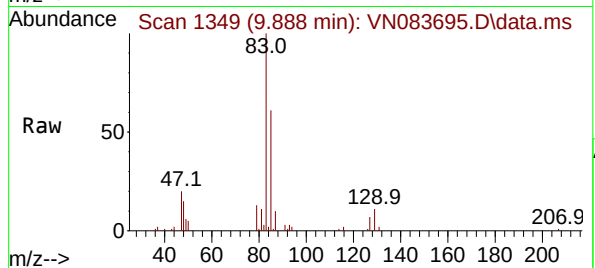
#41
Bromodichloromethane
Concen: 18.098 ug/l
RT: 9.888 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion: 83 Resp: 56589
Ion Ratio Lower Upper
83 100
85 60.8 49.4 74.2
127 7.2 7.3 10.9

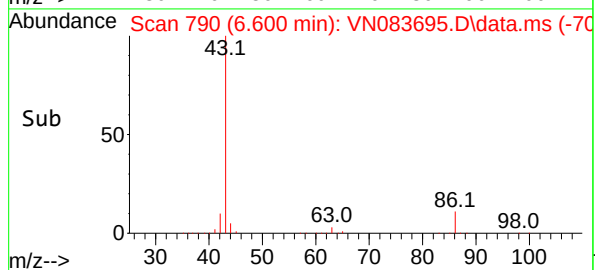
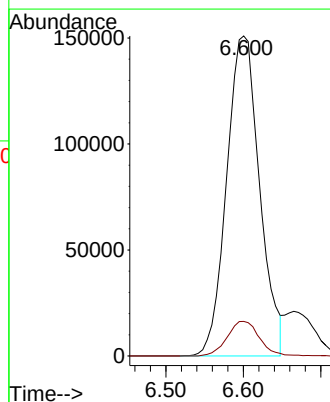
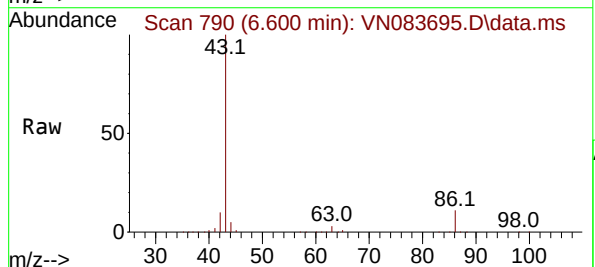
Manual Integrations
APPROVED

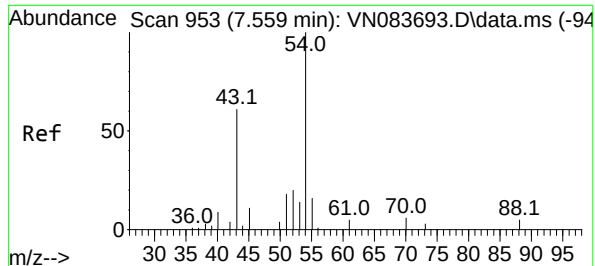
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#42
Vinyl Acetate
Concen: 82.960 ug/l
RT: 6.600 min Scan# 790
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 43 Resp: 447762
Ion Ratio Lower Upper
43 100
86 10.5 9.4 14.2





#43

Ethyl Acetate

Concen: 18.441 ug/l

RT: 7.559 min Scan# 953

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 43 Resp: 48720

Ion Ratio Lower Upper

43 100

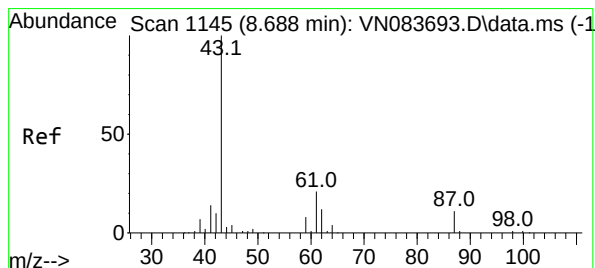
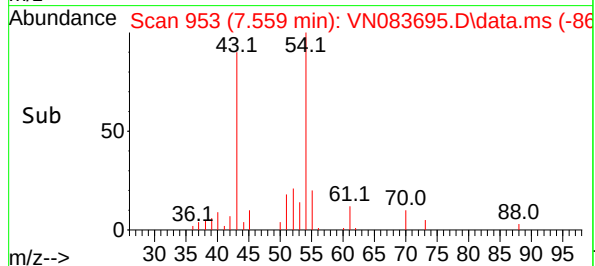
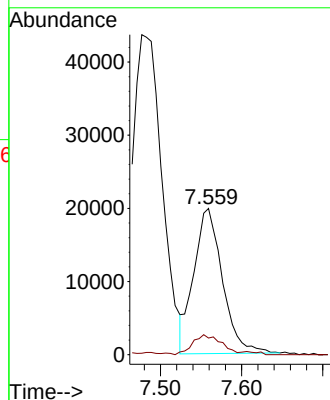
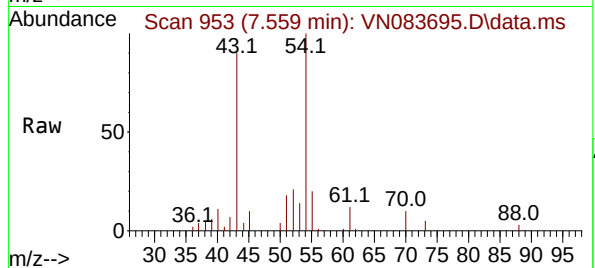
45 13.5 10.6 15.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#44

Isopropyl Acetate

Concen: 18.183 ug/l

RT: 8.689 min Scan# 1145

Delta R.T. 0.000 min

Lab File: VN083695.D

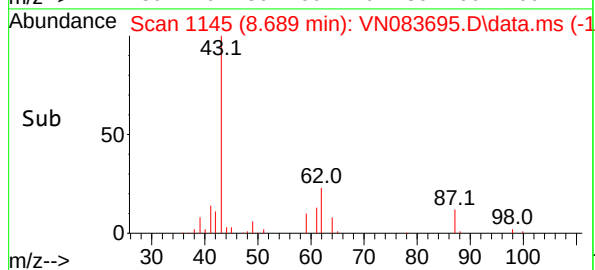
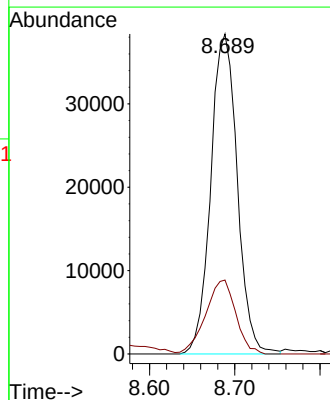
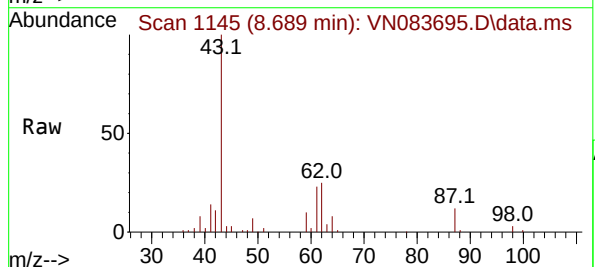
Acq: 06 Sep 2024 14:35

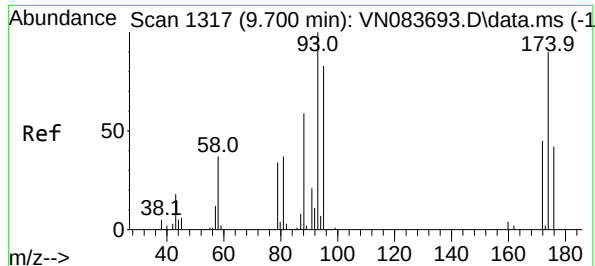
Tgt Ion: 43 Resp: 83095

Ion Ratio Lower Upper

43 100

61 26.2 25.0 37.4





#45

1,4-Dioxane

Concen: 389.428 ug/l

RT: 9.694 min Scan# 1316

Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 88 Resp: 1388

Ion Ratio Lower Upper

88 100

43 32.6 19.8 29.6

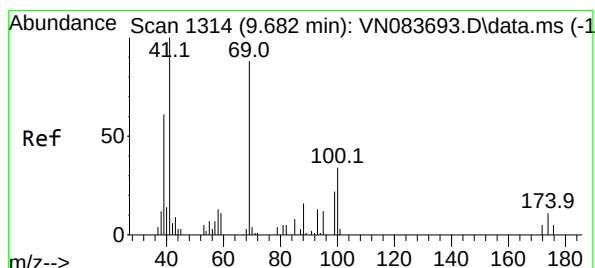
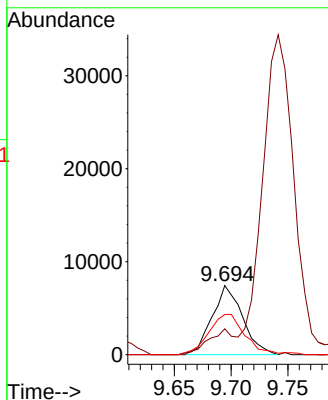
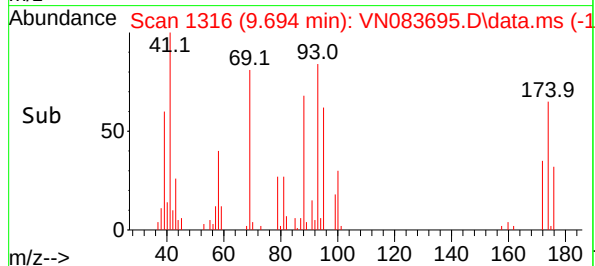
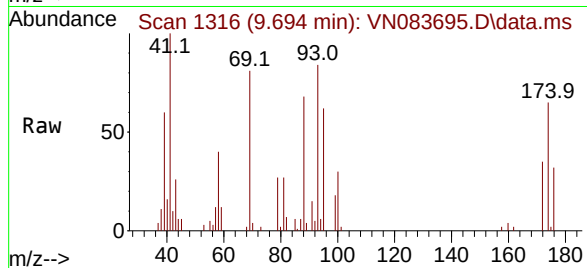
58 68.4 55.4 83.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#46

Methyl methacrylate

Concen: 18.598 ug/l

RT: 9.683 min Scan# 1314

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

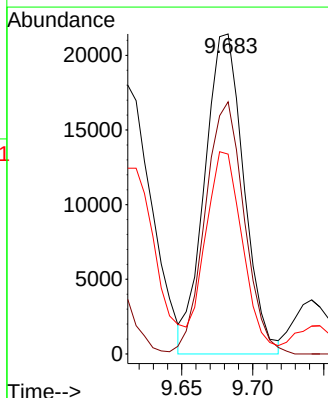
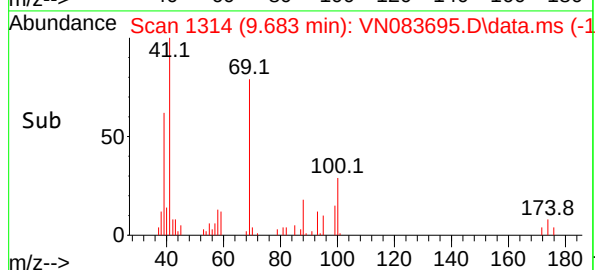
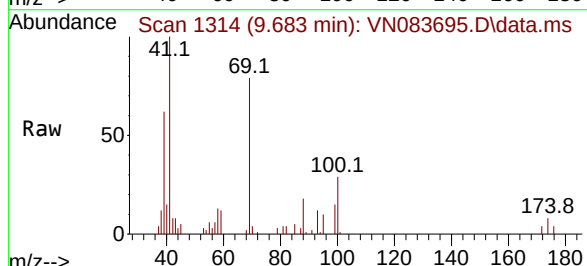
Tgt Ion: 41 Resp: 41140

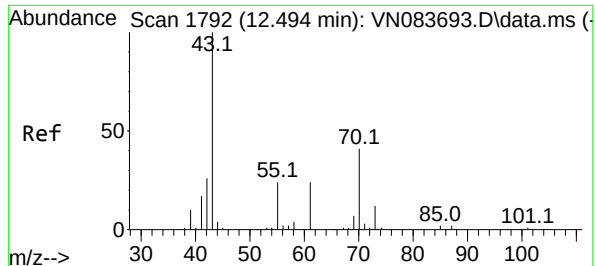
Ion Ratio Lower Upper

41 100

69 80.1 51.1 153.3

39 62.4 25.8 77.3





#47

n-amyl acetate

Concen: 18.382 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 43 Resp: 7441

Ion Ratio Lower Upper

43 100

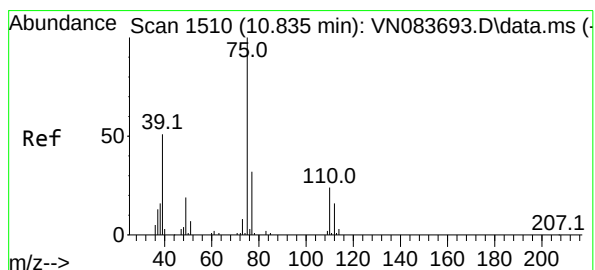
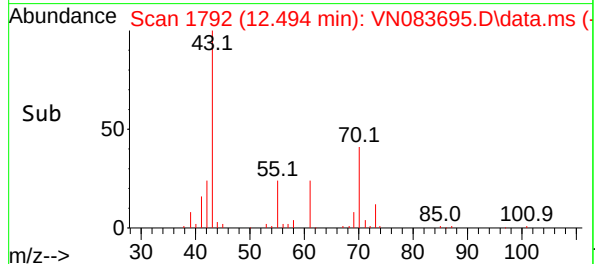
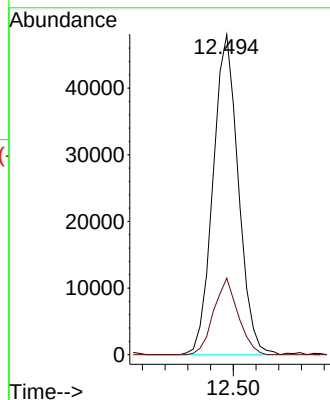
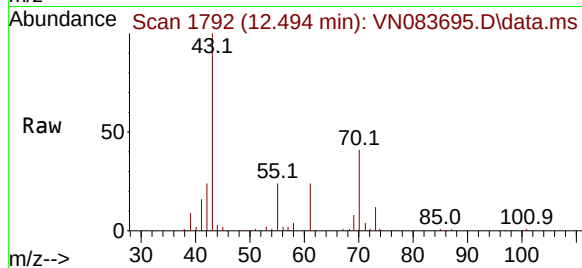
55 23.1 23.4 35.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#48

t-1,3-Dichloropropene

Concen: 17.011 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN083695.D

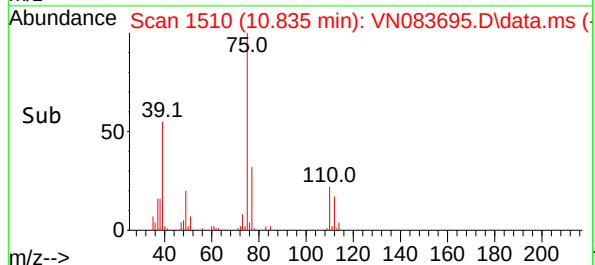
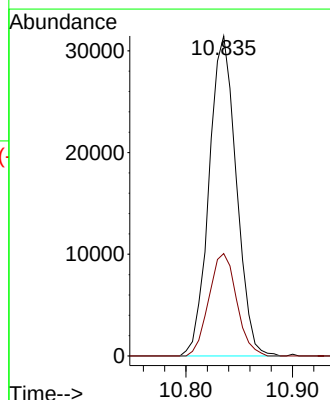
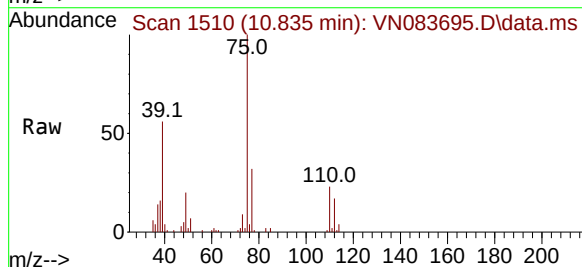
Acq: 06 Sep 2024 14:35

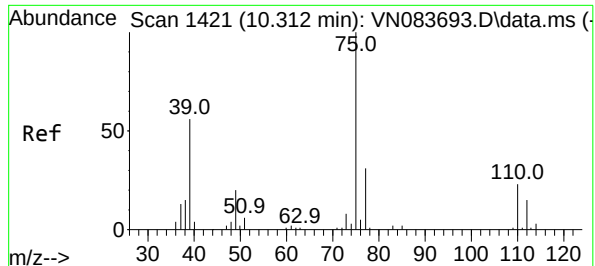
Tgt Ion: 75 Resp: 55950

Ion Ratio Lower Upper

75 100

77 32.0 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 17.769 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

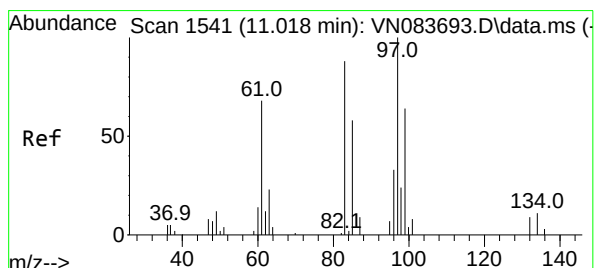
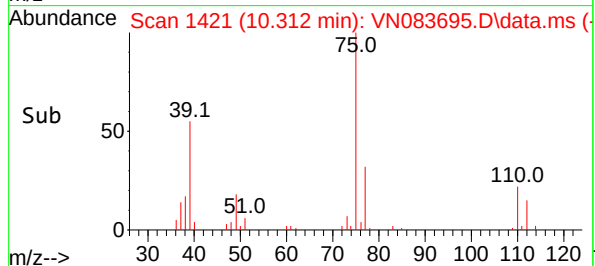
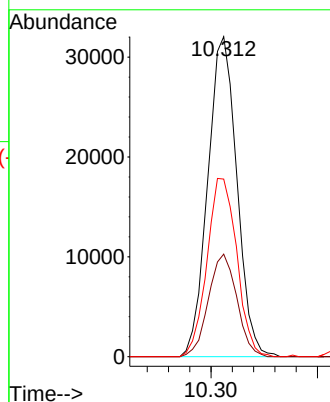
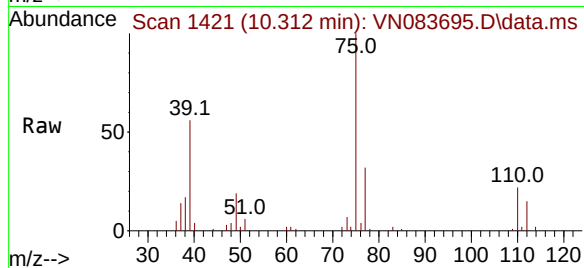
ICVVN090624

Tgt Ion:	75	Resp:	60780
Ion	Ratio	Lower	Upper
75	100		
77	32.0	24.9	37.3
39	55.5	31.0	46.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#50

1,1,2-Trichloroethane

Concen: 18.465 ug/l

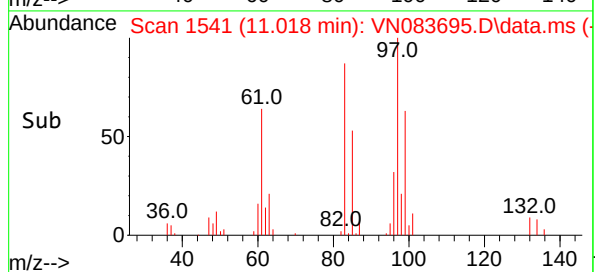
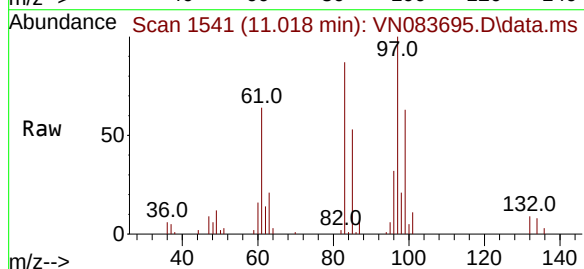
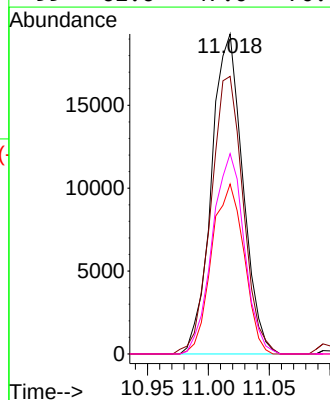
RT: 11.018 min Scan# 1541

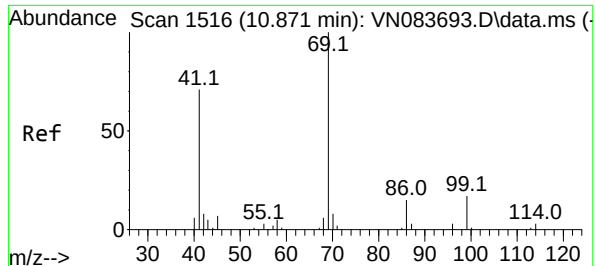
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	97	Resp:	34549
Ion	Ratio	Lower	Upper
97	100		
83	86.7	68.1	102.1
85	53.1	41.8	62.6
99	62.6	47.0	70.4





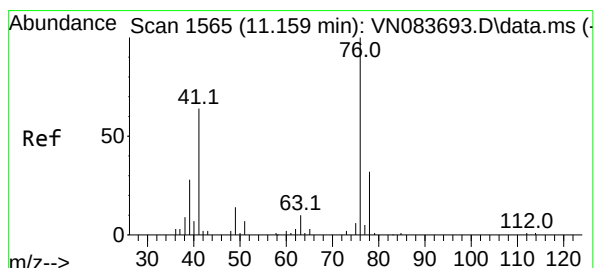
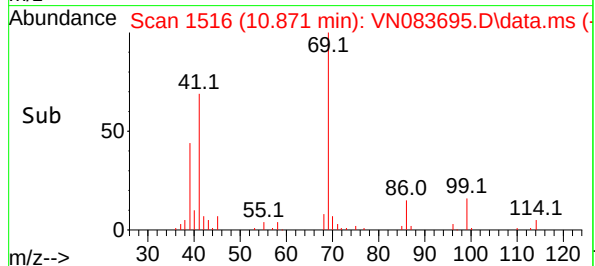
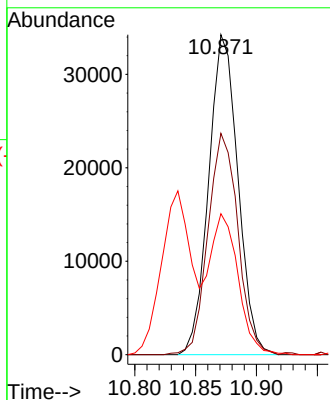
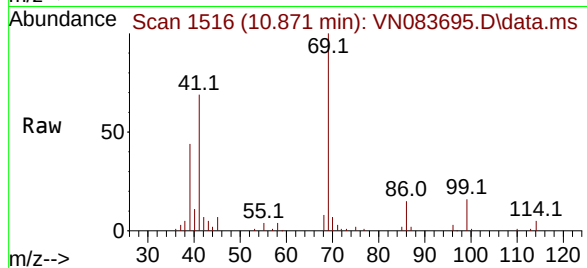
#51
Ethyl methacrylate
Concen: 17.893 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion: 69 Resp: 57190
Ion Ratio Lower Upper
69 100
41 69.1 25.5 76.5
39 43.6 16.0 47.9

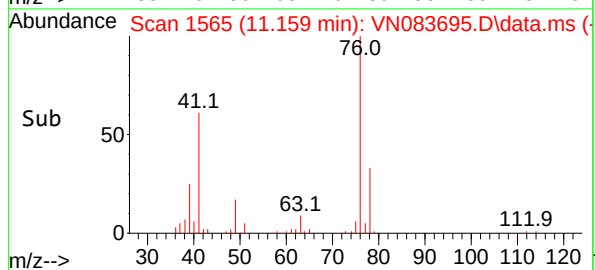
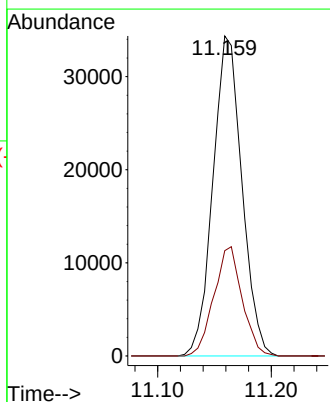
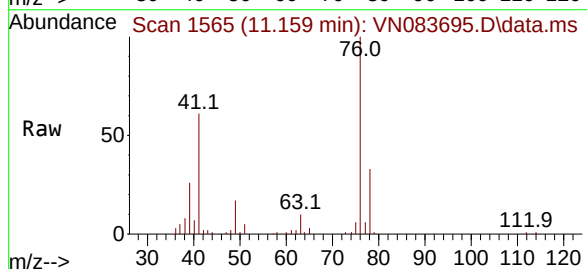
Manual Integrations
APPROVED

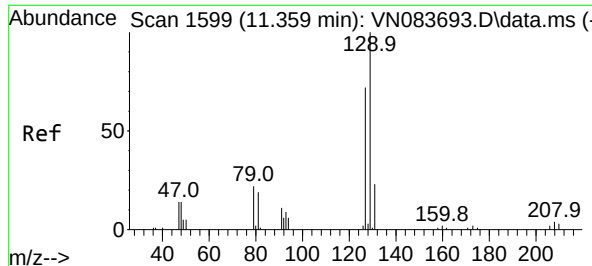
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#52
1,3-Dichloropropane
Concen: 18.033 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 76 Resp: 60931
Ion Ratio Lower Upper
76 100
78 33.3 0.0 65.8





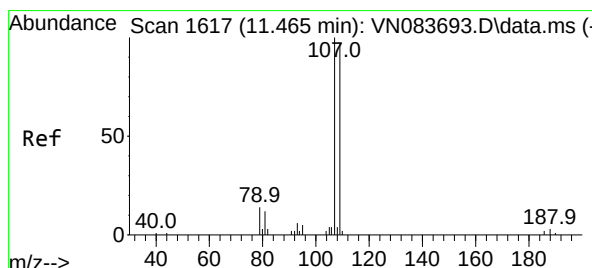
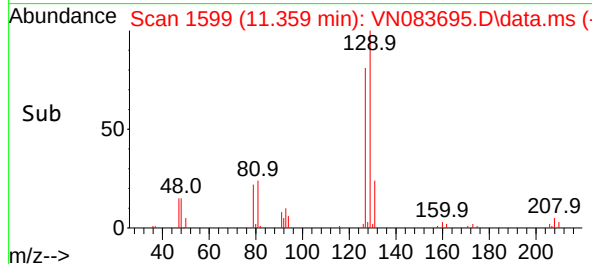
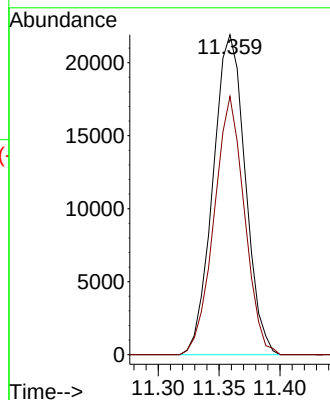
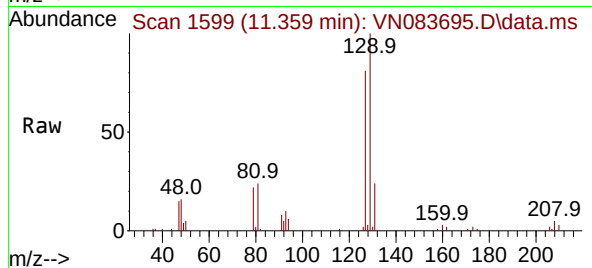
#53
Dibromochloromethane
Concen: 17.998 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion:129 Resp: 4039
Ion Ratio Lower Upper
129 100
127 76.0 39.4 118.1

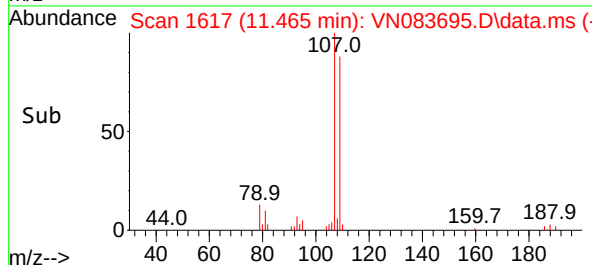
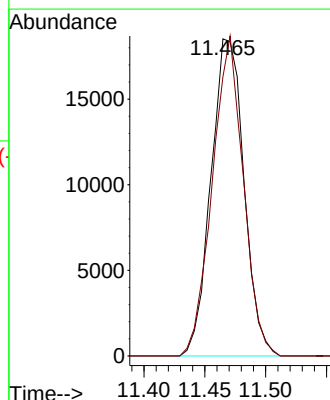
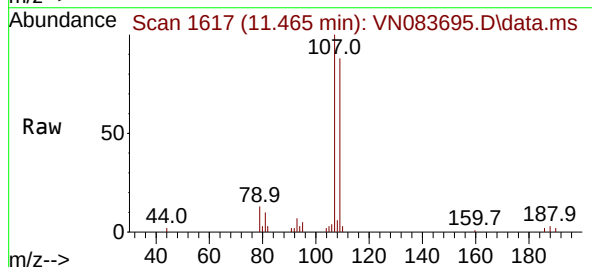
Manual Integrations
APPROVED

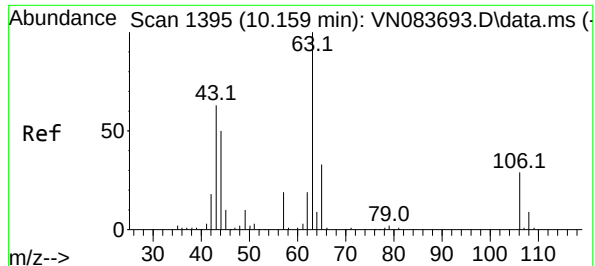
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#54
1,2-Dibromoethane
Concen: 18.052 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion:107 Resp: 34942
Ion Ratio Lower Upper
107 100
109 94.6 74.7 112.1





#55

2-Chloroethyl vinyl ether

Concen: 89.240 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

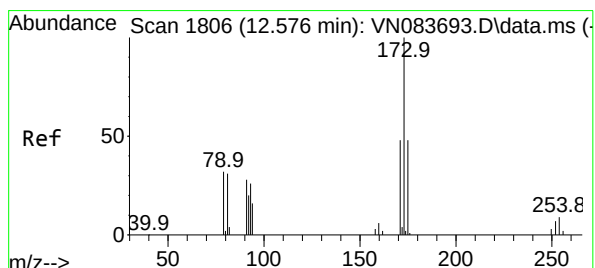
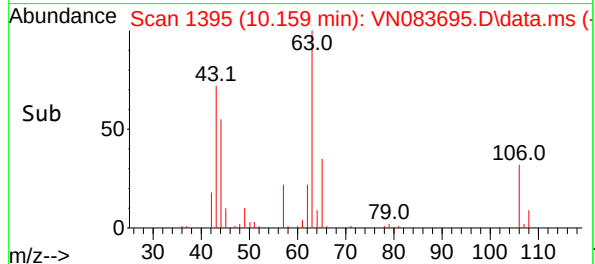
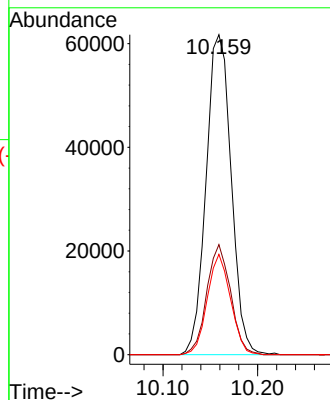
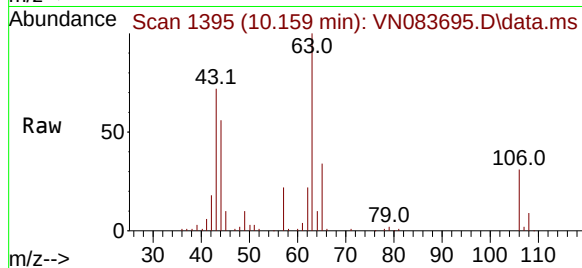
ICVNVN090624

Tgt Ion: 63	Resp: 11368
Ion Ratio	Lower Upper
63 100	
65 32.6	26.2 39.2
106 29.1	23.8 35.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#56

Bromoform

Concen: 17.360 ug/l

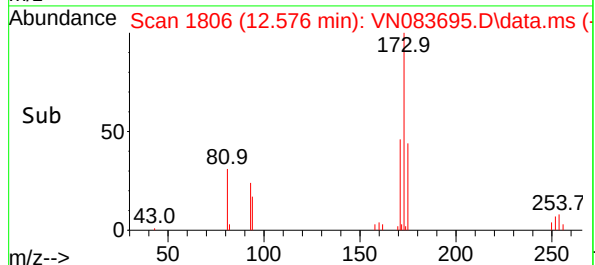
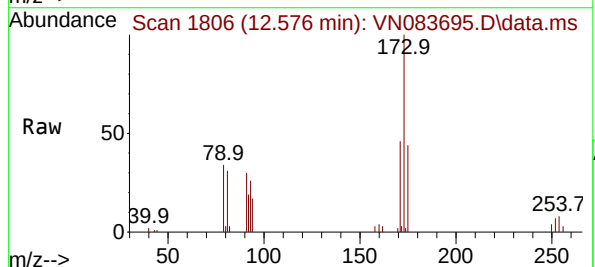
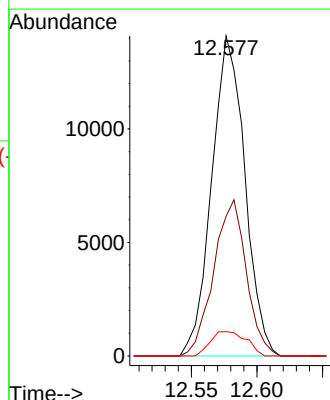
RT: 12.576 min Scan# 1806

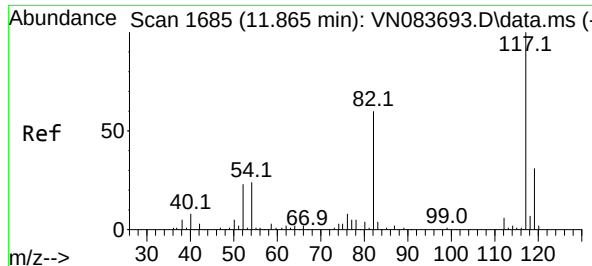
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion: 173	Resp: 24751
Ion Ratio	Lower Upper
173 100	
175 48.1	40.0 60.0
254 8.2	8.3 12.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion:117 Resp: 15773

Ion Ratio Lower Upper

117 100

82 59.2 46.6 69.8

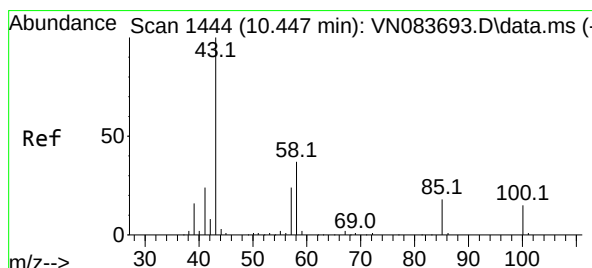
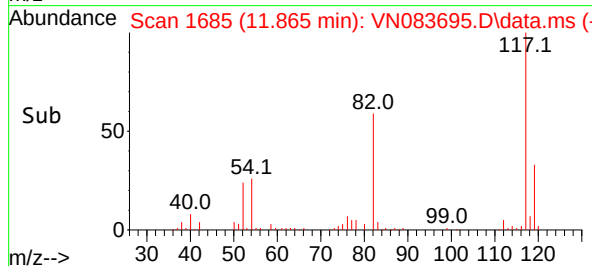
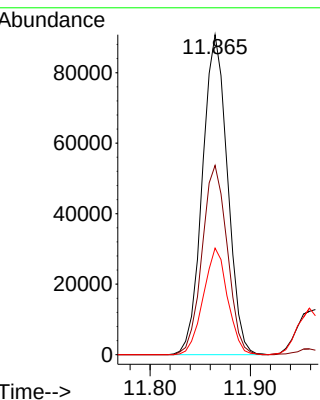
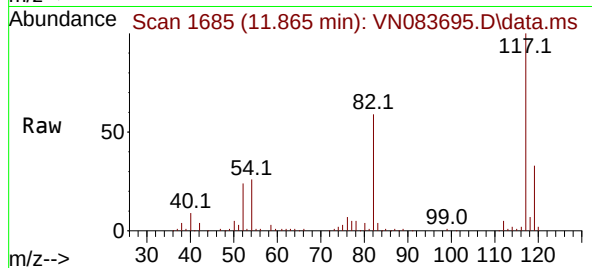
119 32.3 25.4 38.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#58

4-Methyl-2-Pentanone

Concen: 93.719 ug/l

RT: 10.447 min Scan# 1444

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

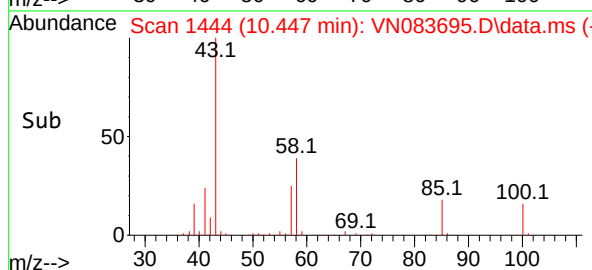
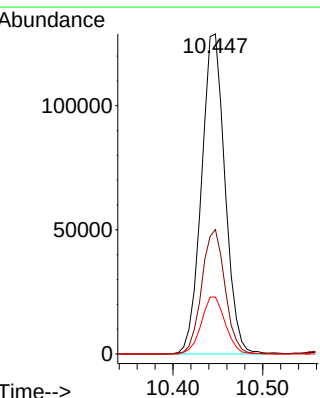
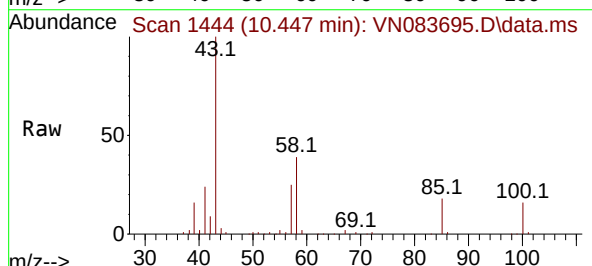
Tgt Ion: 43 Resp: 234399

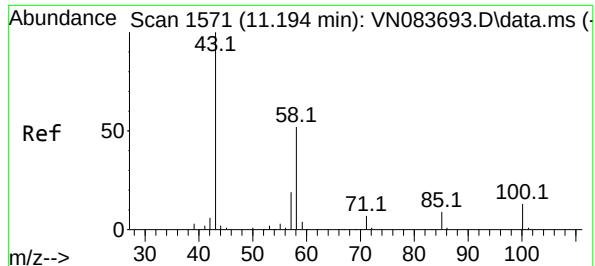
Ion Ratio Lower Upper

43 100

58 38.5 36.5 54.7

85 18.2 19.5 29.3#





#59

2-Hexanone

Concen: 91.318 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 43 Resp: 172578

Ion Ratio Lower Upper

43 100

58 53.6 50.4 75.6

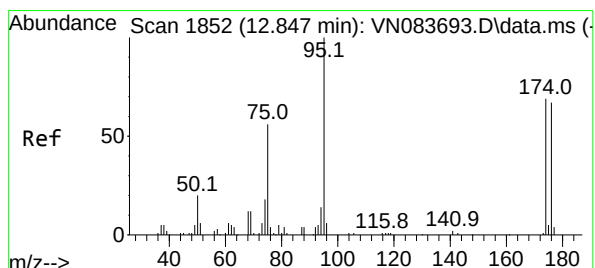
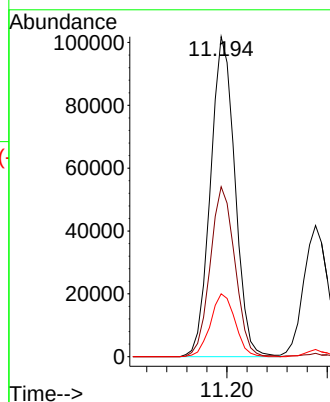
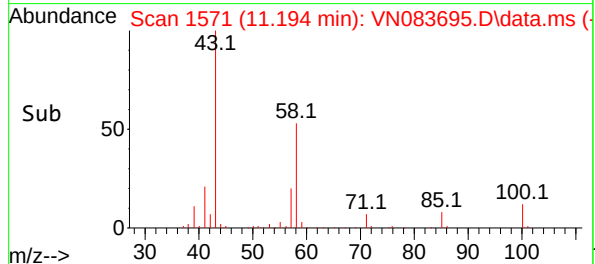
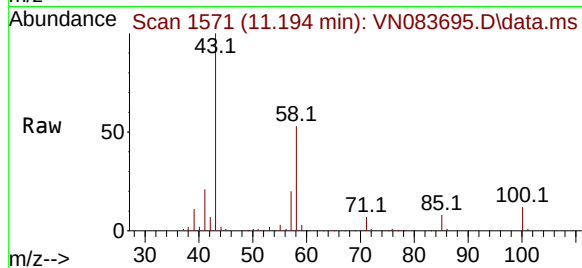
57 19.8 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#60

4-Bromofluorobenzene

Concen: 29.363 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

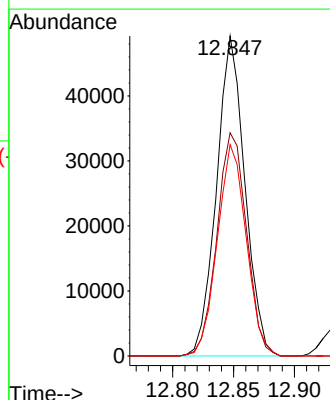
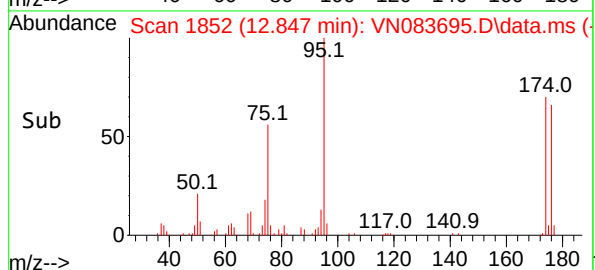
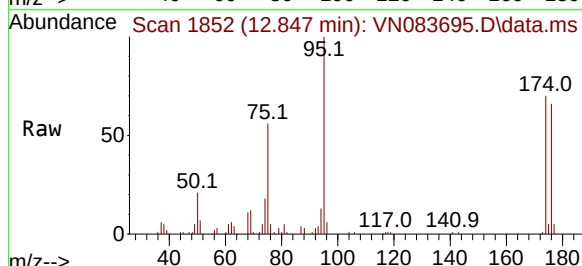
Tgt Ion: 95 Resp: 79825

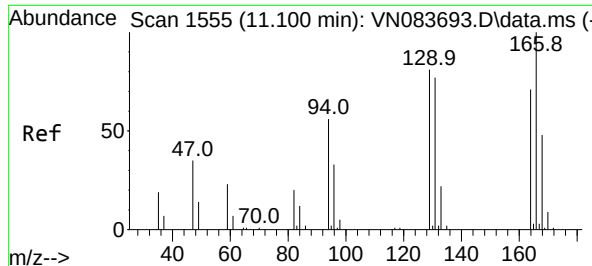
Ion Ratio Lower Upper

95 100

174 72.7 60.5 90.7

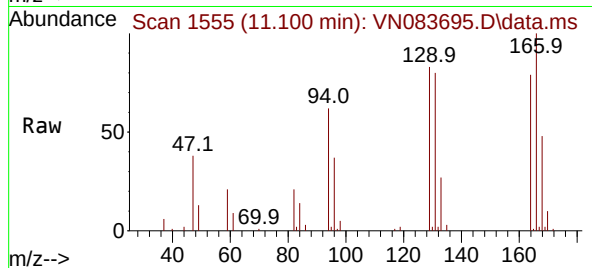
176 67.6 57.8 86.6





#61
Tetrachloroethene
Concen: 17.644 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

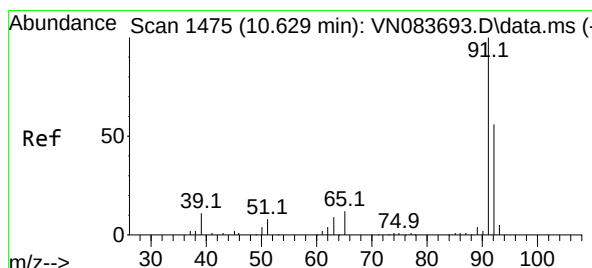
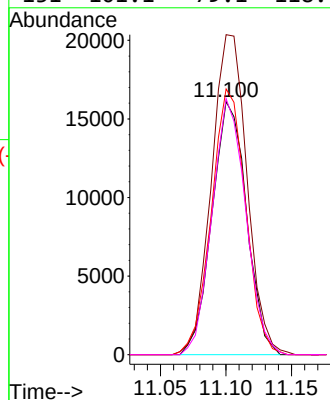
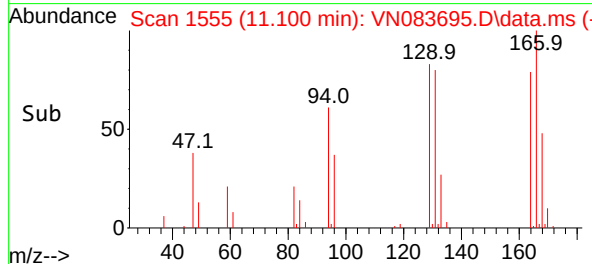
Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624



Tgt Ion:164 Resp: 29454
Ion Ratio Lower Upper
164 100
166 125.3 106.7 160.1
129 103.9 85.8 128.6
131 101.1 79.1 118.7

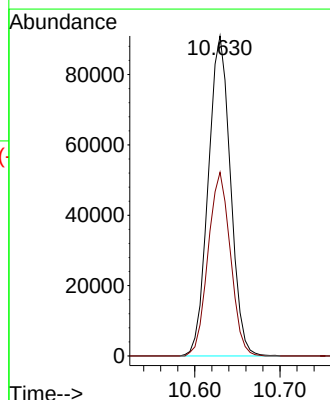
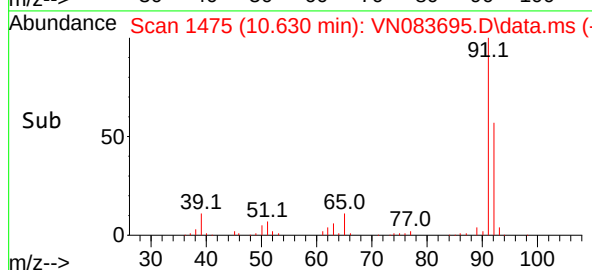
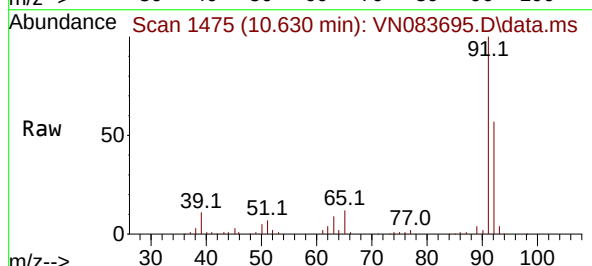
Manual Integrations
APPROVED

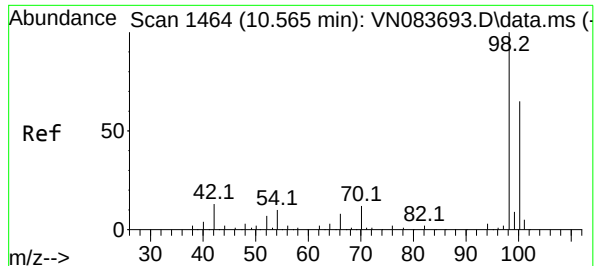
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#62
Toluene
Concen: 18.193 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 91 Resp: 164945
Ion Ratio Lower Upper
91 100
92 57.6 46.5 69.7





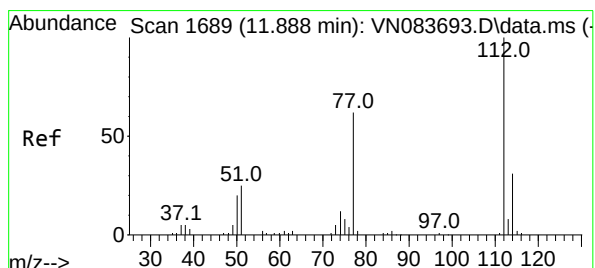
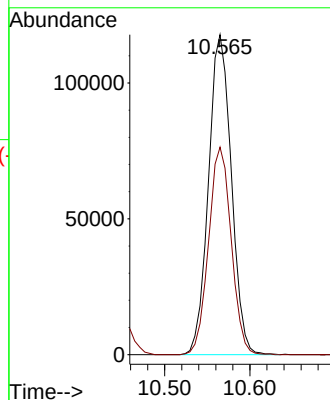
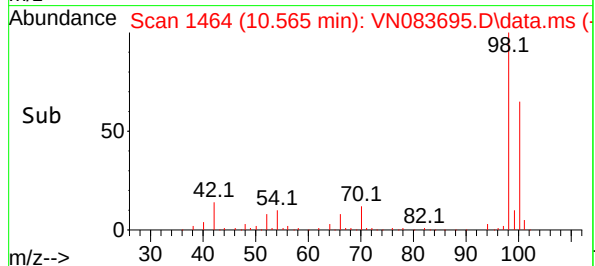
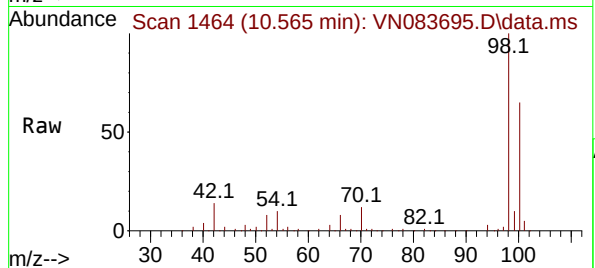
#63
Toluene-d8
Concen: 30.014 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion: 98 Resp: 219210
Ion Ratio Lower Upper
98 100
100 64.1 52.7 79.1

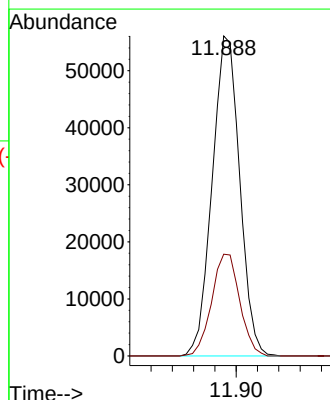
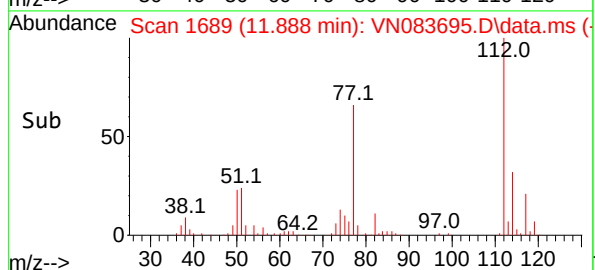
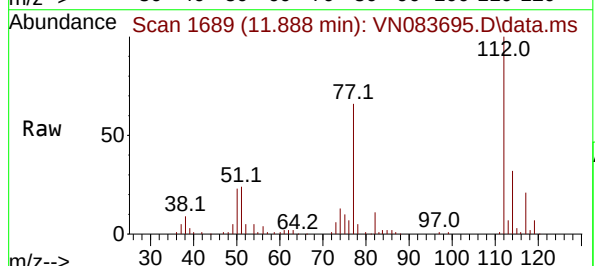
Manual Integrations
APPROVED

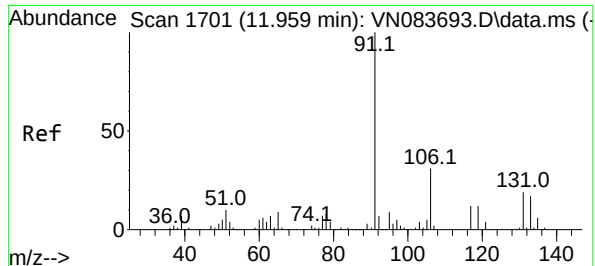
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#64
Chlorobenzene
Concen: 17.878 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion:112 Resp: 100355
Ion Ratio Lower Upper
112 100
114 31.8 26.6 39.8





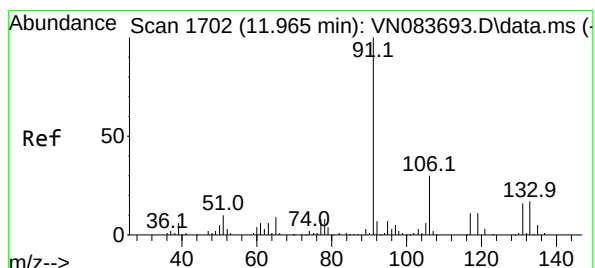
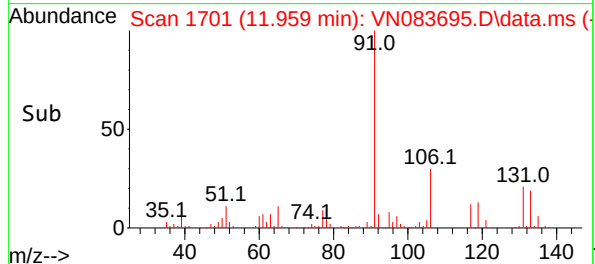
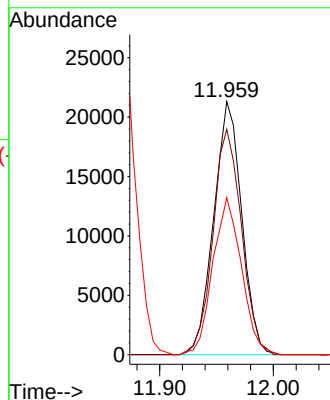
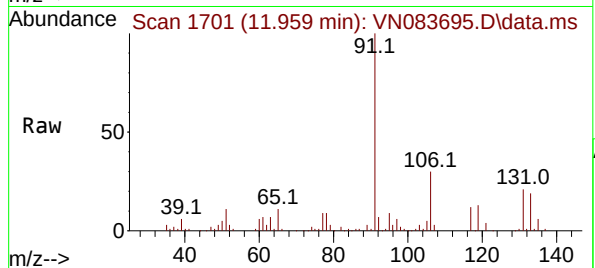
#65
1,1,1,2-Tetrachloroethane
Concen: 18.692 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Tgt Ion:131 Resp: 3655
Ion Ratio Lower Upper
131 100
133 90.8 0.0 188.0
119 63.5 0.0 122.8

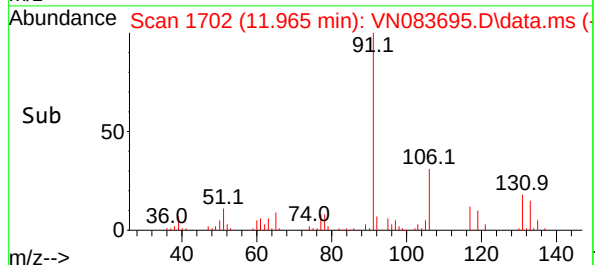
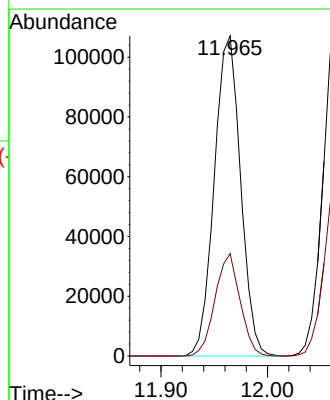
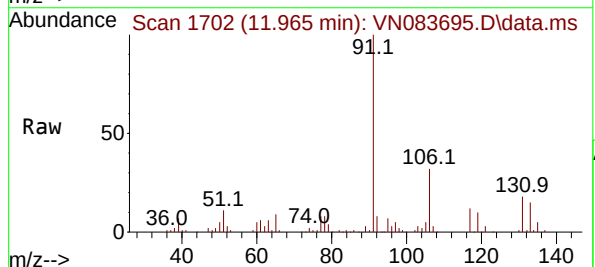
Manual Integrations
APPROVED

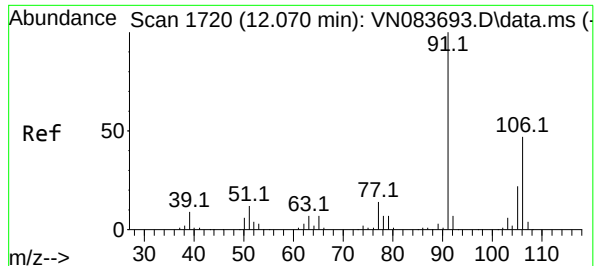
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#66
Ethyl Benzene
Concen: 17.796 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 91 Resp: 183486
Ion Ratio Lower Upper
91 100
106 32.0 24.4 36.6





#67

m/p-Xylenes

Concen: 36.072 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion:106 Resp: 136830

Ion Ratio Lower Upper

106 100

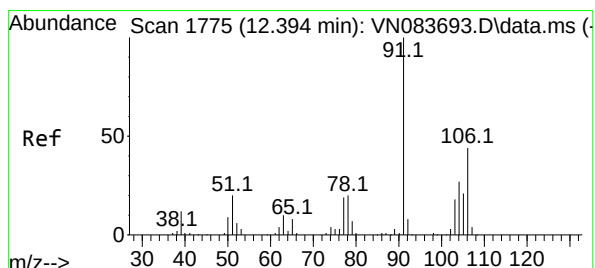
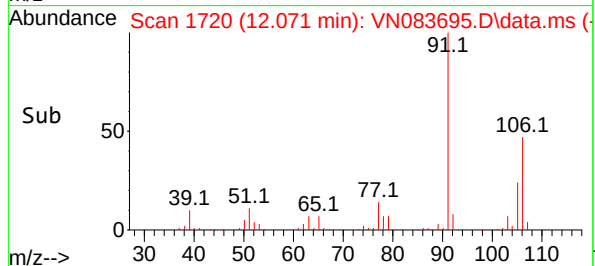
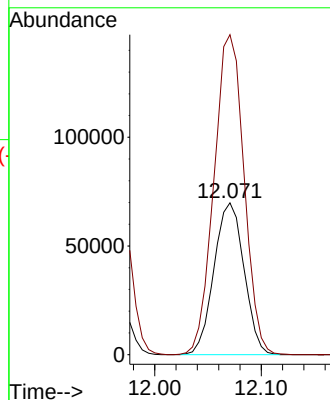
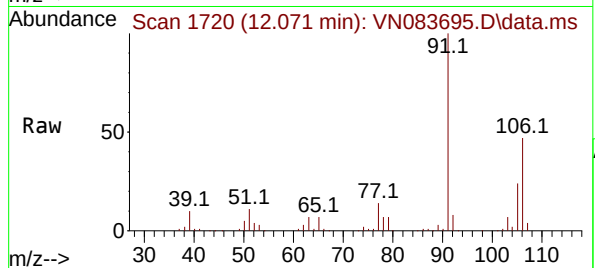
91 211.0 166.6 249.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#68

o-Xylene

Concen: 18.197 ug/l

RT: 12.400 min Scan# 1776

Delta R.T. 0.006 min

Lab File: VN083695.D

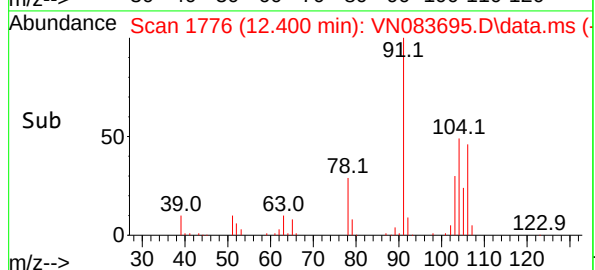
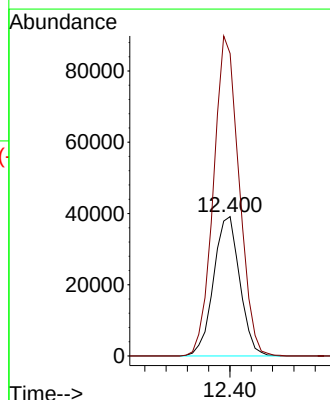
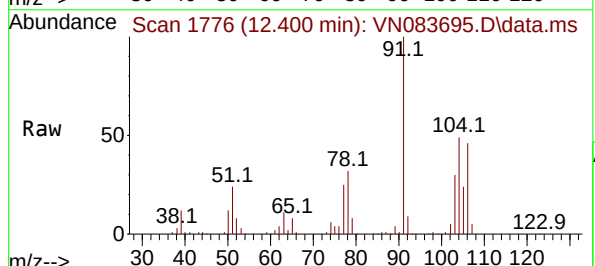
Acq: 06 Sep 2024 14:35

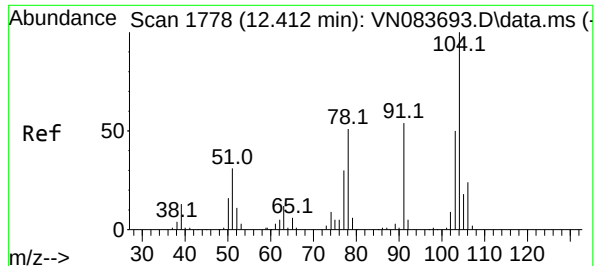
Tgt Ion:106 Resp: 66805

Ion Ratio Lower Upper

106 100

91 224.2 110.0 330.0





#69

Styrene

Concen: 17.479 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion:104 Resp: 108420

Ion Ratio Lower Upper

104 100

78 55.4 42.6 64.0

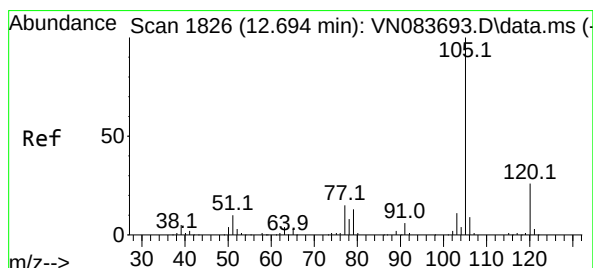
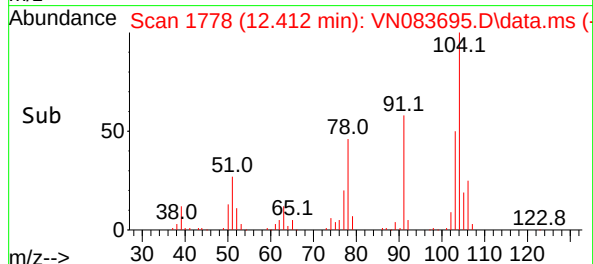
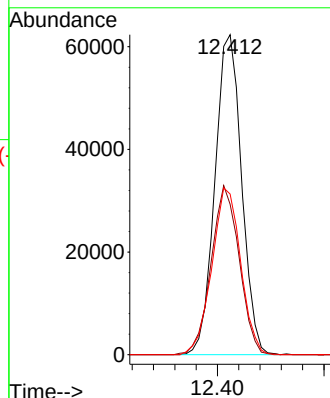
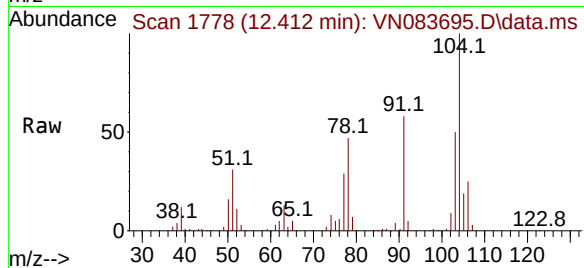
103 56.2 43.7 65.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#70

Isopropylbenzene

Concen: 18.246 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.000 min

Lab File: VN083695.D

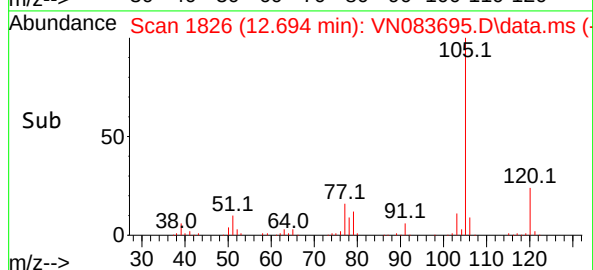
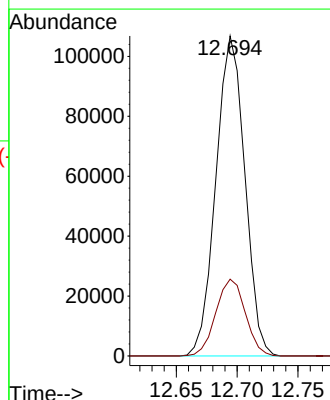
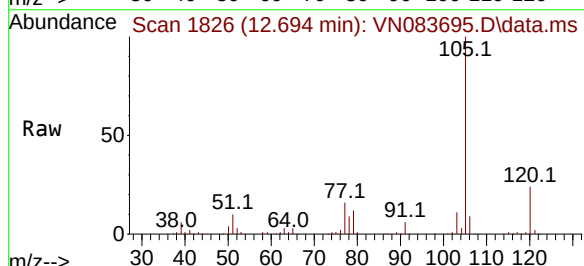
Acq: 06 Sep 2024 14:35

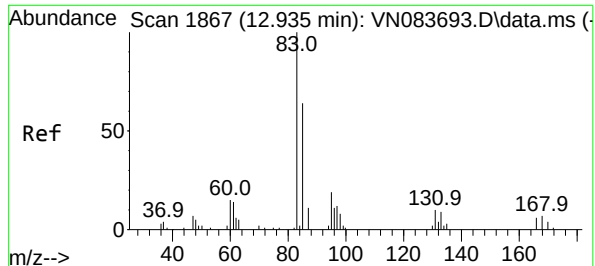
Tgt Ion:105 Resp: 176773

Ion Ratio Lower Upper

105 100

120 24.4 17.8 33.1





#71

1,1,2,2-Tetrachloroethane

Concen: 18.347 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNV090624

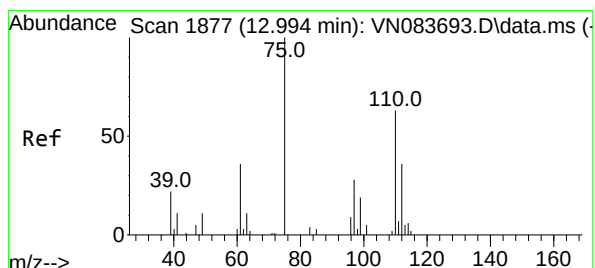
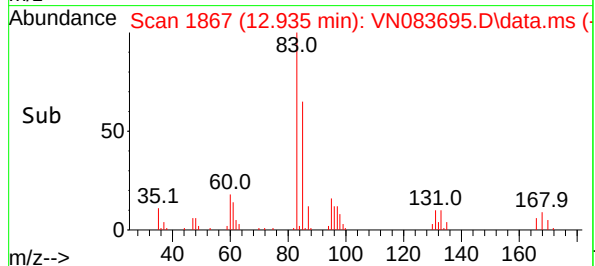
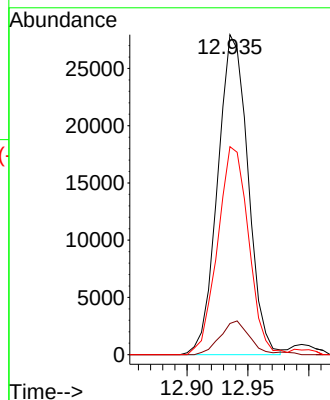
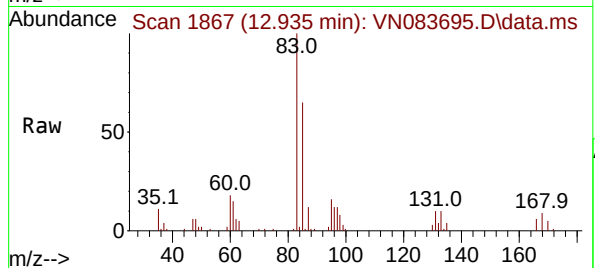
Tgt Ion:	83	Resp:	4854
Ion Ratio	Lower	Upper	
83	100		
131	10.1	5.2	15.6
85	66.3	32.3	96.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#72

1,2,3-Trichloropropane

Concen: 18.507 ug/l m

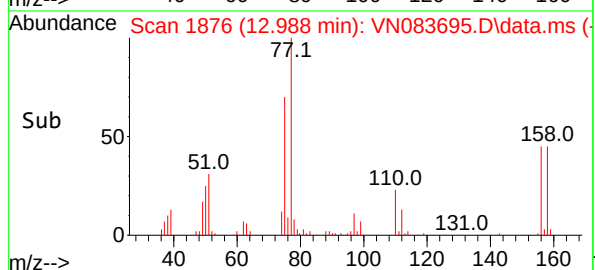
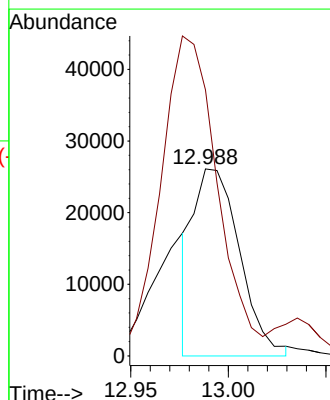
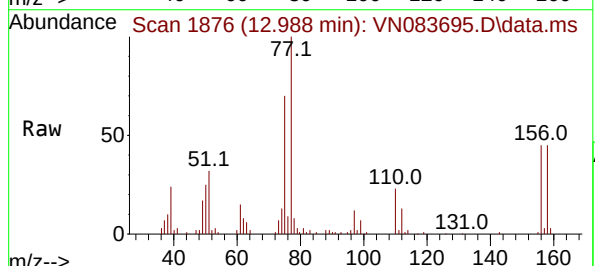
RT: 12.988 min Scan# 1876

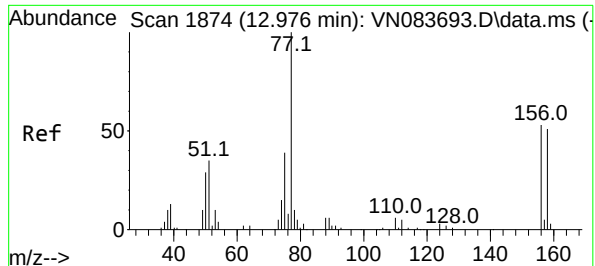
Delta R.T. -0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

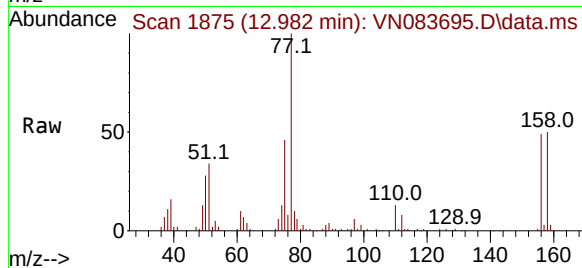
Tgt Ion:	75	Resp:	42935
Ion Ratio	Lower	Upper	
75	100		
77	211.0	0.0	367.6





#73
Bromobenzene
Concen: 17.272 ug/l
RT: 12.982 min Scan# 1875
Delta R.T. 0.006 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

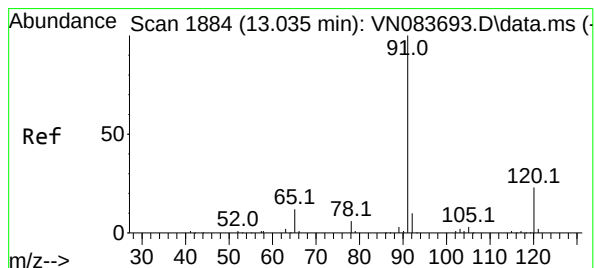
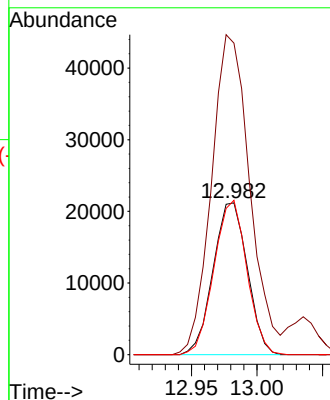
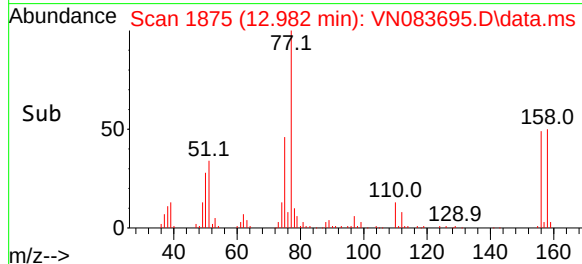
Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624



Tgt Ion: 156 Resp: 38434
Ion Ratio Lower Upper
156 100
77 235.7 0.0 437.6
158 97.7 0.0 203.8

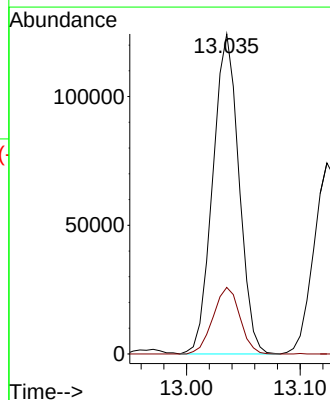
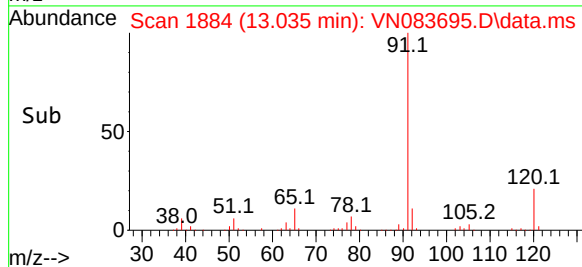
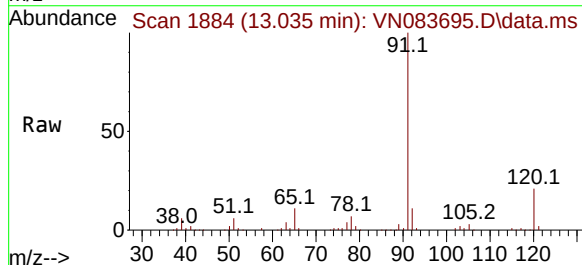
Manual Integrations
APPROVED

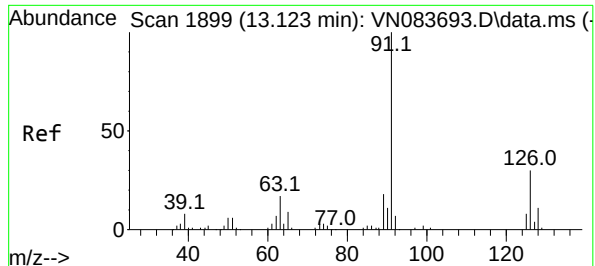
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#74
n-propylbenzene
Concen: 17.536 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

Tgt Ion: 91 Resp: 198876
Ion Ratio Lower Upper
91 100
120 21.3 0.0 43.8





#75

2-Chlorotoluene

Concen: 18.021 ug/l

RT: 13.124 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNVN090624

Tgt Ion: 91 Resp: 12755

Ion Ratio Lower Upper

91 100

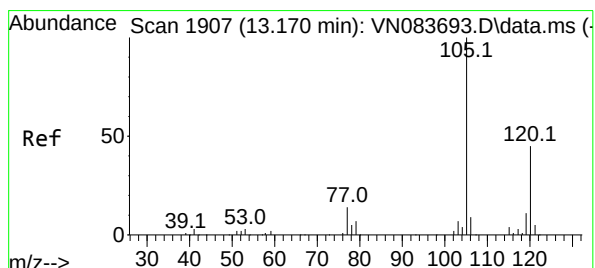
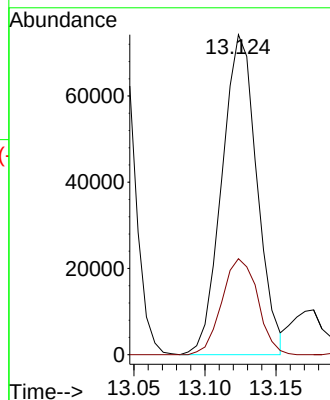
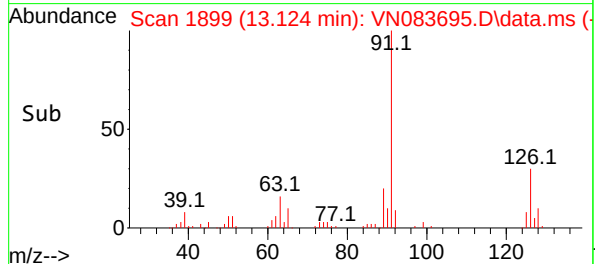
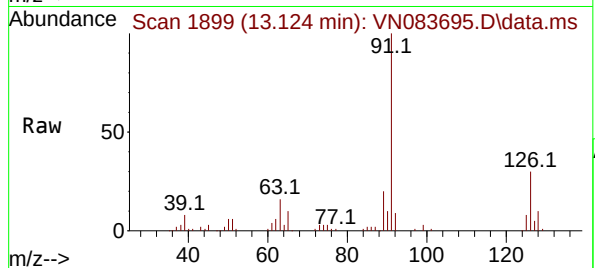
126 30.6 0.0 61.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#76

1,3,5-Trimethylbenzene

Concen: 17.923 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN083695.D

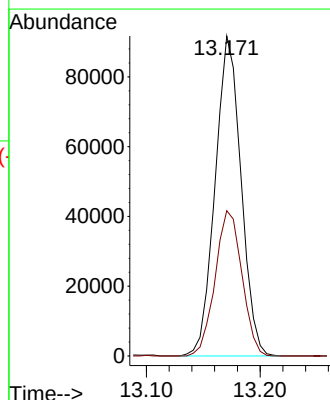
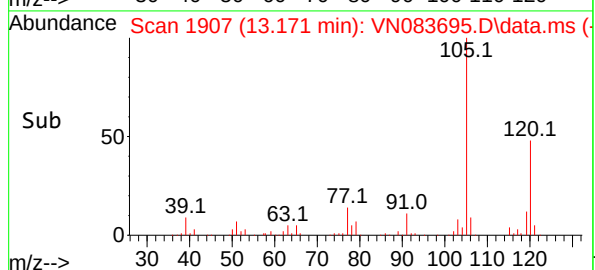
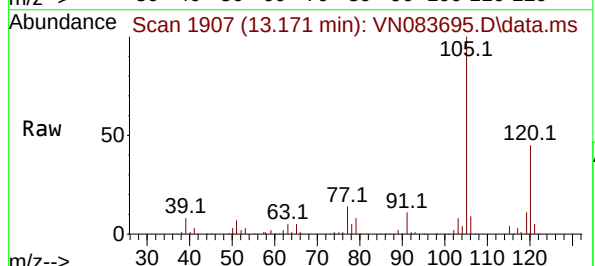
Acq: 06 Sep 2024 14:35

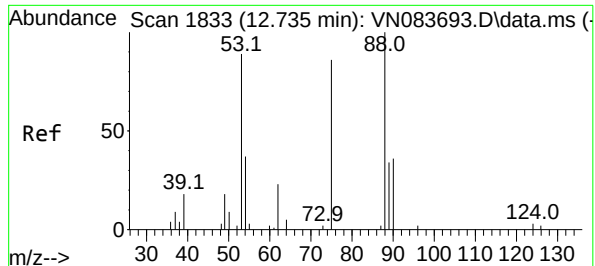
Tgt Ion:105 Resp: 145043

Ion Ratio Lower Upper

105 100

120 47.0 0.0 95.8





#77

t-1,4-Dichloro-2-butene

Concen: 16.682 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVVN090624

Tgt Ion: 75 Resp: 1635

Ion Ratio Lower Upper

75 100

53 106.5 45.9 137.7

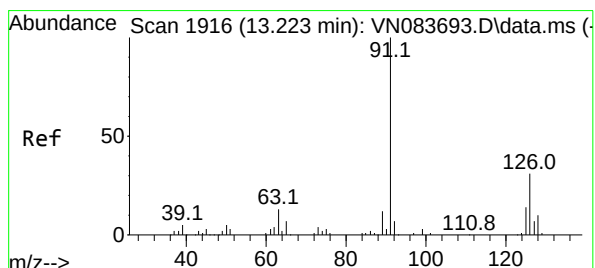
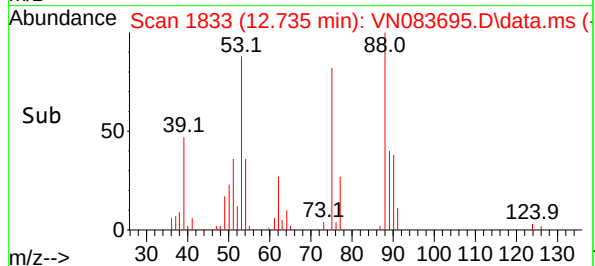
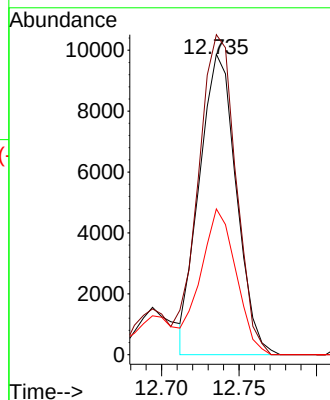
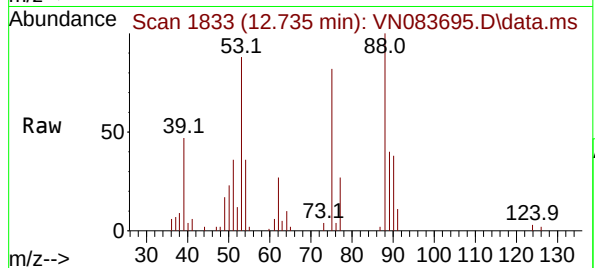
89 48.5 25.9 77.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#78

4-Chlorotoluene

Concen: 17.508 ug/l

RT: 13.224 min Scan# 1916

Delta R.T. 0.000 min

Lab File: VN083695.D

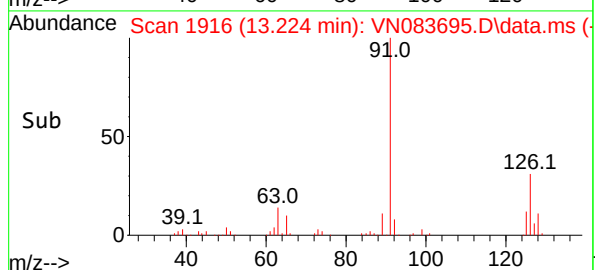
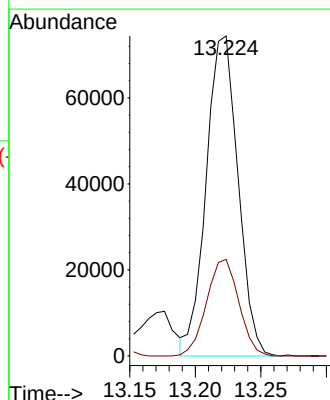
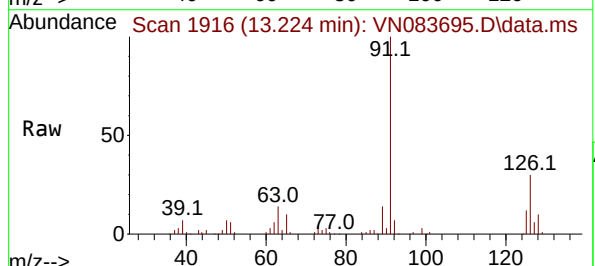
Acq: 06 Sep 2024 14:35

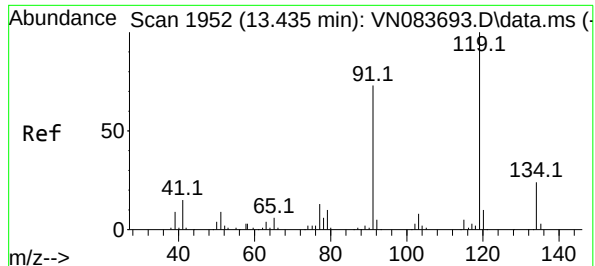
Tgt Ion: 91 Resp: 125678

Ion Ratio Lower Upper

91 100

126 30.6 0.0 62.8





#79

tert-butylbenzene

Concen: 17.537 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

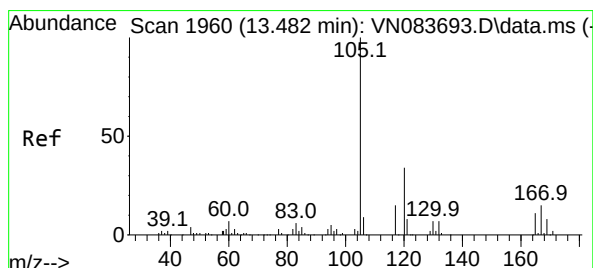
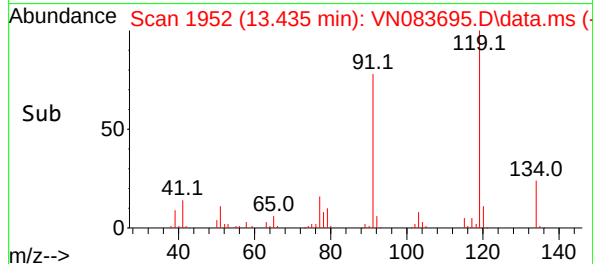
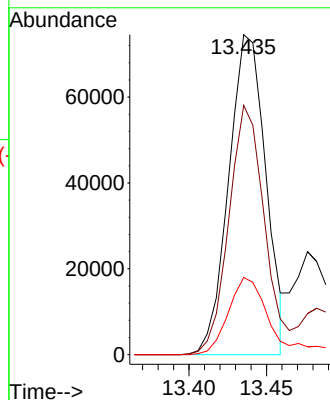
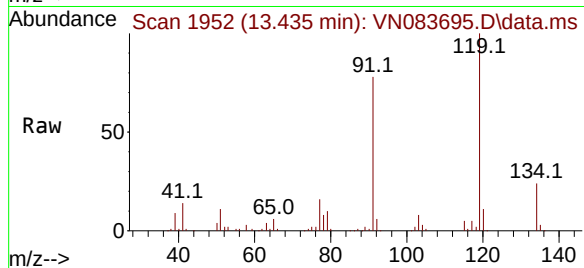
ICVVN090624

Tgt Ion:	119	Resp:	124104
Ion	Ratio	Lower	Upper
119	100		
91	74.7	0.0	138.8
134	24.4	0.0	48.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#80

1,2,4-Trimethylbenzene

Concen: 17.779 ug/l

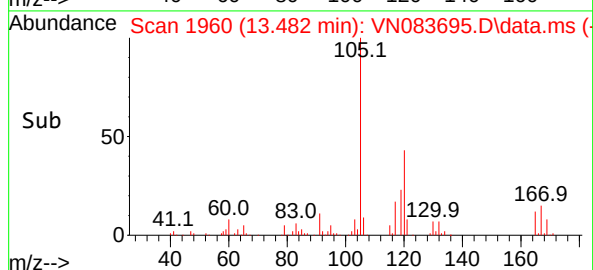
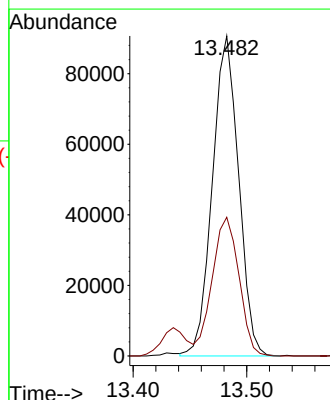
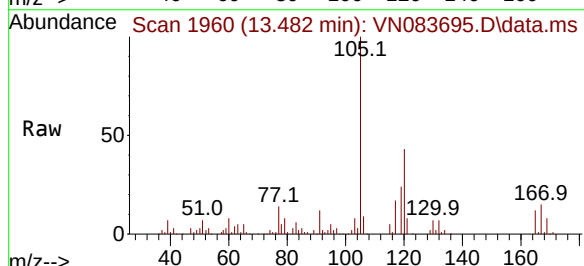
RT: 13.482 min Scan# 1960

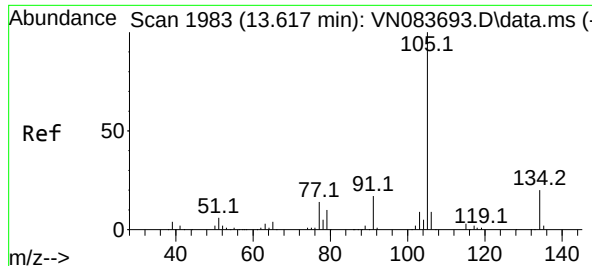
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

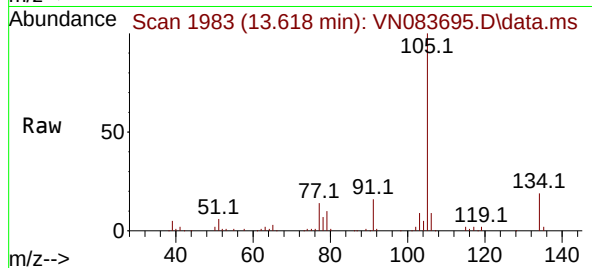
Tgt Ion:	105	Resp:	145402
Ion	Ratio	Lower	Upper
105	100		
120	44.3	0.0	86.8





#81
sec-Butylbenzene
Concen: 17.765 ug/l
RT: 13.618 min Scan# 1983
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

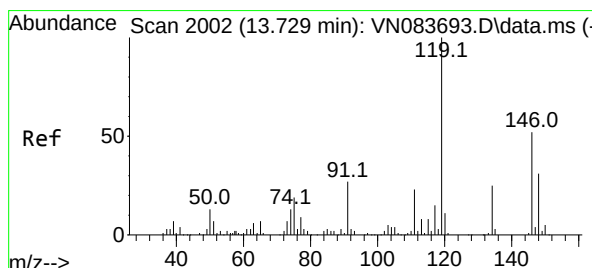
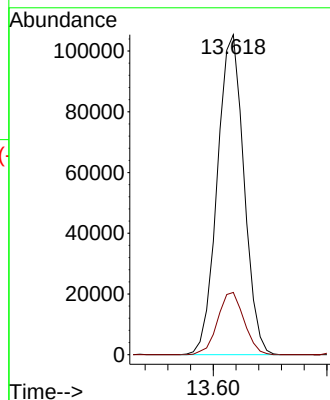
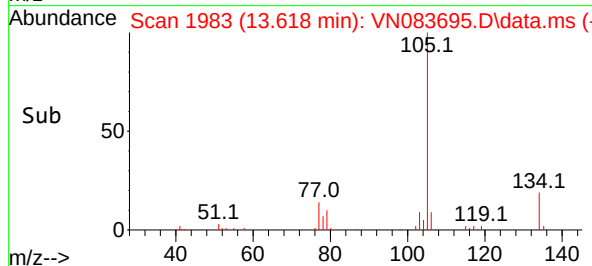
Instrument :
MSVOA_N
ClientSampleId :
ICNVN090624



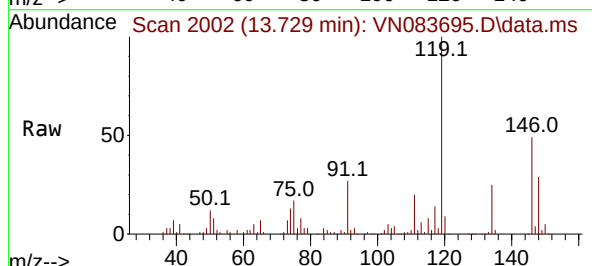
Tgt Ion:105 Resp: 171738
Ion Ratio Lower Upper
105 100
134 19.3 0.0 39.0

Manual Integrations
APPROVED

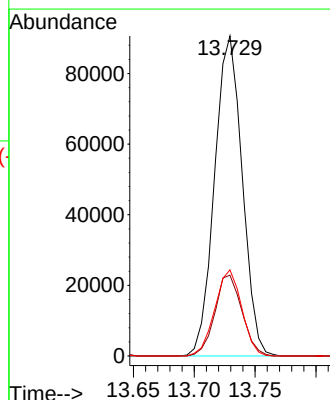
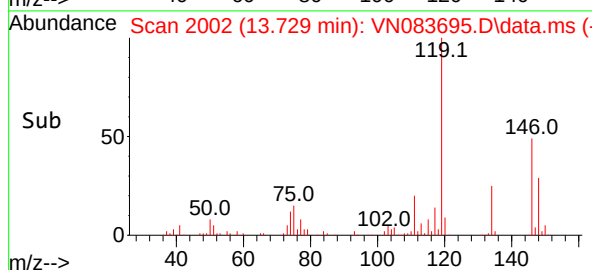
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024

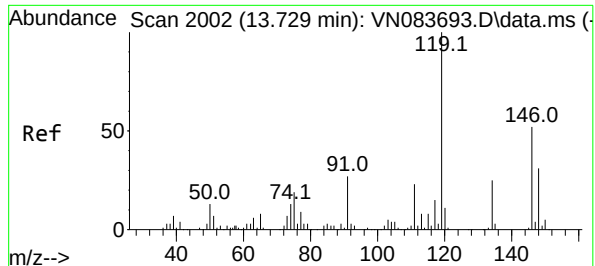


#82
p-Isopropyltoluene
Concen: 17.619 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35



Tgt Ion:119 Resp: 143309
Ion Ratio Lower Upper
119 100
134 24.8 0.0 49.2
91 26.1 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 17.609 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

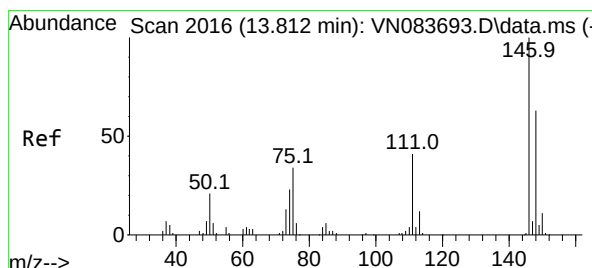
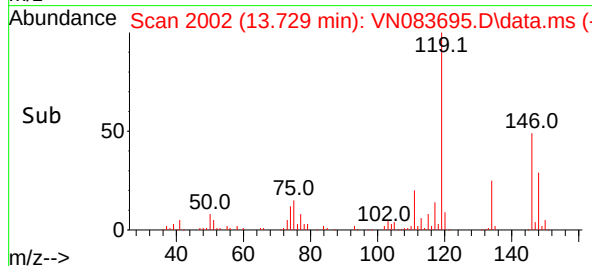
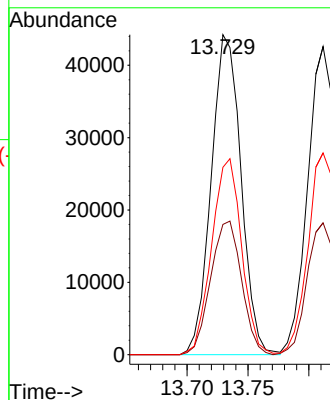
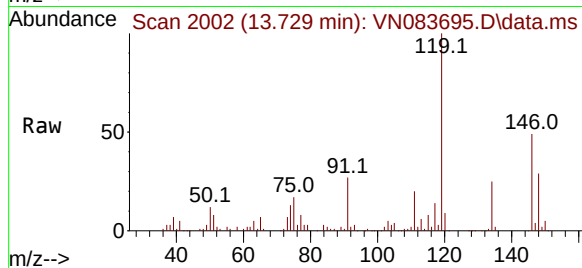
ICVVN090624

Tgt Ion:146	Resp:	7541
Ion Ratio	Lower	Upper
146	100	
111	43.2	22.4 67.0
148	61.5	32.1 96.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#84

1,4-Dichlorobenzene

Concen: 16.562 ug/l

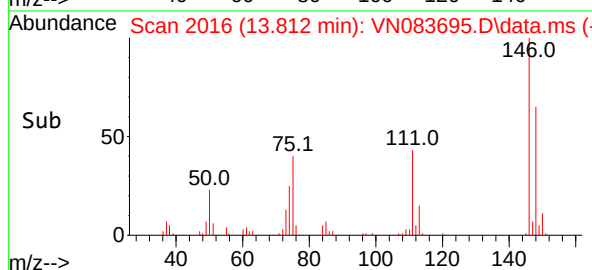
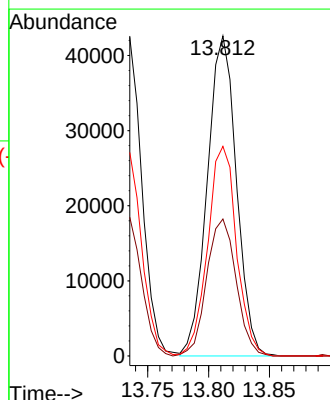
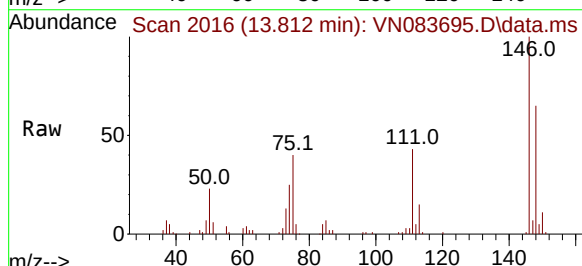
RT: 13.812 min Scan# 2016

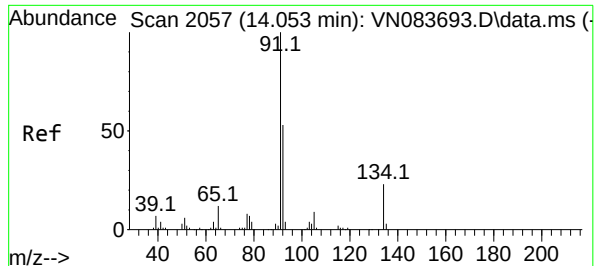
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:146	Resp:	70917
Ion Ratio	Lower	Upper
146	100	
111	43.3	21.3 63.9
148	64.9	31.9 95.5





#85

n-Butylbenzene

Concen: 16.647 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

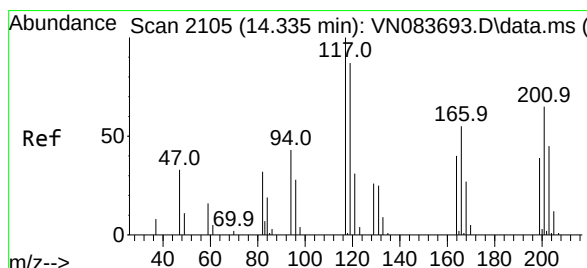
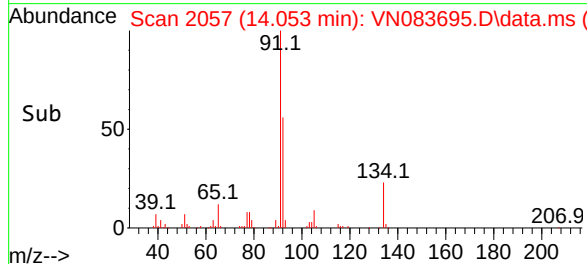
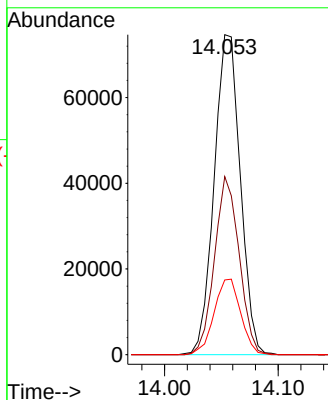
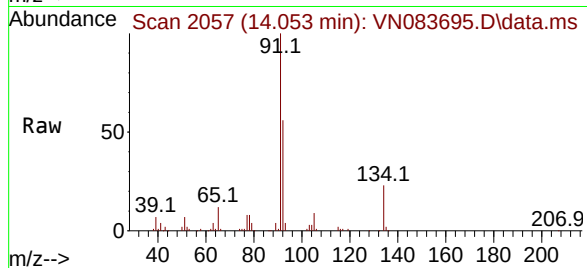
ICVVN090624

Tgt Ion:	91	Resp:	11948
Ion Ratio	Lower	Upper	
91	100		
92	52.5	0.0	105.0
134	24.1	0.0	51.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#86

Hexachloroethane

Concen: 17.706 ug/l

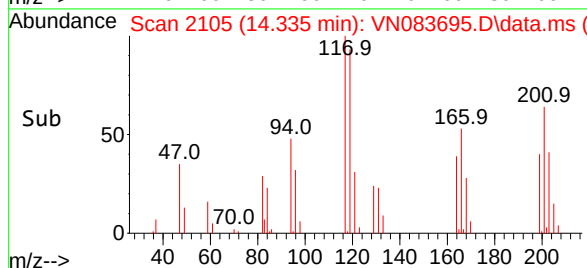
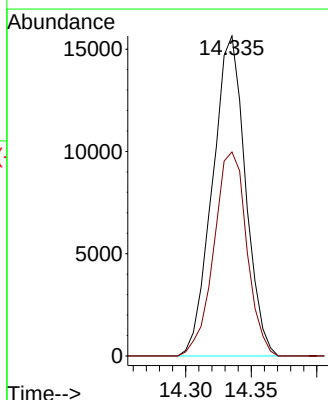
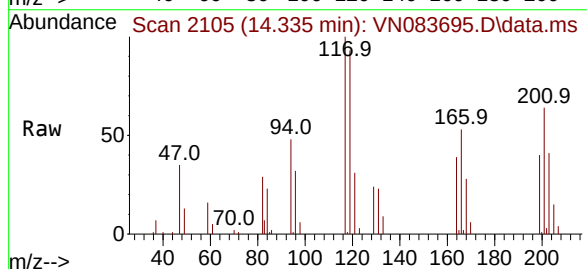
RT: 14.335 min Scan# 2105

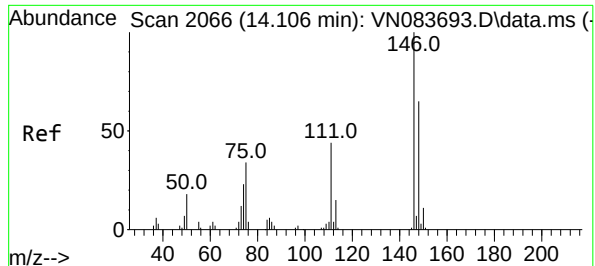
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	117	Resp:	27292
Ion Ratio	Lower	Upper	
117	100		
201	63.7	38.0	114.0





#87

1,2-Dichlorobenzene

Concen: 17.551 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

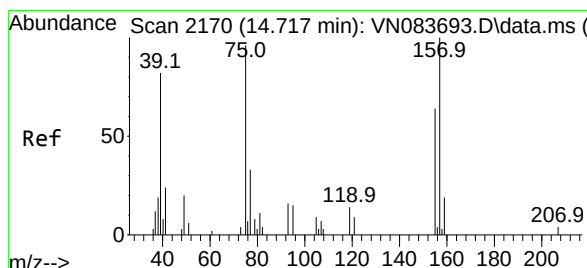
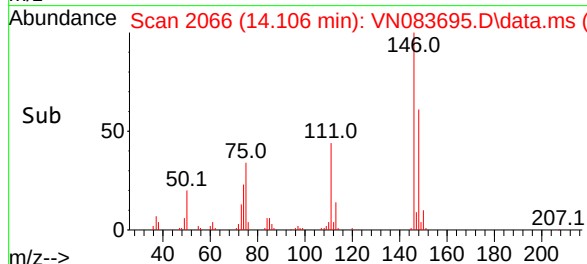
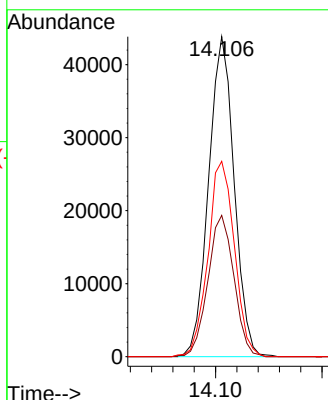
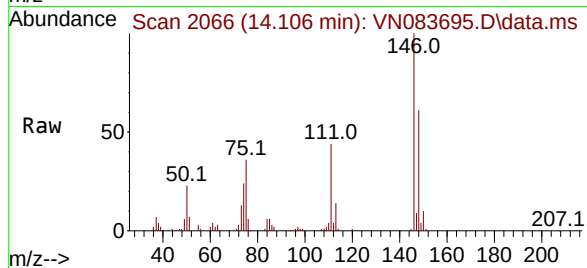
ICV090624

Tgt Ion:	146	Resp:	7295
Ion Ratio	Lower	Upper	
146	100		
111	45.0	22.6	67.8
148	63.1	31.3	93.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 18.041 ug/l

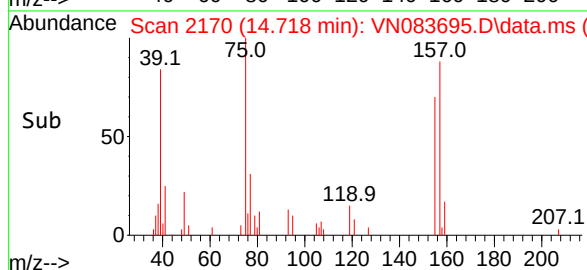
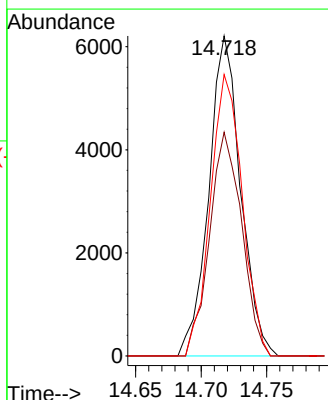
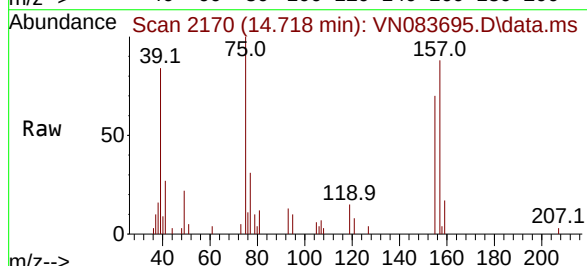
RT: 14.718 min Scan# 2170

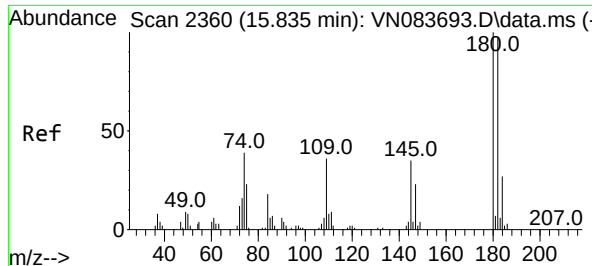
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Tgt Ion:	75	Resp:	10491
Ion Ratio	Lower	Upper	
75	100		
155	70.6	61.7	92.5
157	87.7	83.6	125.4





#89

1,2,4-Trichlorobenzene

Concen: 15.835 ug/l

RT: 15.841 min Scan# 2360

Delta R.T. 0.006 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

Instrument :

MSVOA_N

ClientSampleId :

ICVNV090624

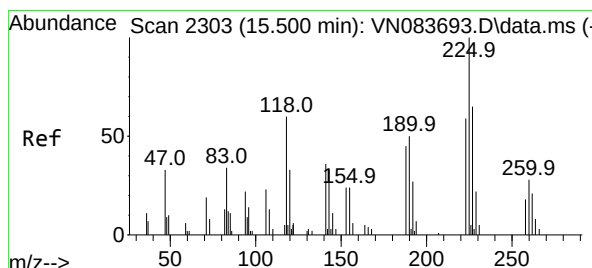
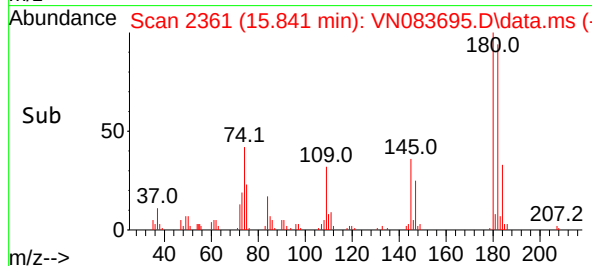
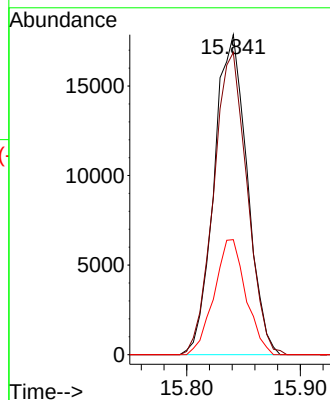
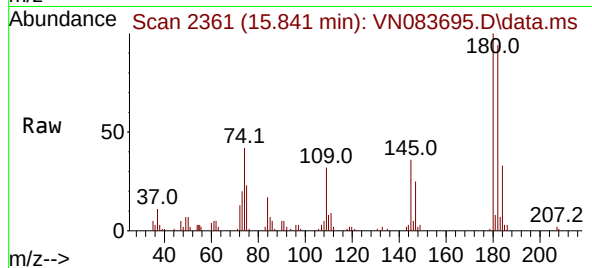
Tgt Ion:	180	Resp:	3605
Ion Ratio	Lower	Upper	
180	100		
182	95.5	76.4	114.6
145	34.6	28.4	42.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/09/2024

Supervised By :Mahesh Dadoda 09/09/2024



#90

Hexachlorobutadiene

Concen: 16.708 ug/l

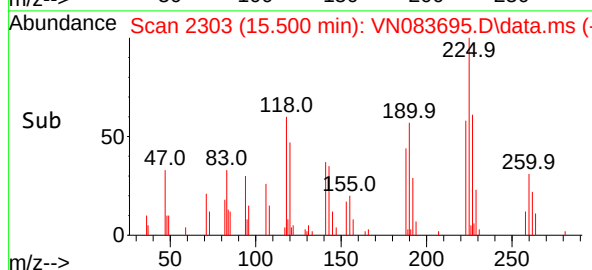
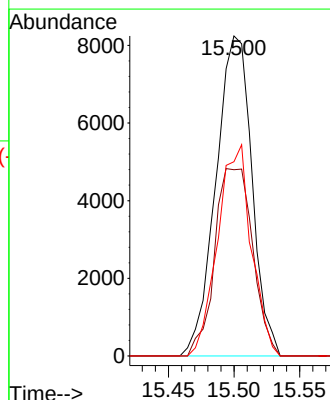
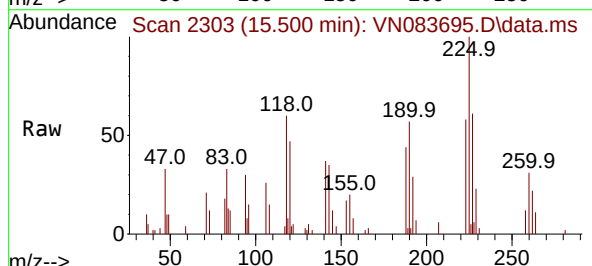
RT: 15.500 min Scan# 2303

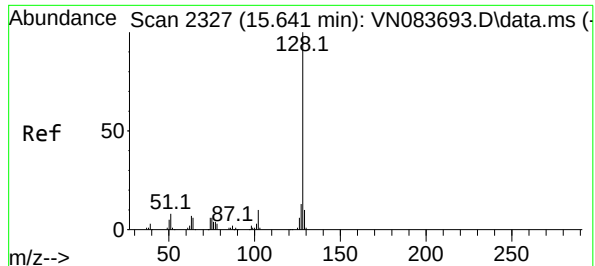
Delta R.T. 0.000 min

Lab File: VN083695.D

Acq: 06 Sep 2024 14:35

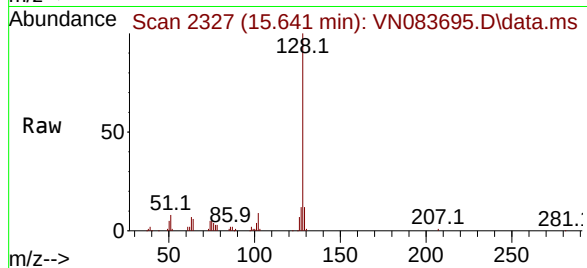
Tgt Ion:	225	Resp:	15748
Ion Ratio	Lower	Upper	
225	100		
223	61.8	0.0	126.6
227	61.6	0.0	126.6





#91
Naphthalene
Concen: 16.206 ug/l
RT: 15.641 min Scan# 2327
Delta R.T. 0.000 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35

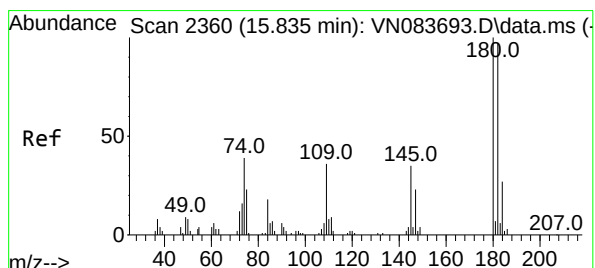
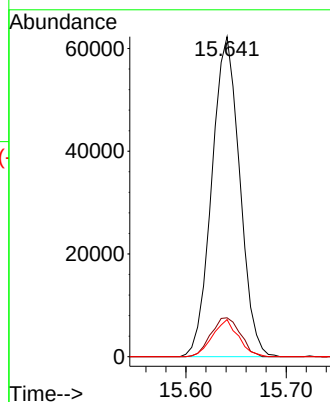
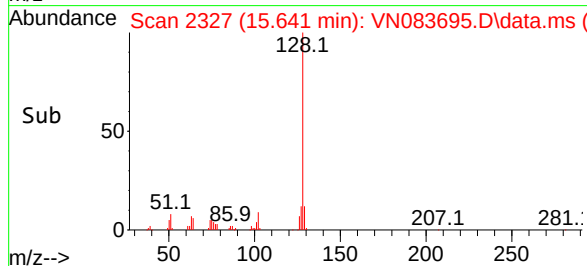
Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624



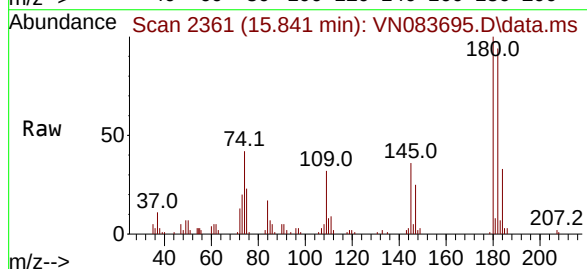
Tgt Ion:128 Resp: 120649
Ion Ratio Lower Upper
128 100
127 12.9 10.6 16.0
129 10.8 8.6 13.0

Manual Integrations
APPROVED

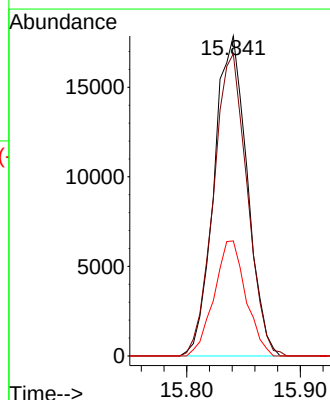
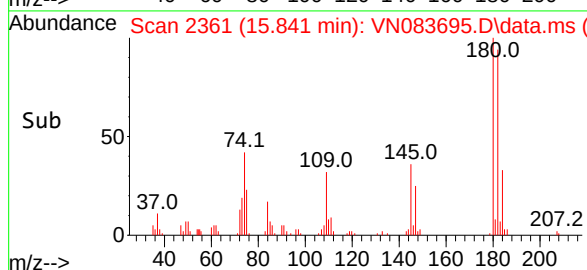
Reviewed By :John Carlone 09/09/2024
Supervised By :Mahesh Dadoda 09/09/2024



#92
1,2,3-Trichlorobenzene
Concen: 15.835 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN083695.D
Acq: 06 Sep 2024 14:35



Tgt Ion:180 Resp: 36058
Ion Ratio Lower Upper
180 100
182 95.5 0.0 191.0
145 34.6 0.0 71.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
Data File : VN083695.D
Acq On : 06 Sep 2024 14:35
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Quant Time: Sep 06 23:45:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	102	0.00
2 M	Dichlorodifluoromethane	2.009	1.839	8.5	95	0.00
3 M	Chloromethane	2.087	1.948	6.7	97	0.00
4 M	Vinyl Chloride	2.146	1.998	6.9	97	0.00
5 M	Bromomethane	1.199	1.074	10.4	92	0.00
6 M	Chloroethane	1.437	1.348	6.2	100	-0.01
7 M	Trichlorofluoromethane	3.598	3.323	7.6	98	0.00
8 T	Diethyl Ether	1.222	1.149	6.0	99	0.00
9	1,1,2-Trichlorotrifluoroeth	1.932	1.786	7.6	99	0.00
10 M	1,1-Dichloroethene	1.865	1.713	8.2	98	0.00
11	Methyl Iodide	2.533	2.323	8.3	97	-0.01
12	Methyl Acetate	2.249	2.046	9.0	101	0.00
13 M	Acrolein	0.328	0.344	-4.9	100	0.00
14 M	Acrylonitrile	0.910	0.826	9.2	97	0.00
15 M	Acetone	0.302	0.257	14.9	96	0.00
16 M	Carbon Disulfide	5.269	4.587	12.9	91	0.00
17	Allyl chloride	3.270	2.876	12.0	94	0.00
18 M	Methylene Chloride	2.040	1.855	9.1	95	0.00
19 M	trans-1,2-Dichloroethene	1.932	1.739	10.0	94	0.00
20 T	Diisopropyl ether	6.603	5.870	11.1	97	0.00
21 M	1,1-Dichloroethane	3.770	3.458	8.3	98	0.00
22 M	cis-1,2-Dichloroethene	2.352	2.133	9.3	95	0.00
23 M	tert-Butyl Alcohol	0.334	0.313	6.3	97	0.00
24 M	Methyl tert-Butyl Ether	6.626	6.093	8.0	96	0.00
25 M	Chloroform	3.995	3.629	9.2	95	0.00
26	Cyclohexane	3.320	3.016	9.2	97	0.00
27 s	1,2-Dichloroethane-d4	2.742	2.781	-1.4	103	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
29	1,1-Dichloropropene	0.476	0.425	10.7	94	0.00
30 M	2-Butanone	0.224	0.199	11.2	95	0.00
31	2,2-Dichloropropane	0.607	0.552	9.1	97	0.00
32 M	1,1,1-Trichloroethane	0.635	0.576	9.3	96	0.00
33 M	Carbon Tetrachloride	0.550	0.501	8.9	97	0.00
34 M	Benzene	1.428	1.316	7.8	96	0.00
35	Methacrylonitrile	0.252	0.237	6.0	97	0.00
36 M	1,2-Dichloroethane	0.537	0.500	6.9	98	0.00
37 M	Trichloroethene	0.335	0.308	8.1	99	0.00
38	Methylcyclohexane	0.570	0.508	10.9	96	0.00
39 M	1,2-Dichloropropane	0.344	0.325	5.5	100	0.00
40	Dibromomethane	0.251	0.230	8.4	94	0.00
41 M	Bromodichloromethane	0.534	0.483	9.6	97	0.00
42 M	Vinyl Acetate	0.922	0.765	17.0	94	0.00
43	Ethyl Acetate	0.451	0.416	7.8	96	0.00
44	Isopropyl Acetate	0.781	0.710	9.1	96	0.00
45 T	1,4-Dioxane	0.006	0.006	0.0	97	0.00
46	Methyl methacrylate	0.378	0.351	7.1	100	0.00
47	n-amyl Acetate	0.692	0.636	8.1	99	0.00
48 M	t-1,3-Dichloropropene	0.562	0.478	14.9	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
Data File : VN083695.D
Acq On : 06 Sep 2024 14:35
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Quant Time: Sep 06 23:45:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	0.584	0.519	11.1	96	0.00
50 M	1,1,2-Trichloroethane	0.320	0.295	7.8	97	0.00
51	Ethyl methacrylate	0.546	0.489	10.4	93	0.00
52	1,3-Dichloropropane	0.577	0.521	9.7	95	0.00
53 M	Dibromochloromethane	0.383	0.345	9.9	98	0.00
54 M	1,2-Dibromoethane	0.331	0.299	9.7	96	0.00
55 M	2-Chloroethyl vinyl ether	0.218	0.194	11.0	84	0.00
56 M	Bromoform	0.244	0.211	13.5	94	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
58 M	4-Methyl-2-Pentanone	0.476	0.446	6.3	97	0.00
59 M	2-Hexanone	0.359	0.328	8.6	96	0.00
60 S	4-Bromofluorobenzene	0.517	0.506	2.1	100	0.00
61 M	Tetrachloroethene	0.317	0.280	11.7	96	0.00
62 M	Toluene	1.724	1.569	9.0	96	0.00
63 S	Toluene-d8	1.389	1.390	-0.1	100	0.00
64 M	Chlorobenzene	1.068	0.954	10.7	94	0.00
65	1,1,1,2-Tetrachloroethane	0.372	0.348	6.5	99	0.00
66 M	Ethyl Benzene	1.961	1.745	11.0	97	0.00
67 M	m/p-Xylenes	0.721	0.651	9.7	96	0.00
68 M	o-Xylene	0.698	0.635	9.0	95	0.00
69 M	Styrene	1.180	1.031	12.6	93	0.00
70	Isopropylbenzene	1.843	1.681	8.8	98	0.00
71 M	1,1,2,2-Tetrachloroethane	0.503	0.462	8.2	95	0.00
72	1,2,3-Trichloropropane	0.441	0.408	7.5	96	0.00
73	Bromobenzene	0.423	0.365	13.7	92	0.00
74	n-propylbenzene	2.157	1.891	12.3	95	0.00
75	2-Chlorotoluene	1.346	1.213	9.9	96	0.00
76	1,3,5-Trimethylbenzene	1.539	1.379	10.4	94	0.00
77	t-1,4-Dichloro-2-butene	0.187	0.156	16.6	91	0.00
78	4-Chlorotoluene	1.365	1.195	12.5	94	0.00
79	tert-butylbenzene	1.346	1.180	12.3	92	0.00
80	1,2,4-Trimethylbenzene	1.555	1.383	11.1	95	0.00
81	sec-Butylbenzene	1.839	1.633	11.2	97	0.00
82	p-Isopropyltoluene	1.547	1.363	11.9	97	0.00
83 M	1,3-Dichlorobenzene	0.815	0.717	12.0	95	0.00
84 M	1,4-Dichlorobenzene	0.814	0.674	17.2	89	0.00
85	n-Butylbenzene	1.365	1.136	16.8	94	0.00
86 T	Hexachloroethane	0.293	0.260	11.3	97	0.00
87 M	1,2-Dichlorobenzene	0.791	0.694	12.3	95	0.00
88	1,2-Dibromo-3-Chloropropane	0.111	0.100	9.9	96	0.00
89	1,2,4-Trichlorobenzene	0.433	0.343	20.8	86	0.00
90	Hexachlorobutadiene	0.179	0.150	16.2	93	0.00
91 M	Naphthalene	1.416	1.147	19.0	88	0.00
92	1,2,3-Trichlorobenzene	0.433	0.343	20.8	86	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
Data File : VN083695.D
Acq On : 06 Sep 2024 14:35
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Quant Time: Sep 06 23:45:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	30.000	30.000	0.0	102	0.00
2 M	Dichlorodifluoromethane	20.000	18.305	8.5	95	0.00
3 M	Chloromethane	20.000	18.663	6.7	97	0.00
4 M	Vinyl Chloride	20.000	18.622	6.9	97	0.00
5 M	Bromomethane	20.000	17.912	10.4	92	0.00
6 M	Chloroethane	20.000	18.763	6.2	100	-0.01
7 M	Trichlorofluoromethane	20.000	18.470	7.7	98	0.00
8 T	Diethyl Ether	20.000	18.791	6.0	99	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	18.479	7.6	99	0.00
10 M	1,1-Dichloroethene	20.000	18.378	8.1	98	0.00
11	Methyl Iodide	20.000	18.347	8.3	97	-0.01
12	Methyl Acetate	20.000	18.200	9.0	101	0.00
13 M	Acrolein	100.000	104.937	-4.9	100	0.00
14 M	Acrylonitrile	100.000	90.791	9.2	97	0.00
15 M	Acetone	100.000	85.256	14.7	96	0.00
16 M	Carbon Disulfide	20.000	17.410	13.0	91	0.00
17	Allyl chloride	20.000	17.590	12.1	94	0.00
18 M	Methylene Chloride	20.000	18.184	9.1	95	0.00
19 M	trans-1,2-Dichloroethene	20.000	17.995	10.0	94	0.00
20 T	Diisopropyl ether	20.000	17.779	11.1	97	0.00
21 M	1,1-Dichloroethane	20.000	18.342	8.3	98	0.00
22 M	cis-1,2-Dichloroethene	20.000	18.142	9.3	95	0.00
23 M	tert-Butyl Alcohol	100.000	93.850	6.2	97	0.00
24 M	Methyl tert-Butyl Ether	20.000	18.391	8.0	96	0.00
25 M	Chloroform	20.000	18.167	9.2	95	0.00
26	Cyclohexane	20.000	18.166	9.2	97	0.00
27 s	1,2-Dichloroethane-d4	30.000	30.424	-1.4	103	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	100	0.00
29	1,1-Dichloropropene	20.000	17.850	10.7	94	0.00
30 M	2-Butanone	100.000	88.703	11.3	95	0.00
31	2,2-Dichloropropane	20.000	18.213	8.9	97	0.00
32 M	1,1,1-Trichloroethane	20.000	18.139	9.3	96	0.00
33 M	Carbon Tetrachloride	20.000	18.202	9.0	97	0.00
34 M	Benzene	20.000	18.440	7.8	96	0.00
35	Methacrylonitrile	20.000	18.821	5.9	97	0.00
36 M	1,2-Dichloroethane	20.000	18.630	6.9	98	0.00
37 M	Trichloroethene	20.000	18.345	8.3	99	0.00
38	Methylcyclohexane	20.000	17.848	10.8	96	0.00
39 M	1,2-Dichloropropane	20.000	18.895	5.5	100	0.00
40	Dibromomethane	20.000	18.272	8.6	94	0.00
41 M	Bromodichloromethane	20.000	18.098	9.5	97	0.00
42 M	Vinyl Acetate	100.000	82.960	17.0	94	0.00
43	Ethyl Acetate	20.000	18.441	7.8	96	0.00
44	Isopropyl Acetate	20.000	18.183	9.1	96	0.00
45 T	1,4-Dioxane	400.000	389.428	2.6	97	0.00
46	Methyl methacrylate	20.000	18.598	7.0	100	0.00
47	n-amyl Acetate	20.000	18.382	8.1	99	0.00
48 M	t-1,3-Dichloropropene	20.000	17.011	14.9	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
Data File : VN083695.D
Acq On : 06 Sep 2024 14:35
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090624

Quant Time: Sep 06 23:45:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	20.000	17.769	11.2	96	0.00
50 M	1,1,2-Trichloroethane	20.000	18.465	7.7	97	0.00
51	Ethyl methacrylate	20.000	17.893	10.5	93	0.00
52	1,3-Dichloropropane	20.000	18.033	9.8	95	0.00
53 M	Dibromochloromethane	20.000	17.998	10.0	98	0.00
54 M	1,2-Dibromoethane	20.000	18.052	9.7	96	0.00
55 M	2-Chloroethyl vinyl ether	100.000	89.240	10.8	84	0.00
56 M	Bromoform	20.000	17.360	13.2	94	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	100	0.00
58 M	4-Methyl-2-Pentanone	100.000	93.719	6.3	97	0.00
59 M	2-Hexanone	100.000	91.318	8.7	96	0.00
60 S	4-Bromofluorobenzene	30.000	29.363	2.1	100	0.00
61 M	Tetrachloroethene	20.000	17.644	11.8	96	0.00
62 M	Toluene	20.000	18.193	9.0	96	0.00
63 S	Toluene-d8	30.000	30.014	-0.0	100	0.00
64 M	Chlorobenzene	20.000	17.878	10.6	94	0.00
65	1,1,1,2-Tetrachloroethane	20.000	18.692	6.5	99	0.00
66 M	Ethyl Benzene	20.000	17.796	11.0	97	0.00
67 M	m/p-Xylenes	40.000	36.072	9.8	96	0.00
68 M	o-Xylene	20.000	18.197	9.0	95	0.00
69 M	Styrene	20.000	17.479	12.6	93	0.00
70	Isopropylbenzene	20.000	18.246	8.8	98	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	18.347	8.3	95	0.00
72	1,2,3-Trichloropropane	20.000	18.507	7.5	96	0.00
73	Bromobenzene	20.000	17.272	13.6	92	0.00
74	n-propylbenzene	20.000	17.536	12.3	95	0.00
75	2-Chlorotoluene	20.000	18.021	9.9	96	0.00
76	1,3,5-Trimethylbenzene	20.000	17.923	10.4	94	0.00
77	t-1,4-Dichloro-2-butene	20.000	16.682	16.6	91	0.00
78	4-Chlorotoluene	20.000	17.508	12.5	94	0.00
79	tert-butylbenzene	20.000	17.537	12.3	92	0.00
80	1,2,4-Trimethylbenzene	20.000	17.779	11.1	95	0.00
81	sec-Butylbenzene	20.000	17.765	11.2	97	0.00
82	p-Isopropyltoluene	20.000	17.619	11.9	97	0.00
83 M	1,3-Dichlorobenzene	20.000	17.609	12.0	95	0.00
84 M	1,4-Dichlorobenzene	20.000	16.562	17.2	89	0.00
85	n-Butylbenzene	20.000	16.647	16.8	94	0.00
86 T	Hexachloroethane	20.000	17.706	11.5	97	0.00
87 M	1,2-Dichlorobenzene	20.000	17.551	12.2	95	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	18.041	9.8	96	0.00
89	1,2,4-Trichlorobenzene	20.000	15.835	20.8	86	0.00
90	Hexachlorobutadiene	20.000	16.708	16.5	93	0.00
91 M	Naphthalene	20.000	16.206	19.0	88	0.00
92	1,2,3-Trichlorobenzene	20.000	15.835	20.8	86	0.00

(#) = Out of Range

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845

Instrument ID: MSVOA_N Calibration Date/Time: 09/09/2024 08:57

Lab File ID: VN083706.D Init. Calib. Date(s): 09/06/2024 09/06/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:58 13:33

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

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	2.009	1.911		-4.88	
Chloromethane	2.087	2.058		-1.39	
Vinyl Chloride	2.146	2.071	0.1	-3.49	
Ethyl Acetate	0.451	0.471		4.43	
Isopropyl Acetate	0.781	0.793		1.54	
Bromomethane	1.199	1.111	0.1	-7.34	
Chloroethane	1.437	1.570		9.26	
Trichlorofluoromethane	3.598	3.441		-4.36	
1,1,2-Trichlorotrifluoroethane	1.932	1.836		-4.97	
tert-Butyl Alcohol	0.334	0.367		9.88	
Diethyl Ether	1.222	1.216		-0.49	
1,1-Dichloroethene	1.865	1.750	0.1	-6.17	
Acrolein	0.328	0.360		9.76	
Acrylonitrile	0.910	0.944		3.74	
Acetone	0.302	0.356		17.88	
Carbon Disulfide	5.270	4.821		-8.5	
Methyl tert-Butyl Ether	6.626	6.475		-2.28	
Methyl Acetate	2.249	2.172		-3.42	
Methylene Chloride	2.040	1.990		-2.45	
trans-1,2-Dichloroethene	1.932	1.793		-7.2	
Vinyl Acetate	0.922	0.830		-9.98	
1,1-Dichloroethane	3.770	3.622	0.2	-3.93	
Cyclohexane	0.564	0.526		-6.74	
2-Butanone	0.224	0.244		8.93	
Carbon Tetrachloride	0.550	0.519	0.1	-5.64	
2,2-Dichloropropane	0.607	0.591		-2.64	
cis-1,2-Dichloroethene	2.352	2.233		-5.06	
Chloroform	3.995	3.797	0.2	-4.96	
1,1,1-Trichloroethane	0.635	0.605	0.1	-4.72	
Methylcyclohexane	0.570	0.522		-8.42	
1,1-Dichloropropene	0.476	0.443		-6.93	
Benzene	1.428	1.347	0.5	-5.67	
1,2-Dichloroethane	0.537	0.515	0.1	-4.1	
Trichloroethene	0.335	0.313	0.3	-6.57	
1,2-Dichloropropane	0.344	0.332		-3.49	
Dibromomethane	0.251	0.236		-5.98	
Bromodichloromethane	0.534	0.510	0.2	-4.49	
4-Methyl-2-Pentanone	0.476	0.508		6.72	

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845
 Instrument ID: MSVOA_N Calibration Date/Time: 09/09/2024 08:57
 Lab File ID: VN083706.D Init. Calib. Date(s): 09/06/2024 09/06/2024
 Heated Purge: (Y/N) N Init. Calib. Time(s): 11:58 13:33
 GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Toluene	1.724	1.634	0.4	-5.22	
t-1,3-Dichloropropene	0.562	0.511	0.1	-9.07	
cis-1,3-Dichloropropene	0.584	0.547	0.2	-6.34	
1,1,2-Trichloroethane	0.320	0.317	0.1	-0.94	
1,3-Dichloropropane	0.577	0.549		-4.85	
2-Chloroethyl vinyl ether	0.218	0.233		6.88	
2-Hexanone	0.359	0.387		7.8	
Dibromochloromethane	0.383	0.368	0.1	-3.92	
1,2-Dibromoethane	0.331	0.314		-5.14	
Tetrachloroethene	0.317	0.306	0.2	-3.47	
Chlorobenzene	1.068	1.012	0.5	-5.24	
1,1,1,2-Tetrachloroethane	0.372	0.367		-1.34	
Hexachloroethane	0.293	0.275		-6.14	
Ethyl Benzene	1.961	1.804	0.1	-8.01	
m/p-Xylenes	0.721	0.677	0.3	-6.1	
o-Xylene	0.698	0.660	0.3	-5.44	
Styrene	1.180	1.060	0.3	-10.17	
Bromoform	0.244	0.230	0.1	-5.74	
Isopropylbenzene	1.843	1.715		-6.95	
1,1,2,2-Tetrachloroethane	0.503	0.504	0.3	0.2	
1,2,3-Trichloropropane	0.441	0.443		0.45	
Bromobenzene	0.423	0.390		-7.8	
n-propylbenzene	2.157	1.932		-10.43	
2-Chlorotoluene	1.346	1.246		-7.43	
1,3,5-Trimethylbenzene	1.539	1.452		-5.65	
4-Chlorotoluene	1.365	1.195		-12.45	
tert-butylbenzene	1.346	1.288		-4.31	
1,2,4-Trimethylbenzene	1.555	1.443		-7.2	
sec-Butylbenzene	1.839	1.648		-10.39	
p-Isopropyltoluene	1.547	1.398		-9.63	
1,3-Dichlorobenzene	0.815	0.711	0.2	-12.76	
1,4-Dichlorobenzene	0.814	0.698	0.2	-14.25	
n-Butylbenzene	1.365	1.180		-13.55	
1,2-Dichlorobenzene	0.791	0.716	0.2	-9.48	
1,2-Dibromo-3-Chloropropane	0.111	0.116		4.51	
1,2,4-Trichlorobenzene	0.433	0.365	0.2	-15.7	
Hexachlorobutadiene	0.179	0.167		-6.7	
Naphthalene	1.416	1.214		-14.27	

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845
 Instrument ID: MSVOA_N Calibration Date/Time: 09/09/2024 08:57
 Lab File ID: VN083706.D Init. Calib. Date(s): 09/06/2024 09/06/2024
 Heated Purge: (Y/N) N Init. Calib. Time(s): 11:58 13:33
 GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
1,2,3-Trichlorobenzene	0.433	0.365		-15.7	
1,2-Dichloroethane-d4	2.742	2.778	0.01	1.31	
Toluene-d8	1.389	1.425	0.01	2.59	
4-Bromofluorobenzene	0.517	0.526	0.2	1.74	
n-amyl Acetate	0.692	0.678		-2.02	
Allyl chloride	3.270	3.175		-2.9	
t-1,4-Dichloro-2-butene	0.187	0.184		-1.6	
Methacrylonitrile	0.252	0.237		-5.95	
1,4-Dioxane	6.091	6.602		8.39	
Methyl methacrylate	0.378	0.379		0.26	

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\VN090924\
 Data File : VN083706.D
 Acq On : 09 Sep 2024 08:57
 Operator : JC\MD
 Sample : VSTDCCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024

Quant Time: Sep 10 01:14:19 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
Internal Standards							
1) Bromochloromethane	7.806	128	29901	30.000	ug/l	0.00	
28) 1,4-Difluorobenzene	9.100	114	176779	30.000	ug/l	0.00	
57) Chlorobenzene-d5	11.865	117	156716	30.000	ug/l	0.00	
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.577	65	83052	30.387	ug/l	0.00	
Spiked Amount	30.000	Range	91 - 110	Recovery	= 101.300%		
60) 4-Bromofluorobenzene	12.847	95	82449	30.526	ug/l	0.00	
Spiked Amount	30.000	Range	63 - 112	Recovery	= 101.767%		
63) Toluene-d8	10.565	98	223252	30.766	ug/l	0.00	
Spiked Amount	30.000	Range	91 - 112	Recovery	= 102.567%		
Target Compounds							
2) Dichlorodifluoromethane	2.124	85	38084	19.019	ug/l		99
3) Chloromethane	2.359	50	41028	19.720	ug/l		97
4) Vinyl Chloride	2.512	62	41290	19.305	ug/l		93
5) Bromomethane	2.906	94	22149	18.535	ug/l		96
6) Chloroethane	3.083	64	31289	21.846	ug/l		98
7) Trichlorofluoromethane	3.471	101	68585	19.127	ug/l		99
8) Diethyl Ether	3.959	74	24246	19.900	ug/l		91
9) 1,1,2-Trichlorotrifluo...	4.359	101	36605m	19.005	ug/l		
10) 1,1-Dichloroethene	4.330	96	34892	18.775	ug/l		86
11) Methyl Iodide	4.577	142	47213m	18.703	ug/l		
12) Methyl Acetate	5.018	43	43298	19.319	ug/l #		84
13) Acrolein	4.171	56	35907	109.778	ug/l		100
14) Acrylonitrile	5.712	53	94104	103.754	ug/l		99
15) Acetone	4.436	58	35532	118.098	ug/l		92
16) Carbon Disulfide	4.700	76	96107	18.299	ug/l		100
17) Allyl chloride	5.012	41	63286	19.419	ug/l		88
18) Methylene Chloride	5.265	84	39672	19.512	ug/l		89
19) trans-1,2-Dichloroethene	5.777	96	35747	18.559	ug/l		90
20) Diisopropyl ether	6.665	45	124845	18.969	ug/l		96
21) 1,1-Dichloroethane	6.559	63	72208	19.216	ug/l		96
22) cis-1,2-Dichloroethene	7.477	96	44516	18.989	ug/l		90
23) tert-Butyl Alcohol	5.536	59	36610	109.997	ug/l #		100
24) Methyl tert-Butyl Ether	5.794	73	129074	19.544	ug/l #		87
25) Chloroform	7.965	83	75687	19.007	ug/l		97
26) Cyclohexane	8.253	56	62003	18.735	ug/l #		88
29) 1,1-Dichloropropene	8.365	75	52261	18.638	ug/l		97
30) 2-Butanone	7.482	43	143941	108.902	ug/l		94
31) 2,2-Dichloropropane	7.488	77	69649	19.483	ug/l #		74
32) 1,1,1-Trichloroethane	8.171	97	71346	19.053	ug/l		97
33) Carbon Tetrachloride	8.359	117	61119	18.847	ug/l		97
34) Benzene	8.606	78	158704	18.864	ug/l		98
35) Methacrylonitrile	7.777	41	27914	18.787	ug/l		89
36) 1,2-Dichloroethane	8.671	62	60679	19.185	ug/l		95
37) Trichloroethene	9.347	130	36905	18.680	ug/l		93
38) Methylcyclohexane	9.600	83	61515	18.325	ug/l		96
39) 1,2-Dichloropropane	9.623	63	39075	19.298	ug/l		96
40) Dibromomethane	9.706	93	27867	18.822	ug/l		96
41) Bromodichloromethane	9.882	83	60049	19.073	ug/l		99
42) Vinyl Acetate	6.594	43	488870	89.959	ug/l		97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
 Data File : VN083706.D
 Acq On : 09 Sep 2024 08:57
 Operator : JC\MD
 Sample : VSTDCCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024

Quant Time: Sep 10 01:14:19 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	55482	20.855	ug/l	100
44) Isopropyl Acetate	8.688	43	93405	20.299	ug/l	91
45) 1,4-Dioxane	9.694	88	15561	433.581	ug/l #	92
46) Methyl methacrylate	9.676	41	44628	20.038	ug/l	77
47) n-amyl Acetate	12.494	43	79859	19.593	ug/l	90
48) t-1,3-Dichloropropene	10.835	75	60272	18.200	ug/l	99
49) cis-1,3-Dichloropropene	10.312	75	64409	18.702	ug/l #	84
50) 1,1,2-Trichloroethane	11.018	97	37367	19.835	ug/l	96
51) Ethyl methacrylate	10.876	69	61944	19.246	ug/l	83
52) 1,3-Dichloropropane	11.159	76	64754	19.033	ug/l	96
53) Dibromochloromethane	11.359	129	43421	19.216	ug/l	98
54) 1,2-Dibromoethane	11.470	107	36980	18.974	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	137269	107.016	ug/l	99
56) Bromoform	12.576	173	27115	18.888	ug/l #	97
58) 4-Methyl-2-Pentanone	10.441	43	265314	106.770	ug/l #	88
59) 2-Hexanone	11.194	43	202111	107.641	ug/l	89
61) Tetrachloroethene	11.100	164	31929	19.251	ug/l	91
62) Toluene	10.629	91	170699	18.950	ug/l	99
64) Chlorobenzene	11.894	112	105745	18.961	ug/l	94
65) 1,1,1,2-Tetrachloroethane	11.959	131	38339	19.734	ug/l	99
66) Ethyl Benzene	11.965	91	188510	18.403	ug/l	98
67) m/p-Xylenes	12.070	106	141462	37.536	ug/l	99
68) o-Xylene	12.400	106	68923	18.896	ug/l	97
69) Styrene	12.412	104	110730	17.967	ug/l	97
70) Isopropylbenzene	12.694	105	179225	18.620	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	52680	20.038	ug/l	99
72) 1,2,3-Trichloropropane	12.994	75	46294m	20.084	ug/l	
73) Bromobenzene	12.982	156	40749	18.431	ug/l	94
74) n-propylbenzene	13.035	91	201798	17.909	ug/l	99
75) 2-Chlorotoluene	13.123	91	130171	18.510	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	151739	18.872	ug/l	98
77) t-1,4-Dichloro-2-butene	12.741	75	19214	19.721	ug/l	92
78) 4-Chlorotoluene	13.223	91	124849	17.506	ug/l	99
79) tert-butylbenzene	13.441	119	134556	19.138	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	150807	18.560	ug/l	100
81) sec-Butylbenzene	13.617	105	172200	17.928	ug/l	100
82) p-Isopropyltoluene	13.729	119	146044	18.072	ug/l	97
83) 1,3-Dichlorobenzene	13.735	146	74259	17.451	ug/l	98
84) 1,4-Dichlorobenzene	13.811	146	72920	17.141	ug/l	98
85) n-Butylbenzene	14.053	91	123241	17.282	ug/l	98
86) Hexachloroethane	14.335	117	28763	18.782	ug/l	89
87) 1,2-Dichlorobenzene	14.106	146	74800	18.113	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	12068	20.888	ug/l	89
89) 1,2,4-Trichlorobenzene	15.841	180	38107	16.843	ug/l	99
90) Hexachlorobutadiene	15.500	225	17487	18.674	ug/l	97
91) Naphthalene	15.641	128	126878	17.154	ug/l	100
92) 1,2,3-Trichlorobenzene	15.841	180	38107	16.843	ug/l	99

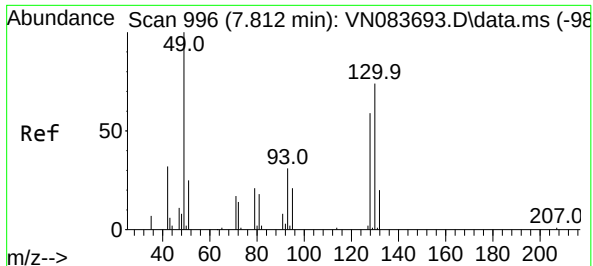
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Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations

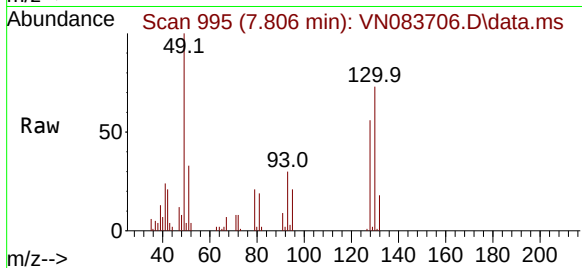
Supervised By :Mahesh
Dadoda
09/10/2024





#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.806 min Scan# 91
Delta R.T. -0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

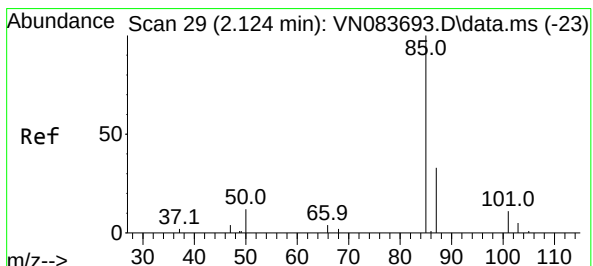
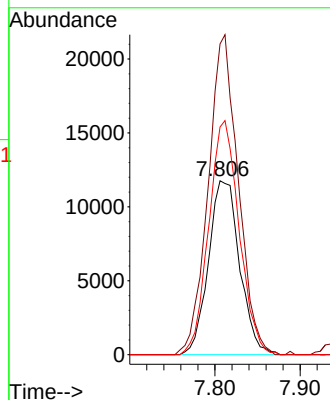
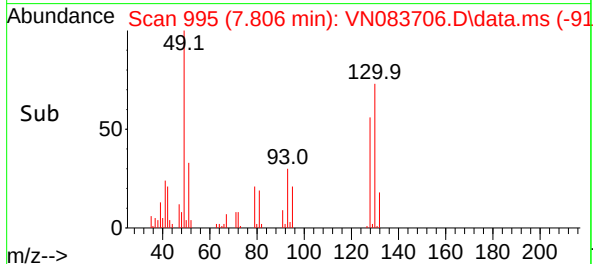


Tgt Ion: 128 Resp: 2990
Ion Ratio Lower Upper
128 100
49 177.2 0.0 403.7
130 131.3 0.0 323.3

Manual Integrations
APPROVED

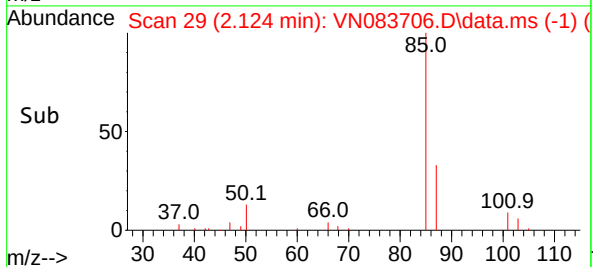
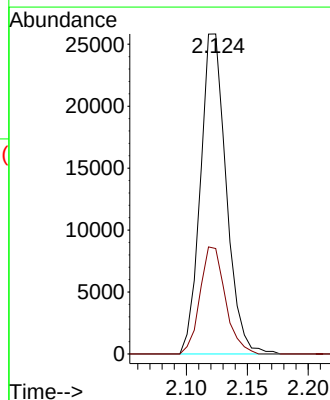
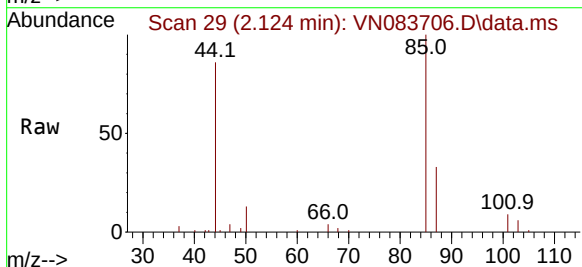
Reviewed By : John Carlone 09/10/2024
Supervised By : Mahesh Dadoda 09/10/2024

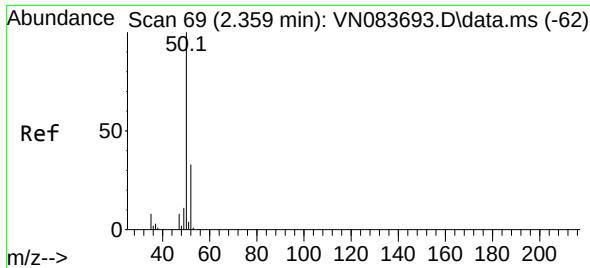
Supervised By : Mahesh
Dadoda
09/10/2024



#2
Dichlorodifluoromethane
Concen: 19.019 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

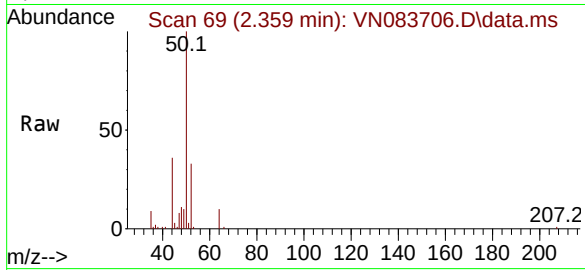
Tgt Ion: 85 Resp: 38084
Ion Ratio Lower Upper
85 100
87 33.0 16.8 50.3





#3
Chloromethane
Concen: 19.720 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

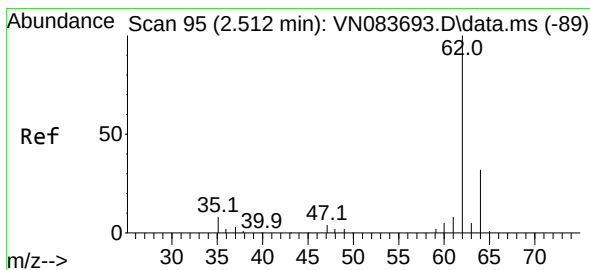
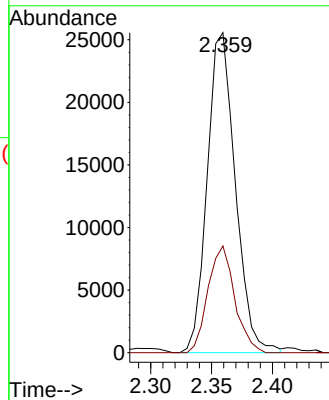


Tgt Ion: 50 Resp: 41028
Ion Ratio Lower Upper
50 100
52 33.3 25.4 38.0

Manual Integrations
APPROVED

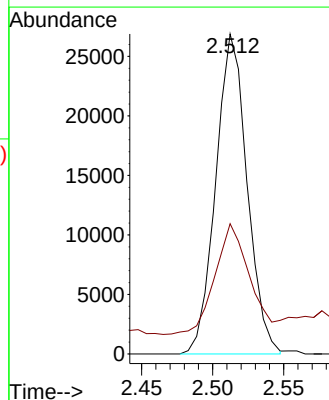
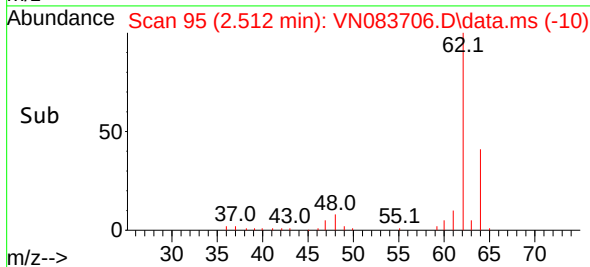
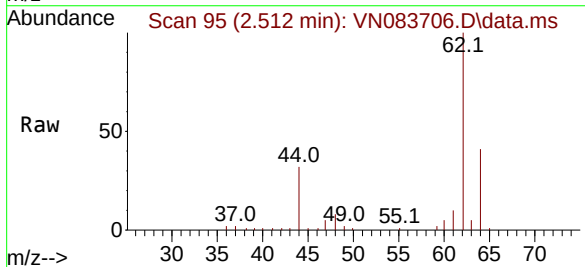
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

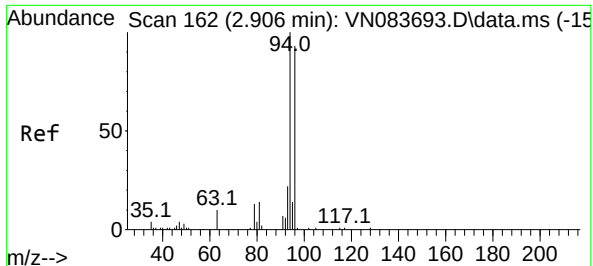
Supervised By :Mahesh
Dadoda
09/10/2024



#4
Vinyl Chloride
Concen: 19.305 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 62 Resp: 41290
Ion Ratio Lower Upper
62 100
64 33.8 24.1 36.1





#5
Bromomethane
Concen: 18.535 ug/l
RT: 2.906 min Scan# 162
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

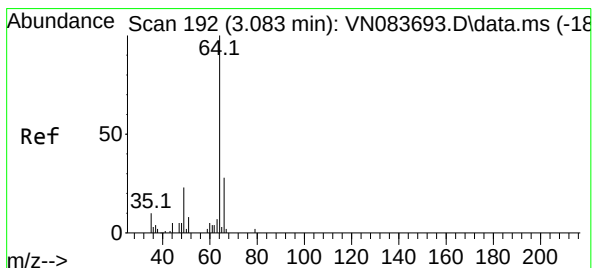
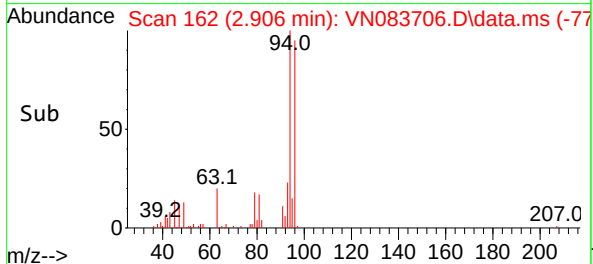
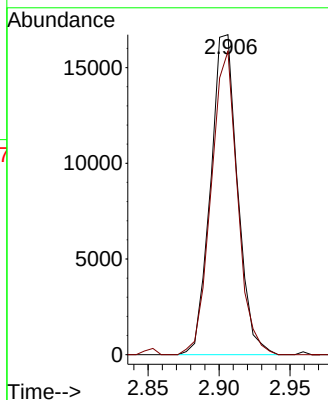
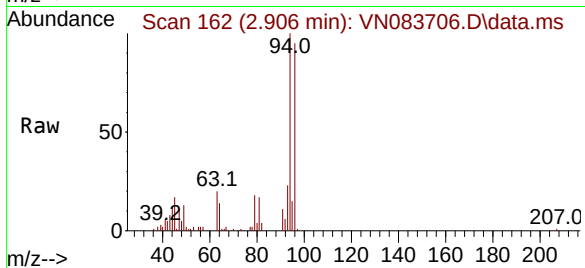
Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion: 94 Resp: 22149
Ion Ratio Lower Upper
94 100
96 94.8 72.8 109.2

Manual Integrations
APPROVED

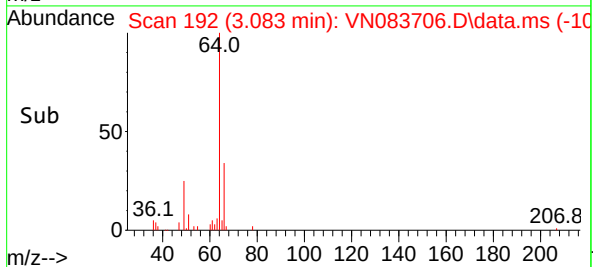
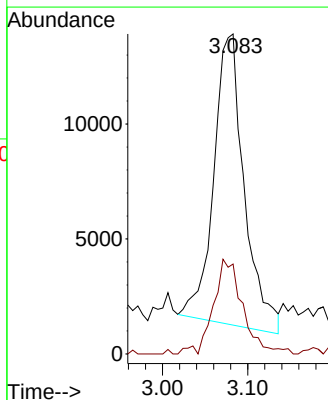
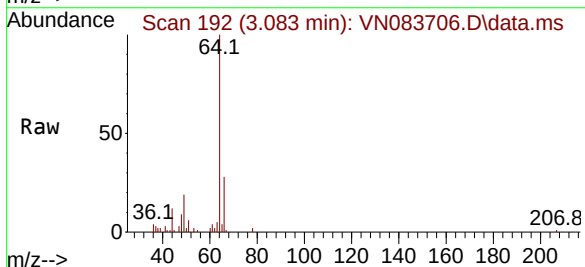
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

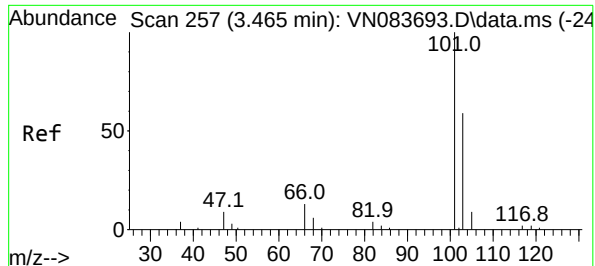
Supervised By :Mahesh
Dadoda
09/10/2024



#6
Chloroethane
Concen: 21.846 ug/l
RT: 3.083 min Scan# 192
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 64 Resp: 31289
Ion Ratio Lower Upper
64 100
66 32.1 26.7 40.1





#7
Trichlorofluoromethane
Concen: 19.127 ug/l
RT: 3.471 min Scan# 210
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

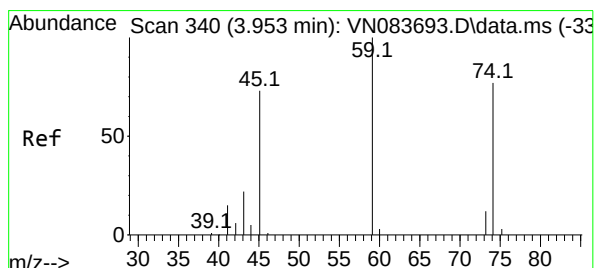
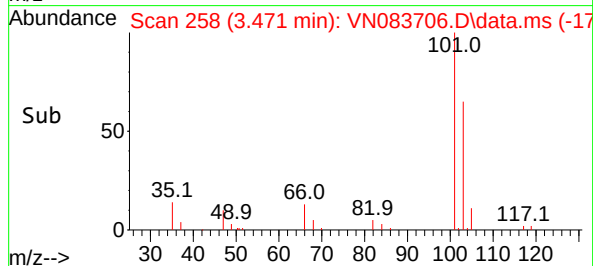
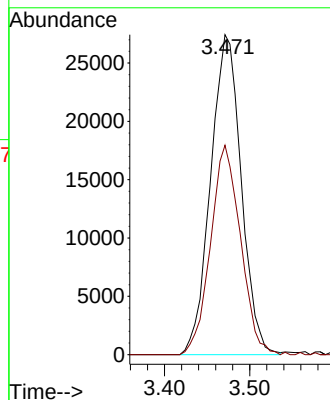
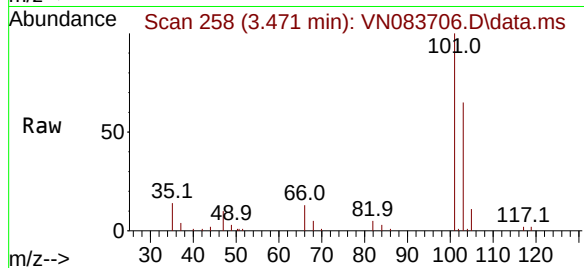
Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

Tgt Ion:101 Resp: 6858
Ion Ratio Lower Upper
101 100
103 65.5 53.0 79.4

Manual Integrations
APPROVED

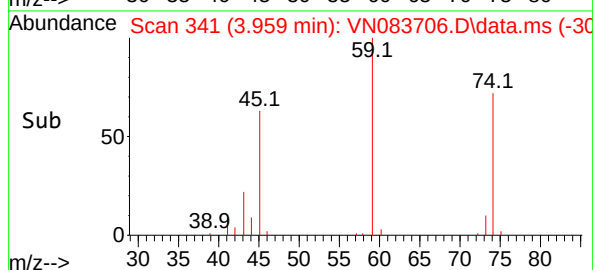
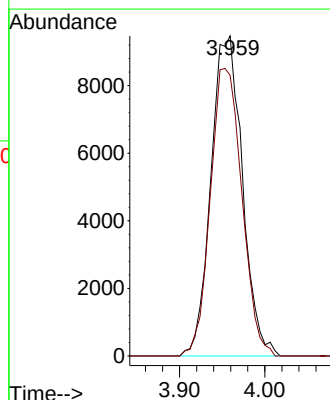
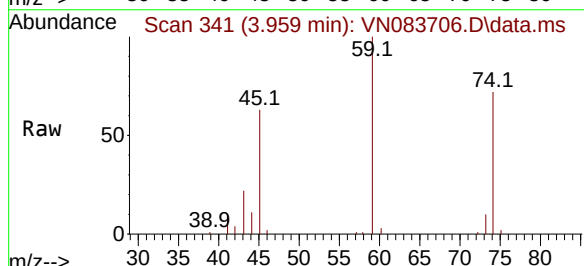
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

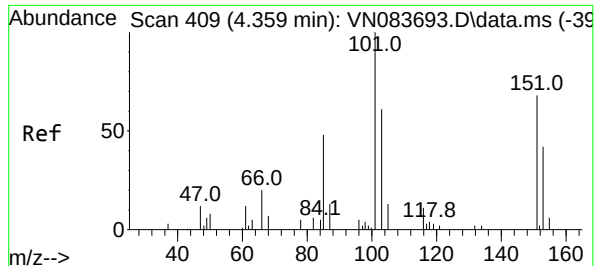
Supervised By :Mahesh
Dadoda
09/10/2024



#8
Diethyl Ether
Concen: 19.900 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 74 Resp: 24246
Ion Ratio Lower Upper
74 100
45 90.4 16.4 147.4





#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.005 ug/l m
RT: 4.359 min Scan# 409
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

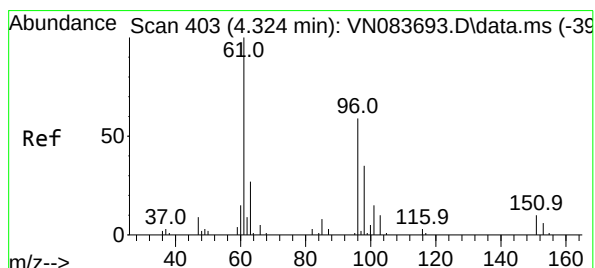
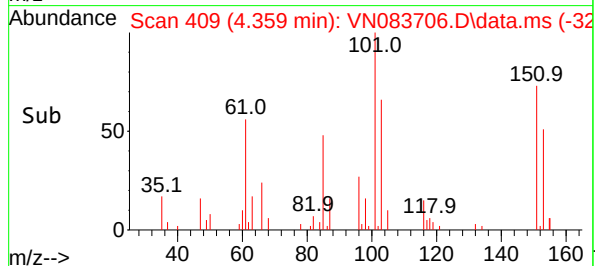
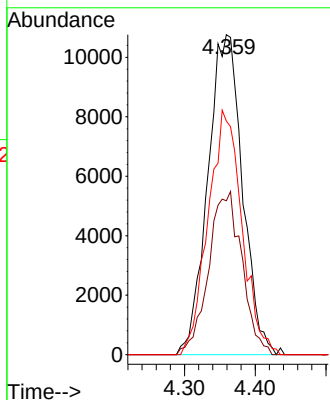
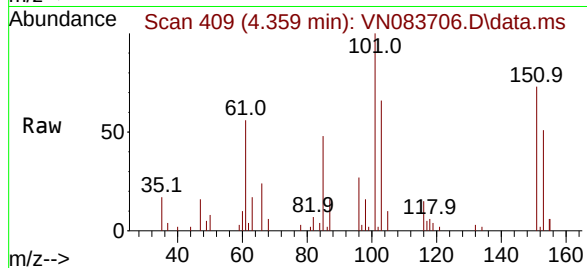
Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion: 101 Resp: 3660
Ion Ratio Lower Upper
101 100
85 49.1 0.0 90.6
151 74.4 0.0 157.6

Manual Integrations
APPROVED

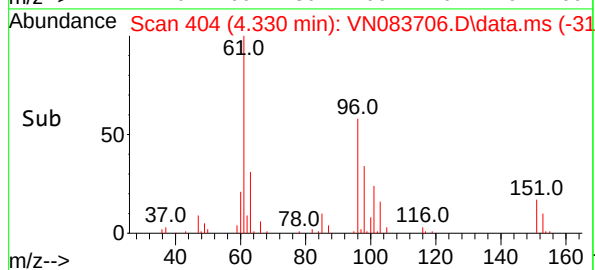
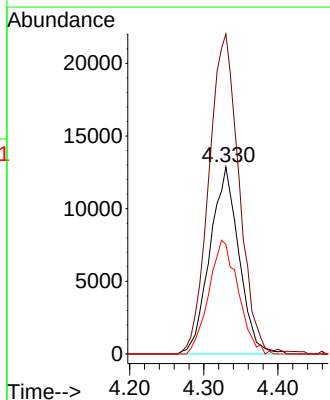
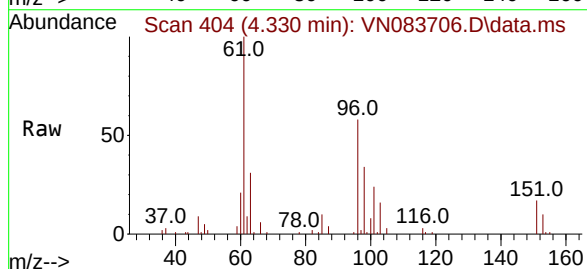
Reviewed By : John Carlone 09/10/2024
Supervised By : Mahesh Dadoda 09/10/2024

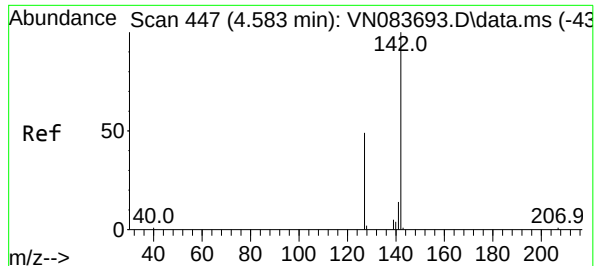
Supervised By : Mahesh
Dadoda
09/10/2024



#10
1,1-Dichloroethene
Concen: 18.775 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 96 Resp: 34892
Ion Ratio Lower Upper
96 100
61 171.2 117.6 176.4
98 58.6 48.4 72.6





#11

Methyl Iodide

Concen: 18.703 ug/l m

RT: 4.577 min Scan# 447

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

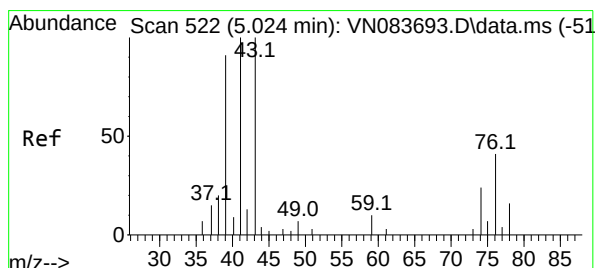
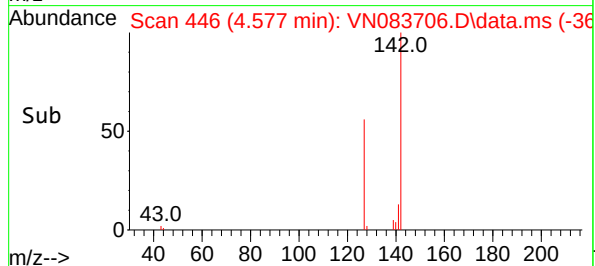
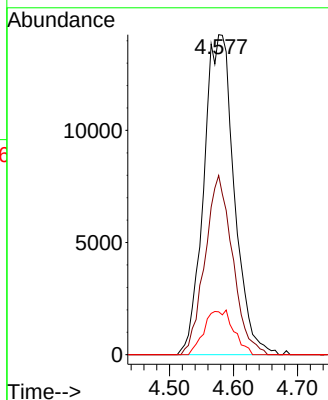
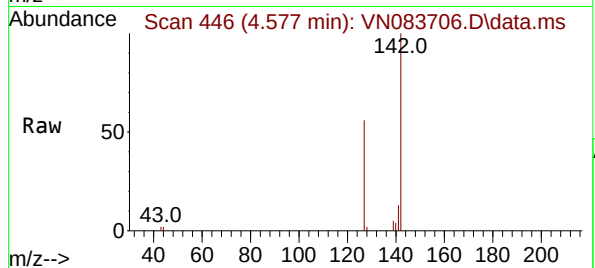
VSTDCCC020

Tgt Ion:	142	Resp:	4721
Ion	Ratio	Lower	Upper
142	100		
127	56.0	26.3	78.9
141	13.4	8.3	24.9

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh
Dadoda
09/10/2024



#12

Methyl Acetate

Concen: 19.319 ug/l

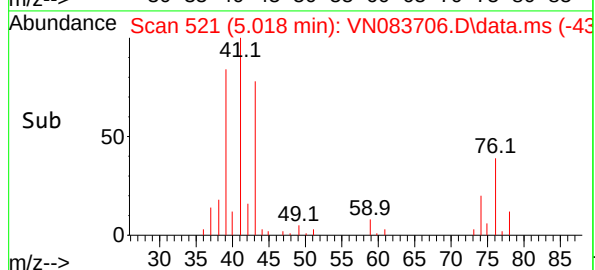
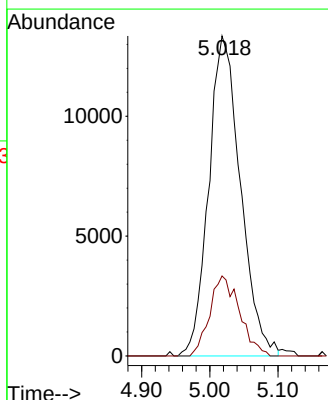
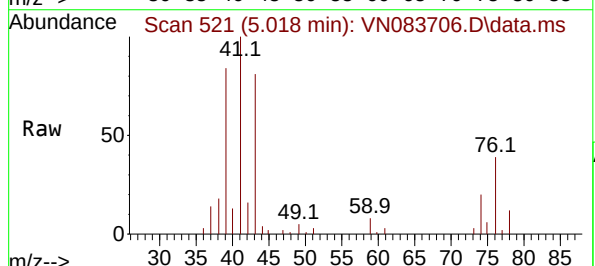
RT: 5.018 min Scan# 521

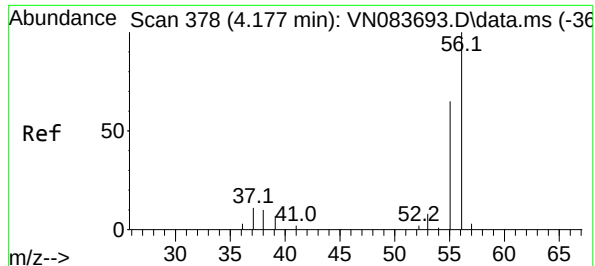
Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Tgt Ion:	43	Resp:	43298
Ion	Ratio	Lower	Upper
43	100		
74	25.2	27.7	41.5#





#13

Acrolein

Concen: 109.778 ug/l

RT: 4.171 min Scan# 31

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDC0020

Tgt Ion: 56 Resp: 3590

Ion Ratio Lower Upper

56 100

55 69.6 55.5 83.3

Manual Integrations

APPROVED

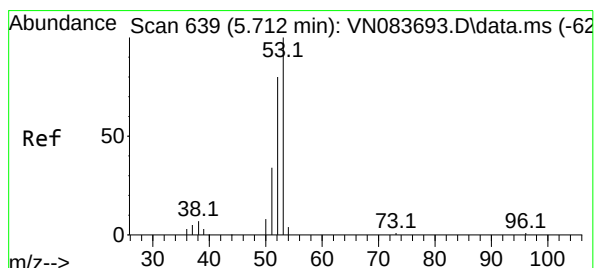
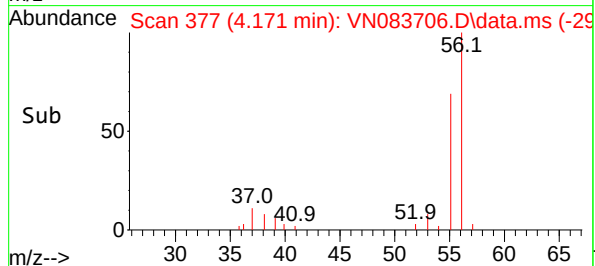
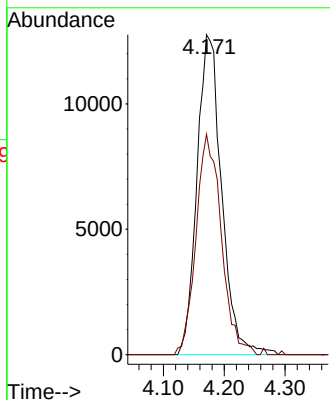
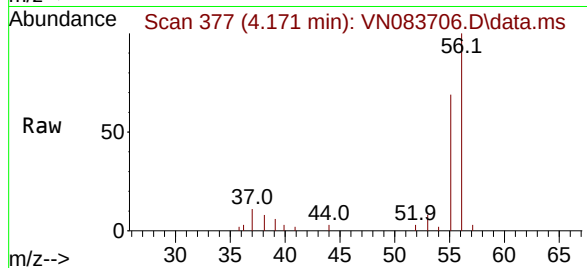
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#14

Acrylonitrile

Concen: 103.754 ug/l

RT: 5.712 min Scan# 639

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

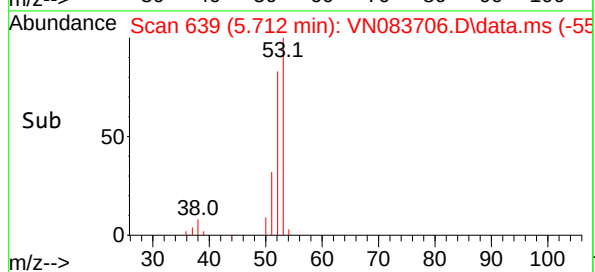
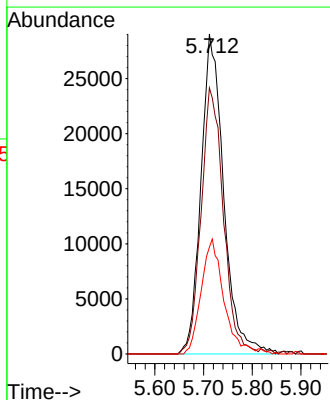
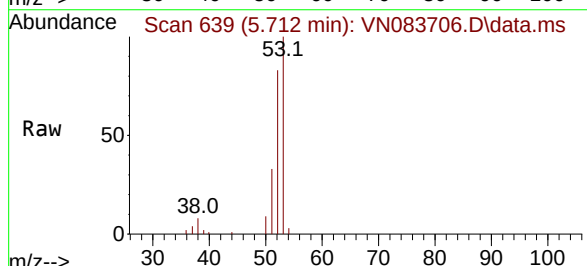
Tgt Ion: 53 Resp: 94104

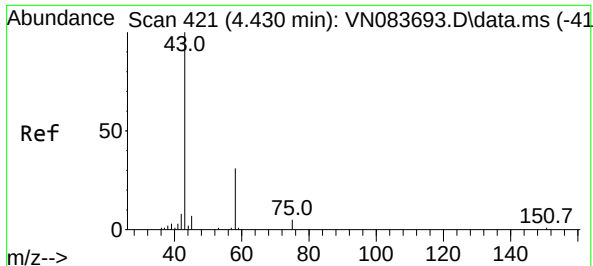
Ion Ratio Lower Upper

53 100

52 81.3 41.3 123.9

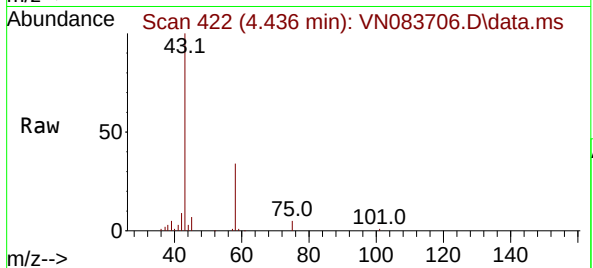
51 34.3 16.8 50.3





#15
Acetone
Concen: 118.098 ug/l
RT: 4.436 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

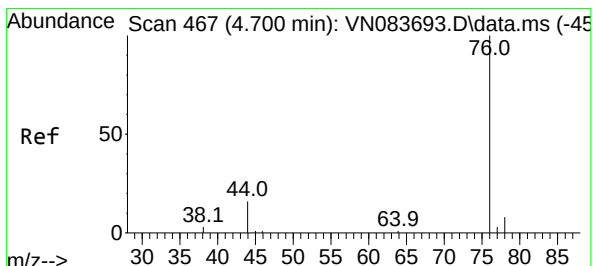
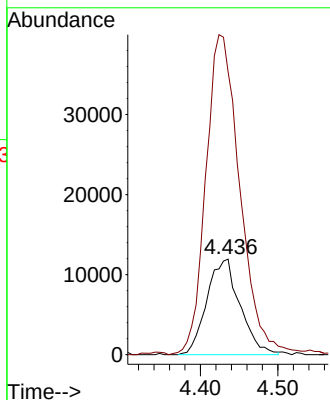
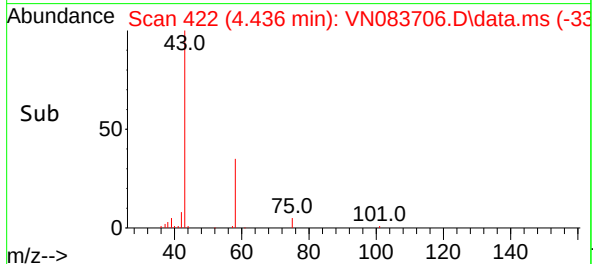


Tgt Ion: 58 Resp: 3553
Ion Ratio Lower Upper
58 100
43 293.7 223.1 334.7

Manual Integrations
APPROVED

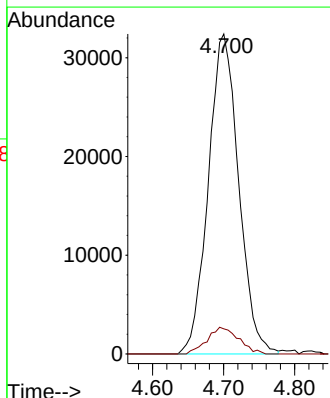
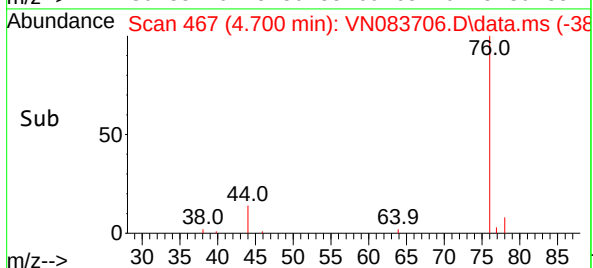
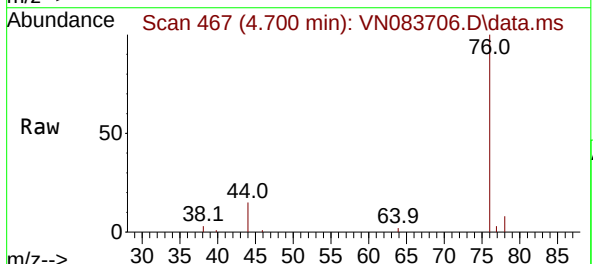
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

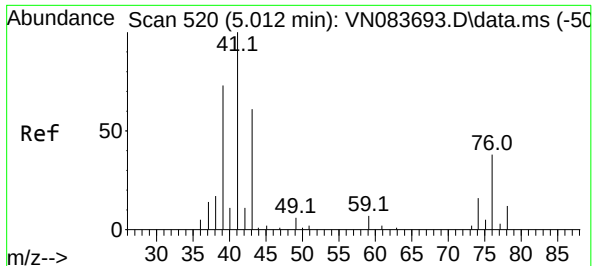
Supervised By :Mahesh
Dadoda
09/10/2024



#16
Carbon Disulfide
Concen: 18.299 ug/l
RT: 4.700 min Scan# 467
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 76 Resp: 96107
Ion Ratio Lower Upper
76 100
78 7.8 6.3 9.5





#17

Allyl chloride

Concen: 19.419 ug/l

RT: 5.012 min Scan# 51

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDC020

Tgt Ion: 41 Resp: 6328

Ion Ratio Lower Upper

41

100

39

76

79.1

39.5

37.6

27.8

112.9

83.4

Manual Integrations

APPROVED

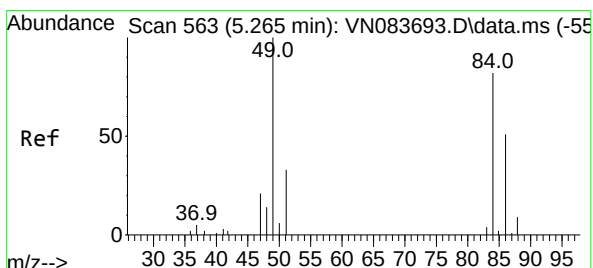
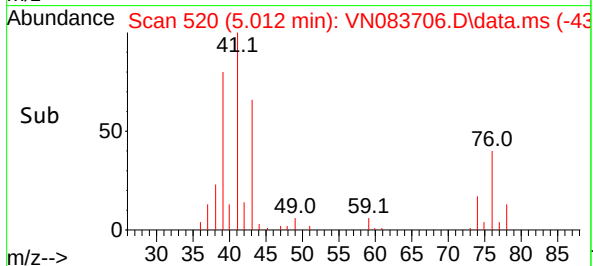
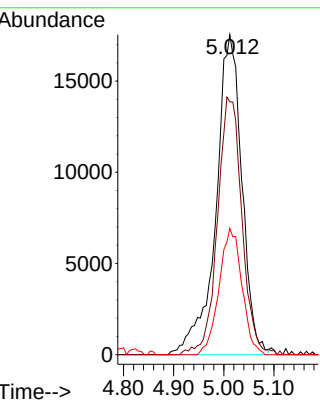
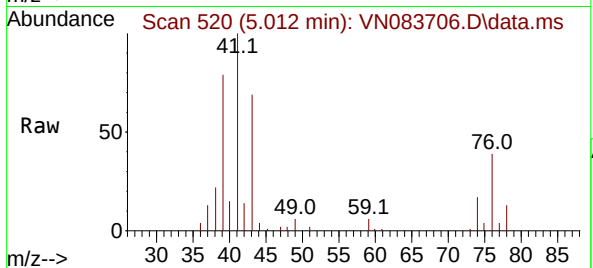
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#18

Methylene Chloride

Concen: 19.512 ug/l

RT: 5.265 min Scan# 563

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Tgt Ion: 84 Resp: 39672

Ion Ratio Lower Upper

84

100

49

51

86

125.9

41.1

64.1

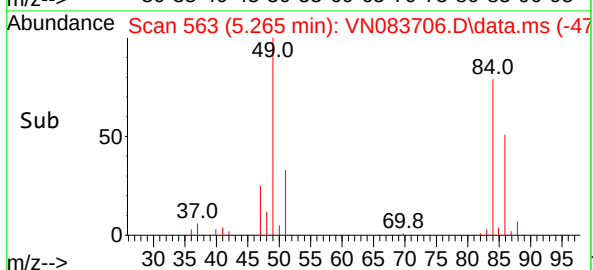
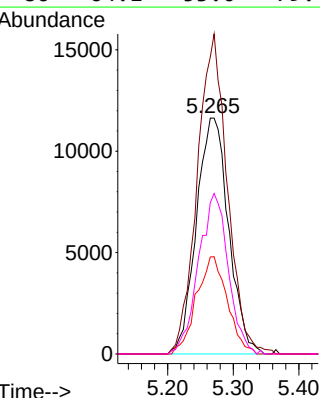
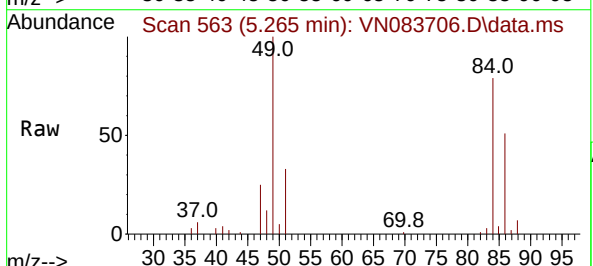
86.0

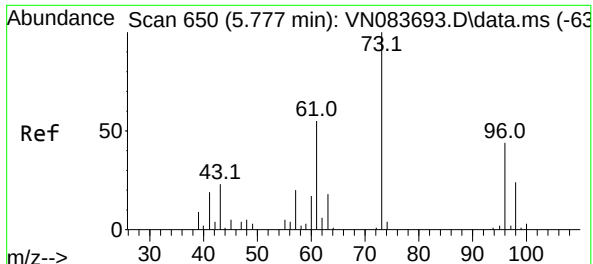
53.0

129.0

45.0

79.4





#19

trans-1,2-Dichloroethene

Concen: 18.559 ug/l

RT: 5.777 min Scan# 61

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 96 Resp: 3574

Ion Ratio Lower Upper

96 100

61 157.3 111.8 167.6

98 61.3 49.2 73.8

Manual Integrations

APPROVED

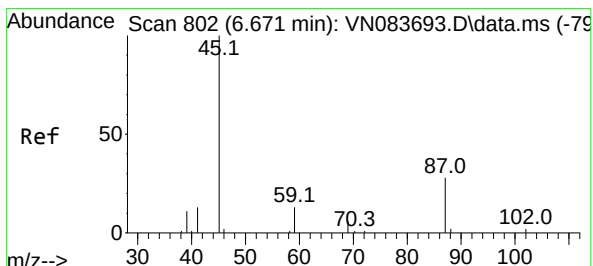
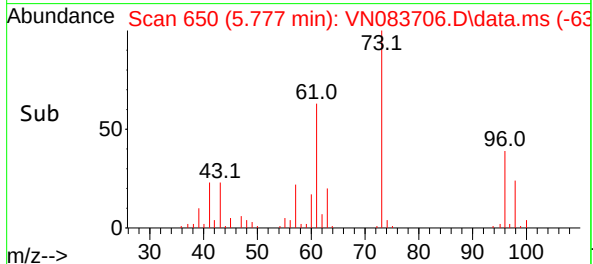
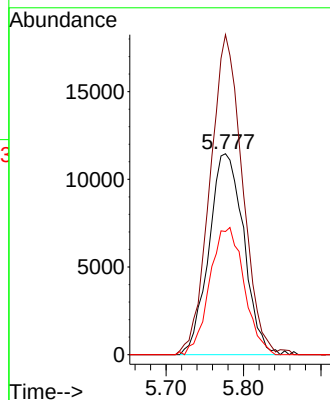
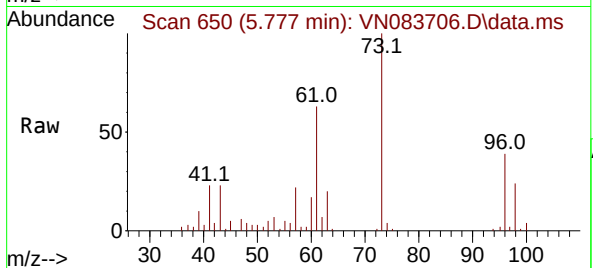
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#20

Diisopropyl ether

Concen: 18.969 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Tgt Ion: 45 Resp: 124845

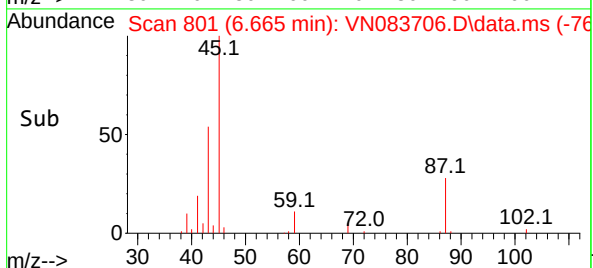
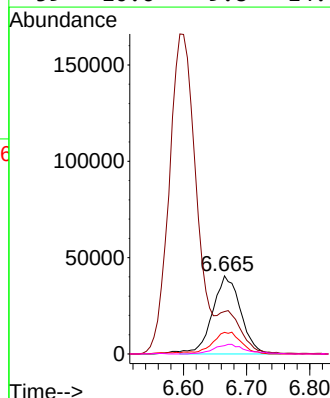
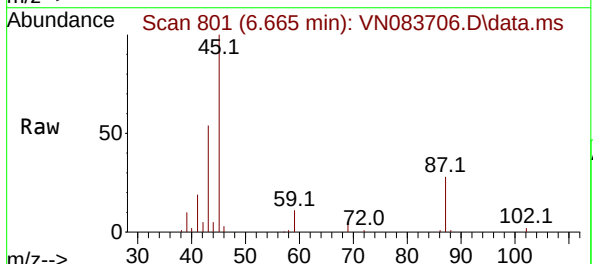
Ion Ratio Lower Upper

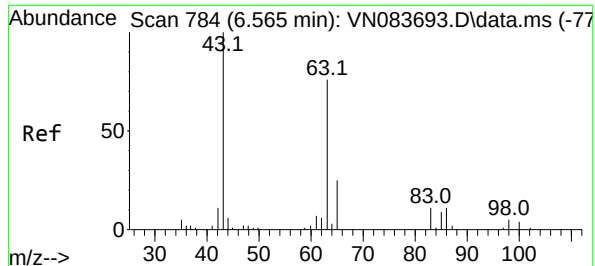
45 100

43 53.6 40.4 60.6

87 27.9 23.8 35.8

59 10.6 9.8 14.6





#21

1,1-Dichloroethane

Concen: 19.216 ug/l

RT: 6.559 min Scan# 71

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 63 Resp: 7220

Ion Ratio Lower Upper

63 100

98 7.1 4.1 12.3

100 4.2 3.0 9.0

Manual Integrations

APPROVED

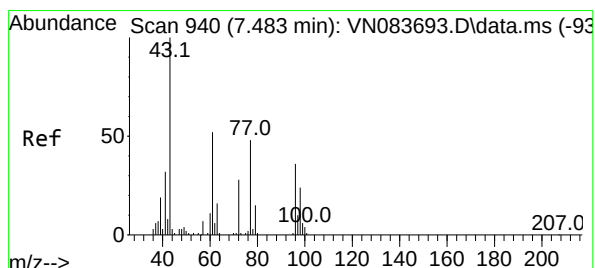
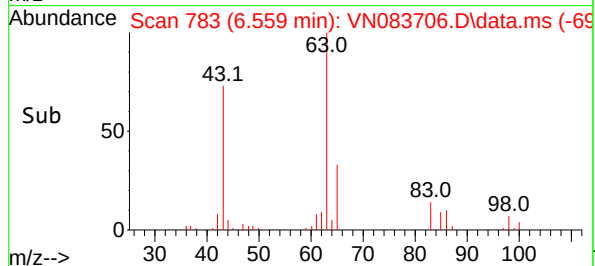
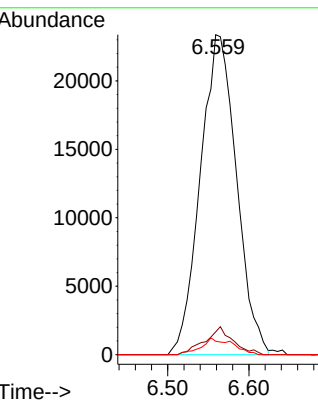
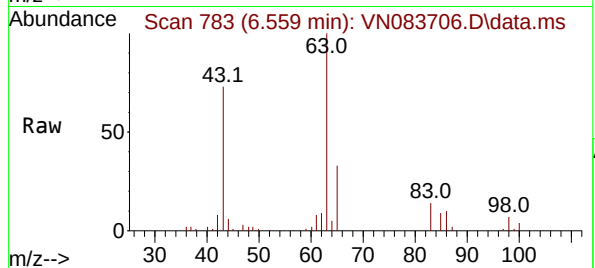
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#22

cis-1,2-Dichloroethene

Concen: 18.989 ug/l

RT: 7.477 min Scan# 939

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

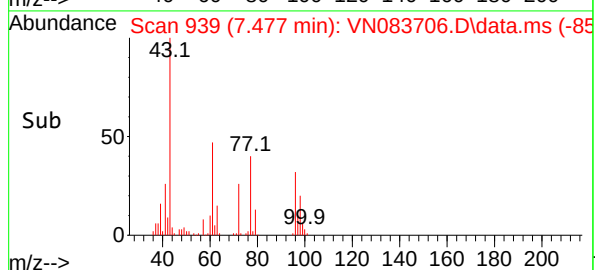
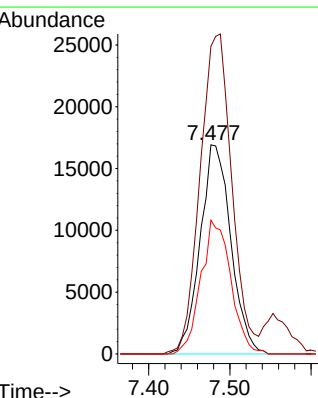
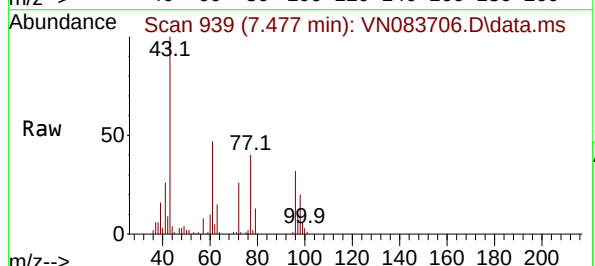
Tgt Ion: 96 Resp: 44516

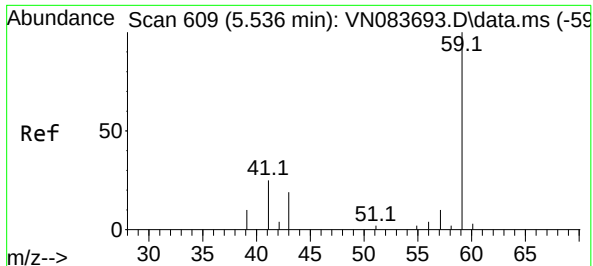
Ion Ratio Lower Upper

96 100

61 158.3 113.5 170.3

98 62.3 52.0 78.0





#23

tert-Butyl Alcohol

Concen: 109.997 ug/l

RT: 5.536 min Scan# 609

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 59 Resp: 36610

Ion Ratio Lower Upper

59 100

52 0.0 0.0 0.0

Manual Integrations

APPROVED

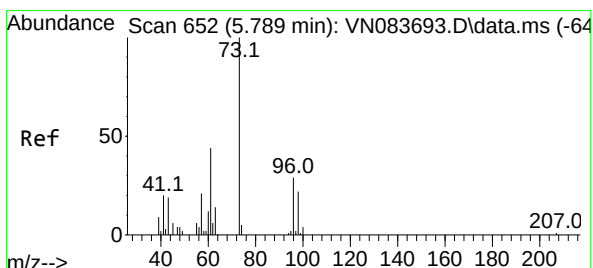
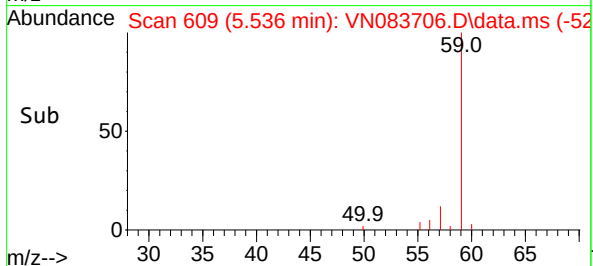
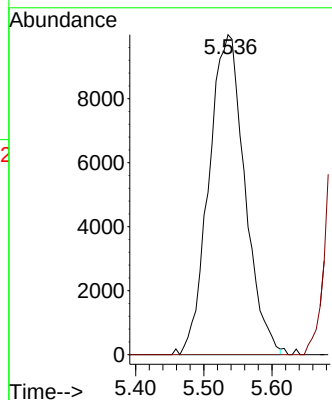
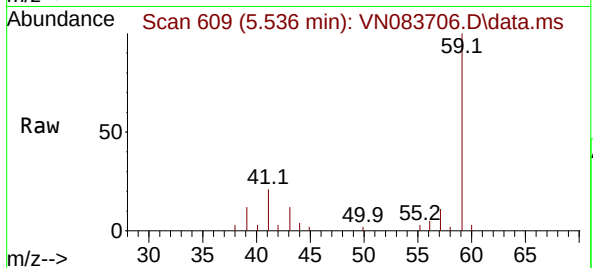
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#24

Methyl tert-Butyl Ether

Concen: 19.544 ug/l

RT: 5.794 min Scan# 653

Delta R.T. 0.006 min

Lab File: VN083706.D

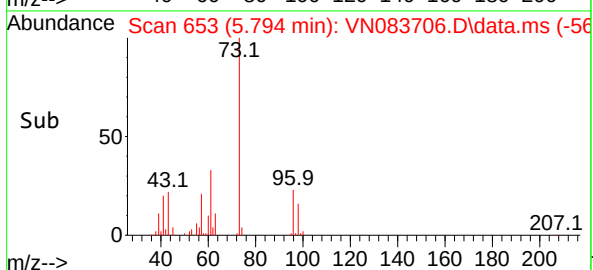
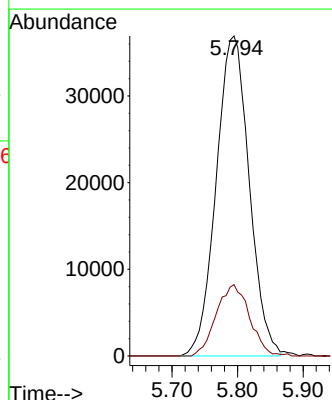
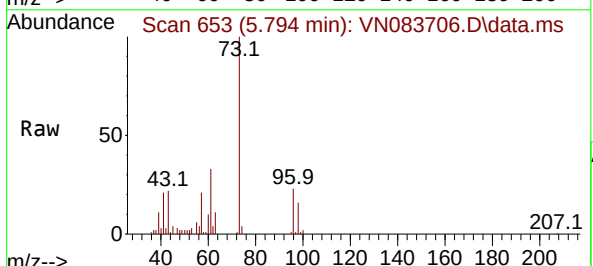
Acq: 09 Sep 2024 08:57

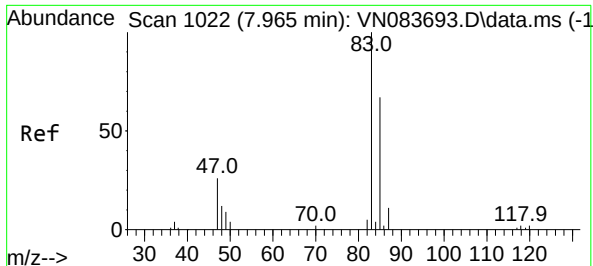
Tgt Ion: 73 Resp: 129074

Ion Ratio Lower Upper

73 100

43 22.4 13.4 20.2#





#25

Chloroform

Concen: 19.007 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 83 Resp: 7568

Ion Ratio Lower Upper

83 100

85 65.7 50.9 76.3

Manual Integrations

APPROVED

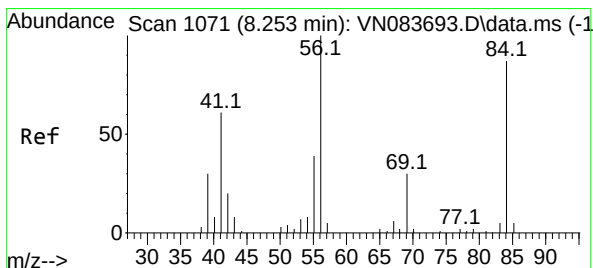
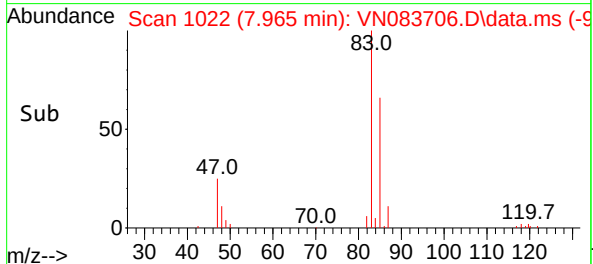
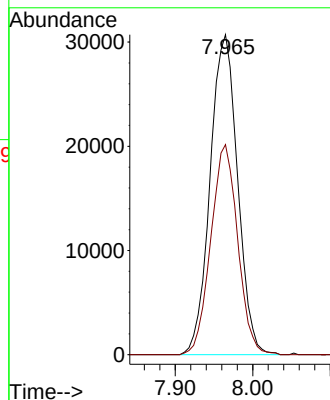
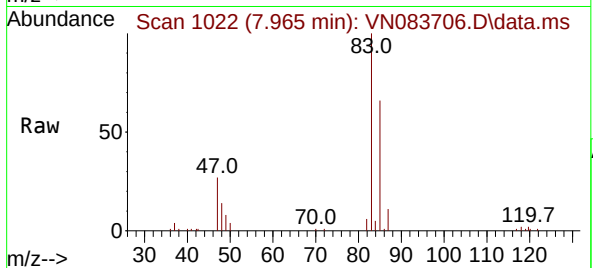
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#26

Cyclohexane

Concen: 18.735 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

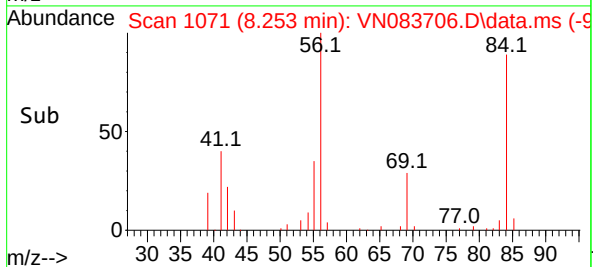
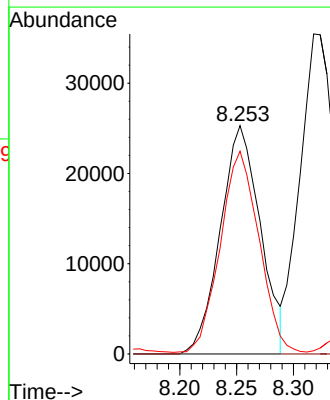
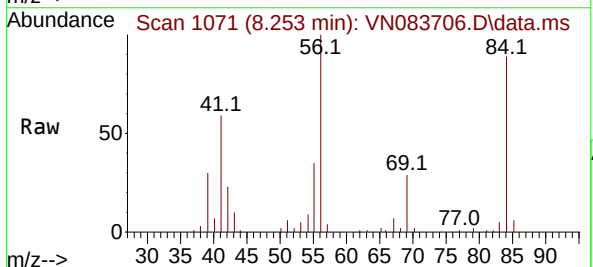
Tgt Ion: 56 Resp: 62003

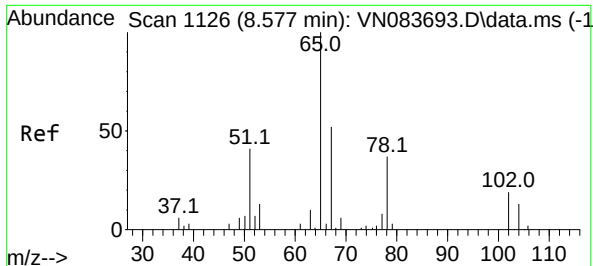
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9#

84 86.8 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 30.387 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN083706.D

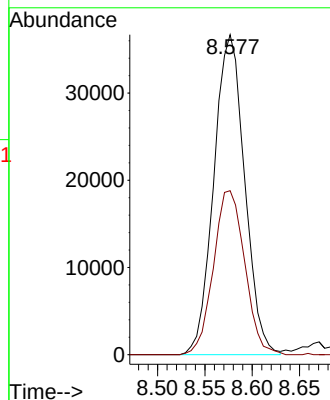
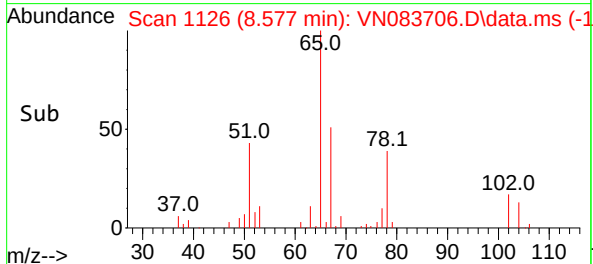
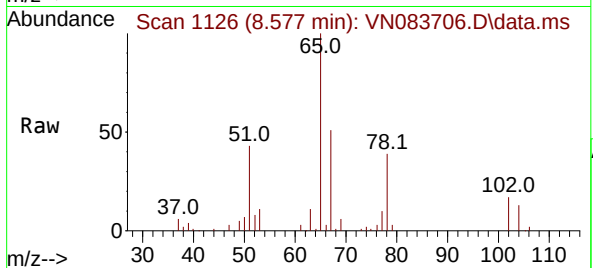
Acq: 09 Sep 2024 08:57

Tgt Ion: 65 Resp: 83052

Ion Ratio Lower Upper

65 100

67 52.0 43.2 64.8



Instrument :

MSVOA_N

ClientSampleId :

VSTDC020

Manual Integrations

APPROVED

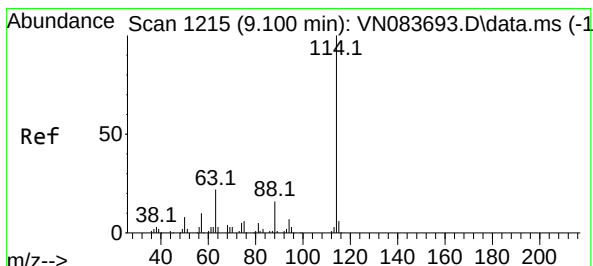
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

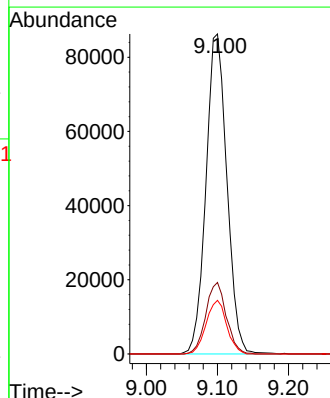
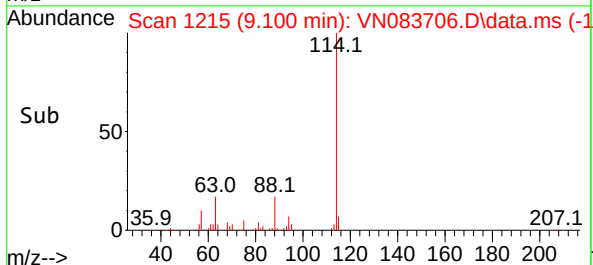
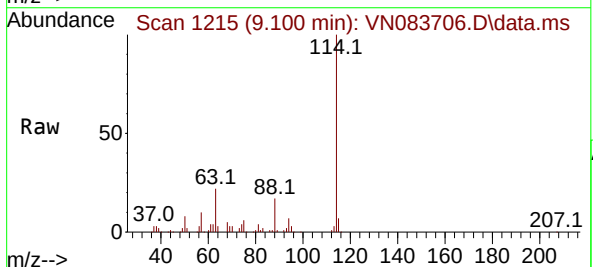
Tgt Ion:114 Resp: 176779

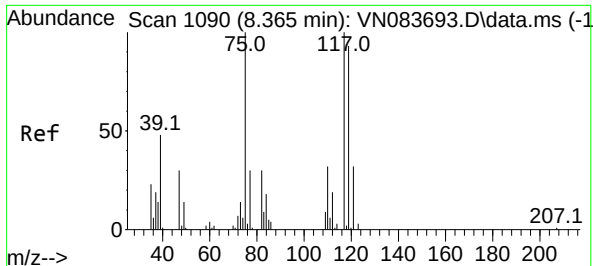
Ion Ratio Lower Upper

114 100

63 21.9 15.9 23.9

88 16.5 12.7 19.1





#29

1,1-Dichloropropene

Concen: 18.638 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

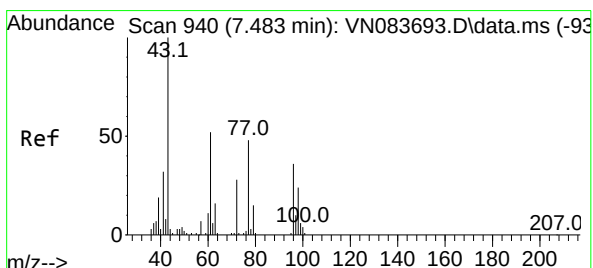
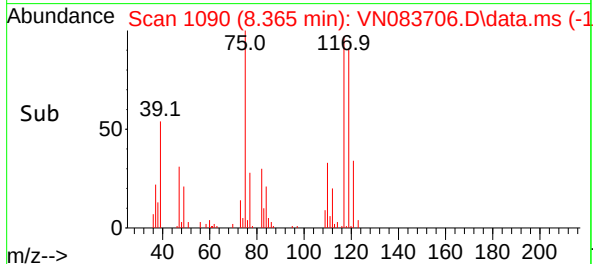
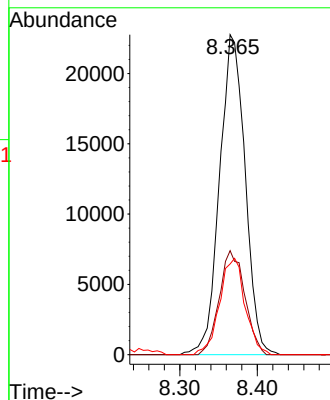
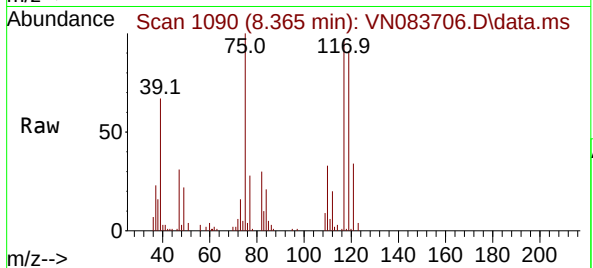
VSTDCCC020

Tgt Ion:	75	Resp:	5226
Ion Ratio	Lower	Upper	
75	100		
110	32.5	0.0	70.2
77	30.1	0.0	61.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh
Dadoda
09/10/2024

#30

2-Butanone

Concen: 108.902 ug/l

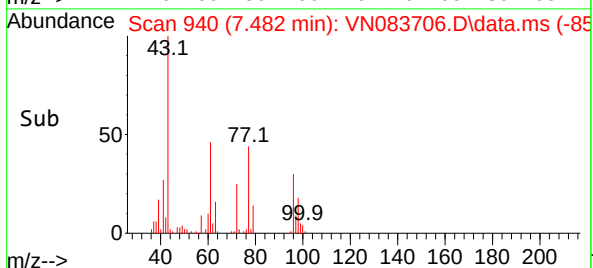
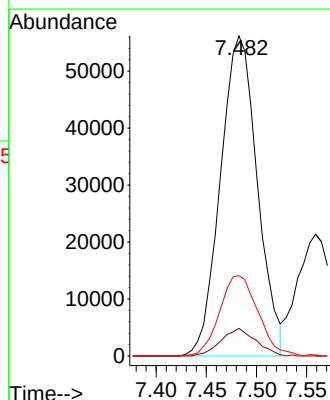
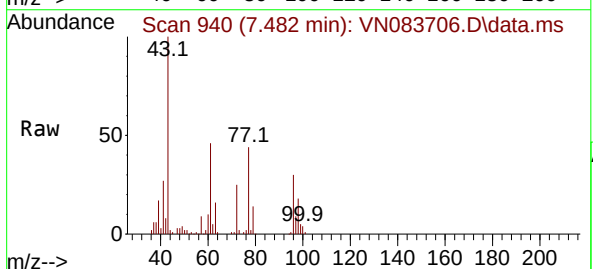
RT: 7.482 min Scan# 940

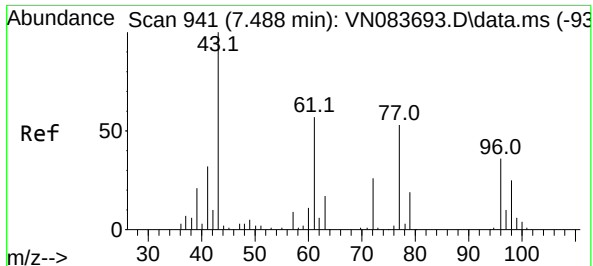
Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Tgt Ion:	43	Resp:	143941
Ion Ratio	Lower	Upper	
43	100		
57	8.1	6.7	10.1
72	26.0	24.0	36.0





#31

2,2-Dichloropropane

Concen: 19.483 ug/l

RT: 7.488 min Scan# 941

Delta R.T. -0.000 min

Lab File: VN083706.D

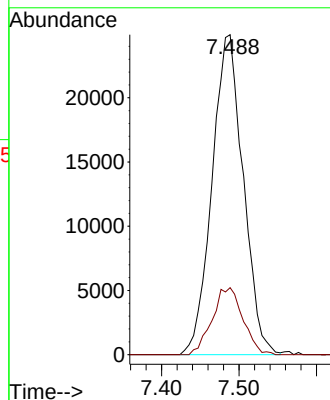
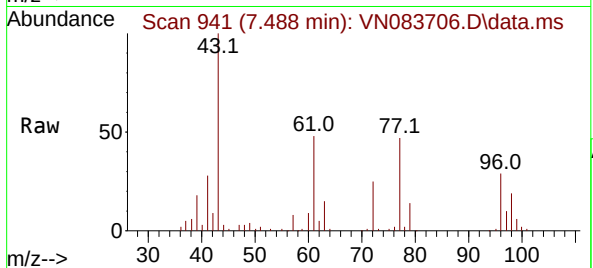
Acq: 09 Sep 2024 08:57

Tgt Ion: 77 Resp: 69649

Ion Ratio Lower Upper

77 100

97 10.3 18.3 27.5



Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Manual Integrations

APPROVED

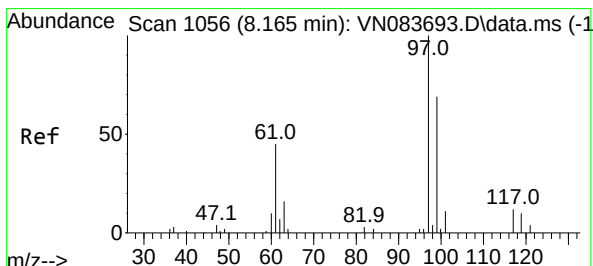
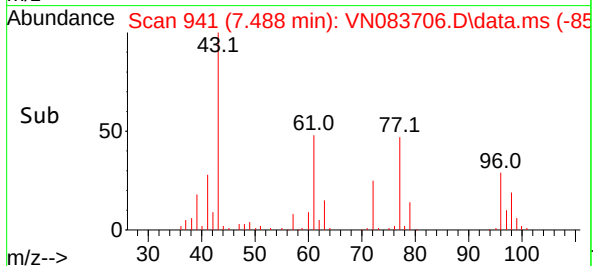
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#32

1,1,1-Trichloroethane

Concen: 19.053 ug/l

RT: 8.171 min Scan# 1057

Delta R.T. 0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

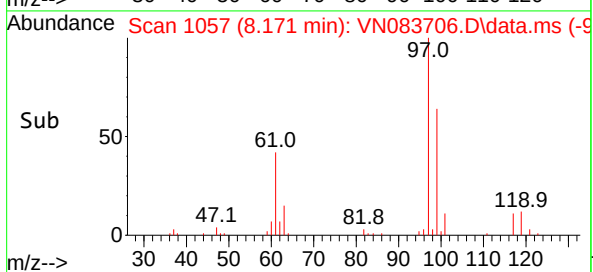
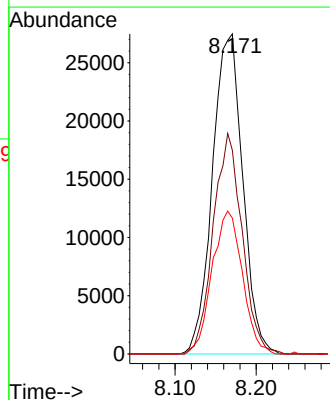
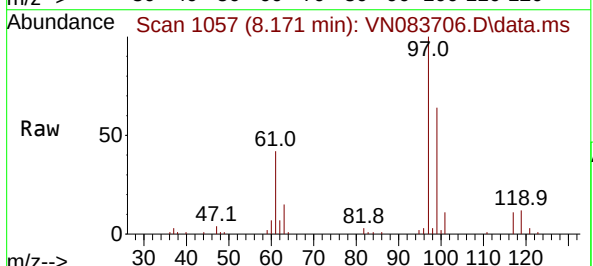
Tgt Ion: 97 Resp: 71346

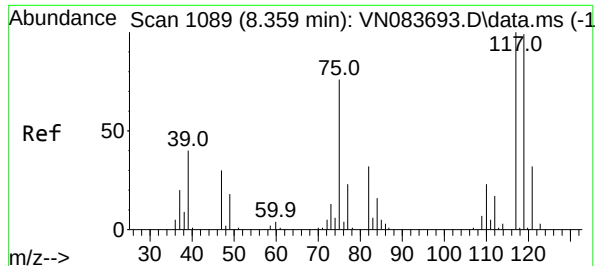
Ion Ratio Lower Upper

97 100

99 65.6 51.0 76.4

61 44.6 33.8 50.8





#33

Carbon Tetrachloride

Concen: 18.847 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion:117 Resp: 61119

Ion Ratio Lower Upper

117 100

119 96.1 77.7 116.5

121 29.6 27.0 40.6

Manual Integrations

APPROVED

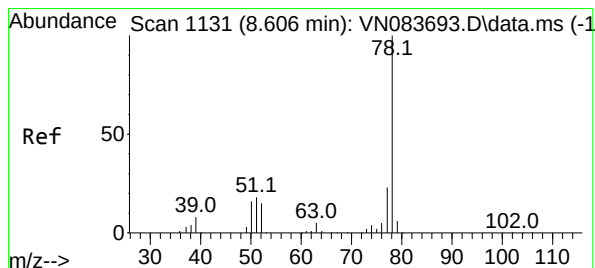
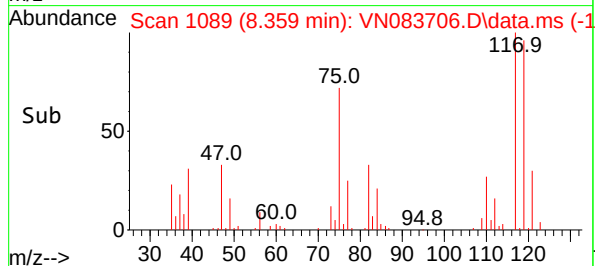
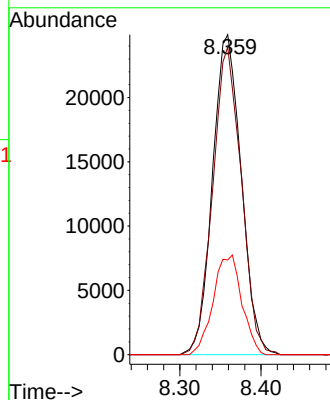
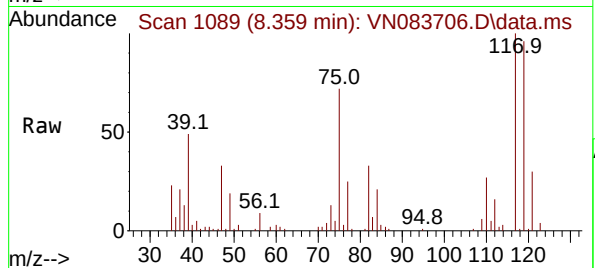
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#34

Benzene

Concen: 18.864 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

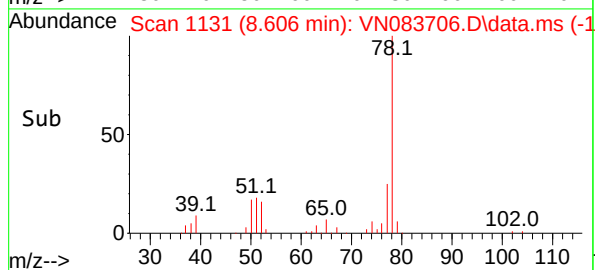
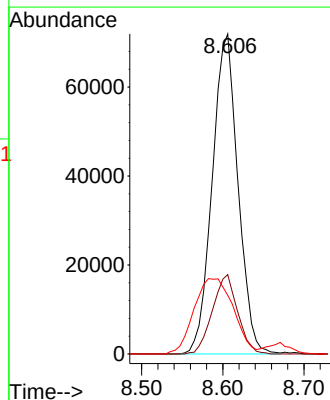
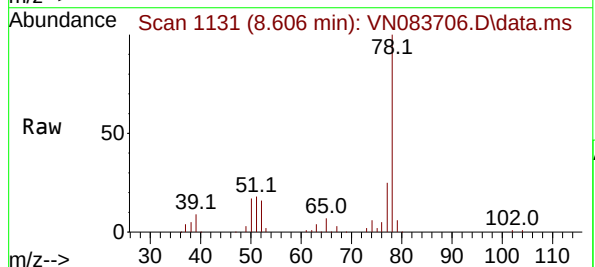
Tgt Ion: 78 Resp: 158704

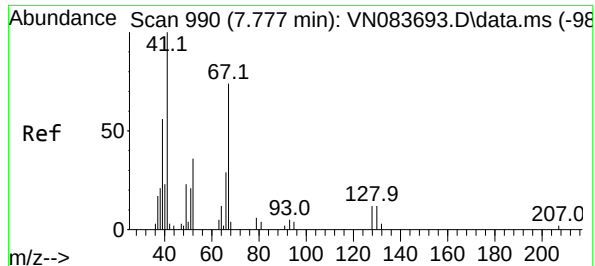
Ion Ratio Lower Upper

78 100

77 24.8 19.2 28.8

51 15.9 13.3 19.9





#35

Methacrylonitrile

Concen: 18.787 ug/l

RT: 7.777 min Scan# 990

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 41 Resp: 27914

Ion Ratio Lower Upper

41 100

39 59.3 25.3 75.9

67 67.9 38.7 116.1

52 32.6 13.6 40.8

Manual Integrations

APPROVED

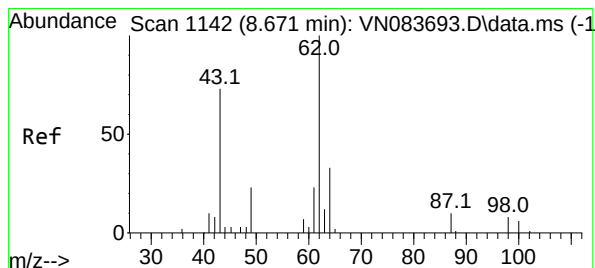
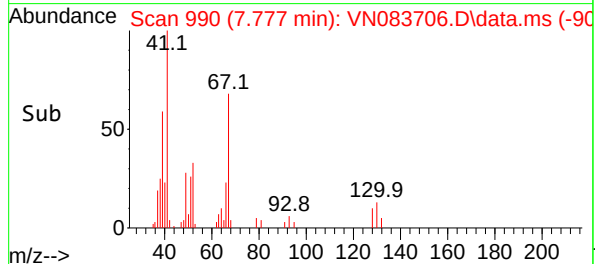
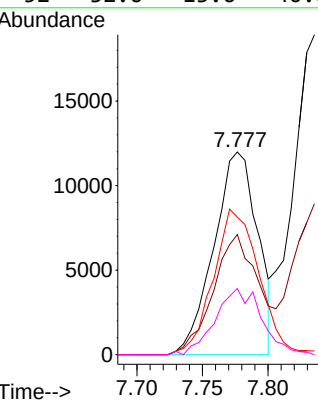
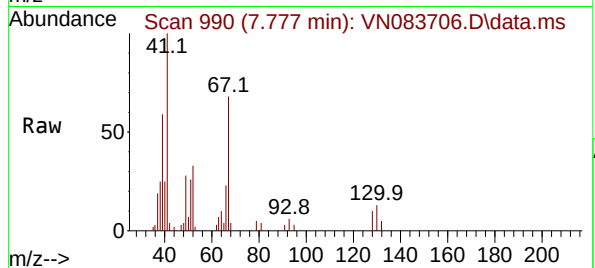
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#36

1,2-Dichloroethane

Concen: 19.185 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. -0.000 min

Lab File: VN083706.D

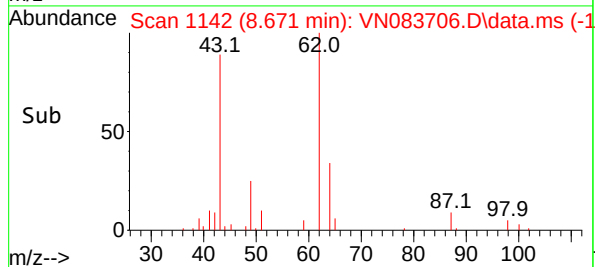
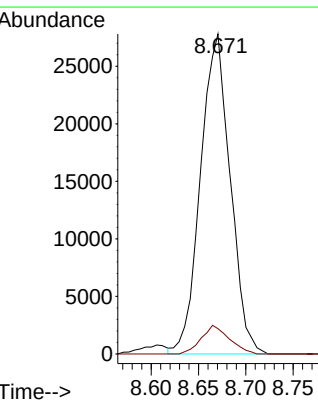
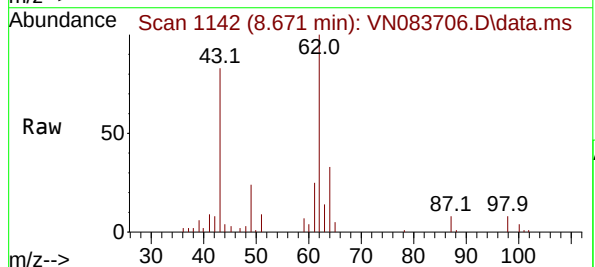
Acq: 09 Sep 2024 08:57

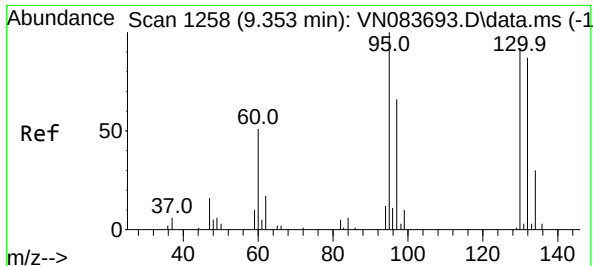
Tgt Ion: 62 Resp: 60679

Ion Ratio Lower Upper

62 100

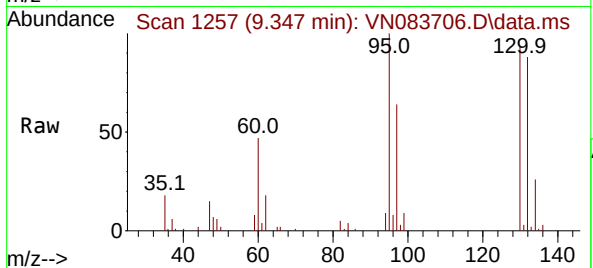
98 8.4 8.2 12.4





#37
Trichloroethene
Concen: 18.680 ug/l
RT: 9.347 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

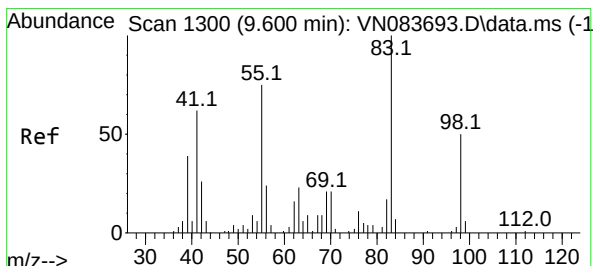
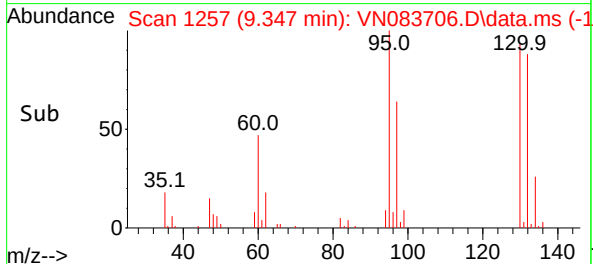
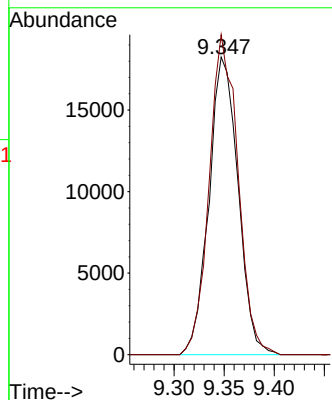


Tgt Ion:130 Resp: 3690
Ion Ratio Lower Upper
130 100
95 107.5 80.2 120.4

Manual Integrations
APPROVED

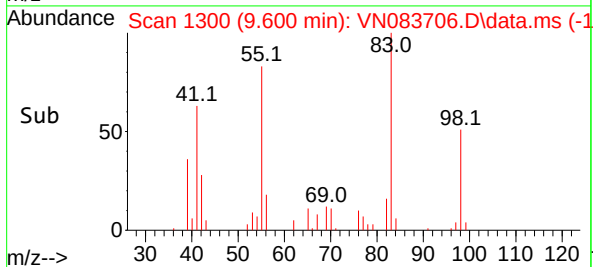
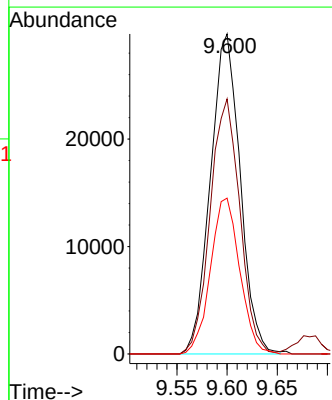
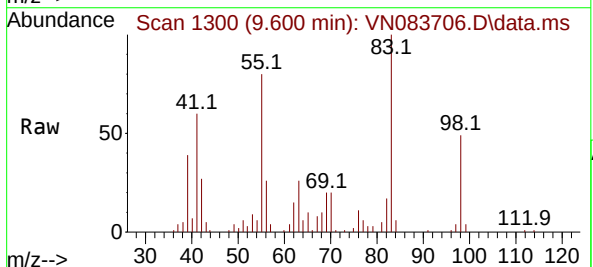
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

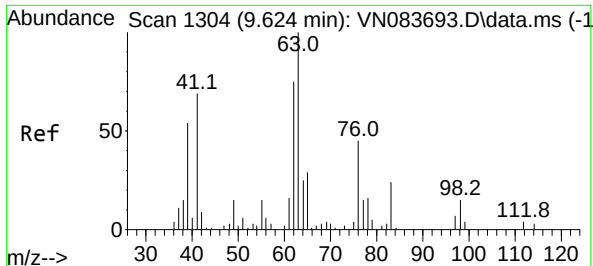
Supervised By :Mahesh
Dadoda
09/10/2024



#38
Methylcyclohexane
Concen: 18.325 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 83 Resp: 61515
Ion Ratio Lower Upper
83 100
55 79.4 36.6 109.9
98 47.9 23.8 71.5





#39

1,2-Dichloropropane

Concen: 19.298 ug/l

RT: 9.623 min Scan# 11

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 63 Resp: 3907

Ion Ratio Lower Upper

63 100

65 33.2 25.0 37.4

Manual Integrations

APPROVED

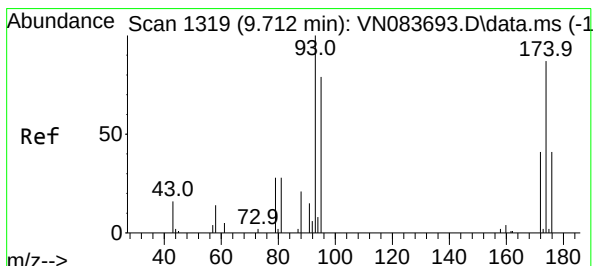
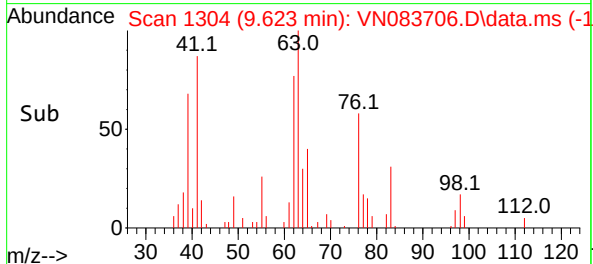
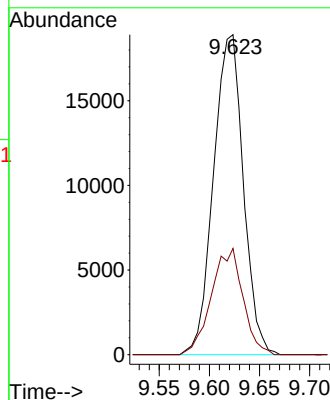
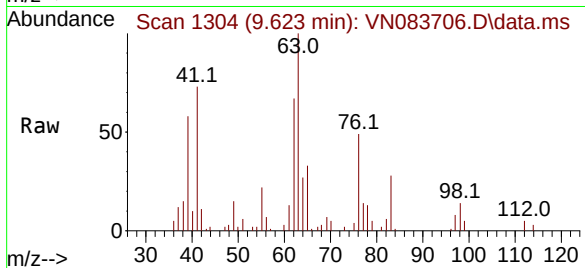
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#40

Dibromomethane

Concen: 18.822 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

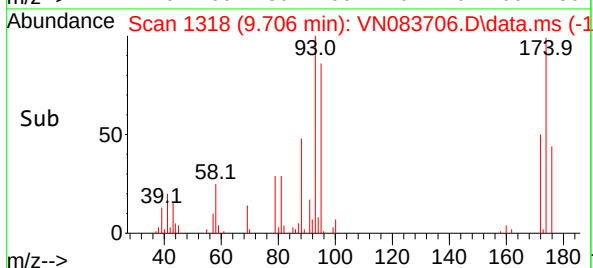
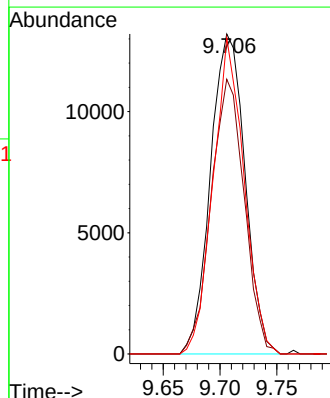
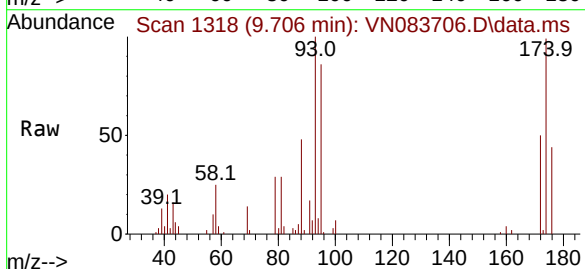
Tgt Ion: 93 Resp: 27867

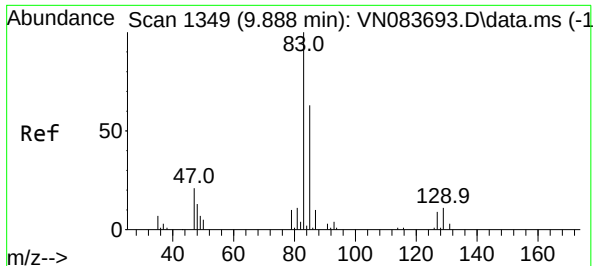
Ion Ratio Lower Upper

93 100

95 82.5 0.0 164.6

174 88.7 0.0 193.2





#41
Bromodichloromethane
Concen: 19.073 ug/l
RT: 9.882 min Scan# 1349
Delta R.T. -0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

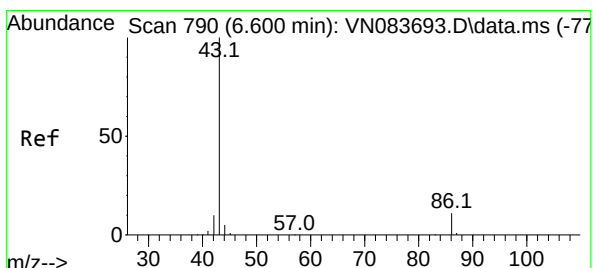
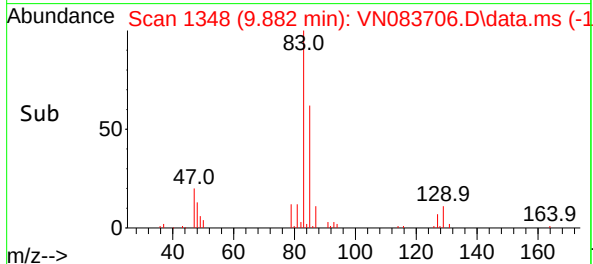
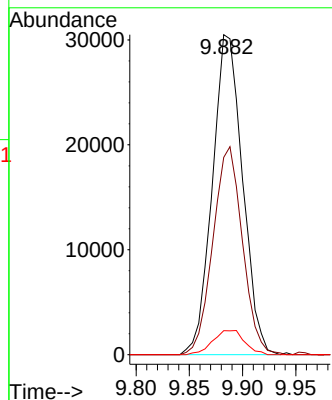
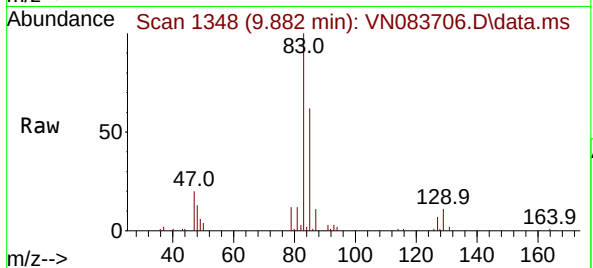
Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

Tgt Ion: 83 Resp: 60049
Ion Ratio Lower Upper
83 100
85 61.6 49.4 74.2
127 7.5 7.3 10.9

Manual Integrations
APPROVED

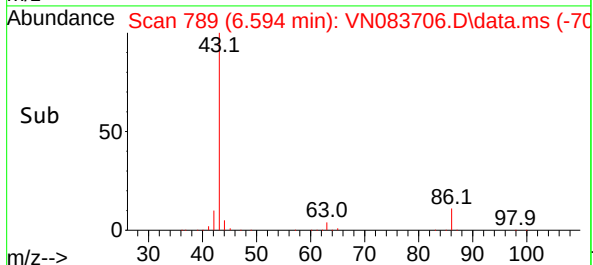
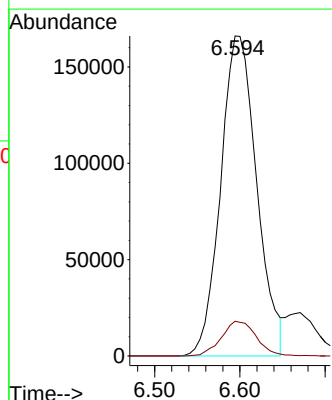
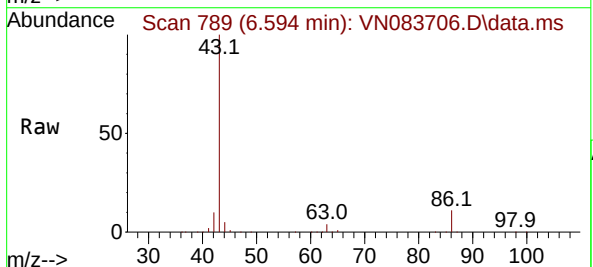
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

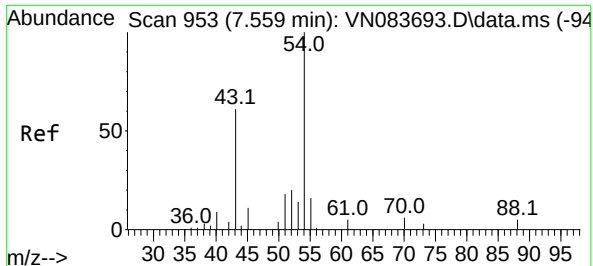
Supervised By :Mahesh
Dadoda
09/10/2024



#42
Vinyl Acetate
Concen: 89.959 ug/l
RT: 6.594 min Scan# 789
Delta R.T. -0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 43 Resp: 488870
Ion Ratio Lower Upper
43 100
86 10.5 9.4 14.2





#43

Ethyl Acetate

Concen: 20.855 ug/l

RT: 7.559 min Scan# 91

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 43 Resp: 5548

Ion Ratio Lower Upper

43 100

45 13.2 10.6 15.8

Manual Integrations

APPROVED

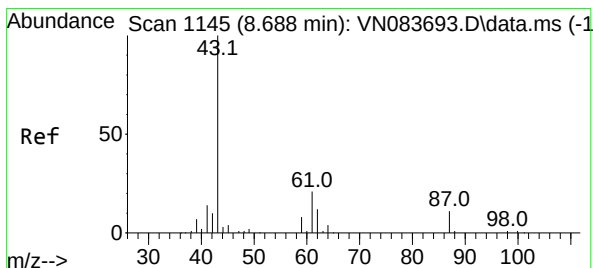
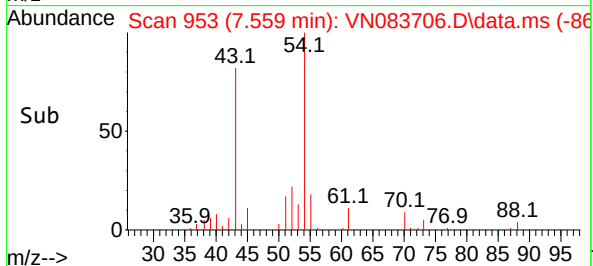
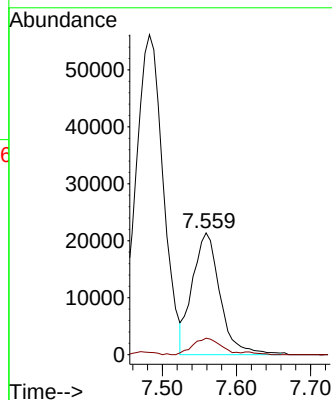
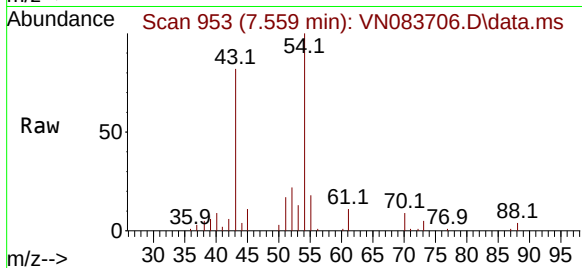
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#44

Isopropyl Acetate

Concen: 20.299 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. -0.000 min

Lab File: VN083706.D

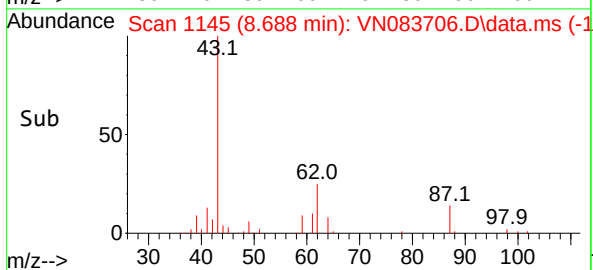
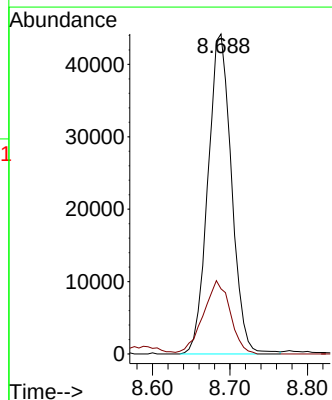
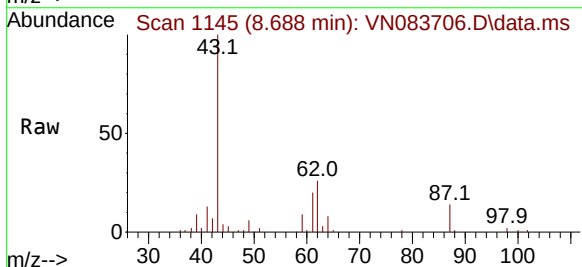
Acq: 09 Sep 2024 08:57

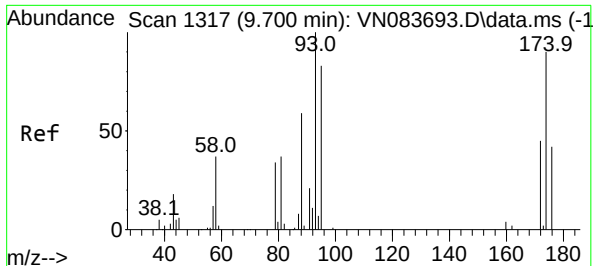
Tgt Ion: 43 Resp: 93405

Ion Ratio Lower Upper

43 100

61 26.2 25.0 37.4





#45

1,4-Dioxane

Concen: 433.581 ug/l

RT: 9.694 min Scan# 1316

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 88 Resp: 1556

Ion Ratio Lower Upper

88 100

43 10.4 19.8 29.6

58 68.1 55.4 83.0

Manual Integrations

APPROVED

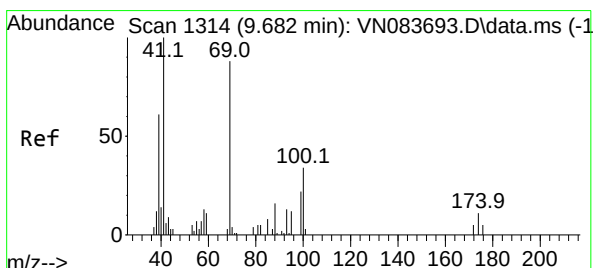
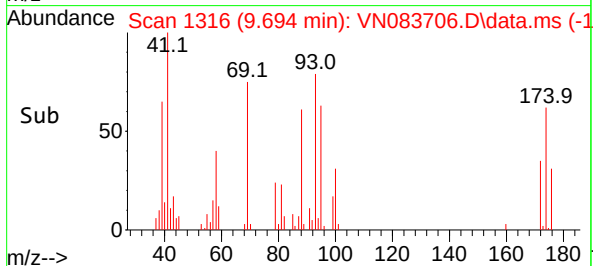
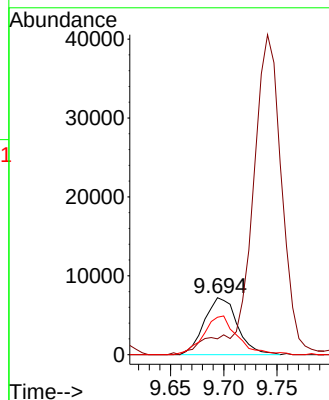
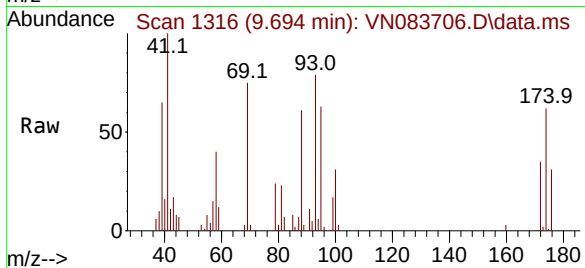
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#46

Methyl methacrylate

Concen: 20.038 ug/l

RT: 9.676 min Scan# 1313

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

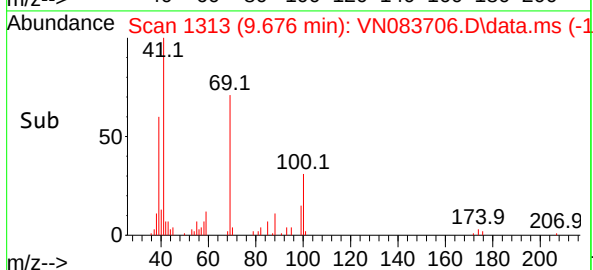
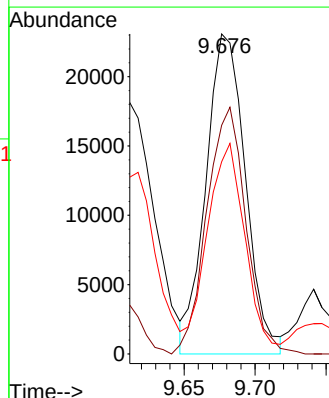
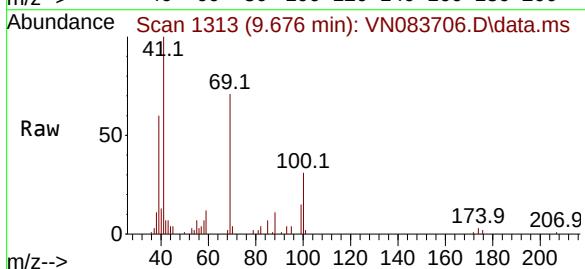
Tgt Ion: 41 Resp: 44628

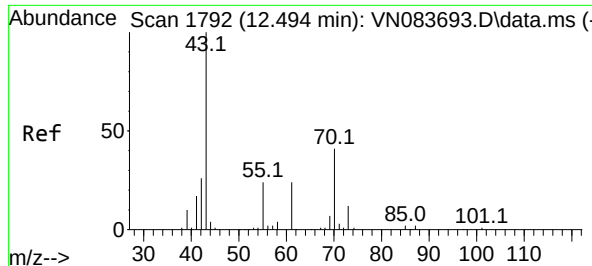
Ion Ratio Lower Upper

41 100

69 73.7 51.1 153.3

39 60.3 25.8 77.3





#47

n-amy1 Acetate

Concen: 19.593 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDC0020

Tgt Ion: 43 Resp: 7985

Ion Ratio Lower Upper

43 100

55 23.8 23.4 35.2

Manual Integrations

APPROVED

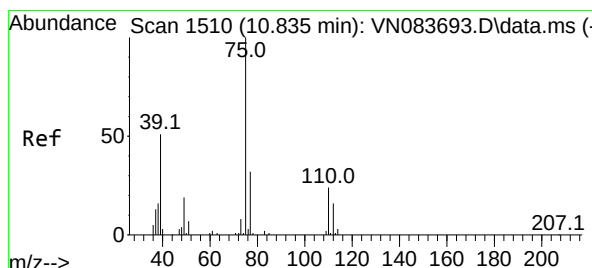
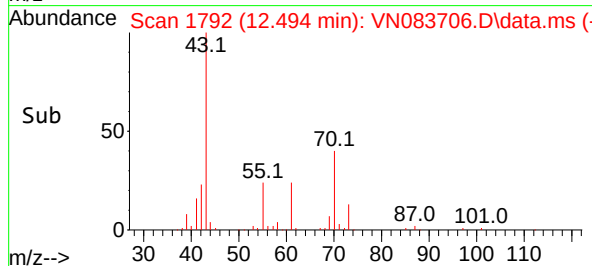
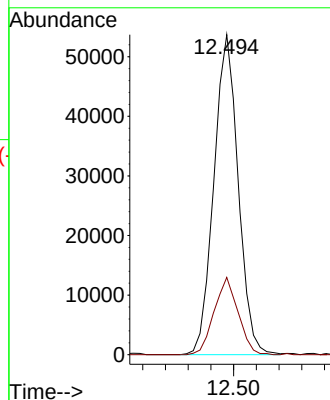
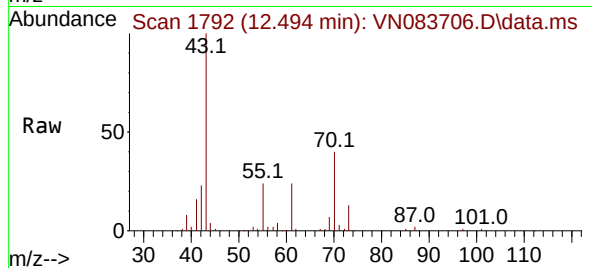
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#48

t-1,3-Dichloropropene

Concen: 18.200 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. -0.000 min

Lab File: VN083706.D

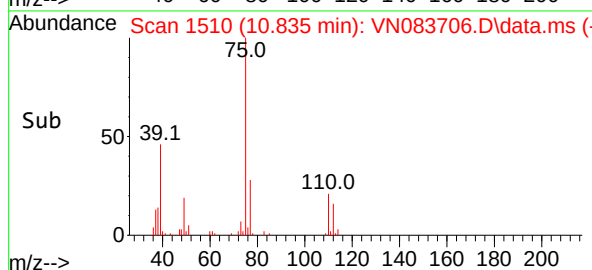
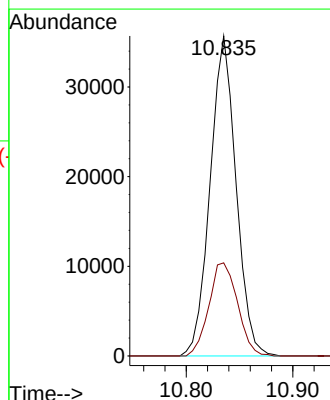
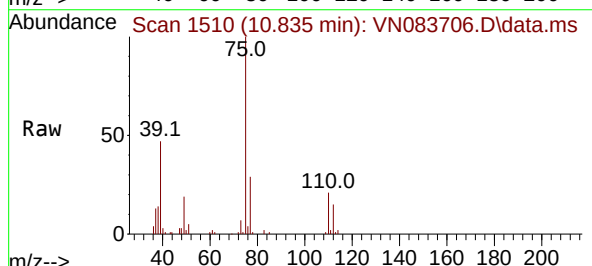
Acq: 09 Sep 2024 08:57

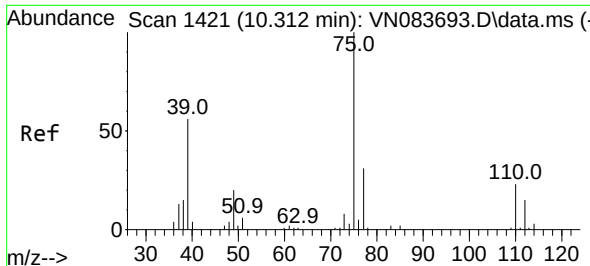
Tgt Ion: 75 Resp: 60272

Ion Ratio Lower Upper

75 100

77 29.1 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 18.702 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 75 Resp: 64409

Ion Ratio Lower Upper

75 100

77 29.3 24.9 37.3

39 55.1 31.0 46.6

Manual Integrations

APPROVED

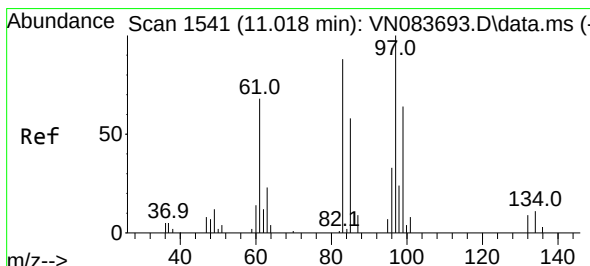
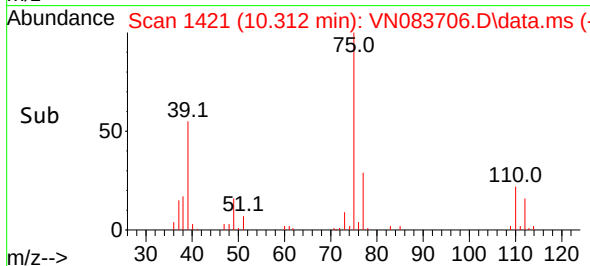
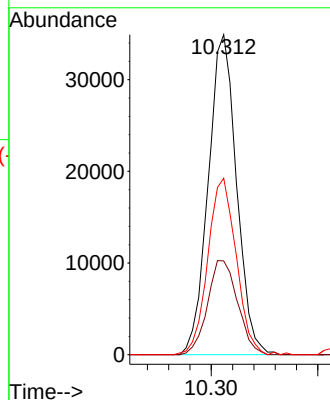
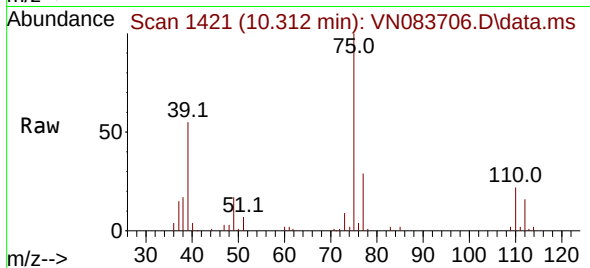
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#50

1,1,2-Trichloroethane

Concen: 19.835 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Tgt Ion: 97 Resp: 37367

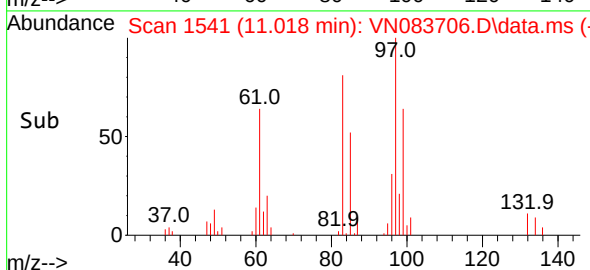
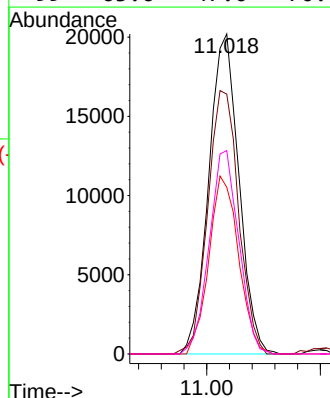
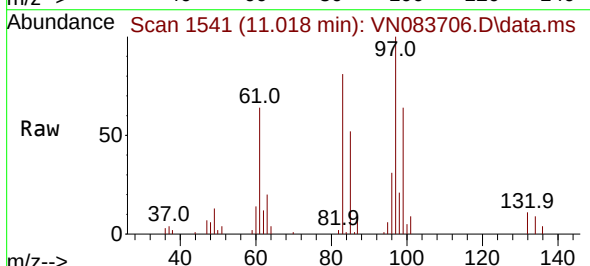
Ion Ratio Lower Upper

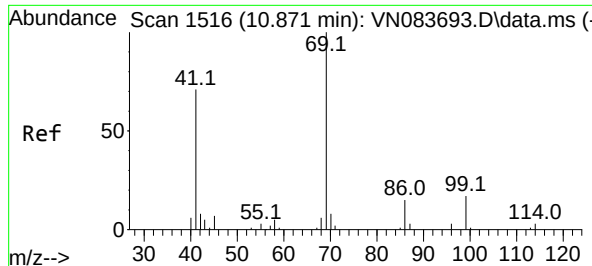
97 100

83 81.2 68.1 102.1

85 52.1 41.8 62.6

99 63.6 47.0 70.4





#51
Ethyl methacrylate
Concen: 19.246 ug/l
RT: 10.876 min Scan# 1516
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

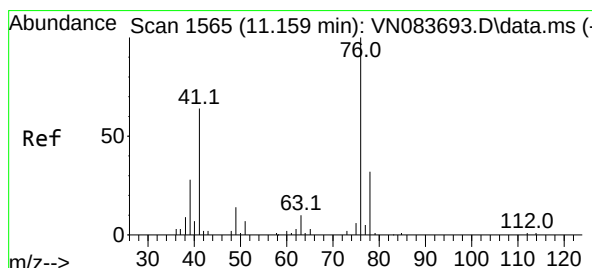
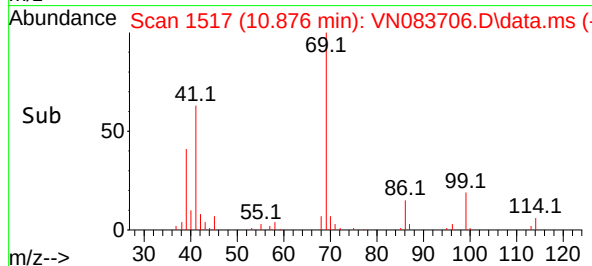
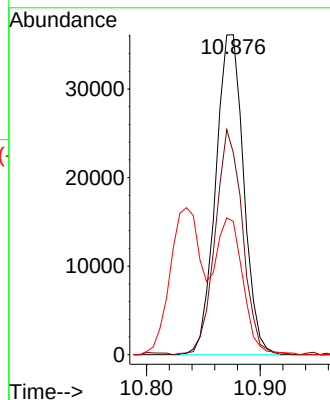
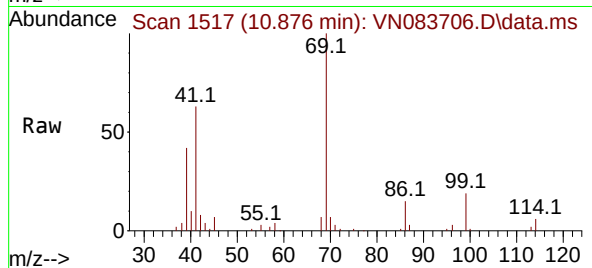
Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion: 69 Resp: 61944
Ion Ratio Lower Upper
69 100
41 62.7 25.5 76.5
39 41.0 16.0 47.9

Manual Integrations
APPROVED

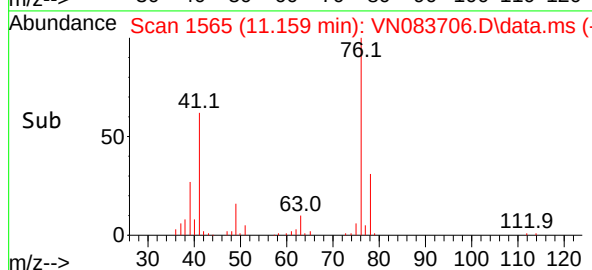
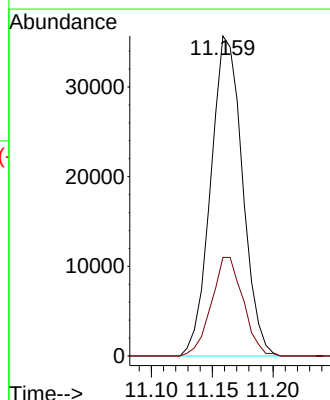
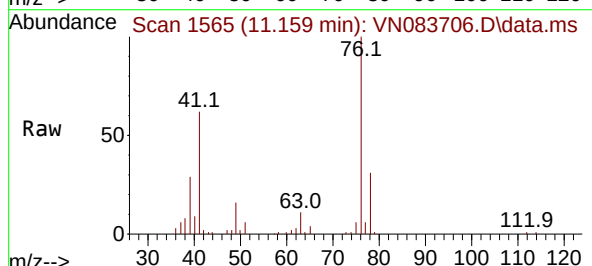
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

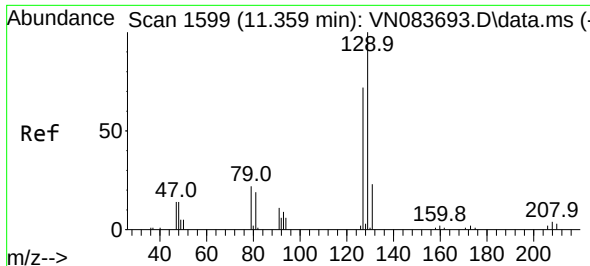
Supervised By :Mahesh
Dadoda
09/10/2024



#52
1,3-Dichloropropane
Concen: 19.033 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

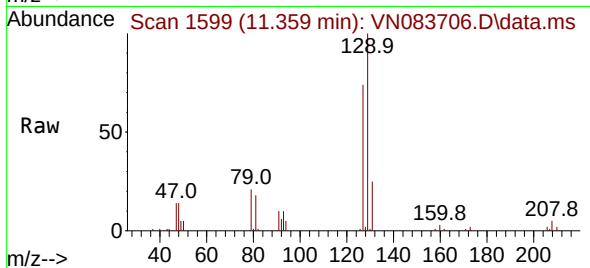
Tgt Ion: 76 Resp: 64754
Ion Ratio Lower Upper
76 100
78 30.8 0.0 65.8





#53
Dibromochloromethane
Concen: 19.216 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

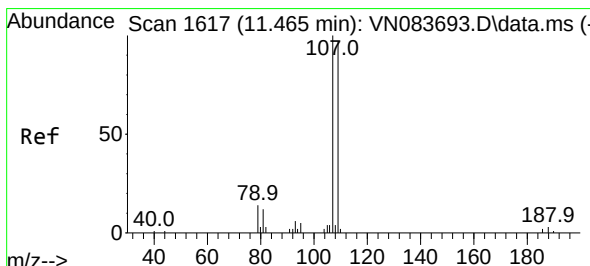
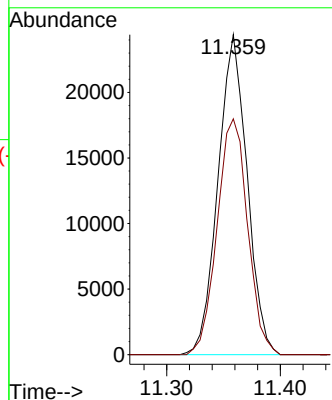
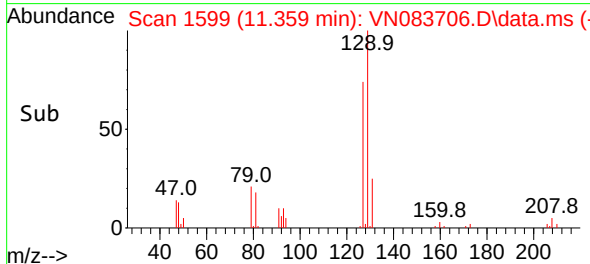


Tgt Ion:129 Resp: 4342
Ion Ratio Lower Upper
129 100
127 77.3 39.4 118.1

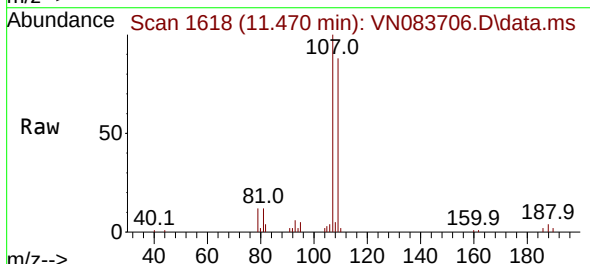
Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

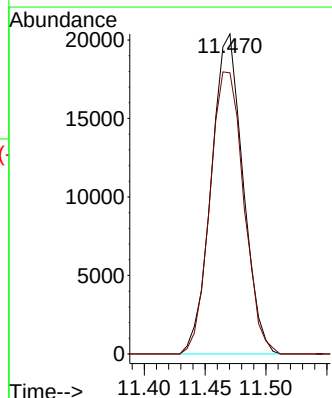
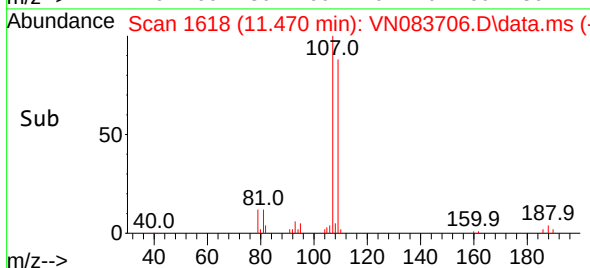
Supervised By :Mahesh
Dadoda
09/10/2024

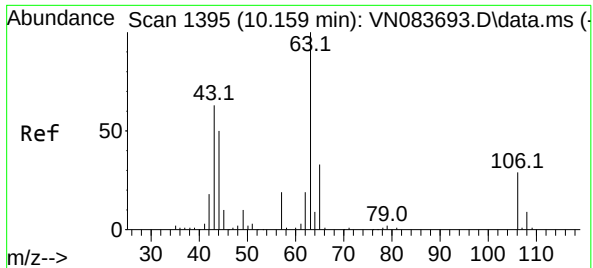


#54
1,2-Dibromoethane
Concen: 18.974 ug/l
RT: 11.470 min Scan# 1618
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57



Tgt Ion:107 Resp: 36980
Ion Ratio Lower Upper
107 100
109 93.9 74.7 112.1





#55
2-Chloroethyl vinyl ether
Concen: 107.016 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

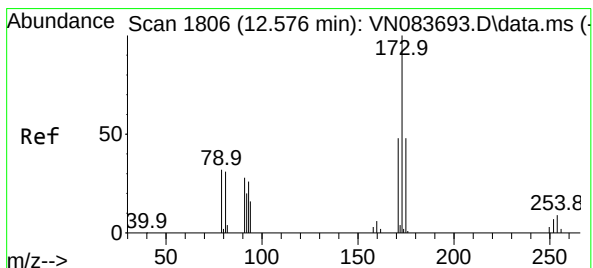
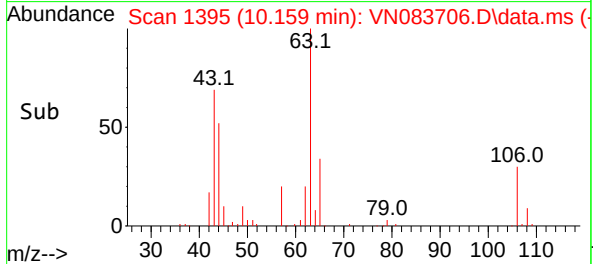
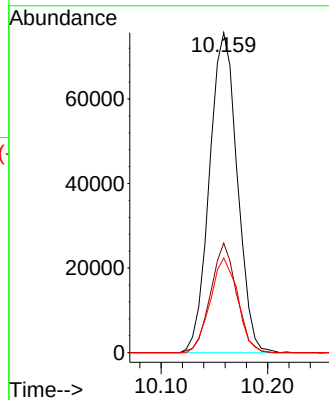
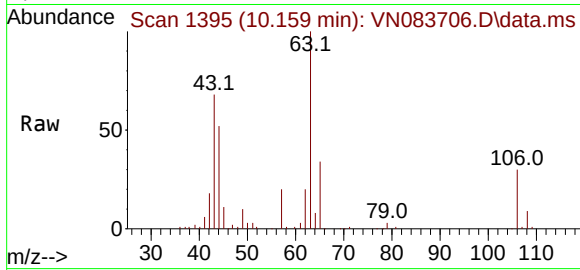
Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion: 63 Resp: 137269
Ion Ratio Lower Upper
63 100
65 32.0 26.2 39.2
106 29.4 23.8 35.8

Manual Integrations
APPROVED

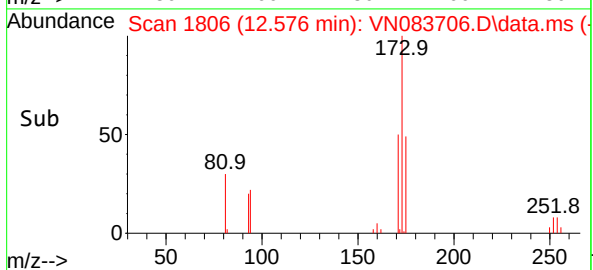
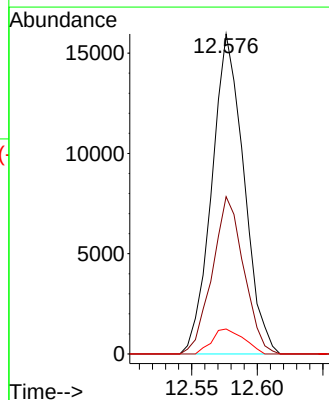
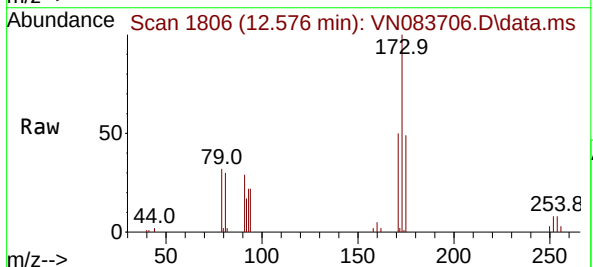
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

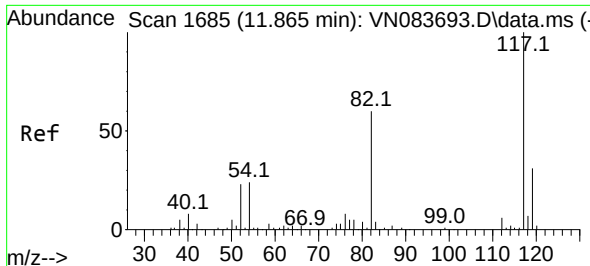
Supervised By :Mahesh
Dadoda
09/10/2024



#56
Bromoform
Concen: 18.888 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion:173 Resp: 27115
Ion Ratio Lower Upper
173 100
175 48.2 40.0 60.0
254 7.8 8.3 12.5#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDC0020

Tgt Ion:117 Resp: 156710

Ion Ratio Lower Upper

117 100

82 60.6 46.6 69.8

119 32.0 25.4 38.2

Manual Integrations

APPROVED

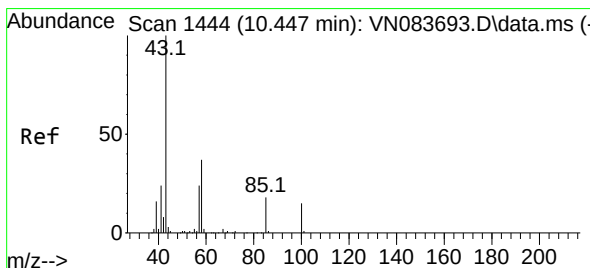
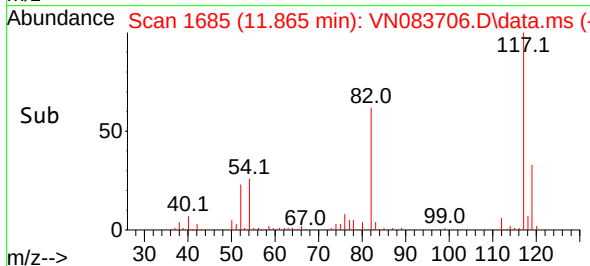
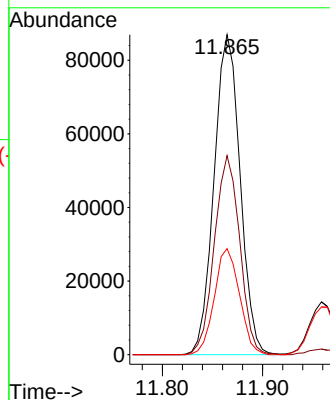
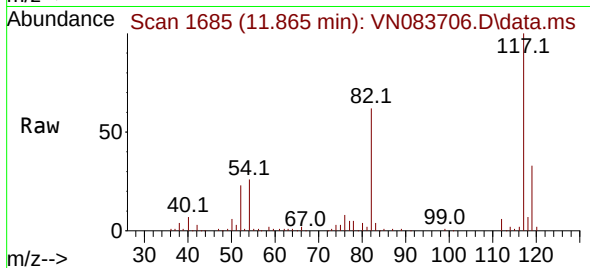
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#58

4-Methyl-2-Pentanone

Concen: 106.770 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. -0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

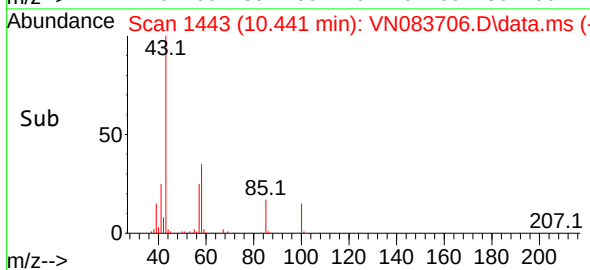
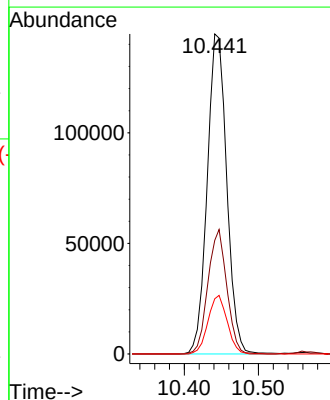
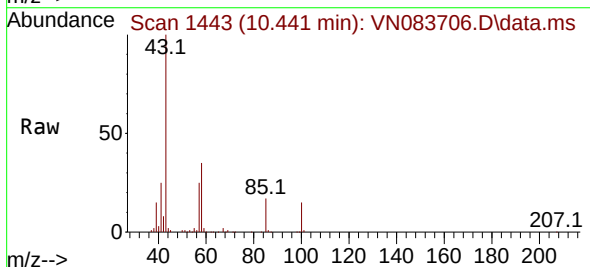
Tgt Ion: 43 Resp: 265314

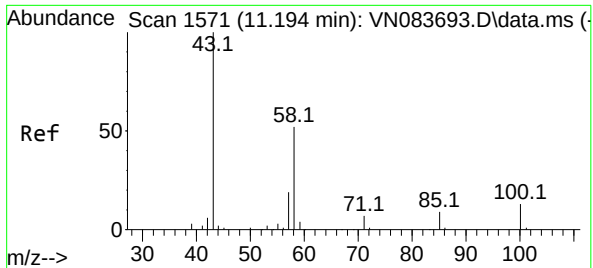
Ion Ratio Lower Upper

43 100

58 37.6 36.5 54.7

85 17.9 19.5 29.3#





#59
2-Hexanone
Concen: 107.641 ug/l
RT: 11.194 min Scan# 1571
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

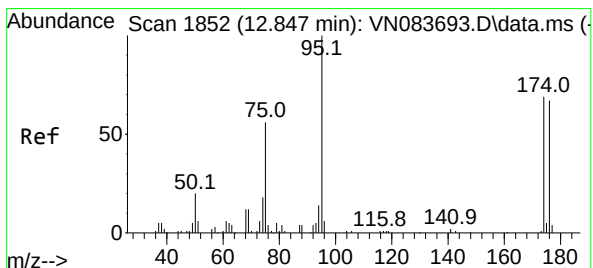
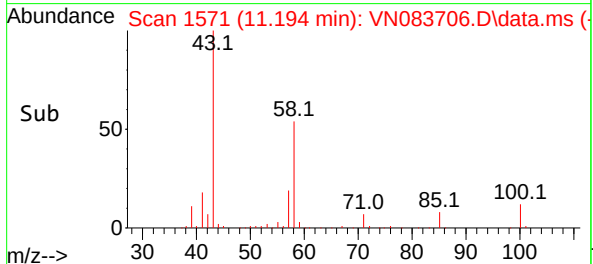
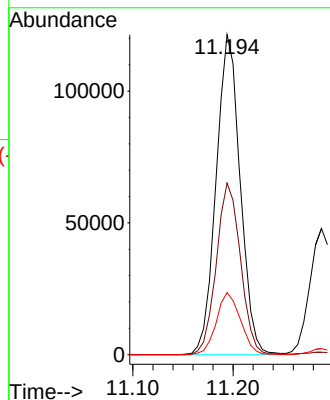
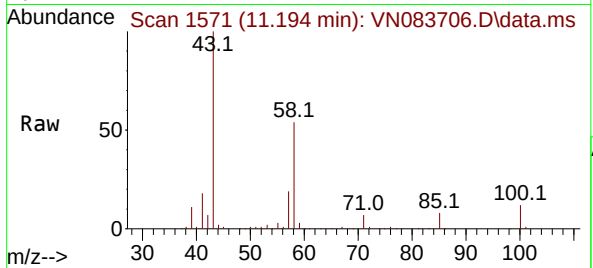
Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

Tgt Ion: 43 Resp: 20211
Ion Ratio Lower Upper
43 100
58 53.7 50.4 75.6
57 19.4 18.6 27.8

Manual Integrations
APPROVED

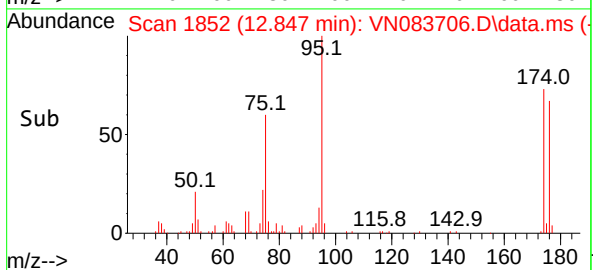
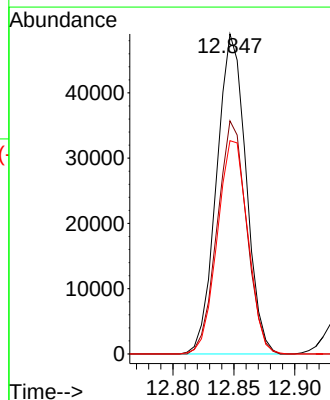
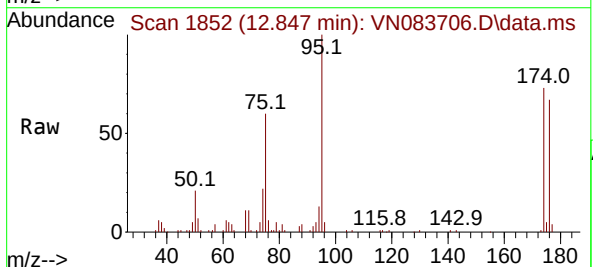
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

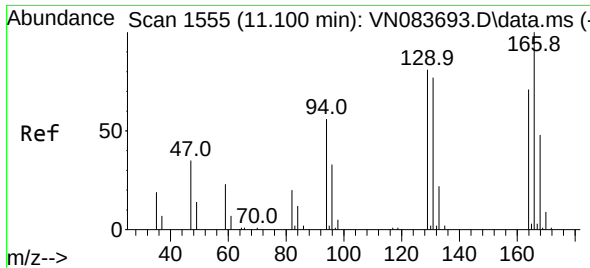
Supervised By :Mahesh
Dadoda
09/10/2024



#60
4-Bromofluorobenzene
Concen: 30.526 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

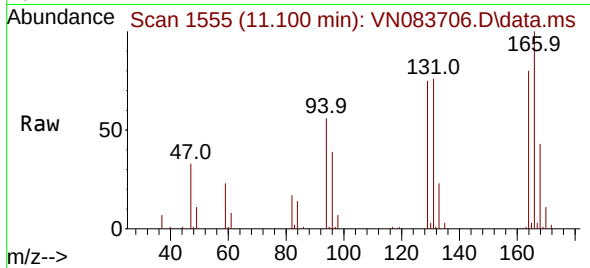
Tgt Ion: 95 Resp: 82449
Ion Ratio Lower Upper
95 100
174 72.6 60.5 90.7
176 69.2 57.8 86.6





#61
Tetrachloroethene
Concen: 19.251 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

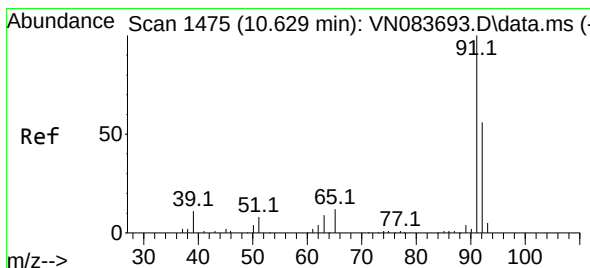
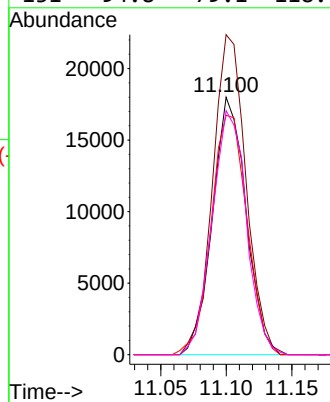
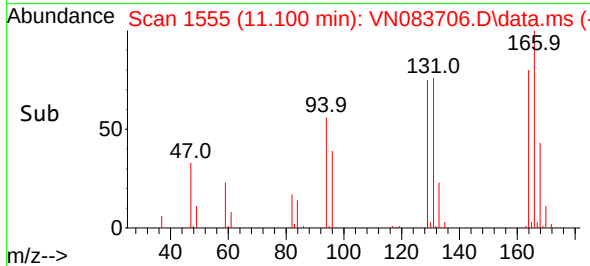


Tgt Ion:164 Resp: 31929
Ion Ratio Lower Upper
164 100
166 124.3 106.7 160.1
129 93.0 85.8 128.6
131 94.8 79.1 118.7

Manual Integrations
APPROVED

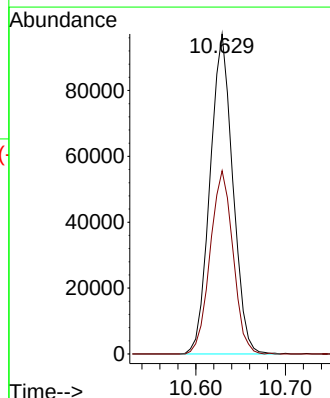
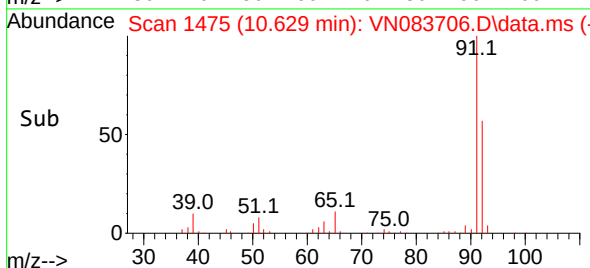
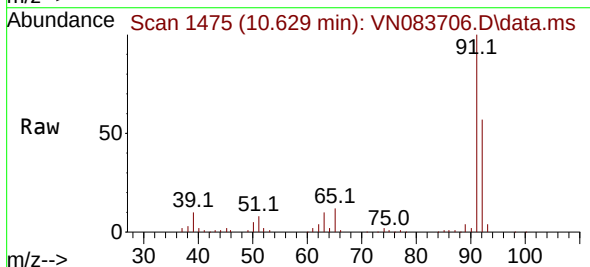
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

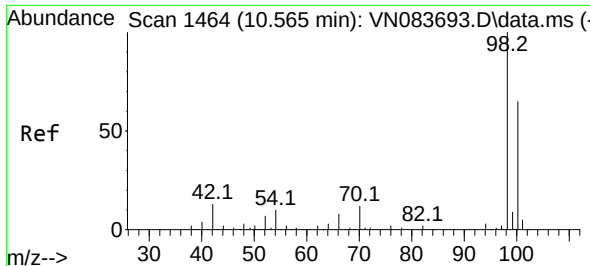
Supervised By :Mahesh
Dadoda
09/10/2024



#62
Toluene
Concen: 18.950 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

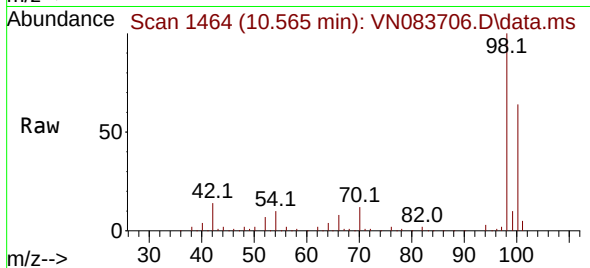
Tgt Ion: 91 Resp: 170699
Ion Ratio Lower Upper
91 100
92 57.6 46.5 69.7





#63
Toluene-d8
Concen: 30.766 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

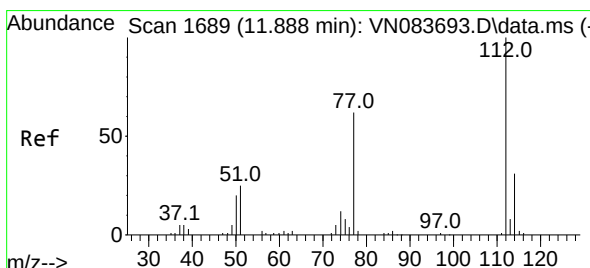
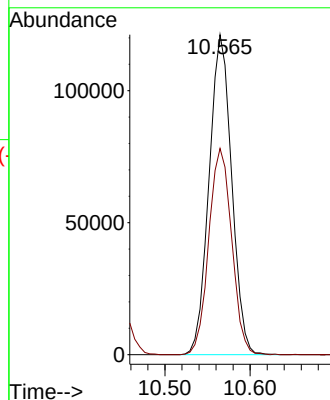
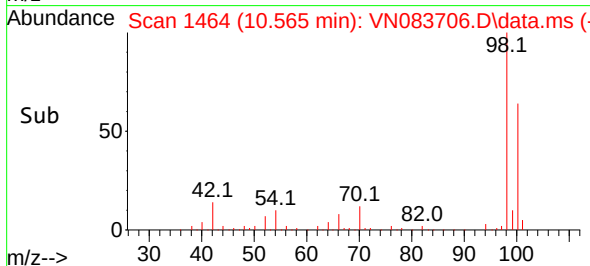


Tgt Ion: 98 Resp: 22325
Ion Ratio Lower Upper
98 100
100 65.3 52.7 79.1

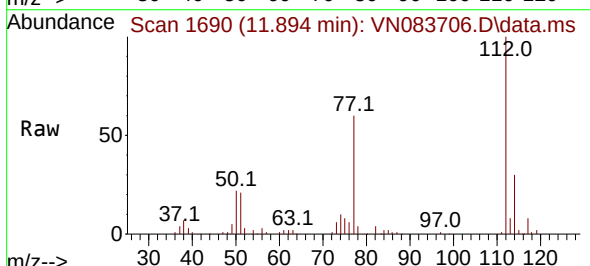
Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

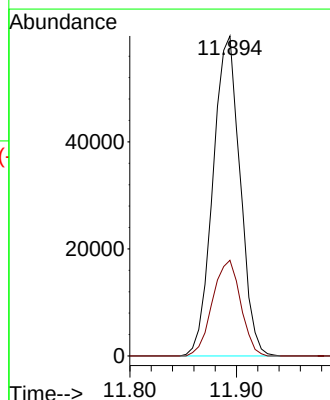
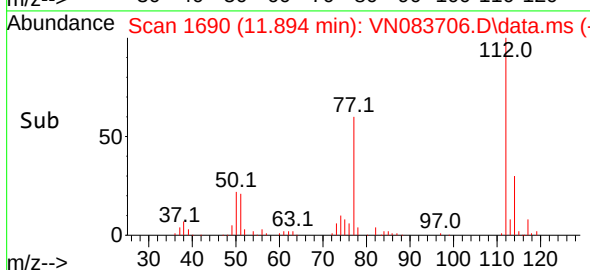
Supervised By :Mahesh
Dadoda
09/10/2024

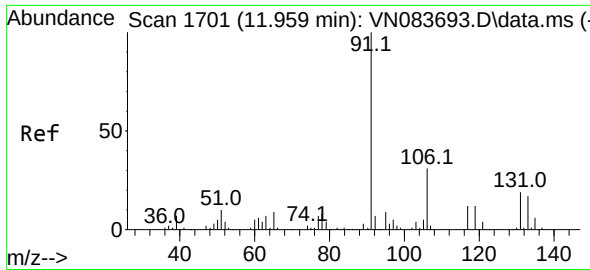


#64
Chlorobenzene
Concen: 18.961 ug/l
RT: 11.894 min Scan# 1690
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57



Tgt Ion:112 Resp: 105745
Ion Ratio Lower Upper
112 100
114 29.9 26.6 39.8





#65
1,1,1,2-Tetrachloroethane
Concen: 19.734 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

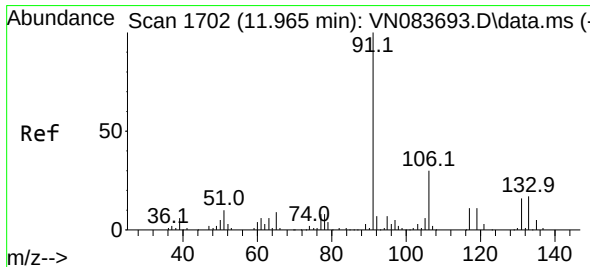
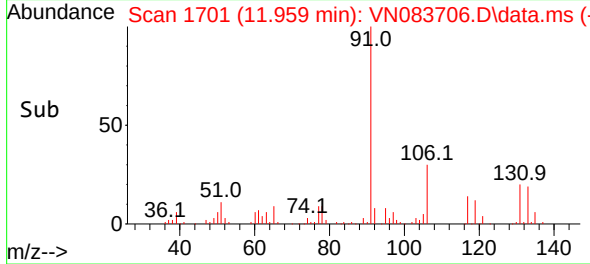
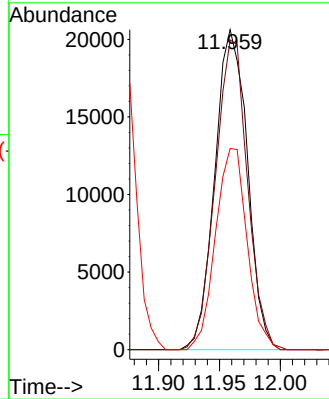
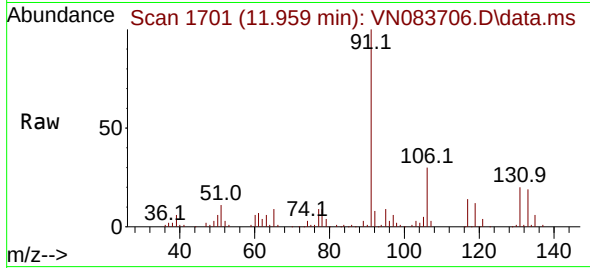
Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion:131 Resp: 38339
Ion Ratio Lower Upper
131 100
133 95.8 0.0 188.0
119 61.1 0.0 122.8

Manual Integrations
APPROVED

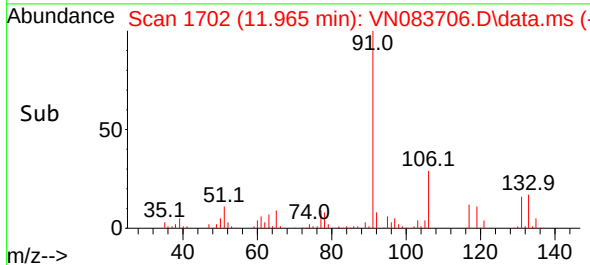
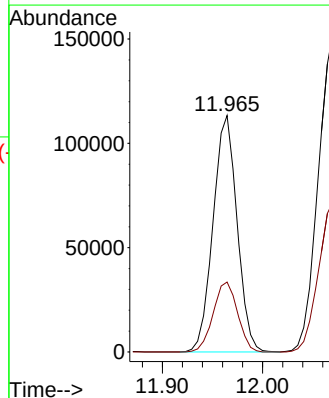
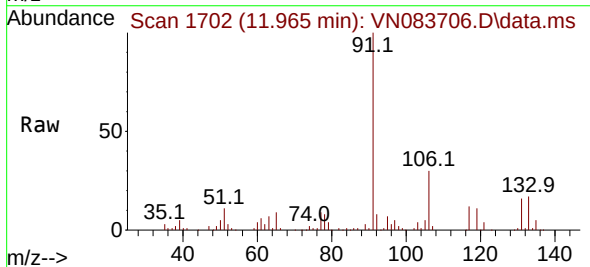
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

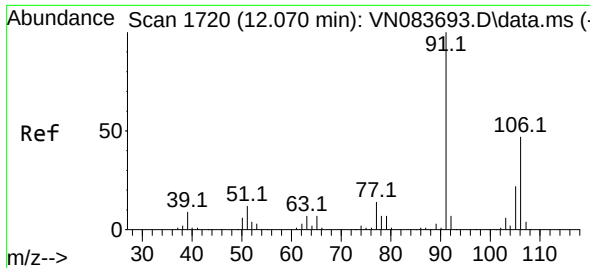
Supervised By :Mahesh
Dadoda
09/10/2024



#66
Ethyl Benzene
Concen: 18.403 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion: 91 Resp: 188510
Ion Ratio Lower Upper
91 100
106 29.5 24.4 36.6





#67
m/p-Xylenes
Concen: 37.536 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

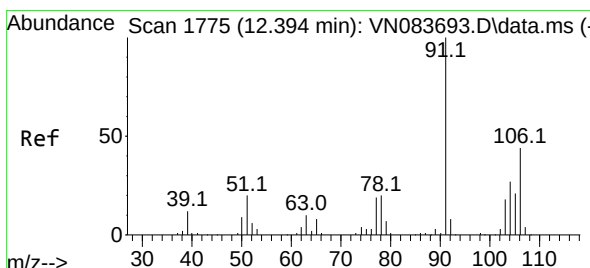
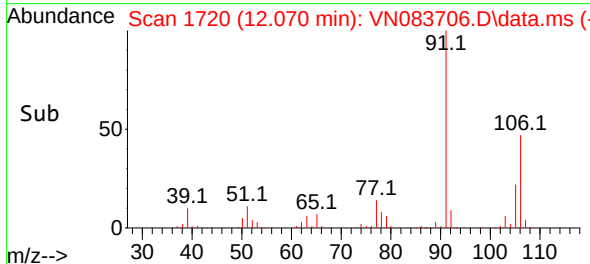
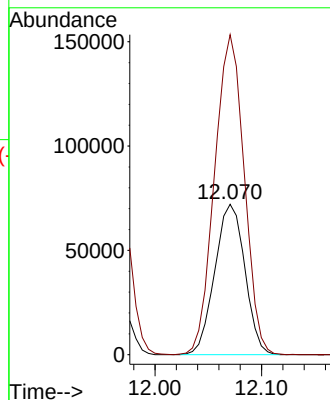
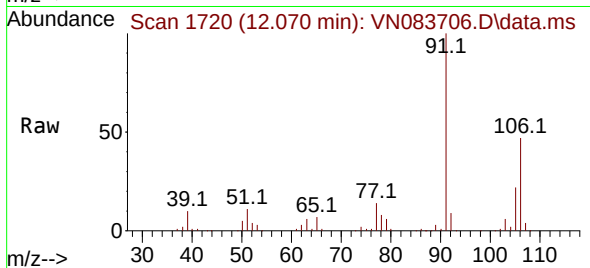
Instrument :
MSVOA_N
ClientSampleId :
VSTDC0020

Tgt Ion:106 Resp: 141462
Ion Ratio Lower Upper
106 100
91 209.7 166.6 249.8

Manual Integrations
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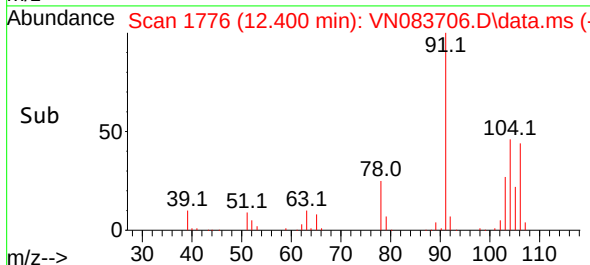
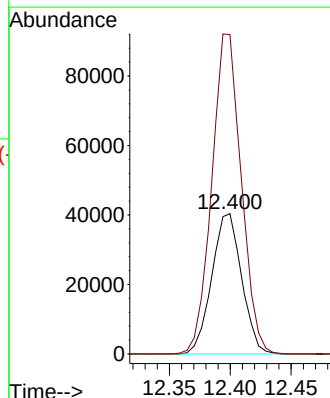
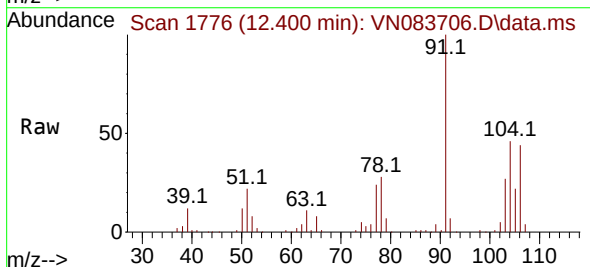
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

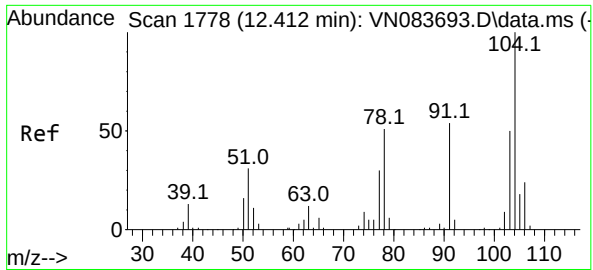
Supervised By :Mahesh
Dadoda
09/10/2024



#68
o-Xylene
Concen: 18.896 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

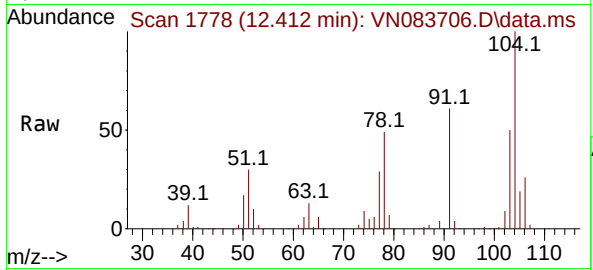
Tgt Ion:106 Resp: 68923
Ion Ratio Lower Upper
106 100
91 225.1 110.0 330.0





#69
Styrene
Concen: 17.967 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

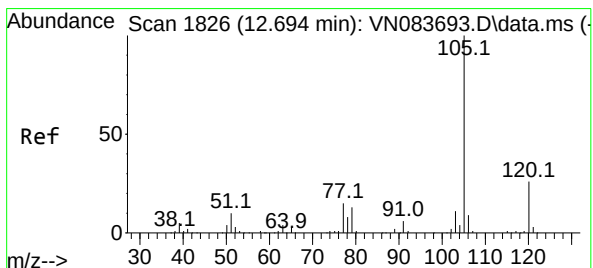
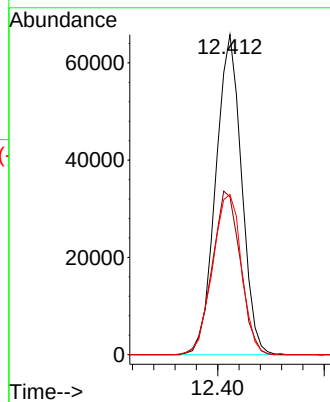
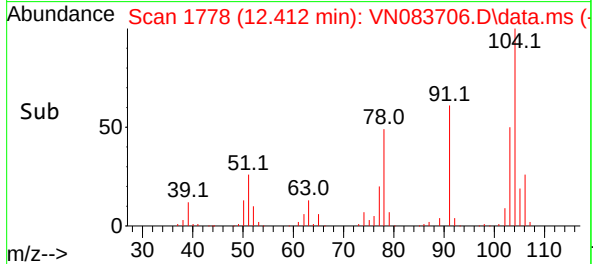


Tgt Ion:104 Resp: 110730
Ion Ratio Lower Upper
104 100
78 55.9 42.6 64.0
103 56.1 43.7 65.5

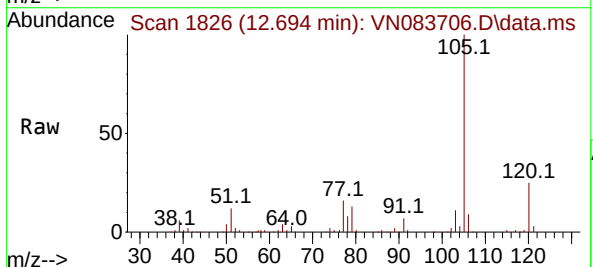
Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

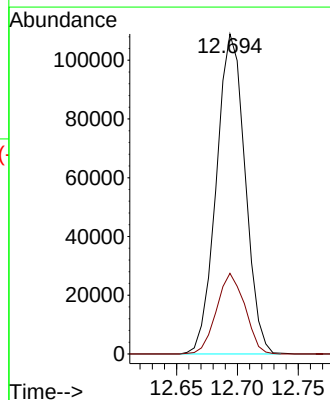
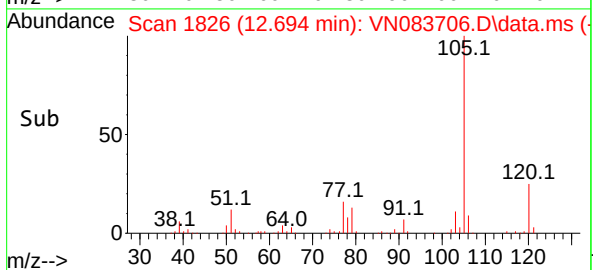
Supervised By :Mahesh
Dadoda
09/10/2024

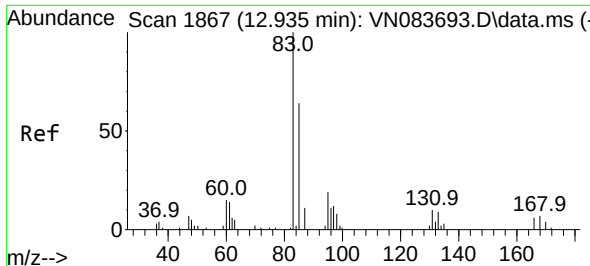


#70
Isopropylbenzene
Concen: 18.620 ug/l
RT: 12.694 min Scan# 1826
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57



Tgt Ion:105 Resp: 179225
Ion Ratio Lower Upper
105 100
120 24.8 17.8 33.1





#71

1,1,2,2-Tetrachloroethane

Concen: 20.038 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDC020

Tgt Ion: 83 Resp: 52680

Ion Ratio Lower Upper

83 100

131 10.0 5.2 15.6

85 65.4 32.3 96.8

Manual Integrations

APPROVED

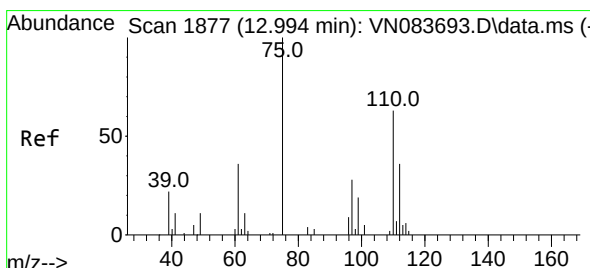
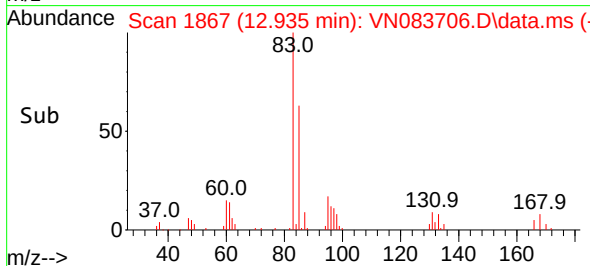
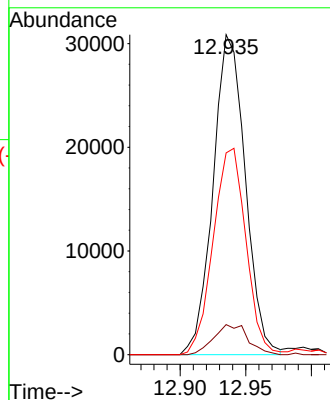
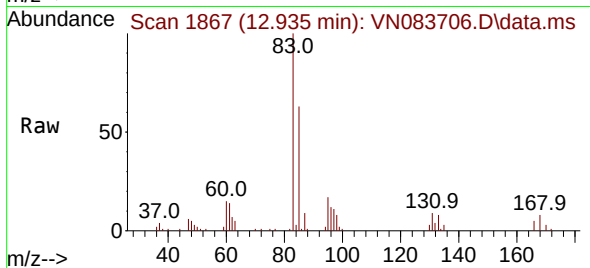
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#72

1,2,3-Trichloropropane

Concen: 20.084 ug/l m

RT: 12.994 min Scan# 1877

Delta R.T. -0.000 min

Lab File: VN083706.D

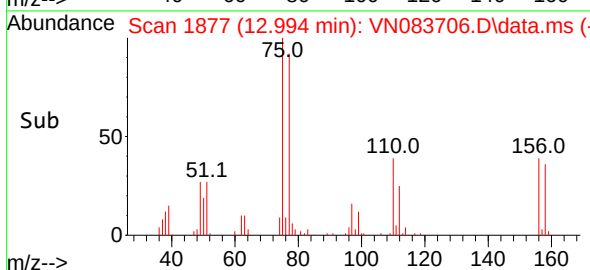
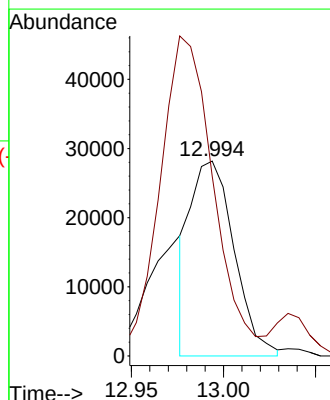
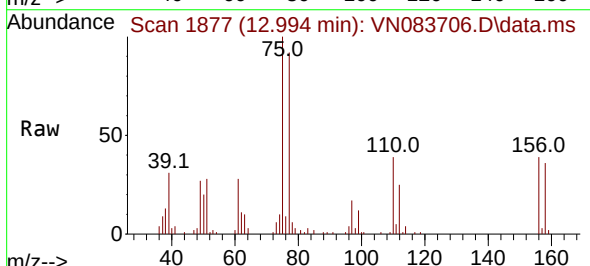
Acq: 09 Sep 2024 08:57

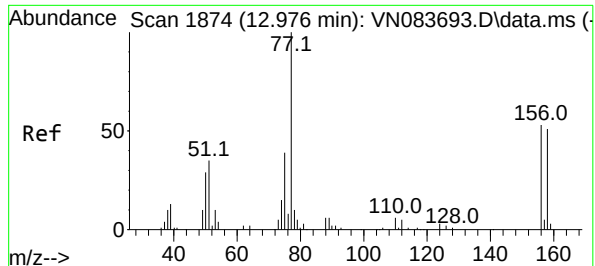
Tgt Ion: 75 Resp: 46294

Ion Ratio Lower Upper

75 100

77 201.2 0.0 367.6





#73

Bromobenzene

Concen: 18.431 ug/l

RT: 12.982 min Scan# 1875

Delta R.T. 0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion:	156	Resp:	40749
Ion Ratio	Lower	Upper	
156	100		
77	228.6	0.0	437.6
158	97.5	0.0	203.8

Manual Integrations

APPROVED

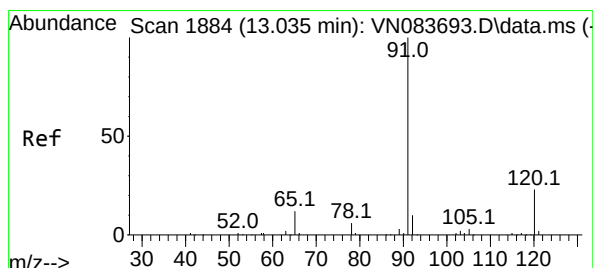
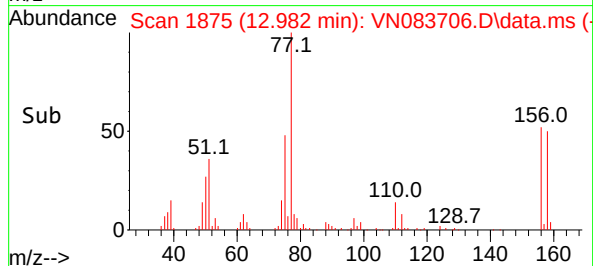
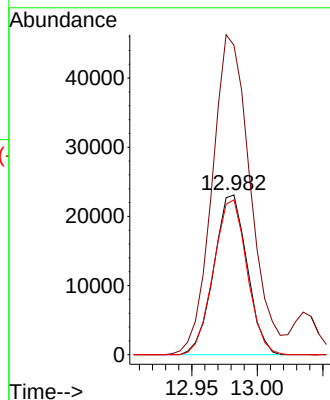
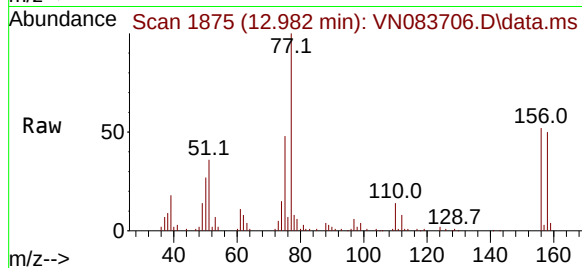
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#74

n-propylbenzene

Concen: 17.909 ug/l

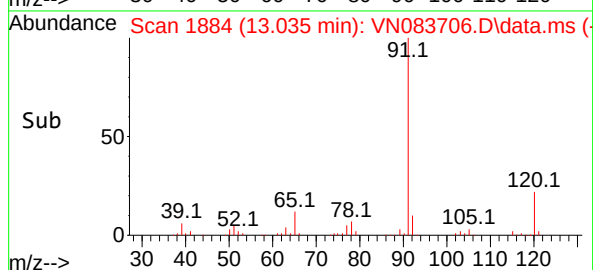
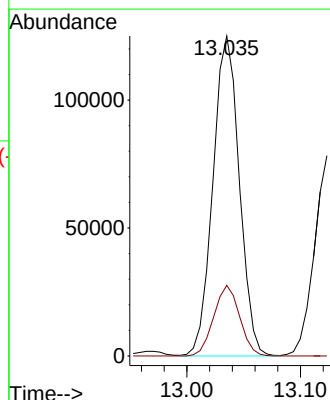
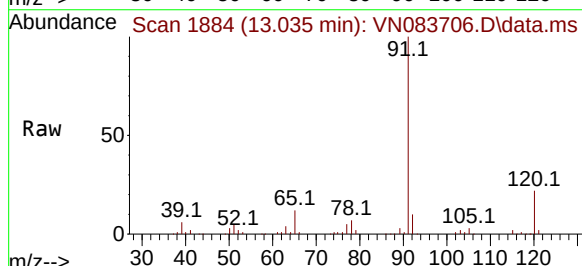
RT: 13.035 min Scan# 1884

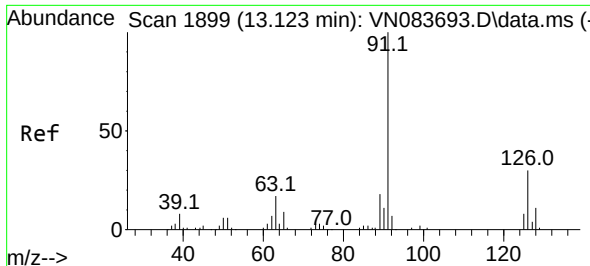
Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Tgt Ion:	91	Resp:	201798
Ion Ratio	Lower	Upper	
91	100		
120	21.6	0.0	43.8





#75
2-Chlorotoluene
Concen: 18.510 ug/l
RT: 13.123 min Scan# 1899
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

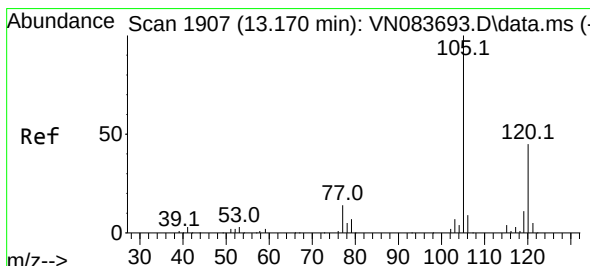
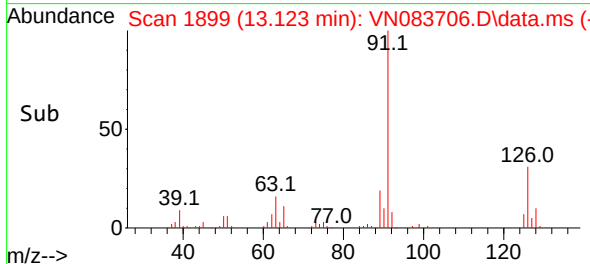
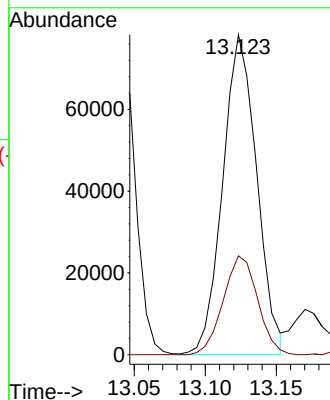
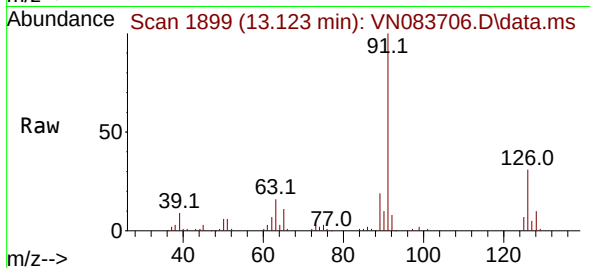
Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion: 91 Resp: 13017
Ion Ratio Lower Upper
91 100
126 31.3 0.0 61.2

Manual Integrations
APPROVED

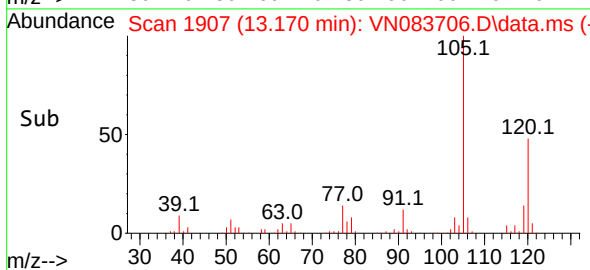
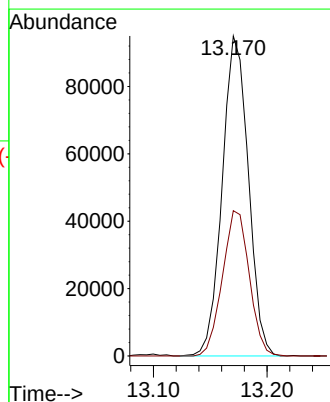
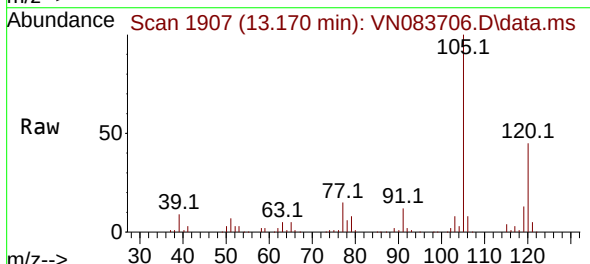
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

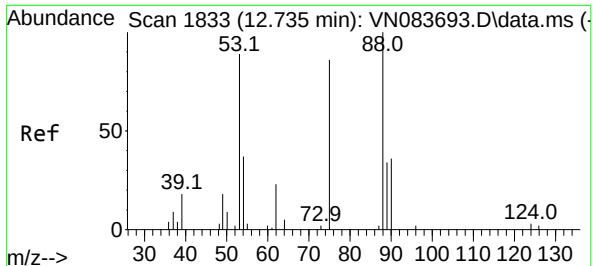
Supervised By :Mahesh
Dadoda
09/10/2024



#76
1,3,5-Trimethylbenzene
Concen: 18.872 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion:105 Resp: 151739
Ion Ratio Lower Upper
105 100
120 46.7 0.0 95.8





#77

t-1,4-Dichloro-2-butene

Concen: 19.721 ug/l

RT: 12.741 min Scan# 1833

Delta R.T. 0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 75 Resp: 19214

Ion Ratio Lower Upper

75 100

53 88.2 45.9 137.7

89 41.2 25.9 77.7

Manual Integrations

APPROVED

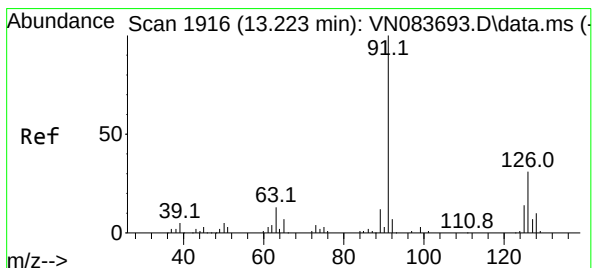
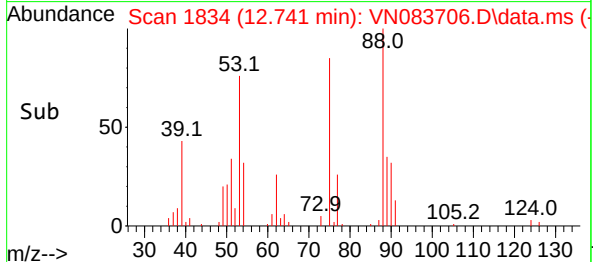
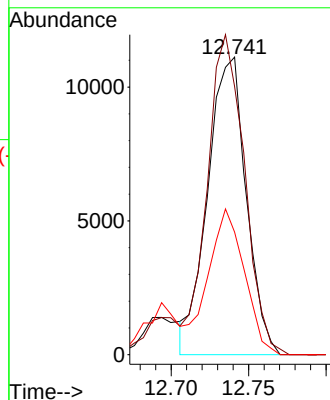
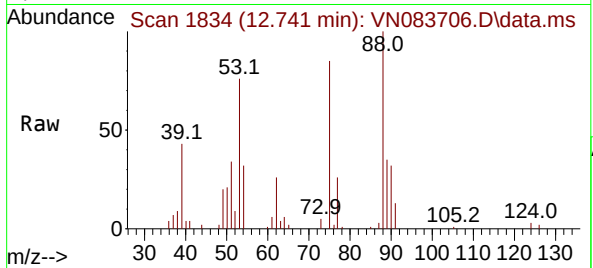
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#78

4-Chlorotoluene

Concen: 17.506 ug/l

RT: 13.223 min Scan# 1916

Delta R.T. -0.000 min

Lab File: VN083706.D

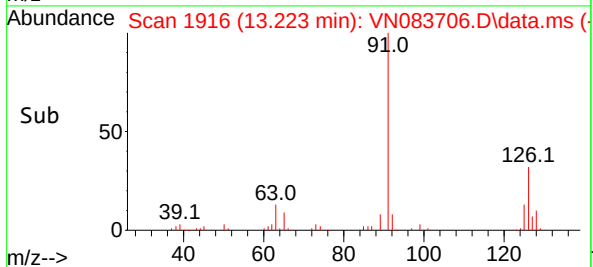
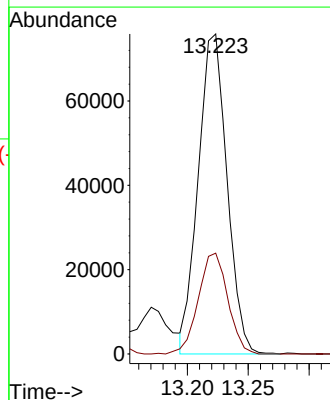
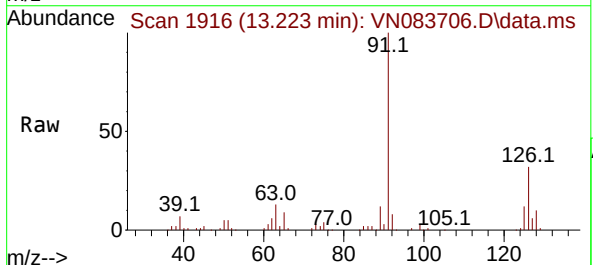
Acq: 09 Sep 2024 08:57

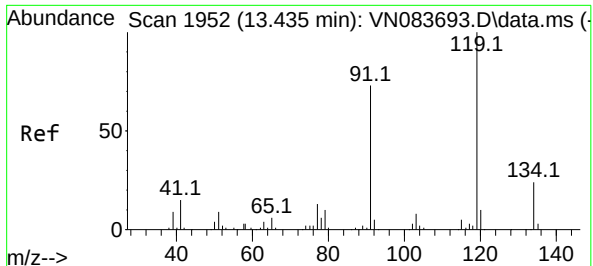
Tgt Ion: 91 Resp: 124849

Ion Ratio Lower Upper

91 100

126 32.2 0.0 62.8





#79

tert-butylbenzene

Concen: 19.138 ug/l

RT: 13.441 min Scan# 1952

Delta R.T. 0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion:119 Resp: 134550

Ion Ratio Lower Upper

119 100

91 69.1 0.0 138.8

134 23.8 0.0 48.6

Manual Integrations

APPROVED

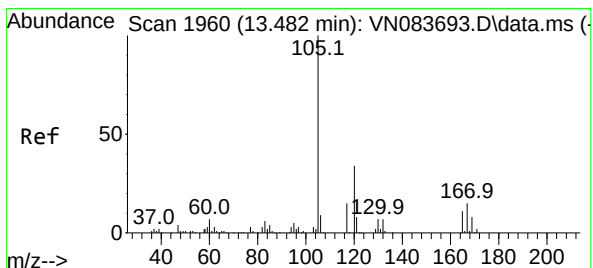
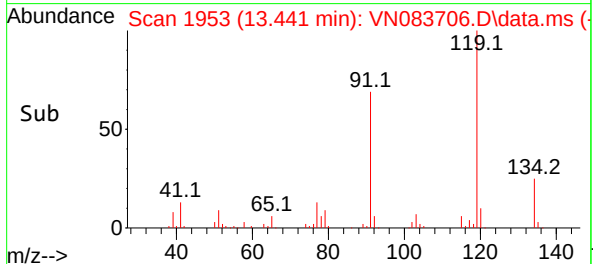
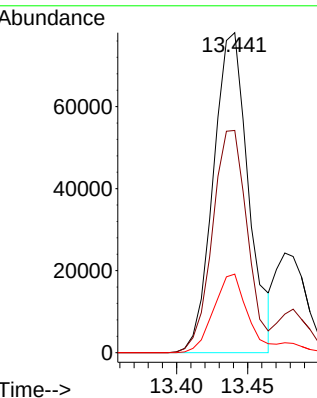
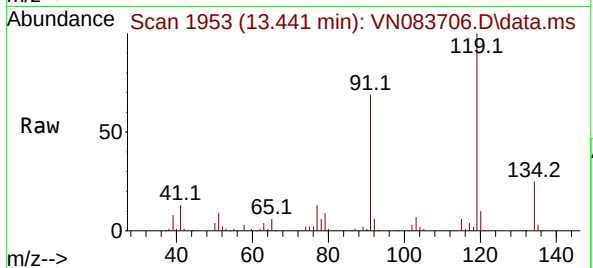
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#80

1,2,4-Trimethylbenzene

Concen: 18.560 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. -0.000 min

Lab File: VN083706.D

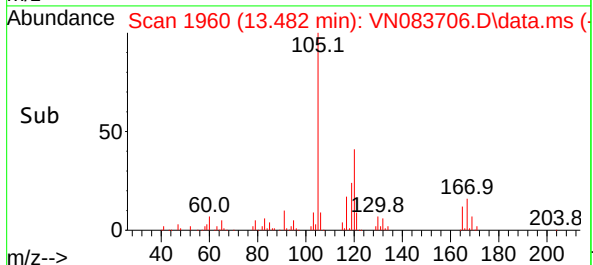
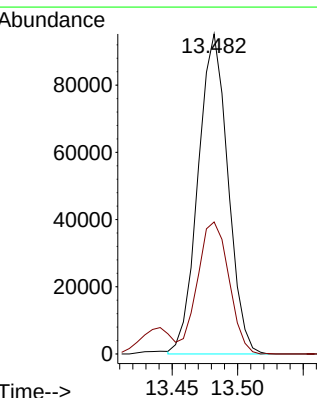
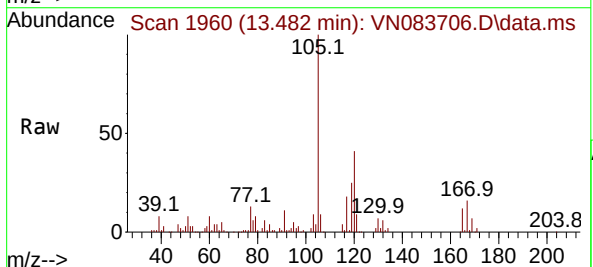
Acq: 09 Sep 2024 08:57

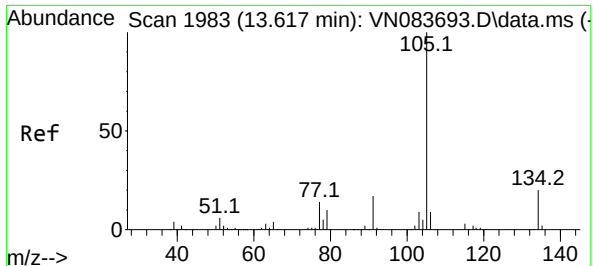
Tgt Ion:105 Resp: 150807

Ion Ratio Lower Upper

105 100

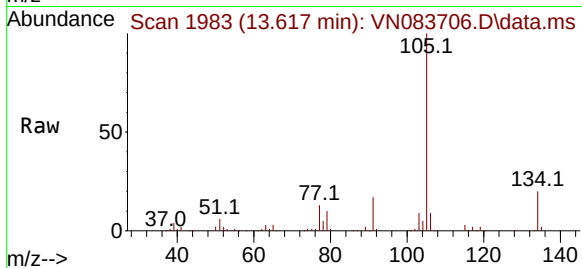
120 43.5 0.0 86.8





#81
sec-Butylbenzene
Concen: 17.928 ug/l
RT: 13.617 min Scan# 1983
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

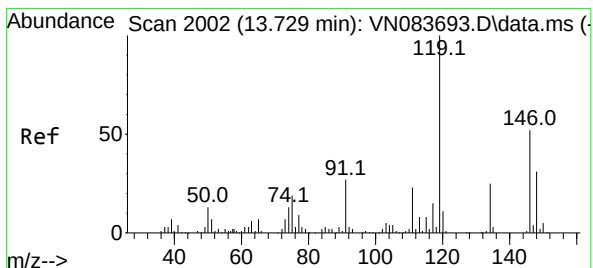
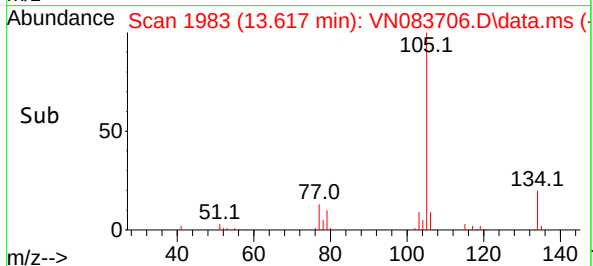
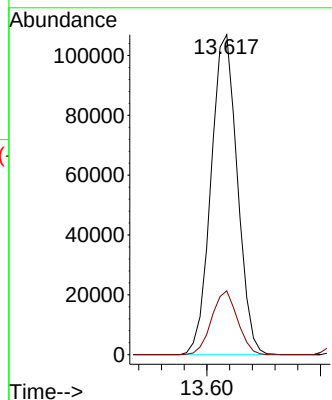


Tgt Ion:105 Resp: 172200
Ion Ratio Lower Upper
105 100
134 19.6 0.0 39.0

Manual Integrations
APPROVED

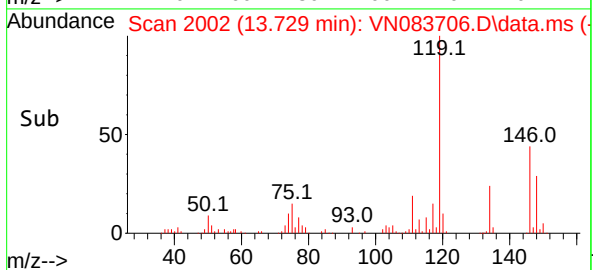
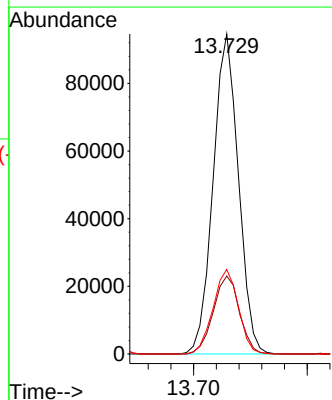
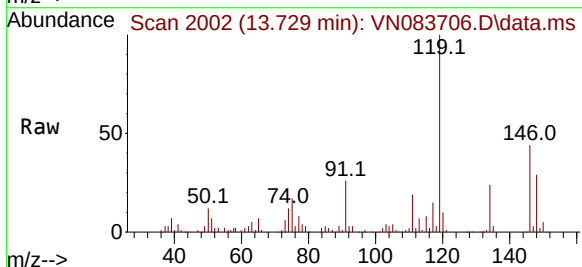
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

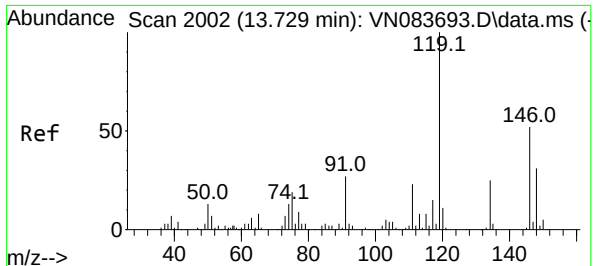
Supervised By :Mahesh
Dadoda
09/10/2024



#82
p-Isopropyltoluene
Concen: 18.072 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion:119 Resp: 146044
Ion Ratio Lower Upper
119 100
134 25.2 0.0 49.2
91 26.4 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 17.451 ug/l

RT: 13.735 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion:146 Resp: 74259

Ion Ratio Lower Upper

146 100

111 42.0 22.4 67.0

148 63.8 32.1 96.5

Manual Integrations

APPROVED

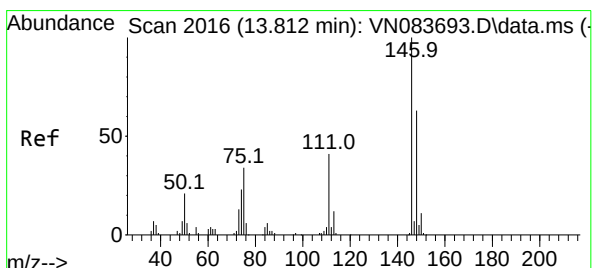
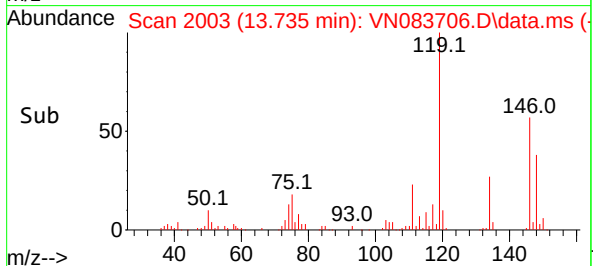
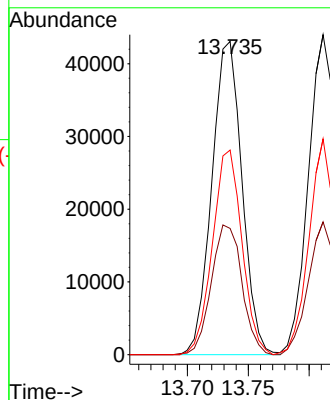
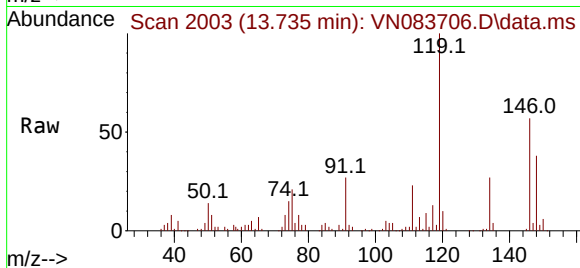
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#84

1,4-Dichlorobenzene

Concen: 17.141 ug/l

RT: 13.811 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

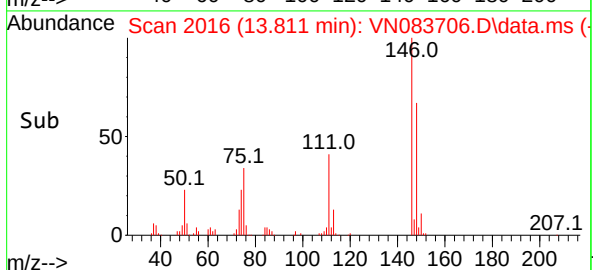
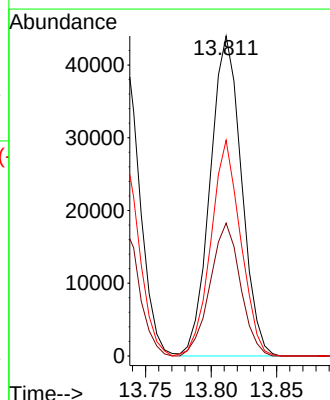
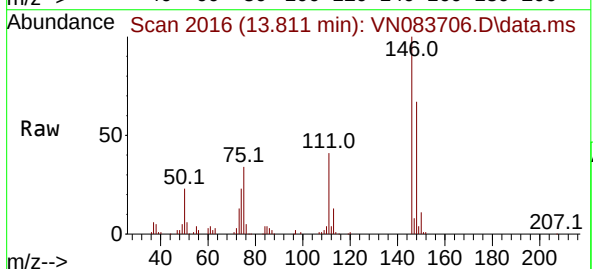
Tgt Ion:146 Resp: 72920

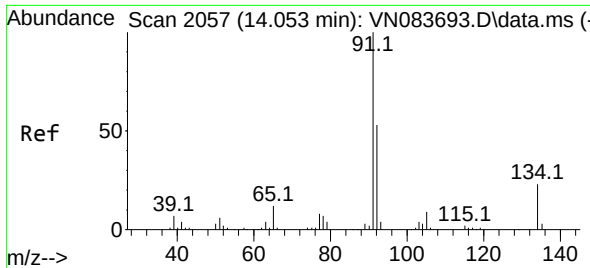
Ion Ratio Lower Upper

146 100

111 40.2 21.3 63.9

148 64.1 31.9 95.5





#85

n-Butylbenzene

Concen: 17.282 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion: 91 Resp: 12324

Ion Ratio Lower Upper

91 100

92 52.0 0.0 105.0

134 24.1 0.0 51.8

Manual Integrations

APPROVED

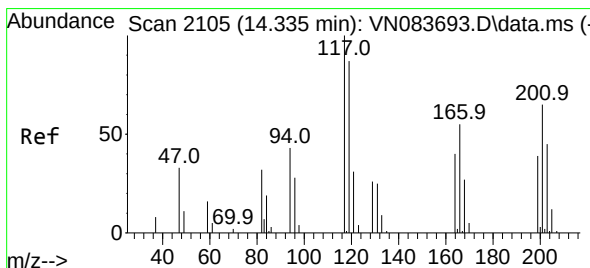
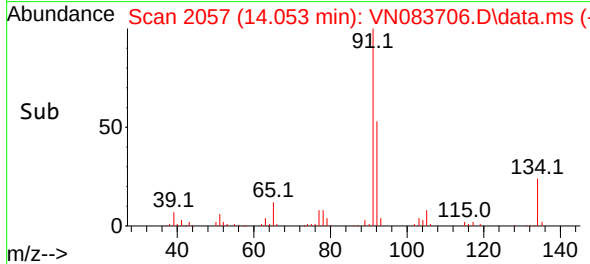
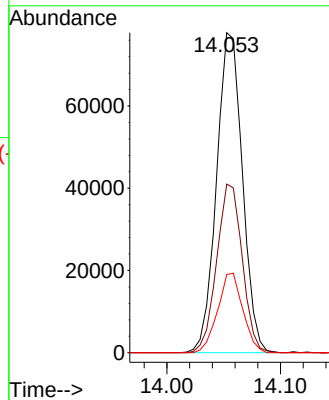
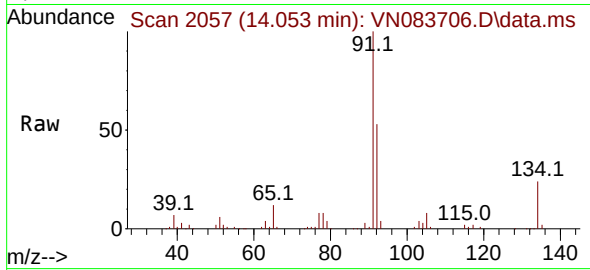
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#86

Hexachloroethane

Concen: 18.782 ug/l

RT: 14.335 min Scan# 2105

Delta R.T. -0.000 min

Lab File: VN083706.D

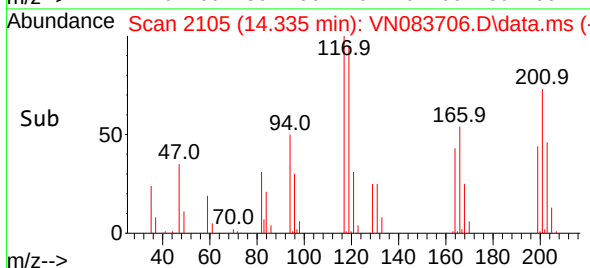
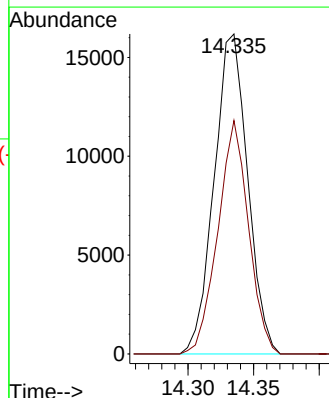
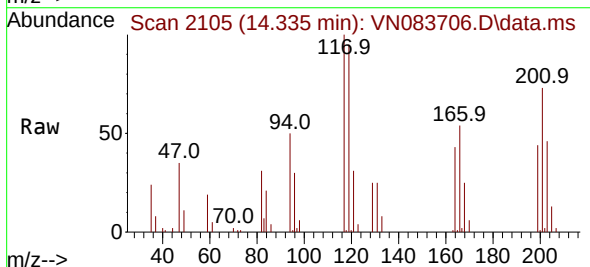
Acq: 09 Sep 2024 08:57

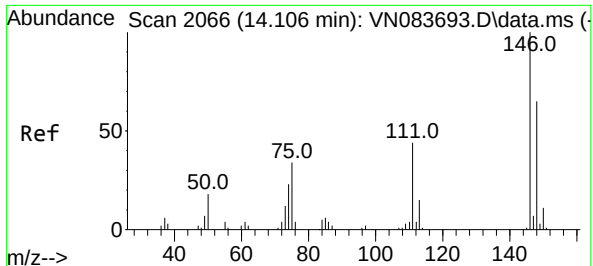
Tgt Ion:117 Resp: 28763

Ion Ratio Lower Upper

117 100

201 66.7 38.0 114.0





#87

1,2-Dichlorobenzene

Concen: 18.113 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

Instrument :

MSVOA_N

ClientSampleId :

VSTDC0020

Tgt Ion:146 Resp: 74800

Ion Ratio Lower Upper

146 100

111 43.9 22.6 67.8

148 61.8 31.3 93.8

Manual Integrations

APPROVED

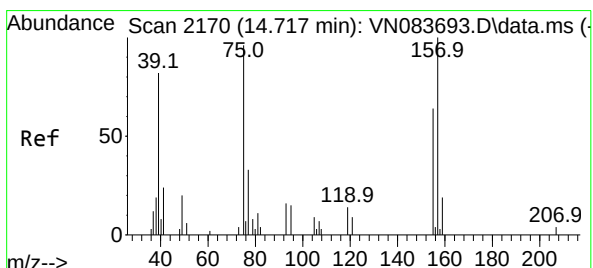
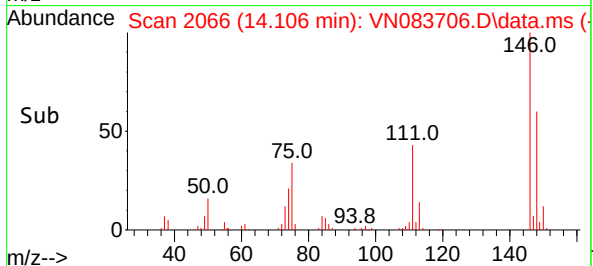
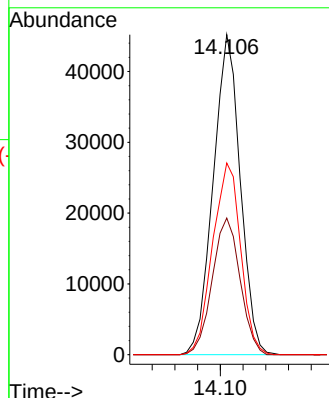
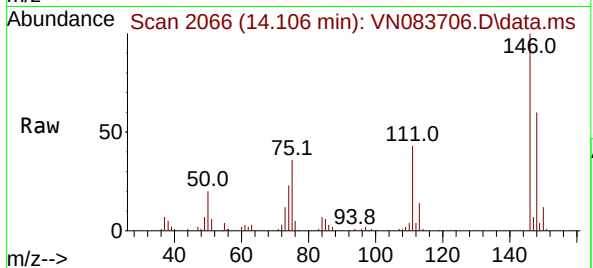
Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 20.888 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

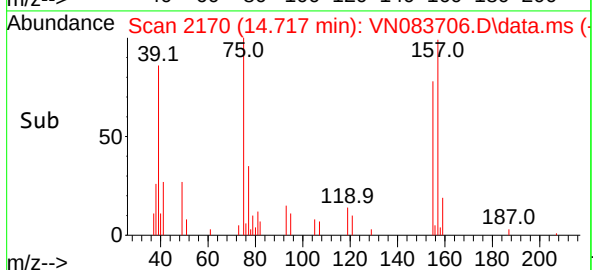
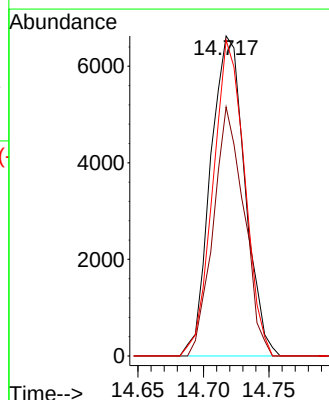
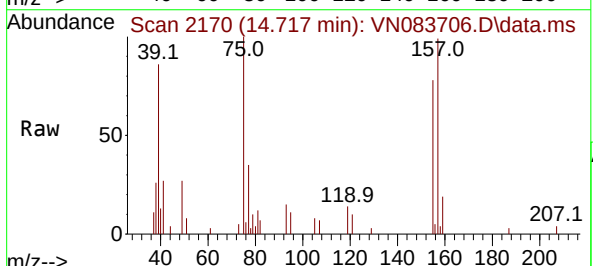
Tgt Ion: 75 Resp: 12068

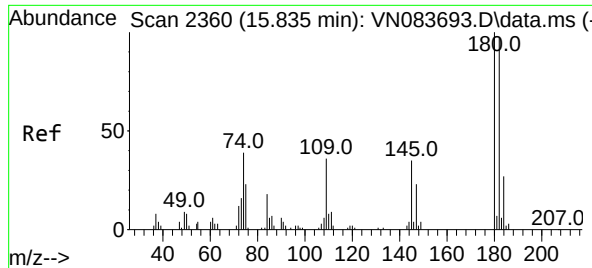
Ion Ratio Lower Upper

75 100

155 69.5 61.7 92.5

157 90.9 83.6 125.4





#89

1,2,4-Trichlorobenzene

Concen: 16.843 ug/l

RT: 15.841 min Scan# 2360

Delta R.T. 0.006 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

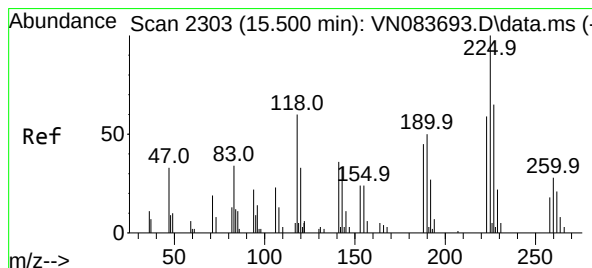
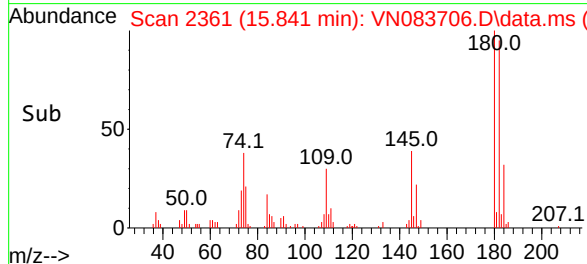
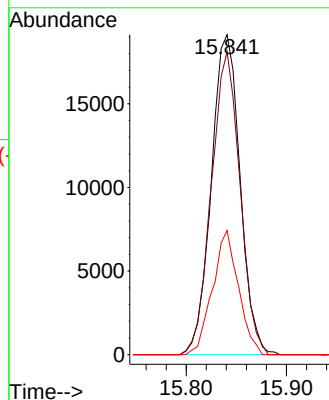
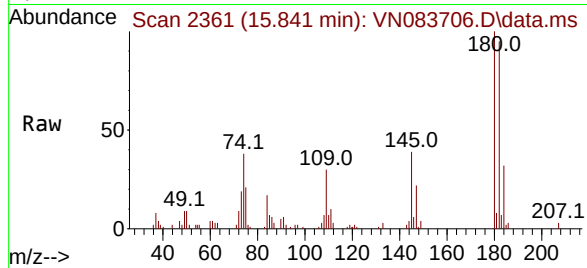
Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC020

Tgt Ion	Ratio	Lower	Upper
180	100		
182	94.1	76.4	114.6
145	35.0	28.4	42.6

Manual Integrations
APPROVEDReviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024Supervised By :Mahesh
Dadoda
09/10/2024

#90

Hexachlorobutadiene

Concen: 18.674 ug/l

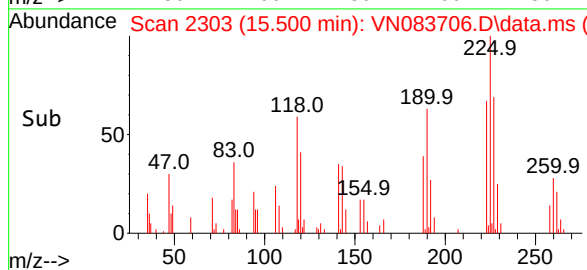
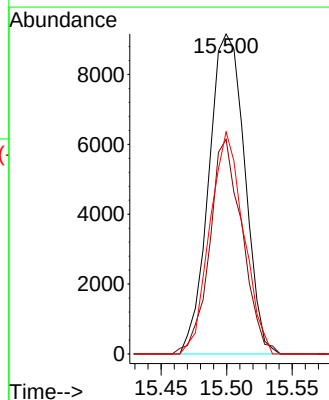
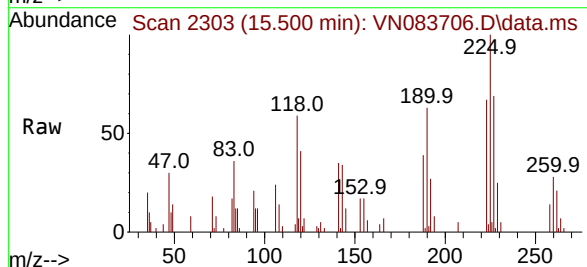
RT: 15.500 min Scan# 2303

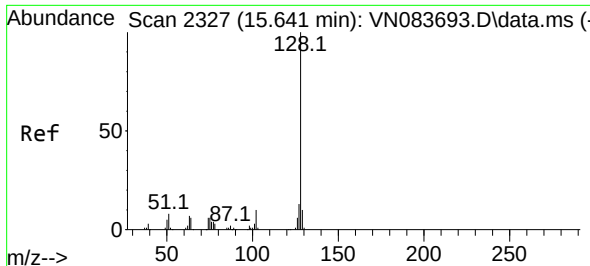
Delta R.T. -0.000 min

Lab File: VN083706.D

Acq: 09 Sep 2024 08:57

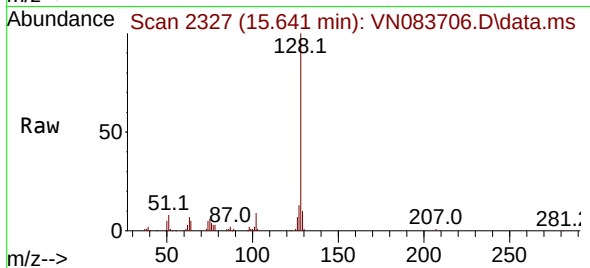
Tgt Ion	Ratio	Lower	Upper
225	100		
223	60.6	0.0	126.6
227	65.1	0.0	126.6





#91
Naphthalene
Concen: 17.154 ug/l
RT: 15.641 min Scan# 2327
Delta R.T. -0.000 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

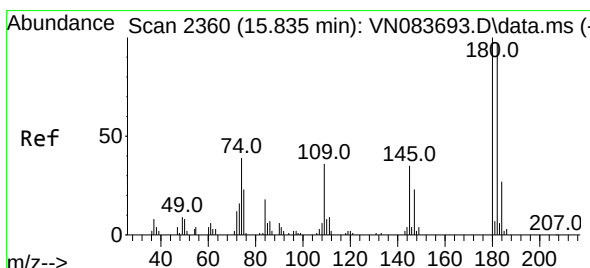
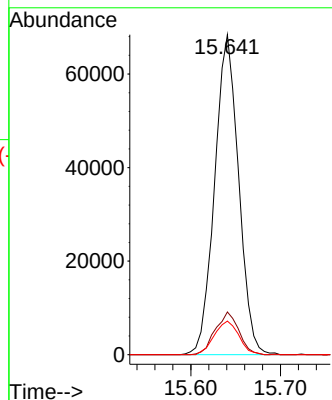


Tgt Ion:128 Resp: 126878
Ion Ratio Lower Upper
128 100
127 13.1 10.6 16.0
129 10.8 8.6 13.0

Manual Integrations
APPROVED

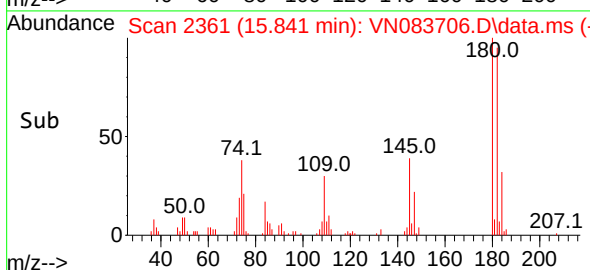
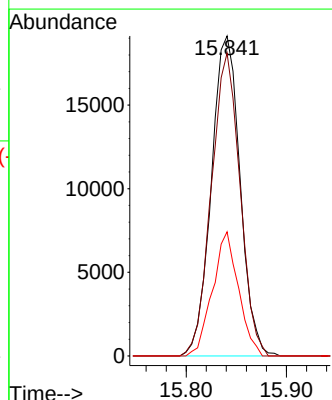
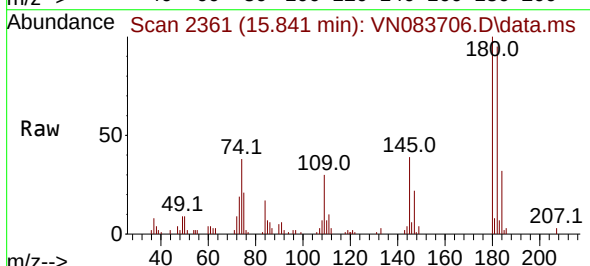
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

Supervised By :Mahesh
Dadoda
09/10/2024



#92
1,2,3-Trichlorobenzene
Concen: 16.843 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN083706.D
Acq: 09 Sep 2024 08:57

Tgt Ion:180 Resp: 38107
Ion Ratio Lower Upper
180 100
182 94.1 0.0 191.0
145 35.0 0.0 71.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
Data File : VN083706.D
Acq On : 09 Sep 2024 08:57
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 10 01:14:19 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	101	0.00
2 M	Dichlorodifluoromethane	2.009	1.911	4.9	97	0.00
3 M	Chloromethane	2.087	2.058	1.4	102	0.00
4 M	Vinyl Chloride	2.146	2.071	3.5	100	0.00
5 M	Bromomethane	1.199	1.111	7.3	94	0.00
6 M	Chloroethane	1.437	1.570	-9.3	115	0.00
7 M	Trichlorofluoromethane	3.598	3.441	4.4	101	0.00
8 T	Diethyl Ether	1.222	1.216	0.5	104	0.00
9	1,1,2-Trichlorotrifluoroeth	1.932	1.836	5.0	101	0.00
10 M	1,1-Dichloroethene	1.865	1.750	6.2	99	0.00
11	Methyl Iodide	2.533	2.368	6.5	98	0.00
12	Methyl Acetate	2.249	2.172	3.4	106	0.00
13 M	Acrolein	0.328	0.360	-9.8	104	0.00
14 M	Acrylonitrile	0.910	0.944	-3.7	110	0.00
15 M	Acetone	0.302	0.356	-17.9	132	0.00
16 M	Carbon Disulfide	5.269	4.821	8.5	95	0.00
17	Allyl chloride	3.270	3.175	2.9	103	0.00
18 M	Methylene Chloride	2.040	1.990	2.5	102	0.00
19 M	trans-1,2-Dichloroethene	1.932	1.793	7.2	96	0.00
20 T	Diisopropyl ether	6.603	6.263	5.1	103	0.00
21 M	1,1-Dichloroethane	3.770	3.622	3.9	101	0.00
22 M	cis-1,2-Dichloroethene	2.352	2.233	5.1	98	0.00
23 M	tert-Butyl Alcohol	0.334	0.367	-9.9	113	0.00
24 M	Methyl tert-Butyl Ether	6.626	6.475	2.3	102	0.00
25 M	Chloroform	3.995	3.797	5.0	99	0.00
26	Cyclohexane	3.320	3.110	6.3	99	0.00
27 s	1,2-Dichloroethane-d4	2.742	2.778	-1.3	102	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
29	1,1-Dichloropropene	0.476	0.443	6.9	99	0.00
30 M	2-Butanone	0.224	0.244	-8.9	117	0.00
31	2,2-Dichloropropane	0.607	0.591	2.6	105	0.00
32 M	1,1,1-Trichloroethane	0.635	0.605	4.7	101	0.00
33 M	Carbon Tetrachloride	0.550	0.519	5.6	102	0.00
34 M	Benzene	1.428	1.347	5.7	98	0.00
35	Methacrylonitrile	0.252	0.237	6.0	97	0.00
36 M	1,2-Dichloroethane	0.537	0.515	4.1	102	0.00
37 M	Trichloroethene	0.335	0.313	6.6	101	0.00
38	Methylcyclohexane	0.570	0.522	8.4	100	0.00
39 M	1,2-Dichloropropane	0.344	0.332	3.5	103	0.00
40	Dibromomethane	0.251	0.236	6.0	97	0.00
41 M	Bromodichloromethane	0.534	0.510	4.5	103	0.00
42 M	Vinyl Acetate	0.922	0.830	10.0	103	0.00
43	Ethyl Acetate	0.451	0.471	-4.4	110	0.00
44	Isopropyl Acetate	0.781	0.793	-1.5	108	0.00
45 T	1,4-Dioxane	0.006	0.007	-16.7	108	0.00
46	Methyl methacrylate	0.378	0.379	-0.3	109	0.00
47	n-amyl Acetate	0.692	0.678	2.0	106	0.00
48 M	t-1,3-Dichloropropene	0.562	0.511	9.1	98	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
Data File : VN083706.D
Acq On : 09 Sep 2024 08:57
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 10 01:14:19 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	0.584	0.547	6.3	102	0.00
50 M	1,1,2-Trichloroethane	0.320	0.317	0.9	105	0.00
51	Ethyl methacrylate	0.546	0.526	3.7	100	0.00
52	1,3-Dichloropropane	0.577	0.549	4.9	101	0.00
53 M	Dibromochloromethane	0.383	0.368	3.9	105	0.00
54 M	1,2-Dibromoethane	0.331	0.314	5.1	101	0.00
55 M	2-Chloroethyl vinyl ether	0.218	0.233	-6.9	102	0.00
56 M	Bromoform	0.244	0.230	5.7	103	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
58 M	4-Methyl-2-Pentanone	0.476	0.508	-6.7	110	0.00
59 M	2-Hexanone	0.359	0.387	-7.8	113	0.00
60 S	4-Bromofluorobenzene	0.517	0.526	-1.7	104	0.00
61 M	Tetrachloroethene	0.317	0.306	3.5	104	0.00
62 M	Toluene	1.724	1.634	5.2	99	0.00
63 S	Toluene-d8	1.389	1.425	-2.6	102	0.00
64 M	Chlorobenzene	1.068	1.012	5.2	99	0.00
65	1,1,1,2-Tetrachloroethane	0.372	0.367	1.3	104	0.00
66 M	Ethyl Benzene	1.961	1.804	8.0	99	0.00
67 M	m/p-Xylenes	0.721	0.677	6.1	100	0.00
68 M	o-Xylene	0.698	0.660	5.4	98	0.00
69 M	Styrene	1.180	1.060	10.2	95	0.00
70	Isopropylbenzene	1.843	1.715	6.9	100	0.00
71 M	1,1,2,2-Tetrachloroethane	0.503	0.504	-0.2	103	0.00
72	1,2,3-Trichloropropane	0.441	0.443	-0.5	104	0.00
73	Bromobenzene	0.423	0.390	7.8	97	0.00
74	n-propylbenzene	2.157	1.932	10.4	96	0.00
75	2-Chlorotoluene	1.346	1.246	7.4	98	0.00
76	1,3,5-Trimethylbenzene	1.539	1.452	5.7	99	0.00
77	t-1,4-Dichloro-2-butene	0.187	0.184	1.6	107	0.00
78	4-Chlorotoluene	1.365	1.195	12.5	94	0.00
79	tert-butylbenzene	1.346	1.288	4.3	99	0.00
80	1,2,4-Trimethylbenzene	1.555	1.443	7.2	99	0.00
81	sec-Butylbenzene	1.839	1.648	10.4	98	0.00
82	p-Isopropyltoluene	1.547	1.398	9.6	99	0.00
83 M	1,3-Dichlorobenzene	0.815	0.711	12.8	93	0.00
84 M	1,4-Dichlorobenzene	0.814	0.698	14.3	91	0.00
85	n-Butylbenzene	1.365	1.180	13.6	97	0.00
86 T	Hexachloroethane	0.293	0.275	6.1	102	0.00
87 M	1,2-Dichlorobenzene	0.791	0.716	9.5	97	0.00
88	1,2-Dibromo-3-Chloropropane	0.111	0.116	-4.5	110	0.00
89	1,2,4-Trichlorobenzene	0.433	0.365	15.7	91	0.00
90	Hexachlorobutadiene	0.179	0.167	6.7	104	0.00
91 M	Naphthalene	1.416	1.214	14.3	92	0.00
92	1,2,3-Trichlorobenzene	0.433	0.365	15.7	91	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
Data File : VN083706.D
Acq On : 09 Sep 2024 08:57
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 10 01:14:19 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	30.000	30.000	0.0	101	0.00
2 M	Dichlorodifluoromethane	20.000	19.019	4.9	97	0.00
3 M	Chloromethane	20.000	19.720	1.4	102	0.00
4 M	Vinyl Chloride	20.000	19.305	3.5	100	0.00
5 M	Bromomethane	20.000	18.535	7.3	94	0.00
6 M	Chloroethane	20.000	21.846	-9.2	115	0.00
7 M	Trichlorofluoromethane	20.000	19.127	4.4	101	0.00
8 T	Diethyl Ether	20.000	19.900	0.5	104	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	19.005	5.0	101	0.00
10 M	1,1-Dichloroethene	20.000	18.775	6.1	99	0.00
11	Methyl Iodide	20.000	18.703	6.5	98	0.00
12	Methyl Acetate	20.000	19.319	3.4	106	0.00
13 M	Acrolein	100.000	109.778	-9.8	104	0.00
14 M	Acrylonitrile	100.000	103.754	-3.8	110	0.00
15 M	Acetone	100.000	118.098	-18.1	132	0.00
16 M	Carbon Disulfide	20.000	18.299	8.5	95	0.00
17	Allyl chloride	20.000	19.419	2.9	103	0.00
18 M	Methylene Chloride	20.000	19.512	2.4	102	0.00
19 M	trans-1,2-Dichloroethene	20.000	18.559	7.2	96	0.00
20 T	Diisopropyl ether	20.000	18.969	5.2	103	0.00
21 M	1,1-Dichloroethane	20.000	19.216	3.9	101	0.00
22 M	cis-1,2-Dichloroethene	20.000	18.989	5.1	98	0.00
23 M	tert-Butyl Alcohol	100.000	109.997	-10.0	113	0.00
24 M	Methyl tert-Butyl Ether	20.000	19.544	2.3	102	0.00
25 M	Chloroform	20.000	19.007	5.0	99	0.00
26	Cyclohexane	20.000	18.735	6.3	99	0.00
27 s	1,2-Dichloroethane-d4	30.000	30.387	-1.3	102	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	100	0.00
29	1,1-Dichloropropene	20.000	18.638	6.8	99	0.00
30 M	2-Butanone	100.000	108.902	-8.9	117	0.00
31	2,2-Dichloropropane	20.000	19.483	2.6	105	0.00
32 M	1,1,1-Trichloroethane	20.000	19.053	4.7	101	0.00
33 M	Carbon Tetrachloride	20.000	18.847	5.8	102	0.00
34 M	Benzene	20.000	18.864	5.7	98	0.00
35	Methacrylonitrile	20.000	18.787	6.1	97	0.00
36 M	1,2-Dichloroethane	20.000	19.185	4.1	102	0.00
37 M	Trichloroethene	20.000	18.680	6.6	101	0.00
38	Methylcyclohexane	20.000	18.325	8.4	100	0.00
39 M	1,2-Dichloropropane	20.000	19.298	3.5	103	0.00
40	Dibromomethane	20.000	18.822	5.9	97	0.00
41 M	Bromodichloromethane	20.000	19.073	4.6	103	0.00
42 M	Vinyl Acetate	100.000	89.959	10.0	103	0.00
43	Ethyl Acetate	20.000	20.855	-4.3	110	0.00
44	Isopropyl Acetate	20.000	20.299	-1.5	108	0.00
45 T	1,4-Dioxane	400.000	433.581	-8.4	108	0.00
46	Methyl methacrylate	20.000	20.038	-0.2	109	0.00
47	n-amyl Acetate	20.000	19.593	2.0	106	0.00
48 M	t-1,3-Dichloropropene	20.000	18.200	9.0	98	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
Data File : VN083706.D
Acq On : 09 Sep 2024 08:57
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 10 01:14:19 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	20.000	18.702	6.5	102	0.00
50 M	1,1,2-Trichloroethane	20.000	19.835	0.8	105	0.00
51	Ethyl methacrylate	20.000	19.246	3.8	100	0.00
52	1,3-Dichloropropane	20.000	19.033	4.8	101	0.00
53 M	Dibromochloromethane	20.000	19.216	3.9	105	0.00
54 M	1,2-Dibromoethane	20.000	18.974	5.1	101	0.00
55 M	2-Chloroethyl vinyl ether	100.000	107.016	-7.0	102	0.00
56 M	Bromoform	20.000	18.888	5.6	103	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	99	0.00
58 M	4-Methyl-2-Pentanone	100.000	106.770	-6.8	110	0.00
59 M	2-Hexanone	100.000	107.641	-7.6	113	0.00
60 S	4-Bromofluorobenzene	30.000	30.526	-1.8	104	0.00
61 M	Tetrachloroethene	20.000	19.251	3.7	104	0.00
62 M	Toluene	20.000	18.950	5.3	99	0.00
63 S	Toluene-d8	30.000	30.766	-2.6	102	0.00
64 M	Chlorobenzene	20.000	18.961	5.2	99	0.00
65	1,1,1,2-Tetrachloroethane	20.000	19.734	1.3	104	0.00
66 M	Ethyl Benzene	20.000	18.403	8.0	99	0.00
67 M	m/p-Xylenes	40.000	37.536	6.2	100	0.00
68 M	o-Xylene	20.000	18.896	5.5	98	0.00
69 M	Styrene	20.000	17.967	10.2	95	0.00
70	Isopropylbenzene	20.000	18.620	6.9	100	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	20.038	-0.2	103	0.00
72	1,2,3-Trichloropropane	20.000	20.084	-0.4	104	0.00
73	Bromobenzene	20.000	18.431	7.8	97	0.00
74	n-propylbenzene	20.000	17.909	10.5	96	0.00
75	2-Chlorotoluene	20.000	18.510	7.4	98	0.00
76	1,3,5-Trimethylbenzene	20.000	18.872	5.6	99	0.00
77	t-1,4-Dichloro-2-butene	20.000	19.721	1.4	107	0.00
78	4-Chlorotoluene	20.000	17.506	12.5	94	0.00
79	tert-butylbenzene	20.000	19.138	4.3	99	0.00
80	1,2,4-Trimethylbenzene	20.000	18.560	7.2	99	0.00
81	sec-Butylbenzene	20.000	17.928	10.4	98	0.00
82	p-Isopropyltoluene	20.000	18.072	9.6	99	0.00
83 M	1,3-Dichlorobenzene	20.000	17.451	12.7	93	0.00
84 M	1,4-Dichlorobenzene	20.000	17.141	14.3	91	0.00
85	n-Butylbenzene	20.000	17.282	13.6	97	0.00
86 T	Hexachloroethane	20.000	18.782	6.1	102	0.00
87 M	1,2-Dichlorobenzene	20.000	18.113	9.4	97	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	20.888	-4.4	110	0.00
89	1,2,4-Trichlorobenzene	20.000	16.843	15.8	91	0.00
90	Hexachlorobutadiene	20.000	18.674	6.6	104	0.00
91 M	Naphthalene	20.000	17.154	14.2	92	0.00
92	1,2,3-Trichlorobenzene	20.000	16.843	15.8	91	0.00

(#) = Out of Range

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



QC SAMPLE DATA

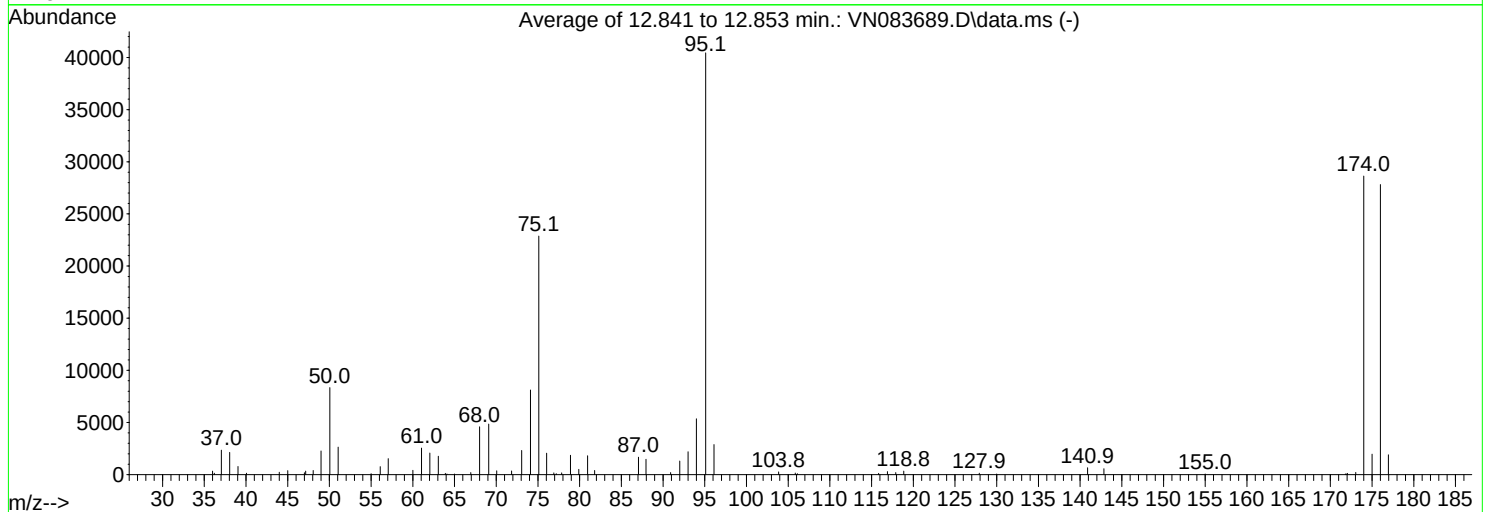
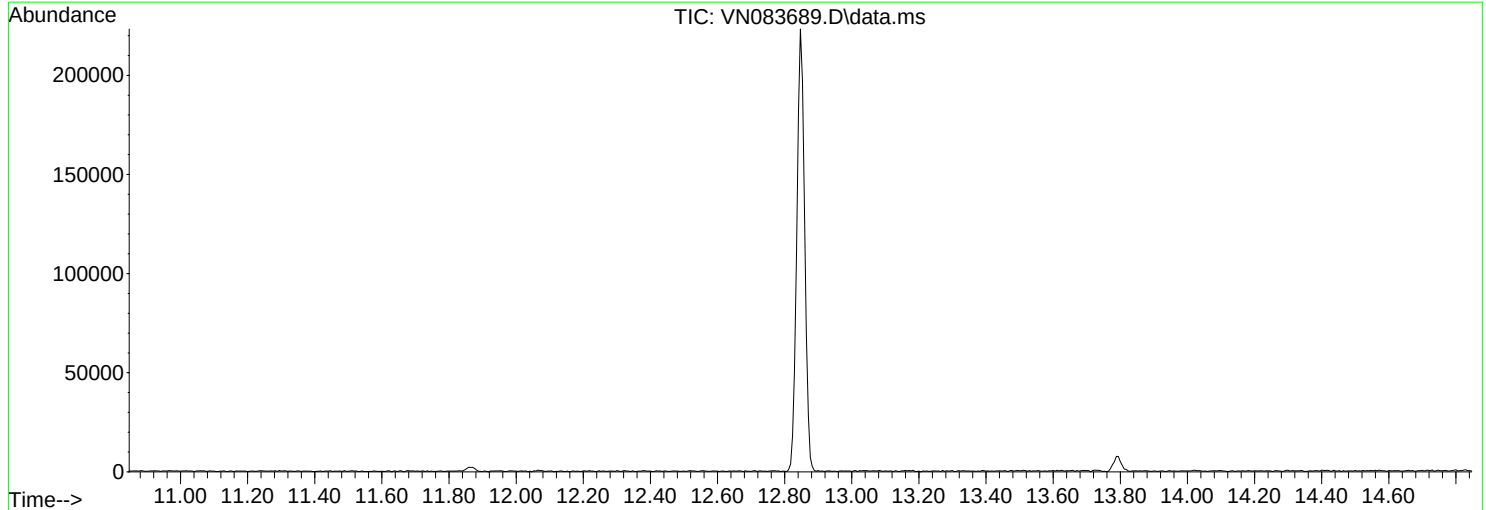
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090624\
Data File : VN083689.D
Acq On : 06 Sep 2024 09:26
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT3.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Fri Sep 06 23:42:47 2024



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1844

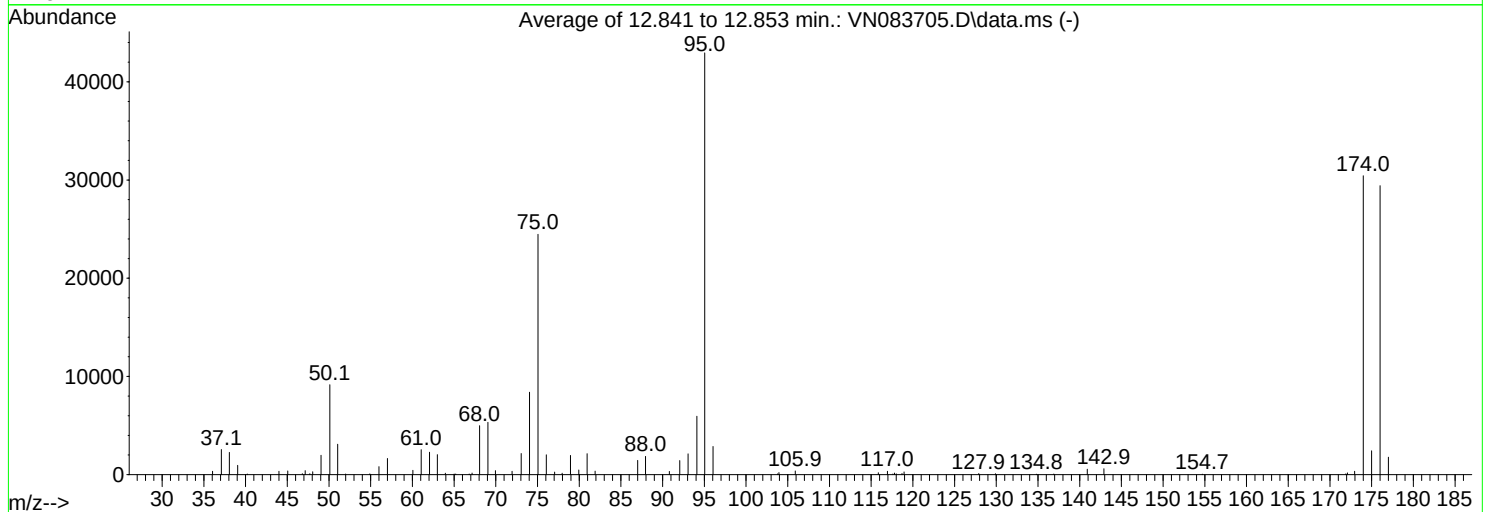
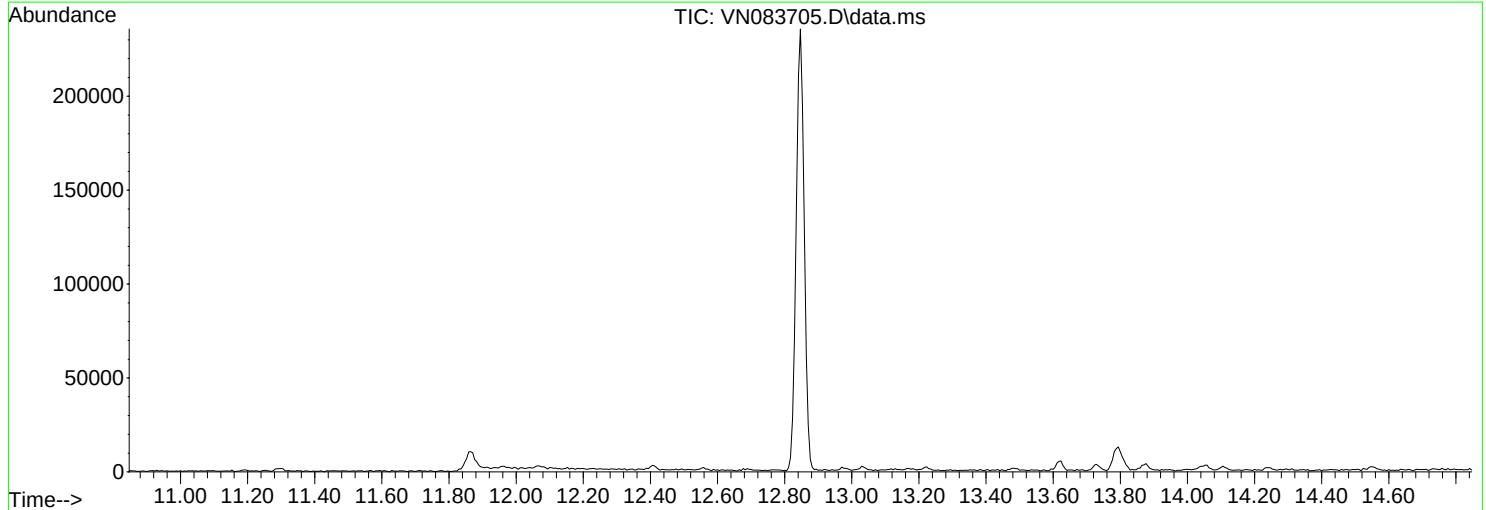
Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	20.6	8347	PASS
75	95	30	60	56.6	22877	PASS
95	95	100	100	100.0	40445	PASS
96	95	5	9	7.1	2881	PASS
173	174	0.00	2	0.8	222	PASS
174	95	50	100	70.8	28624	PASS
175	174	5	9	6.9	1966	PASS
176	174	95	101	97.1	27808	PASS
177	176	5	9	6.8	1901	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
Data File : VN083705.D
Acq On : 09 Sep 2024 07:56
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT3.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Fri Sep 06 23:42:47 2024



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1844

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	21.3	9154	PASS
75	95	30	60	57.0	24472	PASS
95	95	100	100	100.0	42949	PASS
96	95	5	9	6.7	2867	PASS
173	174	0.00	2	1.1	341	PASS
174	95	50	100	70.9	30437	PASS
175	174	5	9	8.0	2428	PASS
176	174	95	101	96.7	29427	PASS
177	176	5	9	6.0	1777	PASS

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBL02		SDG No.:	P3845
Lab Sample ID:	VN0909WBL02		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083710.D	1		09/09/24 10:50	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	1.20	U	1.20	5.00	ug/L
74-87-3	Chloromethane	1.20	U	1.20	5.00	ug/L
75-01-4	Vinyl Chloride	1.20	U	1.20	5.00	ug/L
141-78-6	Ethyl Acetate	1.50	U	1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	0.66	U	0.66	5.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	2.90	U	2.90	5.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	1.00	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/L
75-65-0	tert-Butyl Alcohol	8.50	U	8.50	25.0	ug/L
60-29-7	Diethyl Ether	0.92	U	0.92	5.00	ug/L
75-35-4	1,1-Dichloroethene	1.10	U	1.10	5.00	ug/L
107-02-8	Acrolein	9.30	U	9.30	25.0	ug/L
107-13-1	Acrylonitrile	3.70	U	3.70	25.0	ug/L
67-64-1	Acetone	4.90	U	4.90	25.0	ug/L
75-15-0	Carbon Disulfide	0.93	U	0.93	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	0.83	U	0.83	5.00	ug/L
79-20-9	Methyl Acetate	1.20	U	1.20	5.00	ug/L
75-09-2	Methylene Chloride	1.20	U	1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.95	U	0.95	5.00	ug/L
108-05-4	Vinyl Acetate	3.80	U	3.80	25.0	ug/L
75-34-3	1,1-Dichloroethane	0.81	U	0.81	5.00	ug/L
110-82-7	Cyclohexane	1.00	U	1.00	5.00	ug/L
78-93-3	2-Butanone	3.60	U	3.60	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.91	U	0.91	5.00	ug/L
594-20-7	2,2-Dichloropropane	1.10	U	1.10	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.90	U	0.90	5.00	ug/L
67-66-3	Chloroform	0.72	U	0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.79	U	0.79	5.00	ug/L
108-87-2	Methylcyclohexane	0.89	U	0.89	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBL02		SDG No.:	P3845
Lab Sample ID:	VN0909WBL02		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083710.D	1		09/09/24 10:50	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
563-58-6	1,1-Dichloropropene	0.75	U	0.75	5.00	ug/L
71-43-2	Benzene	0.69	U	0.69	5.00	ug/L
107-06-2	1,2-Dichloroethane	0.75	U	0.75	5.00	ug/L
79-01-6	Trichloroethene	0.77	U	0.77	5.00	ug/L
78-87-5	1,2-Dichloropropane	0.65	U	0.65	5.00	ug/L
74-95-3	Dibromomethane	0.70	U	0.70	5.00	ug/L
75-27-4	Bromodichloromethane	0.81	U	0.81	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	4.20	U	4.20	25.0	ug/L
108-88-3	Toluene	0.72	U	0.72	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.79	U	0.79	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.83	U	0.83	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.68	U	0.68	5.00	ug/L
142-28-9	1,3-Dichloropropane	0.68	U	0.68	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	5.60	U	5.60	25.0	ug/L
591-78-6	2-Hexanone	3.90	U	3.90	25.0	ug/L
124-48-1	Dibromochloromethane	0.72	U	0.72	5.00	ug/L
106-93-4	1,2-Dibromoethane	0.78	U	0.78	5.00	ug/L
127-18-4	Tetrachloroethene	0.94	U	0.94	5.00	ug/L
108-90-7	Chlorobenzene	0.67	U	0.67	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	0.91	U	0.91	5.00	ug/L
67-72-1	Hexachloroethane	0.91	U	0.91	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	1.70	U	1.70	10.0	ug/L
1330-20-7	Total Xylenes	2.52	U	2.52	15.0	ug/L
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/L
100-42-5	Styrene	0.80	U	0.80	5.00	ug/L
75-25-2	Bromoform	1.00	U	1.00	5.00	ug/L
98-82-8	Isopropylbenzene	0.85	U	0.85	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.60	U	0.60	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	1.70	U	1.70	5.00	ug/L
108-86-1	Bromobenzene	0.69	U	0.69	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	
Project:	NJ Waste Water PT			Date Received:	
Client Sample ID:	VN0909WBL02			SDG No.:	P3845
Lab Sample ID:	VN0909WBL02			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083710.D	1		09/09/24 10:50	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
103-65-1	n-propylbenzene	0.80	U	0.80	5.00	ug/L
95-49-8	2-Chlorotoluene	0.81	U	0.81	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.74	U	0.74	5.00	ug/L
106-43-4	4-Chlorotoluene	0.82	U	0.82	5.00	ug/L
98-06-6	tert-butylbenzene	0.77	U	0.77	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.83	U	0.83	5.00	ug/L
135-98-8	sec-Butylbenzene	0.77	U	0.77	5.00	ug/L
99-87-6	p-Isopropyltoluene	0.82	U	0.82	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.88	U	0.88	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.95	U	0.95	5.00	ug/L
104-51-8	n-Butylbenzene	0.86	U	0.86	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.88	U	0.88	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.91	U	0.91	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.00	ug/L
87-68-3	Hexachlorobutadiene	1.10	U	1.10	5.00	ug/L
91-20-3	Naphthalene	1.40	U	1.40	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.40	U	1.40	5.00	ug/L
628-63-7	n-amyl Acetate	0.91	U	0.91	5.00	ug/L
74-88-4	Methyl Iodide	0.94	U	0.94	5.00	ug/L
107-05-1	Allyl chloride	1.30	U	1.30	5.00	ug/L
126-98-7	Methacrylonitrile	1.20	U	1.20	5.00	ug/L
97-63-2	Ethyl methacrylate	0.79	U	0.79	5.00	ug/L
108-20-3	Diisopropyl ether	0.82	U	0.82	5.00	ug/L
123-91-1	1,4-Dioxane	18.4	U	18.4	100	ug/L
80-62-6	Methyl methacrylate	1.00	U	1.00	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	29.8		91 - 110	99%	SPK: 30
2037-26-5	Toluene-d8	30.1		91 - 112	100%	SPK: 30
460-00-4	4-Bromofluorobenzene	27.3		63 - 112	91%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	29500	7.812			
540-36-3	1,4-Difluorobenzene	166000	9.1			

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	
Project:	NJ Waste Water PT			Date Received:	
Client Sample ID:	VN0909WBL02			SDG No.:	P3845
Lab Sample ID:	VN0909WBL02			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083710.D	1		09/09/24 10:50	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
3114-55-4	Chlorobenzene-d5	140000	11.865			
74-97-5	Bromochloromethane	29500	7.812			

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\VN090924\
Data File : VN083710.D
Acq On : 09 Sep 2024 10:50
Operator : JC\MD
Sample : VN0909WBL02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBL02

Quant Time: Sep 10 01:17:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	7.812	128	29530	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	165572	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	139818	30.000	ug/l	0.00

System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	80558	29.844	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	99.467%
60) 4-Bromofluorobenzene	12.847	95	65858	27.330	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	91.100%
63) Toluene-d8	10.565	98	194929	30.109	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	100.367%

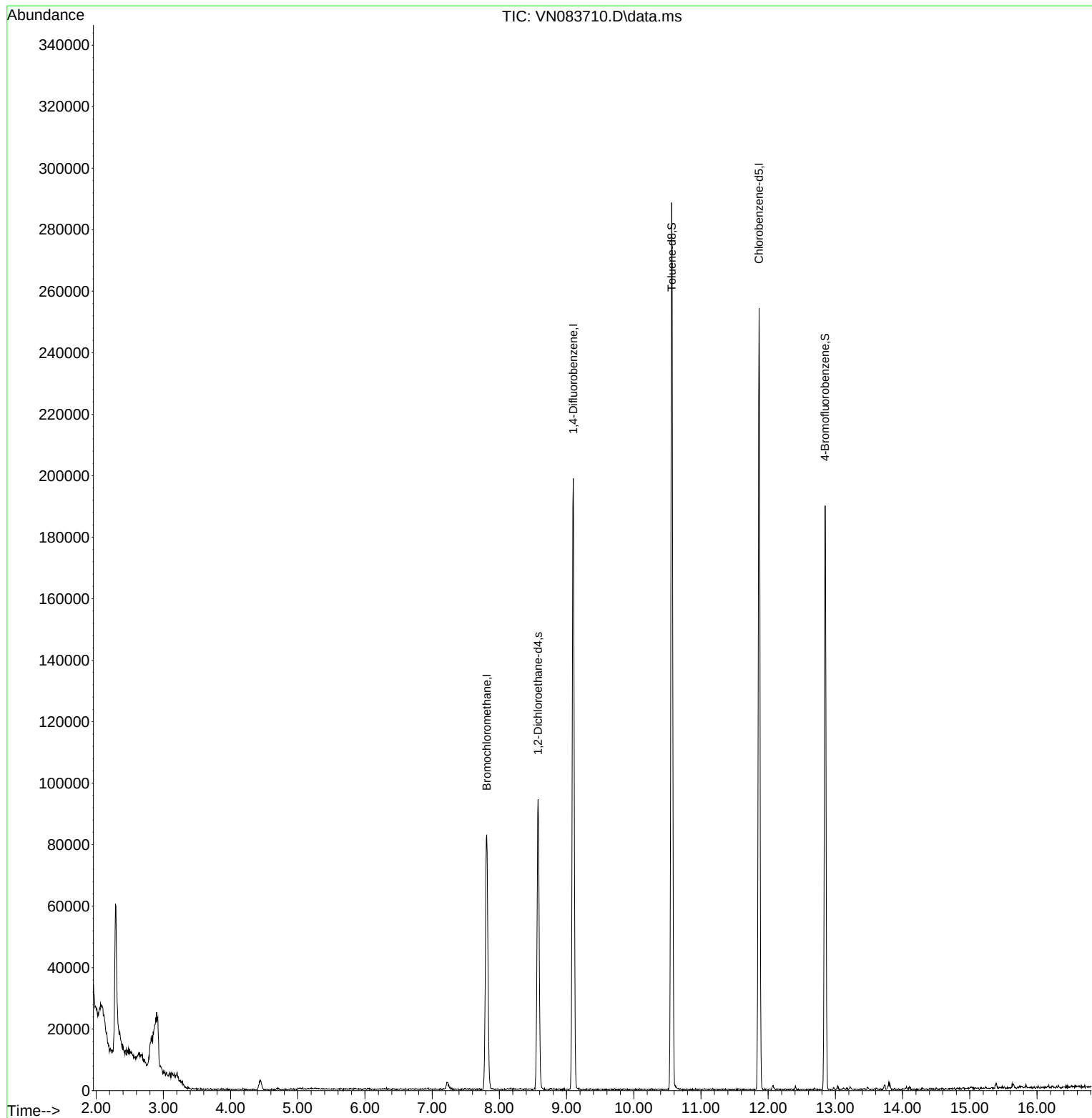
Target Compounds	Qvalue

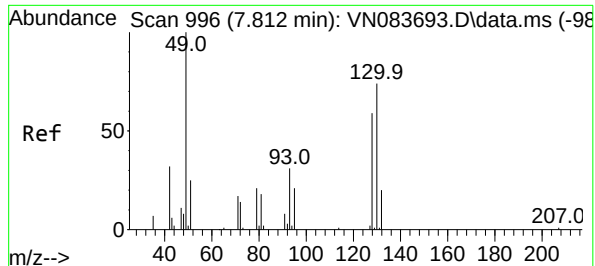
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
Data File : VN083710.D
Acq On : 09 Sep 2024 10:50
Operator : JC\MD
Sample : VN0909WBL02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBL02

Quant Time: Sep 10 01:17:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 06 23:42:47 2024
Response via : Initial Calibration

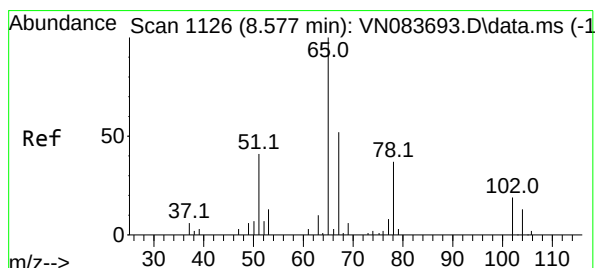
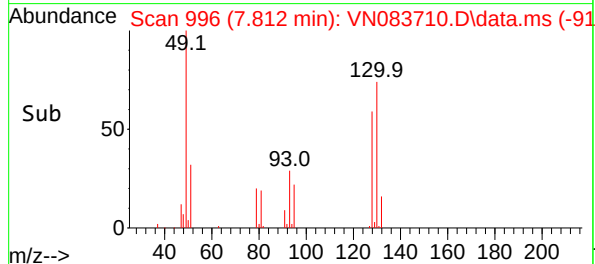
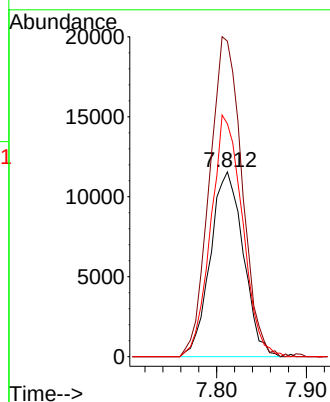
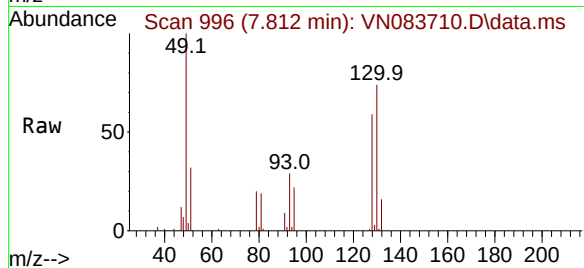




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083710.D
Acq: 09 Sep 2024 10:50

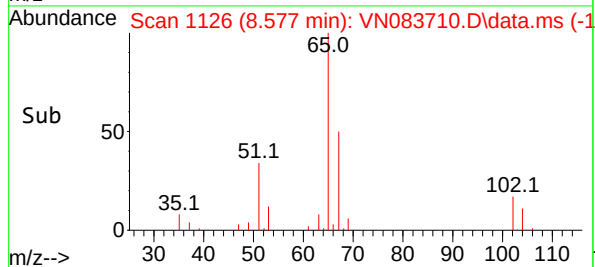
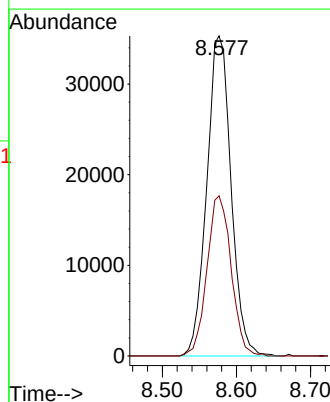
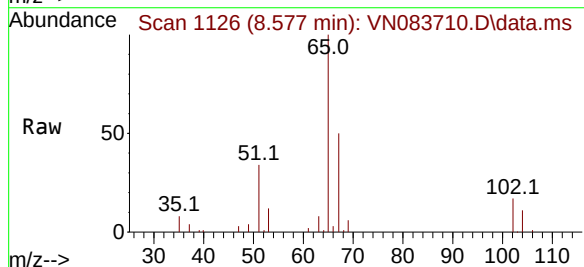
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBL02

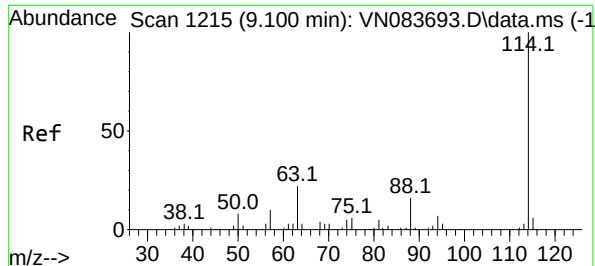
Tgt Ion	Ratio	Lower	Upper
128	100		
49	170.0	0.0	403.7
130	125.3	0.0	323.3



#27
1,2-Dichloroethane-d4
Concen: 29.844 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.000 min
Lab File: VN083710.D
Acq: 09 Sep 2024 10:50

Tgt Ion	Ratio	Lower	Upper
65	100		
67	49.6	43.2	64.8





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 11

Delta R.T. 0.000 min

Lab File: VN083710.D

Acq: 09 Sep 2024 10:50

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBL02

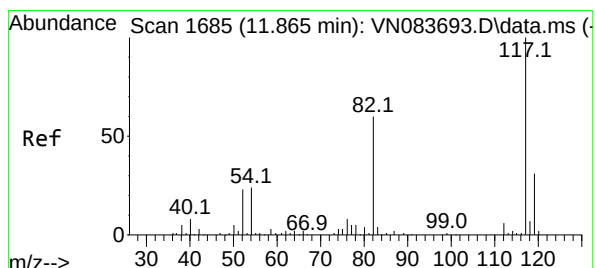
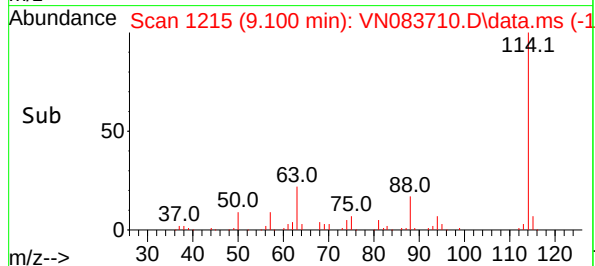
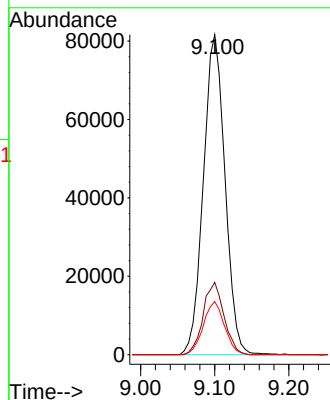
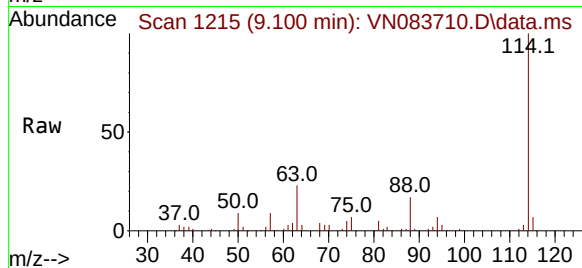
Tgt Ion:114 Resp: 165572

Ion Ratio Lower Upper

114 100

63 21.8 15.9 23.9

88 16.2 12.7 19.1



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN083710.D

Acq: 09 Sep 2024 10:50

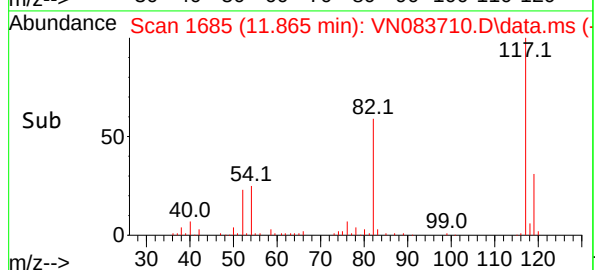
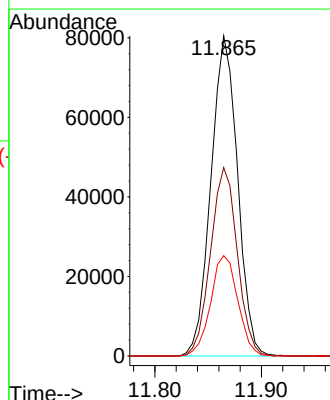
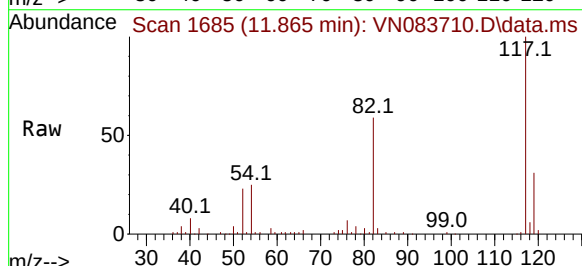
Tgt Ion:117 Resp: 139818

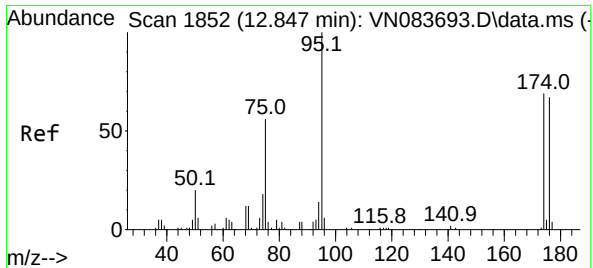
Ion Ratio Lower Upper

117 100

82 59.1 46.6 69.8

119 32.1 25.4 38.2

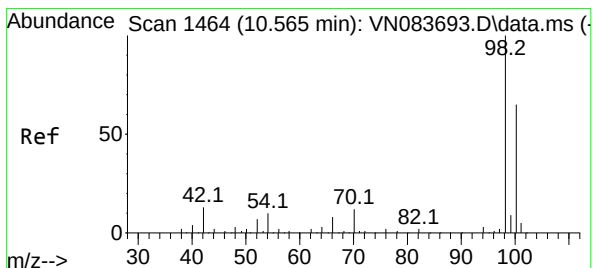
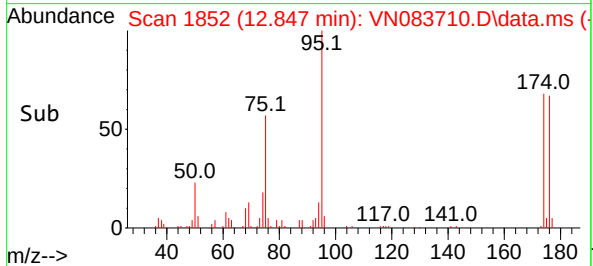
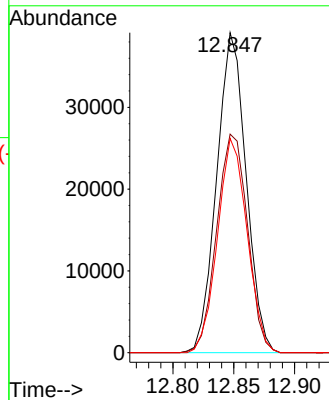
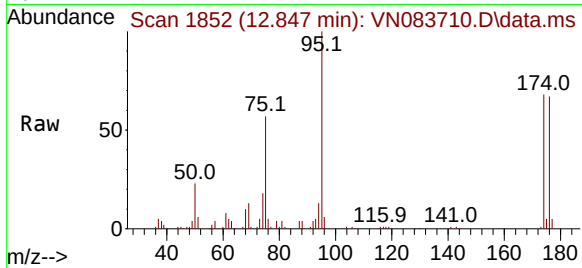




#60
4-Bromofluorobenzene
Concen: 27.330 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083710.D
Acq: 09 Sep 2024 10:50

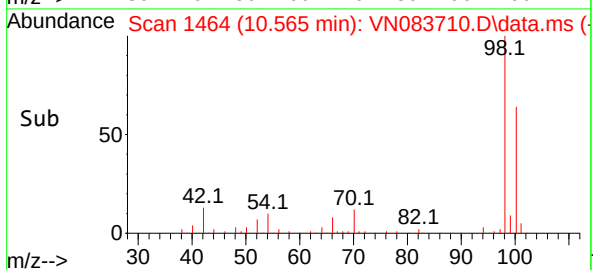
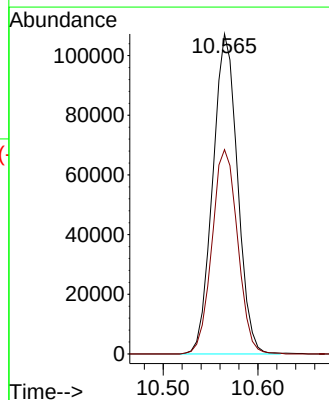
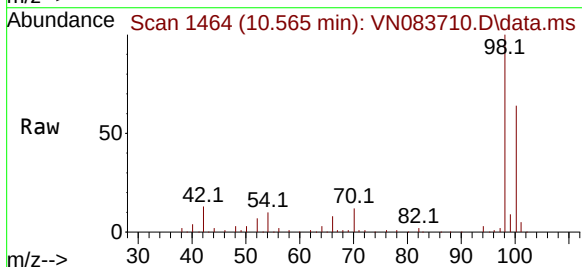
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBL02

Tgt Ion: 95 Resp: 65858
Ion Ratio Lower Upper
95 100
174 71.6 60.5 90.7
176 67.4 57.8 86.6



#63
Toluene-d8
Concen: 30.109 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083710.D
Acq: 09 Sep 2024 10:50

Tgt Ion: 98 Resp: 194929
Ion Ratio Lower Upper
98 100
100 66.2 52.7 79.1



Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBS01		SDG No.:	P3845
Lab Sample ID:	VN0909WBS01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083707.D	1		09/09/24 09:39	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	18.5		1.20	5.00	ug/L
74-87-3	Chloromethane	18.8		1.20	5.00	ug/L
75-01-4	Vinyl Chloride	18.7		1.20	5.00	ug/L
141-78-6	Ethyl Acetate	19.1		1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	18.8		0.66	5.00	ug/L
74-83-9	Bromomethane	18.9		1.40	5.00	ug/L
75-00-3	Chloroethane	21.3		2.90	5.00	ug/L
75-69-4	Trichlorofluoromethane	18.4		1.00	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.3		1.10	5.00	ug/L
75-65-0	tert-Butyl Alcohol	100		8.50	25.0	ug/L
60-29-7	Diethyl Ether	18.2		0.92	5.00	ug/L
75-35-4	1,1-Dichloroethene	18.3		1.10	5.00	ug/L
107-02-8	Acrolein	100		9.30	25.0	ug/L
107-13-1	Acrylonitrile	95.7		3.70	25.0	ug/L
67-64-1	Acetone	97.9		4.90	25.0	ug/L
75-15-0	Carbon Disulfide	17.4		0.93	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	18.7		0.83	5.00	ug/L
79-20-9	Methyl Acetate	18.6		1.20	5.00	ug/L
75-09-2	Methylene Chloride	18.1		1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.2		0.95	5.00	ug/L
108-05-4	Vinyl Acetate	87.2		3.80	25.0	ug/L
75-34-3	1,1-Dichloroethane	18.3		0.81	5.00	ug/L
110-82-7	Cyclohexane	17.9		1.00	5.00	ug/L
78-93-3	2-Butanone	100		3.60	25.0	ug/L
56-23-5	Carbon Tetrachloride	18.1		0.91	5.00	ug/L
594-20-7	2,2-Dichloropropane	18.6		1.10	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.1		0.90	5.00	ug/L
67-66-3	Chloroform	18.6		0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.3		0.79	5.00	ug/L
108-87-2	Methylcyclohexane	17.6		0.89	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBS01		SDG No.:	P3845
Lab Sample ID:	VN0909WBS01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083707.D	1		09/09/24 09:39	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
563-58-6	1,1-Dichloropropene	18.1		0.75	5.00	ug/L
71-43-2	Benzene	18.6		0.69	5.00	ug/L
107-06-2	1,2-Dichloroethane	18.6		0.75	5.00	ug/L
79-01-6	Trichloroethene	17.6		0.77	5.00	ug/L
78-87-5	1,2-Dichloropropane	18.1		0.65	5.00	ug/L
74-95-3	Dibromomethane	18.2		0.70	5.00	ug/L
75-27-4	Bromodichloromethane	18.3		0.81	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	98.4		4.20	25.0	ug/L
108-88-3	Toluene	18.2		0.72	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	17.8		0.79	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	17.6		0.83	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.7		0.68	5.00	ug/L
142-28-9	1,3-Dichloropropane	18.6		0.68	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	100		5.60	25.0	ug/L
591-78-6	2-Hexanone	100		3.90	25.0	ug/L
124-48-1	Dibromochloromethane	18.1		0.72	5.00	ug/L
106-93-4	1,2-Dibromoethane	18.8		0.78	5.00	ug/L
127-18-4	Tetrachloroethene	17.7		0.94	5.00	ug/L
108-90-7	Chlorobenzene	17.7		0.67	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	18.3		0.91	5.00	ug/L
67-72-1	Hexachloroethane	17.7		0.91	5.00	ug/L
100-41-4	Ethyl Benzene	17.3		0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	35.4		1.70	10.0	ug/L
1330-20-7	Total Xylenes	53.3		2.52	15.0	ug/L
95-47-6	o-Xylene	17.9		0.82	5.00	ug/L
100-42-5	Styrene	17.3		0.80	5.00	ug/L
75-25-2	Bromoform	17.5		1.00	5.00	ug/L
98-82-8	Isopropylbenzene	17.7		0.85	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.7		0.60	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	19.1		1.70	5.00	ug/L
108-86-1	Bromobenzene	17.5		0.69	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBS01		SDG No.:	P3845
Lab Sample ID:	VN0909WBS01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083707.D	1		09/09/24 09:39	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
103-65-1	n-propylbenzene	17.1		0.80	5.00	ug/L
95-49-8	2-Chlorotoluene	17.1		0.81	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	17.9		0.74	5.00	ug/L
106-43-4	4-Chlorotoluene	16.8		0.82	5.00	ug/L
98-06-6	tert-butylbenzene	17.9		0.77	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	17.8		0.83	5.00	ug/L
135-98-8	sec-Butylbenzene	17.4		0.77	5.00	ug/L
99-87-6	p-Isopropyltoluene	17.4		0.82	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	16.6		0.88	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	16.8		0.95	5.00	ug/L
104-51-8	n-Butylbenzene	16.6		0.86	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.4		0.88	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	19.1		0.91	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	16.6		1.10	5.00	ug/L
87-68-3	Hexachlorobutadiene	17.3		1.10	5.00	ug/L
91-20-3	Naphthalene	16.7		1.40	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	16.6		1.40	5.00	ug/L
628-63-7	n-amyl Acetate	19.0		0.91	5.00	ug/L
74-88-4	Methyl Iodide	17.6		0.94	5.00	ug/L
107-05-1	Allyl chloride	18.3		1.30	5.00	ug/L
126-98-7	Methacrylonitrile	19.6		1.20	5.00	ug/L
97-63-2	Ethyl methacrylate	18.3		0.79	5.00	ug/L
108-20-3	Diisopropyl ether	18.8		0.82	5.00	ug/L
123-91-1	1,4-Dioxane	390		18.4	100	ug/L
80-62-6	Methyl methacrylate	18.9		1.00	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.0		91 - 110	100%	SPK: 30
2037-26-5	Toluene-d8	29.8		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	28.9		63 - 112	96%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	29800	7.812			
540-36-3	1,4-Difluorobenzene	175000	9.1			

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	
Project:	NJ Waste Water PT			Date Received:	
Client Sample ID:	VN0909WBS01			SDG No.:	P3845
Lab Sample ID:	VN0909WBS01			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083707.D	1		09/09/24 09:39	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
3114-55-4	Chlorobenzene-d5	159000	11.865			
74-97-5	Bromochloromethane	29800	7.812			

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\VN090924\
 Data File : VN083707.D
 Acq On : 09 Sep 2024 09:39
 Operator : JC\MD
 Sample : VN0909WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0909WBS01

Manual Integrations APPROVED

Reviewed By :John
 Carlone
 09/10/2024
 Supervised By :Mahesh
 Dadoda
 09/10/2024

Quant Time: Sep 10 01:15:18 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.812	128	29833	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	175066	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	158507	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	81718	29.967	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	99.900%
60) 4-Bromofluorobenzene	12.847	95	78929	28.892	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	96.300%
63) Toluene-d8	10.565	98	218728	29.802	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	99.333%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.124	85	36924	18.482	ug/l	100
3) Chloromethane	2.359	50	38978	18.777	ug/l	100
4) Vinyl Chloride	2.512	62	39848	18.673	ug/l	99
5) Bromomethane	2.906	94	22581	18.940	ug/l	92
6) Chloroethane	3.083	64	30409	21.280	ug/l	100
7) Trichlorofluoromethane	3.471	101	65825	18.399	ug/l	94
8) Diethyl Ether	3.959	74	22078	18.161	ug/l	86
9) 1,1,2-Trichlorotrifluo...	4.353	101	35193	18.313	ug/l	94
10) 1,1-Dichloroethene	4.330	96	33940	18.305	ug/l	92
11) Methyl Iodide	4.583	142	44361	17.614	ug/l	96
12) Methyl Acetate	5.024	43	41644	18.623	ug/l #	83
13) Acrolein	4.171	56	34083	104.439	ug/l	98
14) Acrylonitrile	5.718	53	86614	95.714	ug/l	99
15) Acetone	4.430	58	29393	97.917	ug/l #	59
16) Carbon Disulfide	4.700	76	91111	17.387	ug/l #	93
17) Allyl chloride	5.018	41	59446	18.282	ug/l	89
18) Methylene Chloride	5.271	84	36750	18.116	ug/l	93
19) trans-1,2-Dichloroethene	5.777	96	35051	18.239	ug/l	96
20) Diisopropyl ether	6.665	45	123284	18.775	ug/l #	94
21) 1,1-Dichloroethane	6.565	63	68588	18.295	ug/l	95
22) cis-1,2-Dichloroethene	7.483	96	42364	18.112	ug/l	91
23) tert-Butyl Alcohol	5.536	59	33684m	101.436	ug/l	
24) Methyl tert-Butyl Ether	5.795	73	123203	18.698	ug/l #	88
25) Chloroform	7.965	83	73985	18.621	ug/l	97
26) Cyclohexane	8.253	56	59120	17.904	ug/l #	88
29) 1,1-Dichloropropene	8.365	75	50193	18.076	ug/l	96
30) 2-Butanone	7.483	43	132211	101.006	ug/l	94
31) 2,2-Dichloropropane	7.489	77	65724	18.565	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	67912	18.313	ug/l	98
33) Carbon Tetrachloride	8.359	117	58274	18.146	ug/l	98
34) Benzene	8.600	78	155085	18.614	ug/l #	96
35) Methacrylonitrile	7.777	41	28773	19.554	ug/l	95
36) 1,2-Dichloroethane	8.665	62	58242	18.595	ug/l #	94
37) Trichloroethene	9.347	130	34530	17.649	ug/l	91
38) Methylcyclohexane	9.600	83	58498	17.596	ug/l	95
39) 1,2-Dichloropropane	9.618	63	36364	18.135	ug/l	99
40) Dibromomethane	9.706	93	26753	18.247	ug/l	94
41) Bromodichloromethane	9.888	83	57105	18.316	ug/l	99
42) Vinyl Acetate	6.600	43	469486	87.237	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
 Data File : VN083707.D
 Acq On : 09 Sep 2024 09:39
 Operator : JC\MD
 Sample : VN0909WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0909WBS01

Manual Integrations APPROVED

Reviewed By :John
 Carlone
 09/10/2024
 Supervised By :Mahesh
 Dadoda
 09/10/2024

Quant Time: Sep 10 01:15:18 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

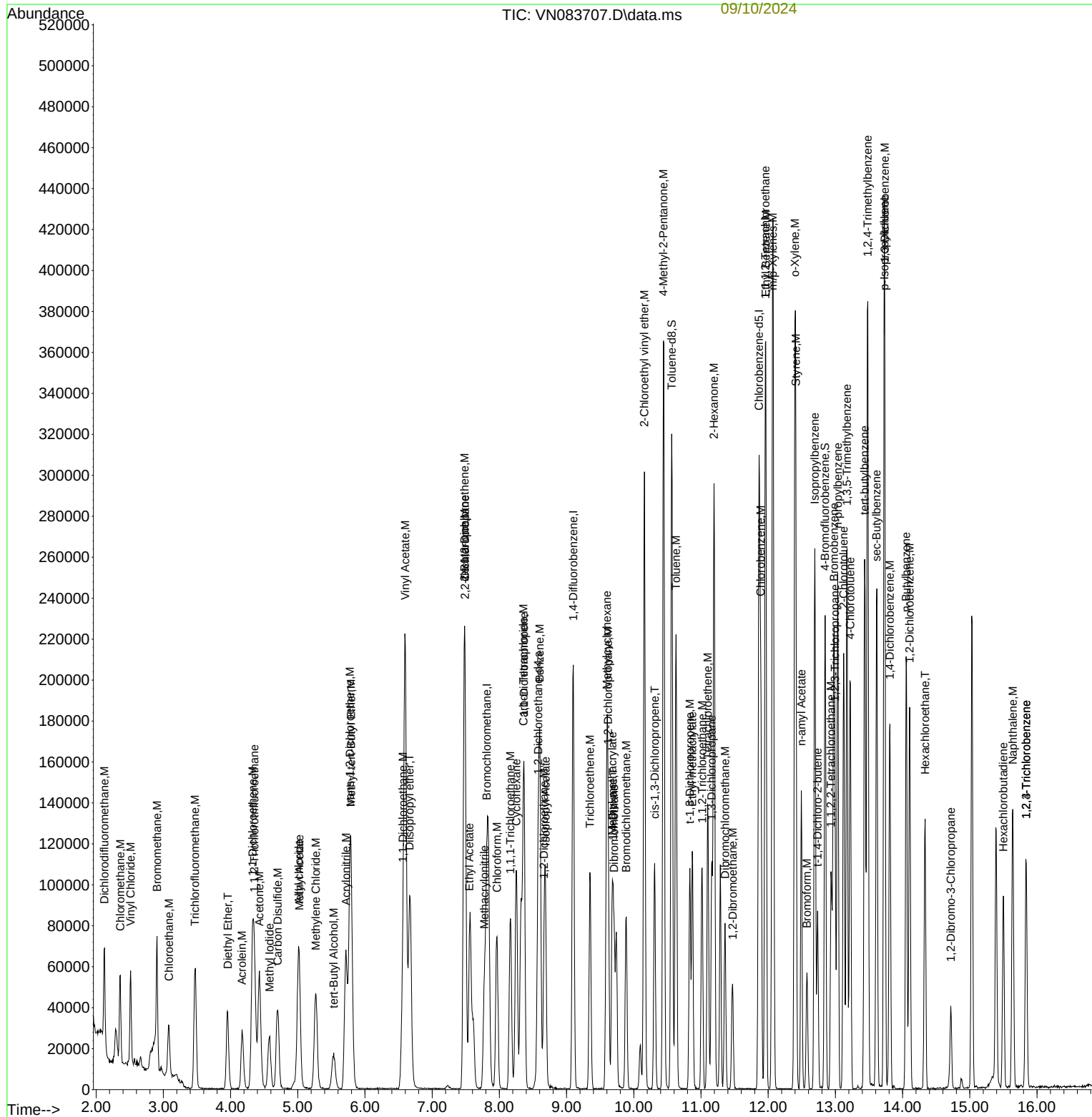
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	50334	19.105	ug/l	96
44) Isopropyl Acetate	8.688	43	85650	18.796	ug/l	94
45) 1,4-Dioxane	9.694	88	13825	388.980	ug/l	91
46) Methyl methacrylate	9.682	41	41695	18.904	ug/l	82
47) n-amyl Acetate	12.494	43	76508	18.954	ug/l	91
48) t-1,3-Dichloropropene	10.835	75	58257	17.764	ug/l	93
49) cis-1,3-Dichloropropene	10.312	75	59900	17.563	ug/l #	78
50) 1,1,2-Trichloroethane	11.018	97	34819	18.663	ug/l	97
51) Ethyl methacrylate	10.871	69	58239	18.272	ug/l	77
52) 1,3-Dichloropropane	11.159	76	62684	18.605	ug/l	99
53) Dibromochloromethane	11.359	129	40594	18.141	ug/l	99
54) 1,2-Dibromoethane	11.471	107	36336	18.826	ug/l	100
55) 2-Chloroethyl vinyl ether	10.159	63	128283	100.989	ug/l	99
56) Bromoform	12.576	173	24827	17.463	ug/l	99
58) 4-Methyl-2-Pentanone	10.441	43	247335	98.410	ug/l #	88
59) 2-Hexanone	11.194	43	191280	100.722	ug/l	87
61) Tetrachloroethene	11.100	164	29682	17.694	ug/l	96
62) Toluene	10.629	91	165466	18.162	ug/l	99
64) Chlorobenzene	11.888	112	100001	17.728	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	35961	18.301	ug/l	98
66) Ethyl Benzene	11.965	91	179613	17.336	ug/l	100
67) m/p-Xylenes	12.071	106	134763	35.354	ug/l	98
68) o-Xylene	12.400	106	66162	17.934	ug/l	98
69) Styrene	12.412	104	108009	17.327	ug/l	98
70) Isopropylbenzene	12.694	105	172529	17.722	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	49715	18.697	ug/l	99
72) 1,2,3-Trichloropropane	12.994	75	44536m	19.103	ug/l	
73) Bromobenzene	12.982	156	39028	17.453	ug/l	92
74) n-propylbenzene	13.035	91	194925	17.104	ug/l	100
75) 2-Chlorotoluene	13.123	91	121355	17.061	ug/l	96
76) 1,3,5-Trimethylbenzene	13.170	105	145775	17.925	ug/l	96
77) t-1,4-Dichloro-2-butene	12.735	75	18190	18.459	ug/l	78
78) 4-Chlorotoluene	13.223	91	121506	16.844	ug/l	99
79) tert-butylbenzene	13.435	119	127376	17.912	ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	146336	17.807	ug/l	100
81) sec-Butylbenzene	13.612	105	168987	17.395	ug/l	100
82) p-Isopropyltoluene	13.729	119	142180	17.395	ug/l	98
83) 1,3-Dichlorobenzene	13.735	146	71513	16.616	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	72270	16.796	ug/l	99
85) n-Butylbenzene	14.053	91	119627	16.585	ug/l	98
86) Hexachloroethane	14.335	117	27442	17.717	ug/l	90
87) 1,2-Dichlorobenzene	14.106	146	72527	17.364	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	11147	19.075	ug/l	90
89) 1,2,4-Trichlorobenzene	15.841	180	37935	16.578	ug/l	98
90) Hexachlorobutadiene	15.500	225	16342	17.254	ug/l	98
91) Naphthalene	15.641	128	124740	16.674	ug/l	100
92) 1,2,3-Trichlorobenzene	15.841	180	37935	16.578	ug/l	98

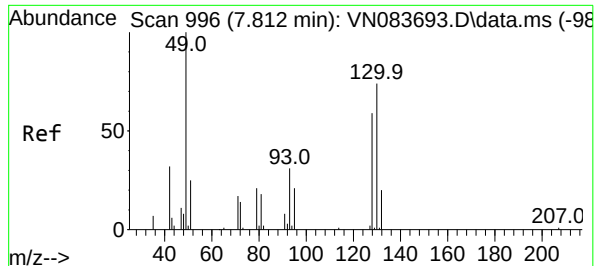
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Manual Integrations APPROVED

Reviewed By :John
Carlone
09/10/2024
Supervised By :Manesh
Dadoda
09/10/2024





#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

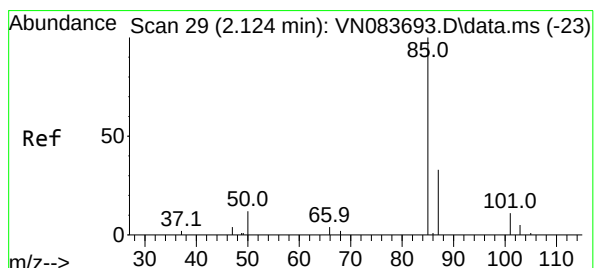
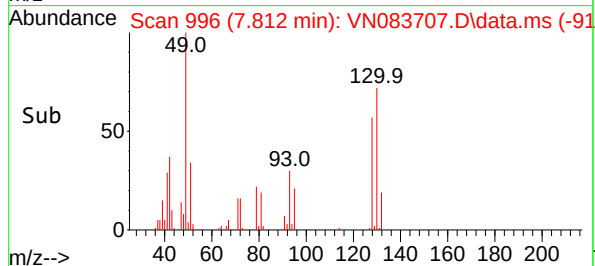
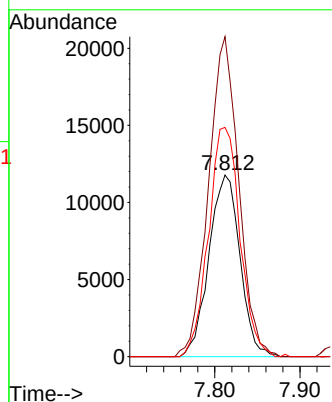
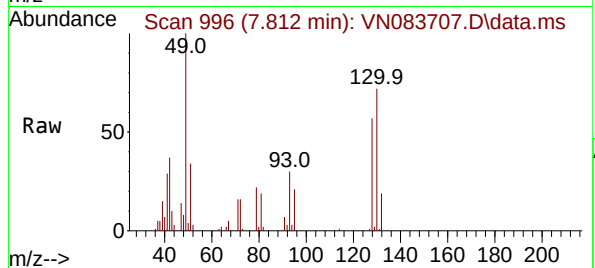
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion	Ratio	Lower	Upper
128	100		
49	171.2	0.0	403.7
130	128.1	0.0	323.3

Manual Integrations
APPROVED

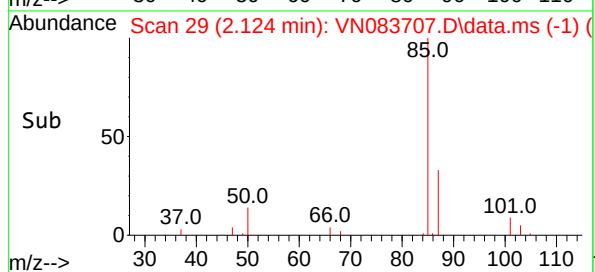
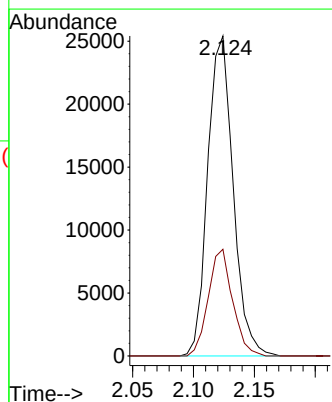
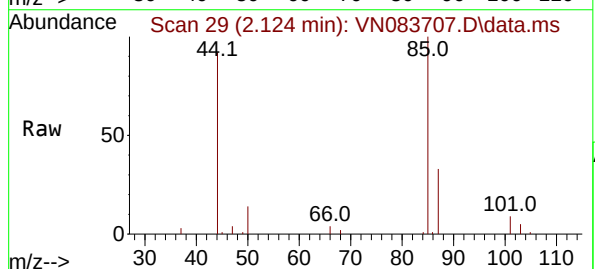
Reviewed By :John
Carlone
09/10/2024

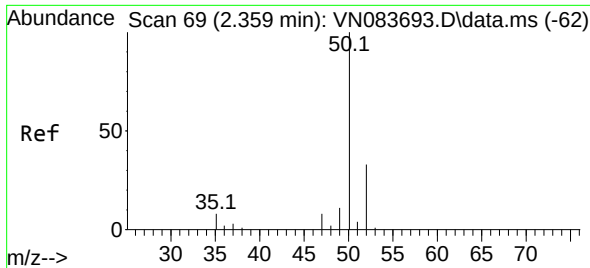
Supervised By :Mahesh
Dadoda
09/10/2024



#2
Dichlorodifluoromethane
Concen: 18.482 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

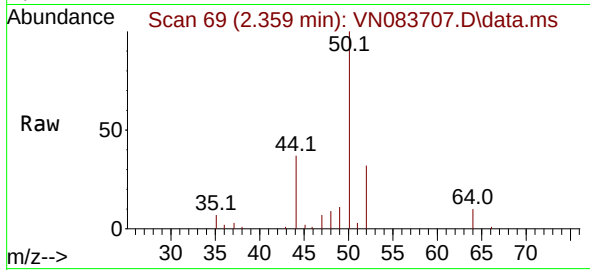
Tgt Ion	Ratio	Lower	Upper
85	100		
87	33.4	16.8	50.3





#3
Chloromethane
Concen: 18.777 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

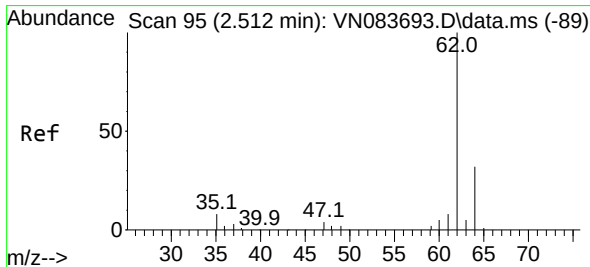
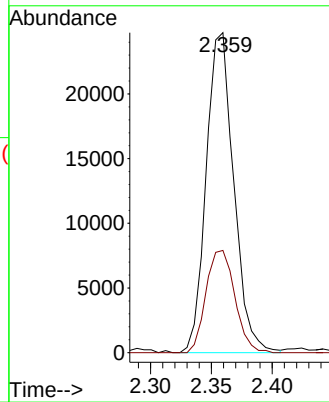
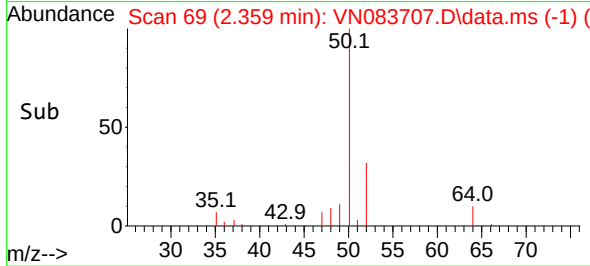
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01



Tgt Ion: 50 Resp: 38978
Ion Ratio Lower Upper
50 100
52 31.9 25.4 38.0

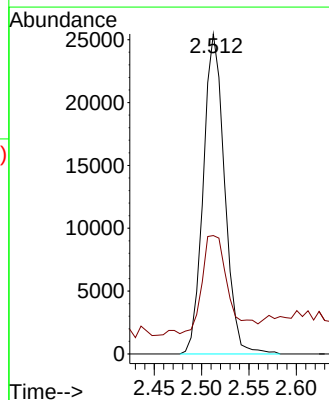
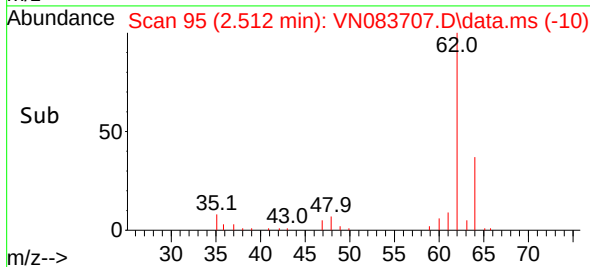
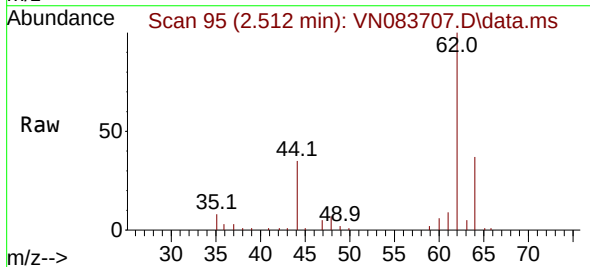
Manual Integrations
APPROVED

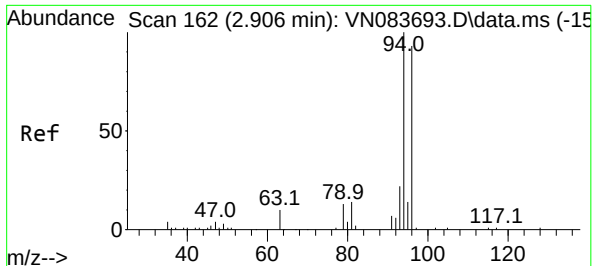
Reviewed By :John
Carlone
09/10/2024
Supervised By :Mahesh
Dadoda
09/10/2024



#4
Vinyl Chloride
Concen: 18.673 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion: 62 Resp: 39848
Ion Ratio Lower Upper
62 100
64 30.7 24.1 36.1





#5
Bromomethane
Concen: 18.940 ug/l
RT: 2.906 min Scan# 162
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

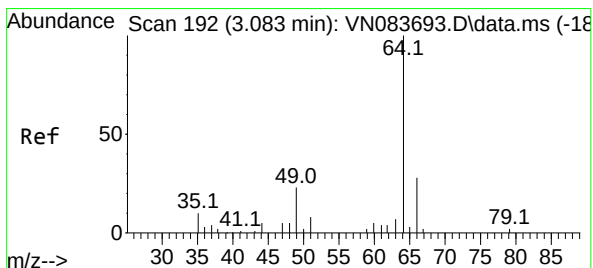
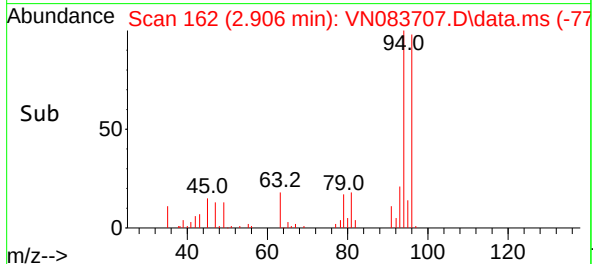
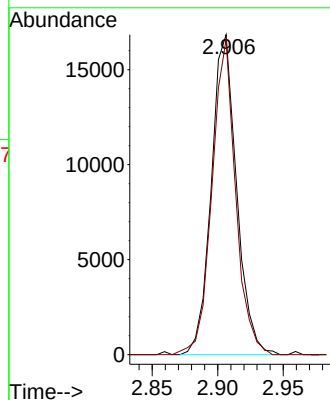
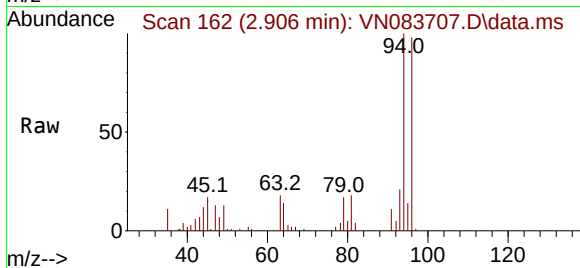
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 94 Resp: 2258
Ion Ratio Lower Upper
94 100
96 98.5 72.8 109.2

Manual Integrations
APPROVED

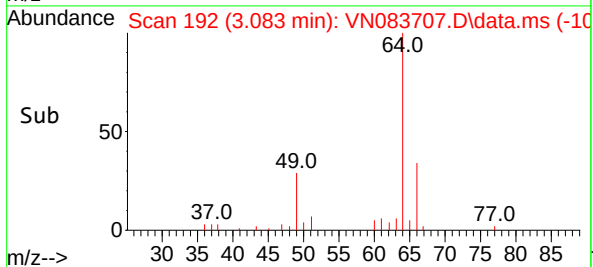
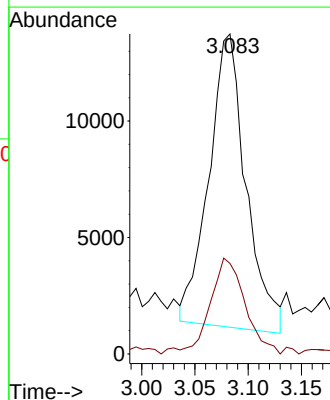
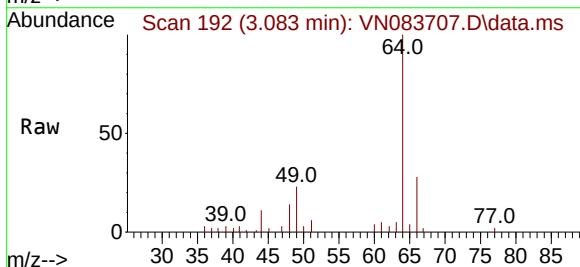
Reviewed By :John
Carlone
09/10/2024

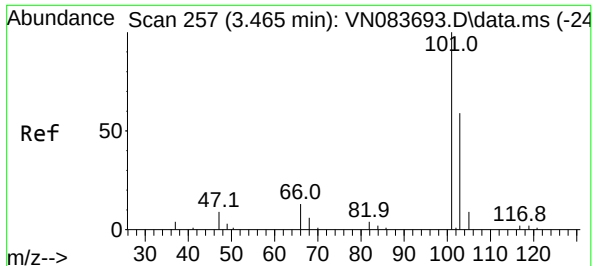
Supervised By :Mahesh
Dadoda
09/10/2024



#6
Chloroethane
Concen: 21.280 ug/l
RT: 3.083 min Scan# 192
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion: 64 Resp: 30409
Ion Ratio Lower Upper
64 100
66 33.2 26.7 40.1





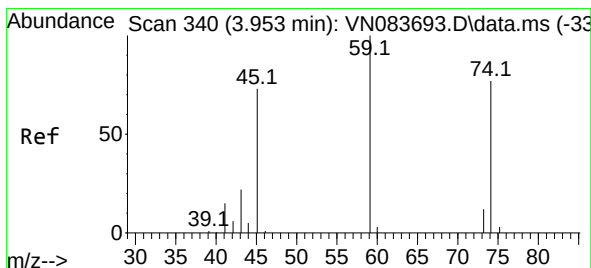
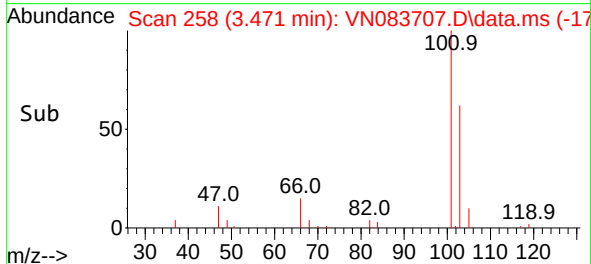
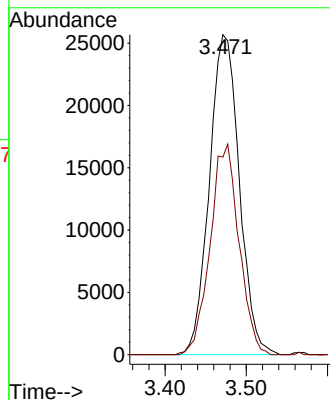
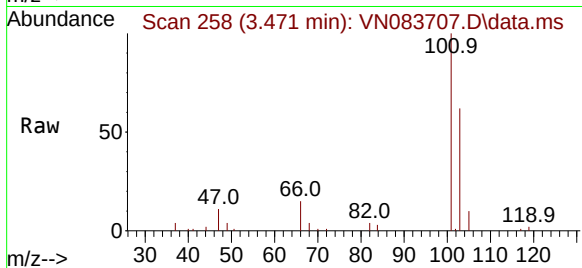
#7
Trichlorofluoromethane
Concen: 18.399 ug/l
RT: 3.471 min Scan# 210
Delta R.T. 0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion:101 Resp: 6582
Ion Ratio Lower Upper
101 100
103 61.7 53.0 79.4

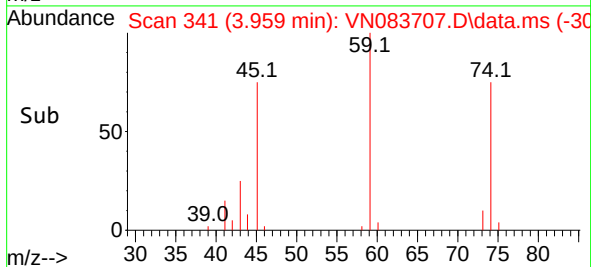
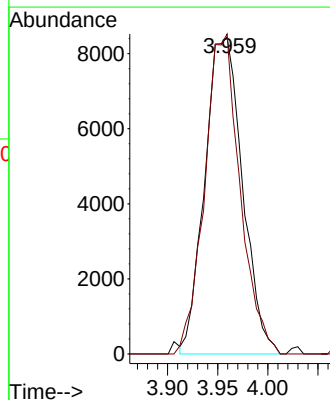
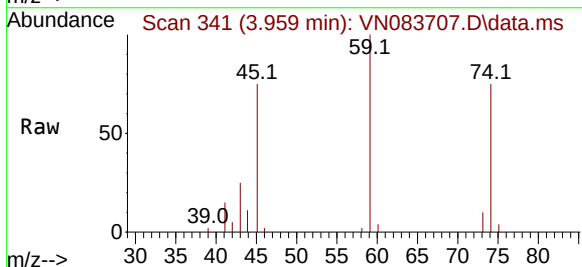
Manual Integrations
APPROVED

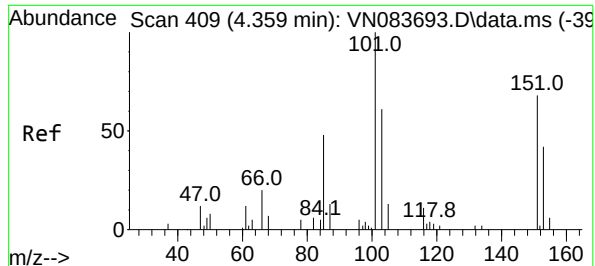
Reviewed By :John
Carlone
09/10/2024
Supervised By :Mahesh
Dadoda
09/10/2024



#8
Diethyl Ether
Concen: 18.161 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion: 74 Resp: 22078
Ion Ratio Lower Upper
74 100
45 94.8 16.4 147.4





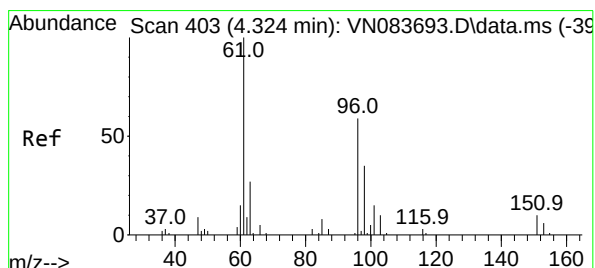
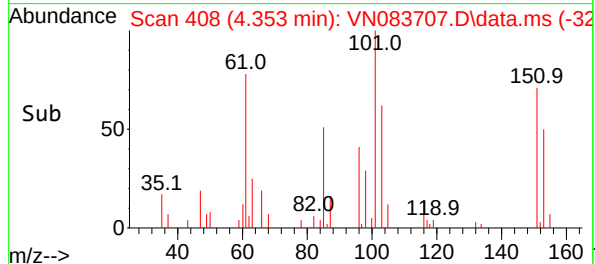
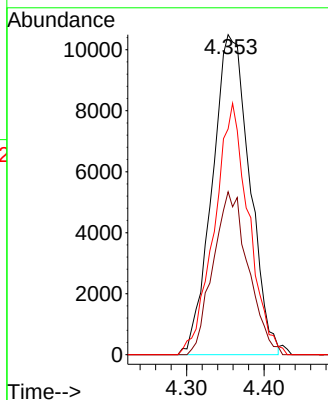
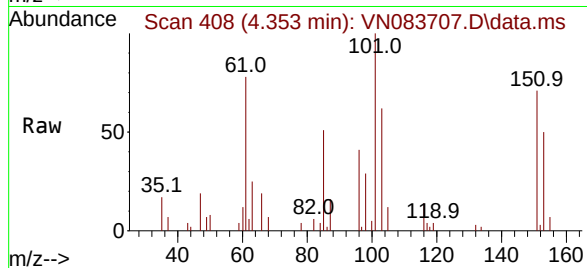
#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.313 ug/l
RT: 4.353 min Scan# 409
Delta R.T. -0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion:101 Resp: 3519
Ion Ratio Lower Upper
101 100
85 47.8 0.0 90.6
151 72.3 0.0 157.6

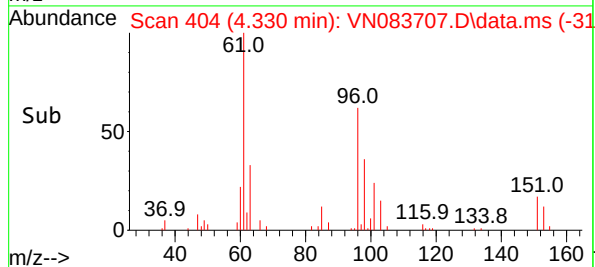
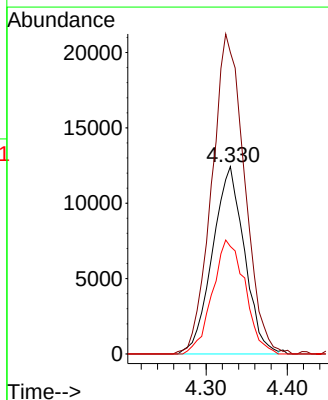
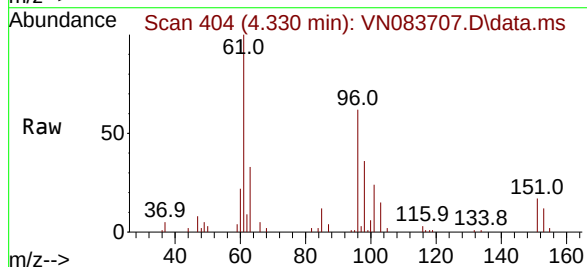
Manual Integrations
APPROVED

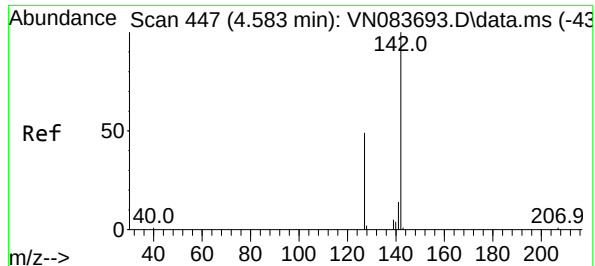
Reviewed By :John
Carlone
09/10/2024
Supervised By :Mahesh
Dadoda
09/10/2024



#10
1,1-Dichloroethene
Concen: 18.305 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion: 96 Resp: 33940
Ion Ratio Lower Upper
96 100
61 159.6 117.6 176.4
98 57.4 48.4 72.6





#11

Methyl Iodide

Concen: 17.614 ug/l

RT: 4.583 min Scan# 447

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:	142	Resp:	4436
Ion Ratio	Lower	Upper	
142	100		
127	55.0	26.3	78.9
141	14.7	8.3	24.9

Manual Integrations
APPROVED

Reviewed By :John

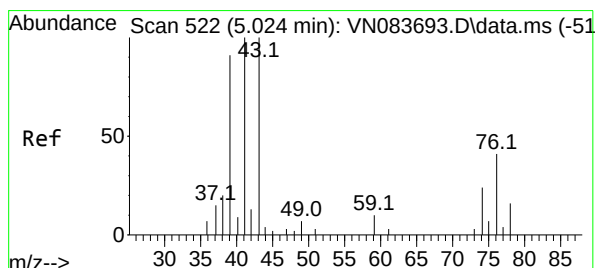
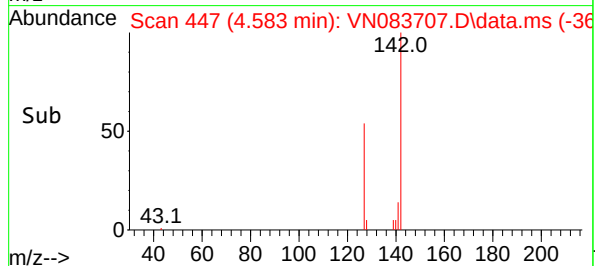
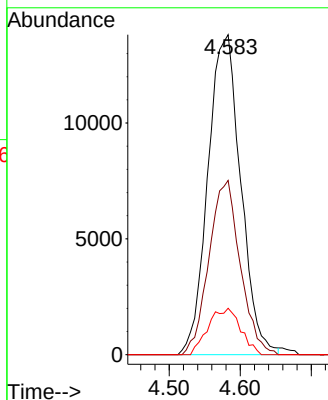
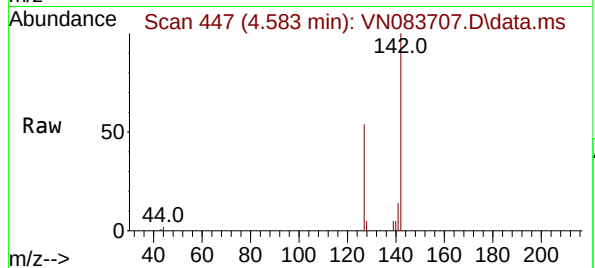
Carlone

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#12

Methyl Acetate

Concen: 18.623 ug/l

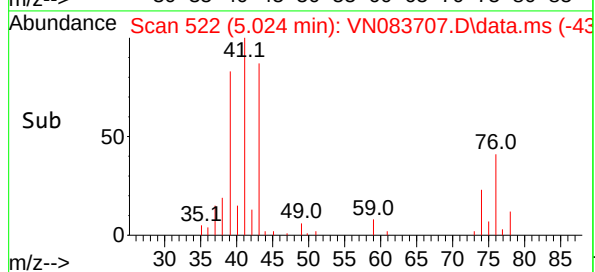
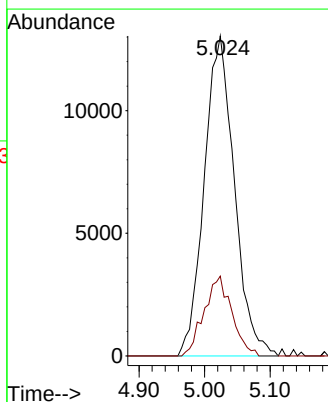
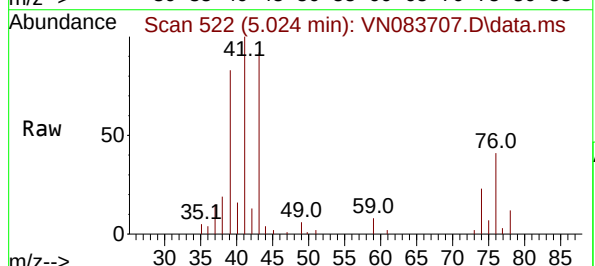
RT: 5.024 min Scan# 522

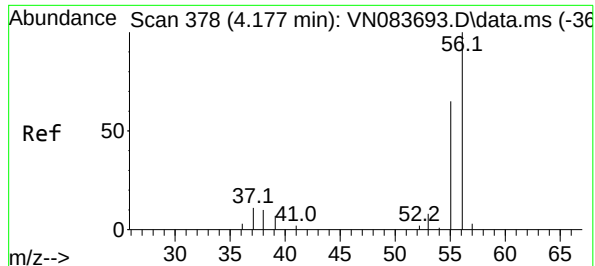
Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion:	43	Resp:	41644
Ion Ratio	Lower	Upper	
43	100		
74	24.9	27.7	41.5#





#13

Acrolein

Concen: 104.439 ug/l

RT: 4.171 min Scan# 31

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 56 Resp: 3408

Ion Ratio Lower Upper

56 100

55 70.7 55.5 83.3

Manual Integrations

APPROVED

Reviewed By :John

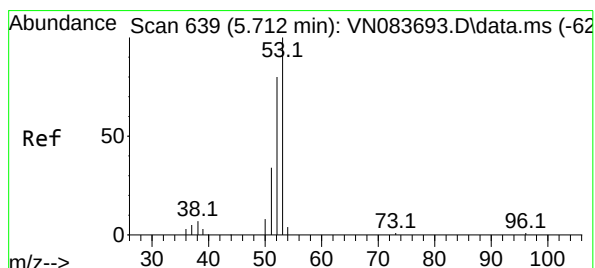
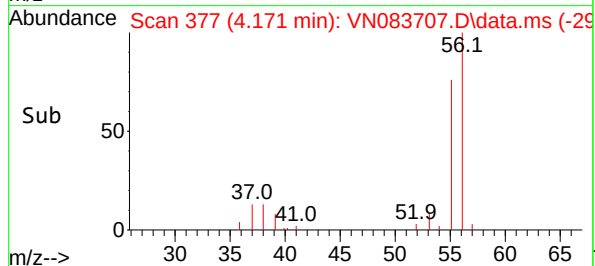
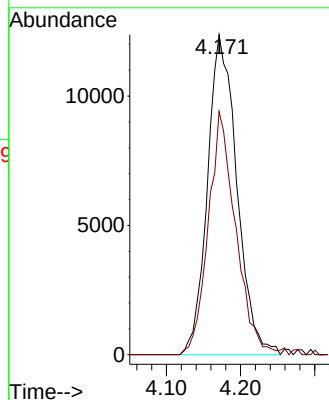
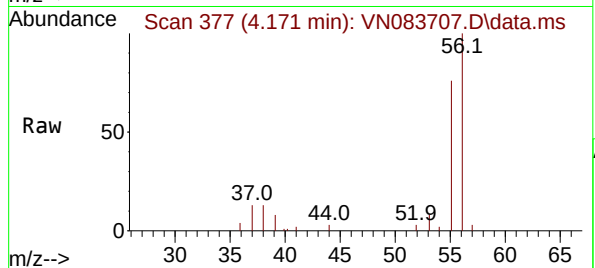
Carlone

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#14

Acrylonitrile

Concen: 95.714 ug/l

RT: 5.718 min Scan# 640

Delta R.T. 0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

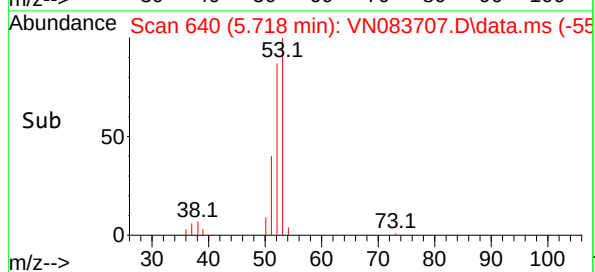
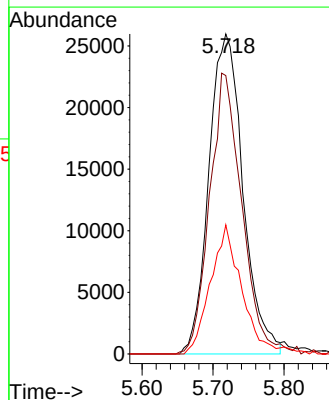
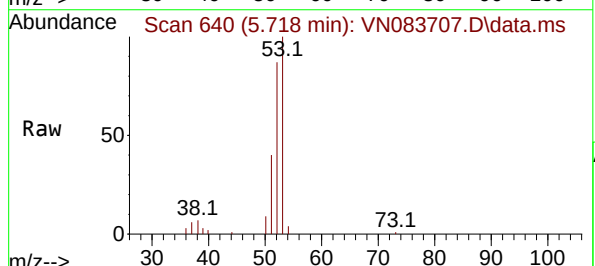
Tgt Ion: 53 Resp: 86614

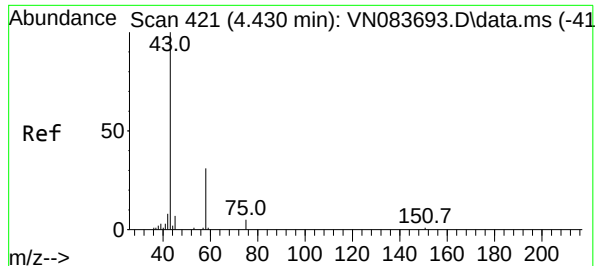
Ion Ratio Lower Upper

53 100

52 82.7 41.3 123.9

51 36.3 16.8 50.3





#15

Acetone

Concen: 97.917 ug/l

RT: 4.430 min Scan# 41

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 58 Resp: 2939

Ion Ratio Lower Upper

58 100

43 355.7 223.1 334.7

Manual Integrations

APPROVED

Reviewed By :John

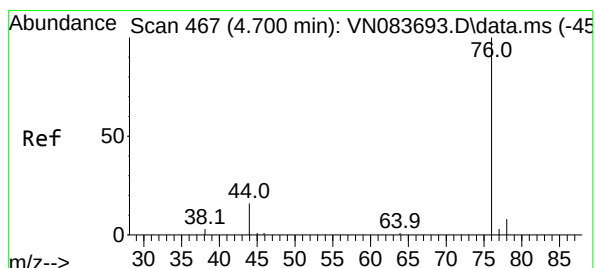
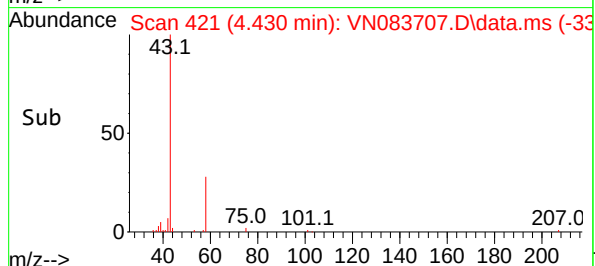
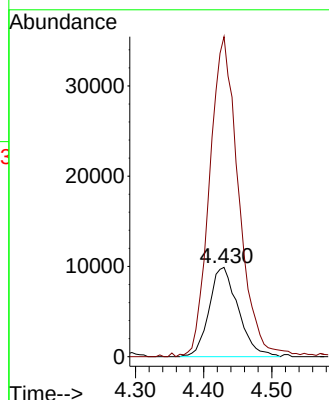
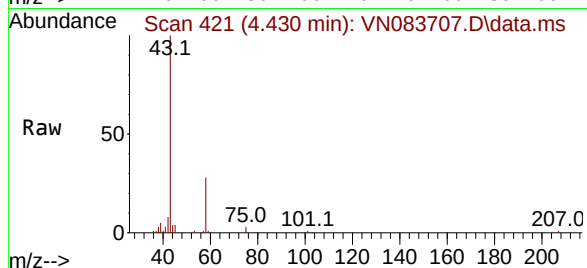
Carlone

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#16

Carbon Disulfide

Concen: 17.387 ug/l

RT: 4.700 min Scan# 467

Delta R.T. 0.000 min

Lab File: VN083707.D

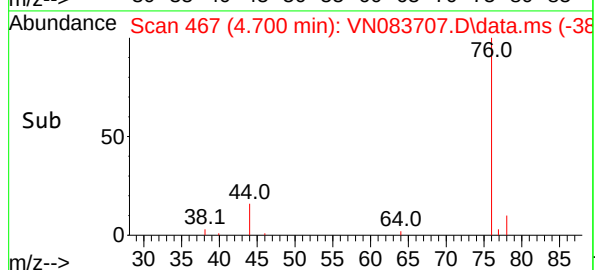
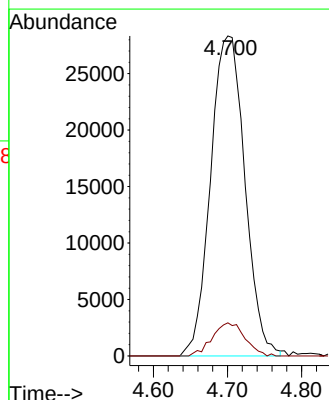
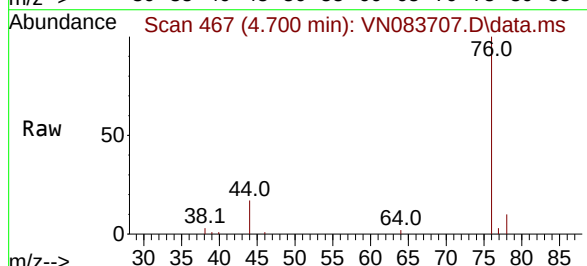
Acq: 09 Sep 2024 09:39

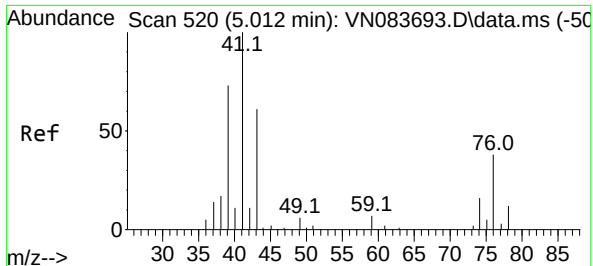
Tgt Ion: 76 Resp: 91111

Ion Ratio Lower Upper

76 100

78 10.4 6.3 9.5





#17

Allyl chloride

Concen: 18.282 ug/l

RT: 5.018 min Scan# 51

Delta R.T. 0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 41 Resp: 5944

Ion Ratio Lower Upper

41 100

39 75.6 37.6 112.9

76 37.9 27.8 83.4

Manual Integrations

APPROVED

Reviewed By :John

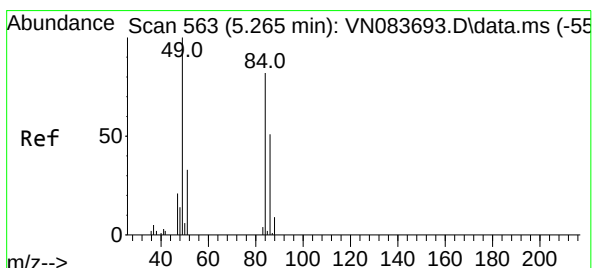
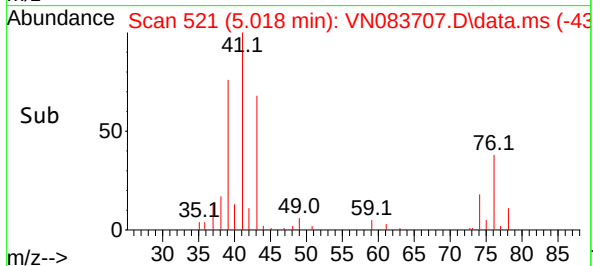
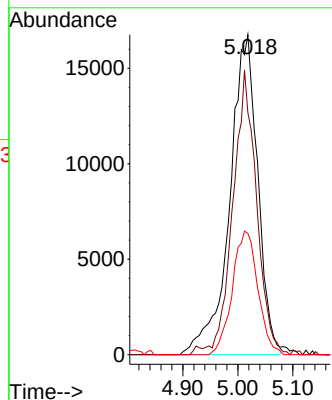
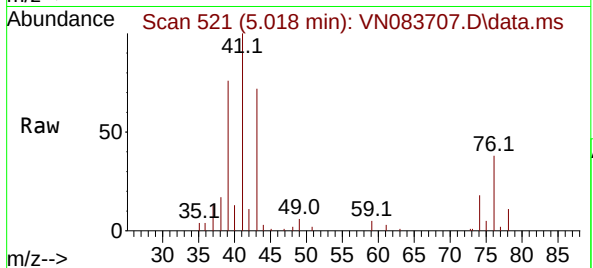
Carlone

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Dadoda

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#18

Methylene Chloride

Concen: 18.116 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion: 84 Resp: 36750

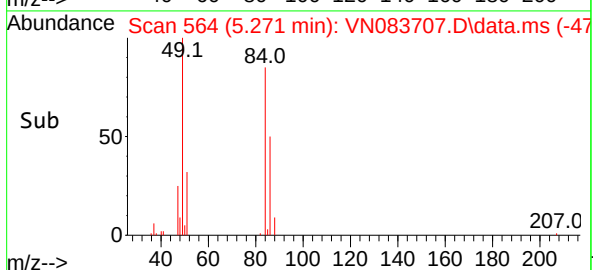
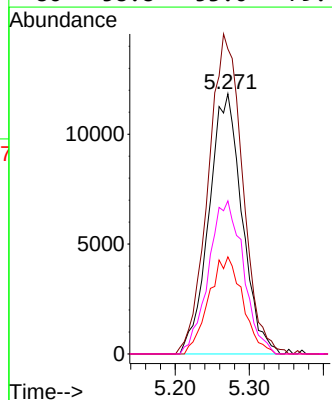
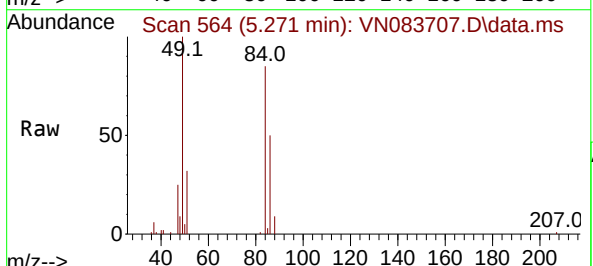
Ion Ratio Lower Upper

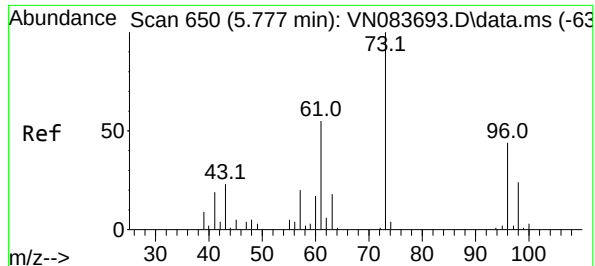
84 100

49 115.5 86.0 129.0

51 37.3 30.0 45.0

86 58.8 53.0 79.4





#19

trans-1,2-Dichloroethene

Concen: 18.239 ug/l

RT: 5.777 min Scan# 61

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 96 Resp: 3505

Ion Ratio Lower Upper

96 100

61 133.5 111.8 167.6

98 62.5 49.2 73.8

Manual Integrations

APPROVED

Reviewed By :John

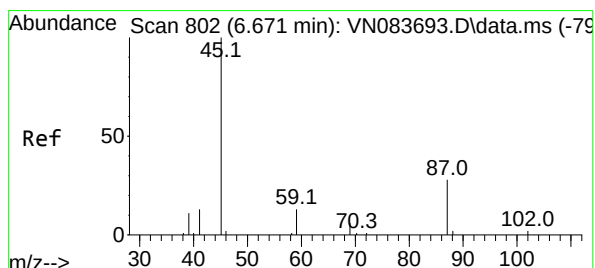
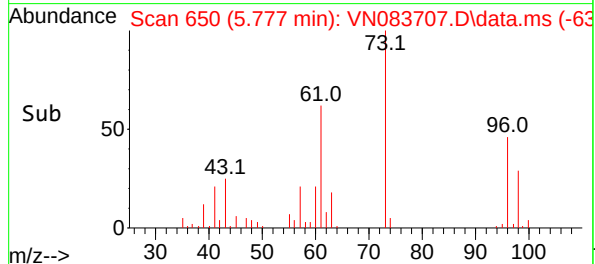
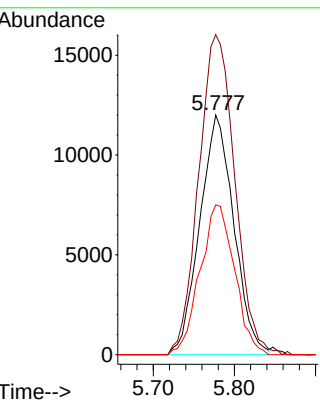
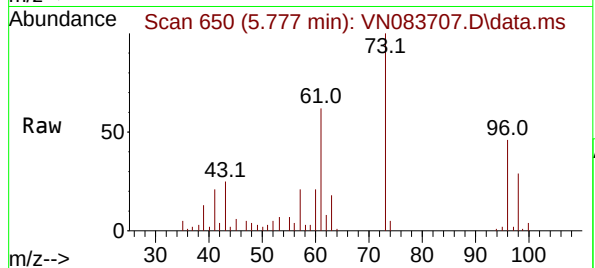
Carlone

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Dadoda

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#20

Diisopropyl ether

Concen: 18.775 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion: 45 Resp: 123284

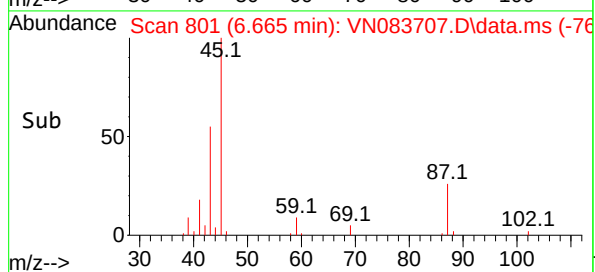
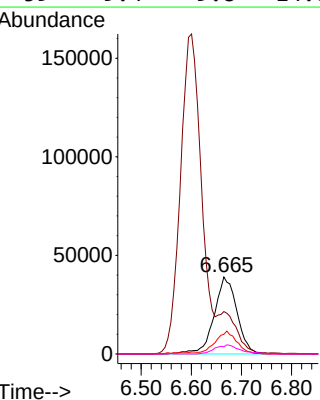
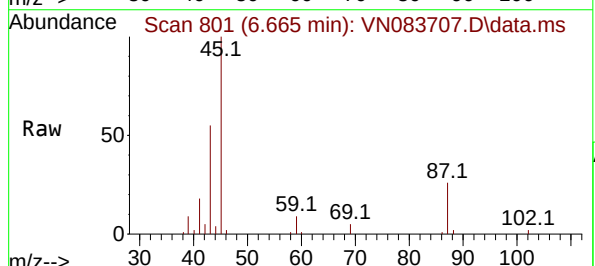
Ion Ratio Lower Upper

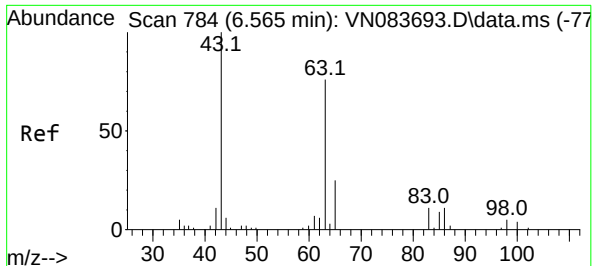
45 100

43 54.0 40.4 60.6

87 25.6 23.8 35.8

59 9.4 9.8 14.6#





#21

1,1-Dichloroethane

Concen: 18.295 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 63 Resp: 6858

Ion Ratio Lower Upper

63 100

98 5.7 4.1 12.3

100 5.1 3.0 9.0

Manual Integrations

APPROVED

Reviewed By :John

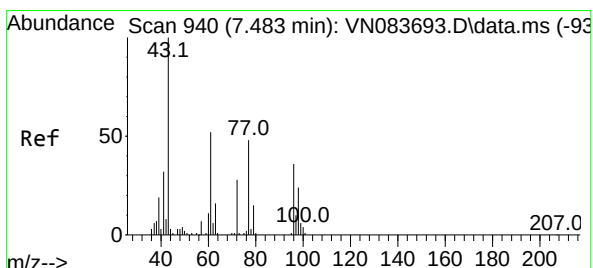
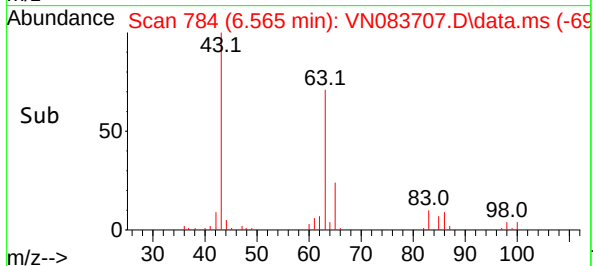
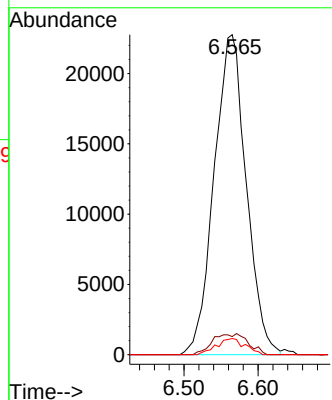
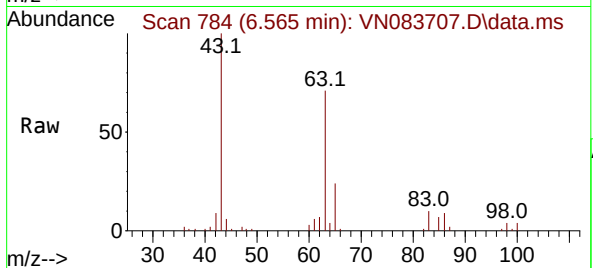
Carlone

09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#22

cis-1,2-Dichloroethene

Concen: 18.112 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

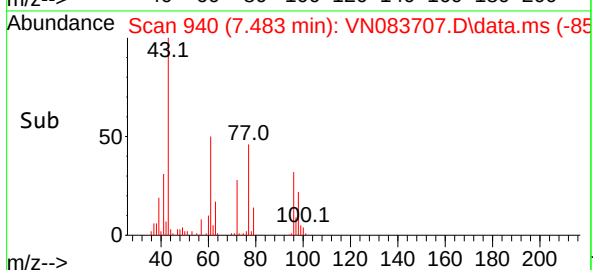
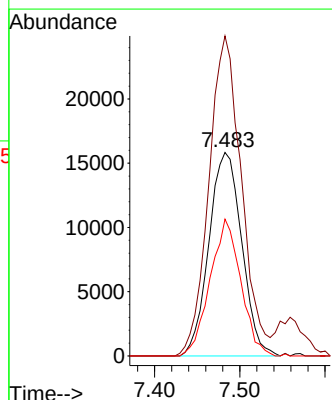
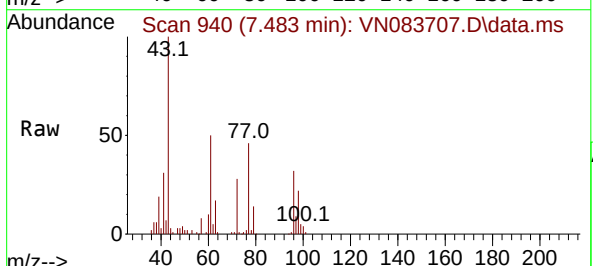
Tgt Ion: 96 Resp: 42364

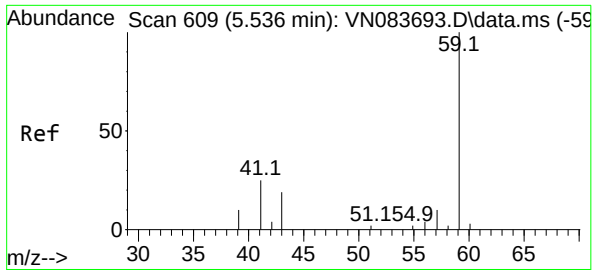
Ion Ratio Lower Upper

96 100

61 156.0 113.5 170.3

98 62.9 52.0 78.0





#23

tert-Butyl Alcohol

Concen: 101.436 ug/l m

RT: 5.536 min Scan# 609

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 59 Resp: 33684
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0

Manual Integrations
APPROVED

Reviewed By :John

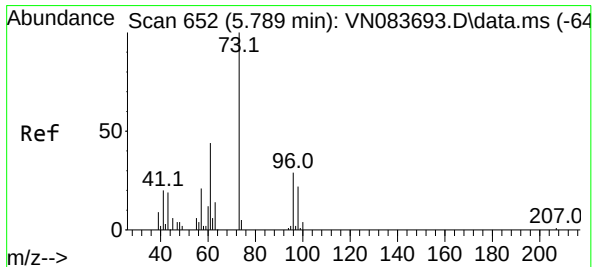
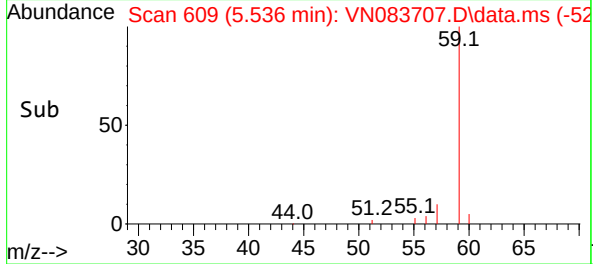
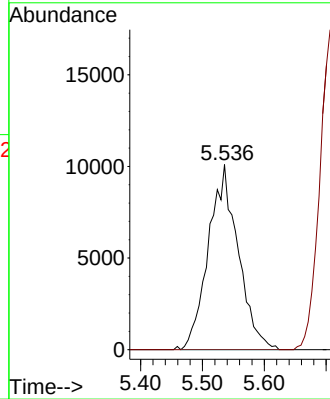
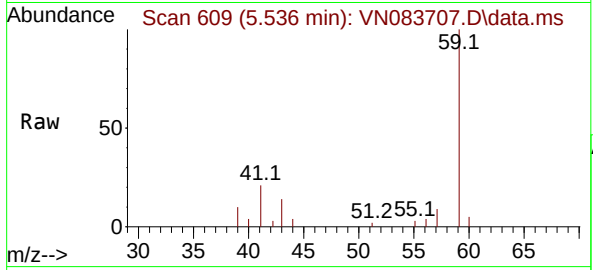
Carlone

09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#24

Methyl tert-Butyl Ether

Concen: 18.698 ug/l

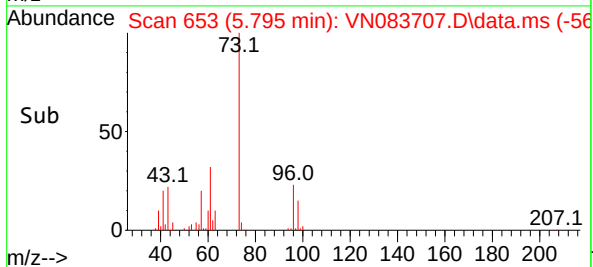
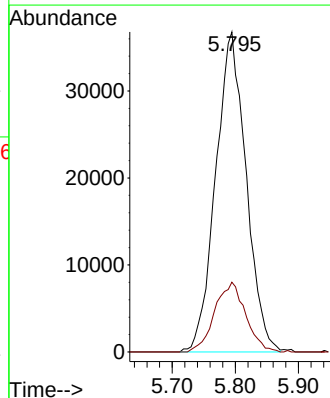
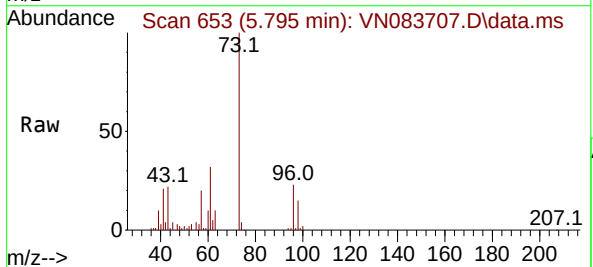
RT: 5.795 min Scan# 653

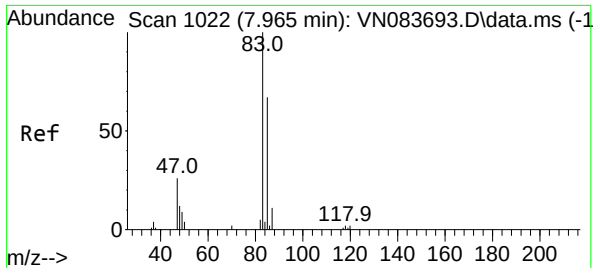
Delta R.T. 0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

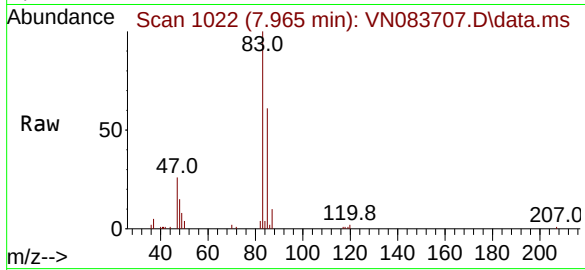
Tgt Ion: 73 Resp: 123203
Ion Ratio Lower Upper
73 100
43 22.1 13.4 20.2#





#25
Chloroform
Concen: 18.621 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

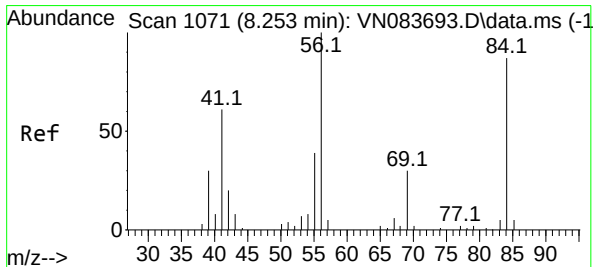
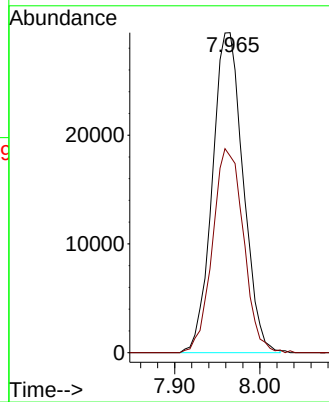
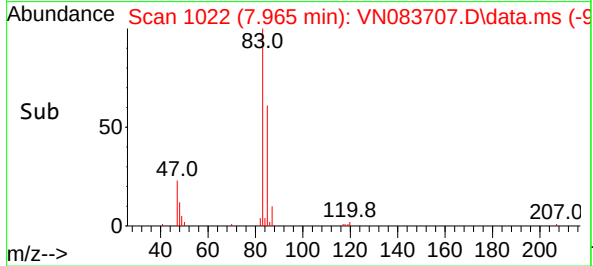
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01



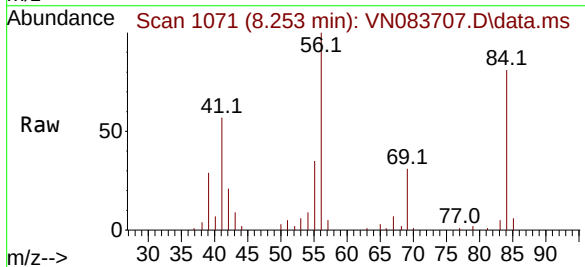
Tgt Ion: 83 Resp: 7398
Ion Ratio Lower Upper
83 100
85 61.4 50.9 76.3

Manual Integrations
APPROVED

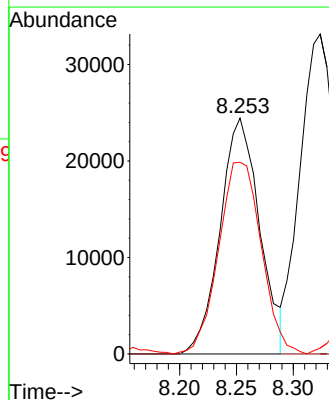
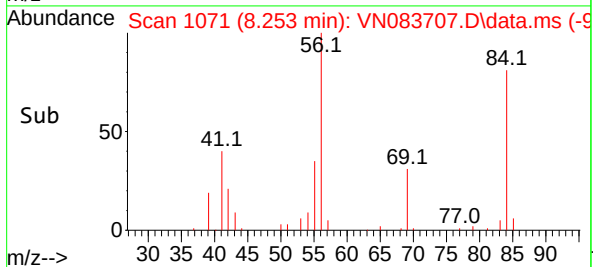
Reviewed By :John
Carlone
09/10/2024
Supervised By :Mahesh
Dadoda
09/10/2024

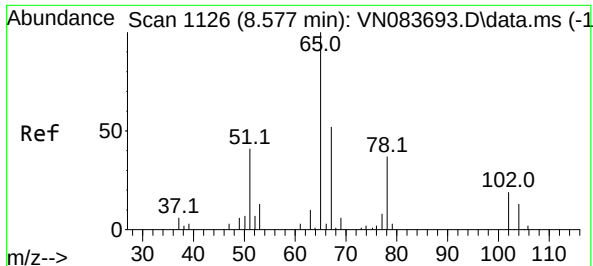


#26
Cyclohexane
Concen: 17.904 ug/l
RT: 8.253 min Scan# 1071
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39



Tgt Ion: 56 Resp: 59120
Ion Ratio Lower Upper
56 100
89 0.0 19.3 28.9#
84 87.7 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 29.967 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 65 Resp: 81718

Ion Ratio Lower Upper

65 100

67 51.2 43.2 64.8

Manual Integrations

APPROVED

Reviewed By :John

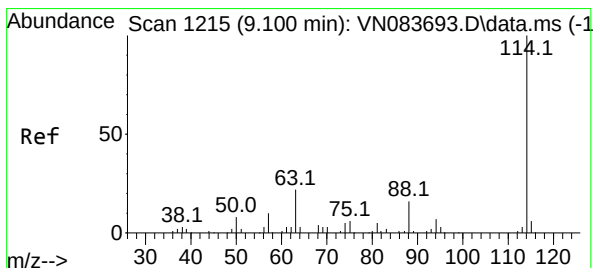
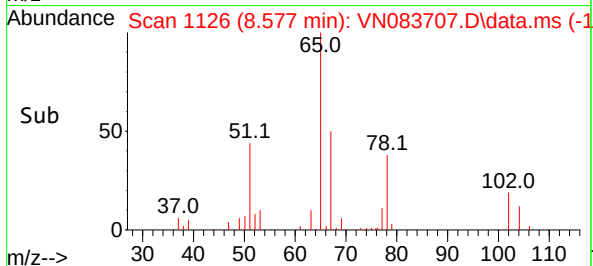
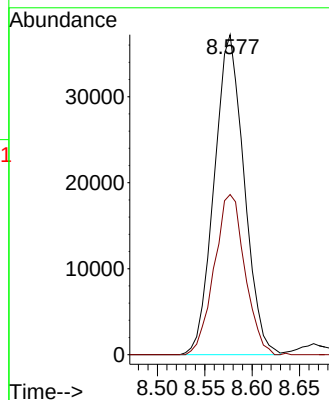
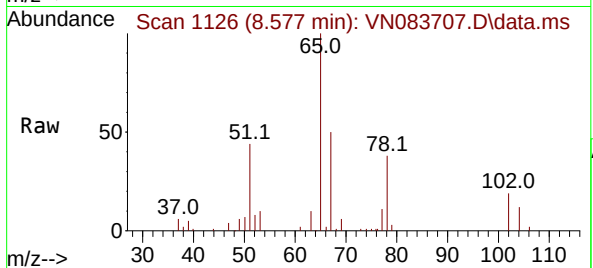
Carlone

09/10/2024

Supervised By :Mahesh

Dadoda

09/10/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

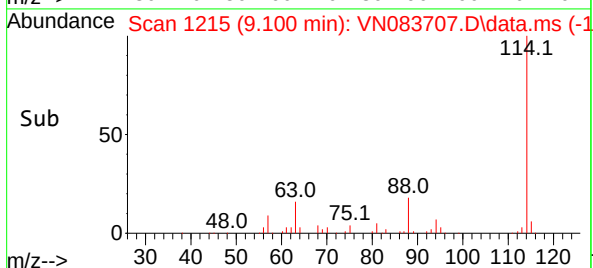
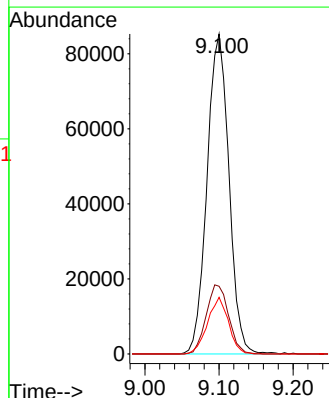
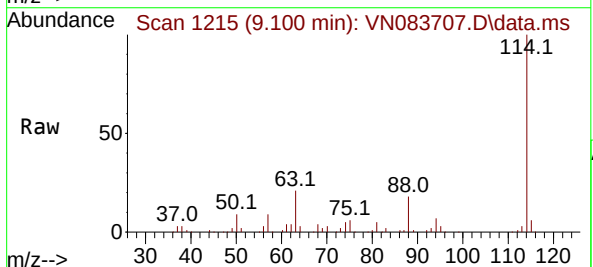
Tgt Ion:114 Resp: 175066

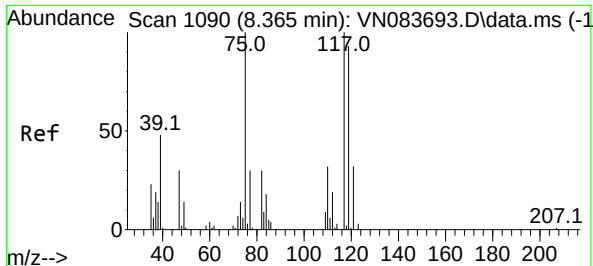
Ion Ratio Lower Upper

114 100

63 22.0 15.9 23.9

88 16.8 12.7 19.1





#29

1,1-Dichloropropene

Concen: 18.076 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

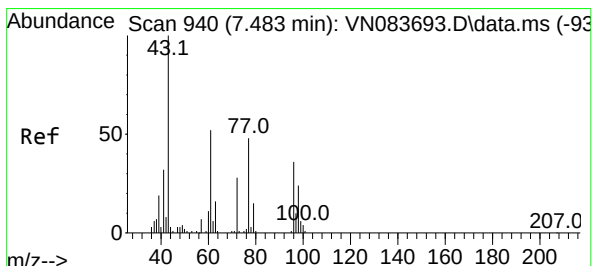
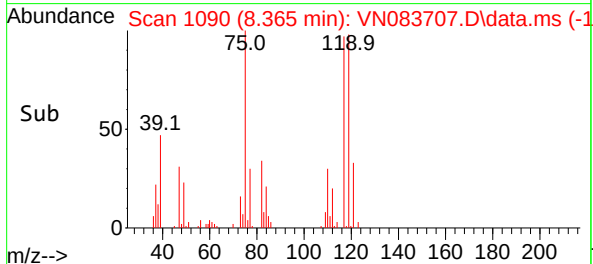
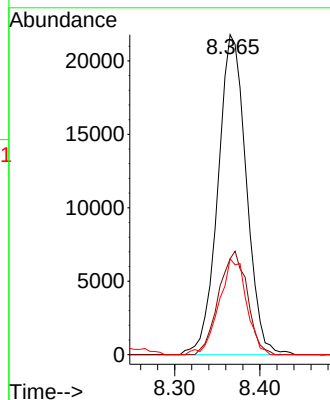
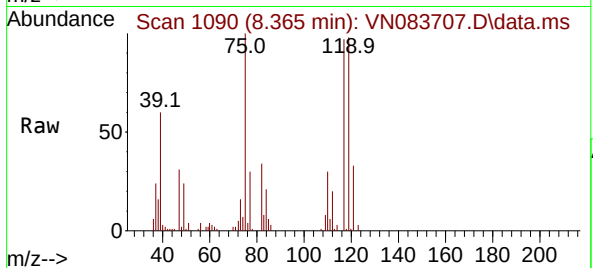
Tgt Ion:	75	Resp:	5019
Ion Ratio	Lower	Upper	
75	100		
110	32.6	0.0	70.2
77	28.5	0.0	61.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#30

2-Butanone

Concen: 101.006 ug/l

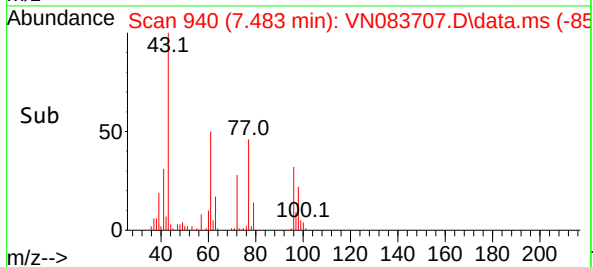
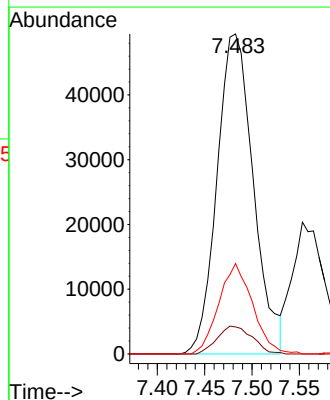
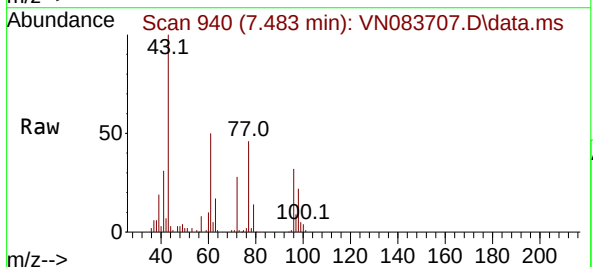
RT: 7.483 min Scan# 940

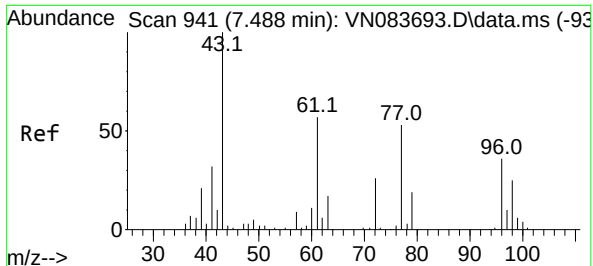
Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion:	43	Resp:	132211
Ion Ratio	Lower	Upper	
43	100		
57	8.3	6.7	10.1
72	26.1	24.0	36.0





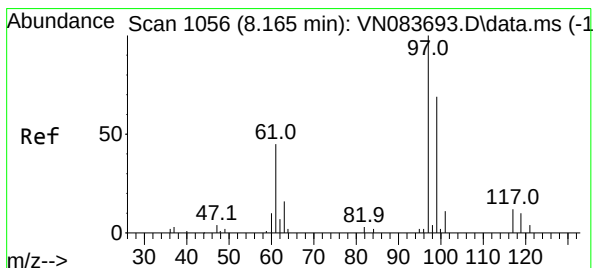
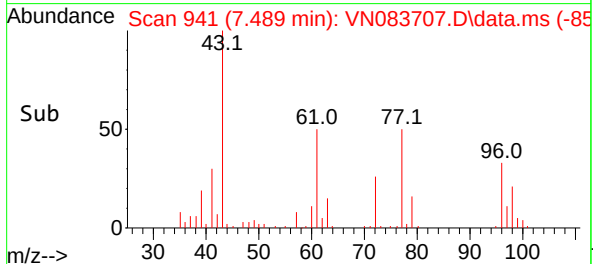
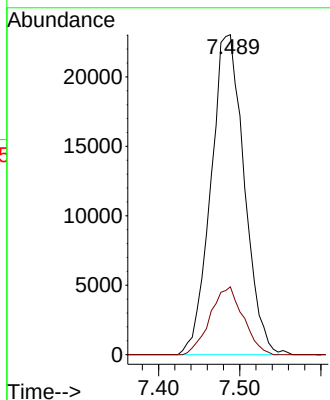
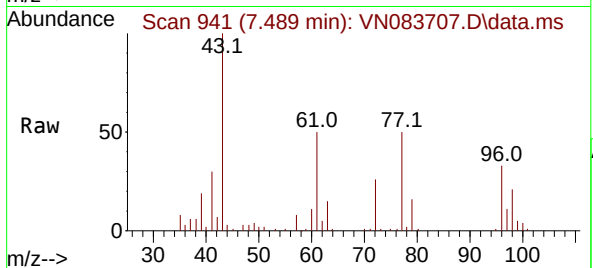
#31
2,2-Dichloropropane
Concen: 18.565 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 77 Resp: 65724
Ion Ratio Lower Upper
77 100
97 21.0 18.3 27.5

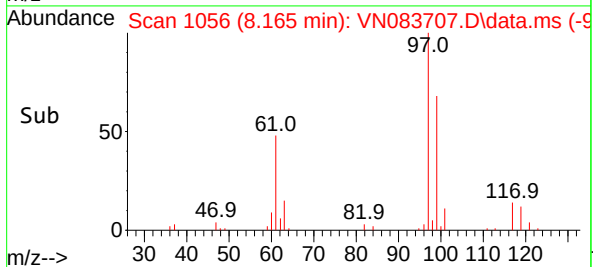
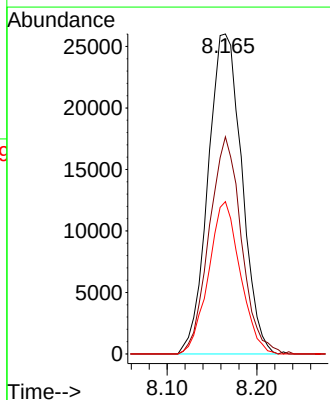
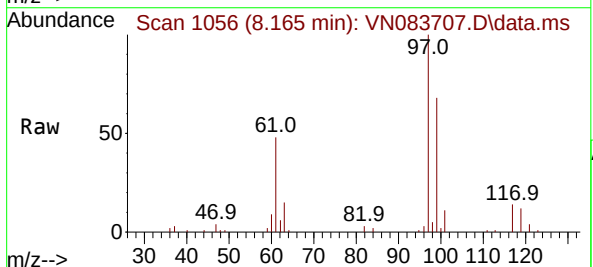
Manual Integrations
APPROVED

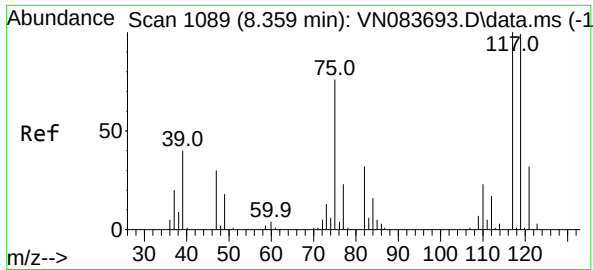
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#32
1,1,1-Trichloroethane
Concen: 18.313 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

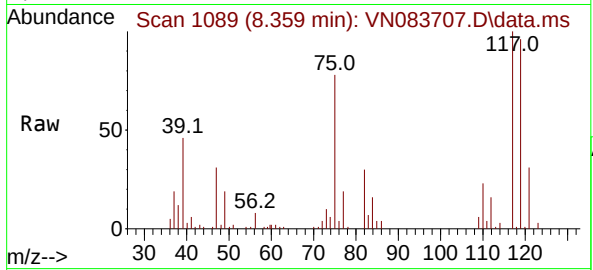
Tgt Ion: 97 Resp: 67912
Ion Ratio Lower Upper
97 100
99 64.7 51.0 76.4
61 44.8 33.8 50.8





#33
Carbon Tetrachloride
Concen: 18.146 ug/l
RT: 8.359 min Scan# 1109
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

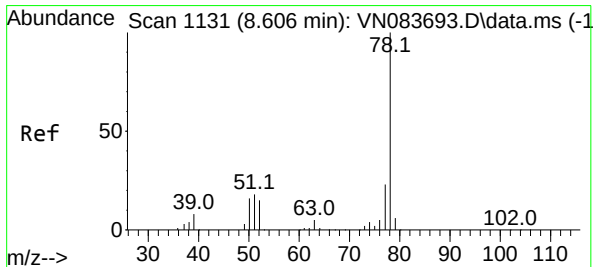
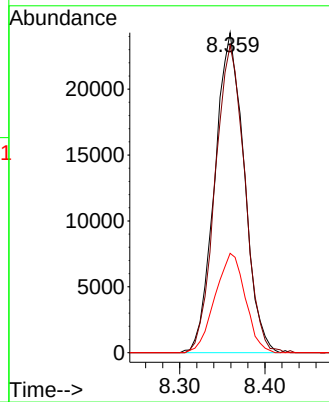
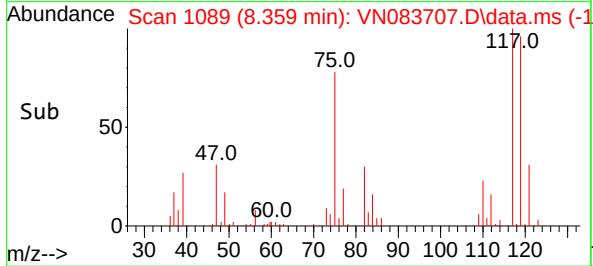
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01



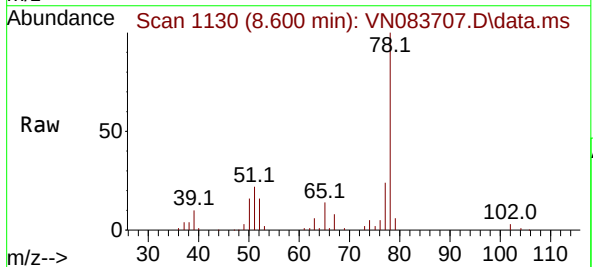
Tgt Ion:117 Resp: 58274
Ion Ratio Lower Upper
117 100
119 96.0 77.7 116.5
121 31.1 27.0 40.6

Manual Integrations
APPROVED

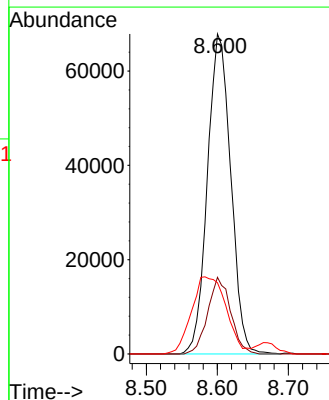
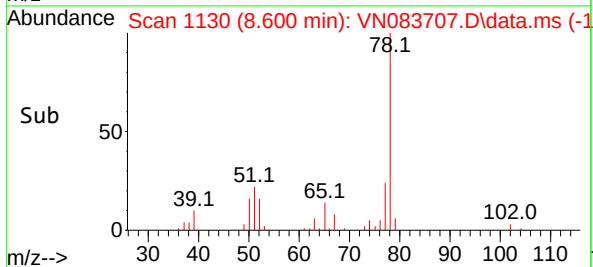
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

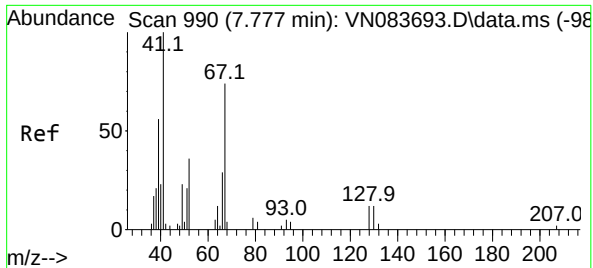


#34
Benzene
Concen: 18.614 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39



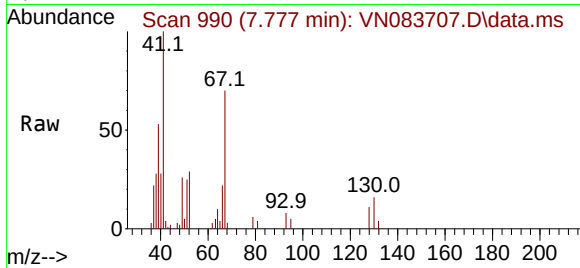
Tgt Ion: 78 Resp: 155085
Ion Ratio Lower Upper
78 100
77 24.0 19.2 28.8
51 21.1 13.3 19.9#





#35
Methacrylonitrile
Concen: 19.554 ug/l
RT: 7.777 min Scan# 990
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

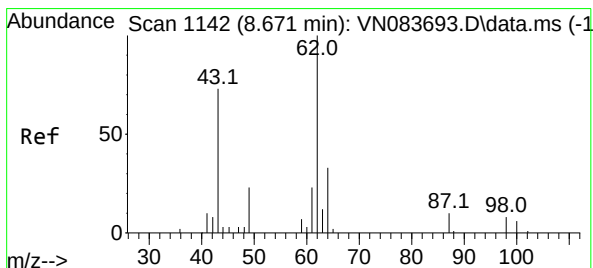
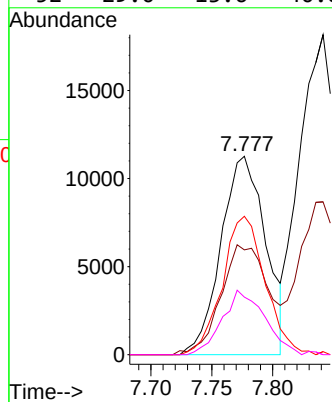
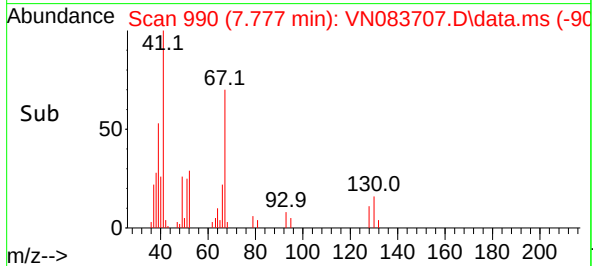
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01



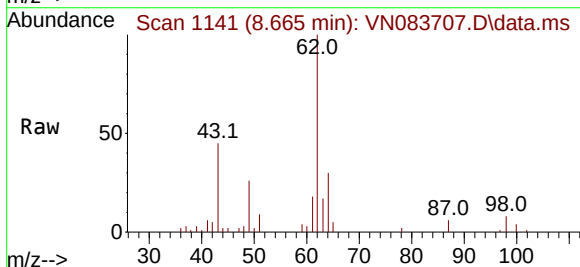
Tgt Ion: 41 Resp: 2877
Ion Ratio Lower Upper
41 100
39 50.8 25.3 75.9
67 69.7 38.7 116.1
52 29.0 13.6 40.8

Manual Integrations
APPROVED

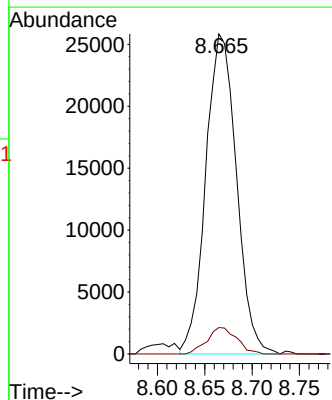
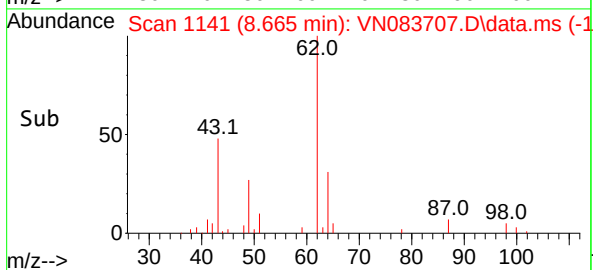
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

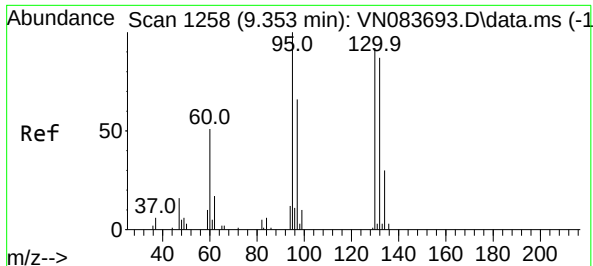


#36
1,2-Dichloroethane
Concen: 18.595 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39



Tgt Ion: 62 Resp: 58242
Ion Ratio Lower Upper
62 100
98 8.0 8.2 12.4#





#37

Trichloroethene

Concen: 17.649 ug/l

RT: 9.347 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:130 Resp: 34530

Ion Ratio Lower Upper

130 100

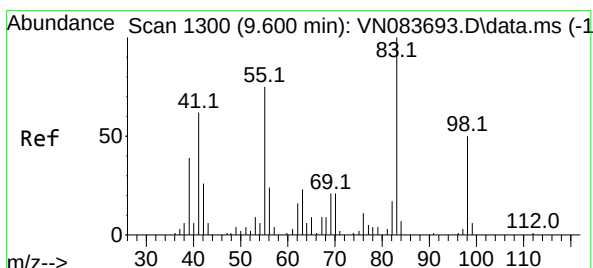
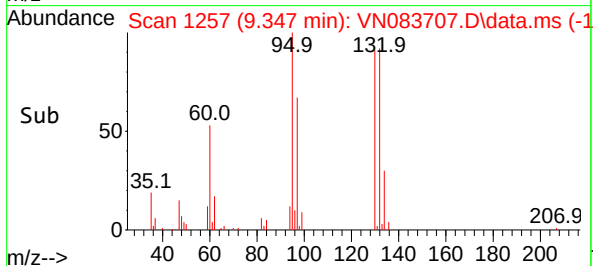
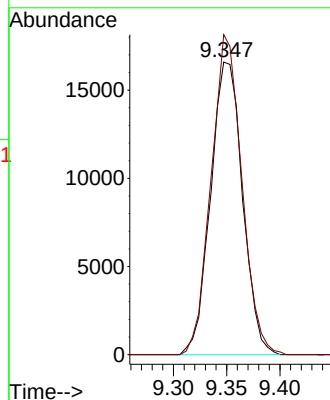
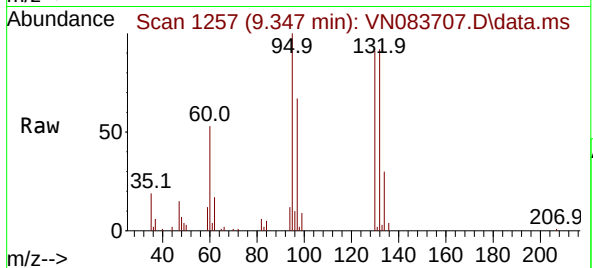
95 109.4 80.2 120.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#38

Methylcyclohexane

Concen: 17.596 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

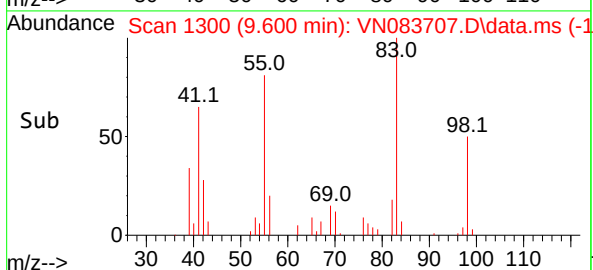
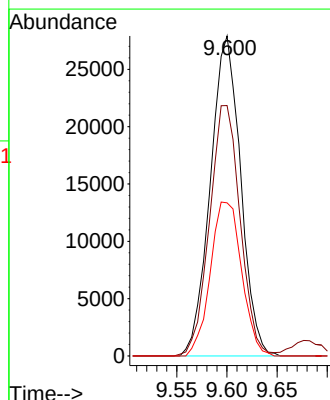
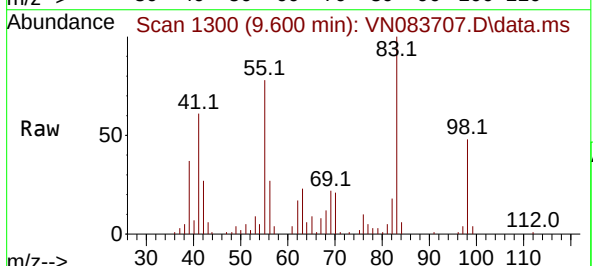
Tgt Ion: 83 Resp: 58498

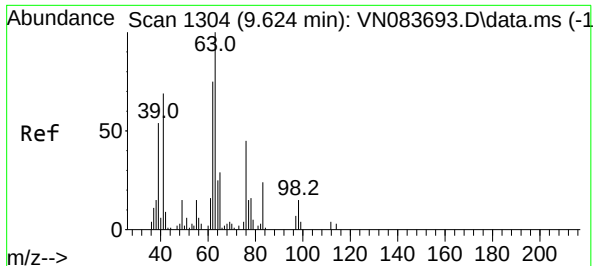
Ion Ratio Lower Upper

83 100

55 79.1 36.6 109.9

98 49.7 23.8 71.5





#39

1,2-Dichloropropane

Concen: 18.135 ug/l

RT: 9.618 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 63 Resp: 3636

Ion Ratio Lower Upper

63 100

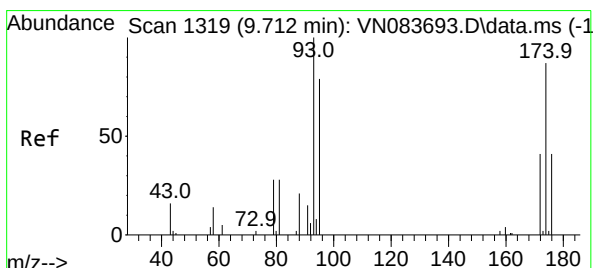
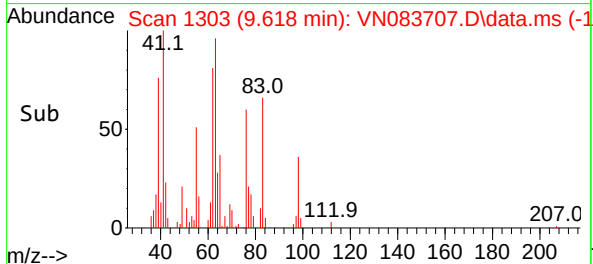
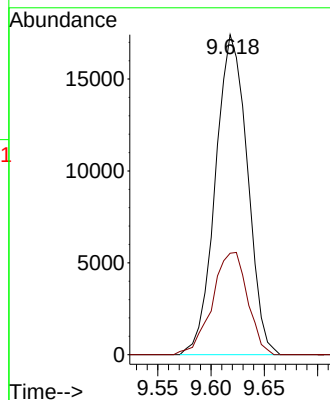
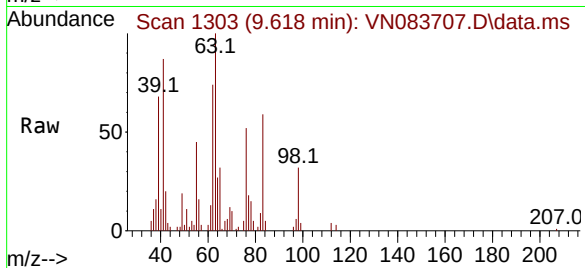
65 31.7 25.0 37.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#40

Dibromomethane

Concen: 18.247 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

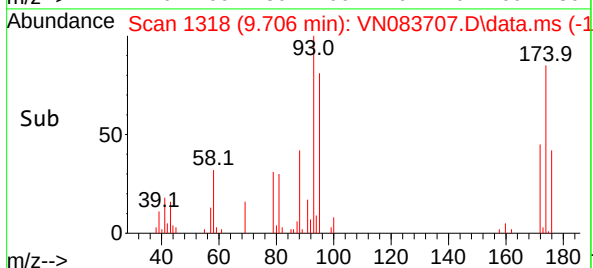
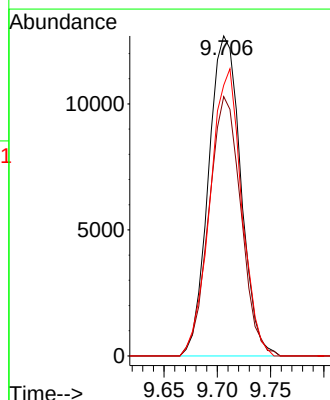
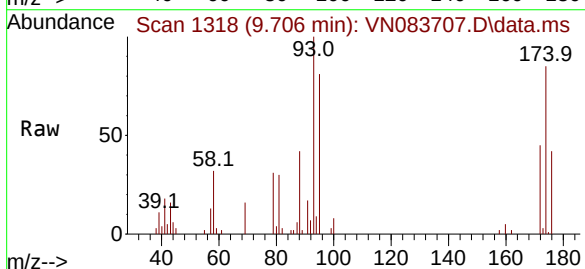
Tgt Ion: 93 Resp: 26753

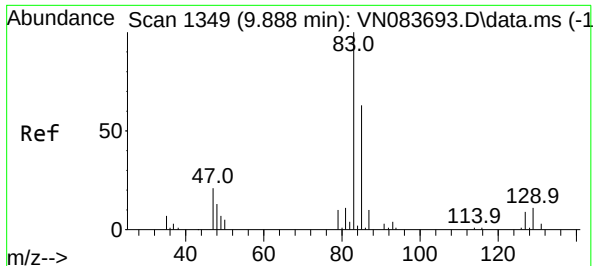
Ion Ratio Lower Upper

93 100

95 80.5 0.0 164.6

174 87.4 0.0 193.2





#41

Bromodichloromethane

Concen: 18.316 ug/l

RT: 9.888 min Scan# 1349

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 83 Resp: 5710

Ion Ratio Lower Upper

83 100

85 62.6 49.4 74.2

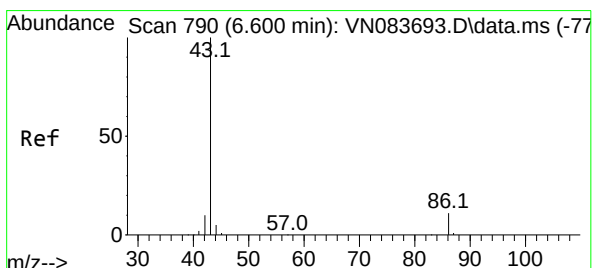
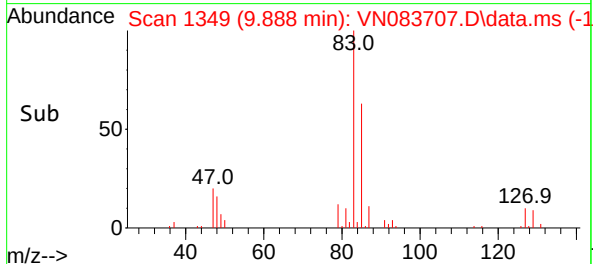
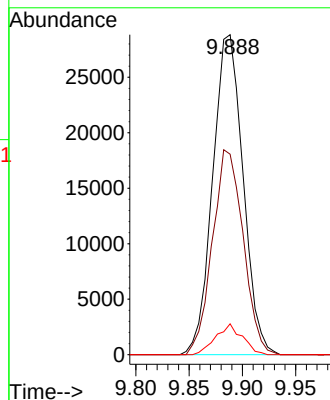
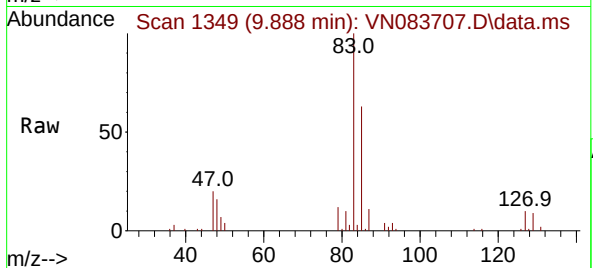
127 9.6 7.3 10.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#42

Vinyl Acetate

Concen: 87.237 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.000 min

Lab File: VN083707.D

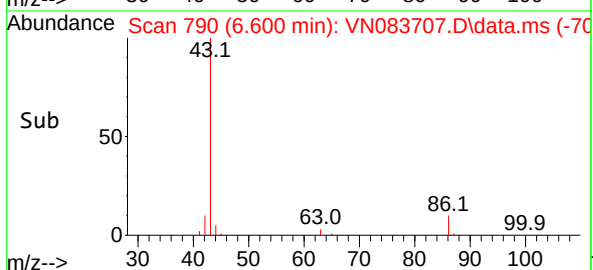
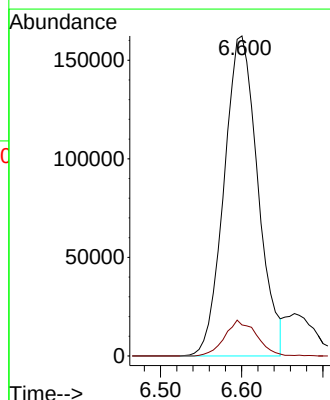
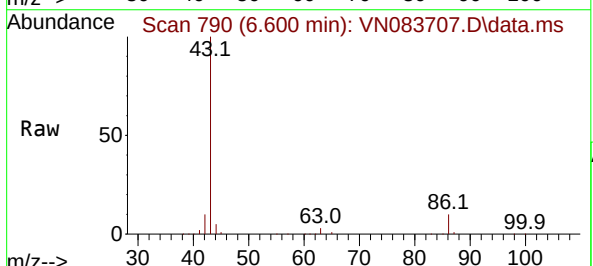
Acq: 09 Sep 2024 09:39

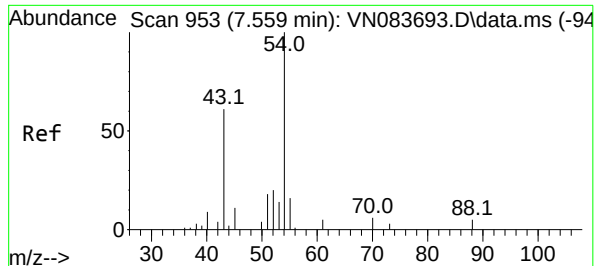
Tgt Ion: 43 Resp: 469486

Ion Ratio Lower Upper

43 100

86 10.5 9.4 14.2





#43

Ethyl Acetate

Concen: 19.105 ug/l

RT: 7.553 min Scan# 91

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 43 Resp: 50334

Ion Ratio Lower Upper

43 100

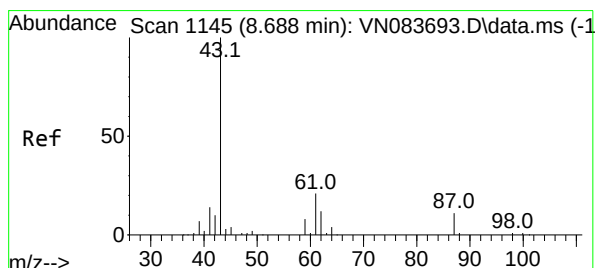
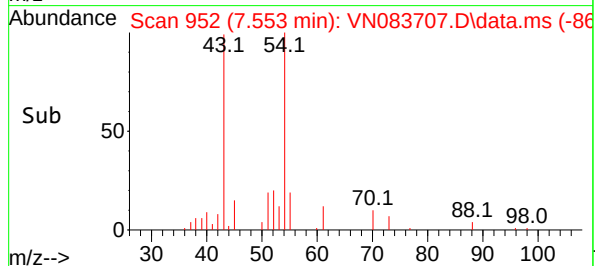
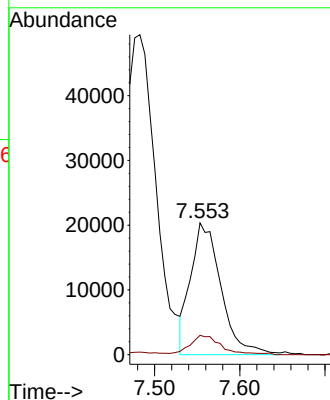
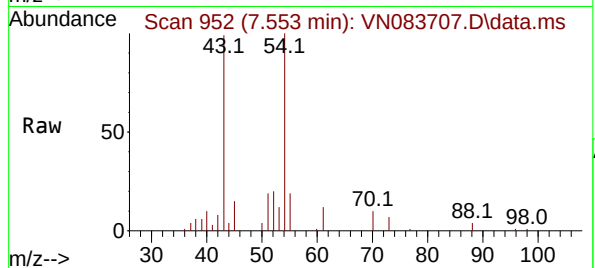
45 14.9 10.6 15.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#44

Isopropyl Acetate

Concen: 18.796 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.000 min

Lab File: VN083707.D

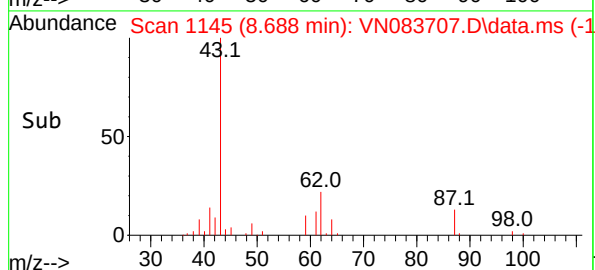
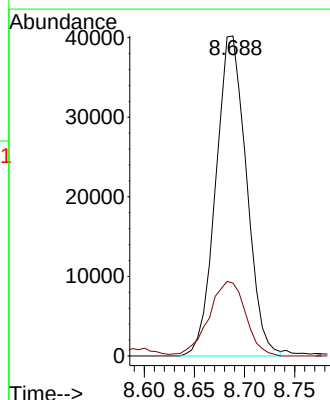
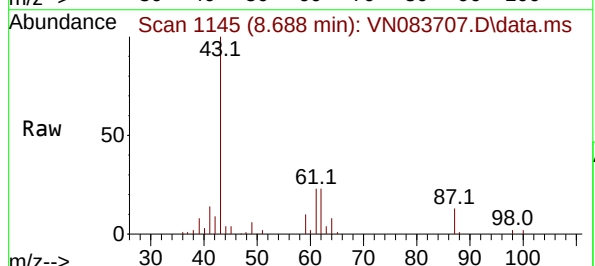
Acq: 09 Sep 2024 09:39

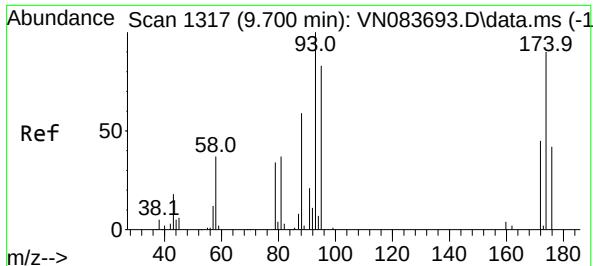
Tgt Ion: 43 Resp: 85650

Ion Ratio Lower Upper

43 100

61 27.9 25.0 37.4





#45

1,4-Dioxane

Concen: 388.980 ug/l

RT: 9.694 min Scan# 1316

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

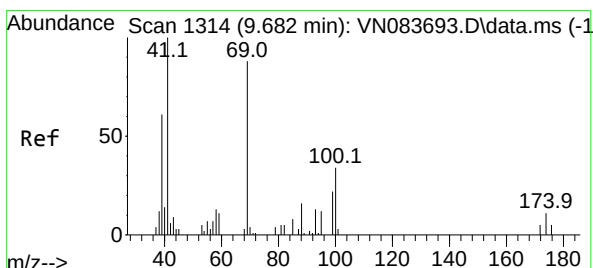
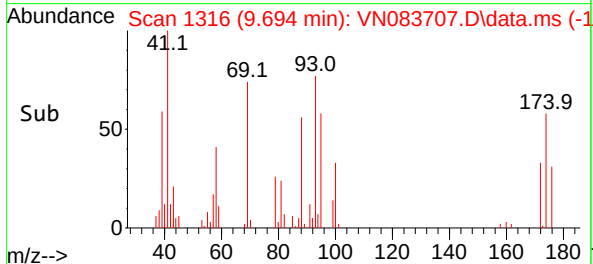
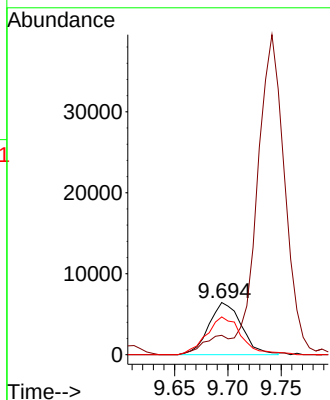
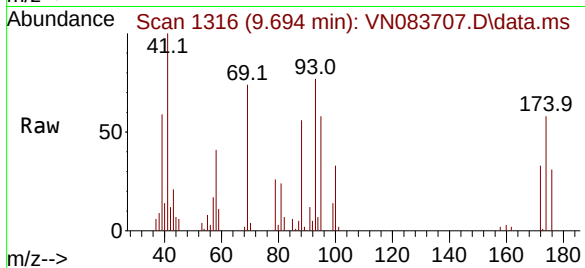
Tgt Ion:	88	Resp:	1382
Ion	Ratio	Lower	Upper
88	100		
43	28.5	19.8	29.6
58	77.3	55.4	83.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#46

Methyl methacrylate

Concen: 18.904 ug/l

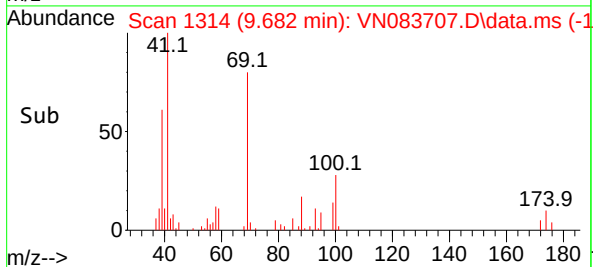
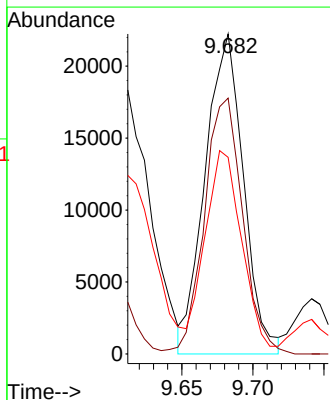
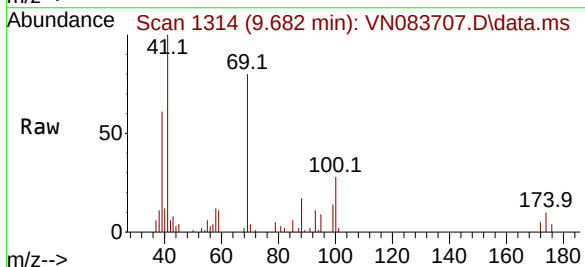
RT: 9.682 min Scan# 1314

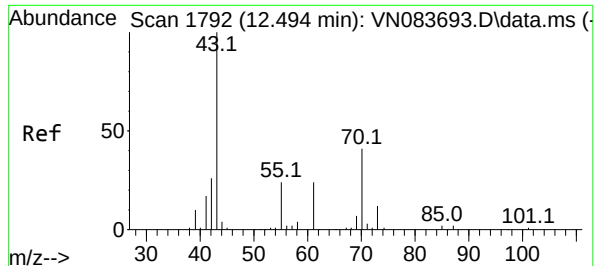
Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion:	41	Resp:	41695
Ion	Ratio	Lower	Upper
41	100		
69	82.4	51.1	153.3
39	62.2	25.8	77.3





#47

n-amyl acetate

Concen: 18.954 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 43 Resp: 76508

Ion Ratio Lower Upper

43 100

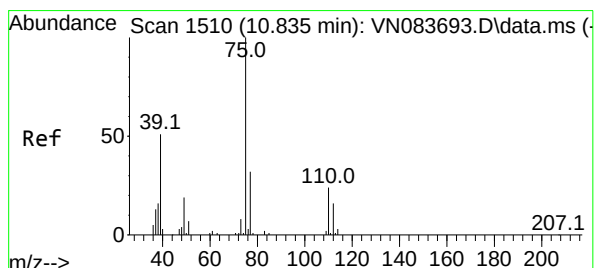
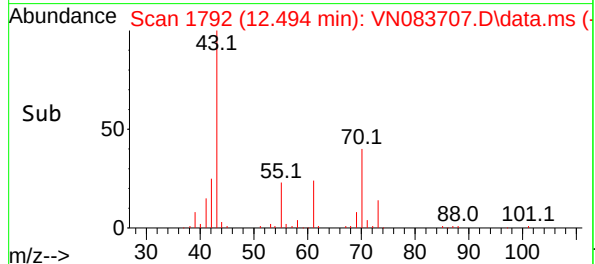
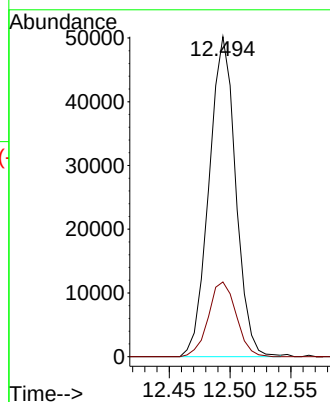
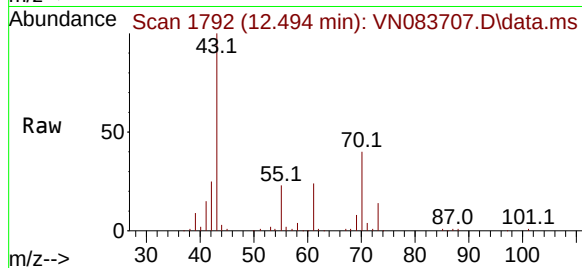
55 24.3 23.4 35.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#48

t-1,3-dichloropropene

Concen: 17.764 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN083707.D

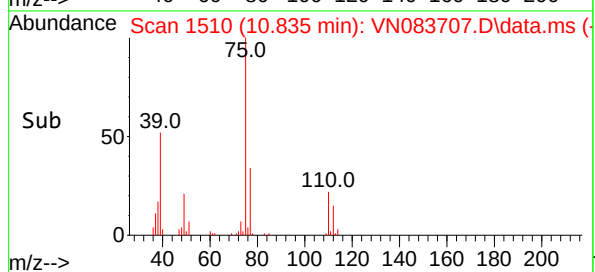
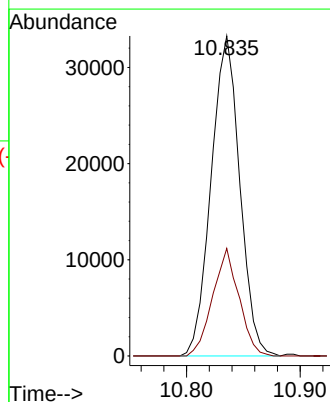
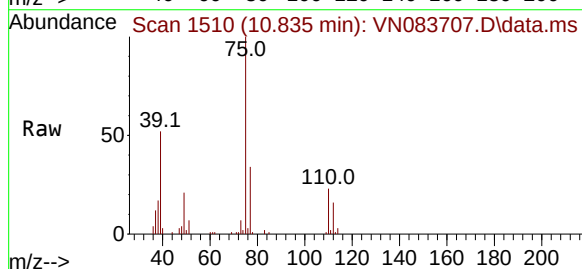
Acq: 09 Sep 2024 09:39

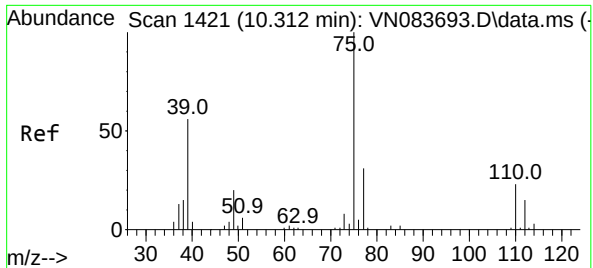
Tgt Ion: 75 Resp: 58257

Ion Ratio Lower Upper

75 100

77 33.6 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 17.563 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 75 Resp: 59900

Ion Ratio Lower Upper

75 100

77 34.5 24.9 37.3

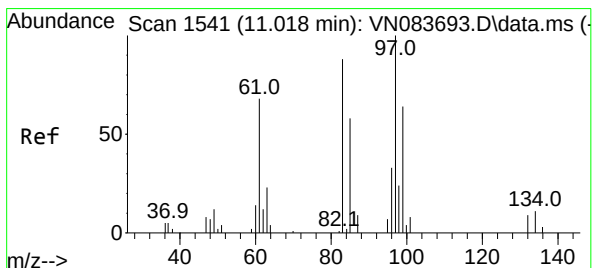
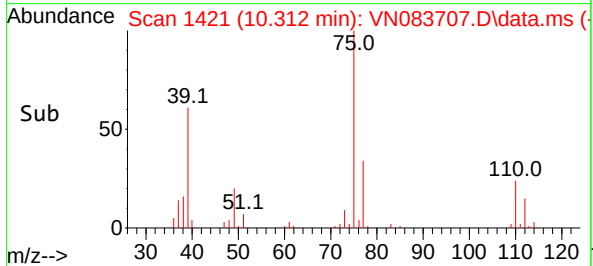
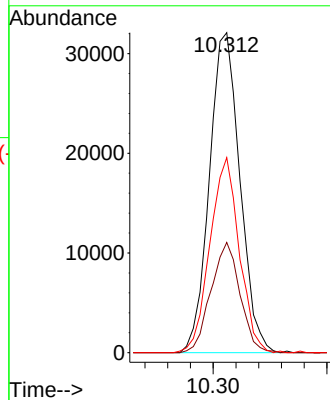
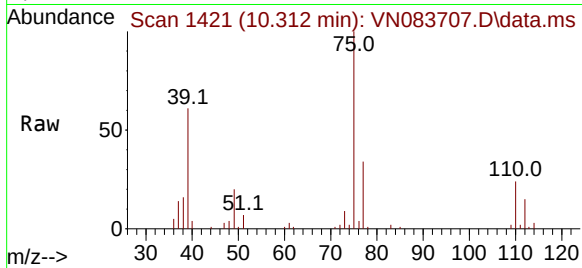
39 60.5 31.0 46.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#50

1,1,2-Trichloroethane

Concen: 18.663 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion: 97 Resp: 34819

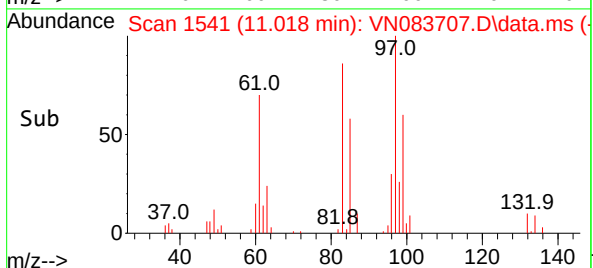
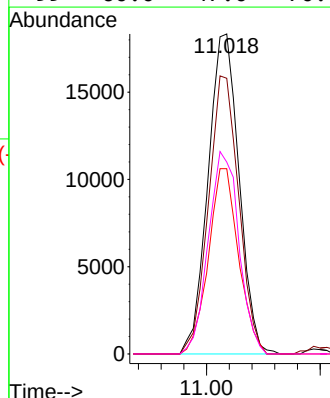
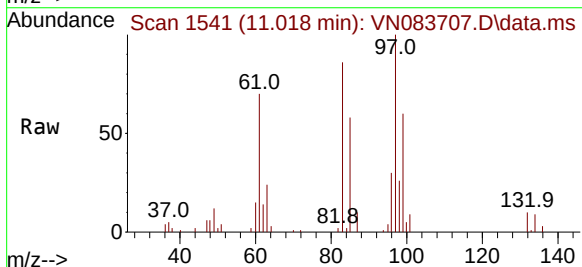
Ion Ratio Lower Upper

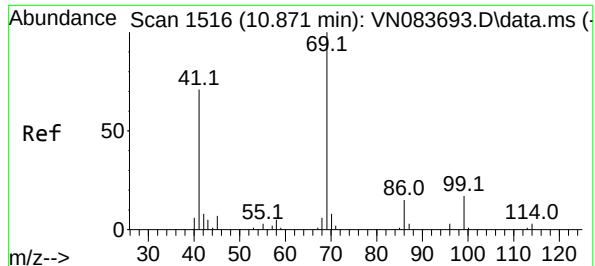
97 100

83 86.2 68.1 102.1

85 57.9 41.8 62.6

99 60.0 47.0 70.4





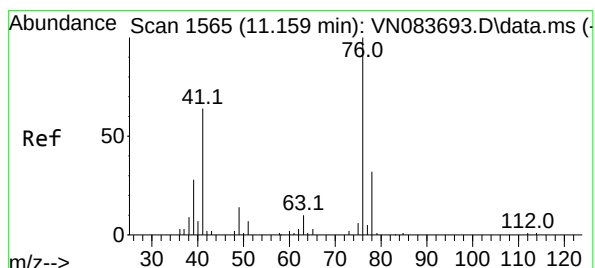
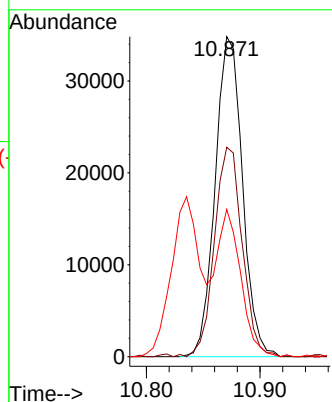
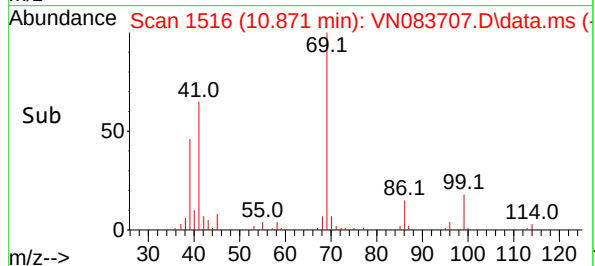
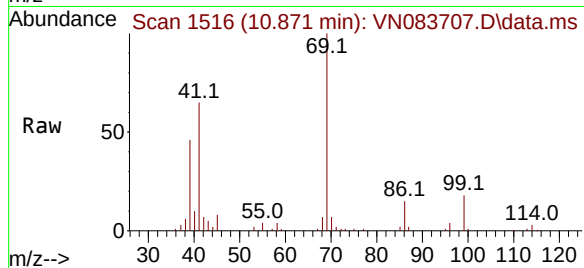
#51
Ethyl methacrylate
Concen: 18.272 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 69 Resp: 58239
Ion Ratio Lower Upper
69 100
41 65.5 25.5 76.5
39 46.1 16.0 47.9

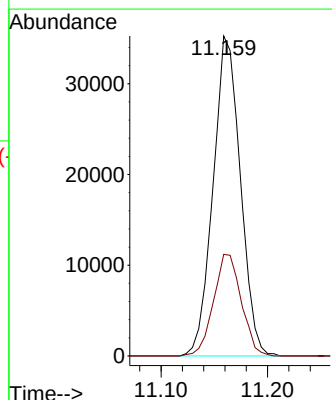
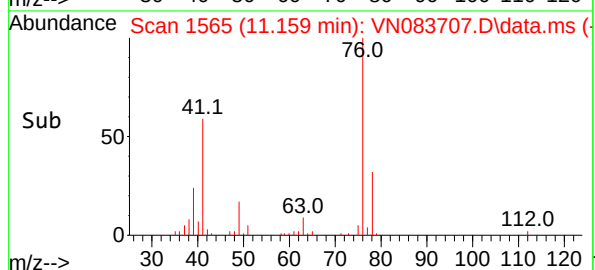
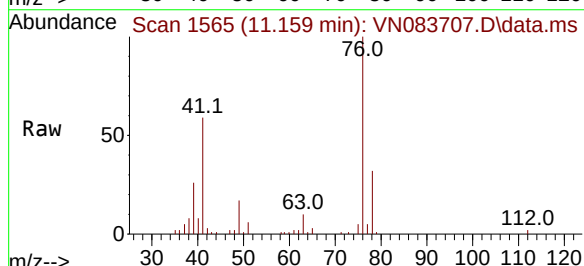
Manual Integrations
APPROVED

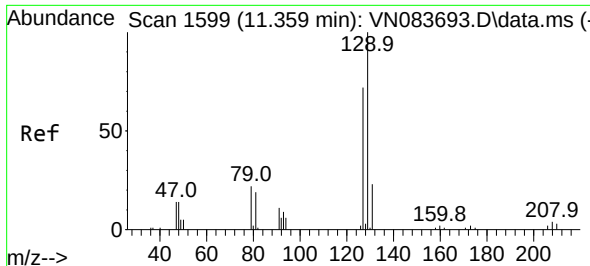
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#52
1,3-Dichloropropane
Concen: 18.605 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

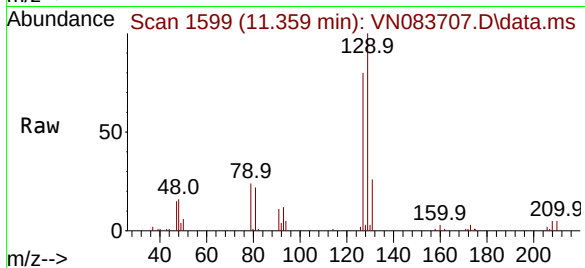
Tgt Ion: 76 Resp: 62684
Ion Ratio Lower Upper
76 100
78 32.3 0.0 65.8





#53
Dibromochloromethane
Concen: 18.141 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

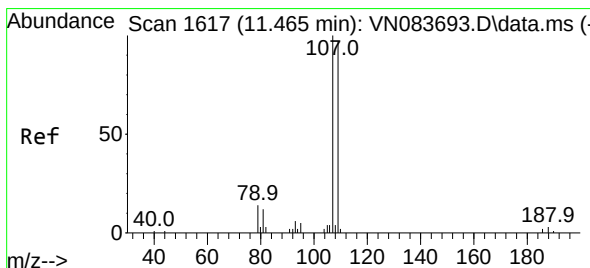
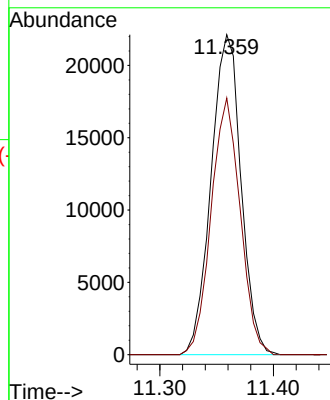
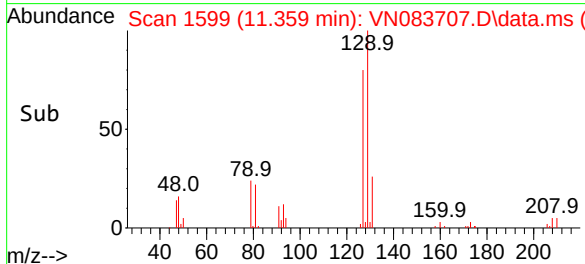
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01



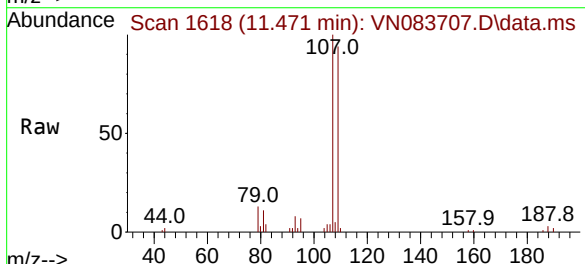
Tgt Ion:129 Resp: 40594
Ion Ratio Lower Upper
129 100
127 77.6 39.4 118.1

Manual Integrations
APPROVED

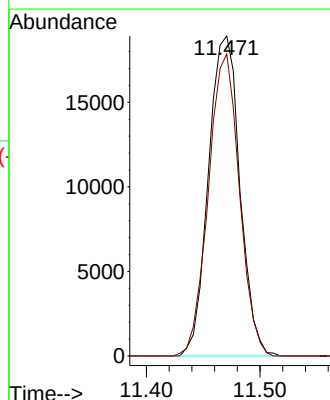
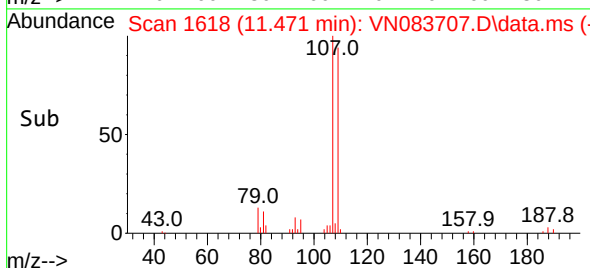
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

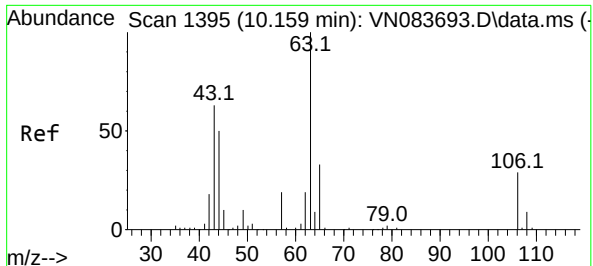


#54
1,2-Dibromoethane
Concen: 18.826 ug/l
RT: 11.471 min Scan# 1618
Delta R.T. 0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39



Tgt Ion:107 Resp: 36336
Ion Ratio Lower Upper
107 100
109 93.0 74.7 112.1





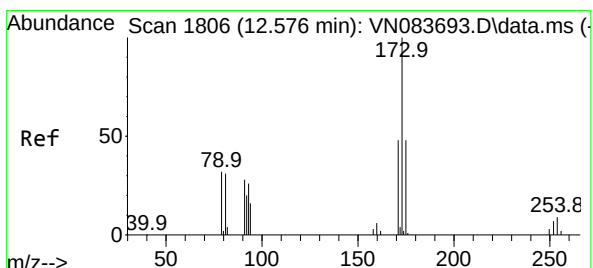
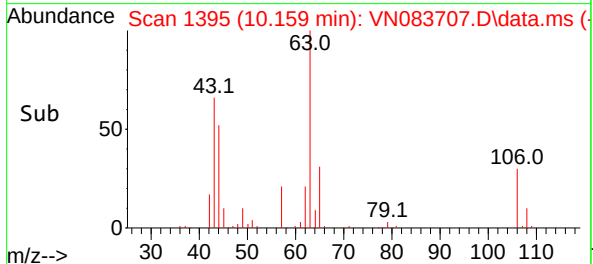
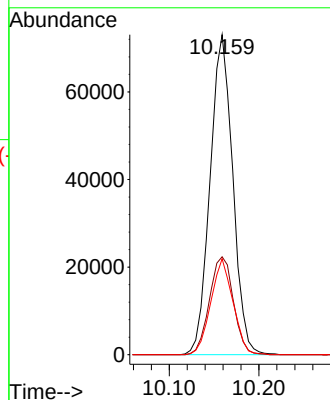
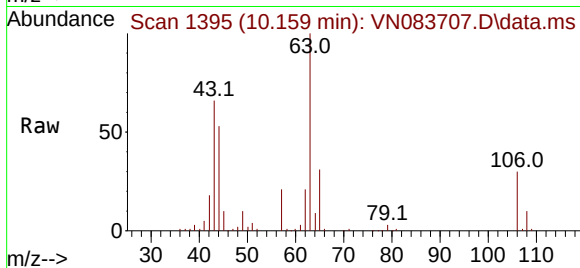
#55
2-Chloroethyl vinyl ether
Concen: 100.989 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 63 Resp: 12828
Ion Ratio Lower Upper
63 100
65 32.3 26.2 39.2
106 29.3 23.8 35.8

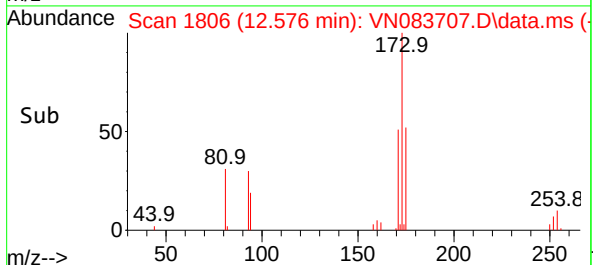
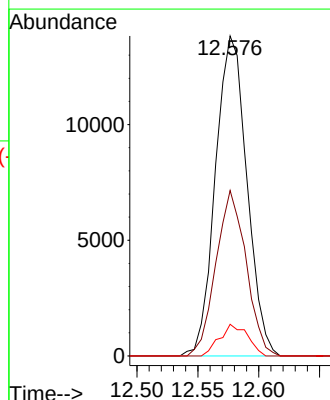
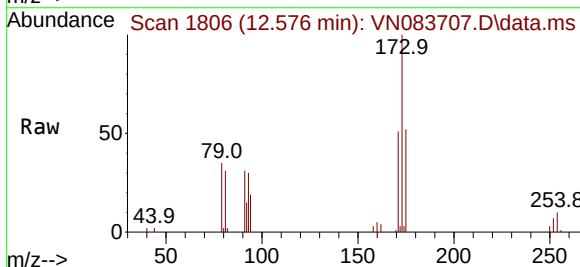
Manual Integrations
APPROVED

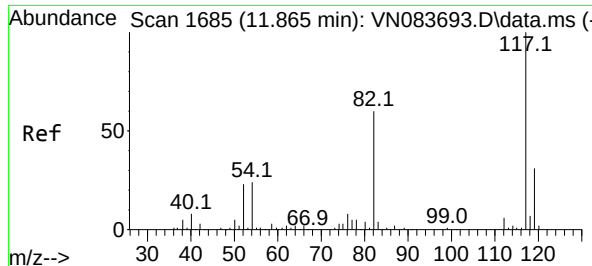
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#56
Bromoform
Concen: 17.463 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion:173 Resp: 24827
Ion Ratio Lower Upper
173 100
175 49.7 40.0 60.0
254 8.8 8.3 12.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:117 Resp: 15850

Ion Ratio Lower Upper

117 100

82 58.5 46.6 69.8

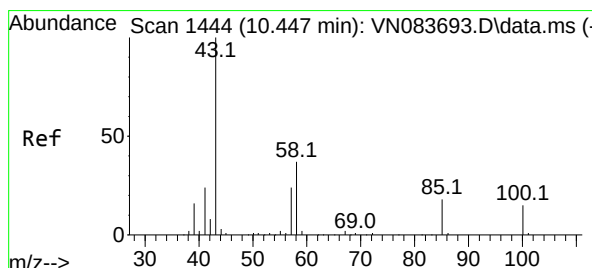
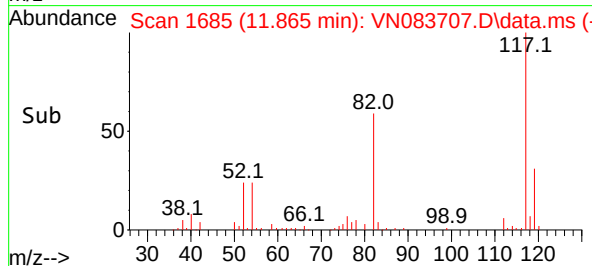
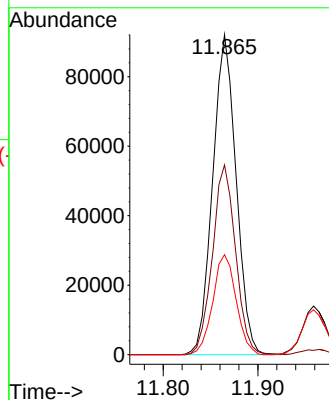
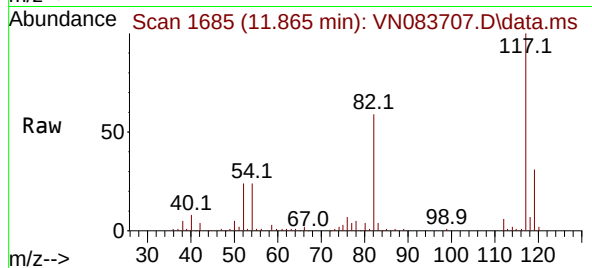
119 31.2 25.4 38.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#58

4-Methyl-2-Pentanone

Concen: 98.410 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. -0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

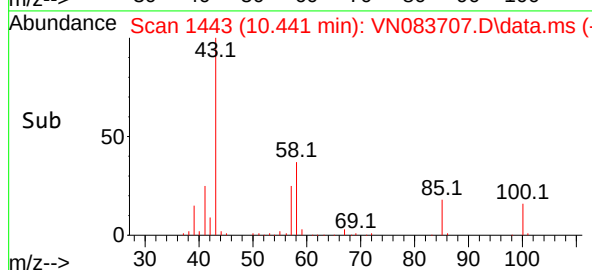
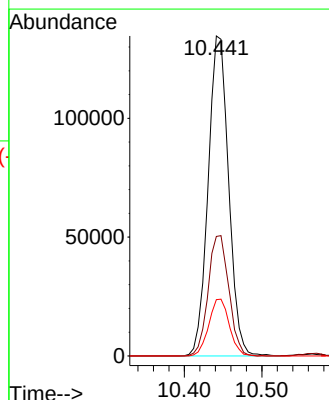
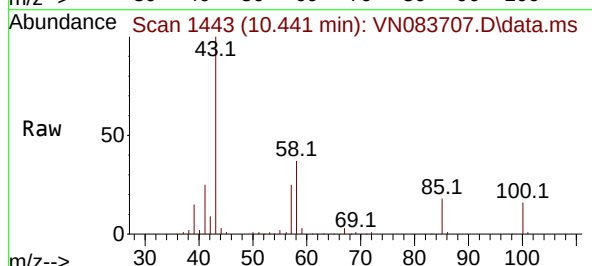
Tgt Ion: 43 Resp: 247335

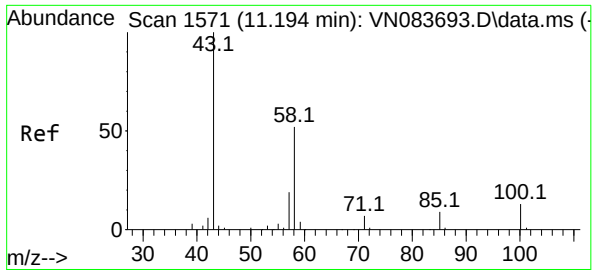
Ion Ratio Lower Upper

43 100

58 38.0 36.5 54.7

85 17.8 19.5 29.3#





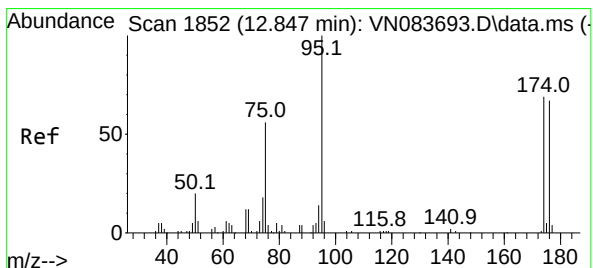
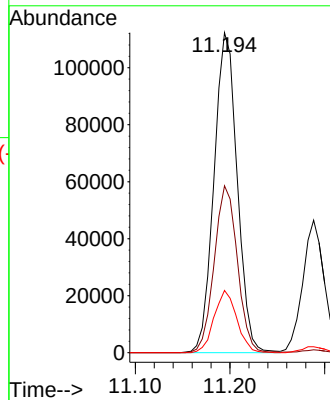
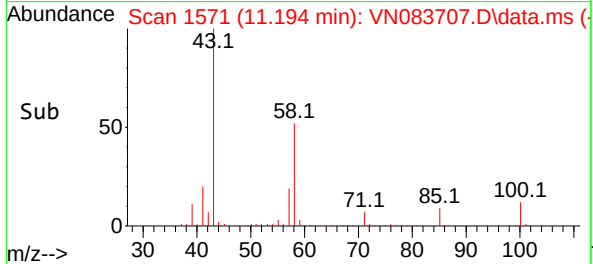
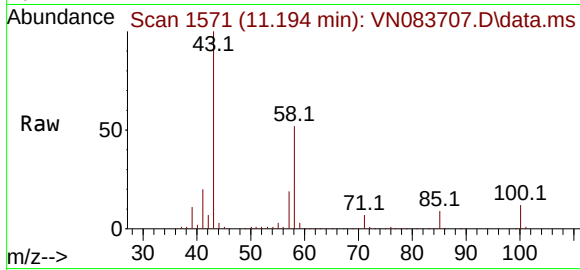
#59
2-Hexanone
Concen: 100.722 ug/l
RT: 11.194 min Scan# 1571
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 43 Resp: 191280
Ion Ratio Lower Upper
43 100
58 51.9 50.4 75.6
57 19.0 18.6 27.8

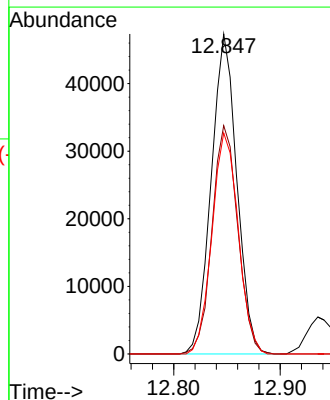
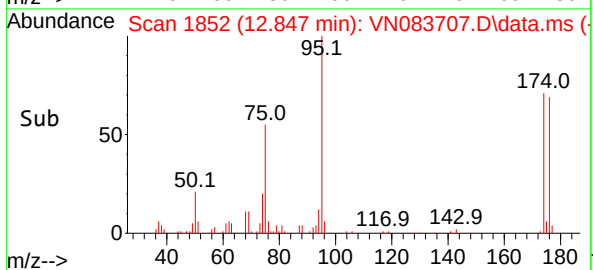
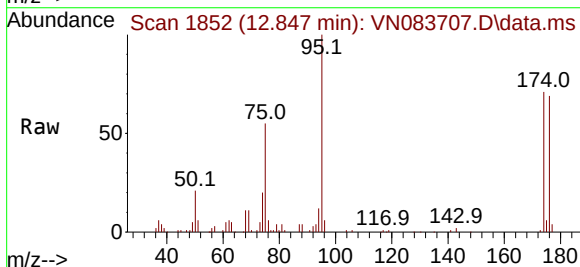
Manual Integrations
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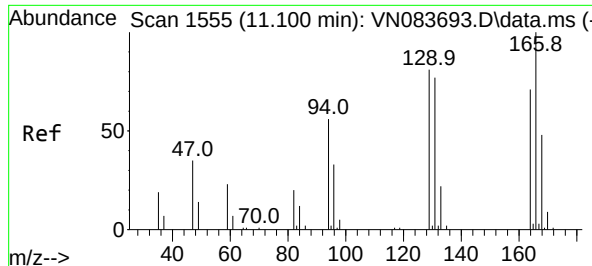
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#60
4-Bromofluorobenzene
Concen: 28.892 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion: 95 Resp: 78929
Ion Ratio Lower Upper
95 100
174 71.8 60.5 90.7
176 70.9 57.8 86.6





#61

Tetrachloroethene

Concen: 17.694 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:164 Resp: 2968

Ion Ratio Lower Upper

164 100

166 139.9 106.7 160.1

129 103.9 85.8 128.6

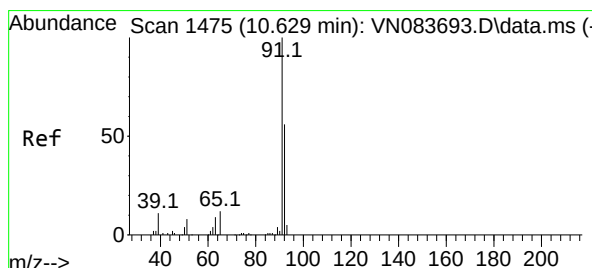
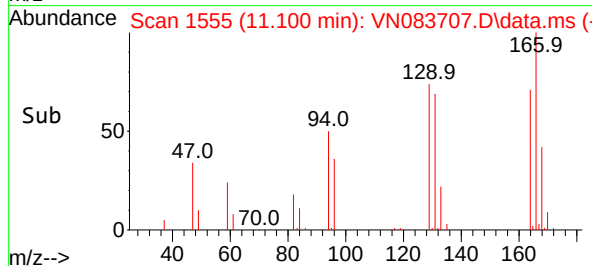
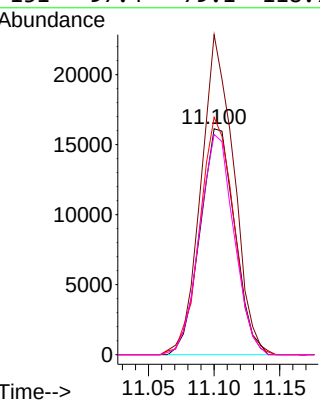
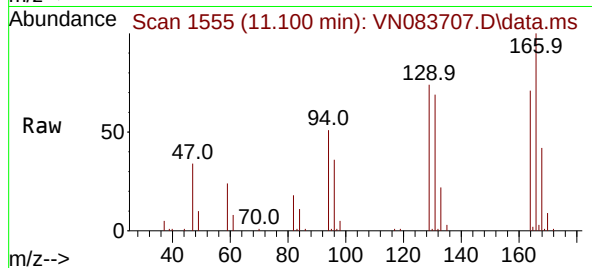
131 97.4 79.1 118.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#62

Toluene

Concen: 18.162 ug/l

RT: 10.629 min Scan# 1475

Delta R.T. 0.000 min

Lab File: VN083707.D

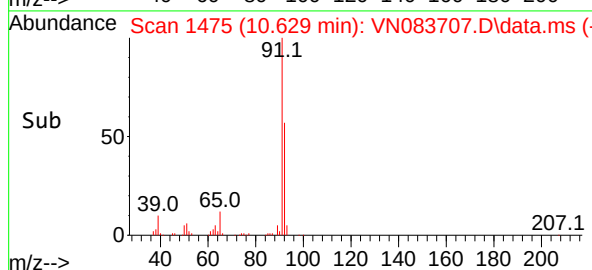
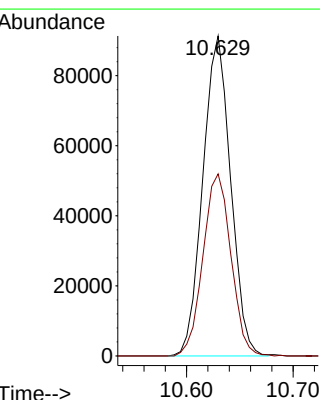
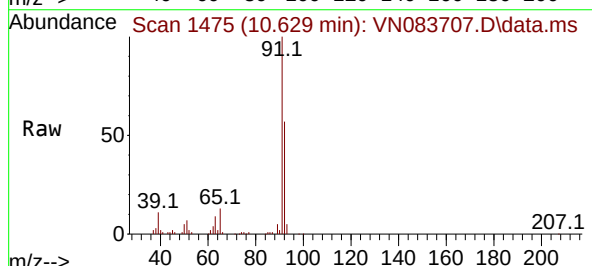
Acq: 09 Sep 2024 09:39

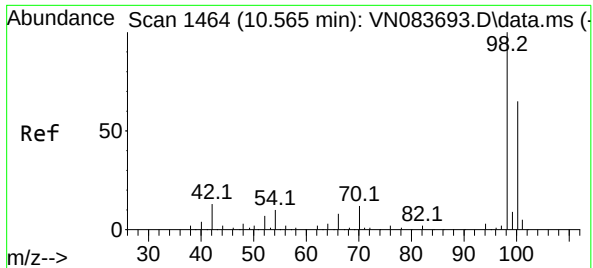
Tgt Ion: 91 Resp: 165466

Ion Ratio Lower Upper

91 100

92 57.2 46.5 69.7





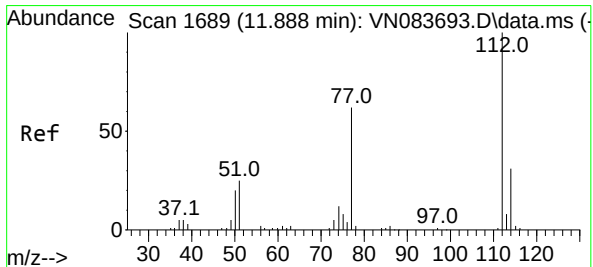
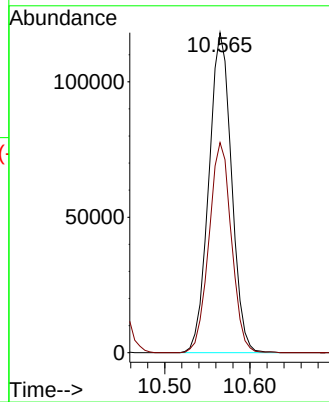
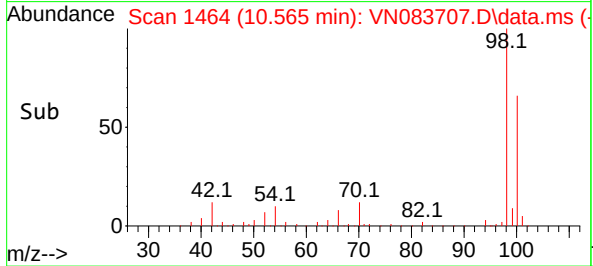
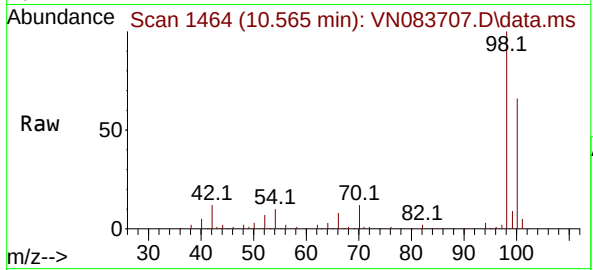
#63
Toluene-d8
Concen: 29.802 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 98 Resp: 218728
Ion Ratio Lower Upper
98 100
100 65.0 52.7 79.1

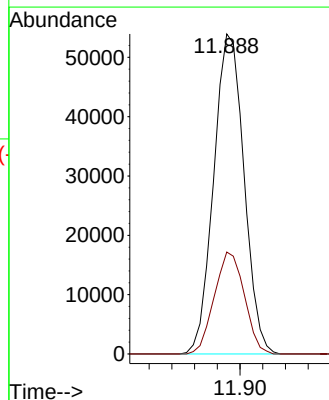
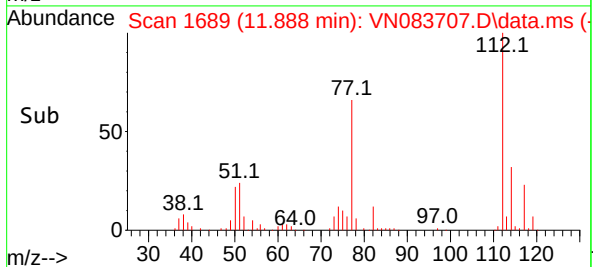
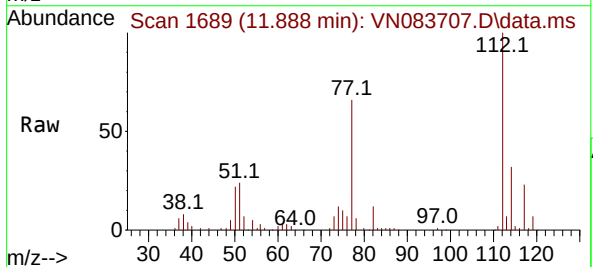
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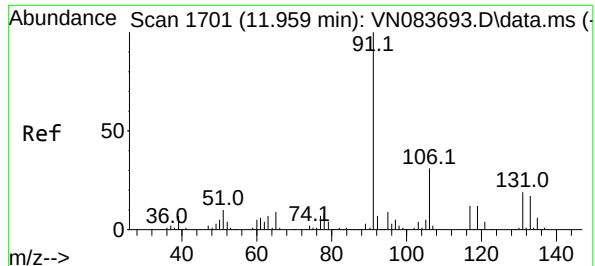
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#64
Chlorobenzene
Concen: 17.728 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion:112 Resp: 100001
Ion Ratio Lower Upper
112 100
114 31.8 26.6 39.8





#65

1,1,1,2-Tetrachloroethane

Concen: 18.301 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:131 Resp: 3596

Ion Ratio Lower Upper

131 100

133 94.7 0.0 188.0

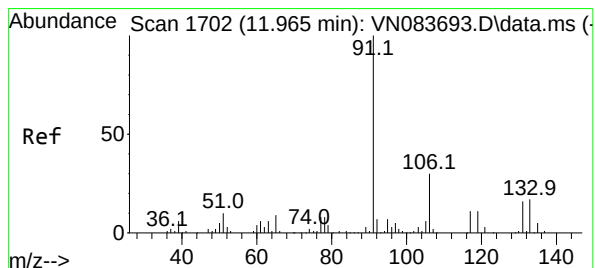
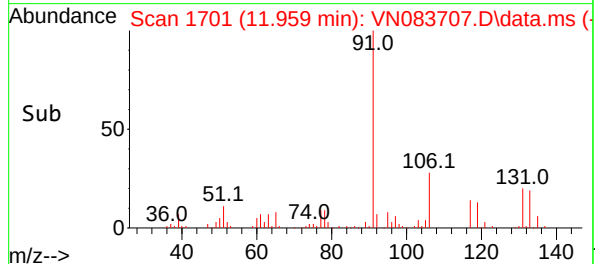
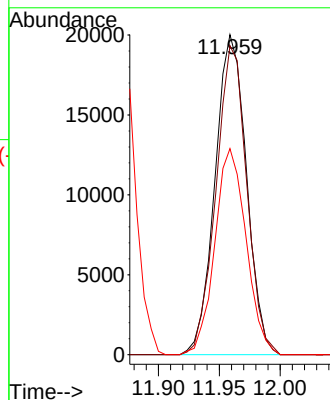
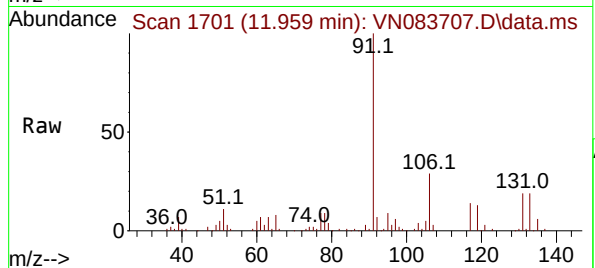
119 64.1 0.0 122.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#66

Ethyl Benzene

Concen: 17.336 ug/l

RT: 11.965 min Scan# 1702

Delta R.T. 0.000 min

Lab File: VN083707.D

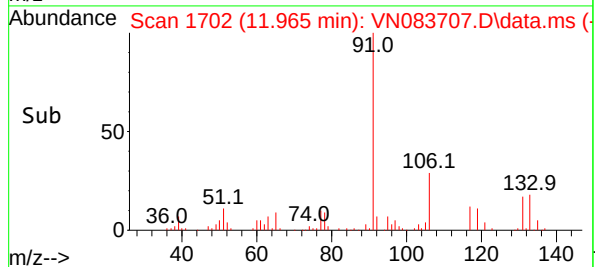
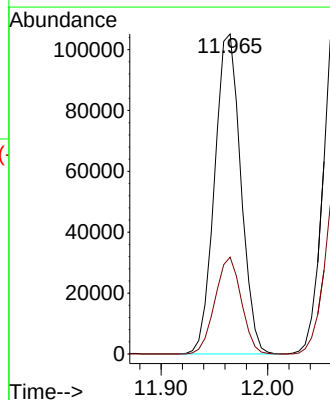
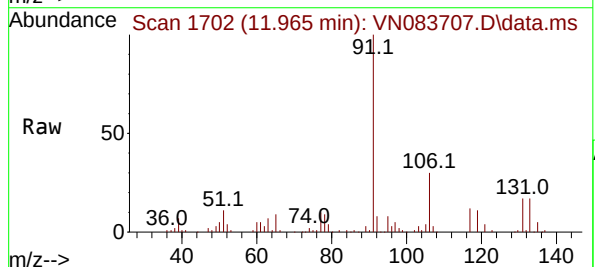
Acq: 09 Sep 2024 09:39

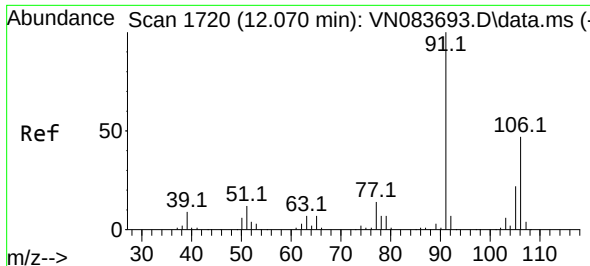
Tgt Ion: 91 Resp: 179613

Ion Ratio Lower Upper

91 100

106 30.3 24.4 36.6





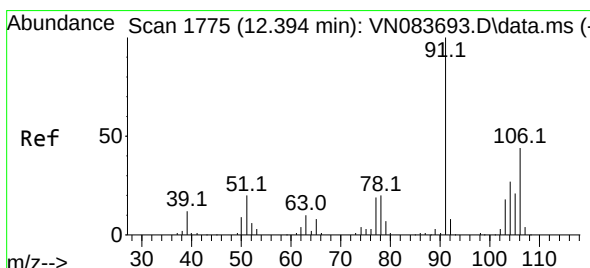
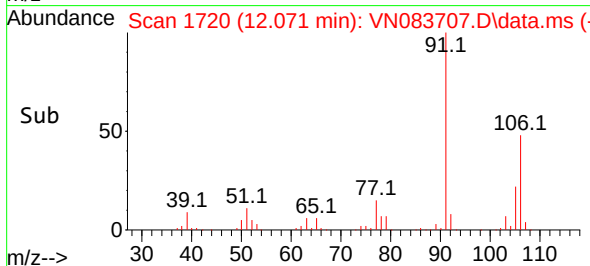
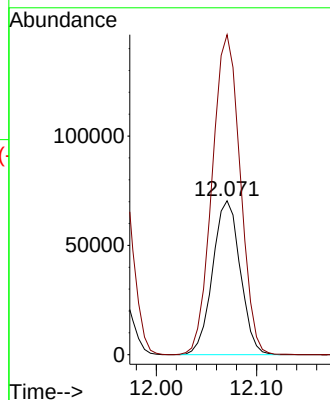
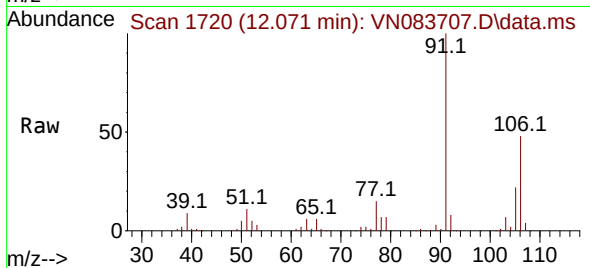
#67
m/p-Xylenes
Concen: 35.354 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion:106 Resp: 13476
Ion Ratio Lower Upper
106 100
91 211.5 166.6 249.8

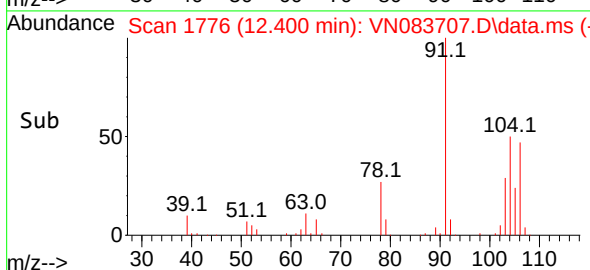
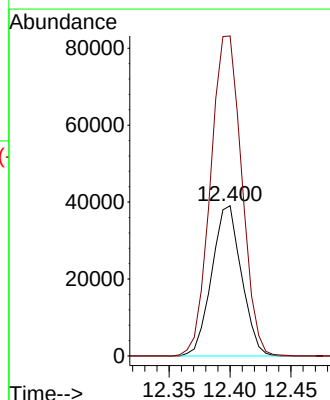
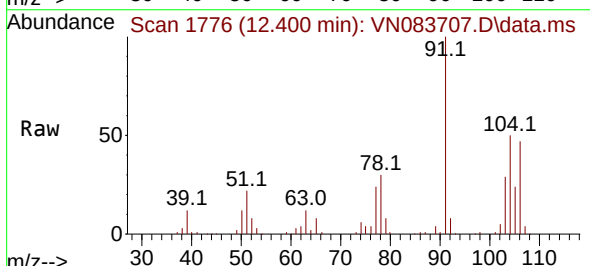
Manual Integrations
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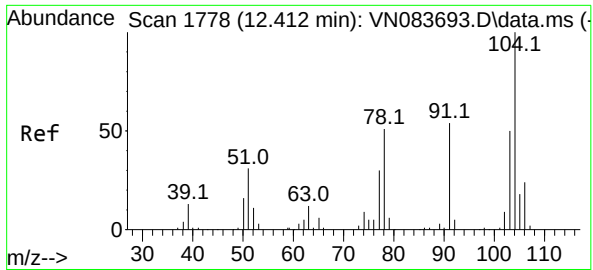
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#68
o-Xylene
Concen: 17.934 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. 0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion:106 Resp: 66162
Ion Ratio Lower Upper
106 100
91 223.8 110.0 330.0





#69

Styrene

Concen: 17.327 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:104 Resp: 108009

Ion Ratio Lower Upper

104 100

78 55.5 42.6 64.0

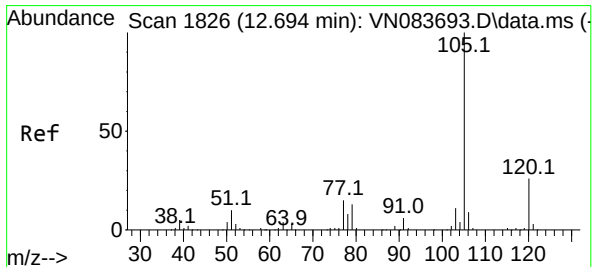
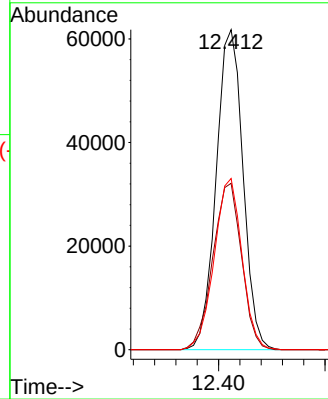
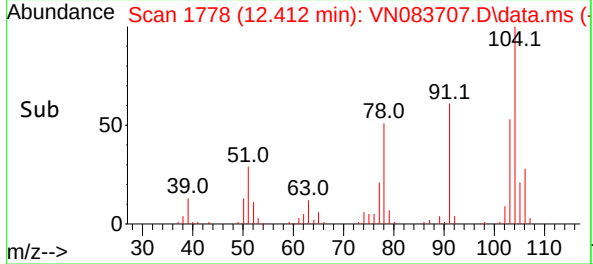
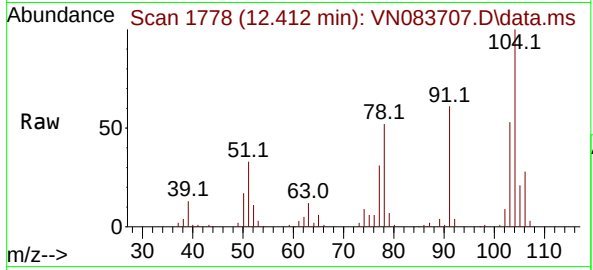
103 55.4 43.7 65.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#70

Isopropylbenzene

Concen: 17.722 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.000 min

Lab File: VN083707.D

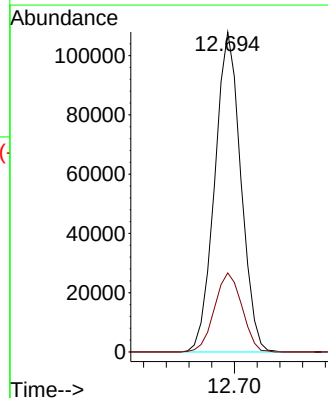
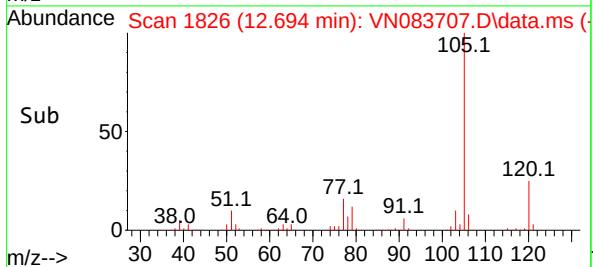
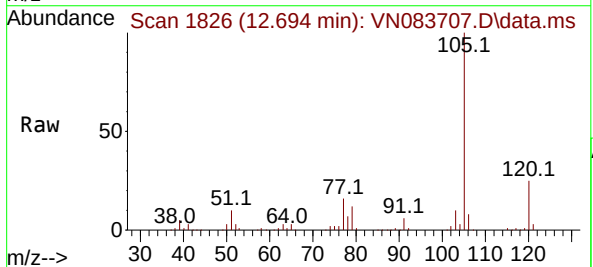
Acq: 09 Sep 2024 09:39

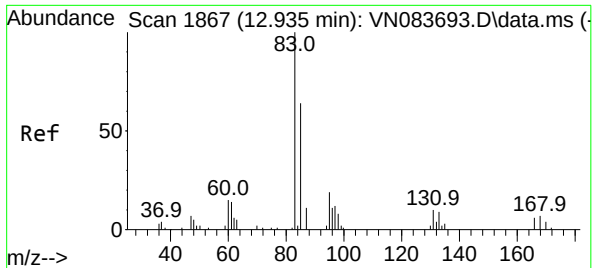
Tgt Ion:105 Resp: 172529

Ion Ratio Lower Upper

105 100

120 25.9 17.8 33.1





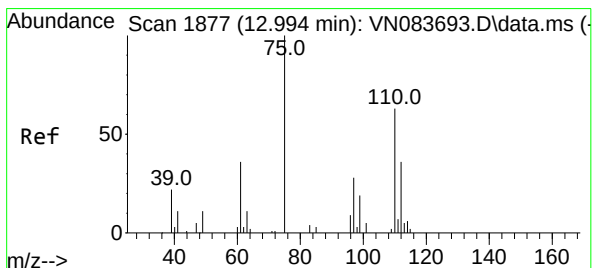
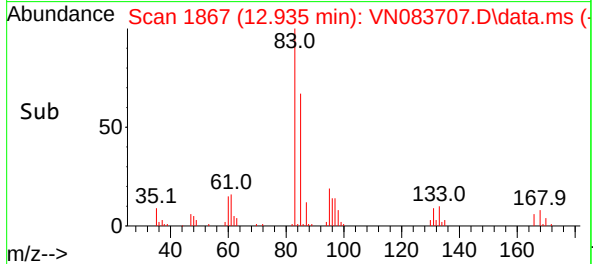
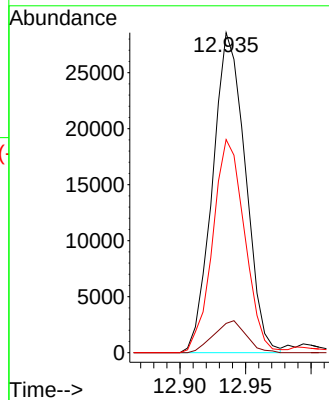
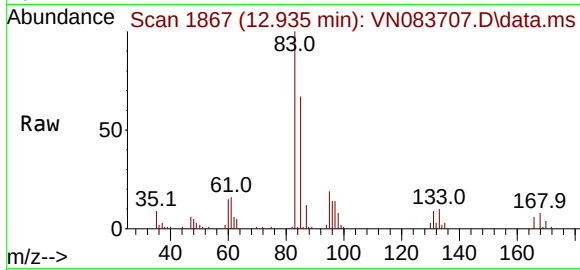
#71
1,1,2,2-Tetrachloroethane
Concen: 18.697 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 83 Resp: 49715
Ion Ratio Lower Upper
83 100
131 9.8 5.2 15.6
85 65.0 32.3 96.8

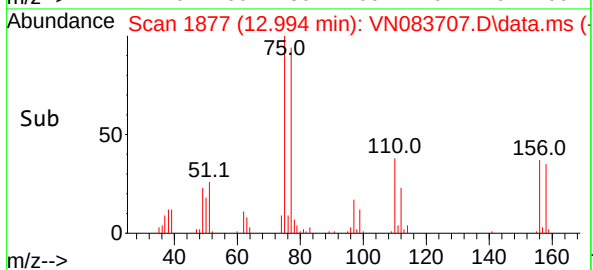
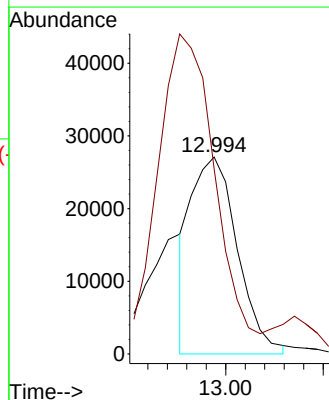
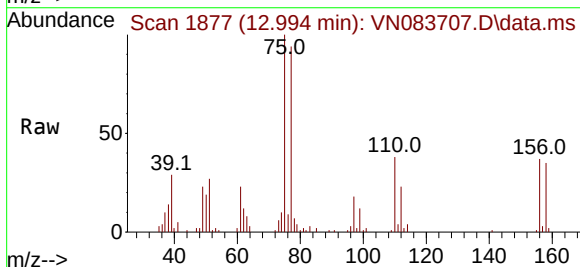
Manual Integrations
APPROVED

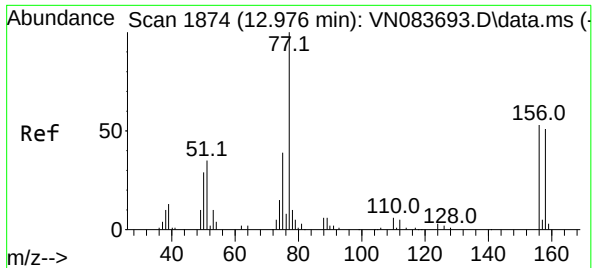
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#72
1,2,3-Trichloropropane
Concen: 19.103 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

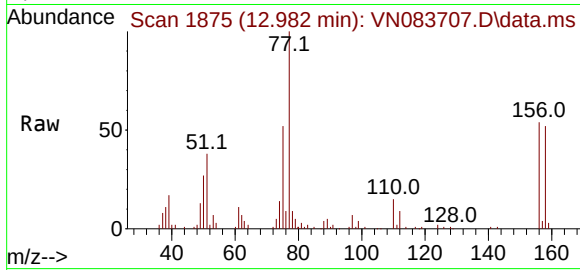
Tgt Ion: 75 Resp: 44536
Ion Ratio Lower Upper
75 100
77 204.3 0.0 367.6





#73
Bromobenzene
Concen: 17.453 ug/l
RT: 12.982 min Scan# 1875
Delta R.T. 0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

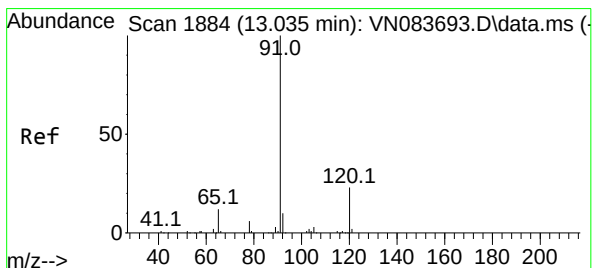
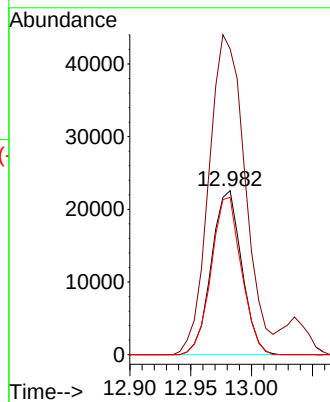
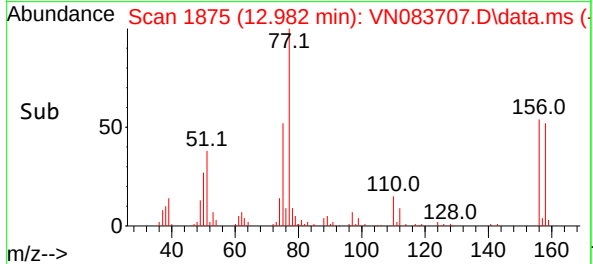
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01



Tgt Ion: 156 Resp: 39028
Ion Ratio Lower Upper
156 100
77 233.1 0.0 437.6
158 95.6 0.0 203.8

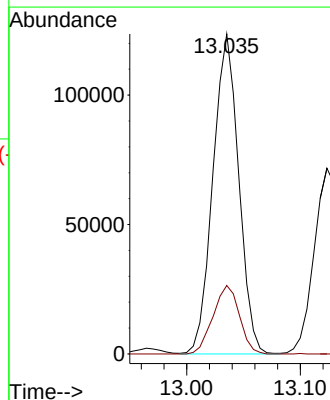
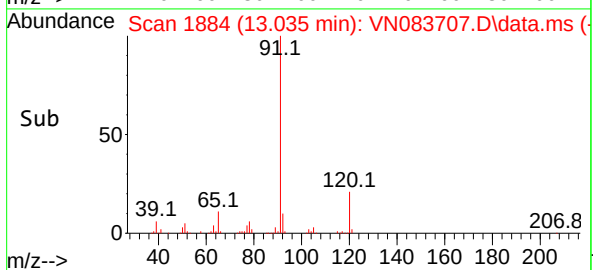
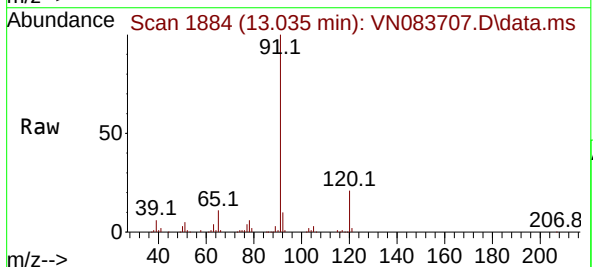
Manual Integrations
APPROVED

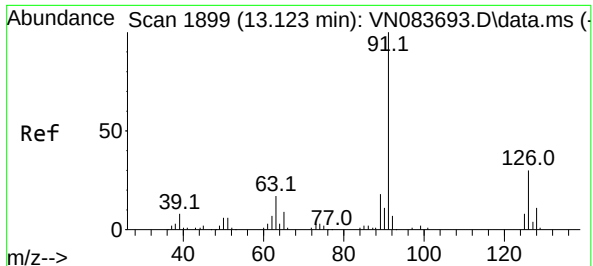
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#74
n-propylbenzene
Concen: 17.104 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion: 91 Resp: 194925
Ion Ratio Lower Upper
91 100
120 21.8 0.0 43.8





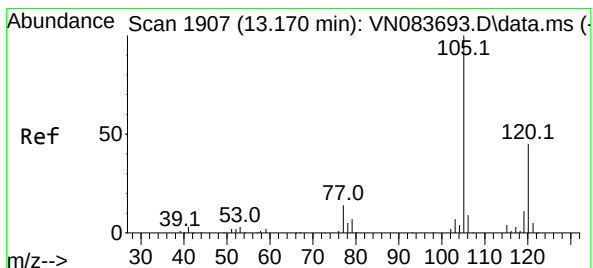
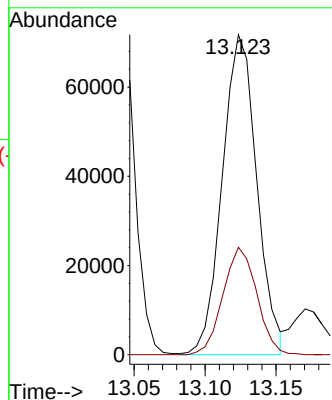
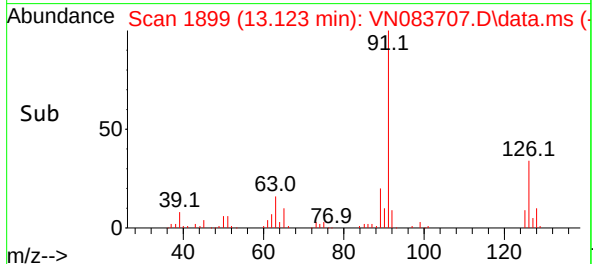
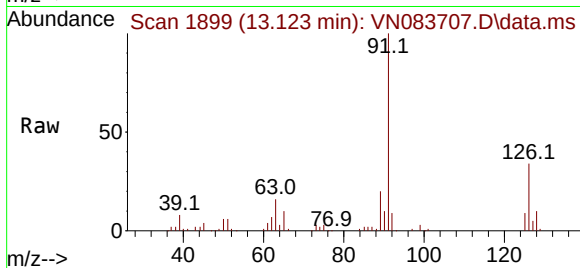
#75
2-Chlorotoluene
Concen: 17.061 ug/l
RT: 13.123 min Scan# 1899
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion: 91 Resp: 12135
Ion Ratio Lower Upper
91 100
126 32.9 0.0 61.2

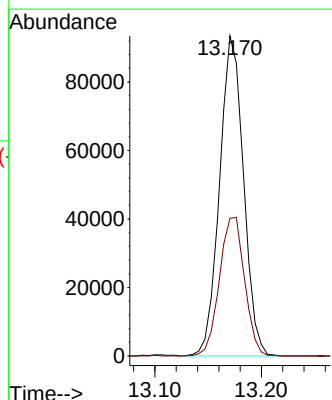
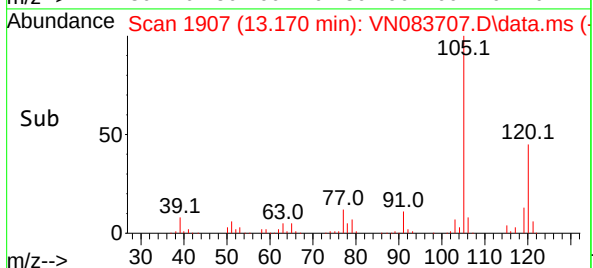
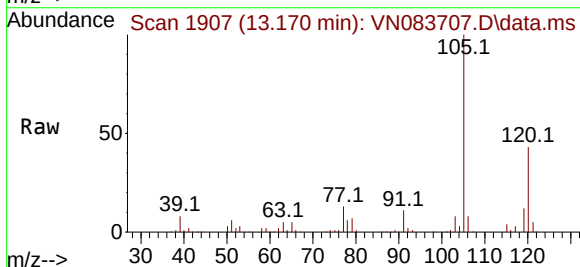
Manual Integrations
APPROVED

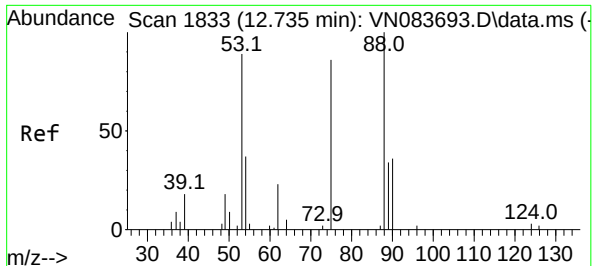
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#76
1,3,5-Trimethylbenzene
Concen: 17.925 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion:105 Resp: 145775
Ion Ratio Lower Upper
105 100
120 45.5 0.0 95.8





#77

t-1,4-Dichloro-2-butene

Concen: 18.459 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion: 75 Resp: 18190

Ion Ratio Lower Upper

75 100

53 120.1 45.9 137.7

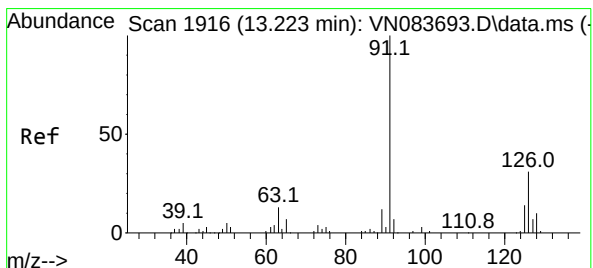
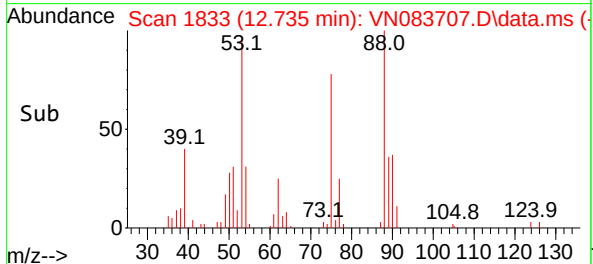
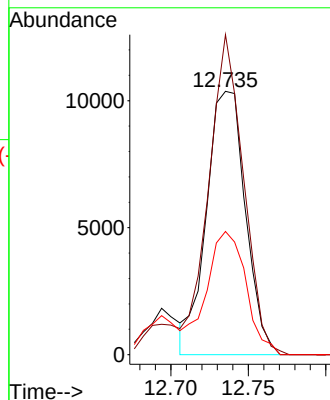
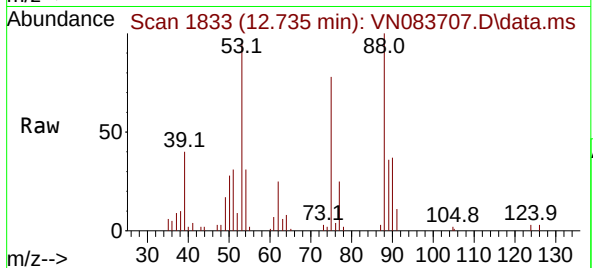
89 46.8 25.9 77.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#78

4-Chlorotoluene

Concen: 16.844 ug/l

RT: 13.223 min Scan# 1916

Delta R.T. 0.000 min

Lab File: VN083707.D

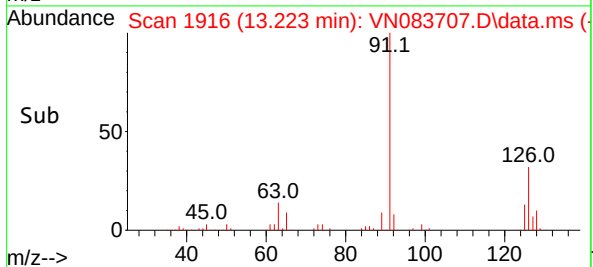
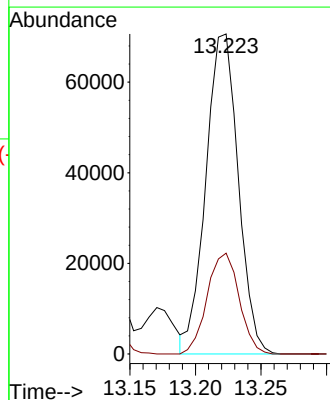
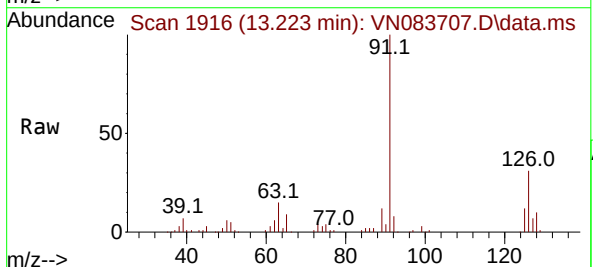
Acq: 09 Sep 2024 09:39

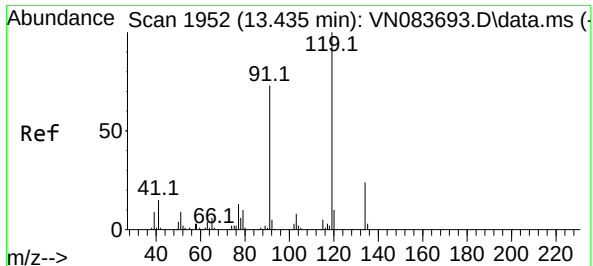
Tgt Ion: 91 Resp: 121506

Ion Ratio Lower Upper

91 100

126 31.0 0.0 62.8





#79

tert-butylbenzene

Concen: 17.912 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:119 Resp: 127370

Ion Ratio Lower Upper

119 100

91 70.8 0.0 138.8

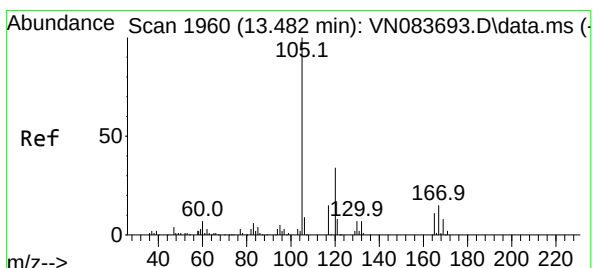
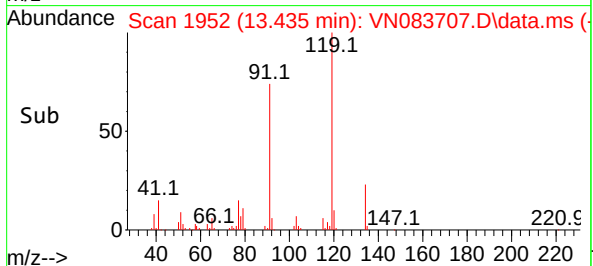
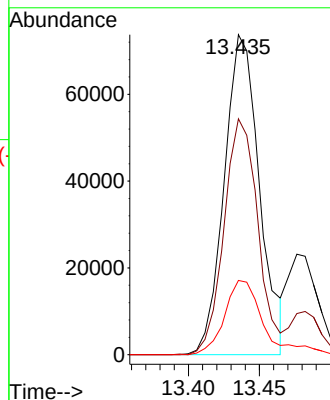
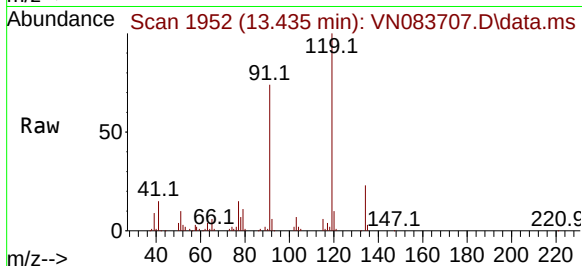
134 25.6 0.0 48.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#80

1,2,4-Trimethylbenzene

Concen: 17.807 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.000 min

Lab File: VN083707.D

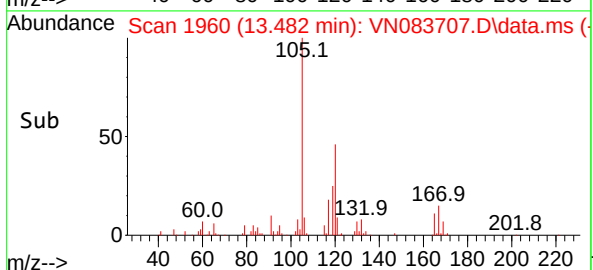
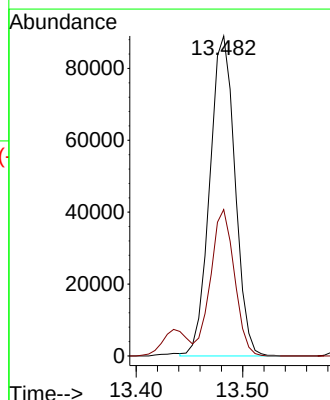
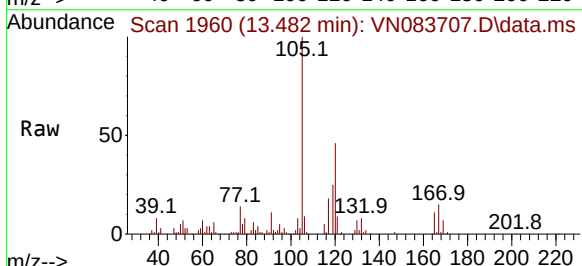
Acq: 09 Sep 2024 09:39

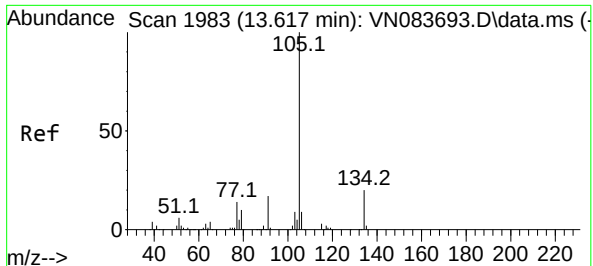
Tgt Ion:105 Resp: 146336

Ion Ratio Lower Upper

105 100

120 43.2 0.0 86.8





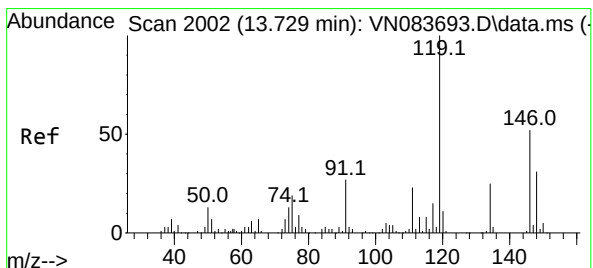
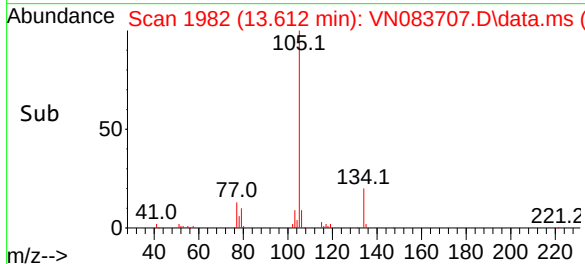
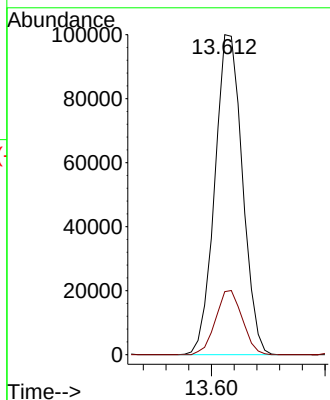
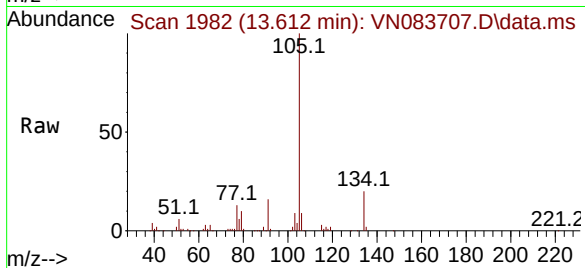
#81
sec-Butylbenzene
Concen: 17.395 ug/l
RT: 13.612 min Scan# 1983
Delta R.T. -0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01

Tgt Ion:105 Resp: 16898
Ion Ratio Lower Upper
105 100
134 19.4 0.0 39.0

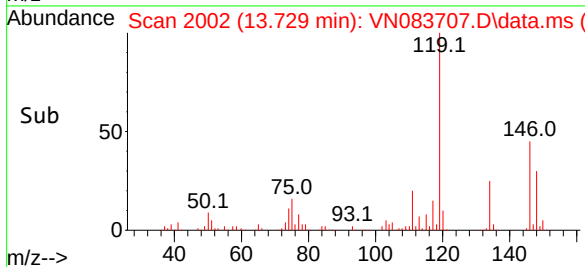
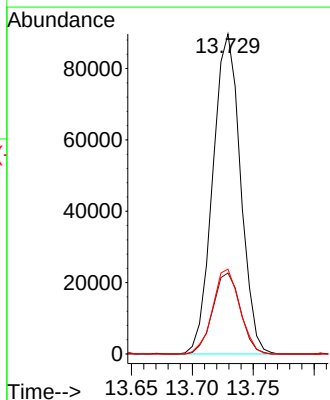
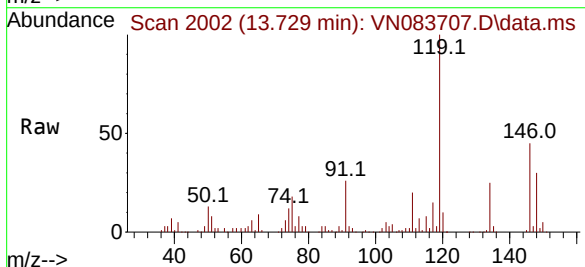
Manual Integrations
APPROVED

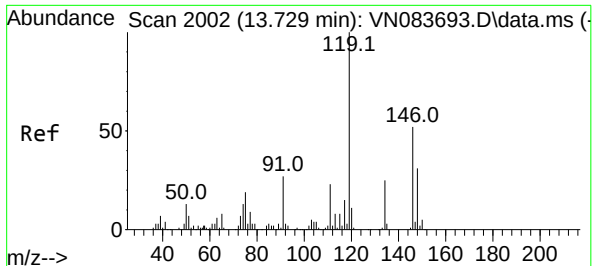
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#82
p-Isopropyltoluene
Concen: 17.395 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion:119 Resp: 142180
Ion Ratio Lower Upper
119 100
134 25.1 0.0 49.2
91 25.9 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 16.616 ug/l

RT: 13.735 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

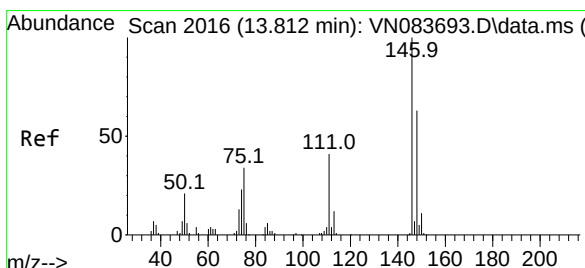
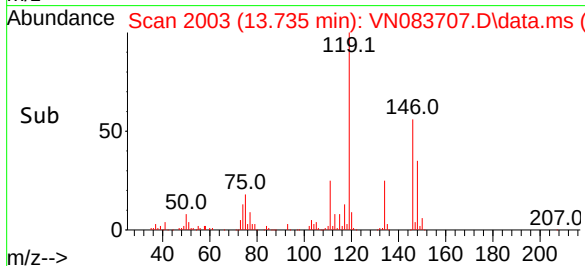
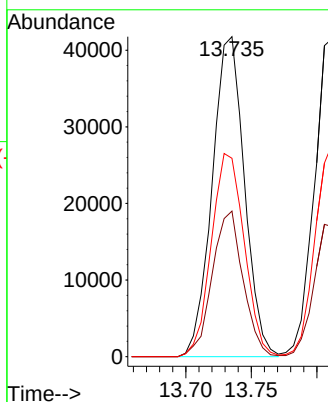
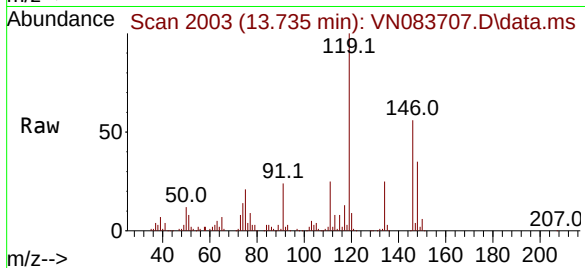
VN0909WBS01

Tgt Ion:	146	Resp:	7151
Ion Ratio	Lower	Upper	
146	100		
111	43.6	22.4	67.0
148	64.7	32.1	96.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#84

1,4-Dichlorobenzene

Concen: 16.796 ug/l

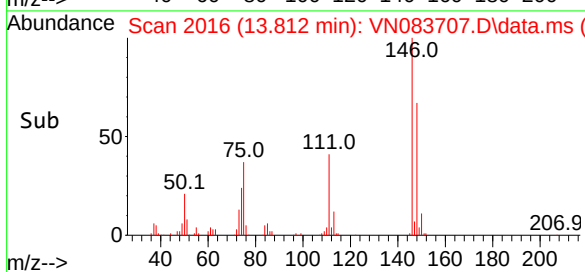
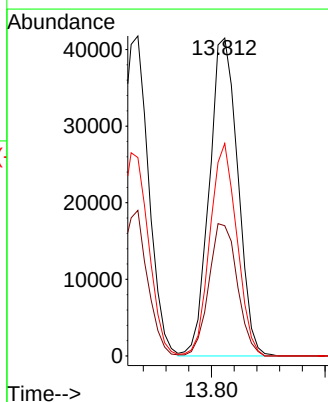
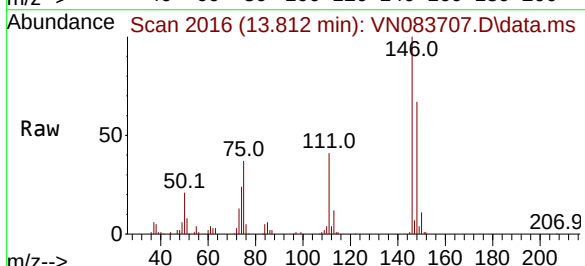
RT: 13.812 min Scan# 2016

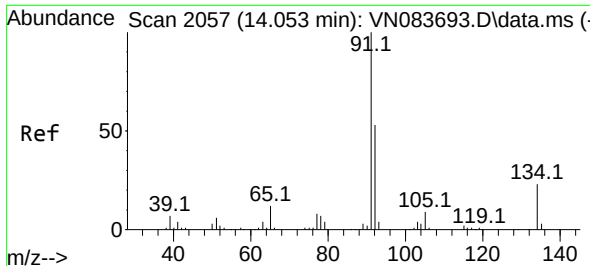
Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion:	146	Resp:	72270
Ion Ratio	Lower	Upper	
146	100		
111	41.5	21.3	63.9
148	63.1	31.9	95.5





#85

n-Butylbenzene

Concen: 16.585 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

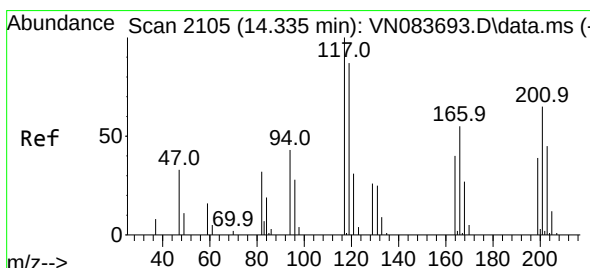
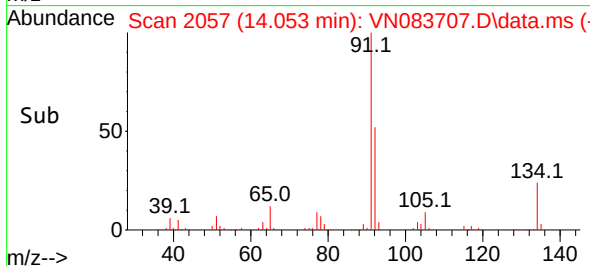
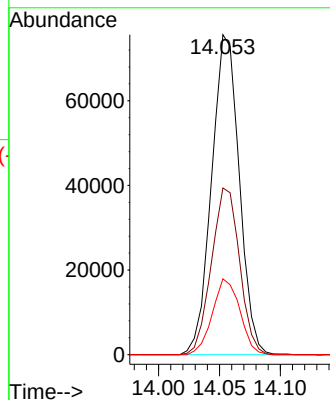
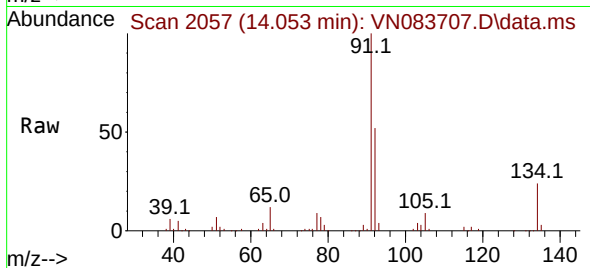
VN0909WBS01

Tgt Ion:	91	Resp:	11962
Ion Ratio	Lower	Upper	
91	100		
92	52.9	0.0	105.0
134	23.5	0.0	51.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#86

Hexachloroethane

Concen: 17.717 ug/l

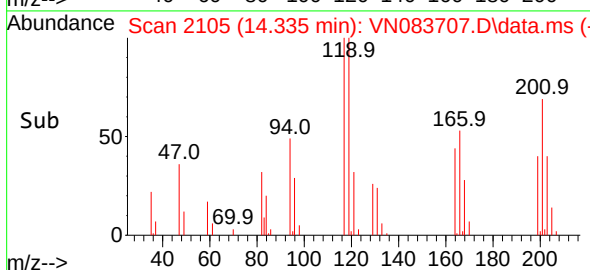
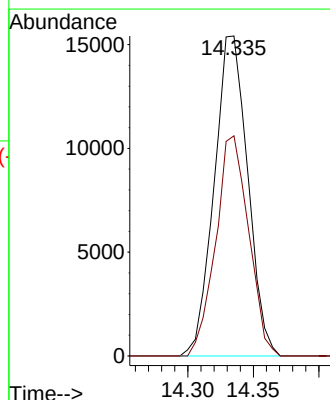
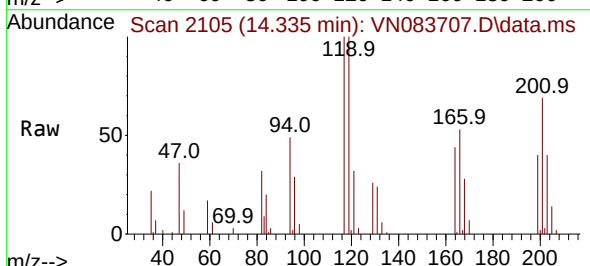
RT: 14.335 min Scan# 2105

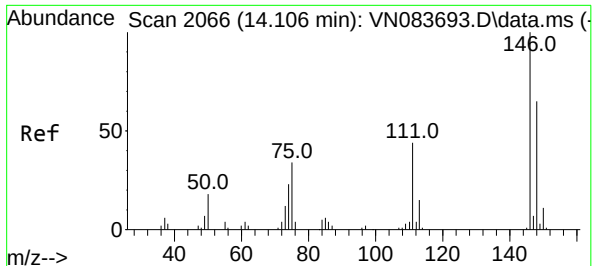
Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Tgt Ion:	117	Resp:	27442
Ion Ratio	Lower	Upper	
117	100		
201	67.5	38.0	114.0





#87

1,2-Dichlorobenzene

Concen: 17.364 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

Tgt Ion:146 Resp: 7252

Ion Ratio Lower Upper

146 100

111 45.0 22.6 67.8

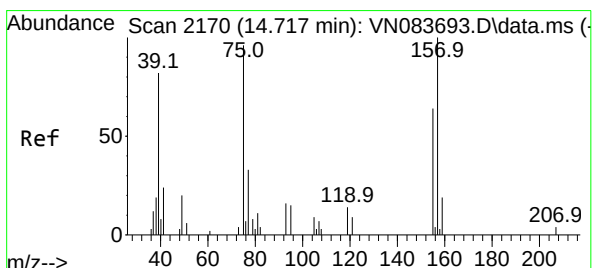
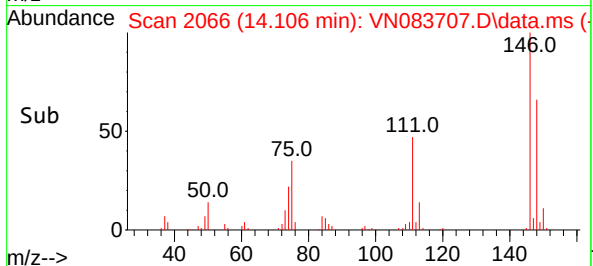
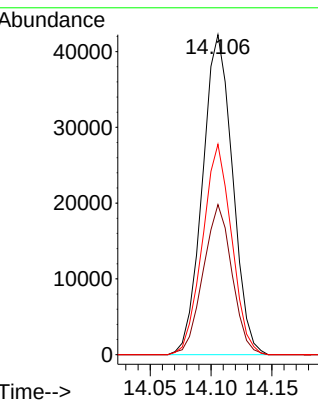
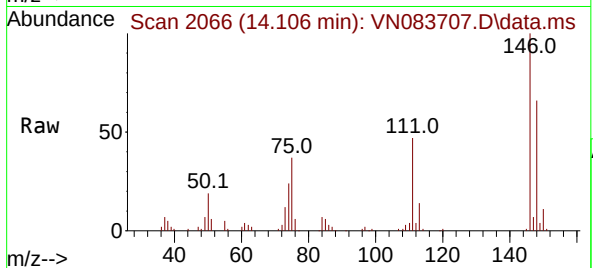
148 63.9 31.3 93.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 19.075 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

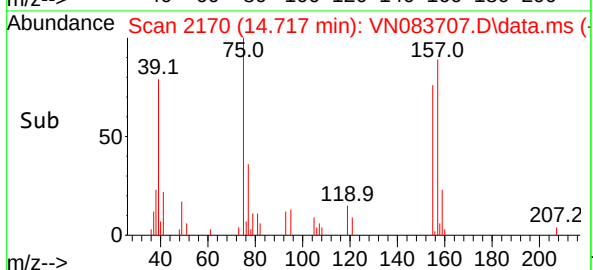
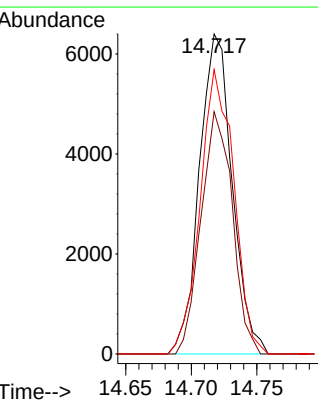
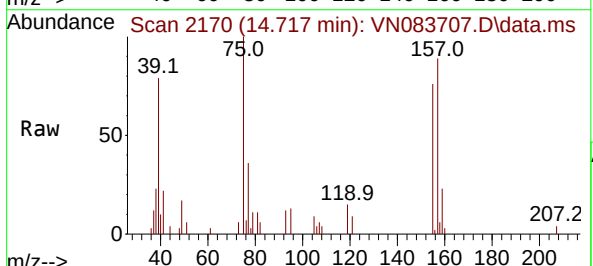
Tgt Ion: 75 Resp: 11147

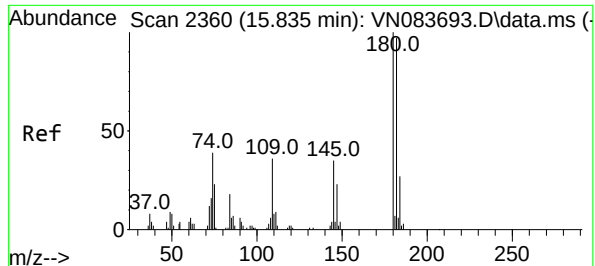
Ion Ratio Lower Upper

75 100

155 72.2 61.7 92.5

157 90.9 83.6 125.4





#89

1,2,4-Trichlorobenzene

Concen: 16.578 ug/l

RT: 15.841 min Scan# 2360

Delta R.T. 0.006 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBS01

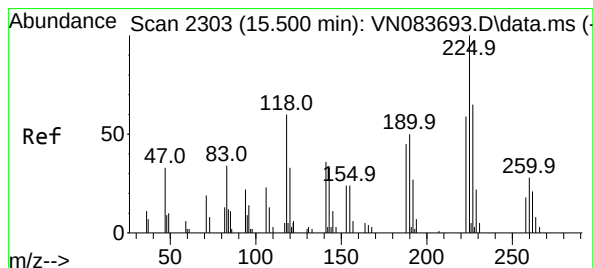
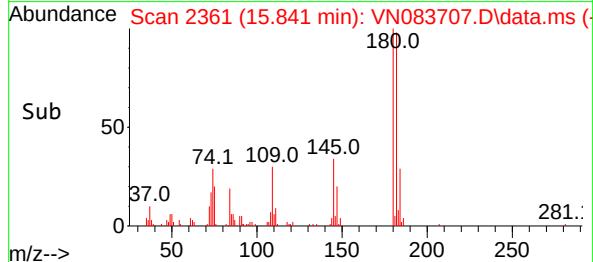
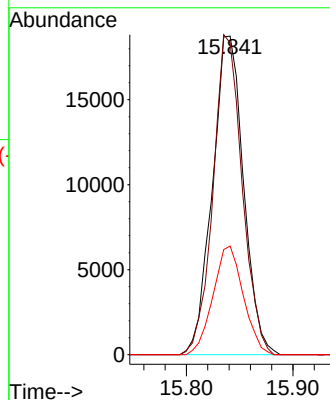
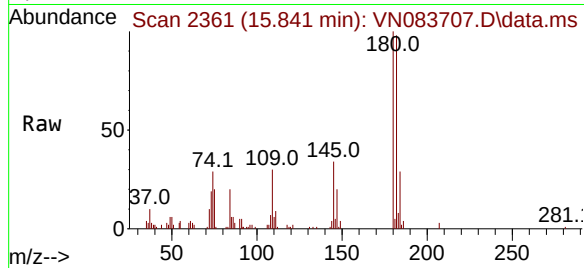
Tgt Ion:180	Resp:	3793
Ion Ratio	Lower	Upper
180	100	
182	93.9	76.4 114.6
145	33.3	28.4 42.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#90

Hexachlorobutadiene

Concen: 17.254 ug/l

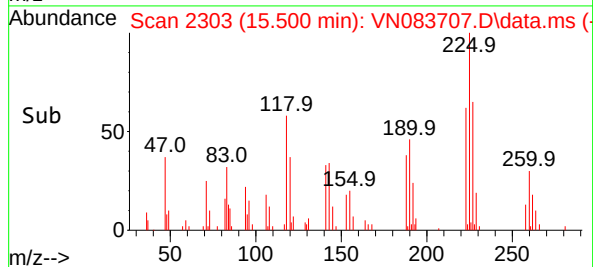
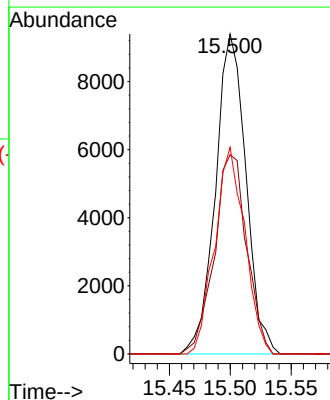
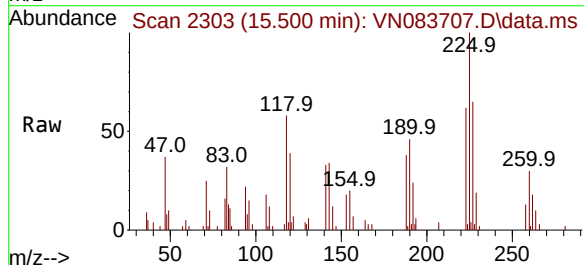
RT: 15.500 min Scan# 2303

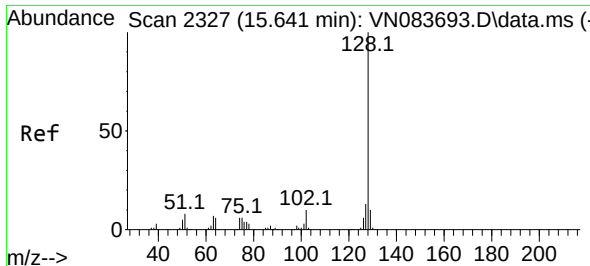
Delta R.T. 0.000 min

Lab File: VN083707.D

Acq: 09 Sep 2024 09:39

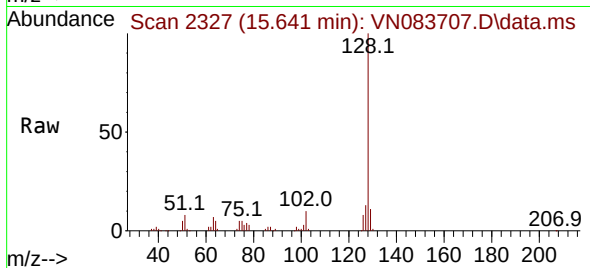
Tgt Ion:225	Resp:	16342
Ion Ratio	Lower	Upper
225	100	
223	66.2	0.0 126.6
227	64.1	0.0 126.6





#91
Naphthalene
Concen: 16.674 ug/l
RT: 15.641 min Scan# 2327
Delta R.T. 0.000 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

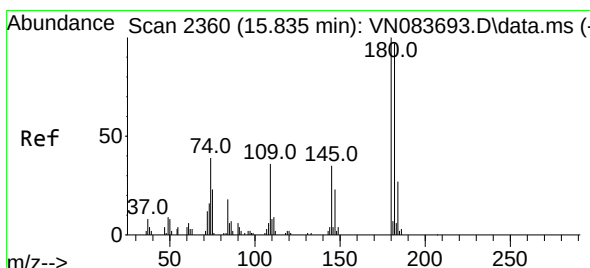
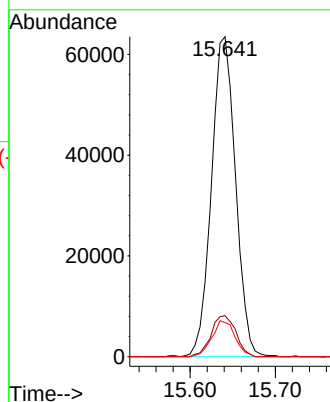
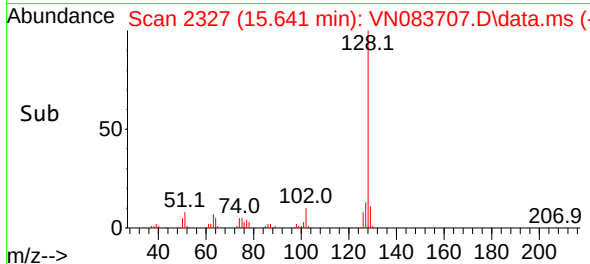
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBS01



Tgt Ion:128 Resp: 124740
Ion Ratio Lower Upper
128 100
127 13.2 10.6 16.0
129 10.8 8.6 13.0

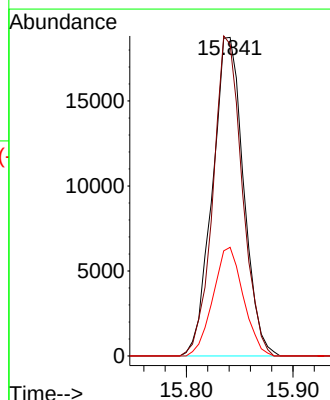
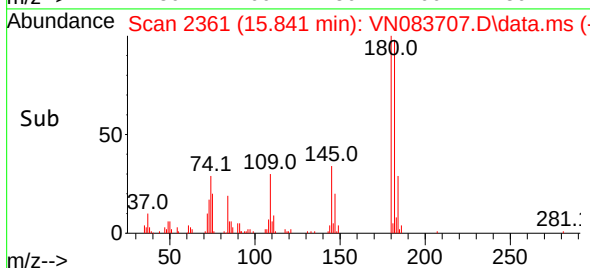
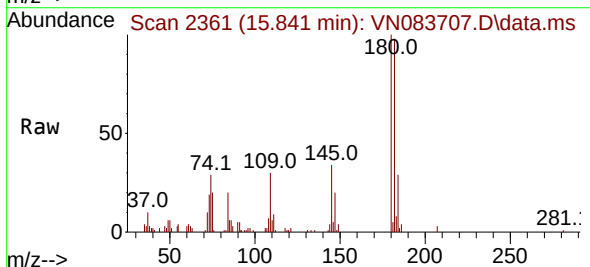
Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#92
1,2,3-Trichlorobenzene
Concen: 16.578 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN083707.D
Acq: 09 Sep 2024 09:39

Tgt Ion:180 Resp: 37935
Ion Ratio Lower Upper
180 100
182 93.9 0.0 191.0
145 33.3 0.0 71.0



Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0909WBSD01	SDG No.:	P3845
Lab Sample ID:	VN0909WBSD01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083708.D	1		09/09/24 10:03	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	17.2		1.20	5.00	ug/L
74-87-3	Chloromethane	17.5		1.20	5.00	ug/L
75-01-4	Vinyl Chloride	17.2		1.20	5.00	ug/L
141-78-6	Ethyl Acetate	18.4		1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	18.7		0.66	5.00	ug/L
74-83-9	Bromomethane	17.5		1.40	5.00	ug/L
75-00-3	Chloroethane	18.3		2.90	5.00	ug/L
75-69-4	Trichlorofluoromethane	17.2		1.00	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	17.6		1.10	5.00	ug/L
75-65-0	tert-Butyl Alcohol	100		8.50	25.0	ug/L
60-29-7	Diethyl Ether	17.9		0.92	5.00	ug/L
75-35-4	1,1-Dichloroethene	17.1		1.10	5.00	ug/L
107-02-8	Acrolein	110		9.30	25.0	ug/L
107-13-1	Acrylonitrile	90.1		3.70	25.0	ug/L
67-64-1	Acetone	91.2		4.90	25.0	ug/L
75-15-0	Carbon Disulfide	16.5		0.93	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	17.7		0.83	5.00	ug/L
79-20-9	Methyl Acetate	18.7		1.20	5.00	ug/L
75-09-2	Methylene Chloride	17.5		1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.4		0.95	5.00	ug/L
108-05-4	Vinyl Acetate	83.1		3.80	25.0	ug/L
75-34-3	1,1-Dichloroethane	17.5		0.81	5.00	ug/L
110-82-7	Cyclohexane	16.8		1.00	5.00	ug/L
78-93-3	2-Butanone	95.0		3.60	25.0	ug/L
56-23-5	Carbon Tetrachloride	17.9		0.91	5.00	ug/L
594-20-7	2,2-Dichloropropane	18.2		1.10	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	16.9		0.90	5.00	ug/L
67-66-3	Chloroform	17.5		0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	17.8		0.79	5.00	ug/L
108-87-2	Methylcyclohexane	17.7		0.89	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBSD01		SDG No.:	P3845
Lab Sample ID:	VN0909WBSD01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083708.D	1		09/09/24 10:03	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
563-58-6	1,1-Dichloropropene	17.2		0.75	5.00	ug/L
71-43-2	Benzene	18.0		0.69	5.00	ug/L
107-06-2	1,2-Dichloroethane	18.1		0.75	5.00	ug/L
79-01-6	Trichloroethene	17.8		0.77	5.00	ug/L
78-87-5	1,2-Dichloropropane	18.0		0.65	5.00	ug/L
74-95-3	Dibromomethane	18.0		0.70	5.00	ug/L
75-27-4	Bromodichloromethane	17.7		0.81	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	99.3		4.20	25.0	ug/L
108-88-3	Toluene	17.7		0.72	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	17.4		0.79	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.0		0.83	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.8		0.68	5.00	ug/L
142-28-9	1,3-Dichloropropane	18.0		0.68	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	85.6		5.60	25.0	ug/L
591-78-6	2-Hexanone	100		3.90	25.0	ug/L
124-48-1	Dibromochloromethane	18.2		0.72	5.00	ug/L
106-93-4	1,2-Dibromoethane	18.1		0.78	5.00	ug/L
127-18-4	Tetrachloroethene	17.3		0.94	5.00	ug/L
108-90-7	Chlorobenzene	17.5		0.67	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	17.9		0.91	5.00	ug/L
67-72-1	Hexachloroethane	17.5		0.91	5.00	ug/L
100-41-4	Ethyl Benzene	17.2		0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	34.5		1.70	10.0	ug/L
1330-20-7	Total Xylenes	52.1		2.52	15.0	ug/L
95-47-6	o-Xylene	17.6		0.82	5.00	ug/L
100-42-5	Styrene	17.2		0.80	5.00	ug/L
75-25-2	Bromoform	18.1		1.00	5.00	ug/L
98-82-8	Isopropylbenzene	17.7		0.85	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.1		0.60	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	19.4		1.70	5.00	ug/L
108-86-1	Bromobenzene	17.7		0.69	5.00	ug/L

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBSD01		SDG No.:	P3845
Lab Sample ID:	VN0909WBSD01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083708.D	1		09/09/24 10:03	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
103-65-1	n-propylbenzene	17.1		0.80	5.00	ug/L
95-49-8	2-Chlorotoluene	17.7		0.81	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	17.7		0.74	5.00	ug/L
106-43-4	4-Chlorotoluene	16.8		0.82	5.00	ug/L
98-06-6	tert-butylbenzene	17.8		0.77	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	17.5		0.83	5.00	ug/L
135-98-8	sec-Butylbenzene	17.0		0.77	5.00	ug/L
99-87-6	p-Isopropyltoluene	17.1		0.82	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	16.9		0.88	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	16.7		0.95	5.00	ug/L
104-51-8	n-Butylbenzene	16.4		0.86	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.2		0.88	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	18.8		0.91	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	15.9		1.10	5.00	ug/L
87-68-3	Hexachlorobutadiene	17.0		1.10	5.00	ug/L
91-20-3	Naphthalene	16.5		1.40	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	15.9		1.40	5.00	ug/L
628-63-7	n-amyl Acetate	19.0		0.91	5.00	ug/L
74-88-4	Methyl Iodide	17.1		0.94	5.00	ug/L
107-05-1	Allyl chloride	17.1		1.30	5.00	ug/L
126-98-7	Methacrylonitrile	19.7		1.20	5.00	ug/L
97-63-2	Ethyl methacrylate	18.1		0.79	5.00	ug/L
108-20-3	Diisopropyl ether	17.4		0.82	5.00	ug/L
123-91-1	1,4-Dioxane	420		18.4	100	ug/L
80-62-6	Methyl methacrylate	19.1		1.00	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	29.6		91 - 110	99%	SPK: 30
2037-26-5	Toluene-d8	30.1		91 - 112	100%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.8		63 - 112	99%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	31000	7.812			
540-36-3	1,4-Difluorobenzene	176000	9.094			

Report of Analysis

Client:	Chemtech Consulting Group		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VN0909WBSD01		SDG No.:	P3845
Lab Sample ID:	VN0909WBSD01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083708.D	1		09/09/24 10:03	VN090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
3114-55-4	Chlorobenzene-d5	158000	11.865			
74-97-5	Bromochloromethane	31000	7.812			

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\VN090924\
 Data File : VN083708.D
 Acq On : 09 Sep 2024 10:03
 Operator : JC\MD
 Sample : VN0909WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0909WBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 09/10/2024
 Supervised By : Mahesh Dadoda 09/10/2024

Quant Time: Sep 10 01:16:13 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.812	128	31032	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	176340	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	157868	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	84062	29.635	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	98.800%		
60) 4-Bromofluorobenzene	12.847	95	81142	29.823	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	99.400%		
63) Toluene-d8	10.565	98	219979	30.093	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	100.300%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.124	85	35706	17.182	ug/l	96
3) Chloromethane	2.359	50	37868	17.538	ug/l	94
4) Vinyl Chloride	2.512	62	38226	17.221	ug/l	91
5) Bromomethane	2.901	94	21688	17.488	ug/l	93
6) Chloroethane	3.071	64	27267	18.344	ug/l	92
7) Trichlorofluoromethane	3.465	101	64048	17.211	ug/l	98
8) Diethyl Ether	3.954	74	22619	17.888	ug/l	84
9) 1,1,2-Trichlorotrifluo...	4.353	101	35220m	17.619	ug/l	
10) 1,1-Dichloroethene	4.324	96	32968	17.093	ug/l #	74
11) Methyl Iodide	4.571	142	44708	17.066	ug/l	92
12) Methyl Acetate	5.018	43	43491	18.698	ug/l #	77
13) Acrolein	4.177	56	36591	107.792	ug/l	98
14) Acrylonitrile	5.712	53	84766	90.052	ug/l	95
15) Acetone	4.430	58	28466	91.165	ug/l	75
16) Carbon Disulfide	4.701	76	90091	16.528	ug/l	96
17) Allyl chloride	5.012	41	57665	17.050	ug/l	87
18) Methylene Chloride	5.265	84	36879	17.477	ug/l	92
19) trans-1,2-Dichloroethene	5.777	96	34686	17.352	ug/l	97
20) Diisopropyl ether	6.671	45	118820	17.396	ug/l	96
21) 1,1-Dichloroethane	6.565	63	68303	17.515	ug/l	97
22) cis-1,2-Dichloroethene	7.483	96	41012	16.857	ug/l	92
23) tert-Butyl Alcohol	5.536	59	35151	101.764	ug/l #	100
24) Methyl tert-Butyl Ether	5.795	73	121305	17.699	ug/l #	87
25) Chloroform	7.965	83	72159	17.460	ug/l	99
26) Cyclohexane	8.253	56	57616	16.775	ug/l #	89
29) 1,1-Dichloropropene	8.371	75	48120	17.204	ug/l	98
30) 2-Butanone	7.483	43	125228	94.980	ug/l	96
31) 2,2-Dichloropropane	7.489	77	64997	18.227	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	66397	17.775	ug/l	98
33) Carbon Tetrachloride	8.359	117	58022	17.937	ug/l	99
34) Benzene	8.600	78	151159	18.012	ug/l #	95
35) Methacrylonitrile	7.777	41	29187	19.692	ug/l	91
36) 1,2-Dichloroethane	8.671	62	57105	18.100	ug/l	95
37) Trichloroethene	9.353	130	35056	17.789	ug/l	94
38) Methylcyclohexane	9.594	83	59286	17.705	ug/l	97
39) 1,2-Dichloropropane	9.618	63	36311	17.978	ug/l	97
40) Dibromomethane	9.706	93	26610	18.018	ug/l	94
41) Bromodichloromethane	9.888	83	55660	17.723	ug/l	98
42) Vinyl Acetate	6.600	43	450676	83.137	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090924\
 Data File : VN083708.D
 Acq On : 09 Sep 2024 10:03
 Operator : JC\MD
 Sample : VN0909WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0909WBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 09/10/2024
 Supervised By : Mahesh Dadoda 09/10/2024

Quant Time: Sep 10 01:16:13 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 06 23:42:47 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	48775	18.379	ug/l	97
44) Isopropyl Acetate	8.683	43	85971	18.730	ug/l	90
45) 1,4-Dioxane	9.694	88	15043	420.192	ug/l	98
46) Methyl methacrylate	9.683	41	42453	19.109	ug/l	80
47) n-amyl Acetate	12.494	43	77395	19.035	ug/l #	89
48) t-1,3-Dichloropropene	10.835	75	57570	17.428	ug/l	96
49) cis-1,3-Dichloropropene	10.312	75	61875	18.011	ug/l #	87
50) 1,1,2-Trichloroethane	11.012	97	35316	18.793	ug/l	96
51) Ethyl methacrylate	10.871	69	58165	18.117	ug/l	70
52) 1,3-Dichloropropane	11.159	76	61067	17.994	ug/l	99
53) Dibromochloromethane	11.359	129	40918	18.153	ug/l	96
54) 1,2-Dibromoethane	11.471	107	35213	18.113	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	109480	85.564	ug/l	99
56) Bromoform	12.576	173	25863	18.061	ug/l	99
58) 4-Methyl-2-Pentanone	10.441	43	248553	99.295	ug/l #	88
59) 2-Hexanone	11.194	43	189895	100.397	ug/l	88
61) Tetrachloroethene	11.100	164	28874	17.282	ug/l	95
62) Toluene	10.630	91	160730	17.713	ug/l	100
64) Chlorobenzene	11.888	112	98169	17.474	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	35072	17.921	ug/l	95
66) Ethyl Benzene	11.965	91	177087	17.161	ug/l	96
67) m/p-Xylenes	12.071	106	131117	34.537	ug/l	96
68) o-Xylene	12.394	106	64783	17.632	ug/l	95
69) Styrene	12.412	104	106951	17.227	ug/l	98
70) Isopropylbenzene	12.694	105	171180	17.654	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	50581	19.099	ug/l	99
72) 1,2,3-Trichloropropane	12.994	75	44968m	19.367	ug/l	
73) Bromobenzene	12.976	156	39441	17.709	ug/l	94
74) n-propylbenzene	13.035	91	194312	17.119	ug/l	100
75) 2-Chlorotoluene	13.124	91	125200	17.673	ug/l	99
76) 1,3,5-Trimethylbenzene	13.171	105	143082	17.665	ug/l	98
77) t-1,4-Dichloro-2-butene	12.735	75	16943	17.263	ug/l	87
78) 4-Chlorotoluene	13.223	91	120926	16.832	ug/l	99
79) tert-butylbenzene	13.435	119	126257	17.826	ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	143312	17.509	ug/l	99
81) sec-Butylbenzene	13.618	105	164949	17.048	ug/l	100
82) p-Isopropyltoluene	13.729	119	138870	17.059	ug/l	97
83) 1,3-Dichlorobenzene	13.729	146	72292	16.865	ug/l	98
84) 1,4-Dichlorobenzene	13.812	146	71460	16.675	ug/l	99
85) n-Butylbenzene	14.053	91	117524	16.360	ug/l	98
86) Hexachloroethane	14.335	117	26943	17.465	ug/l	88
87) 1,2-Dichlorobenzene	14.106	146	71564	17.203	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.718	75	10930	18.780	ug/l	93
89) 1,2,4-Trichlorobenzene	15.841	180	36209	15.888	ug/l	99
90) Hexachlorobutadiene	15.500	225	16072	17.038	ug/l	99
91) Naphthalene	15.641	128	122921	16.498	ug/l	99
92) 1,2,3-Trichlorobenzene	15.841	180	36209	15.888	ug/l	99

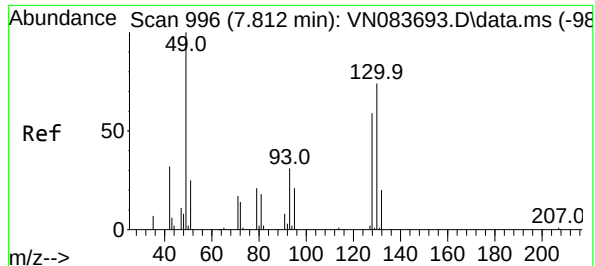
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Manual Integrations

Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024





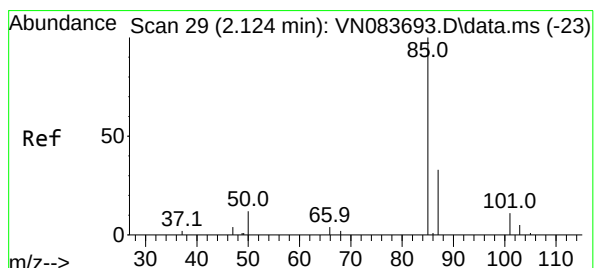
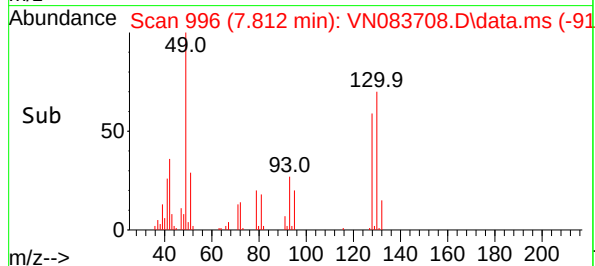
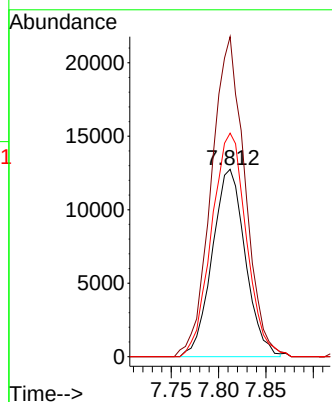
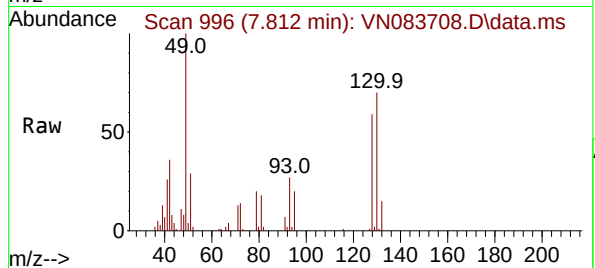
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion:128 Resp: 3103
Ion Ratio Lower Upper
128 100
49 173.1 0.0 403.7
130 125.8 0.0 323.3

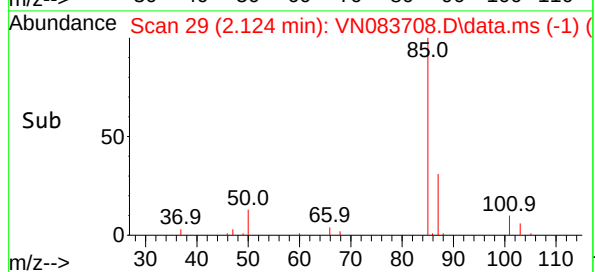
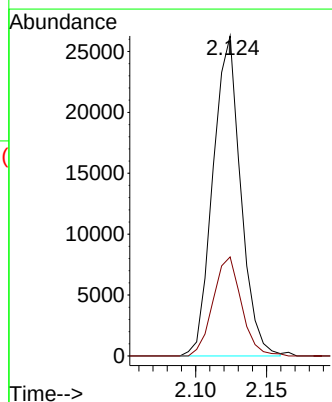
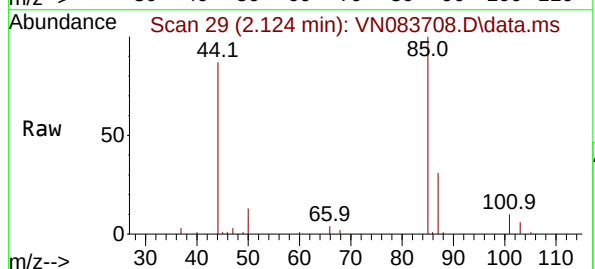
Manual Integrations
APPROVED

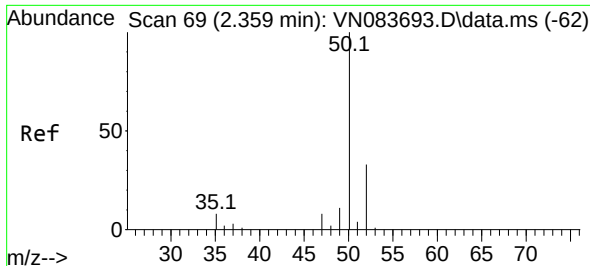
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#2
Dichlorodifluoromethane
Concen: 17.182 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion: 85 Resp: 35706
Ion Ratio Lower Upper
85 100
87 31.0 16.8 50.3





#3

Chloromethane

Concen: 17.538 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 50 Resp: 3786

Ion Ratio Lower Upper

50 100

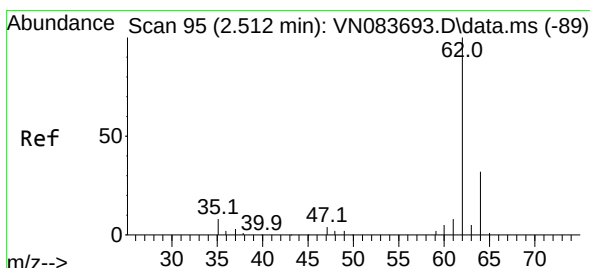
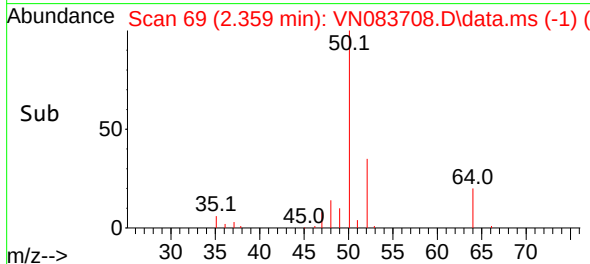
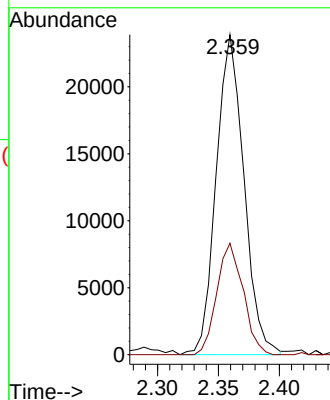
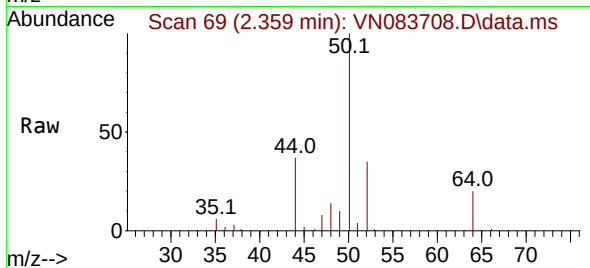
52 34.8 25.4 38.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#4

Vinyl Chloride

Concen: 17.221 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN083708.D

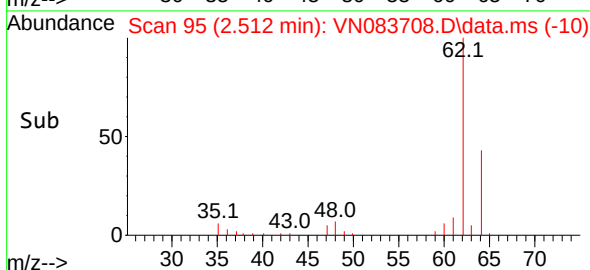
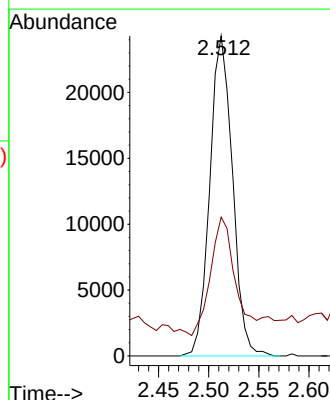
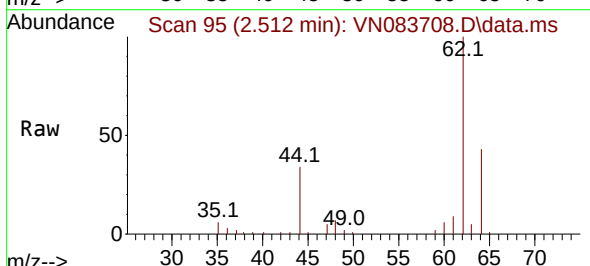
Acq: 09 Sep 2024 10:03

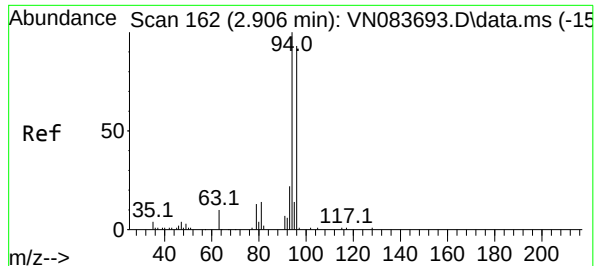
Tgt Ion: 62 Resp: 38226

Ion Ratio Lower Upper

62 100

64 35.1 24.1 36.1





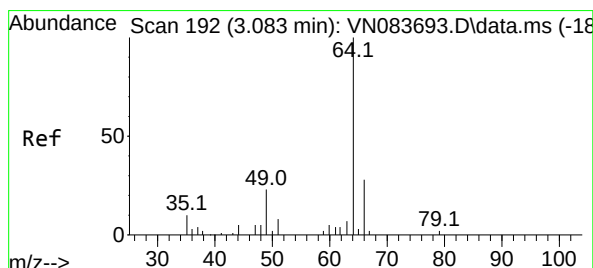
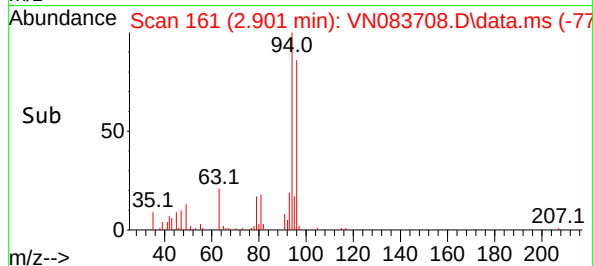
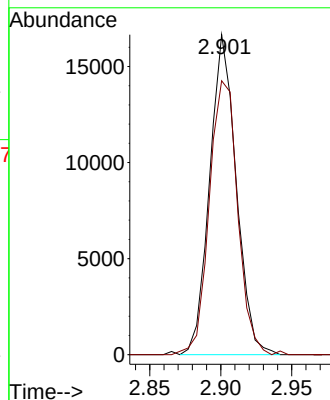
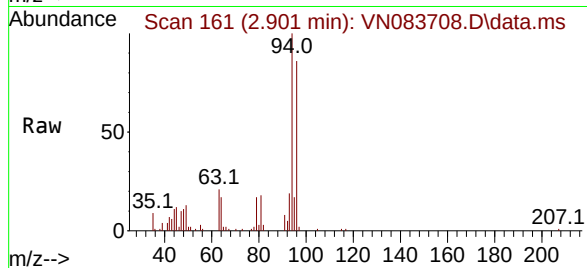
#5
Bromomethane
Concen: 17.488 ug/l
RT: 2.901 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 94 Resp: 2168
Ion Ratio Lower Upper
94 100
96 84.5 72.8 109.2

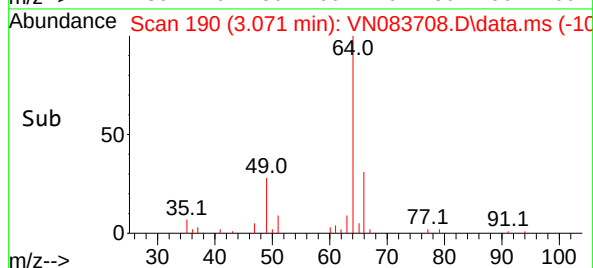
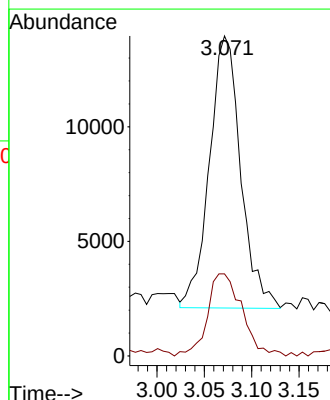
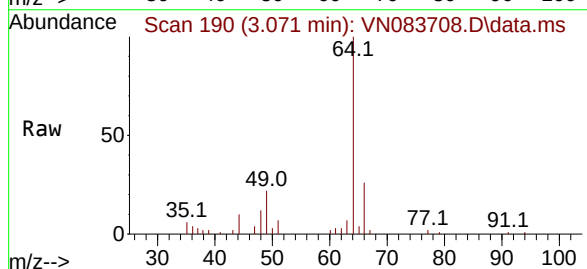
Manual Integrations
APPROVED

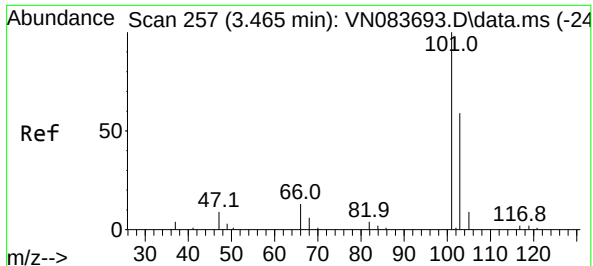
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#6
Chloroethane
Concen: 18.344 ug/l
RT: 3.071 min Scan# 190
Delta R.T. -0.012 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

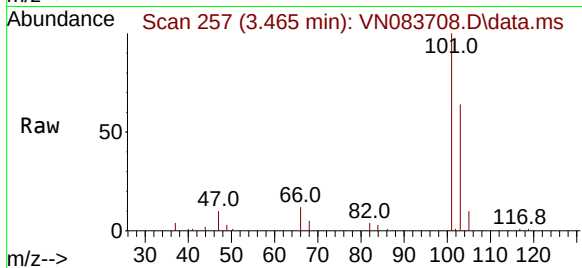
Tgt Ion: 64 Resp: 27267
Ion Ratio Lower Upper
64 100
66 28.8 26.7 40.1





#7
Trichlorofluoromethane
Concen: 17.211 ug/l
RT: 3.465 min Scan# 257
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

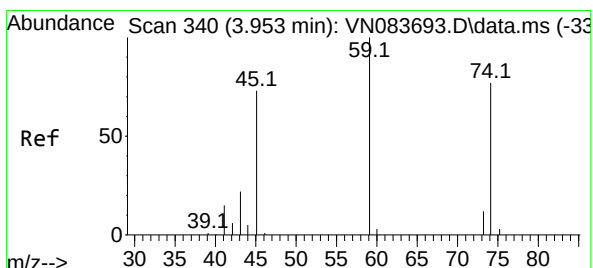
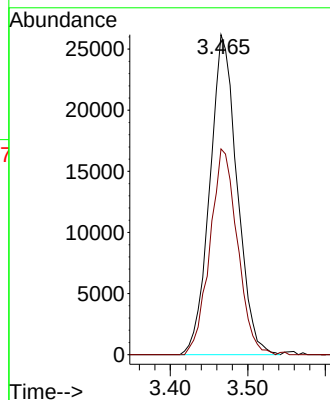
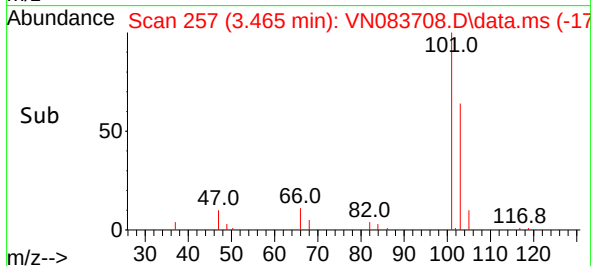
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01



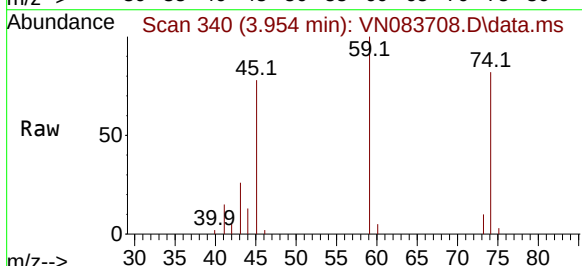
Tgt Ion: 101 Resp: 6404
Ion Ratio Lower Upper
101 100
103 64.3 53.0 79.4

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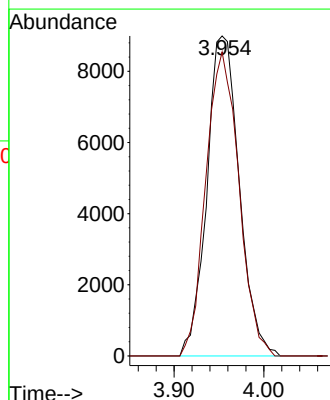
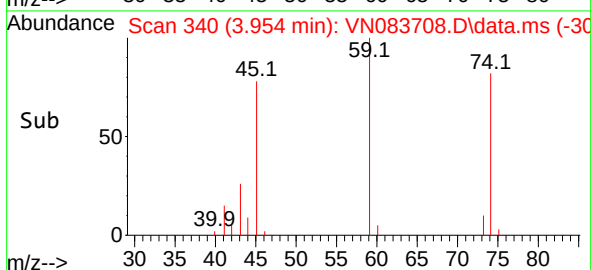
Reviewed By : John Carlone 09/10/2024
Supervised By : Mahesh Dadoda 09/10/2024

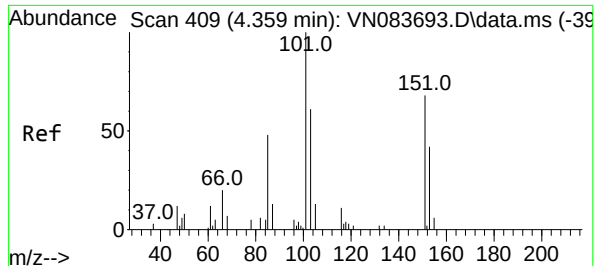


#8
Diethyl Ether
Concen: 17.888 ug/l
RT: 3.954 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03



Tgt Ion: 74 Resp: 22619
Ion Ratio Lower Upper
74 100
45 96.6 16.4 147.4





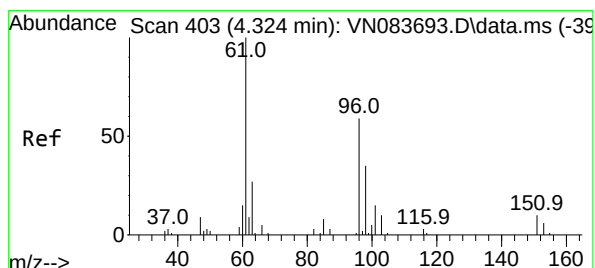
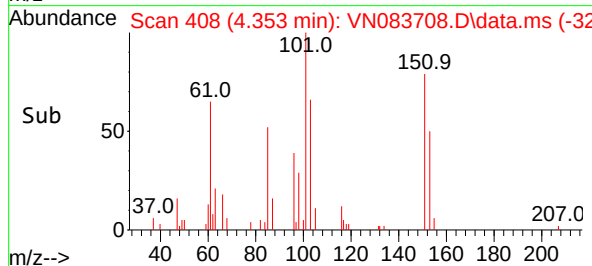
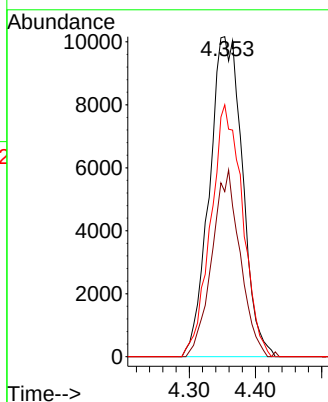
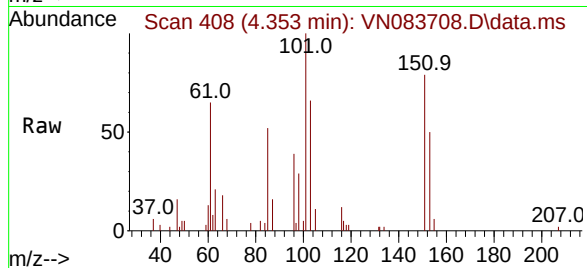
#9
1,1,2-Trichlorotrifluoroethane
Concen: 17.619 ug/l m
RT: 4.353 min Scan# 409
Delta R.T. -0.006 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion:101 Resp: 35220
Ion Ratio Lower Upper
101 100
85 49.7 0.0 90.6
151 75.8 0.0 157.6

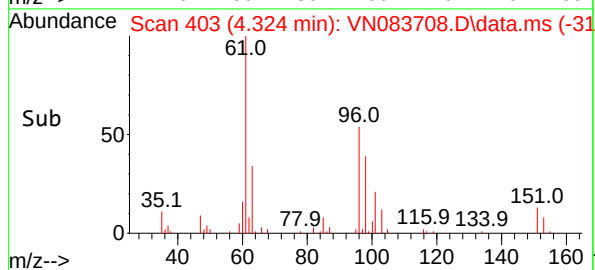
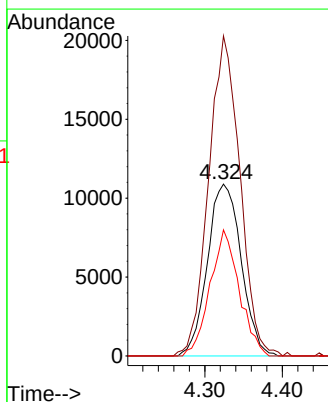
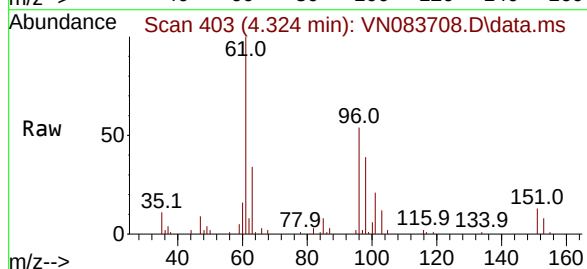
Manual Integrations
APPROVED

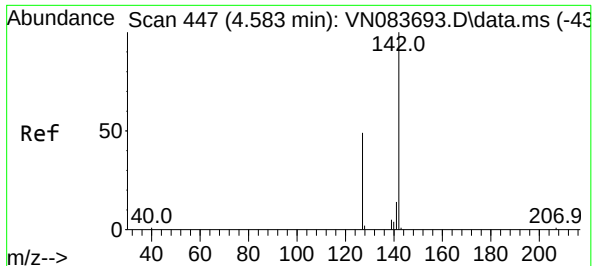
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#10
1,1-Dichloroethene
Concen: 17.093 ug/l
RT: 4.324 min Scan# 403
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion: 96 Resp: 32968
Ion Ratio Lower Upper
96 100
61 183.9 117.6 176.4#
98 73.4 48.4 72.6#





#11

Methyl Iodide

Concen: 17.066 ug/l

RT: 4.571 min Scan# 447

Delta R.T. -0.012 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

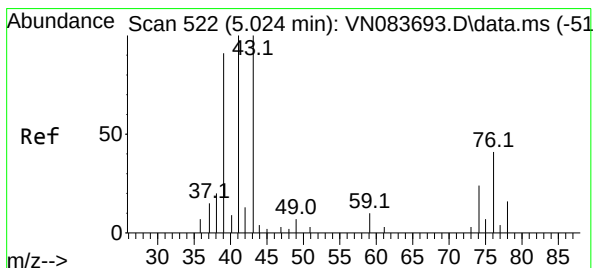
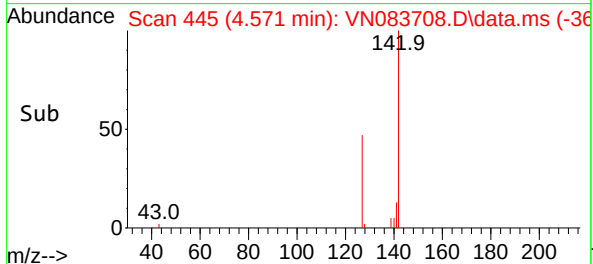
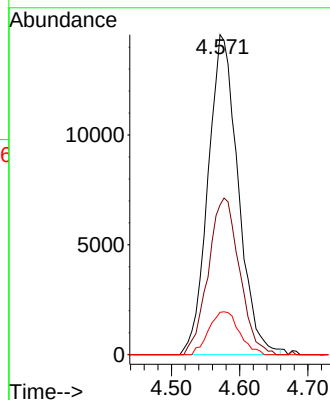
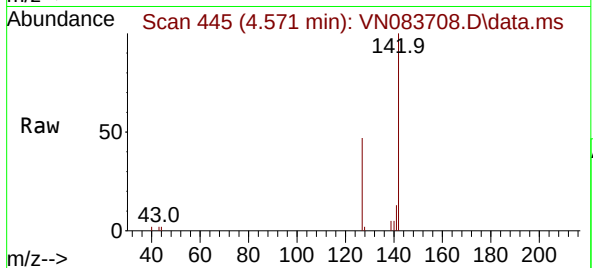
Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion:	142	Resp:	44708
Ion Ratio	Lower	Upper	
142	100		
127	47.2	26.3	78.9
141	13.4	8.3	24.9

Manual Integrations
APPROVEDReviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

#12

Methyl Acetate

Concen: 18.698 ug/l

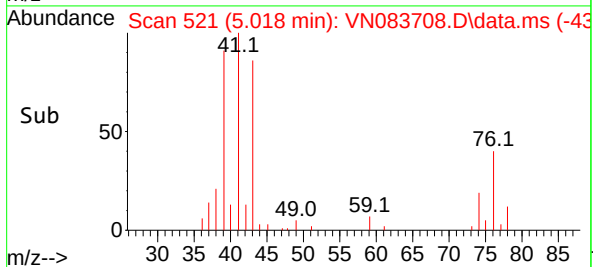
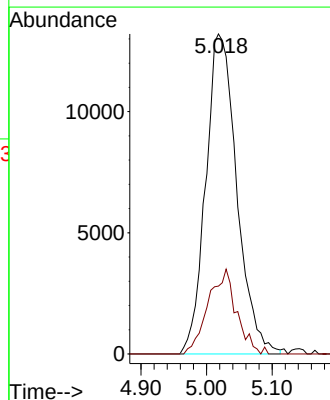
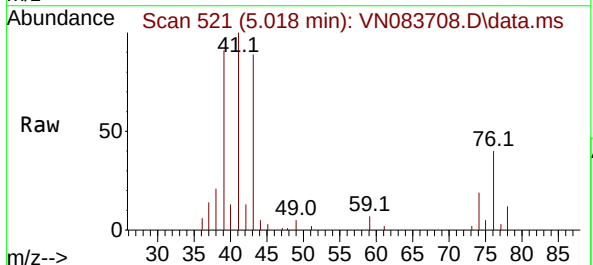
RT: 5.018 min Scan# 521

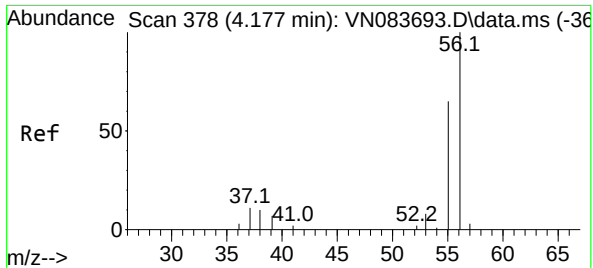
Delta R.T. -0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	43	Resp:	43491
Ion Ratio	Lower	Upper	
43	100		
74	21.4	27.7	41.5#





#13

Acrolein

Concen: 107.792 ug/l

RT: 4.177 min Scan# 31

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 56 Resp: 3659

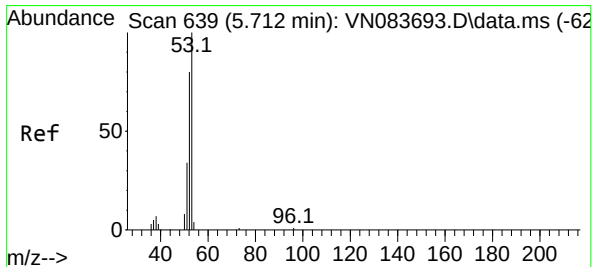
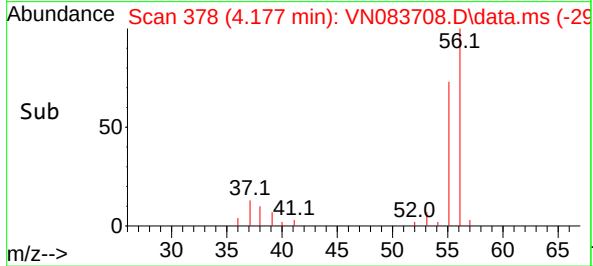
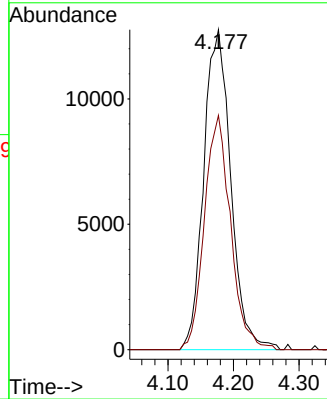
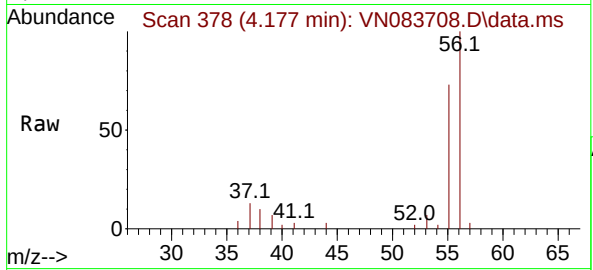
Ion	Ratio	Lower	Upper
56	100		
55	70.9	55.5	83.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#14

Acrylonitrile

Concen: 90.052 ug/l

RT: 5.712 min Scan# 639

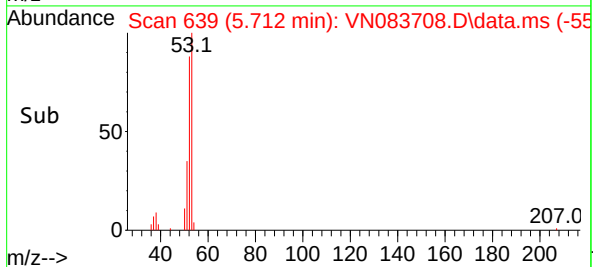
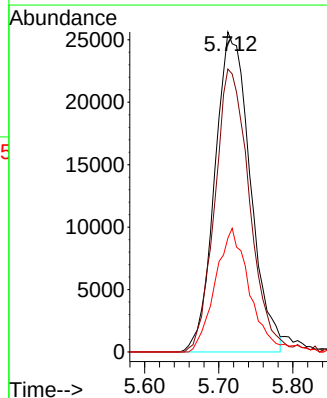
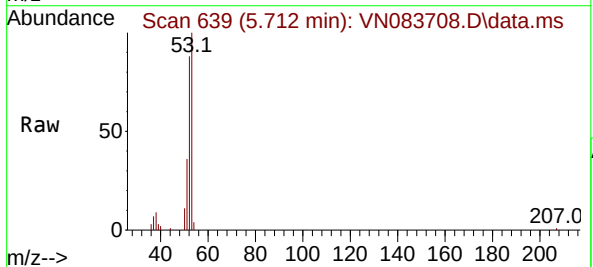
Delta R.T. 0.000 min

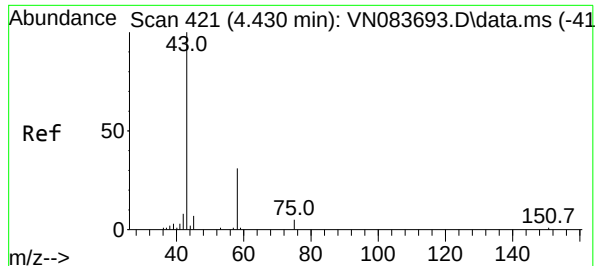
Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion: 53 Resp: 84766

Ion	Ratio	Lower	Upper
53	100		
52	86.7	41.3	123.9
51	37.0	16.8	50.3





#15

Acetone

Concen: 91.165 ug/l

RT: 4.430 min Scan# 41

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 58 Resp: 2846

Ion Ratio Lower Upper

58 100

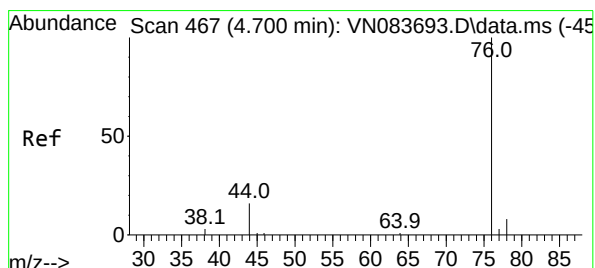
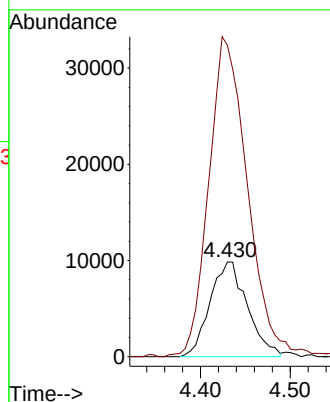
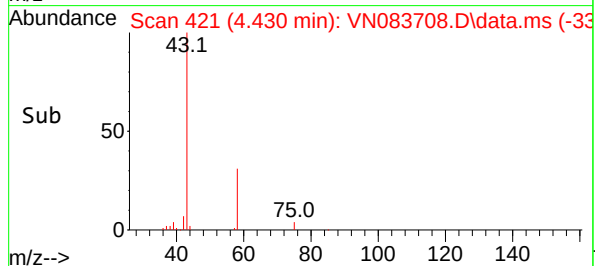
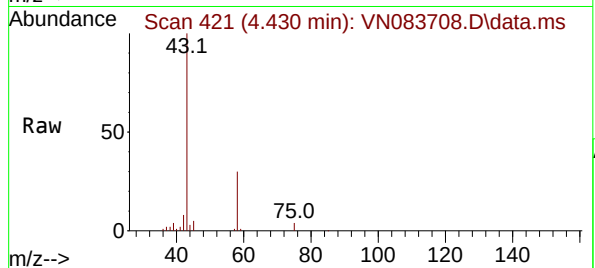
43 325.4 223.1 334.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#16

Carbon Disulfide

Concen: 16.528 ug/l

RT: 4.701 min Scan# 467

Delta R.T. 0.000 min

Lab File: VN083708.D

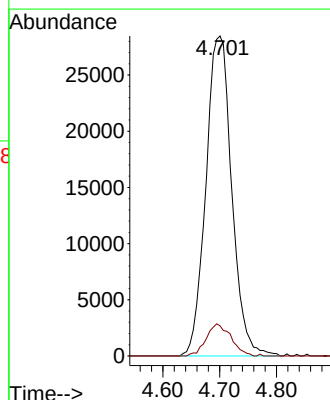
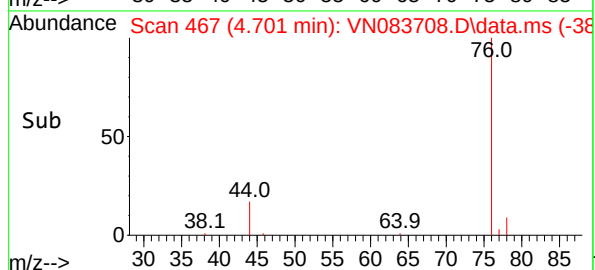
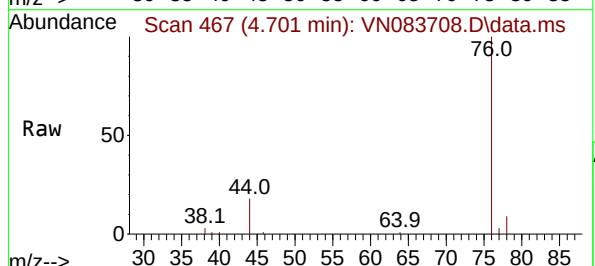
Acq: 09 Sep 2024 10:03

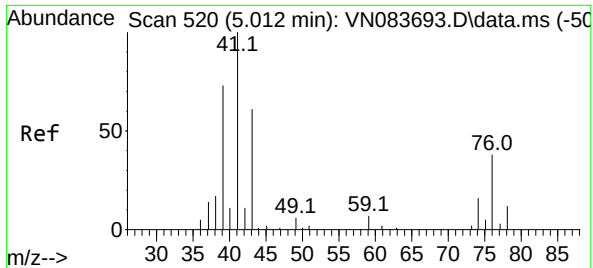
Tgt Ion: 76 Resp: 90091

Ion Ratio Lower Upper

76 100

78 9.4 6.3 9.5





#17

Allyl chloride

Concen: 17.050 ug/l

RT: 5.012 min Scan# 51

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

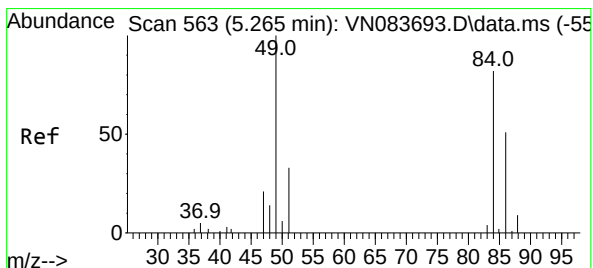
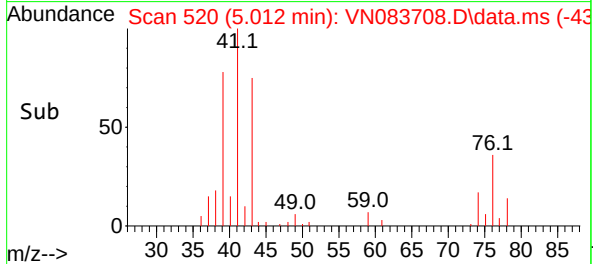
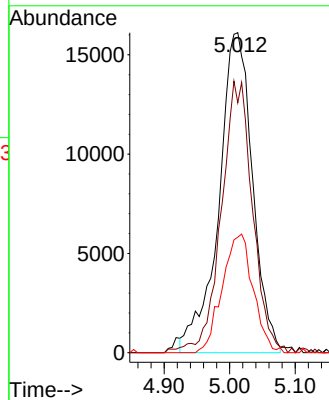
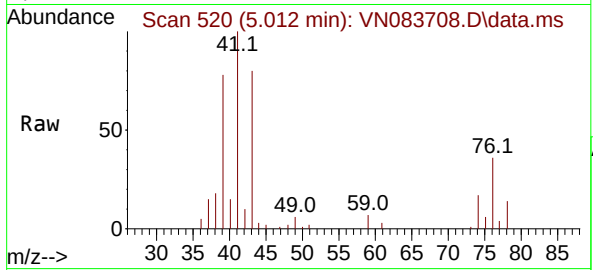
VN0909WBSD01

Tgt Ion:	41	Resp:	5766
Ion	Ratio	Lower	Upper
41	100		
39	77.8	37.6	112.9
76	36.7	27.8	83.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#18

Methylene Chloride

Concen: 17.477 ug/l

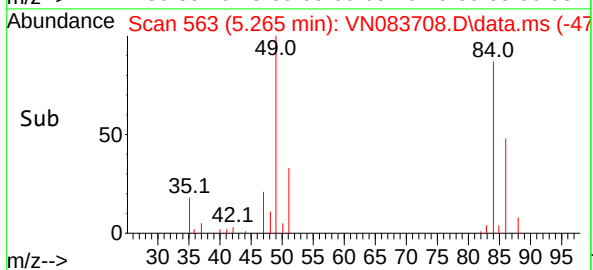
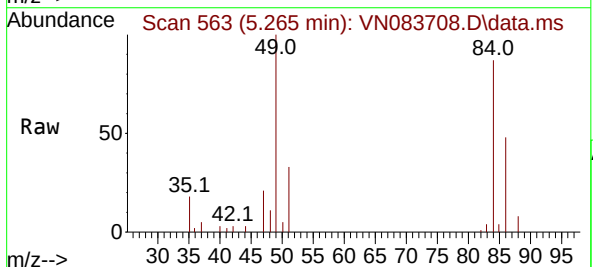
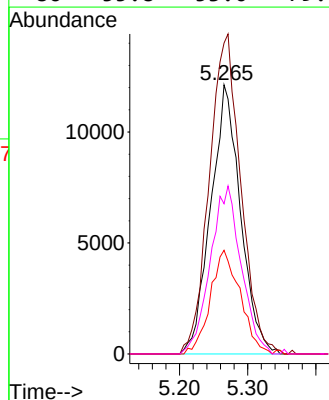
RT: 5.265 min Scan# 563

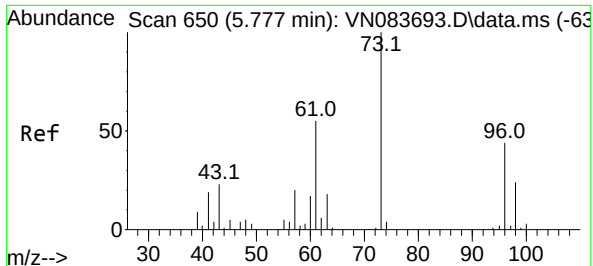
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	84	Resp:	36879
Ion	Ratio	Lower	Upper
84	100		
49	115.5	86.0	129.0
51	38.5	30.0	45.0
86	55.8	53.0	79.4





#19

trans-1,2-Dichloroethene

Concen: 17.352 ug/l

RT: 5.777 min Scan# 61

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 96 Resp: 3468

Ion Ratio Lower Upper

96 100

61 137.5 111.8 167.6

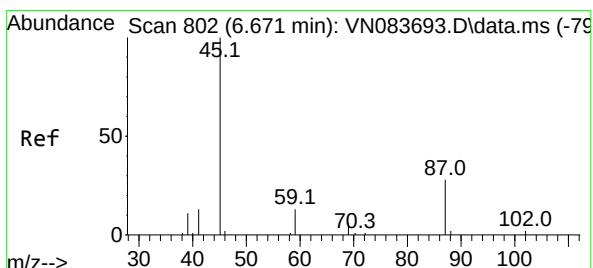
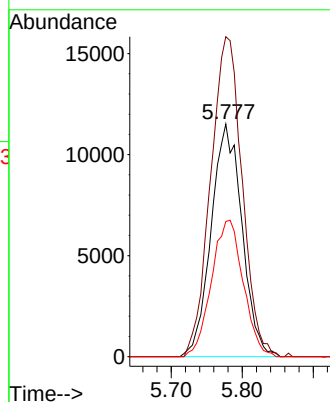
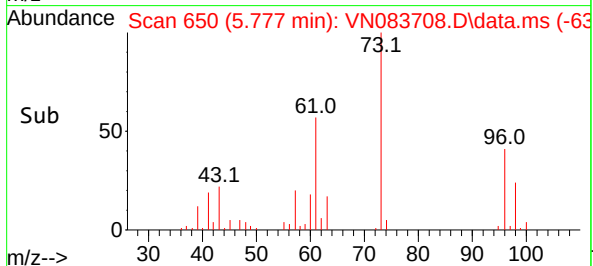
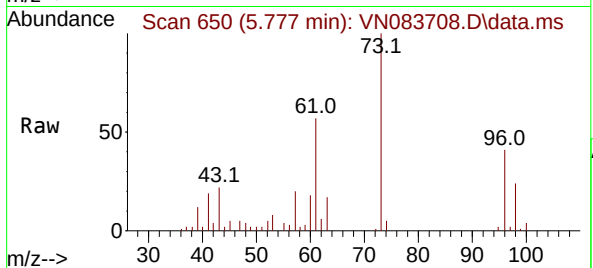
98 58.1 49.2 73.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#20

Diisopropyl ether

Concen: 17.396 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion: 45 Resp: 118820

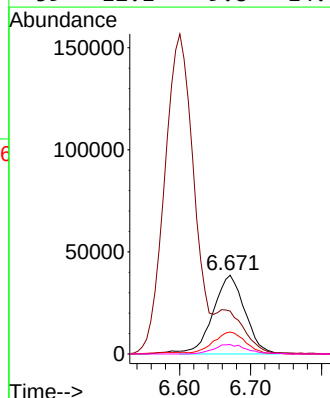
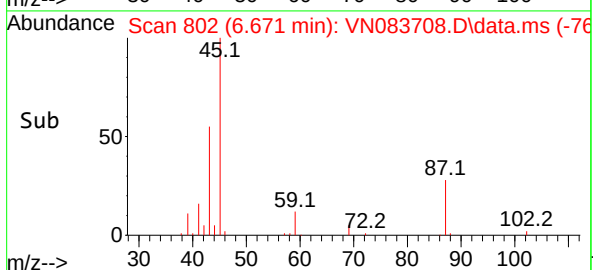
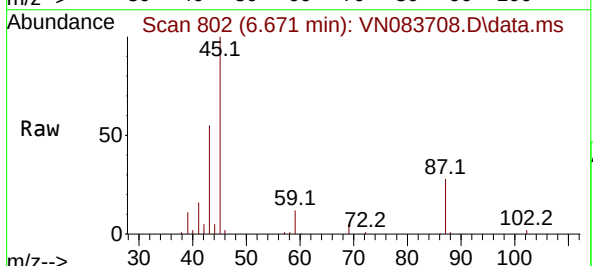
Ion Ratio Lower Upper

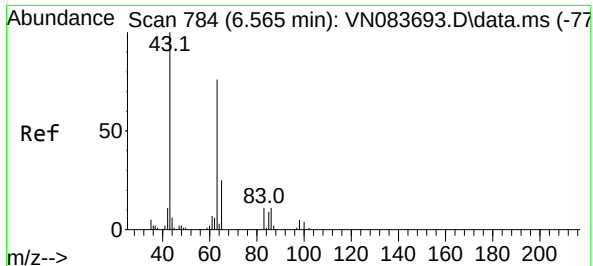
45 100

43 53.2 40.4 60.6

87 27.5 23.8 35.8

59 12.1 9.8 14.6





#21

1,1-Dichloroethane

Concen: 17.515 ug/l

RT: 6.565 min Scan# 71

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

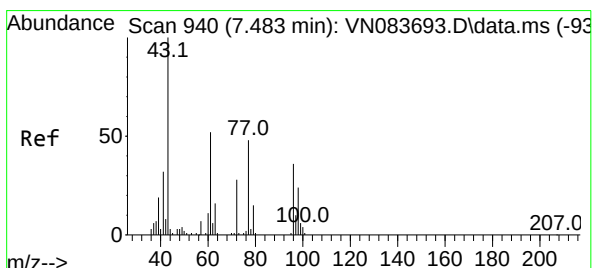
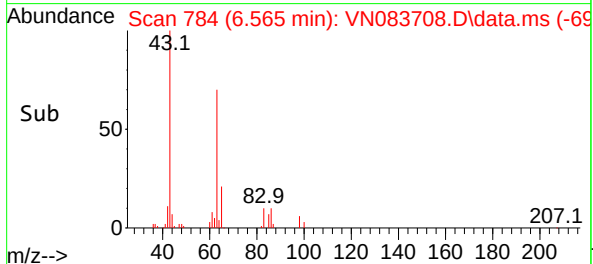
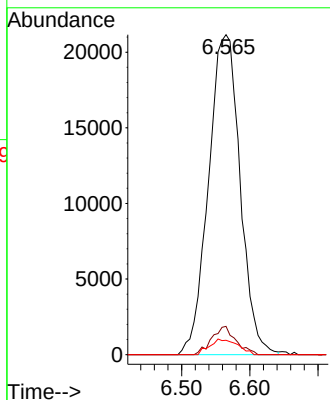
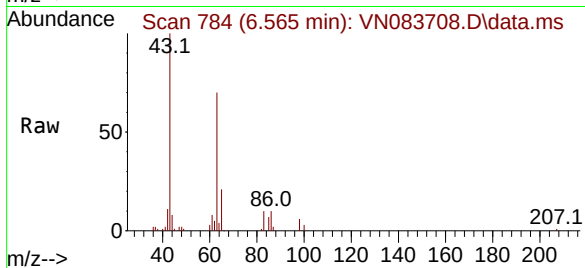
VN0909WBSD01

Tgt Ion:	63	Resp:	6830
Ion Ratio	Lower	Upper	
63	100		
98	8.8	4.1	12.3
100	4.5	3.0	9.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#22

cis-1,2-Dichloroethene

Concen: 16.857 ug/l

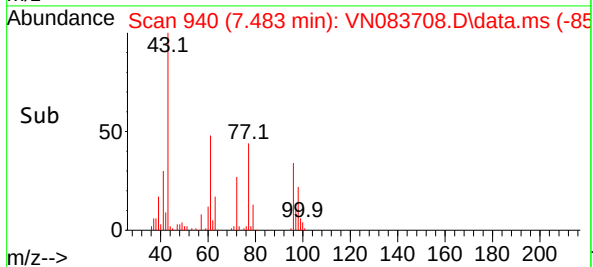
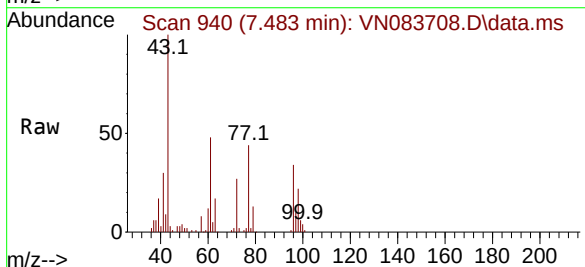
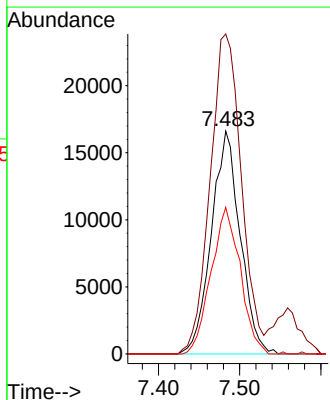
RT: 7.483 min Scan# 940

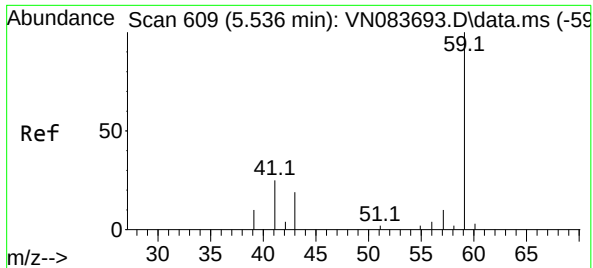
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	96	Resp:	41012
Ion Ratio	Lower	Upper	
96	100		
61	155.7	113.5	170.3
98	66.6	52.0	78.0





#23

tert-Butyl Alcohol

Concen: 101.764 ug/l

RT: 5.536 min Scan# 609

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 59 Resp: 3515

Ion Ratio Lower Upper

59 100

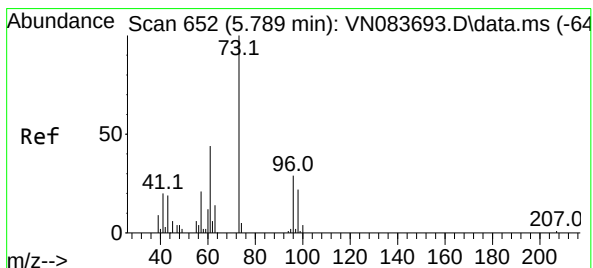
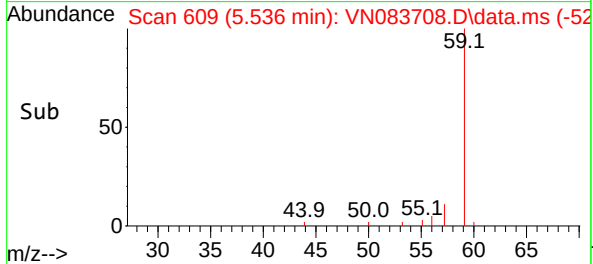
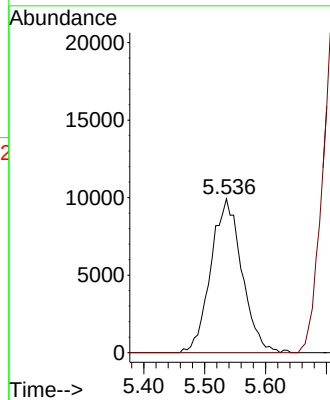
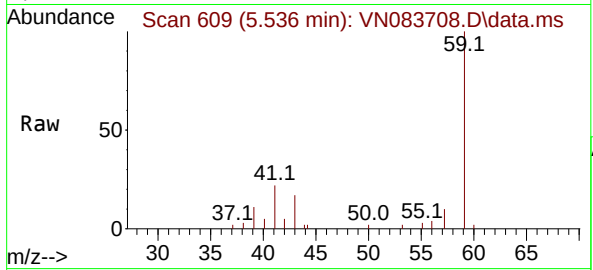
52 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#24

Methyl tert-Butyl Ether

Concen: 17.699 ug/l

RT: 5.795 min Scan# 653

Delta R.T. 0.006 min

Lab File: VN083708.D

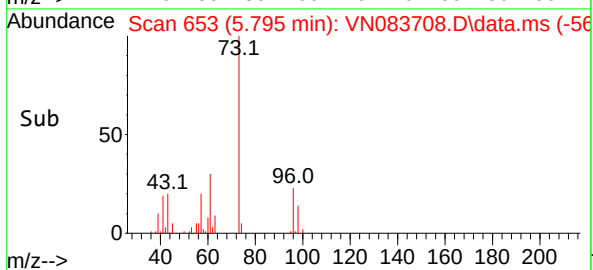
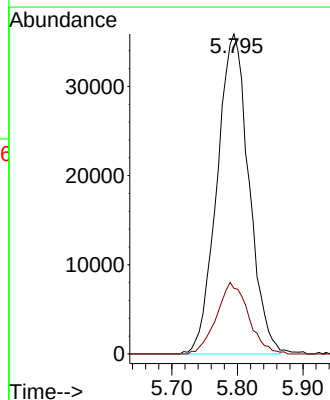
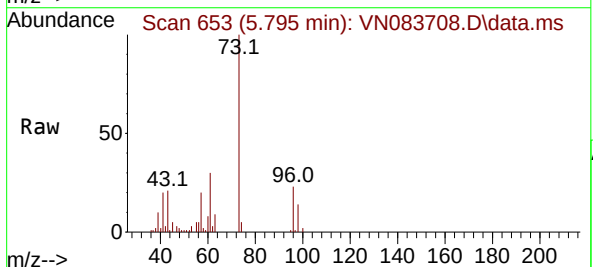
Acq: 09 Sep 2024 10:03

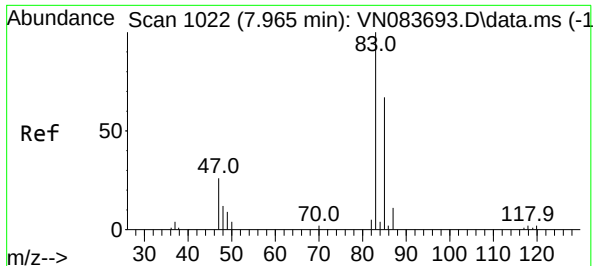
Tgt Ion: 73 Resp: 121305

Ion Ratio Lower Upper

73 100

43 22.4 13.4 20.2#





#25

Chloroform

Concen: 17.460 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 83 Resp: 72159

Ion Ratio Lower Upper

83 100

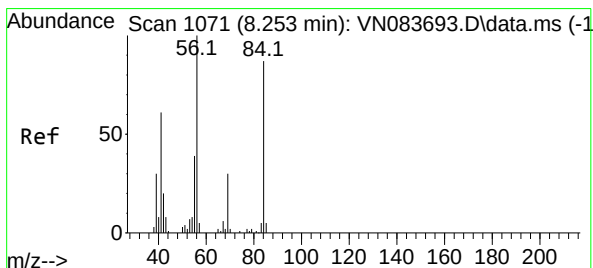
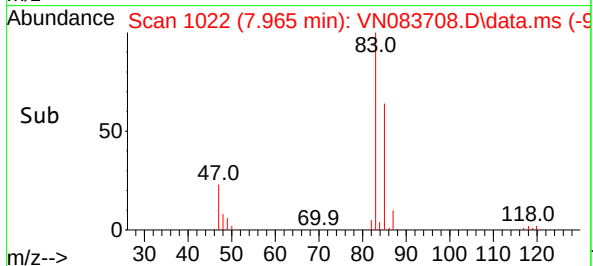
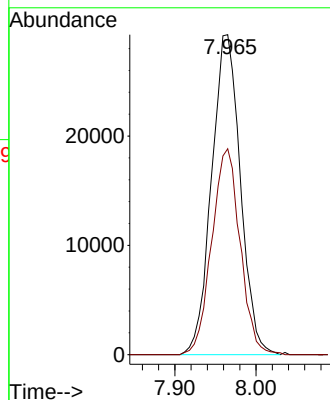
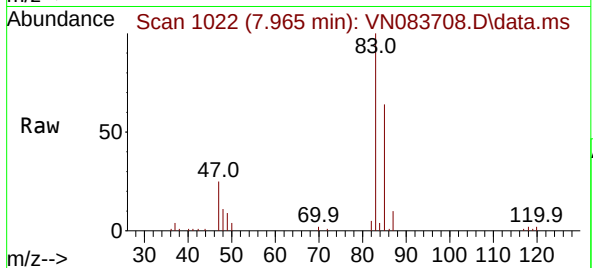
85 64.3 50.9 76.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#26

Cyclohexane

Concen: 16.775 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

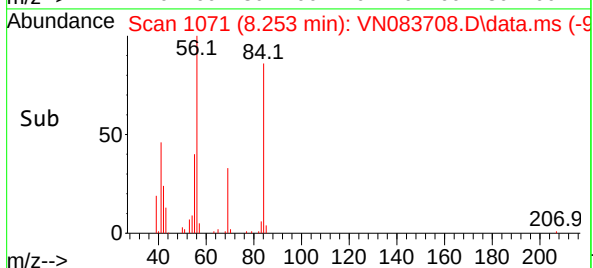
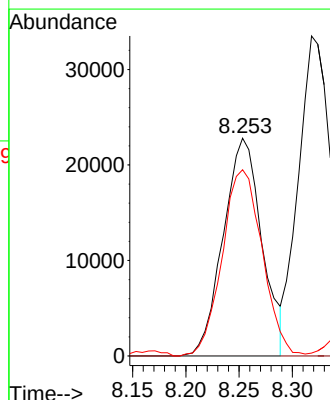
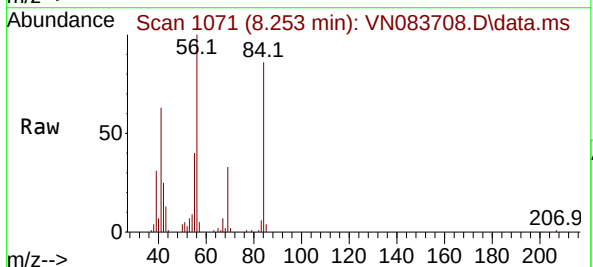
Tgt Ion: 56 Resp: 57616

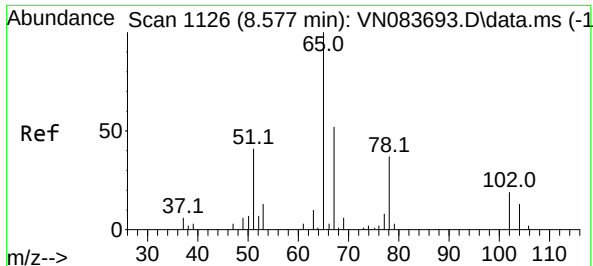
Ion Ratio Lower Upper

56 100

89 0.0 19.3 28.9#

84 88.6 71.3 106.9





#27

1,2-Dichloroethane-d4

Concen: 29.635 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 65 Resp: 84062

Ion Ratio Lower Upper

65 100

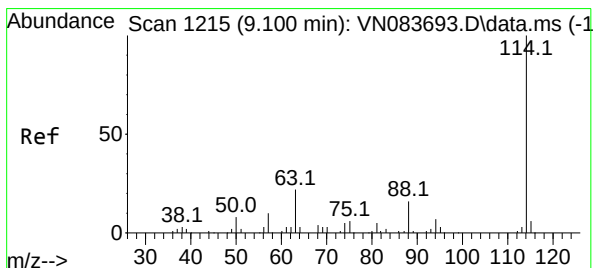
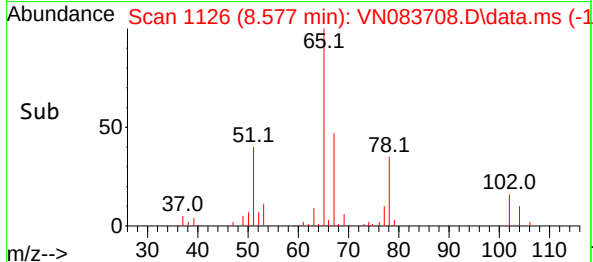
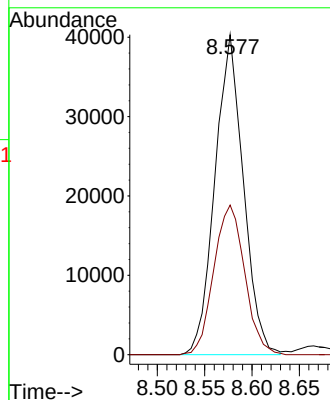
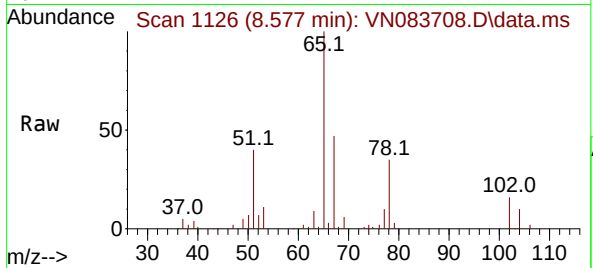
67 50.8 43.2 64.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. -0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

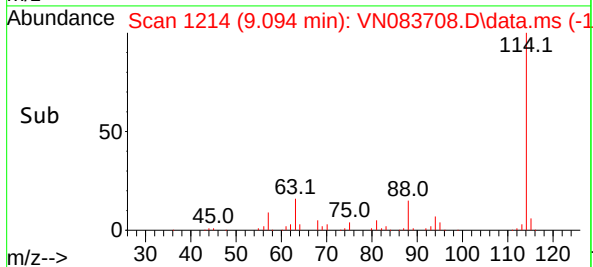
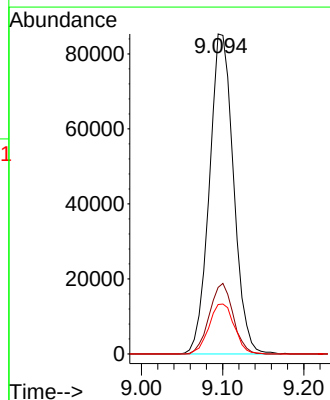
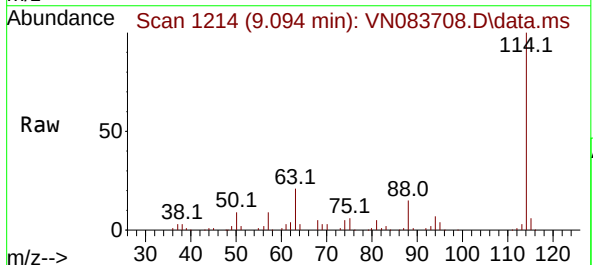
Tgt Ion:114 Resp: 176340

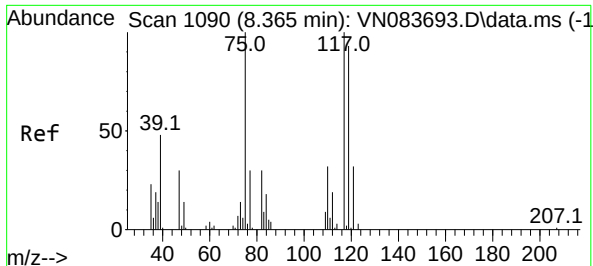
Ion Ratio Lower Upper

114 100

63 21.7 15.9 23.9

88 16.4 12.7 19.1





#29

1,1-Dichloropropene

Concen: 17.204 ug/l

RT: 8.371 min Scan# 1090

Delta R.T. 0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

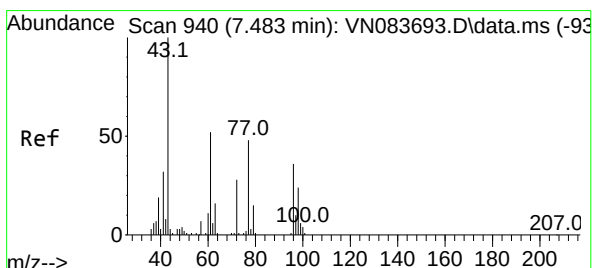
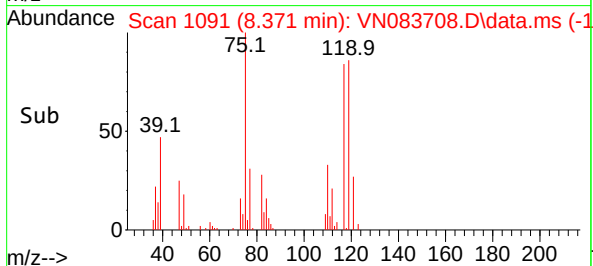
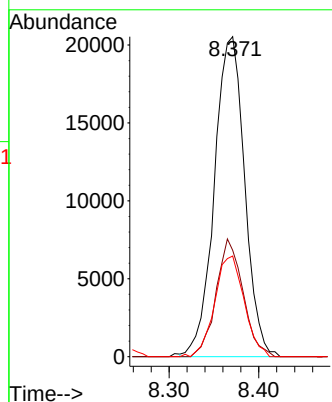
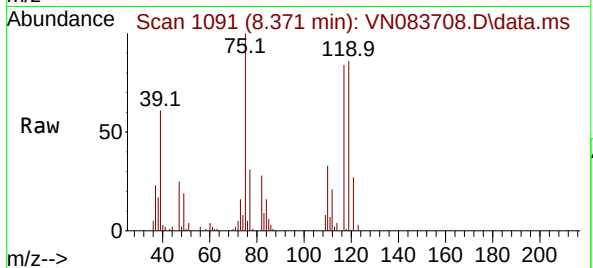
VN0909WBSD01

Tgt Ion:	75	Resp:	48120
Ion	Ratio	Lower	Upper
75	100		
110	32.7	0.0	70.2
77	30.5	0.0	61.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#30

2-Butanone

Concen: 94.980 ug/l

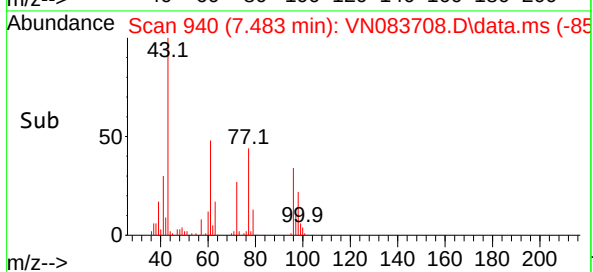
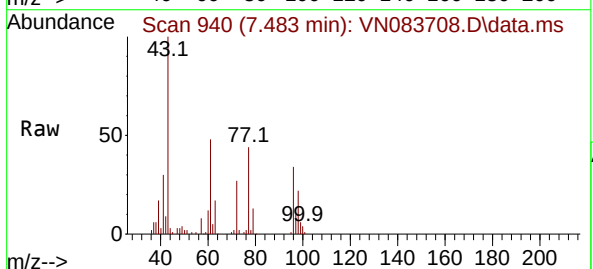
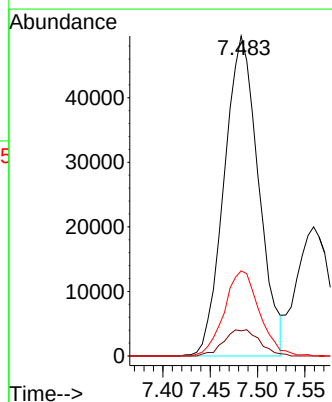
RT: 7.483 min Scan# 940

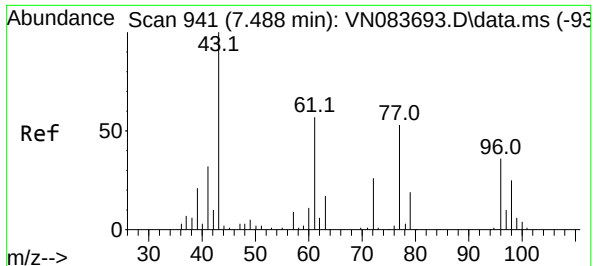
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	43	Resp:	125228
Ion	Ratio	Lower	Upper
43	100		
57	8.6	6.7	10.1
72	27.1	24.0	36.0





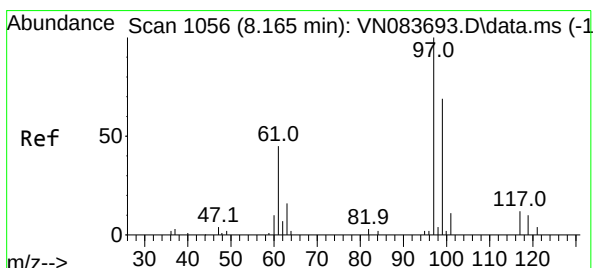
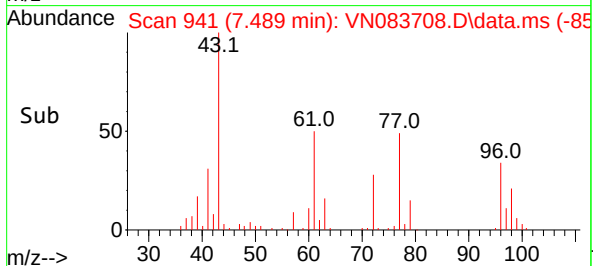
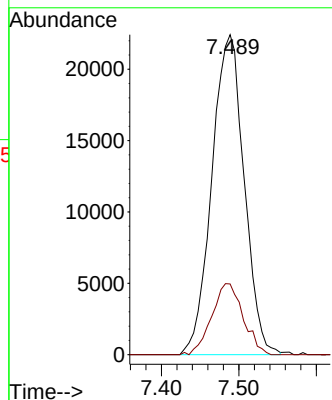
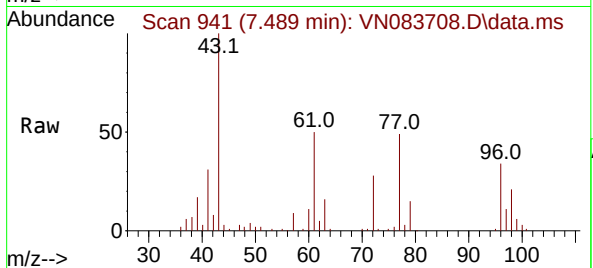
#31
2,2-Dichloropropane
Concen: 18.227 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 77 Resp: 6499
Ion Ratio Lower Upper
77 100
97 21.5 18.3 27.5

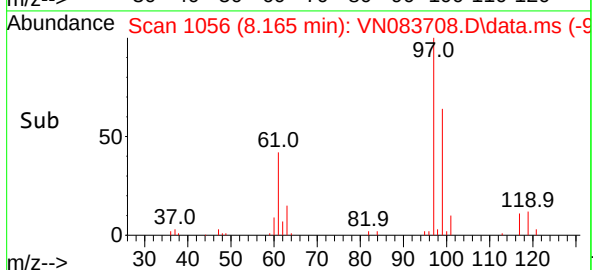
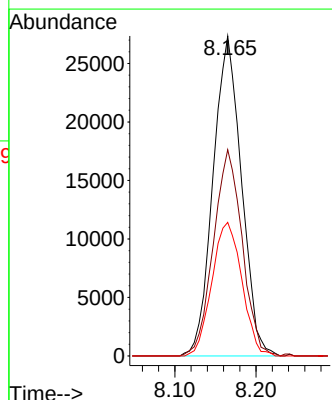
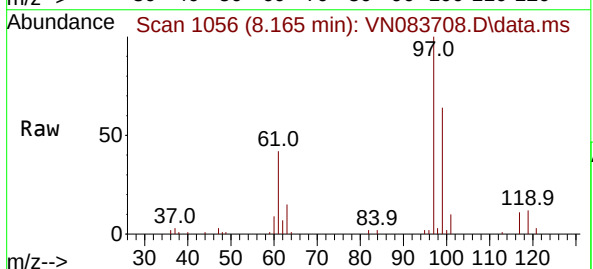
Manual Integrations
APPROVED

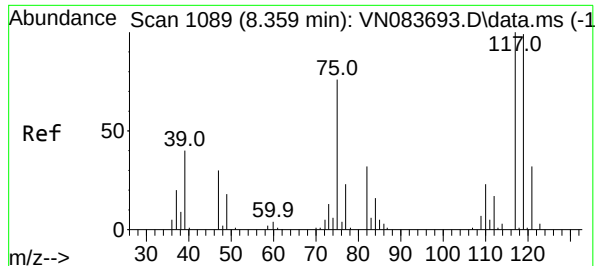
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#32
1,1,1-Trichloroethane
Concen: 17.775 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion: 97 Resp: 66397
Ion Ratio Lower Upper
97 100
99 65.4 51.0 76.4
61 44.0 33.8 50.8





#33

Carbon Tetrachloride

Concen: 17.937 ug/l

RT: 8.359 min Scan# 1109

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

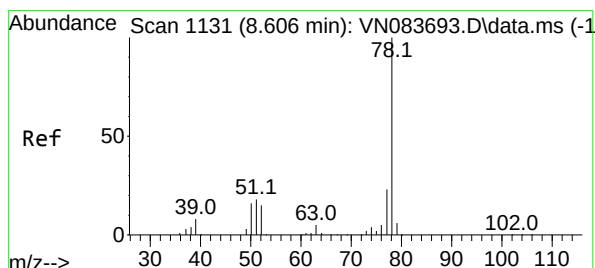
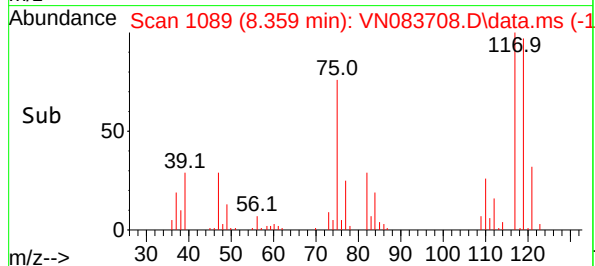
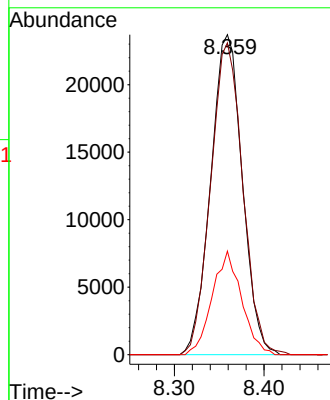
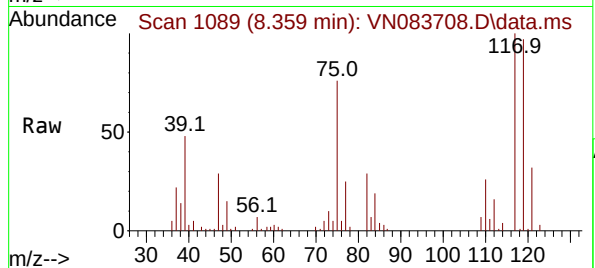
Tgt Ion:117	Resp:	5802
Ion Ratio	Lower	Upper
117	100	
119	97.4	77.7 116.5
121	32.4	27.0 40.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#34

Benzene

Concen: 18.012 ug/l

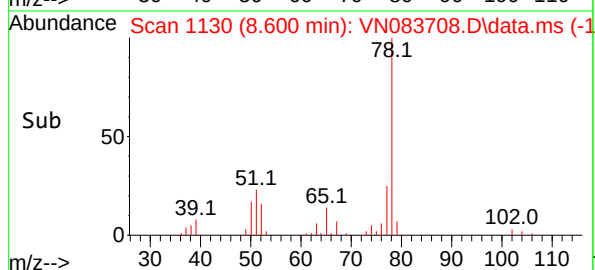
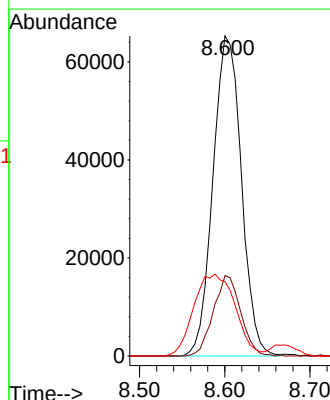
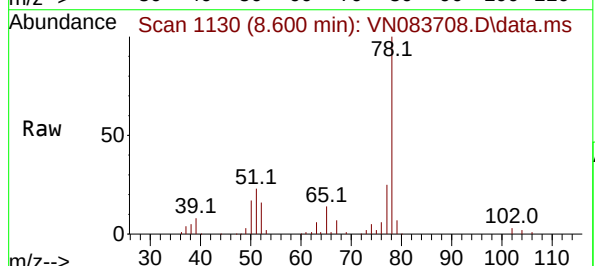
RT: 8.600 min Scan# 1130

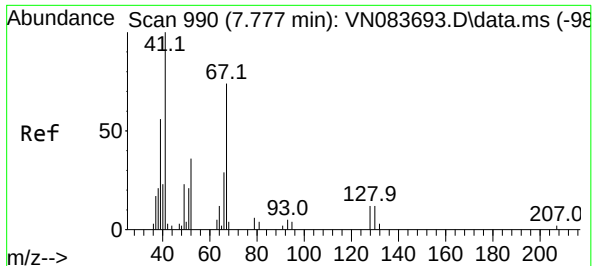
Delta R.T. -0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion: 78	Resp:	151159
Ion Ratio	Lower	Upper
78	100	
77	25.1	19.2 28.8
51	20.0	13.3 19.9





#35

Methacrylonitrile

Concen: 19.692 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 41 Resp: 2918

Ion Ratio Lower Upper

41 100

39 56.3 25.3 75.9

67 68.2 38.7 116.1

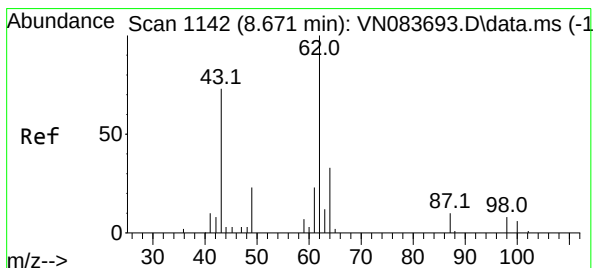
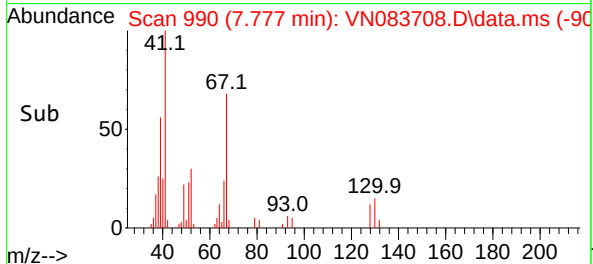
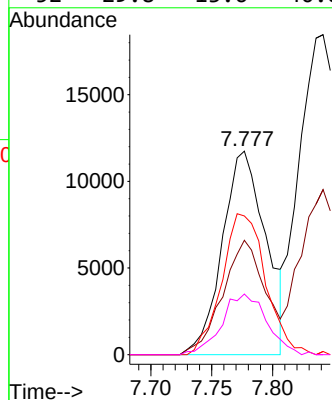
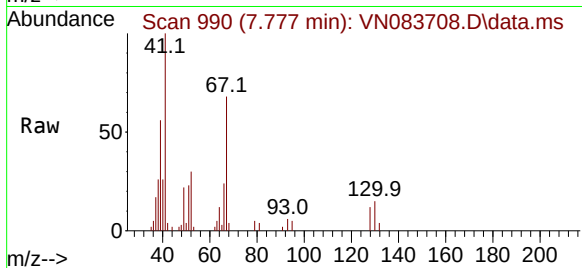
52 29.8 13.6 40.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#36

1,2-Dichloroethane

Concen: 18.100 ug/l

RT: 8.671 min Scan# 1142

Delta R.T. 0.000 min

Lab File: VN083708.D

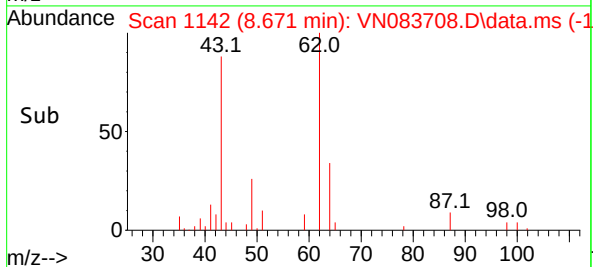
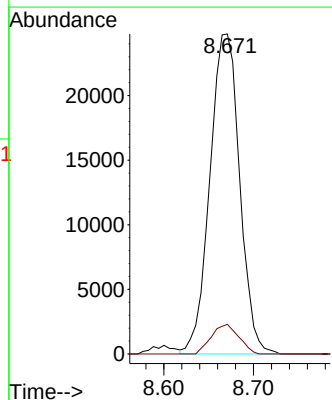
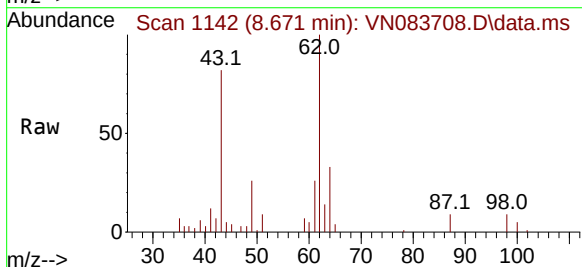
Acq: 09 Sep 2024 10:03

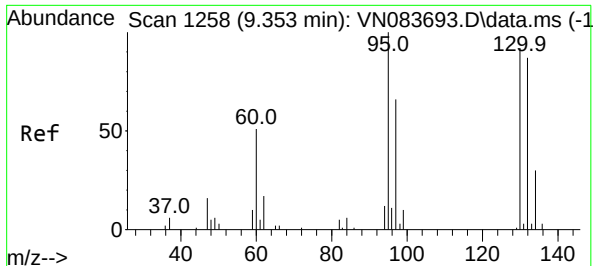
Tgt Ion: 62 Resp: 57105

Ion Ratio Lower Upper

62 100

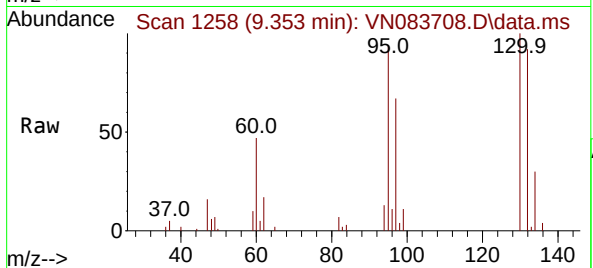
98 8.5 8.2 12.4





#37
Trichloroethene
Concen: 17.789 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

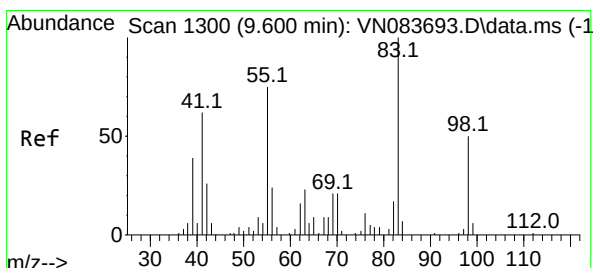
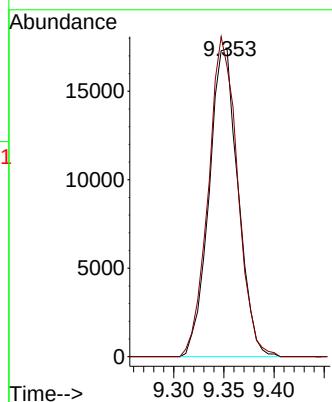
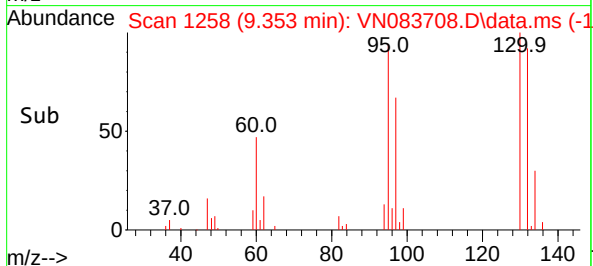
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01



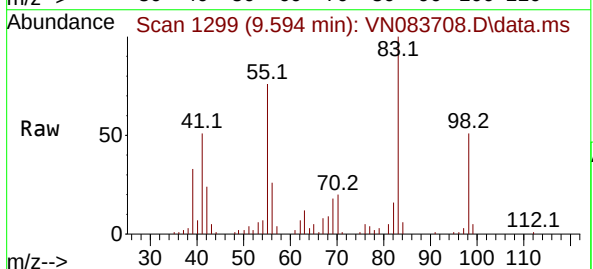
Tgt Ion:130 Resp: 3505
Ion Ratio Lower Upper
130 100
95 94.2 80.2 120.4

Manual Integrations
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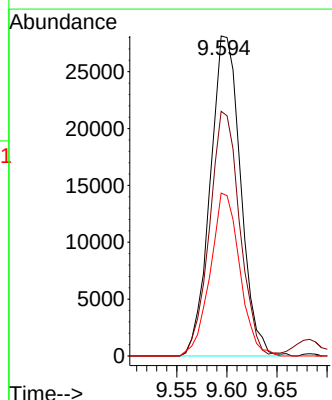
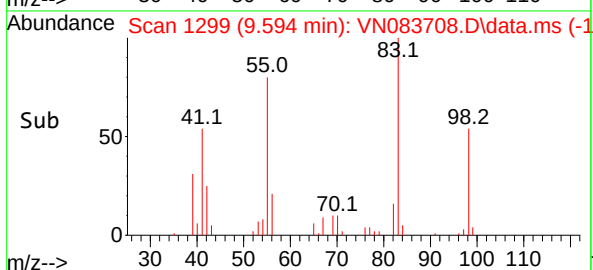
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

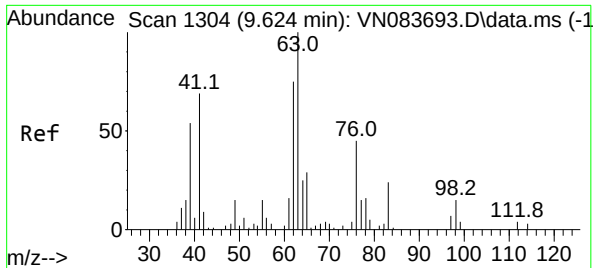


#38
Methylcyclohexane
Concen: 17.705 ug/l
RT: 9.594 min Scan# 1299
Delta R.T. -0.006 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03



Tgt Ion: 83 Resp: 59286
Ion Ratio Lower Upper
83 100
55 75.7 36.6 109.9
98 49.5 23.8 71.5





#39

1,2-Dichloropropane

Concen: 17.978 ug/l

RT: 9.618 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 63 Resp: 3631

Ion Ratio Lower Upper

63 100

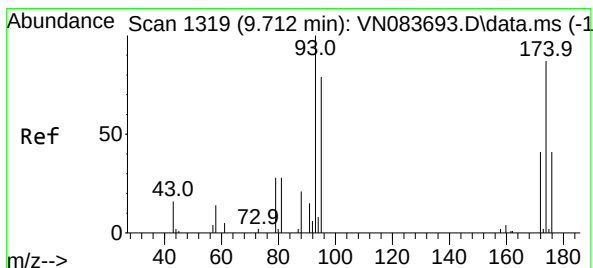
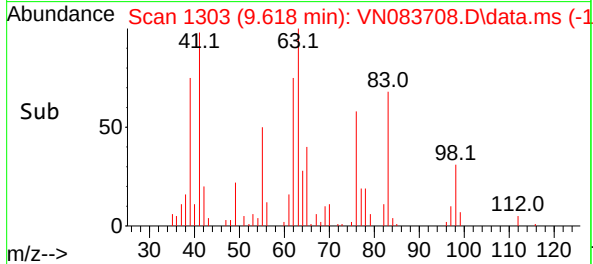
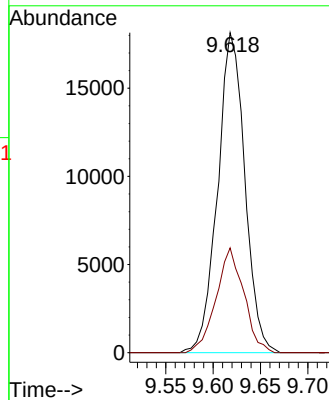
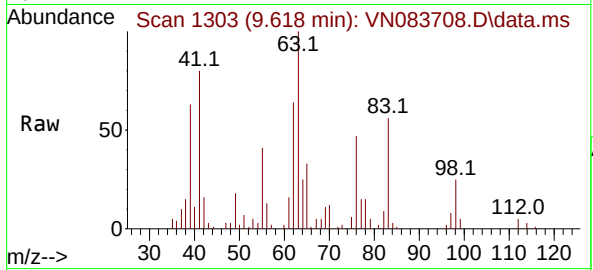
65 32.8 25.0 37.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#40

Dibromomethane

Concen: 18.018 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

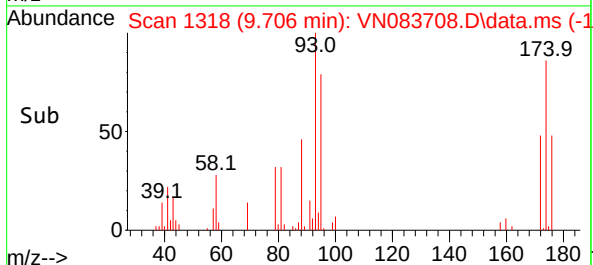
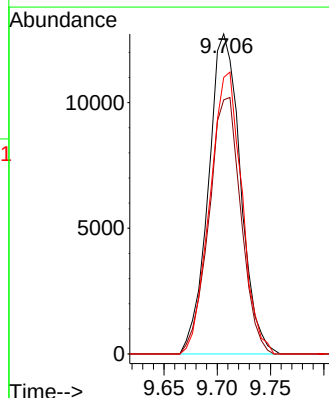
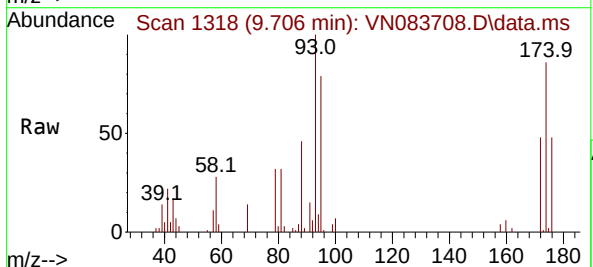
Tgt Ion: 93 Resp: 26610

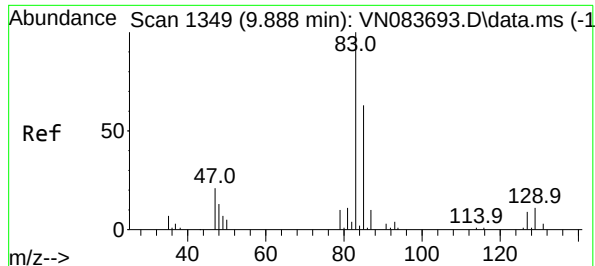
Ion Ratio Lower Upper

93 100

95 80.1 0.0 164.6

174 87.7 0.0 193.2





#41

Bromodichloromethane

Concen: 17.723 ug/l

RT: 9.888 min Scan# 1349

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 83 Resp: 5566

Ion Ratio Lower Upper

83 100

85 63.3 49.4 74.2

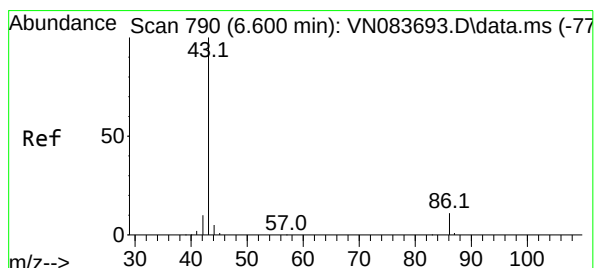
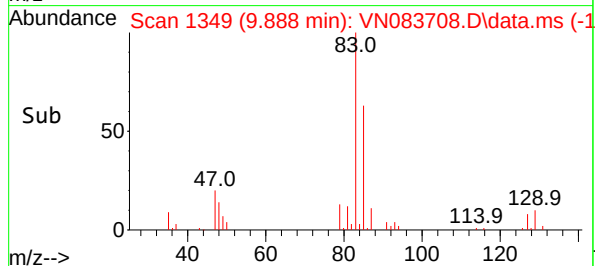
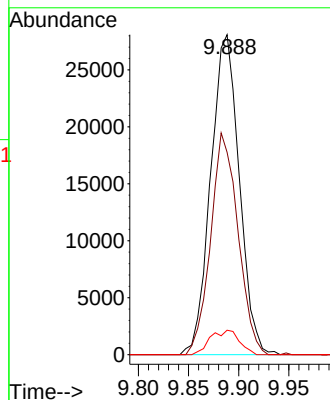
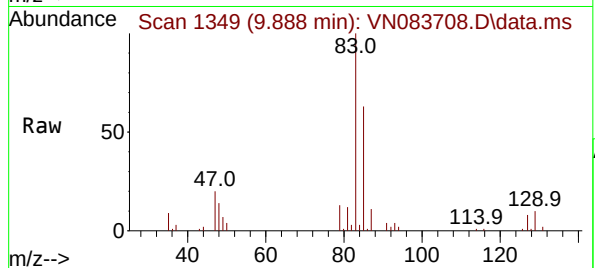
127 7.7 7.3 10.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#42

Vinyl Acetate

Concen: 83.137 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.000 min

Lab File: VN083708.D

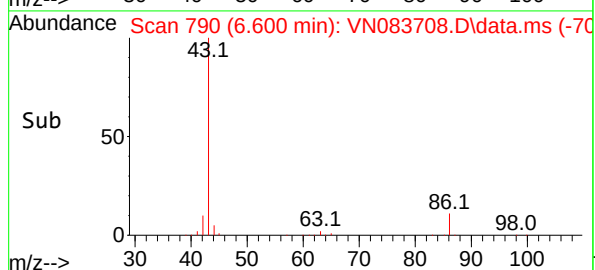
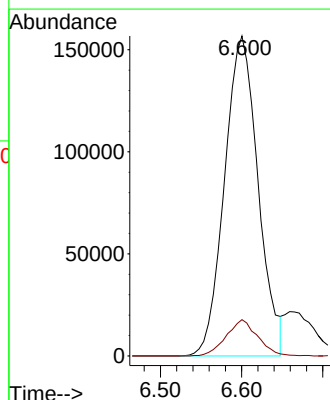
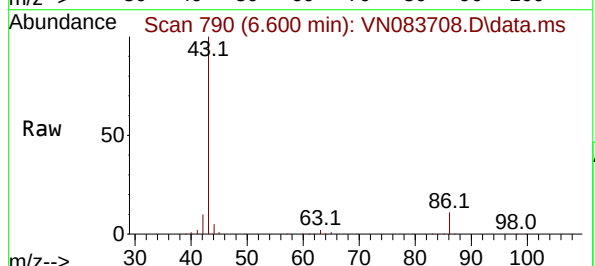
Acq: 09 Sep 2024 10:03

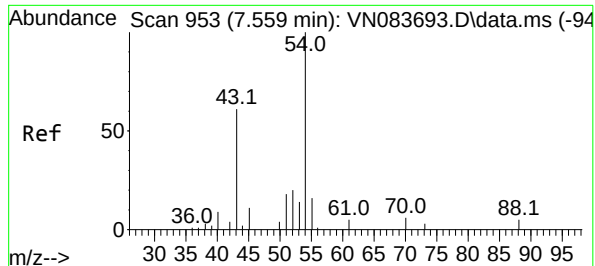
Tgt Ion: 43 Resp: 450676

Ion Ratio Lower Upper

43 100

86 10.6 9.4 14.2





#43

Ethyl Acetate

Concen: 18.379 ug/l

RT: 7.559 min Scan# 91

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 43 Resp: 4877

Ion Ratio Lower Upper

43 100

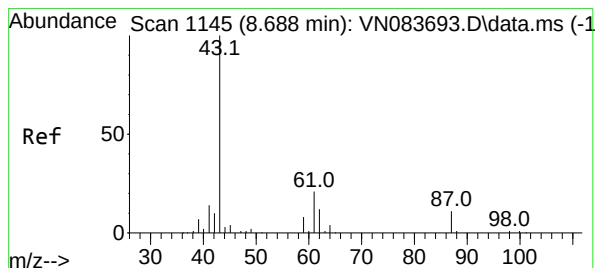
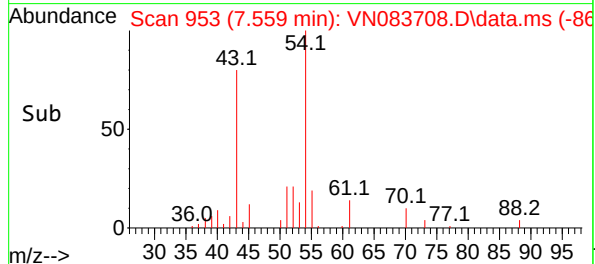
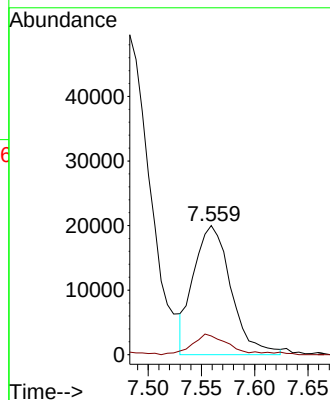
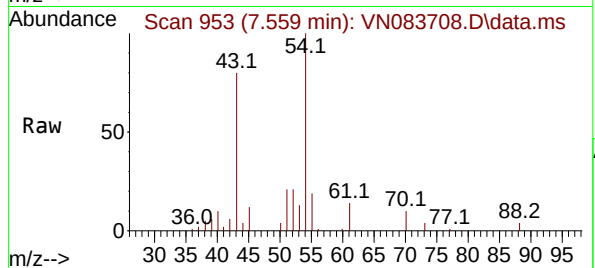
45 14.4 10.6 15.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#44

Isopropyl Acetate

Concen: 18.730 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. -0.006 min

Lab File: VN083708.D

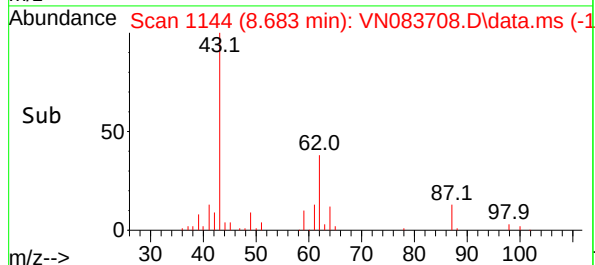
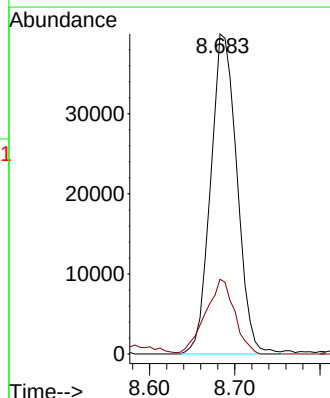
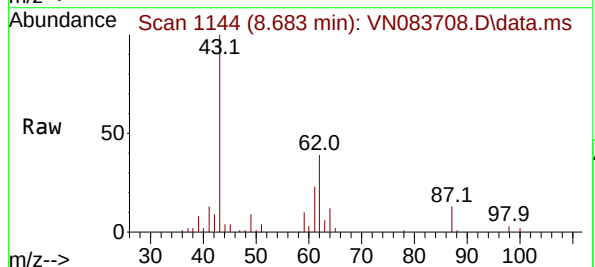
Acq: 09 Sep 2024 10:03

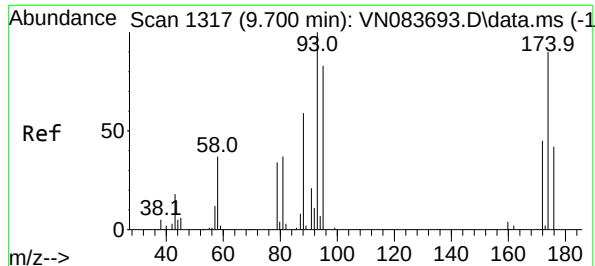
Tgt Ion: 43 Resp: 85971

Ion Ratio Lower Upper

43 100

61 25.7 25.0 37.4





#45

1,4-Dioxane

Concen: 420.192 ug/l

RT: 9.694 min Scan# 1316

Delta R.T. -0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 88 Resp: 1504

Ion Ratio Lower Upper

88 100

43 26.6 19.8 29.6

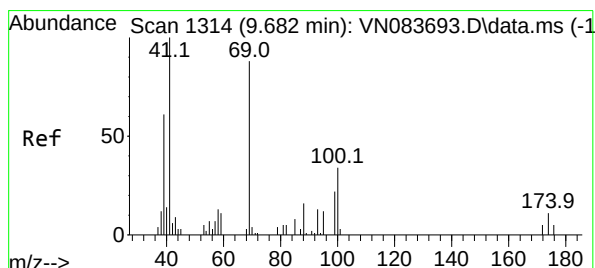
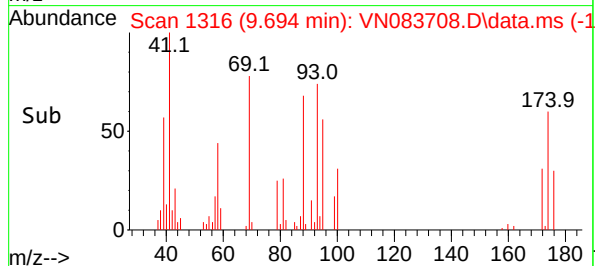
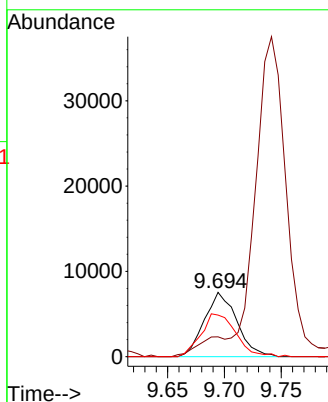
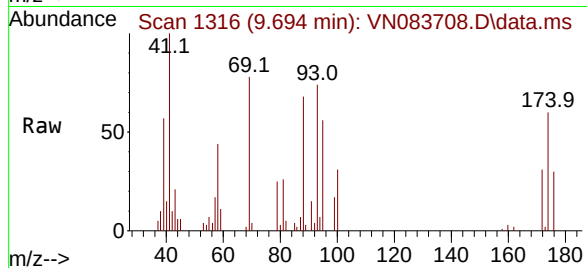
58 70.1 55.4 83.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#46

Methyl methacrylate

Concen: 19.109 ug/l

RT: 9.683 min Scan# 1314

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

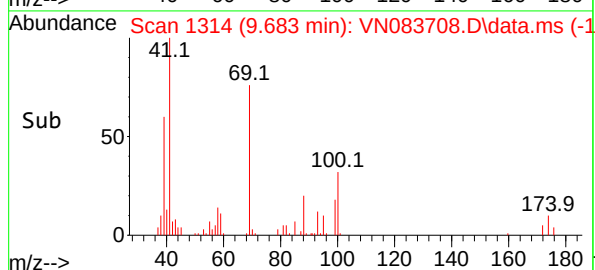
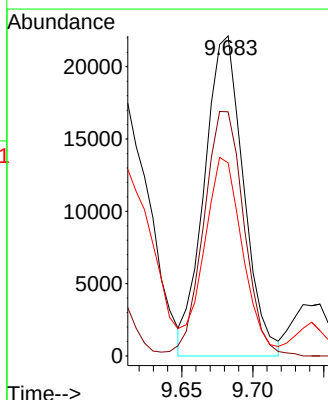
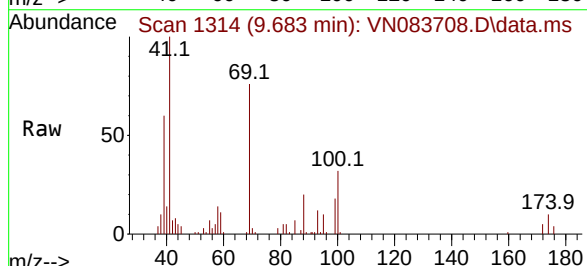
Tgt Ion: 41 Resp: 42453

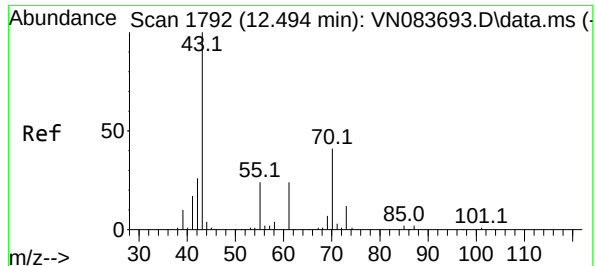
Ion Ratio Lower Upper

41 100

69 78.5 51.1 153.3

39 60.2 25.8 77.3





#47

n-amy1 Acetate

Concen: 19.035 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 43 Resp: 7739

Ion Ratio Lower Upper

43 100

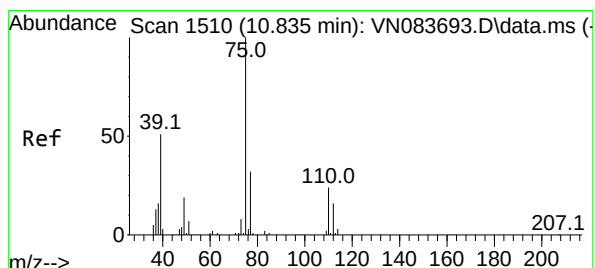
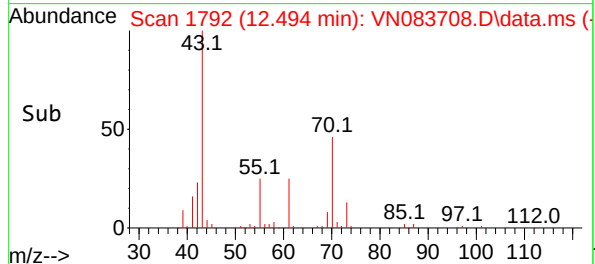
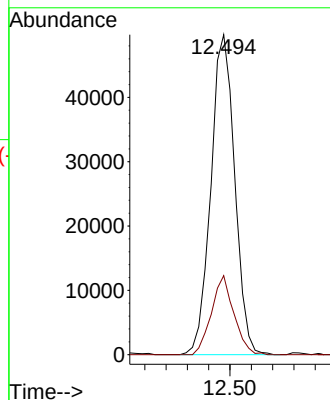
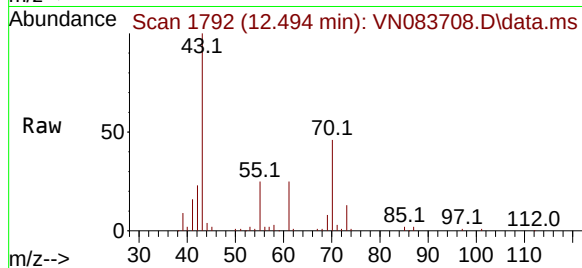
55 23.2 23.4 35.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#48

t-1,3-Dichloropropene

Concen: 17.428 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN083708.D

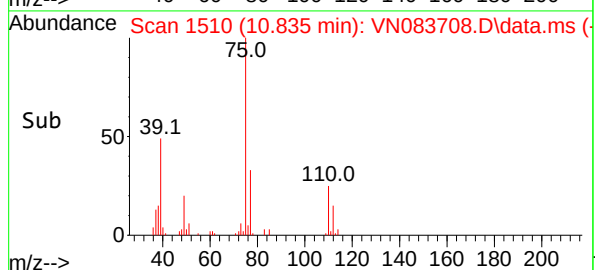
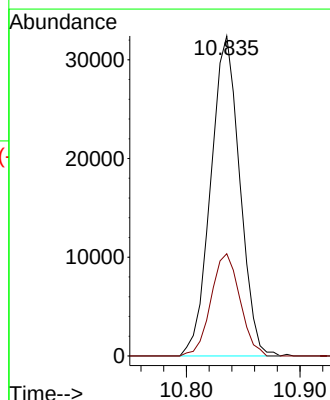
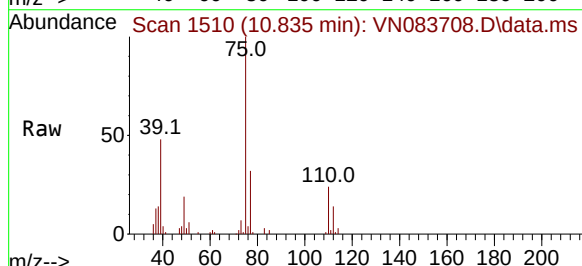
Acq: 09 Sep 2024 10:03

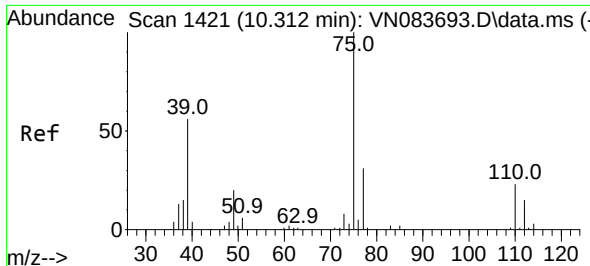
Tgt Ion: 75 Resp: 57570

Ion Ratio Lower Upper

75 100

77 32.0 23.8 35.6





#49

cis-1,3-Dichloropropene

Concen: 18.011 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 75 Resp: 61875

Ion Ratio Lower Upper

75 100

77 30.0 24.9 37.3

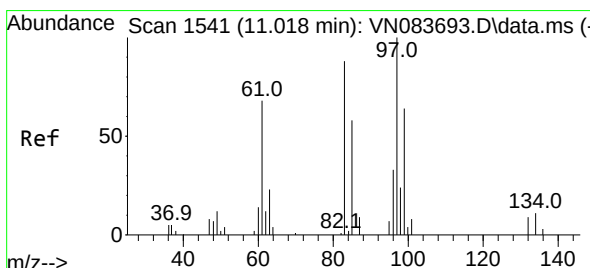
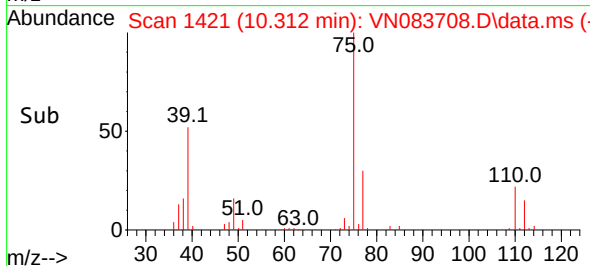
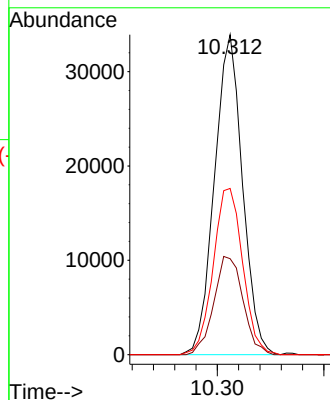
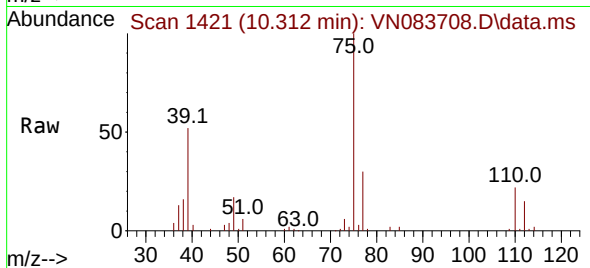
39 51.9 31.0 46.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#50

1,1,2-Trichloroethane

Concen: 18.793 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion: 97 Resp: 35316

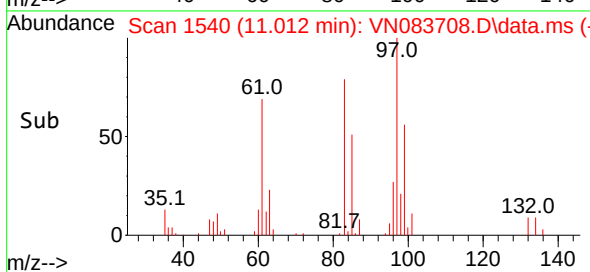
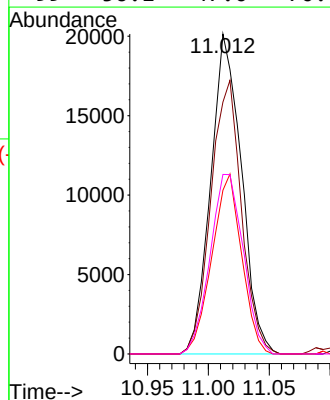
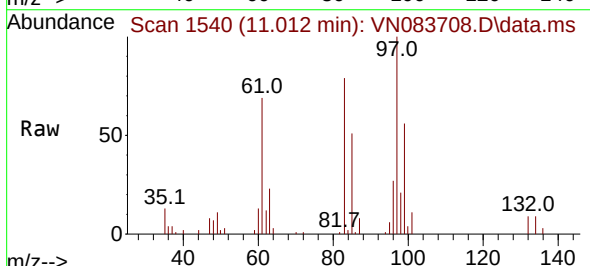
Ion Ratio Lower Upper

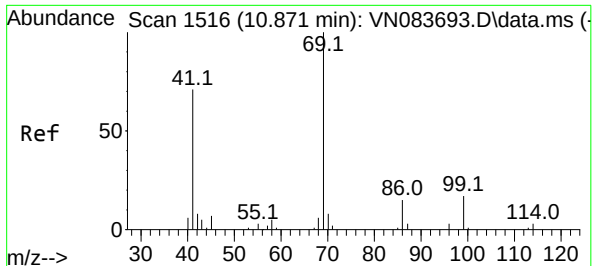
97 100

83 78.7 68.1 102.1

85 51.2 41.8 62.6

99 56.1 47.0 70.4





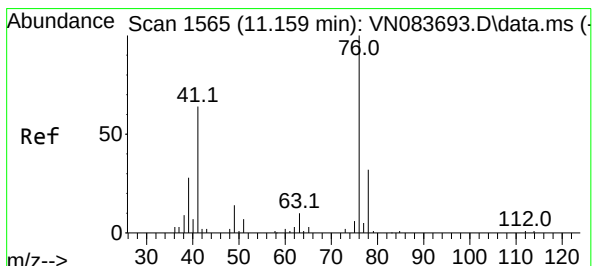
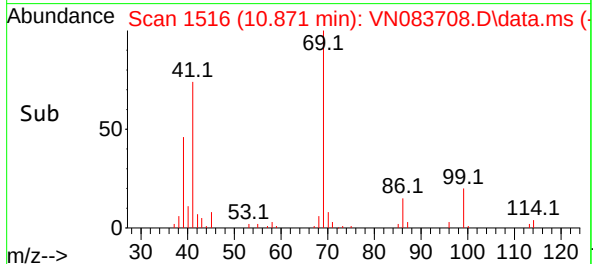
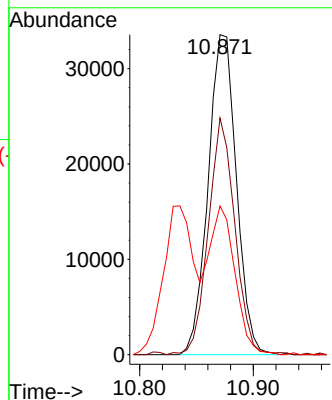
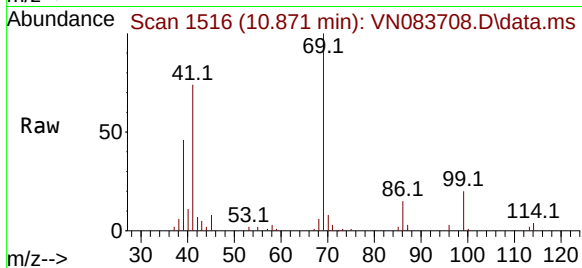
#51
Ethyl methacrylate
Concen: 18.117 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 69 Resp: 5816
Ion Ratio Lower Upper
69 100
41 73.5 25.5 76.5
39 46.4 16.0 47.9

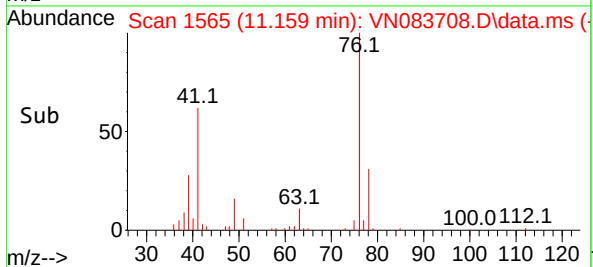
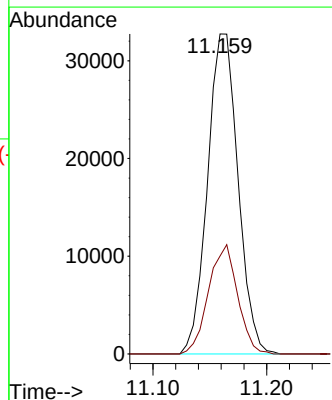
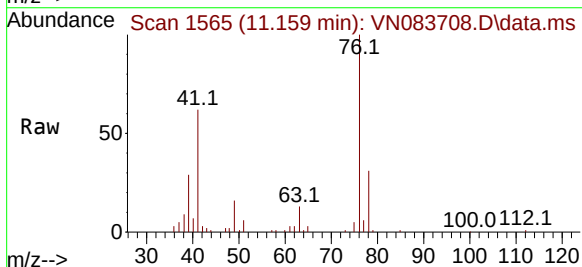
Manual Integrations
APPROVED

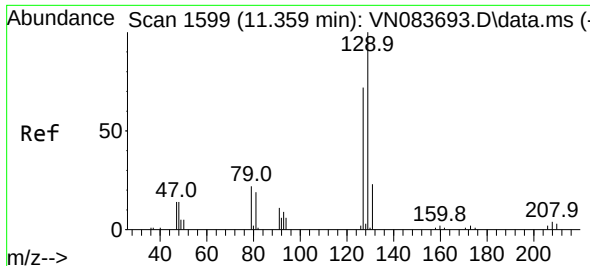
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#52
1,3-Dichloropropane
Concen: 17.994 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion: 76 Resp: 61067
Ion Ratio Lower Upper
76 100
78 32.5 0.0 65.8





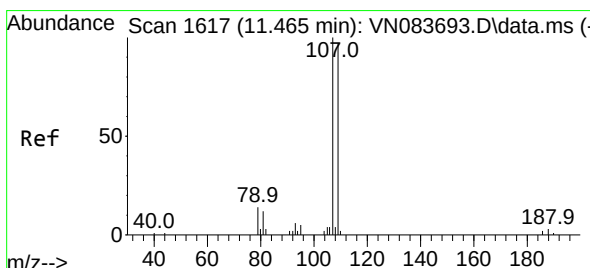
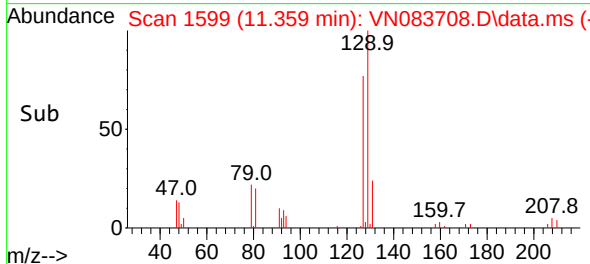
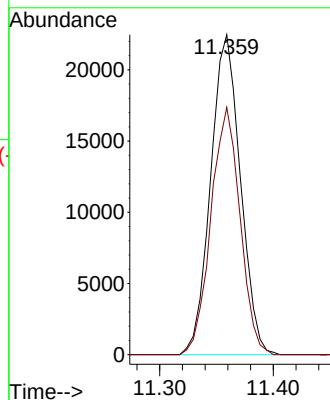
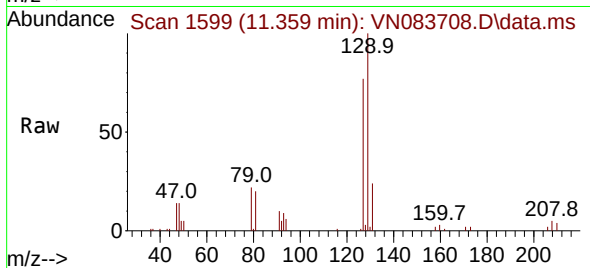
#53
Dibromochloromethane
Concen: 18.153 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion:129 Resp: 40918
Ion Ratio Lower Upper
129 100
127 75.5 39.4 118.1

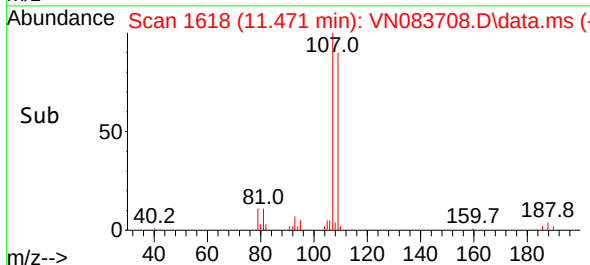
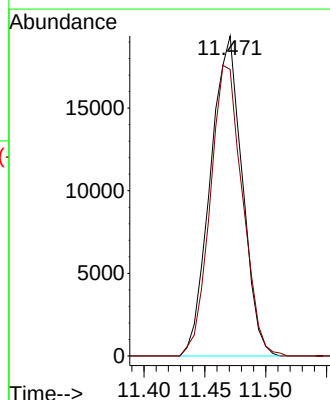
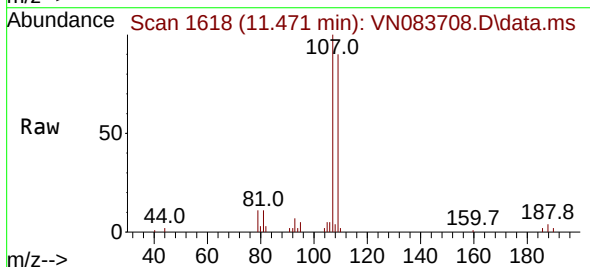
Manual Integrations
APPROVED

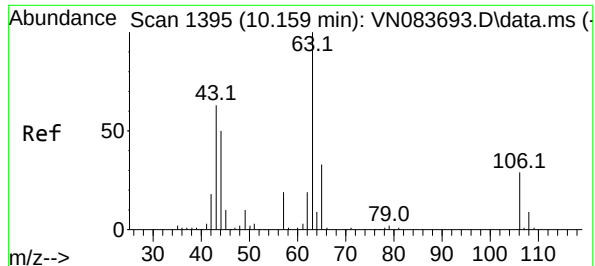
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#54
1,2-Dibromoethane
Concen: 18.113 ug/l
RT: 11.471 min Scan# 1618
Delta R.T. 0.006 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion:107 Resp: 35213
Ion Ratio Lower Upper
107 100
109 92.0 74.7 112.1





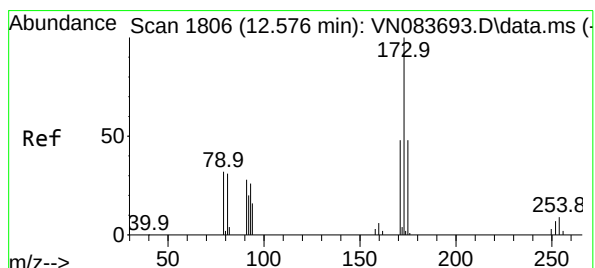
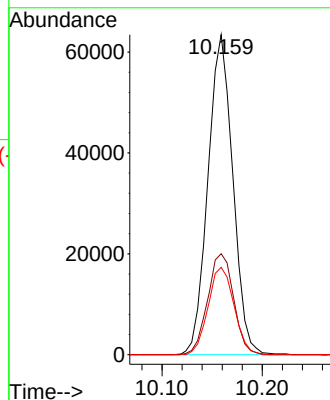
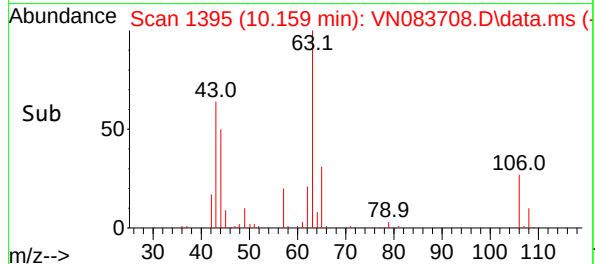
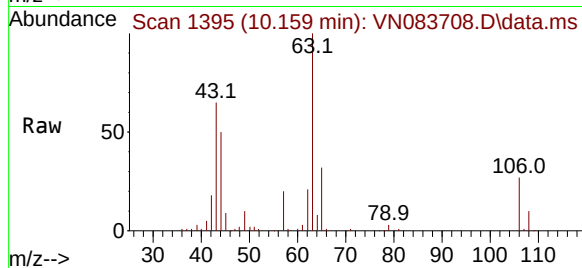
#55
2-Chloroethyl vinyl ether
Concen: 85.564 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 63 Resp: 109480
Ion Ratio Lower Upper
63 100
65 32.8 26.2 39.2
106 28.4 23.8 35.8

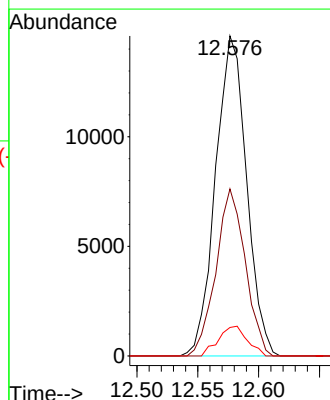
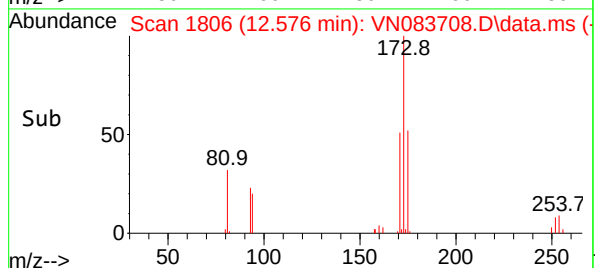
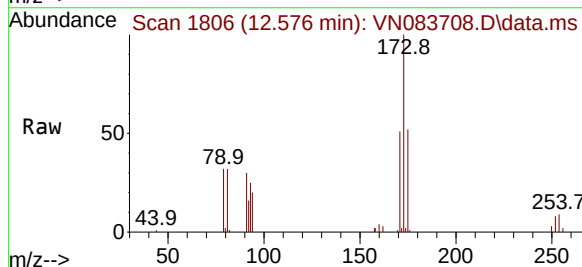
Manual Integrations
APPROVED

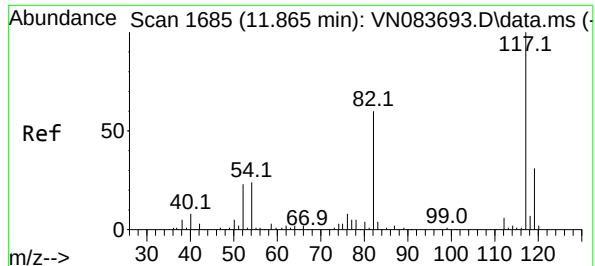
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#56
Bromoform
Concen: 18.061 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

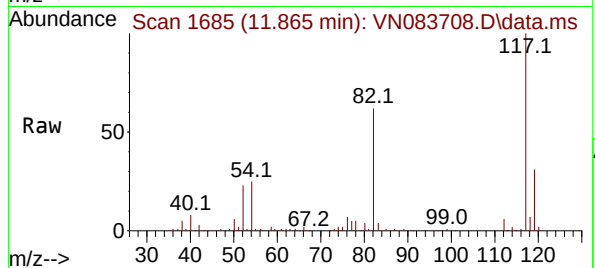
Tgt Ion:173 Resp: 25863
Ion Ratio Lower Upper
173 100
175 49.4 40.0 60.0
254 8.7 8.3 12.5





#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 117
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

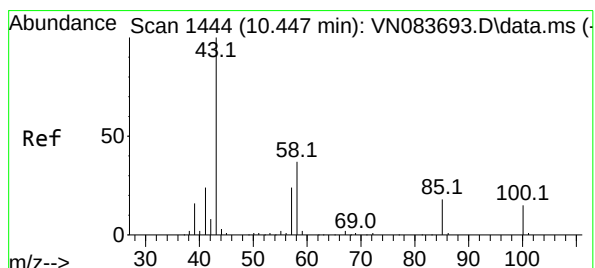
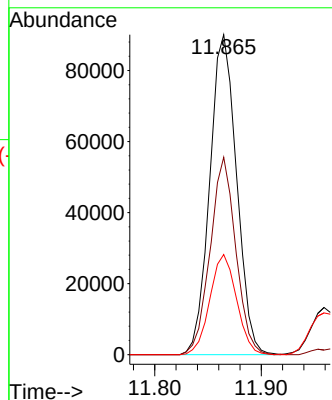
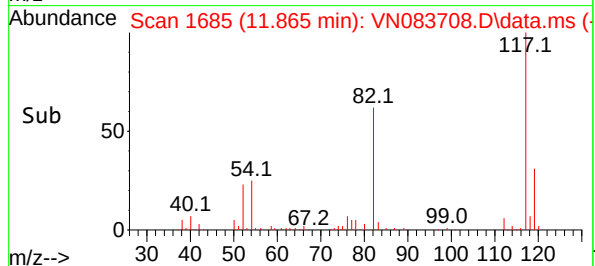
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01



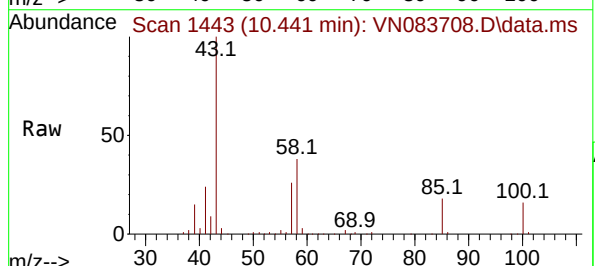
Tgt Ion: 117 Resp: 15786
Ion Ratio Lower Upper
117 100
82 58.9 46.6 69.8
119 31.2 25.4 38.2

Manual Integrations
APPROVED

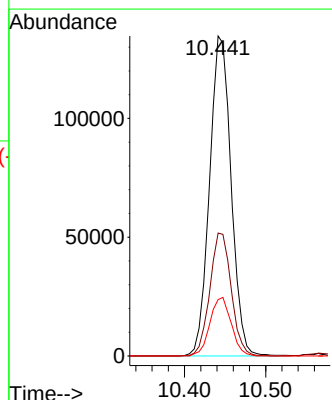
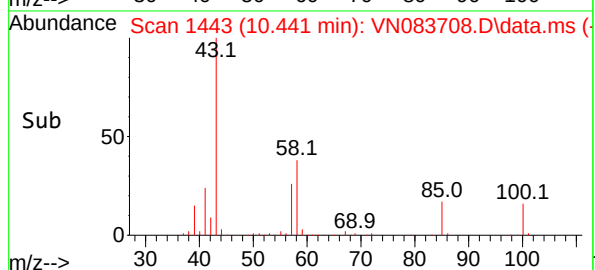
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

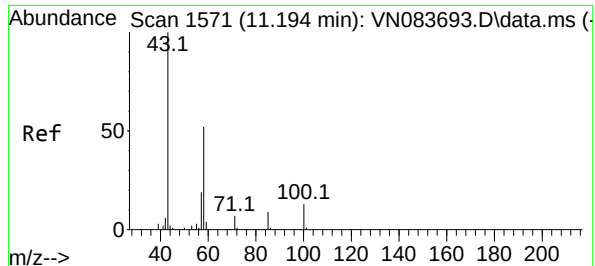


#58
4-Methyl-2-Pentanone
Concen: 99.295 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. -0.006 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03



Tgt Ion: 43 Resp: 248553
Ion Ratio Lower Upper
43 100
58 38.2 36.5 54.7
85 18.0 19.5 29.3#





#59

2-Hexanone

Concen: 100.397 ug/l

RT: 11.194 min Scan# 1571

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 43 Resp: 18989

Ion Ratio Lower Upper

43 100

58 52.3 50.4 75.6

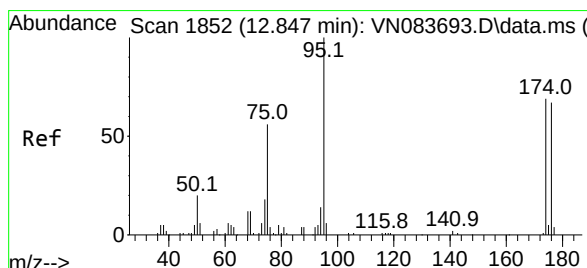
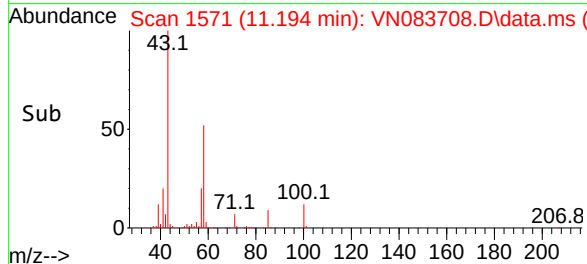
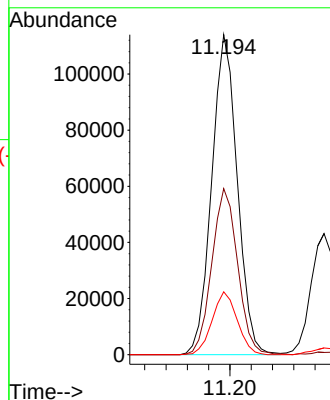
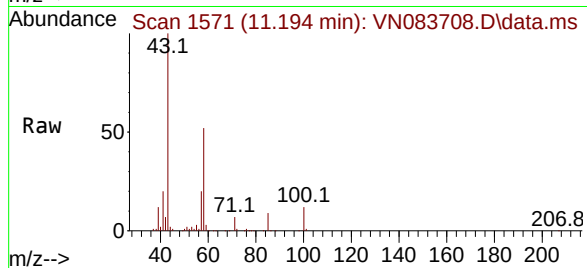
57 19.3 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#60

4-Bromofluorobenzene

Concen: 29.823 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

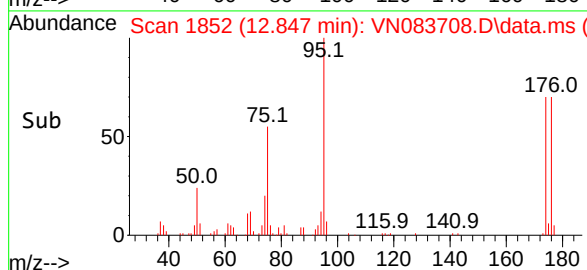
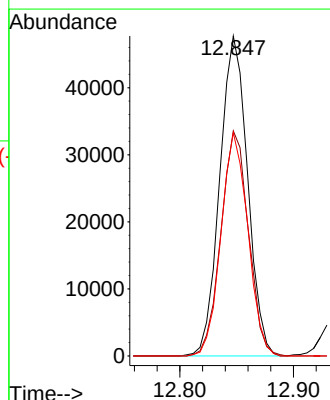
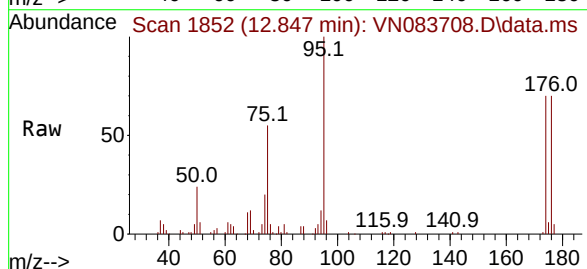
Tgt Ion: 95 Resp: 81142

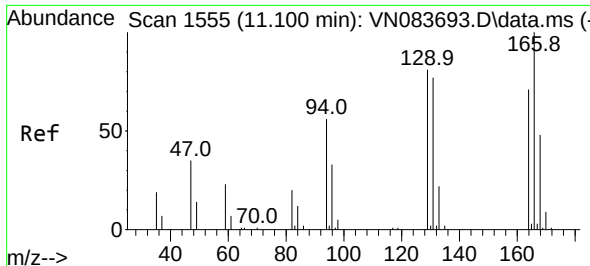
Ion Ratio Lower Upper

95 100

174 69.7 60.5 90.7

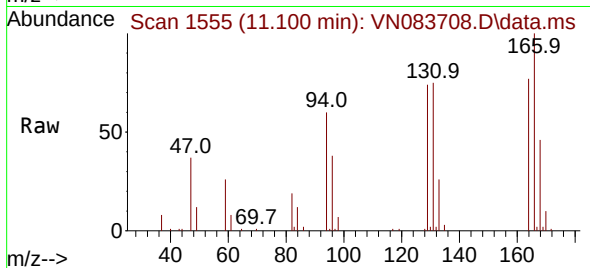
176 67.4 57.8 86.6





#61
Tetrachloroethene
Concen: 17.282 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

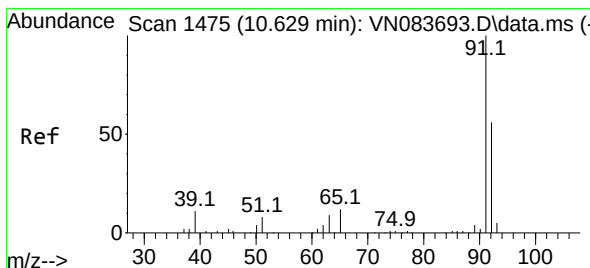
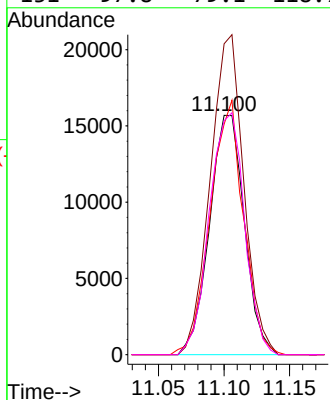
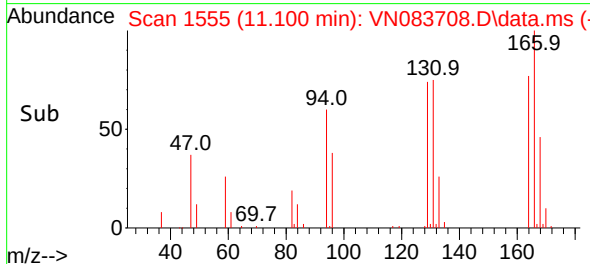
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01



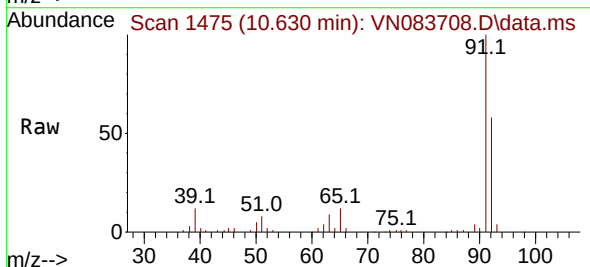
Tgt Ion:164 Resp: 28874
Ion Ratio Lower Upper
164 100
166 129.9 106.7 160.1
129 95.4 85.8 128.6
131 97.8 79.1 118.7

Manual Integrations
APPROVED

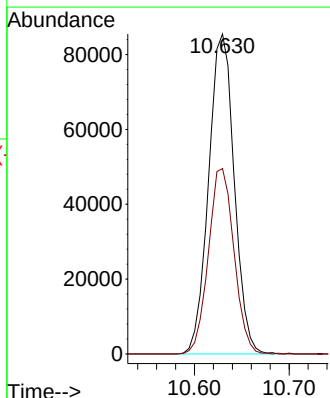
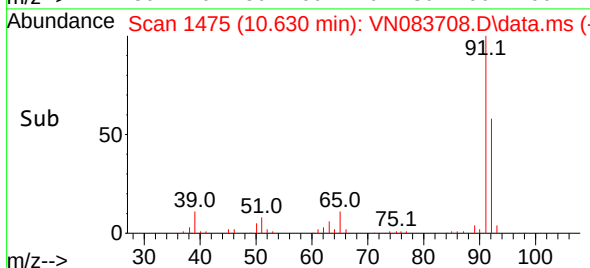
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024

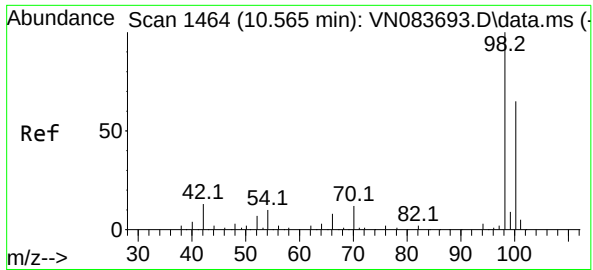


#62
Toluene
Concen: 17.713 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03



Tgt Ion: 91 Resp: 160730
Ion Ratio Lower Upper
91 100
92 57.9 46.5 69.7





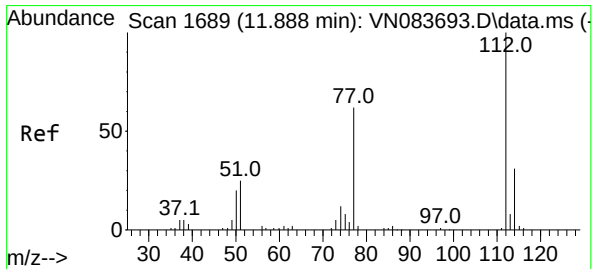
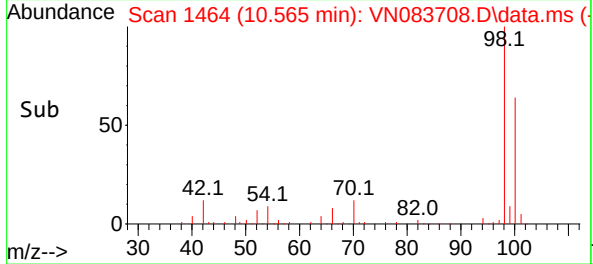
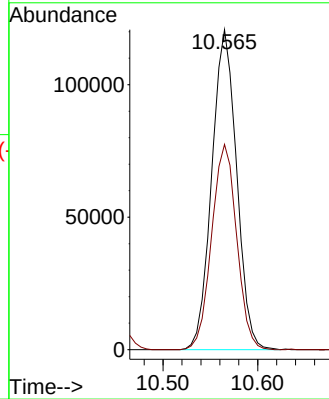
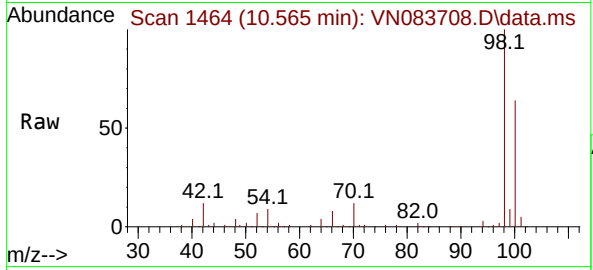
#63
Toluene-d8
Concen: 30.093 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 98 Resp: 219979
Ion Ratio Lower Upper
98 100
100 64.6 52.7 79.1

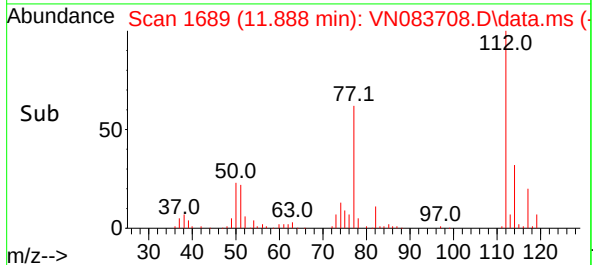
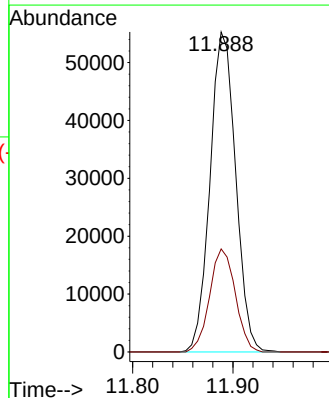
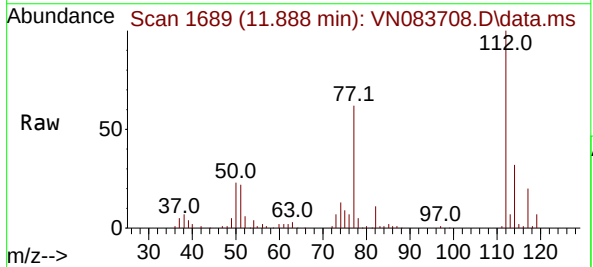
Manual Integrations
APPROVED

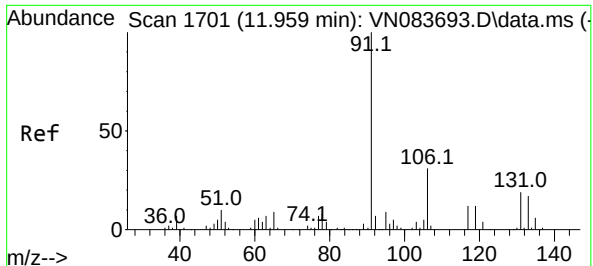
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#64
Chlorobenzene
Concen: 17.474 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion:112 Resp: 98169
Ion Ratio Lower Upper
112 100
114 32.2 26.6 39.8





#65

1,1,1,2-Tetrachloroethane

Concen: 17.921 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

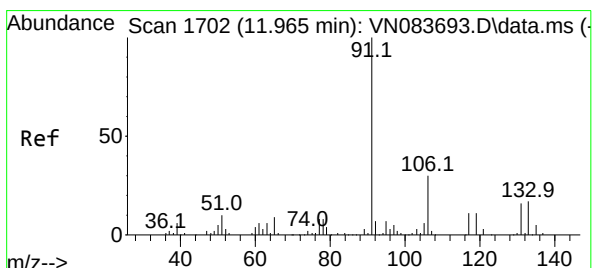
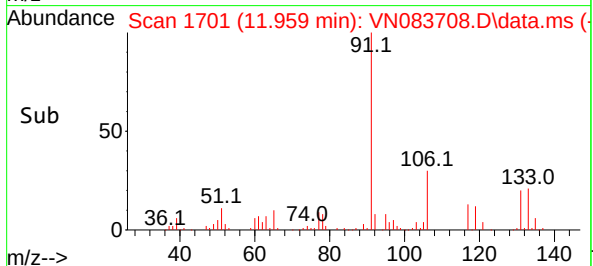
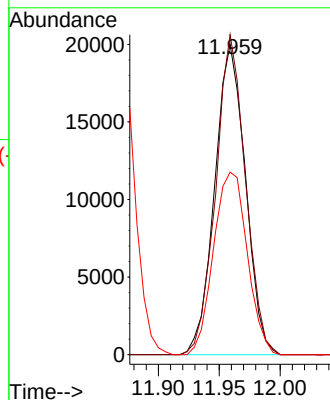
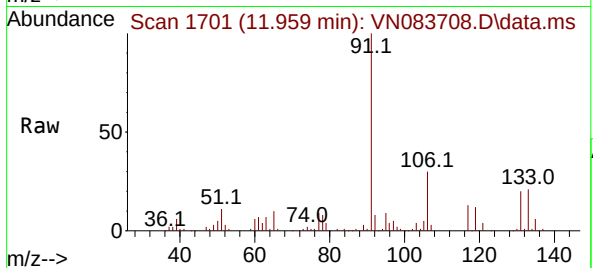
Tgt Ion:	131	Resp:	3507
Ion Ratio	Lower	Upper	
131	100		
133	99.5	0.0	188.0
119	64.6	0.0	122.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#66

Ethyl Benzene

Concen: 17.161 ug/l

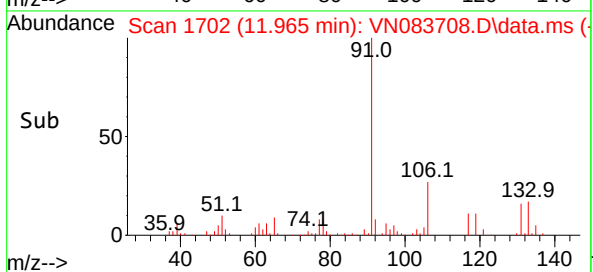
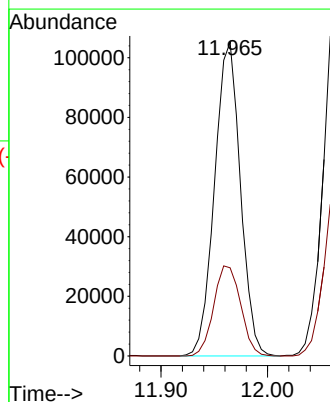
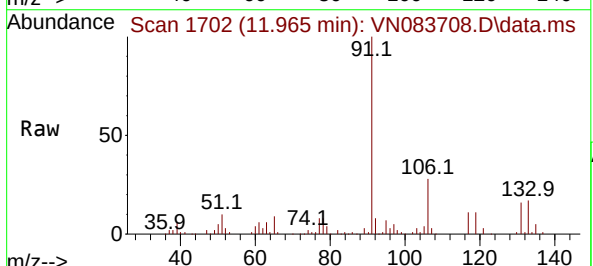
RT: 11.965 min Scan# 1702

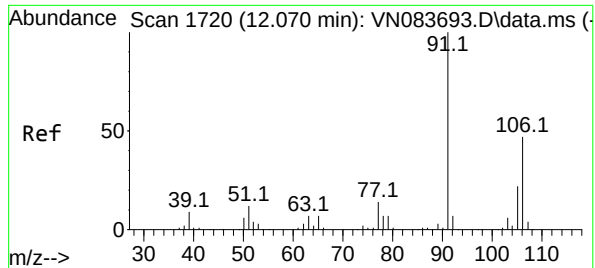
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	91	Resp:	177087
Ion Ratio	Lower	Upper	
91	100		
106	28.1	24.4	36.6





#67

m/p-Xylenes

Concen: 34.537 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion:106 Resp: 13111

Ion Ratio Lower Upper

106 100

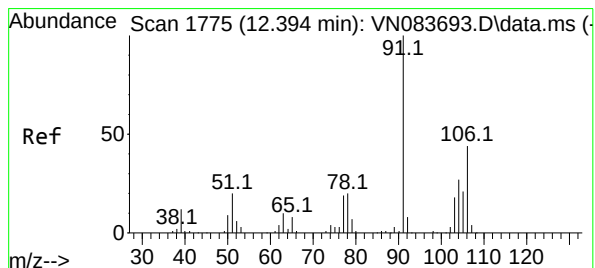
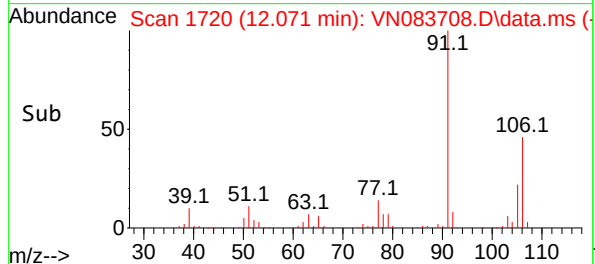
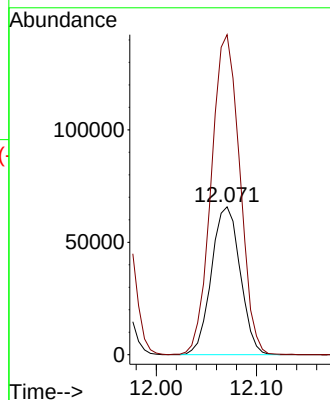
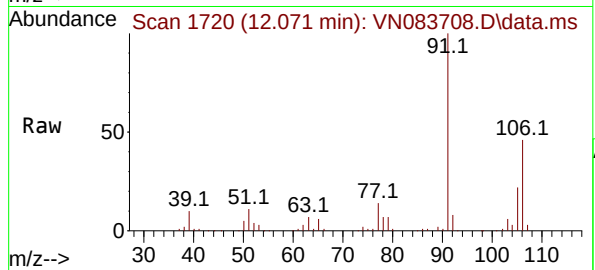
91 214.5 166.6 249.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#68

o-Xylene

Concen: 17.632 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN083708.D

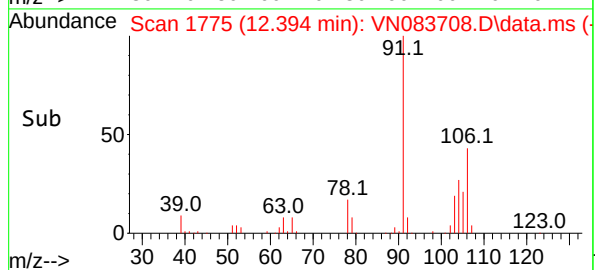
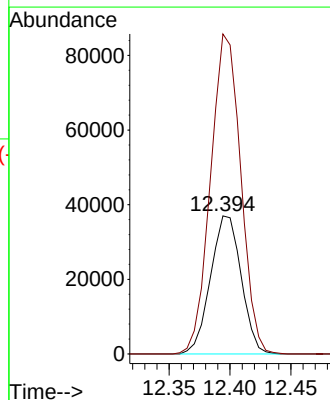
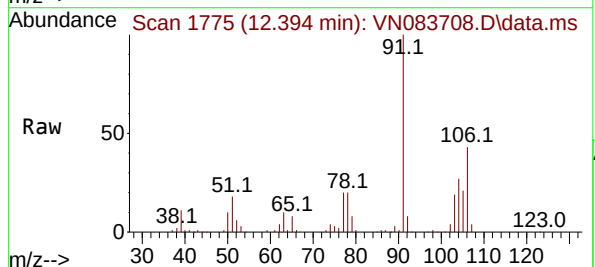
Acq: 09 Sep 2024 10:03

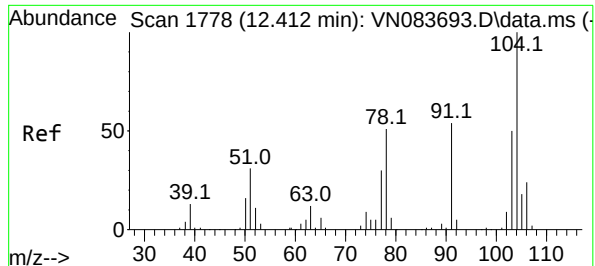
Tgt Ion:106 Resp: 64783

Ion Ratio Lower Upper

106 100

91 228.5 110.0 330.0





#69

Styrene

Concen: 17.227 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion:104 Resp: 10695

Ion Ratio Lower Upper

104 100

78 55.1 42.6 64.0

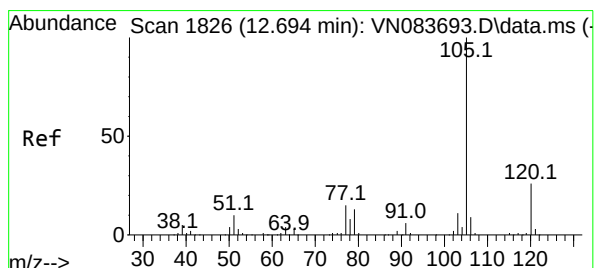
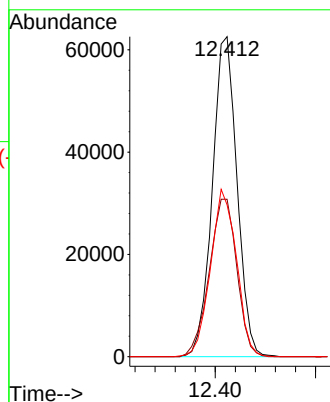
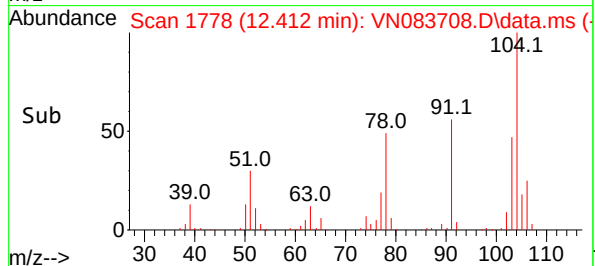
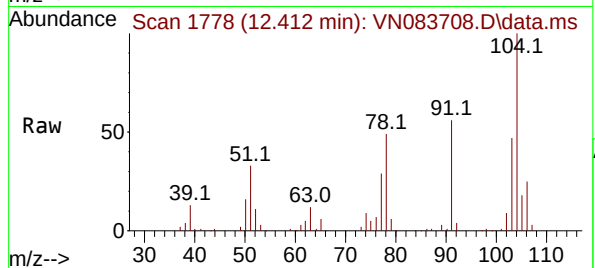
103 54.9 43.7 65.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#70

Isopropylbenzene

Concen: 17.654 ug/l

RT: 12.694 min Scan# 1826

Delta R.T. 0.000 min

Lab File: VN083708.D

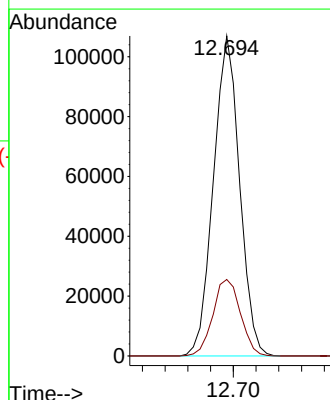
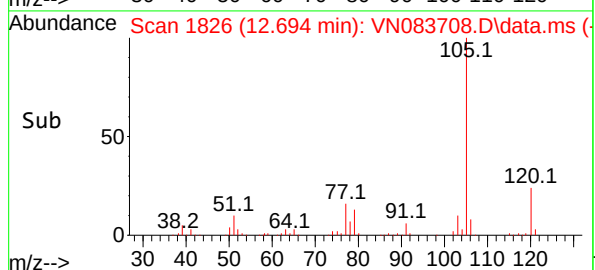
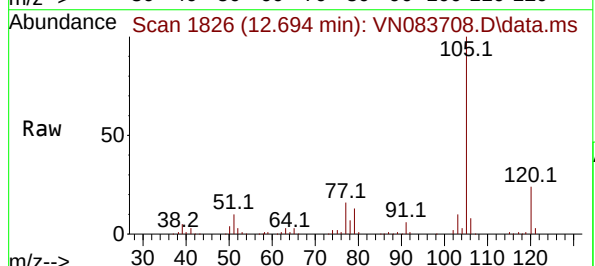
Acq: 09 Sep 2024 10:03

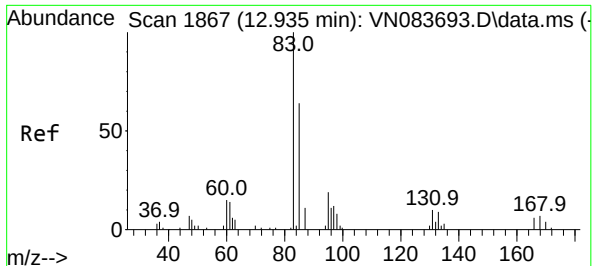
Tgt Ion:105 Resp: 171180

Ion Ratio Lower Upper

105 100

120 25.2 17.8 33.1





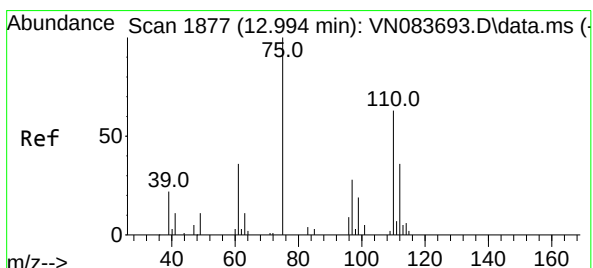
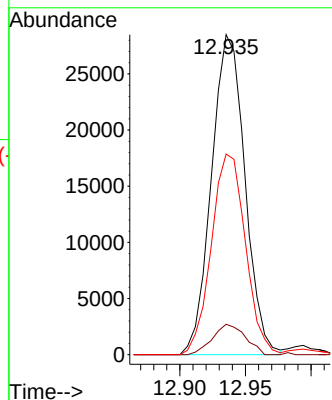
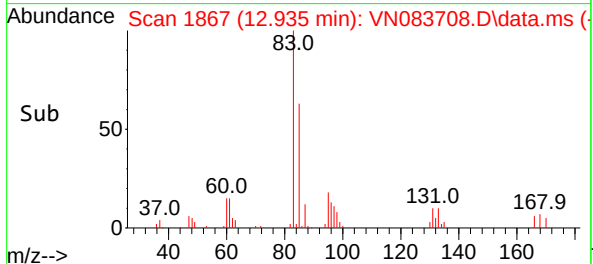
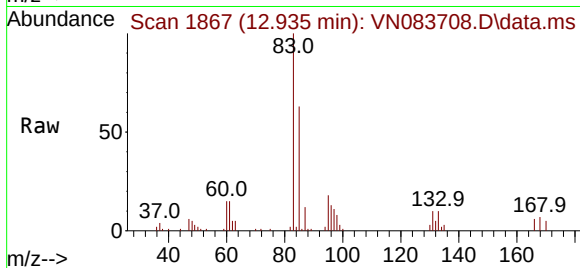
#71
1,1,2,2-Tetrachloroethane
Concen: 19.099 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 83 Resp: 5058
Ion Ratio Lower Upper
83 100
131 9.3 5.2 15.6
85 63.7 32.3 96.8

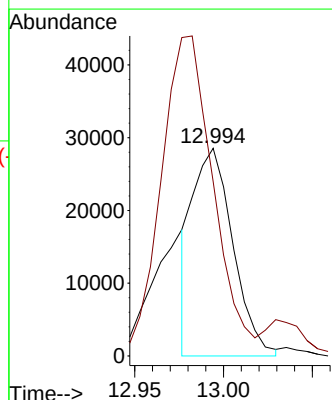
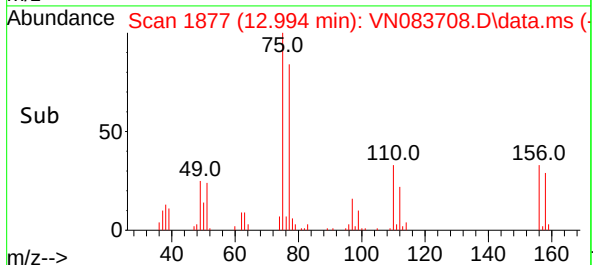
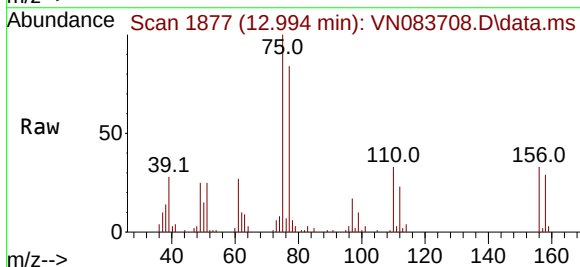
Manual Integrations
APPROVED

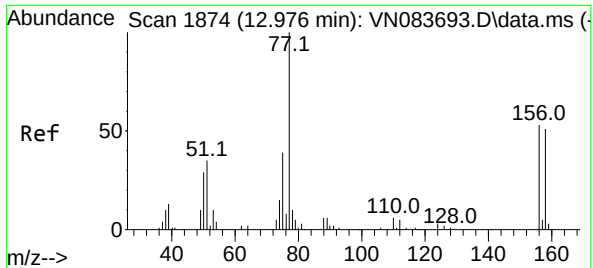
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#72
1,2,3-Trichloropropane
Concen: 19.367 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

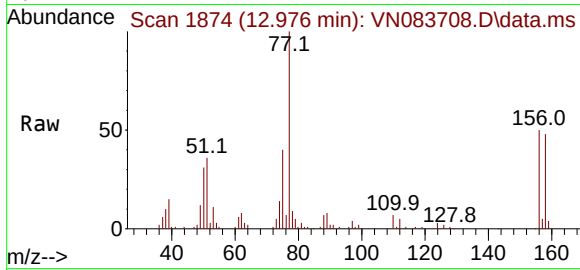
Tgt Ion: 75 Resp: 44968
Ion Ratio Lower Upper
75 100
77 198.8 0.0 367.6





#73
Bromobenzene
Concen: 17.709 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

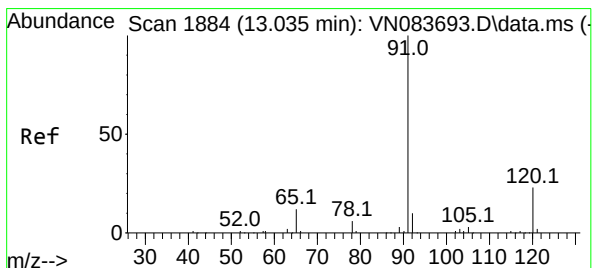
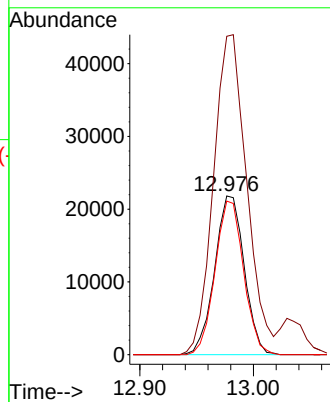
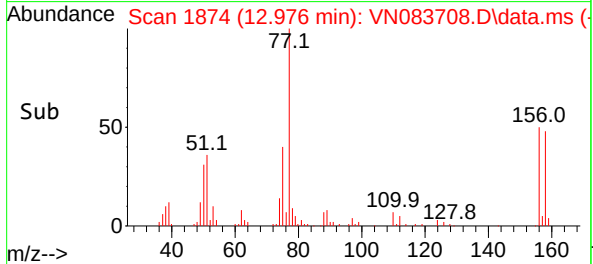
Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01



Tgt Ion:156 Resp: 3944
Ion Ratio Lower Upper
156 100
77 226.7 0.0 437.6
158 93.5 0.0 203.8

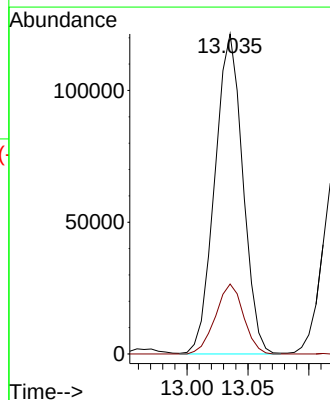
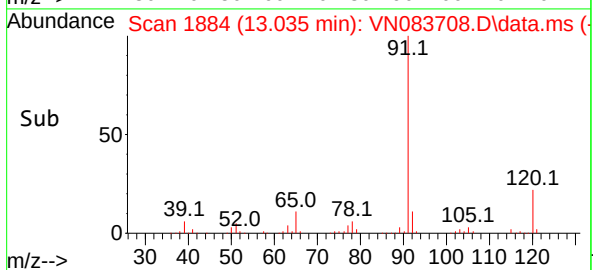
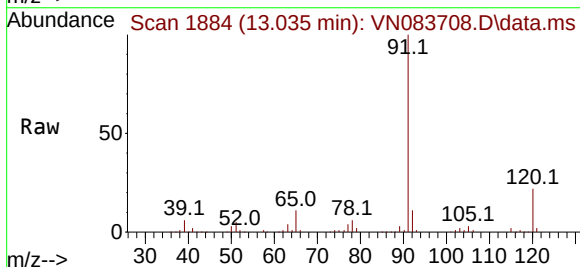
Manual Integrations
APPROVED

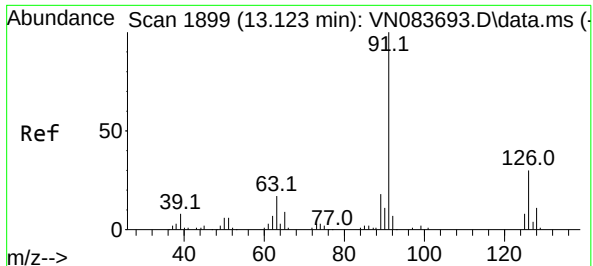
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#74
n-propylbenzene
Concen: 17.119 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion: 91 Resp: 194312
Ion Ratio Lower Upper
91 100
120 21.8 0.0 43.8





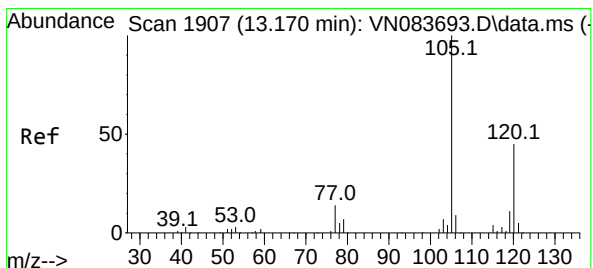
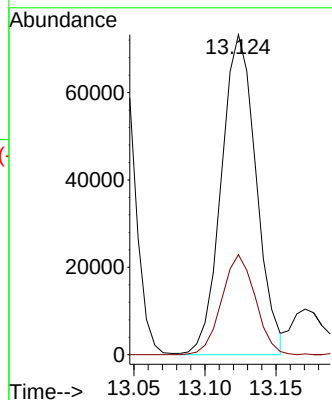
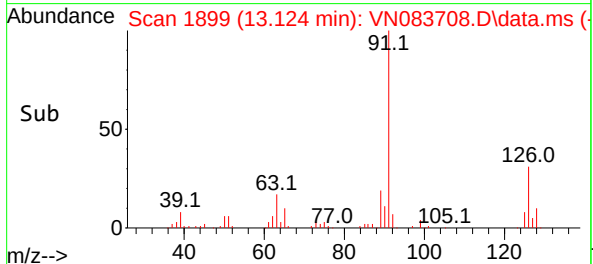
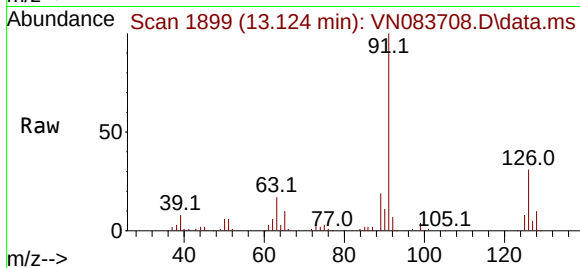
#75
2-Chlorotoluene
Concen: 17.673 ug/l
RT: 13.124 min Scan# 1899
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 91 Resp: 125200
Ion Ratio Lower Upper
91 100
126 30.0 0.0 61.2

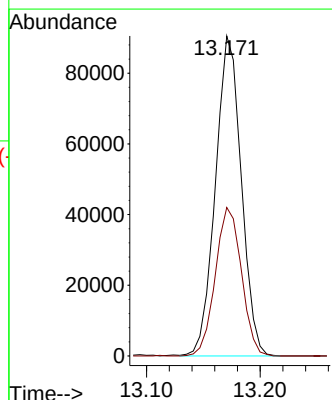
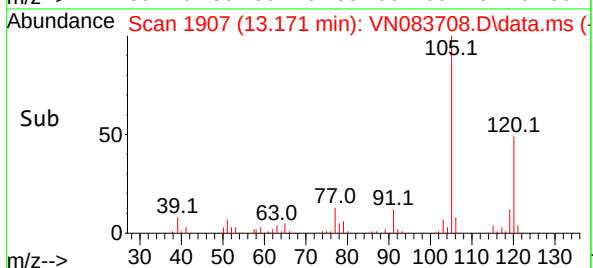
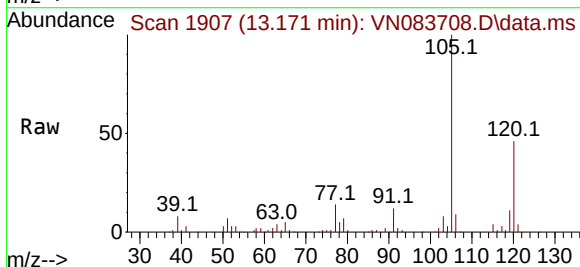
Manual Integrations
APPROVED

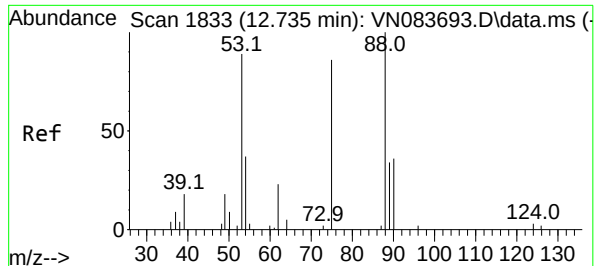
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#76
1,3,5-Trimethylbenzene
Concen: 17.665 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion:105 Resp: 143082
Ion Ratio Lower Upper
105 100
120 46.8 0.0 95.8





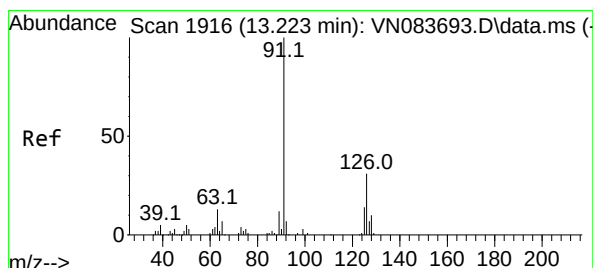
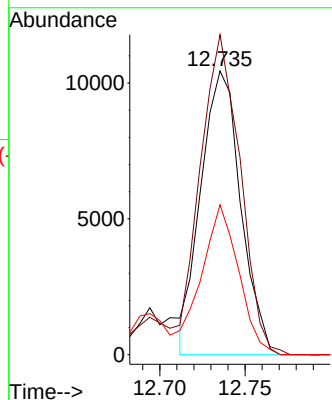
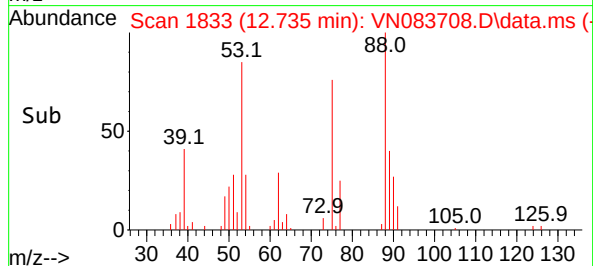
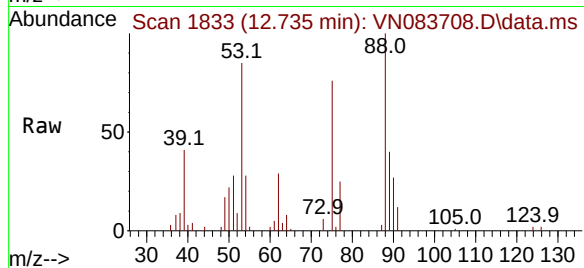
#77
t-1,4-Dichloro-2-butene
Concen: 17.263 ug/l
RT: 12.735 min Scan# 1833
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Instrument :
MSVOA_N
ClientSampleId :
VN0909WBSD01

Tgt Ion: 75 Resp: 1694
Ion Ratio Lower Upper
75 100
53 111.1 45.9 137.7
89 52.8 25.9 77.7

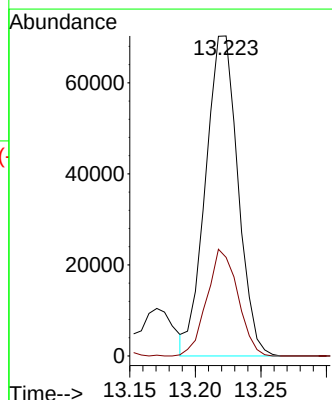
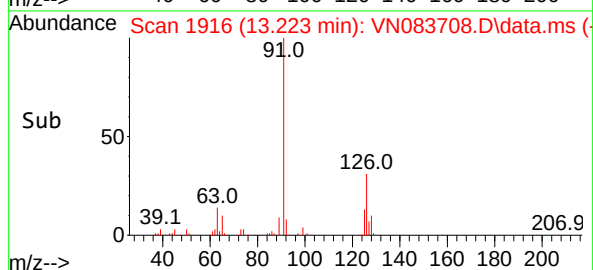
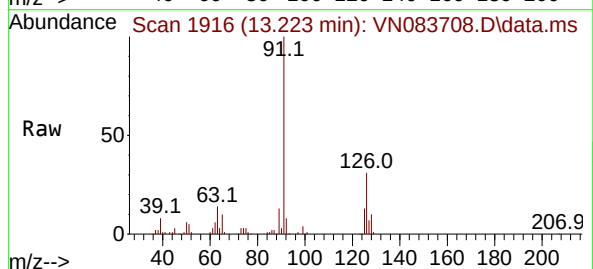
Manual Integrations
APPROVED

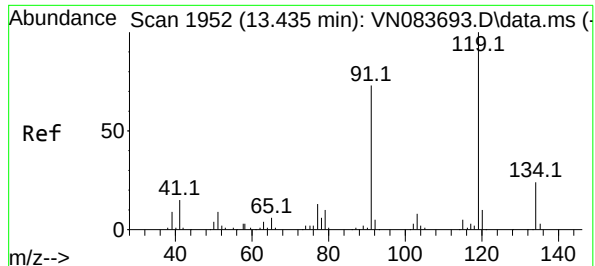
Reviewed By :John Carlone 09/10/2024
Supervised By :Mahesh Dadoda 09/10/2024



#78
4-Chlorotoluene
Concen: 16.832 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083708.D
Acq: 09 Sep 2024 10:03

Tgt Ion: 91 Resp: 120926
Ion Ratio Lower Upper
91 100
126 31.8 0.0 62.8





#79

tert-butylbenzene

Concen: 17.826 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

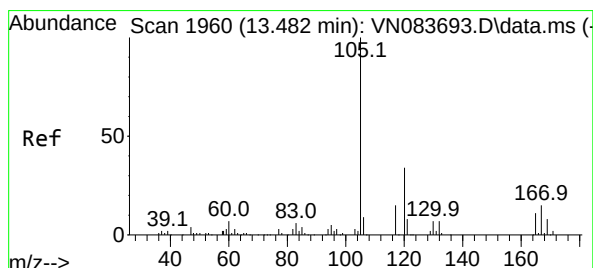
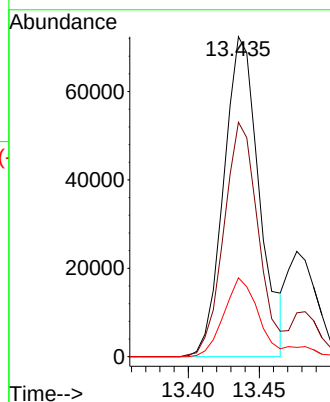
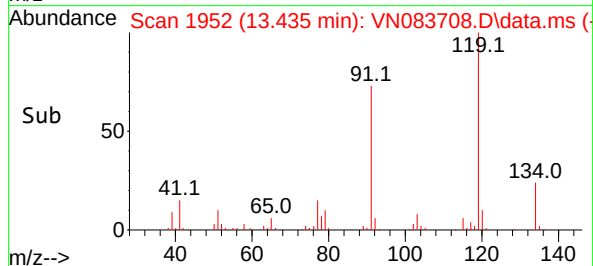
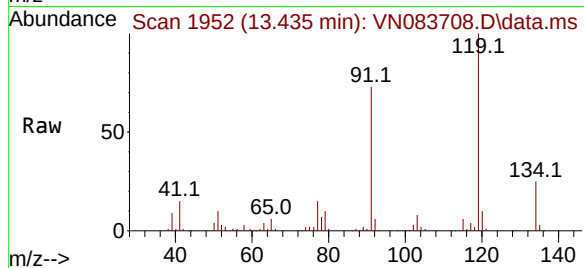
VN0909WBSD01

Tgt Ion:	119	Resp:	12625
Ion Ratio	Lower	Upper	
119	100		
91	70.9	0.0	138.8
134	23.6	0.0	48.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#80

1,2,4-Trimethylbenzene

Concen: 17.509 ug/l

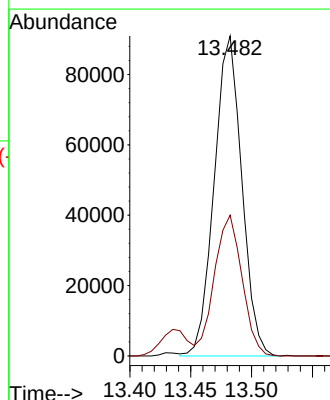
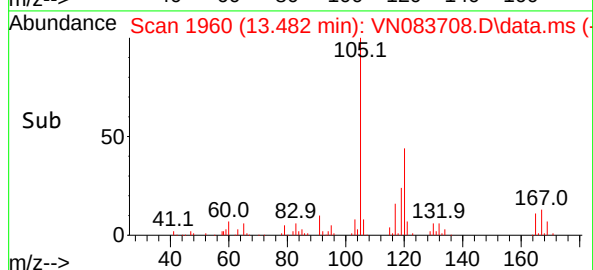
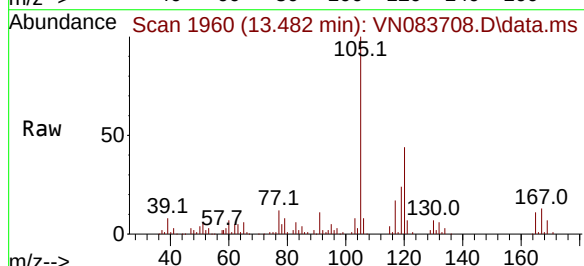
RT: 13.482 min Scan# 1960

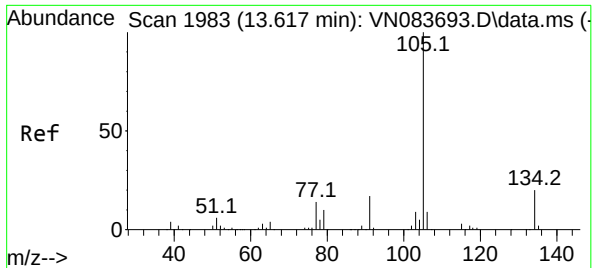
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	105	Resp:	143312
Ion Ratio	Lower	Upper	
105	100		
120	44.1	0.0	86.8





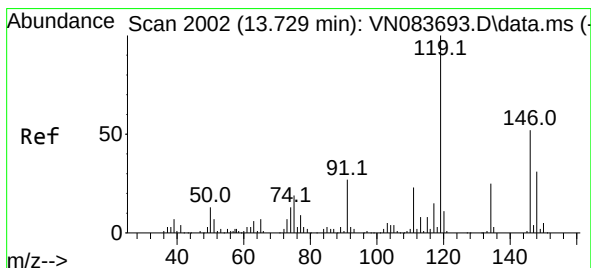
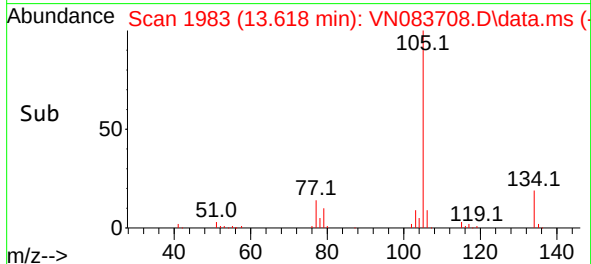
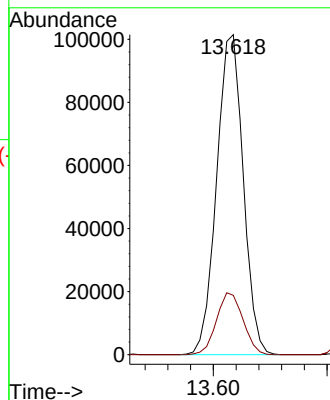
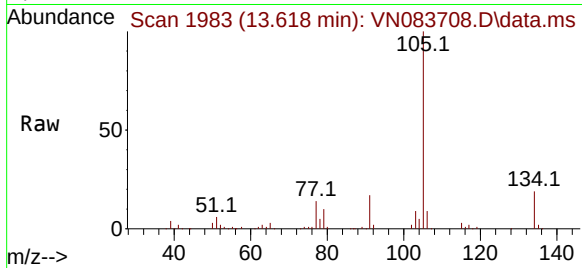
#81
 sec-Butylbenzene
 Concen: 17.048 ug/l
 RT: 13.618 min Scan# 1983
 Delta R.T. 0.000 min
 Lab File: VN083708.D
 Acq: 09 Sep 2024 10:03

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0909WBSD01

Tgt Ion:105 Resp: 164949
 Ion Ratio Lower Upper
 105 100
 134 19.3 0.0 39.0

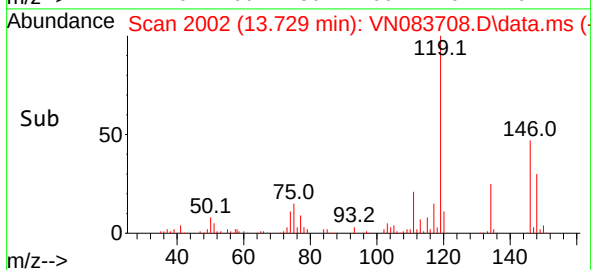
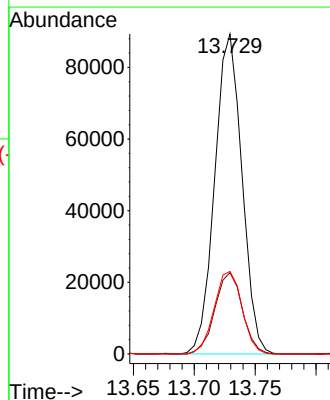
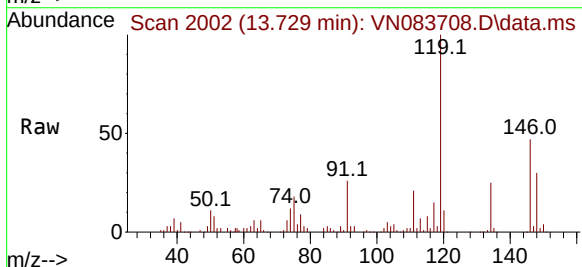
Manual Integrations
 APPROVED

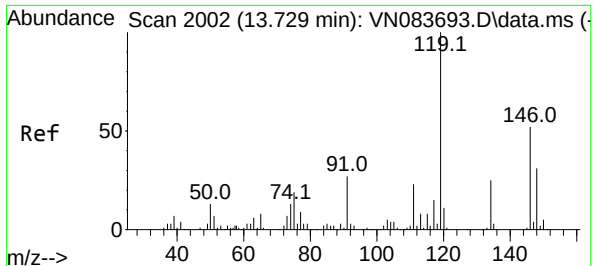
Reviewed By :John Carlone 09/10/2024
 Supervised By :Mahesh Dadoda 09/10/2024



#82
 p-Isopropyltoluene
 Concen: 17.059 ug/l
 RT: 13.729 min Scan# 2002
 Delta R.T. 0.000 min
 Lab File: VN083708.D
 Acq: 09 Sep 2024 10:03

Tgt Ion:119 Resp: 138870
 Ion Ratio Lower Upper
 119 100
 134 25.6 0.0 49.2
 91 26.3 0.0 48.8





#83

1,3-Dichlorobenzene

Concen: 16.865 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

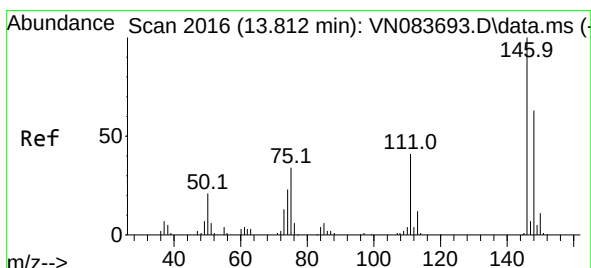
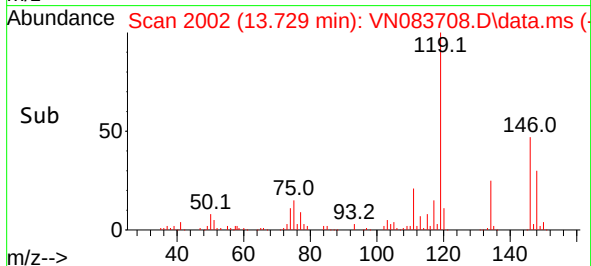
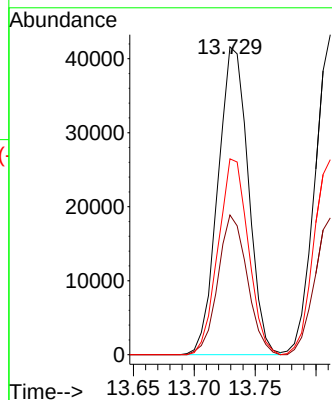
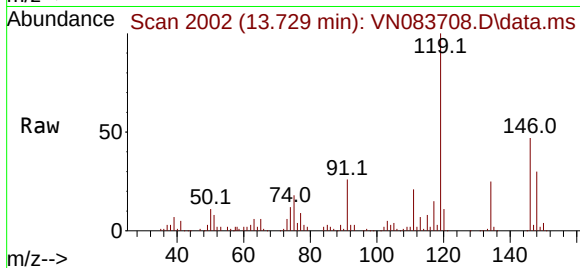
VN0909WBSD01

Tgt Ion:146	Resp:	7229
Ion Ratio	Lower	Upper
146	100	
111	43.7	22.4 67.0
148	63.0	32.1 96.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#84

1,4-Dichlorobenzene

Concen: 16.675 ug/l

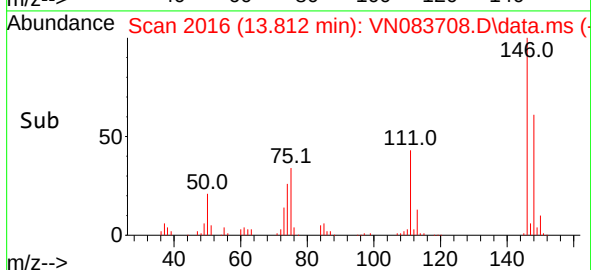
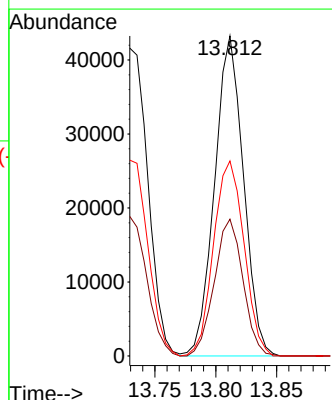
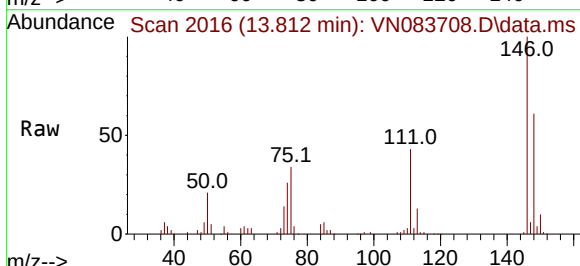
RT: 13.812 min Scan# 2016

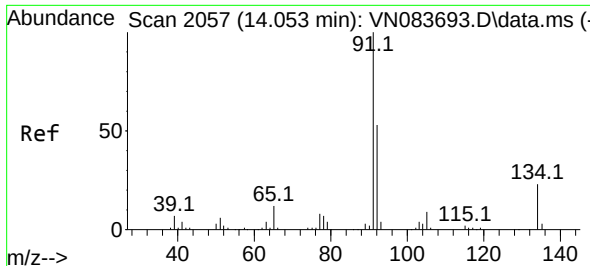
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:146	Resp:	71460
Ion Ratio	Lower	Upper
146	100	
111	42.4	21.3 63.9
148	64.2	31.9 95.5





#85

n-Butylbenzene

Concen: 16.360 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

Tgt Ion: 91 Resp: 117524

Ion Ratio Lower Upper

91 100

92 53.0 0.0 105.0

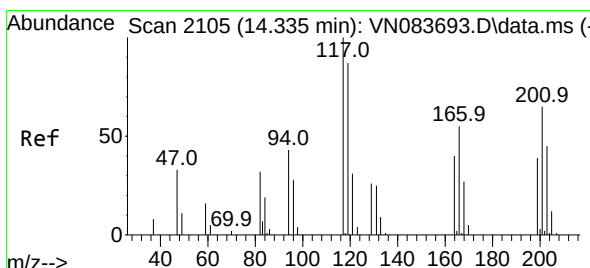
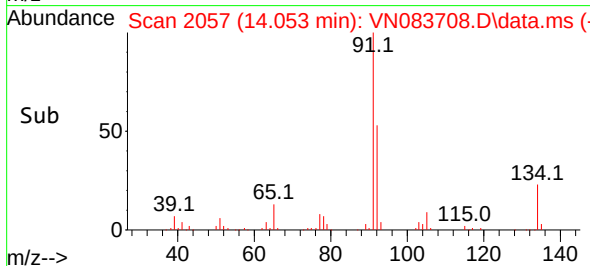
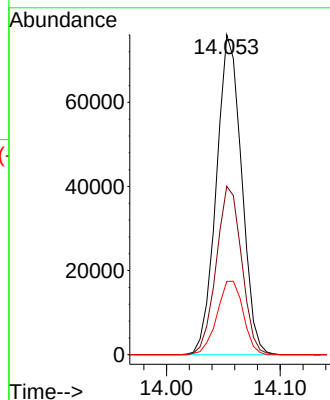
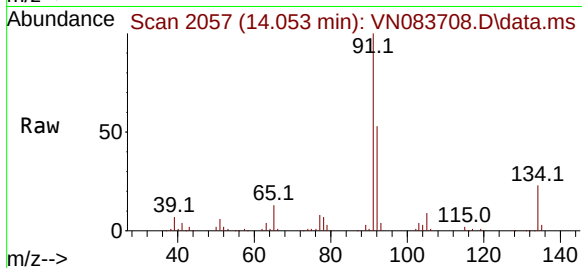
134 23.8 0.0 51.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#86

Hexachloroethane

Concen: 17.465 ug/l

RT: 14.335 min Scan# 2105

Delta R.T. 0.000 min

Lab File: VN083708.D

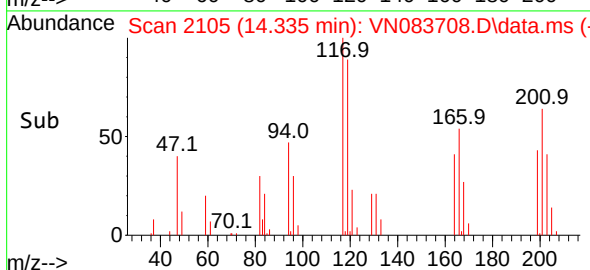
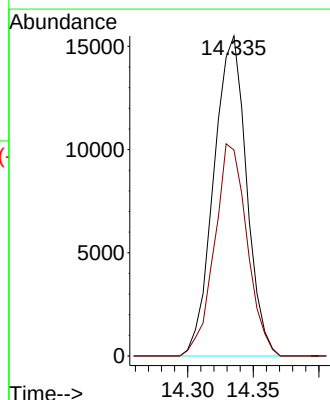
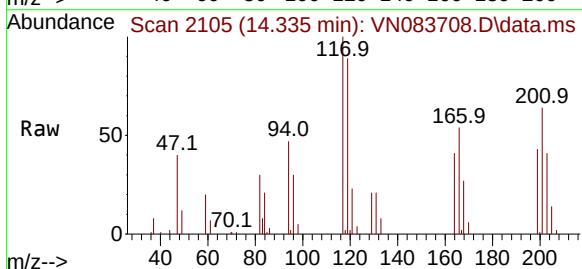
Acq: 09 Sep 2024 10:03

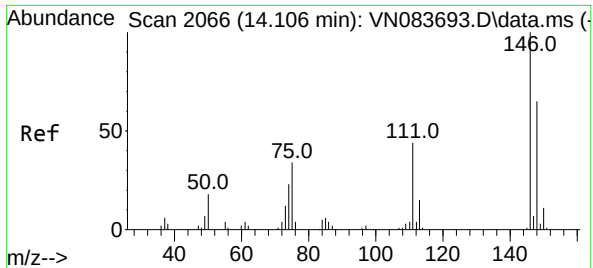
Tgt Ion:117 Resp: 26943

Ion Ratio Lower Upper

117 100

201 65.9 38.0 114.0





#87

1,2-Dichlorobenzene

Concen: 17.203 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

VN0909WBSD01

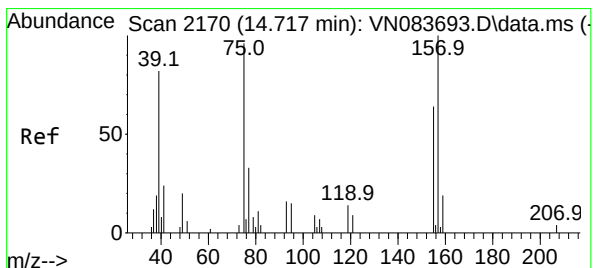
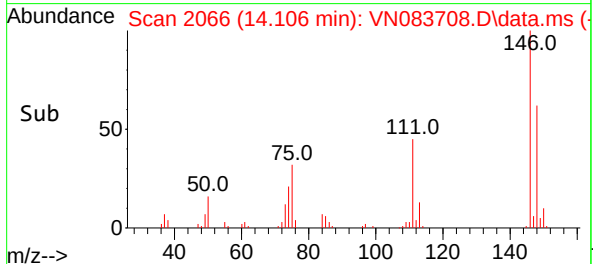
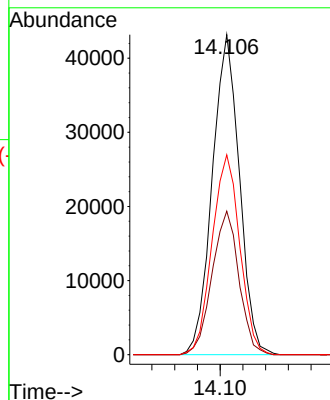
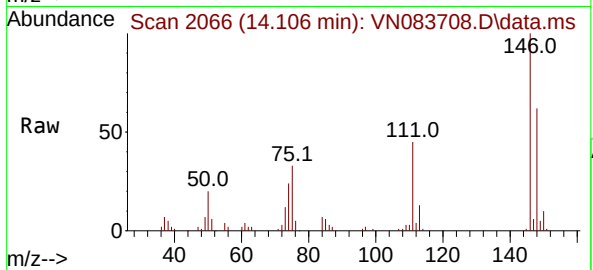
Tgt Ion:146	Resp:	71564
Ion Ratio	Lower	Upper
146	100	
111	44.5	22.6 67.8
148	63.8	31.3 93.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#88

1,2-Dibromo-3-Chloropropane

Concen: 18.780 ug/l

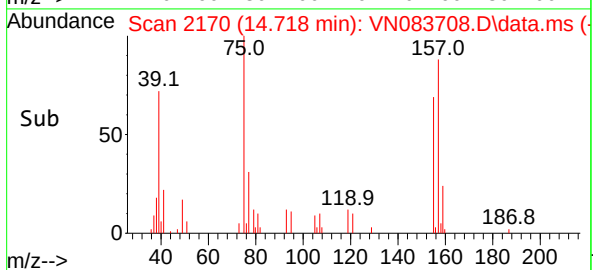
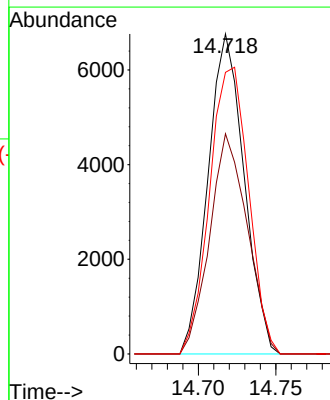
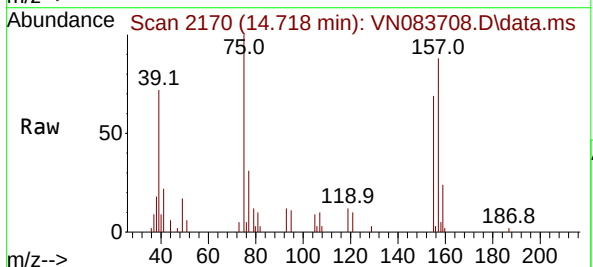
RT: 14.718 min Scan# 2170

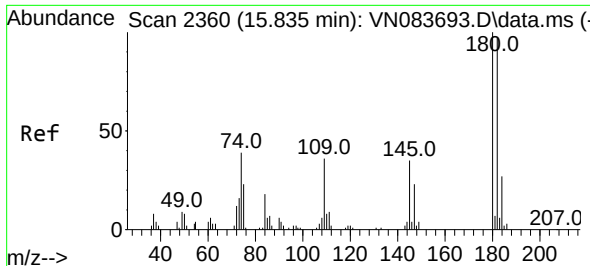
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion: 75	Resp:	10930
Ion Ratio	Lower	Upper
75	100	
155	71.9	61.7 92.5
157	97.1	83.6 125.4





#89

1,2,4-Trichlorobenzene

Concen: 15.888 ug/l

RT: 15.841 min Scan# 2360

Delta R.T. 0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

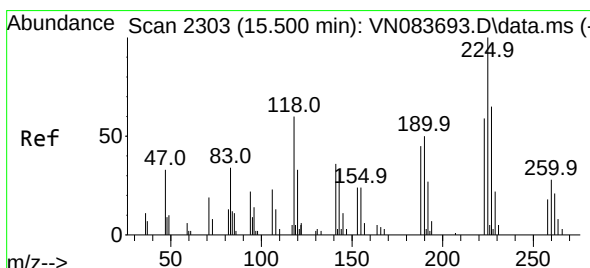
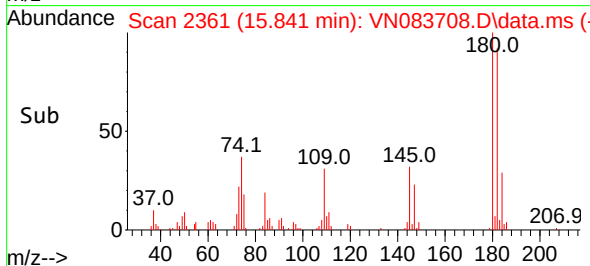
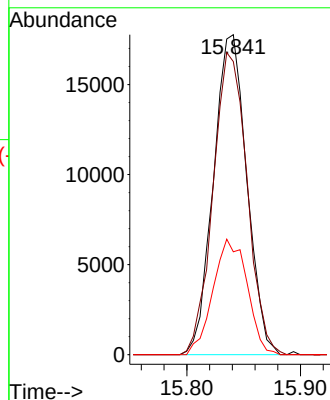
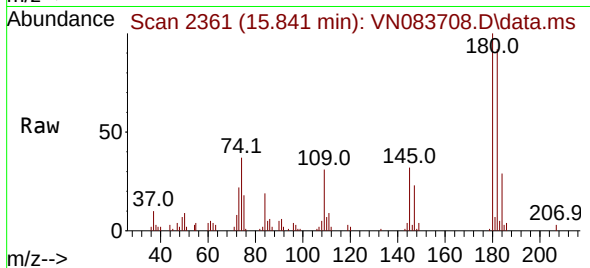
VN0909WBSD01

Tgt Ion:	180	Resp:	36209
Ion Ratio	Lower	Upper	
180	100		
182	96.5	76.4	114.6
145	37.0	28.4	42.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#90

Hexachlorobutadiene

Concen: 17.038 ug/l

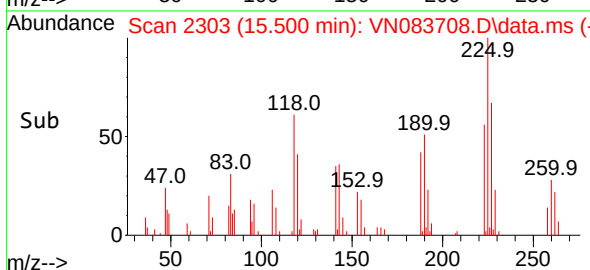
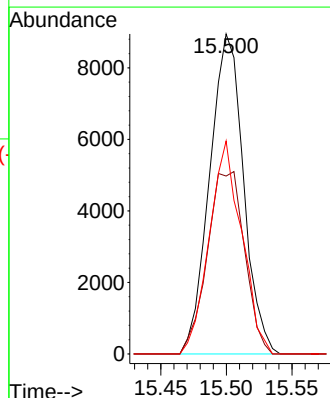
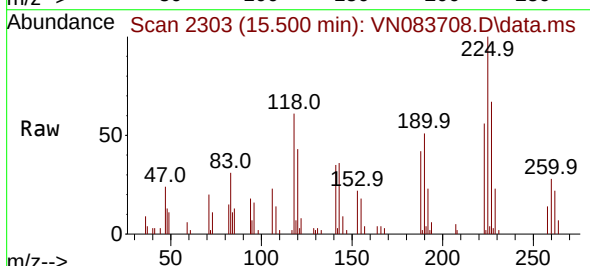
RT: 15.500 min Scan# 2303

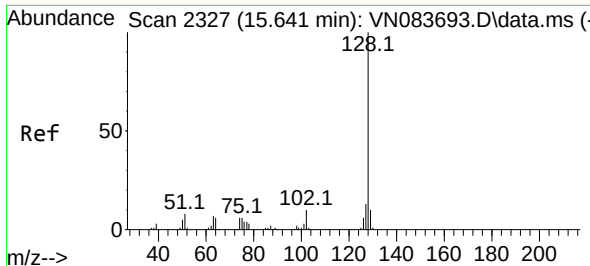
Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	225	Resp:	16072
Ion Ratio	Lower	Upper	
225	100		
223	62.8	0.0	126.6
227	63.9	0.0	126.6





#91

Naphthalene

Concen: 16.498 ug/l

RT: 15.641 min Scan# 2327

Delta R.T. 0.000 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Instrument :

MSVOA_N

ClientSampleId :

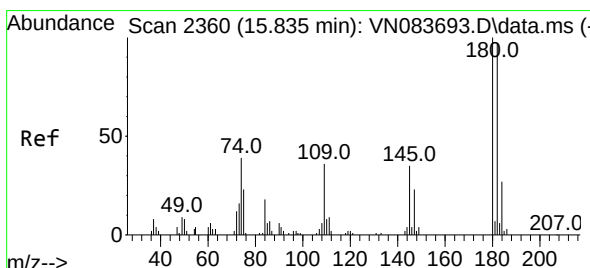
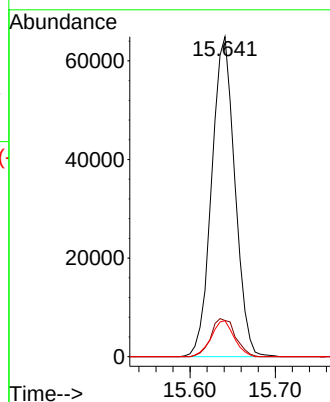
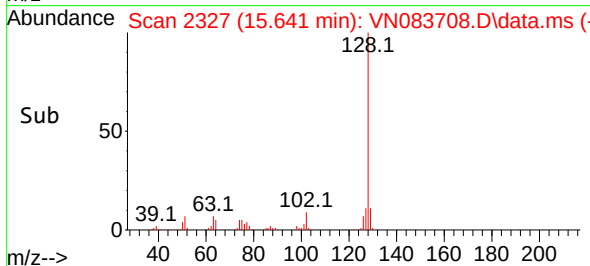
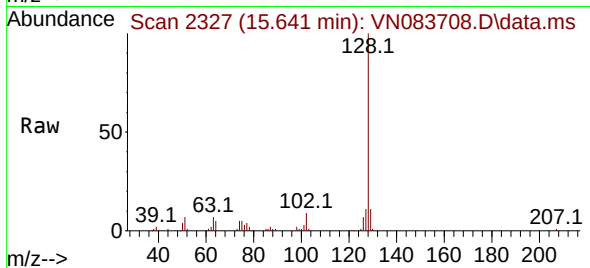
VN0909WBSD01

Tgt Ion:	128	Resp:	12292
Ion Ratio	Lower	Upper	
128	100		
127	12.6	10.6	16.0
129	11.1	8.6	13.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/10/2024

Supervised By :Mahesh Dadoda 09/10/2024



#92

1,2,3-Trichlorobenzene

Concen: 15.888 ug/l

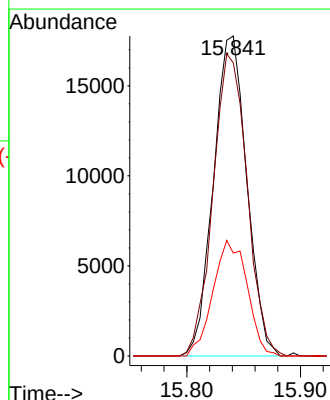
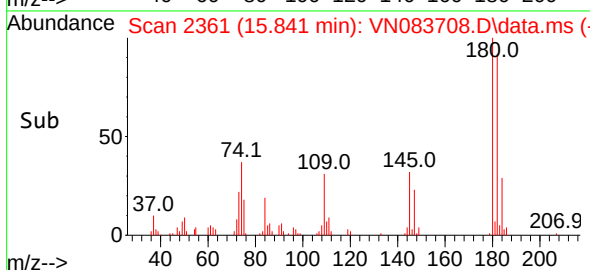
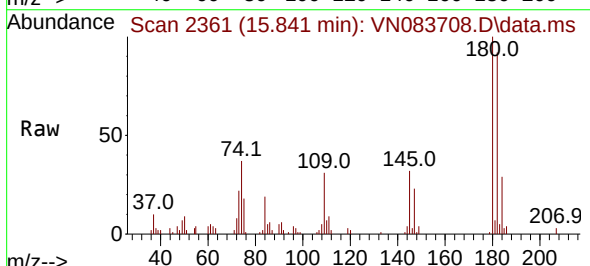
RT: 15.841 min Scan# 2361

Delta R.T. 0.006 min

Lab File: VN083708.D

Acq: 09 Sep 2024 10:03

Tgt Ion:	180	Resp:	36209
Ion Ratio	Lower	Upper	
180	100		
182	96.5	0.0	191.0
145	37.0	0.0	71.0



Manual Integration Report

Sequence:	vn090624	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC150	VN083690.D	1,2,3-Trichloropropane	JOHN	9/9/2024 9:37:49 AM	MMDadoda	9/9/2024 4:15:43 PM	Peak Integrated by Software
VSTDICC100	VN083691.D	1,2,3-Trichloropropane	JOHN	9/9/2024 9:37:56 AM	MMDadoda	9/9/2024 4:15:45 PM	Peak Integrated by Software
VSTDICC050	VN083692.D	1,2,3-Trichloropropane	JOHN	9/9/2024 9:38:03 AM	MMDadoda	9/9/2024 4:15:47 PM	Peak Integrated by Software
VSTDICC050	VN083692.D	Methyl Acetate	JOHN	9/9/2024 9:38:03 AM	MMDadoda	9/9/2024 4:15:47 PM	Peak Integrated by Software
VSTDICCC020	VN083693.D	1,2,3-Trichloropropane	JOHN	9/9/2024 9:38:08 AM	MMDadoda	9/9/2024 4:15:49 PM	Peak Integrated by Software
VSTDICC005	VN083694.D	1,1-Dichloroethane	JOHN	9/9/2024 9:38:13 AM	MMDadoda	9/9/2024 4:15:51 PM	Peak Integrated by Software
VSTDICC005	VN083694.D	1,2,3-Trichloropropane	JOHN	9/9/2024 9:38:13 AM	MMDadoda	9/9/2024 4:15:51 PM	Peak Integrated by Software
VSTDICC005	VN083694.D	Acetone	JOHN	9/9/2024 9:38:13 AM	MMDadoda	9/9/2024 4:15:51 PM	Peak Integrated by Software
VSTDICC005	VN083694.D	Acrolein	JOHN	9/9/2024 9:38:13 AM	MMDadoda	9/9/2024 4:15:51 PM	Peak Integrated by Software
VSTDICC005	VN083694.D	Allyl chloride	JOHN	9/9/2024 9:38:13 AM	MMDadoda	9/9/2024 4:15:51 PM	Peak Integrated by Software
VSTDICC005	VN083694.D	tert-Butyl Alcohol	JOHN	9/9/2024 9:38:13 AM	MMDadoda	9/9/2024 4:15:51 PM	Peak Integrated by Software
VSTDICV020	VN083695.D	1,2,3-Trichloropropane	JOHN	9/9/2024 9:38:17 AM	MMDadoda	9/9/2024 4:15:52 PM	Peak Integrated by Software
VSTDCCC020	VN083704.D	1,2,3-Trichloropropane	JOHN	9/9/2024 9:38:42 AM	SAM	9/9/2024 4:17:26 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	vn090624	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC020	VN083704.D	Methylene Chloride	JOHN	9/9/2024 9:38:42 AM	SAM	9/9/2024 4:17:26 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	vn090924	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC020	VN083706.D	1,1,2-Trichlorotrifluoroethane	JOHN	9/10/2024 9:37:26 AM	MMDadoda	9/10/2024 10:25:48 AM	Peak Integrated by Software
VSTDCCC020	VN083706.D	1,2,3-Trichloropropane	JOHN	9/10/2024 9:37:26 AM	MMDadoda	9/10/2024 10:25:48 AM	Peak Integrated by Software
VSTDCCC020	VN083706.D	Methyl Iodide	JOHN	9/10/2024 9:37:26 AM	MMDadoda	9/10/2024 10:25:48 AM	Peak Integrated by Software
VN0909WBS01	VN083707.D	1,2,3-Trichloropropane	JOHN	9/10/2024 9:37:31 AM	MMDadoda	9/10/2024 10:25:51 AM	Peak Integrated by Software
VN0909WBS01	VN083707.D	tert-Butyl Alcohol	JOHN	9/10/2024 9:37:31 AM	MMDadoda	9/10/2024 10:25:51 AM	Peak Integrated by Software
VN0909WBSD01	VN083708.D	1,1,2-Trichlorotrifluoroethane	JOHN	9/10/2024 9:37:35 AM	MMDadoda	9/10/2024 10:25:52 AM	Peak Integrated by Software
VN0909WBSD01	VN083708.D	1,2,3-Trichloropropane	JOHN	9/10/2024 9:37:35 AM	MMDadoda	9/10/2024 10:25:52 AM	Peak Integrated by Software
VSTDCCC020	VN083715.D	1,2,3-Trichloropropane	JOHN	9/10/2024 9:37:44 AM	MMDadoda	9/10/2024 10:25:55 AM	Peak Integrated by Software
VSTDCCC020	VN083715.D	tert-Butyl Alcohol	JOHN	9/10/2024 9:37:44 AM	MMDadoda	9/10/2024 10:25:55 AM	Peak Integrated by Software
VSTDCCC050	VN083717.D	1,2,3-Trichloropropane	JOHN	9/10/2024 9:37:53 AM	MMDadoda	9/10/2024 10:25:57 AM	Peak Integrated by Software
VSTDCCC050	VN083740.D	1,2,3-Trichloropropane	JOHN	9/10/2024 9:38:35 AM	MMDadoda	9/10/2024 10:26:05 AM	Peak Integrated by Software

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN090624

Review By	John Carlone	Review On	9/9/2024 9:41:09 AM		
Supervise By	Romaben Patel	Supervise On	9/9/2024 4:14:06 PM		
SubDirectory	VN090624	HP Acquire Method	MSVOA_N	HP Processing Method	624n090624w.m
STD. NAME		STD REF.#			
Tune/Reschk		VP130147			
Initial Calibration Stds		VP130148,VP130149,VP130150,VP130151,VP130152			
CCC		VP130154,VP130156			
Internal Standard/PEM		VP127286			
ICV/I.BLK		VP130153			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN083689.D	06 Sep 2024 09:26	JC\MD	Ok
2	VSTDICC150	VN083690.D	06 Sep 2024 11:58	JC\MD	Ok,M
3	VSTDICC100	VN083691.D	06 Sep 2024 12:22	JC\MD	Ok,M
4	VSTDICC050	VN083692.D	06 Sep 2024 12:46	JC\MD	Ok,M
5	VSTDICCC020	VN083693.D	06 Sep 2024 13:10	JC\MD	Ok,M
6	VSTDICC005	VN083694.D	06 Sep 2024 13:33	JC\MD	Ok,M
7	VSTDICV020	VN083695.D	06 Sep 2024 14:35	JC\MD	Ok,M
8	VN0906WBS01	VN083696.D	06 Sep 2024 15:13	JC\MD	Ok,M
9	VN0906WBSD01	VN083697.D	06 Sep 2024 15:37	JC\MD	Ok,M
10	VN0906WBL01	VN083698.D	06 Sep 2024 16:00	JC\MD	Not Ok
11	VN0906WBL02	VN083699.D	06 Sep 2024 16:24	JC\MD	Ok
12	P3790-01	VN083700.D	06 Sep 2024 16:48	JC\MD	Ok,M
13	P3790-02	VN083701.D	06 Sep 2024 17:12	JC\MD	Not Ok
14	P3884-01	VN083702.D	06 Sep 2024 17:36	JC\MD	Ok,M
15	P3884-02	VN083703.D	06 Sep 2024 18:00	JC\MD	Ok
16	VSTDCCC020	VN083704.D	06 Sep 2024 18:24	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN090924

Review By	John Carlone	Review On	9/10/2024 9:58:02 AM
Supervise By	Maresh Dadoda	Supervise On	9/10/2024 10:26:26 AM
SubDirectory	VN090924	HP Acquire Method	HP Processing Method 624N090624W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP130163,VP130189		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130164,VP130165,VP130166,VP130190,VP130191		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN083705.D	09 Sep 2024 07:56	JC\MD	Ok
2	VSTDCCC020	VN083706.D	09 Sep 2024 08:57	JC\MD	Ok,M
3	VN0909WBS01	VN083707.D	09 Sep 2024 09:39	JC\MD	Ok,M
4	VN0909WBSD01	VN083708.D	09 Sep 2024 10:03	JC\MD	Ok,M
5	VN0909WBL01	VN083709.D	09 Sep 2024 10:26	JC\MD	Ok
6	VN0909WBL02	VN083710.D	09 Sep 2024 10:50	JC\MD	Ok
7	P3390-09 2.5PPB	VN083711.D	09 Sep 2024 11:14	JC\MD	Ok,M
8	P3845-02	VN083712.D	09 Sep 2024 12:48	JC\MD	Ok
9	IBLK	VN083713.D	09 Sep 2024 13:12	JC\MD	Ok
10	P3790-02	VN083714.D	09 Sep 2024 13:36	JC\MD	Ok
11	VSTDCCC020	VN083715.D	09 Sep 2024 14:06	JC\MD	Ok,M
12	BFB	VN083716.D	09 Sep 2024 14:30	JC\MD	Ok
13	VSTDCCC050	VN083717.D	09 Sep 2024 15:04	JC\MD	Ok,M
14	VN0909MBL01	VN083718.D	09 Sep 2024 15:38	JC\MD	Ok
15	VN0909WBL03	VN083719.D	09 Sep 2024 16:02	JC\MD	Ok
16	VN0909WBS02	VN083720.D	09 Sep 2024 16:26	JC\MD	Ok,M
17	VN0909WBSD02	VN083721.D	09 Sep 2024 17:00	JC\MD	Not Ok
18	P3815-01DL	VN083722.D	09 Sep 2024 17:24	JC\MD	Ok
19	P3827-04DL	VN083723.D	09 Sep 2024 17:48	JC\MD	Ok
20	P3802-08RE	VN083724.D	09 Sep 2024 18:12	JC\MD	Confirms
21	PB163206TB	VN083725.D	09 Sep 2024 18:36	JC\MD	Ok,M

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN090924

Review By	John Carlone	Review On	9/10/2024 9:58:02 AM
Supervise By	Maresh Dadoda	Supervise On	9/10/2024 10:26:26 AM
SubDirectory	VN090924	HP Acquire Method	HP Processing Method 624N090624W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP130163,VP130189		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130164,VP130165,VP130166,VP130190,VP130191		

22	P3827-02RE	VN083726.D	09 Sep 2024 19:00	JC\MD	Confirms
23	P3815-05	VN083727.D	09 Sep 2024 19:24	JC\MD	Ok
24	P3841-04	VN083728.D	09 Sep 2024 19:48	JC\MD	Ok
25	P3868-03	VN083729.D	09 Sep 2024 20:12	JC\MD	Ok
26	P3868-04	VN083730.D	09 Sep 2024 20:36	JC\MD	Ok
27	P3841-01	VN083731.D	09 Sep 2024 21:00	JC\MD	Ok
28	P3841-02	VN083732.D	09 Sep 2024 21:24	JC\MD	Dilution
29	P3841-03	VN083733.D	09 Sep 2024 21:48	JC\MD	Dilution
30	P3868-01	VN083734.D	09 Sep 2024 22:12	JC\MD	ReRun
31	P3868-02	VN083735.D	09 Sep 2024 22:36	JC\MD	Not Ok
32	P3872-02	VN083736.D	09 Sep 2024 23:00	JC\MD	Ok
33	P3853-01	VN083737.D	09 Sep 2024 23:24	JC\MD	Ok
34	P3837-02	VN083738.D	09 Sep 2024 23:48	JC\MD	Ok
35	VN0909WBSD02	VN083739.D	10 Sep 2024 00:11	JC\MD	Ok,M
36	VSTDCCC050	VN083740.D	10 Sep 2024 00:35	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN090624

Review By	John Carlone	Review On	9/9/2024 9:41:09 AM
Supervise By	Romaben Patel	Supervise On	9/9/2024 4:14:06 PM
SubDirectory	VN090624	HP Acquire Method	MSVOA_N HP Processing Method 624n090624w.m

STD. NAME	STD REF.#
Tune/Reschk	VP130147
Initial Calibration Stds	VP130148,VP130149,VP130150,VP130151,VP130152
CCC	VP130154,VP130156
Internal Standard/PEM	VP127286
ICV/I.BLK	VP130153
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN083689.D	06 Sep 2024 09:26		JC\MD	Ok
2	VSTDICC150	VSTDICC150	VN083690.D	06 Sep 2024 11:58	624 method	JC\MD	Ok,M
3	VSTDICC100	VSTDICC100	VN083691.D	06 Sep 2024 12:22		JC\MD	Ok,M
4	VSTDICC050	VSTDICC050	VN083692.D	06 Sep 2024 12:46		JC\MD	Ok,M
5	VSTDICCC020	VSTDICCC020	VN083693.D	06 Sep 2024 13:10		JC\MD	Ok,M
6	VSTDICC005	VSTDICC005	VN083694.D	06 Sep 2024 13:33		JC\MD	Ok,M
7	VSTDICV020	ICVVN090624	VN083695.D	06 Sep 2024 14:35		JC\MD	Ok,M
8	VN0906WBS01	VN0906WBS01	VN083696.D	06 Sep 2024 15:13		JC\MD	Ok,M
9	VN0906WBSD01	VN0906WBSD01	VN083697.D	06 Sep 2024 15:37		JC\MD	Ok,M
10	VN0906WBL01	VN0906WBL01	VN083698.D	06 Sep 2024 16:00		JC\MD	Not Ok
11	VN0906WBL02	VN0906WBL02	VN083699.D	06 Sep 2024 16:24		JC\MD	Ok
12	P3790-01	OUTFALL-DSN-001	VN083700.D	06 Sep 2024 16:48	vial A pH<2	JC\MD	Ok,M
13	P3790-02	OUTFALL-DSN-002	VN083701.D	06 Sep 2024 17:12	Need straight run	JC\MD	Not Ok
14	P3884-01	001-WILLETS-PT-BLVD	VN083702.D	06 Sep 2024 17:36	vial A pH<2	JC\MD	Ok,M
15	P3884-02	002-35TH-AVE(SEP)	VN083703.D	06 Sep 2024 18:00	vial A pH<2	JC\MD	Ok
16	VSTDCCC020	VSTDCCC020EC	VN083704.D	06 Sep 2024 18:24		JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN090924

Review By	John Carlone	Review On	9/10/2024 9:58:02 AM
Supervise By	Mahesh Dadoda	Supervise On	9/10/2024 10:26:26 AM
SubDirectory	VN090924	HP Acquire Method	HP Processing Method 624N090624W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP130163,VP130189
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130164,VP130165,VP130166,VP130190,VP130191

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN083705.D	09 Sep 2024 07:56		JC\MD	Ok
2	VSTDCCC020	VSTDCCC020	VN083706.D	09 Sep 2024 08:57	V13516	JC\MD	Ok,M
3	VN0909WBS01	VN0909WBS01	VN083707.D	09 Sep 2024 09:39		JC\MD	Ok,M
4	VN0909WBSD01	VN0909WBSD01	VN083708.D	09 Sep 2024 10:03	m/p-Xylenes Low	JC\MD	Ok,M
5	VN0909WBL01	VN0909WBL01	VN083709.D	09 Sep 2024 10:26		JC\MD	Ok
6	VN0909WBL02	VN0909WBL02	VN083710.D	09 Sep 2024 10:50		JC\MD	Ok
7	P3390-09 2.5PPB	MDL-WATER-03-QT3-2	VN083711.D	09 Sep 2024 11:14		JC\MD	Ok,M
8	P3845-02	PT-VOA-WP	VN083712.D	09 Sep 2024 12:48		JC\MD	Ok
9	IBLK	IBLK	VN083713.D	09 Sep 2024 13:12		JC\MD	Ok
10	P3790-02	OUTFALL-DSN-002	VN083714.D	09 Sep 2024 13:36	vial A pH<2	JC\MD	Ok
11	VSTDCCC020	VSTDCCC020EC	VN083715.D	09 Sep 2024 14:06		JC\MD	Ok,M
12	BFB	BFB	VN083716.D	09 Sep 2024 14:30		JC\MD	Ok
13	VSTDCCC050	VSTDCCC050	VN083717.D	09 Sep 2024 15:04		JC\MD	Ok,M
14	VN0909MBL01	VN0909MBL01	VN083718.D	09 Sep 2024 15:38		JC\MD	Ok
15	VN0909WBL03	VN0909WBL03	VN083719.D	09 Sep 2024 16:02		JC\MD	Ok
16	VN0909WBS02	VN0909WBS02	VN083720.D	09 Sep 2024 16:26		JC\MD	Ok,M
17	VN0909WBSD02	VN0909WBSD02	VN083721.D	09 Sep 2024 17:00	Surrogate Fail	JC\MD	Not Ok
18	P3815-01DL	OWBR-05-134.8-08302	VN083722.D	09 Sep 2024 17:24	vial B pH<2	JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN090924

Review By	John Carlone	Review On	9/10/2024 9:58:02 AM
Supervise By	Maresh Dadoda	Supervise On	9/10/2024 10:26:26 AM
SubDirectory	VN090924	HP Acquire Method	HP Processing Method 624N090624W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP130163,VP130189		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130164,VP130165,VP130166,VP130190,VP130191		

19	P3827-04DL	MW-11A-13.5-090324D	VN083723.D	09 Sep 2024 17:48	vial B pH<2	JC\MD	Ok
20	P3802-08RE	OWBR-02-170-082924	VN083724.D	09 Sep 2024 18:12	Surrogate Fail	JC\MD	Confirms
21	PB163206TB	PB163206TB	VN083725.D	09 Sep 2024 18:36		JC\MD	Ok,M
22	P3827-02RE	BR-03D-489.5-090324F	VN083726.D	09 Sep 2024 19:00	vial B pH<2 Surrogate Fail	JC\MD	Confirms
23	P3815-05	MW-10A-9.5-083024	VN083727.D	09 Sep 2024 19:24	vial B pH<2	JC\MD	Ok
24	P3841-04	TB01-090424	VN083728.D	09 Sep 2024 19:48	vial A pH<2 TB	JC\MD	Ok
25	P3868-03	EB01-090524	VN083729.D	09 Sep 2024 20:12	vial A pH<2 EB	JC\MD	Ok
26	P3868-04	TB01-090524	VN083730.D	09 Sep 2024 20:36	vial A pH<2 TB	JC\MD	Ok
27	P3841-01	BR-04DR-451-090424	VN083731.D	09 Sep 2024 21:00	vial A pH<2	JC\MD	Ok
28	P3841-02	OW-07B-65.5-090424	VN083732.D	09 Sep 2024 21:24	vial A pH<2 Need 5X	JC\MD	Dilution
29	P3841-03	MW-11B-37.5-090424	VN083733.D	09 Sep 2024 21:48	vial A pH<2 Need 50X	JC\MD	Dilution
30	P3868-01	OWBR-06-219-090524	VN083734.D	09 Sep 2024 22:12	vial A pH<2 E flag in previous sample	JC\MD	ReRun
31	P3868-02	OWBR-01-170-090524	VN083735.D	09 Sep 2024 22:36	vial A pH<2 Carryover conc.	JC\MD	Not Ok
32	P3872-02	WC-W-07-202409	VN083736.D	09 Sep 2024 23:00	vial A pH#5.0	JC\MD	Ok
33	P3853-01	252805	VN083737.D	09 Sep 2024 23:24	vial A pH<2	JC\MD	Ok
34	P3837-02	RAIN-TANK	VN083738.D	09 Sep 2024 23:48	vial A pH<2	JC\MD	Ok
35	VN0909WBSD02	VN0909WBSD02	VN083739.D	10 Sep 2024 00:11		JC\MD	Ok,M
36	VSTDCCC050	VSTDCCC050EC	VN083740.D	10 Sep 2024 00:35		JC\MD	Ok,M

M : Manual Integration

Prep Standard - Chemical Standard Summary

Order ID : P3845

Test : VOCMS Group1

Prepbatch ID :

Sequence ID/Qc Batch ID: vn090924,

Standard ID :

VP126666,VP127286,VP128290,VP128298,VP128762,VP128764,VP128766,VP129517,VP129519,VP129858,VP129860,VP130163,VP130164,VP130165,VP130166,VP130189,VP130190,VP130191,

Chemical ID :

V12566,V12664,V12794,V12798,V13390,V13444,V13462,V13463,V13708,V13800,V13801,V13952,V13953,V14016,V14017,V14103,V14104,V14138,V14140,V14141,V14143,V14147,V14148,V14169,V14170,V14202,V14207,V14219,V14288,V14467,V14468,V14469,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	VP126666	03/19/2024	09/19/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
03/28/2024								

FROM 0.80000ml of V13708 + 49.20000ml of V14141 = 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>
466	624 Internal Standard and Surrogate Mix, 150PPM	VP127286	04/22/2024	10/22/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
05/03/2024								

FROM 0.15000ml of V12566 + 0.15000ml of V12664 + 24.70000ml of V14138 = 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>
218	BFB, 25PPM	VP128290	06/10/2024	11/23/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
06/12/2024								

FROM 0.25000ml of V13390 + 24.75000ml of V14148 = 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	VP128298	06/10/2024	11/23/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
06/12/2024								

FROM 0.10000ml of V14288 + 9.90000ml of V14148 = Final Quantity: 10.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1810	8260 Working Std(2-CVE)-800ppm	VP128762	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
07/02/2024								

FROM 0.50000ml of V12798 + 1.50000ml of V12794 + 23.00000ml of V14147 = 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>
1812	8260 Working Std(2-CVE)-100ppm	VP128764	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
07/02/2024								

FROM 0.20000ml of V12798 + 19.08000ml of V14147 = Final Quantity: 20.000 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	VP128766	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
								07/02/2024

FROM 1.50000ml of V13462 + 1.50000ml of V13463 + 12.00000ml of V14147 = Final Quantity: 15.000 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>
257	8260 Calibration Working STD Mix-First source, 160PPM	VP129517	08/05/2024	09/14/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
								08/08/2024

FROM 0.40000ml of V13444 + 1.00000ml of V13800 + 1.00000ml of V13801 + 1.00000ml of V13952 + 1.00000ml of V13953 + 1.00000ml of V14016 + 1.00000ml of V14017 + 1.00000ml of V14103 + 1.00000ml of V14104 + 1.00000ml of V14169 + 1.00000ml of V14170 + 1.00000ml of V14219 + 1.50000ml of V14202 + 1.50000ml of V14207 + 10.60000ml of V14143 = 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>
245	8260 Calibration Working STD Mix-First source, 20PPM	VP129519	08/05/2024	09/14/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
								08/08/2024

FROM 17.50000ml of V14143 + 2.50000ml of VP129517 = Final Quantity: 20.000 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	VP129858	08/21/2024	09/15/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
								08/24/2024

FROM 1.00000ml of V14469 + 1.50000ml of V14467 + 1.50000ml of V14468 + 21.00000ml of V14140 = 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>
180	8260 Working STD (Acrolein)-First source, 100PPM	VP129860	08/21/2024	09/15/2024	Semsettin Yesilyurt	None	None	Maresh Dadoda
08/24/2024								

FROM 17.25000ml of V14140 + 2.50000ml of VP129858 = Final Quantity: 20.000 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	VP130163	09/09/2024	09/10/2024	John Carlone	None	None	Maresh Dadoda
09/11/2024								

FROM 39.98400ml of W3112 + 0.01600ml of VP128290 = Final Quantity: 40.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
645	20 PPB CCC, 624	VP130164	09/09/2024	09/10/2024	John Carlone	None	None	Maresh Dadoda
FROM 39.97000ml of W3112 + 0.00500ml of VP128762 + 0.00500ml of VP129517 + 0.00500ml of VP129858 + 0.00800ml of VP127286 = Final Quantity: 40.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
645	20 PPB CCC, 624	VP130165	09/09/2024	09/10/2024	John Carlone	None	None	Maresh Dadoda
FROM 39.97000ml of W3112 + 0.00500ml of VP128762 + 0.00500ml of VP129517 + 0.00500ml of VP129858 + 0.00800ml of VP127286 = 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>
3591	624 WATER 2.5 PPB MDL	VP130166	09/09/2024	09/10/2024	John Carlone	None	None	Maresh Dadoda
FROM 39.90000ml of W3112 + 0.00500ml of VP128764 + 0.00500ml of VP129519 + 0.00500ml of VP129860 + 0.00800ml of VP127286 = 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>
589	BFB TUNE CHECK	VP130189	09/09/2024	09/10/2024	John Carlone	None	None	Maresh Dadoda
FROM 39.98400ml of W3112 + 0.01600ml of VP128290 = 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	VP130190	09/09/2024	09/10/2024	John Carlone	None	None	Maresh Dadoda
FROM 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129517 + 0.01250ml of VP129858 = 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	VP130191	09/09/2024	09/10/2024	John Carlone	None	None	Maresh Dadoda
FROM 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129517 + 0.01250ml of VP129858 = 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	555584 / Custom Standard, CLP VOA SurrogateStd [CS 5179-4]	A0179624	10/22/2024	04/22/2024 / SAM	01/04/2022 / SAM	V12566

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555583 / Custom Standard, CLP VOA Internal Std [CS 5179-3]	A0181978	10/22/2024	04/22/2024 / SAM	02/22/2022 / SAM	V12664

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	121321	12/13/2024	06/25/2024 / SAM	03/30/2022 / SAM	V12794

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	121321	12/13/2024	06/25/2024 / SAM	03/30/2022 / SAM	V12798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	12/08/2024	12/08/2023 / SAM	01/13/2023 / SAM	V13390

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	12/14/2024	06/14/2024 / SAM	01/23/2023 / SAM	V13444

CHEMICAL RECEIPT LOG BOOK

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	01/01/2025	07/01/2024 / SAM	01/27/2023 / SAM	V13462

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	01/01/2025	07/01/2024 / SAM	01/27/2023 / SAM	V13463

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	09/19/2024	03/19/2024 / SAM	04/12/2023 / SAM	V13708

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	A0194279	01/30/2025	07/30/2024 / SAM	05/31/2023 / SAM	V13800

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	A0194279	12/28/2024	06/28/2024 / SAM	05/31/2023 / SAM	V13801

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	A0196115	09/30/2024	06/14/2024 / SAM	09/25/2023 / SAM	V13952

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	A0196115	09/30/2024	06/14/2024 / SAM	09/25/2023 / SAM	V13953

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)	032922	12/14/2024	06/14/2024 / SAM	11/22/2023 / SAM	V14016

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)	032922	12/14/2024	06/14/2024 / SAM	11/22/2023 / SAM	V14017

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	A0205179	12/14/2024	06/14/2024 / SAM	12/22/2023 / SAM	V14103

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	A0205179	12/14/2024	06/14/2024 / SAM	12/22/2023 / SAM	V14104

LOTS

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	10/22/2024	04/22/2024 / pedro	02/06/2024 / SAM	V14138

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	02/16/2025	08/16/2024 / SAM	02/06/2024 / SAM	V14140

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	09/19/2024	03/19/2024 / SAM	02/06/2024 / SAM	V14141

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	01/22/2025	07/22/2024 / SAM	02/06/2024 / SAM	V14143

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	12/11/2024	06/11/2024 / pedro	02/06/2024 / SAM	V14147

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	11/23/2024	05/23/2024 / pedro	02/06/2024 / SAM	V14148

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	12/14/2024	06/14/2024 / SAM	02/20/2024 / SAM	V14169

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	12/14/2024	06/14/2024 / SAM	02/20/2024 / SAM	V14170

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	12/25/2024	06/25/2024 / SAM	02/28/2024 / SAM	V14202

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	12/25/2024	06/25/2024 / SAM	02/28/2024 / SAM	V14207

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	12/25/2024	06/25/2024 / SAM	02/28/2024 / SAM	V14219

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	06/10/2025	06/10/2024 / SAM	04/15/2024 / SAM	V14288

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	081524	09/15/2024	08/16/2024 / SAM	08/16/2024 / SAM	V14467

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)	081524	09/15/2024	08/16/2024 / SAM	08/16/2024 / SAM	V14468

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	081524	09/15/2024	08/16/2024 / SAM	08/16/2024 / SAM	V14469

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



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

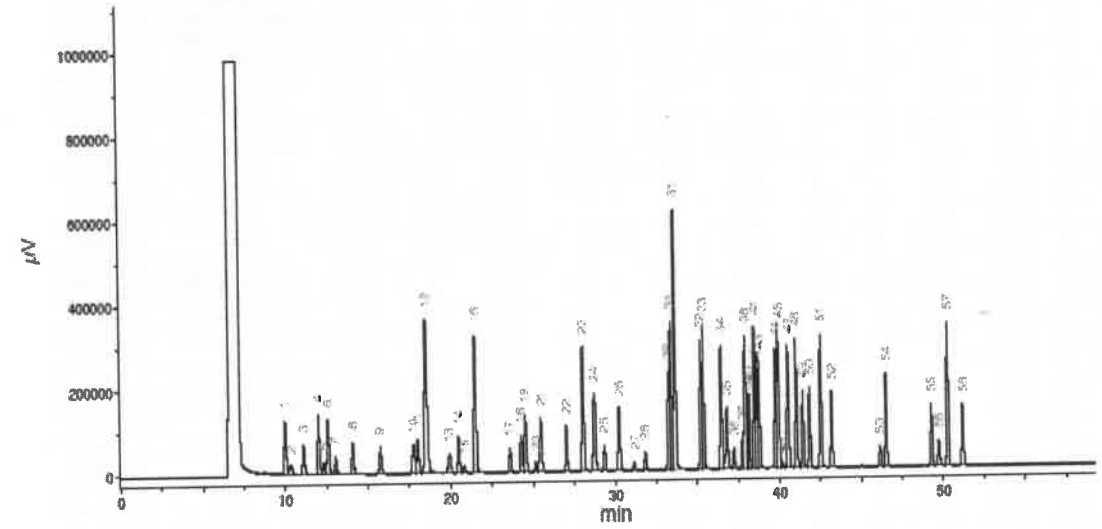
Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty
Flask Uncertainty

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information		
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc. (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	or-rat 2400mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102395	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	or-rat 700mg/kg
3. Carbon disulfide	(0060)	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	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CA5000K	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	N/A
8. Iodomethane	(0489)	5HBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm (28mg/m3/8H) (skin)	or-rat 14800mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	or-rat 76mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H) (skin)	or-rat 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	2001.6	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 848mg/kg
19. cis-1,2-Dichloroethane	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	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 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	or-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	or-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	or-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	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	22.9	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	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	99-87-6	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	1999.7	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	1999.7	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	1999.6	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	1999.7	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	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	541-73-1	N/A	or-rat 1063mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA						

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethane	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.48
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
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	33.86
32	o-Xylene	35.22
33	Styrene	35.39
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.80
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**

<i>Prashant Chauhan</i>		021624
Formulated By:	Prashant Chauhan	DATE
<i>Pedro L. Rentes</i>		021624
Reviewed By:	Pedro L. Rentes	DATE

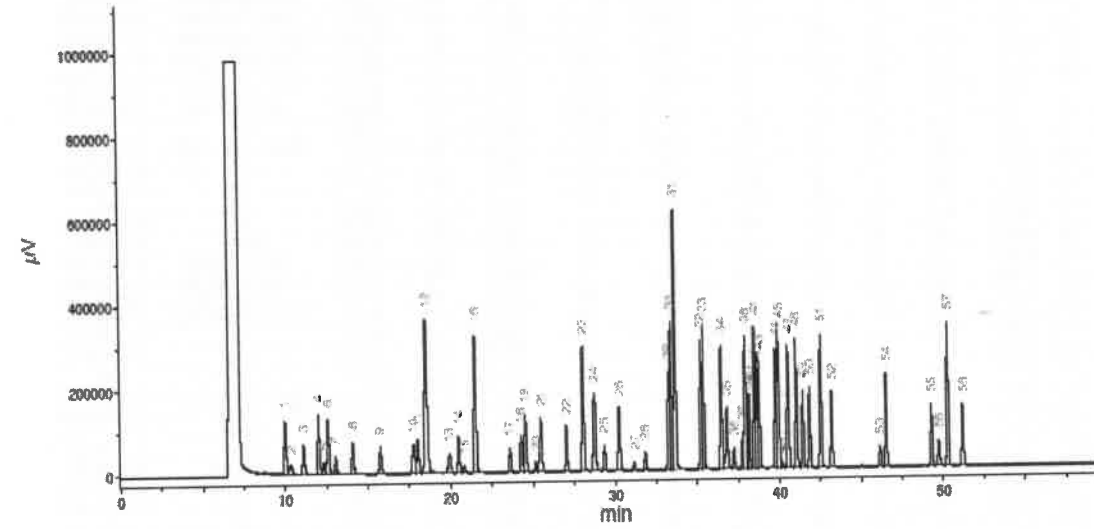
Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty
Flask Uncertainty

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information		
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	or-rat 2400mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102395	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	or-rat 700mg/kg
3. Carbon disulfide	(0060)	MKCR8581	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	or-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS000K	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	or-rat 14800mg/kg
8. Iodomethane	(0489)	5HBF6718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm (28mg/m3/8H) (skin)	or-rat 70mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	or-rat 2400mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H) (skin)	or-rat 1200mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-30-3	10 ppm (35mg/m3/8H) (skin)	or-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	or-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H) (skin)	or-rat 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 7200mg/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	1999.8	20.4	75-35-4	1 ppm (4mg/m3/8H)	or-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	or-rat 930mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	or-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	or-rat 900mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-85-3	N/A	or-rat 100mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	N/A	or-rat 100mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	100 ppm	or-rat 725mg/kg
29. Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	or-rat 10300mg/kg
32. 1,2-Dibromomethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-6	0.001 ppm	or-rat 170mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-08-2	20 ppm (8H)	or-rat 100mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-57-5	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	142-28-9	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg
36. 1,1-Dichloropropane	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	un-rat 3600mg/kg
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-56-6	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	or-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	or-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H) (skin)	or-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (46mg/m3/8H) (skin)	or-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	80 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	1999.7	22.9	106-98-3	200 ppm	or-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-98-3	200 ppm	or-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	or-rat 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	23.0	95-63-6	5 ppm (CL) (40mg/m3)	or-rat 750mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	95-63-6	N/A	or-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-57-8	N/A	or-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	or-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	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	1999.6	22.9	95-49-8	80 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	40003.3	2000	NA	NA	0.017	NA	NA	1999.5	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	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000</										

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethane	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.46
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethane	23.58
18	1,2-Dichloropropane	24.38
19	Methyl methacrylate	24.52
20	Bromochloromethane	25.13
21	Dibromomethane/2-Helopropene	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropene	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromomethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.66
32	o-Xylene	35.22
33	Styrene	35.39
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.48
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropene	37.77
38	n-Propylbenzene	37.93
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



CERTIFIED WEIGHT REPORT

Part Number:

Lot Number:

Description:

Expiration Date:

Recommended Storage:

Nominal Concentration (µg/mL):

NIST Test ID#:

Weight(s) shown below were combined and diluted to (mL):

Solvent(s):
Methanol

Lot#
EC592-US

95319

032922

Revised Additions Mix

11 components

032925

Refrigerate (4 °C)

Varied

6UTB

5E-05 Balance Uncertainty

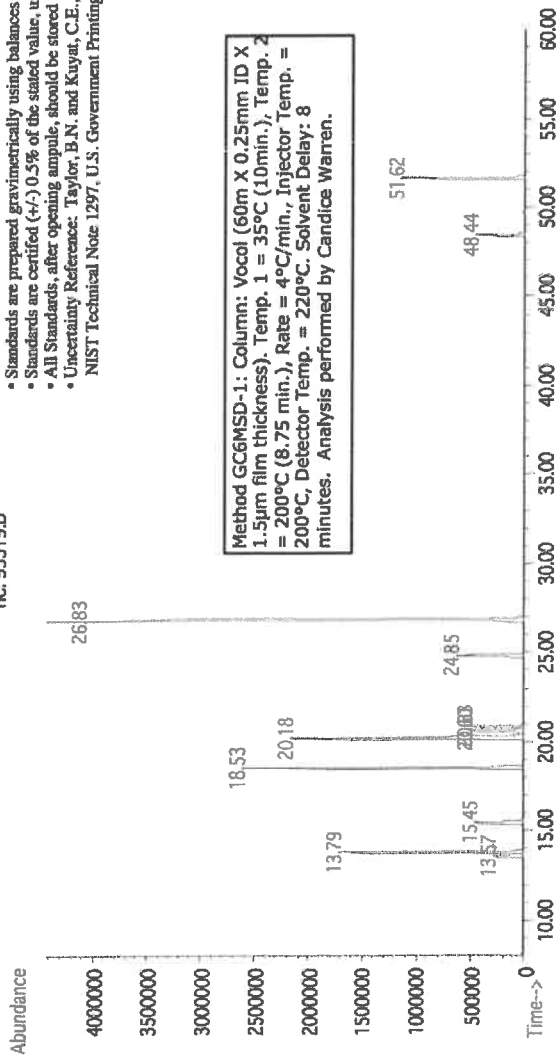
0.012 Flask Uncertainty

Formulated By:	Prashant Chauhan	DATE	032922
Reviewed By:	Pedro L. Rentas	DATE	032922

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Expanded Uncertainty (+/-) (µg/mL)	Actual Weight (g)	Actual Conc (µg/mL)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	OSHA PEL (TWA)	LD50

1. Acrylonitrile	7	4718CK	10000	99	0.2	1.01015	1.01030	10001.5	40.5	107-13-1	N/A	ori-rat 78 mg/kg
2. 1-Chlorobutane	1072	MKCM5711	2000	99.99	0.2	0.20003	0.20020	2001.7	8.1	109-69-3	N/A	ori-rat 2870mg/kg
3. Cyclohexane	1023	28930	2000	99	0.2	0.20203	0.20215	2001.2	8.2	110-82-7	300 ppm (1050mg/m3/8h)	ori-rat 12705mg/kg
4. Di-Isopropyl ether (DIPE)	987	00412MX	2000	99	0.2	0.20203	0.20215	2001.2	8.2	109-20-3	500 ppm (2100mg/m3/8h)	ori-rat 8470mg/kg
5. 1,4-Dioxane	373	03853KE	40000	99	0.2	4.04060	4.04100	40004.0	161.9	123-91-1	25 ppm (90mg/m3/8h)(skin)	ori-mus 5700mg/kg
6. Hexachloroethane	199	12604HBV	2000	99	0.2	0.20203	0.20213	2001.0	8.2	67-72-1	1 ppm (10mg/m3/8h)(skin)	ori-gpg 4870mg/kg
7. Methylcyclohexane	1627	08046KN	2000	99	0.2	0.20203	0.20215	2001.2	8.2	108-87-2	N/A	N/A
8. Methyl tert-butyl ether (MTBE)	209	02197LJ	2000	99.8	0.2	0.20041	0.20055	2001.4	8.1	1634-04-4	N/A	ori-rat 4g/kg
9. Propionitrile	349	1395468	20000	99	0.2	2.02030	2.02045	20001.5	81.0	107-12-0	N/A	ori-rat 38mg/kg
10. Tetrahydrofuran	380	SHBH8330	10000	99.9	0.2	1.00105	1.00120	10001.5	40.1	109-99-9	20 ppm (590mg/m3/8h)	ori-rat 1650mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21506	0.21520	2001.3	8.7	488-23-3	N/A	ori-rat 6408mg/kg

TIC: 95319.D



Name	MSD RT (min.)
Methyl tert-butyl ether (MTBE)	13.56
Acrylonitrile	13.79
Di-isopropyl ether	15.44
Propionitrile	18.53
Tetrahydrofuran	20.17
Cyclohexane	20.58
1-Chlorobutane	20.83
Methylcyclohexane	24.84
1,4-Dioxane	26.84
Hexachloroethane	48.44
1,2,3,4-Tetramethylbenzene	51.62

* 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

Address 44 Rossotto Dr.
Hamden CT, 06514Emergency Telephone USA & CANADA
Emergency Telephone International
Date Prepared/Revised

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:	CAS#:	LD50 Oral - Rat	OSHA PEL	% (optional)
Methanol	67-56-1	2,769 mg/kg	200 ppm	> 99

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice
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
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
TWA 200 ppm
Skin notation
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

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 chemicals or 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.

Section XVI. Misc. 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 XV. REGULATORY INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol
ATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XIV. TRANSPORT INFORMATION

Dispose with normal Laboratory Solvent Waste.

Section XIII. DISPOSAL CONSIDERATIONS

LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 6400 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 XI. TOXICOLOGICAL INFORMATION

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 X. STABILITY AND REACTIVITY

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Solubility in Water			
COMPLETE			
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79



CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:

95319
032922
Revised Additions Mix

Solvent(s):
Methanol

Lot#
EC592-US

11 components

032925

Refrigerate (4 °C)

Varied

6UTB

Expiration Date:

Recommended Storage:

Nominal Concentration (µg/mL):

NIST Test ID#:

Weight(s) shown below were combined and diluted to (mL):

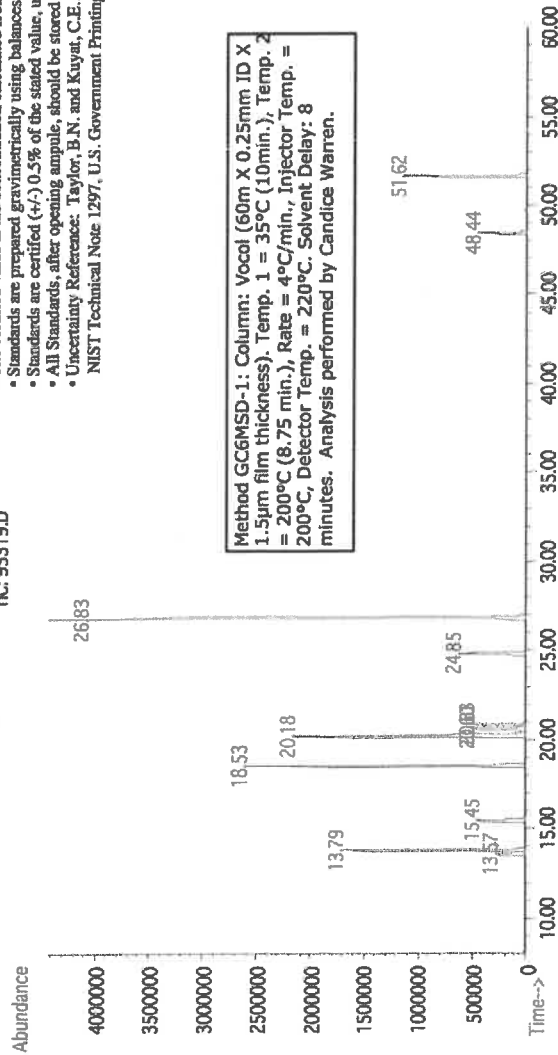
5E-05 Balance Uncertainty
0.012 Flask Uncertainty

Formulated By:	Prashant Chauhan	DATE	032922
Reviewed By:	Pedro L. Rentas	DATE	032922

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (µg)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. Acrylonitrile	7	4718CK	10000	99	0.2	1.01015	1.01030	10001.5	40.5	107-13-1	N/A

2. 1-Chlorobutane	1072	MKCM5711	2000	99.99	0.2	0.20003	0.20020	2001.7	8.1	109-69-3	N/A
3. Cyclohexane	1023	28930	2000	99	0.2	0.20203	0.20215	2001.2	8.2	110-82-7	300 ppm (1050mg/m3/8H) orl-rat 2870mg/kg
4. Di-Isopropyl ether (DIPE)	987	00412MX	2000	99	0.2	0.20203	0.20215	2001.2	8.2	109-20-3	500 ppm (2100mg/m3/8H) orl-rat 12705mg/kg
5. 1,4-Dioxane	373	03853KE	40000	99	0.2	4.04060	4.04100	40004.0	161.9	123-91-1	25 ppm (90mg/m3/8H)(skin) orl-mus 5700mg/kg
6. Hexachloroethane	199	12604HBV	2000	99	0.2	0.20203	0.20213	2001.0	8.2	67-72-1	1 ppm (10mg/m3/8H)(skin) orl-gpg 4970mg/kg
7. Methylcyclohexane	1627	08046KN	2000	99	0.2	0.20203	0.20215	2001.2	8.2	108-87-2	N/A
8. Methyl tert-butyl ether (MTBE)	209	02197LJ	2000	99.8	0.2	0.20041	0.20055	2001.4	8.1	1634-04-4	N/A
9. Propionitrile	349	1395468	20000	99	0.2	2.02030	2.02045	20001.5	81.0	107-12-0	N/A
10. Tetrahydrofuran	380	SHBH8330	10000	99.9	0.2	1.00105	1.00120	10001.5	40.1	109-99-9	20 ppm (590mg/m3/8H) orl-rat 38mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21506	0.21520	2001.3	8.7	488-23-3	N/A

TIC: 95319.D



• 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).

Name	MSD RT (min.)
Methyl tert-butyl ether (MTBE)	13.56
Acrylonitrile	13.79
Di-isopropyl ether	15.44
Propionitrile	18.53
Tetrahydrofuran	20.17
Cyclohexane	20.58
1-Chlorobutane	20.83
Methylcyclohexane	24.84
1,4-Dioxane	26.84
Hexachloroethane	48.44
1,2,3,4-Tetramethylbenzene	51.62

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
Address 44 Rossotto Dr.
Hamden CT, 06514

Emergency Telephone USA & CANADA 1-800-536-5053
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
H370 Cause damage to organs
P271 Use in ventilated area
P302,332 If on skin, wash with soap and water

H301, 311, 331 Toxic if swallowed, skin contact, inhaled
H351 Suspected of causing cancer
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:

CAS#:	LD50 Oral - Rat	OSHA PEL	% (optional)
67-56-1	2,769 mg/kg	200 ppm	> 99

Methanol

See Certified Weight Report For Other Analytes Present At Trace Quantities.
INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice
If inhaled Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
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.
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Wear self contained breathing apparatus for fire fighting if necessary.

Suitable extinguishing media
Protective equipment for fire

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

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 chemicals or 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.

Section XVI. Misc. 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 XV. REGULATORY INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol
ATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XIV. TRANSPORT INFORMATION

Dispose with normal Laboratory Solvent Waste.

Section XIII. DISPOSAL CONSIDERATIONS

LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

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 XI. TOXICOLOGICAL INFORMATION

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 X. STABILITY AND REACTIVITY

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Solubility in Water			
COMPLETE			
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

P271 P302,332	Use in ventilated area If on skin, wash with soap and water	H315 H335 P280 P305,351,338	Causes skin and eye irritation. Use gloves, eye protection/face shield 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
If inhaled
If case of skin contact
If case of eye contact
If swallowed
Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Wash with soap and water. Consult a physician.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up
Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions
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)

Melting Point

1

Vapor Pressure (mm Hg)

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		

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) Not dangerous goods

Proper shipping name: Water

IATA Not dangerous goods

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



CERTIFIED WEIGHT REPORT

Part Number:
 Lot Number:
 Description:

91980
 081524
 Acrolein

Solvent(s):
 Water

Lot#
 121123Q

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:

091524
 Refrigerate (4 °C)
 5000
 6UTB

Weight(s) shown below were combined and diluted to (mL):

10.0

5E-05 Balance Uncertainty
 0.001 Flask Uncertainty

Formulated By:
Reviewed By:

Gabriel Holland
 Pedro L. Rentas

081524
 081524

DATE
 DATE

Expanded
Uncertainty
(+/-) (µg/mL)

52.5
 0.1 ppm

OSHA PEL (TWA)
 LD50

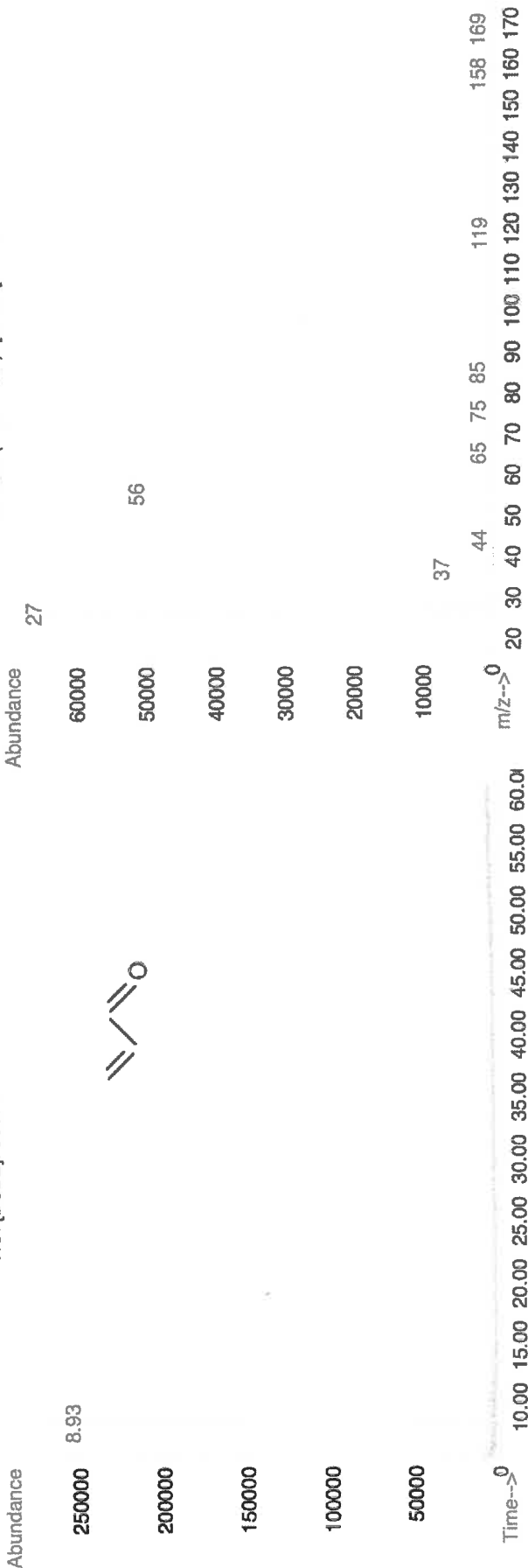
SDS Information
(Solvent Safety Info. On Attached pg.)

1. Acrolein
 RM# 5
 103755R02H
 5000
 97
 0.5
 0.05166
 0.05170
 5004.1
 52.5
 107-02-8
 0.1 ppm
 or-rat 46mg/kg

Method: GC6MSD-1, Detector: Mass Selective Detector (Scan mode), Column: Vooil (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.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D



- 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).
- All Standards, after opening ampule, should be stored with capse tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY
ANALYTICAL STANDARD DISSOLVED IN WATER
Manufacturer's Name ABSOLUTE STANDARDS INC
Address 44 Rossotto Dr.
Hamden CT, 06514
Date Prepared/Revised January 1, 2024
Emergency Telephone USA & CANADA 1-800-535-5053
Emergency Telephone International 1-352-323-3500

Section II - Hazards Identification

P271
P302,332
Signal Word : DANGER
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
H315
P280
P305,351,338
Causes skin and eye irritation.
Use gloves, eye protection/face shield
If in eyes, remove contacts, rinse with water
If on skin, wash with soap and water
Signal Word : DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))
Water
CAS#: 7732-18-5
% (optional) > 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.
INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled
If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash with soap and water. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed
Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire
Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products
Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up
Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions
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	

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.

Section XVI. Misc. INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XV. REGULATORY INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water
IATA
Not dangerous goods
Proper shipping name: Water

Section XIV. TRANSPORT INFORMATION

Dispose with normal Laboratory Solvent Waste.

Section XIII. DISPOSAL CONSIDERATIONS

LC50
EC50
NA
NA

Section XII. ECOLOGICAL INFORMATION

LD50 Oral - Rat
LC50 Inhalation - Rat
LD50 Dermal - Guinea pig
NA
NA
NA
Eye irritation
Causes skin irritation.

Section XI. TOXICOLOGICAL INFORMATION

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 X. STABILITY AND REACTIVITY

Appearance and Odor
CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Solubility in Water			
Completely miscible			
Vapor Density (AIR = 1)			
NA	NA	(Butyl Acetate = 1)	Evaporation rate
			0°C



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number:
 Lot Number:
 Description:

91980
 081524
 Acrolein

Solvent(s):
 Water

Lot#
 121123Q

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:

091524
 Refrigerate (4 °C)
 5000
 6UTB

5E-05 Balance Uncertainty
 0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL):

10.0

0.001

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:
Reviewed By:

Gabriel Holland
 Pedro L. Rentas

081524
DATE

081524
DATE

Expanded
Uncertainty
(+/-) (µg/mL)
CAS#
OSHA PEL (TWA)
LD50

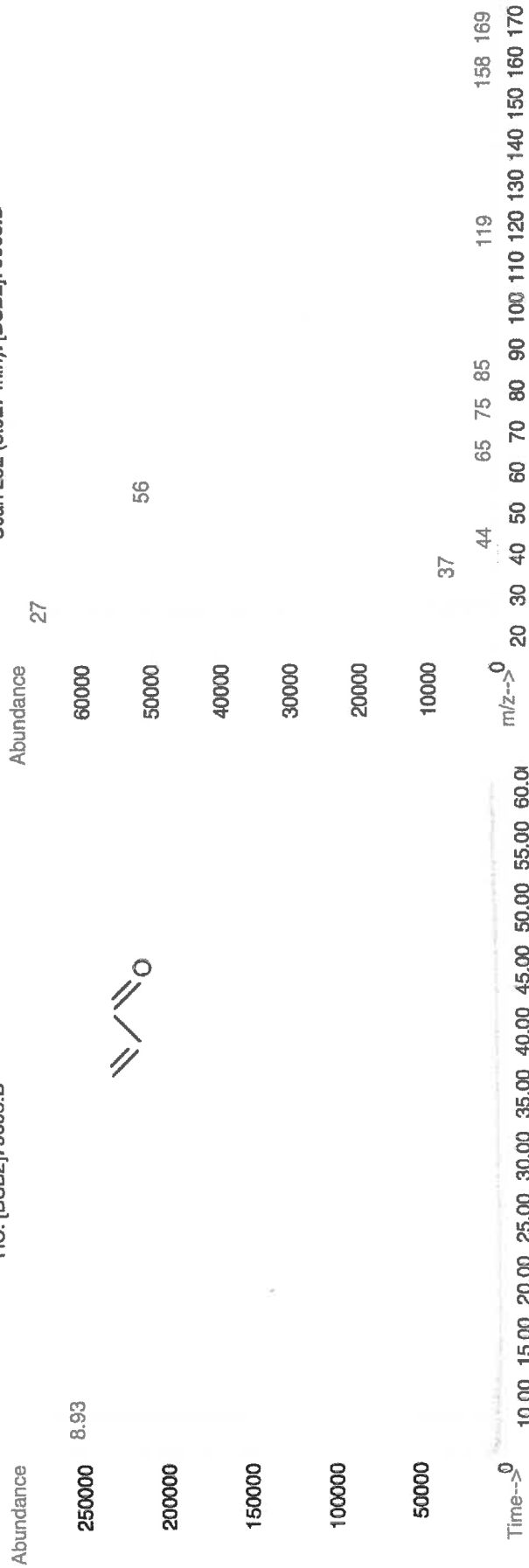
52.5
 107-02-8
 0.1 ppm
 or-rat 46mg/kg

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755R02H	5000	97	0.5	0.05166	0.05170	5004.1	52.5	107-02-8	0.1 ppm	or-rat 46mg/kg

Method: GC/MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vooil (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.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D



- 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).
- All Standards, after opening ampule, should be stored with capse tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY
ANALYTICAL STANDARD DISSOLVED IN WATER
Manufacturer's Name ABSOLUTE STANDARDS INC
Address 44 Rossetto Dr.
Hamden CT, 06514
Date Prepared/Revised January 1, 2024
Emergency Telephone USA & CANADA 1-800-535-5053
Emergency Telephone International 1-352-323-3500

Section II - Hazards Identification

P271
P302,332
Signal Word: DANGER
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
H315
P280
P305,351,338
Causes skin and eye irritation.
Use gloves, eye protection/face shield
If on skin, wash with soap and water
If in eyes, remove contacts, rinse with water



Section III - Composition

Components (Specific Chemical Identity; Common Name(s))
Water
CAS#: 7732-18-5
% (optional) > 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.
INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled
If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash with soap and water. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed
Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire
Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products
Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up
Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions
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
Melting Point

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.

Section XVI. Misc. INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XV. REGULATORY INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water
IATA
Not dangerous goods
Proper shipping name: Water

Section XIV. TRANSPORT INFORMATION

Dispose with normal Laboratory Solvent Waste.

Section XIII. DISPOSAL CONSIDERATIONS

LC50
EC50
NA
NA

Section XII. ECOLOGICAL INFORMATION

LD50 Oral - Rat
LC50 Inhalation - Rat
LD50 Dermal - Guinea pig
NA
NA
NA
Eye irritation
Causes skin irritation.

Section XI. TOXICOLOGICAL INFORMATION

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 X. STABILITY AND REACTIVITY

Appearance and Odor
CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Solubility in Water			
Completely miscible			
Vapor Density (AIR = 1)			
NA	NA	(Butyl Acetate = 1)	Evaporation rate
0°C			
NA			



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

Solvent(s): Lot#
Methanol EA899-US

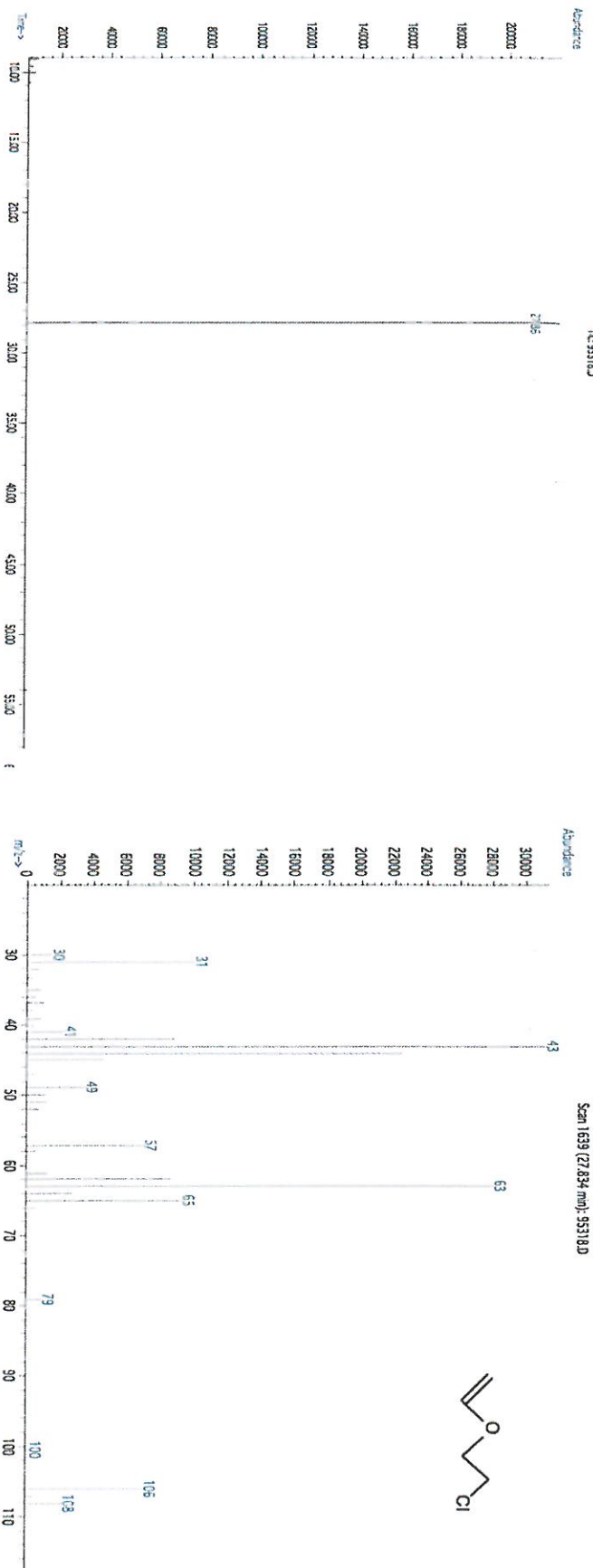
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB
Weight(s) shown below were combined and diluted to (mL): 30.0
5E-05 Balance Uncertainty
0.0003 Flask Uncertainty

Formulated By:	Benson Chan	121321
Reviewed By:	Pedro L. Rentas	121321
		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)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50

1. 2-Chloroethyl vinyl ether 74 MKCD0033 10000 99 0.2 0.30320 0.30411 10030.2 40.7 110-75-8 N/A or rat 250mg/kg

Method: GC/MSD-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).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

Solvent(s): Lot#
Methanol EA899-US

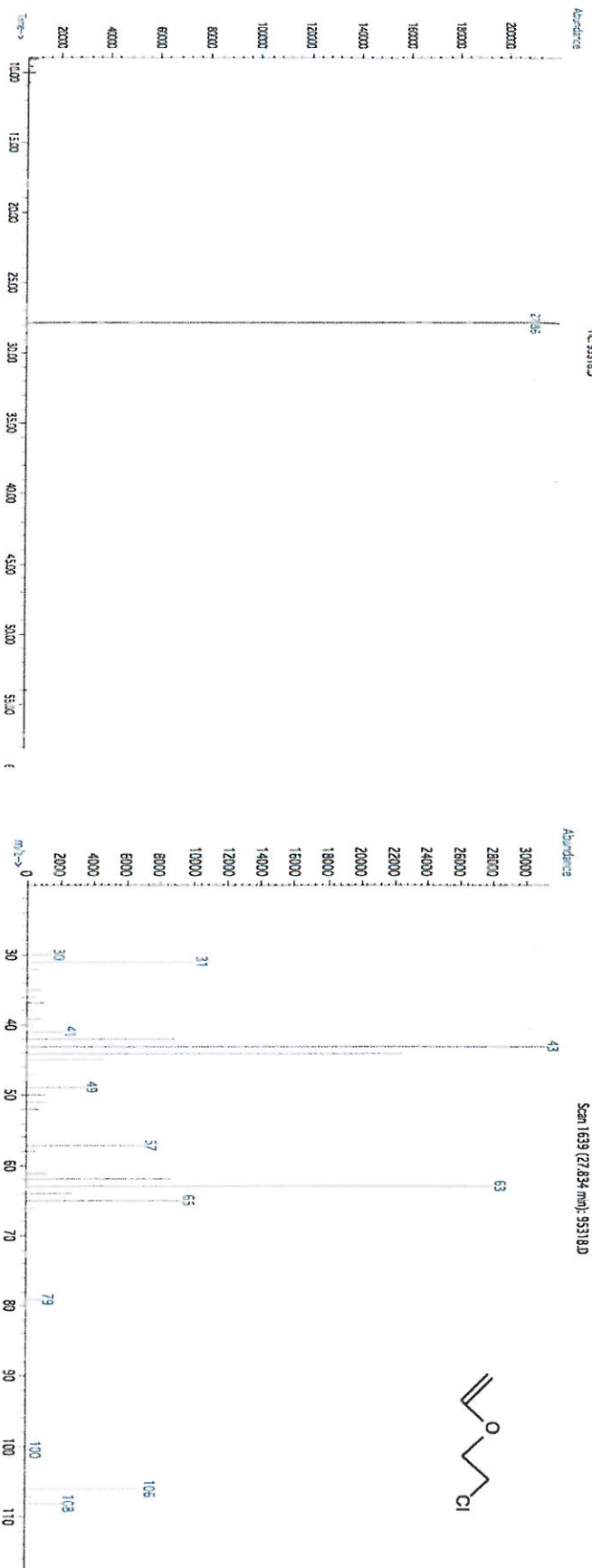
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB
Weight(s) shown below were combined and diluted to (mL): 30.0
5E-05 Balance Uncertainty
0.0003 Flask Uncertainty

Formulated By:	Benson Chan	121321
Reviewed By:	Pedro L. Rentes	121321
		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)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50

1. 2-Chloroethyl vinyl ether 74 MKCD0033 10000 99 0.2 0.30320 0.30411 10030.2 40.7 110-75-8 N/A or-rat 250mg/kg

Method: GC/MSD-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).
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- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555583 Lot No.: A0181978

Description : Custom CLP VOA Internal Standard Mix

Custom CLP VOA Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : February 28, 2025 Storage: 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,4-Difluorobenzene CAS # 540-36-3 Purity 99% (Lot MKBN8571V)	25,032.0 µg/mL	+/- 231.6508 µg/mL Gravimetric
			+/- 1,415.0433 µg/mL Unstressed
			+/- 1,447.6224 µg/mL Stressed
2	Bromochloromethane CAS # 74-97-5 Purity 99% (Lot 00008541)	25,036.0 µg/mL	+/- 231.6879 µg/mL Gravimetric
			+/- 1,415.2694 µg/mL Unstressed
			+/- 1,447.8538 µg/mL Stressed
3	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-29571)	25,104.0 µg/mL	+/- 232.3171 µg/mL Gravimetric
			+/- 1,419.1134 µg/mL Unstressed
			+/- 1,451.7863 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Miranda Kline
Miranda Kline - Operations Technician I

Date Mixed: 17-Feb-2022 Balance: B707717271

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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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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) CAS # 75-65-0 Purity 99% (Lot SHBM7694)	50,126.0 µg/mL	<table><tr><td>+/-</td><td>293.4988</td><td>µg/mL</td><td>Gravimetric</td></tr><tr><td>+/-</td><td>1,073.7654</td><td>µg/mL</td><td>Unstressed</td></tr><tr><td>+/-</td><td>1,104.9494</td><td>µg/mL</td><td>Stressed</td></tr></table>	+/-	293.4988	µg/mL	Gravimetric	+/-	1,073.7654	µg/mL	Unstressed	+/-	1,104.9494	µg/mL	Stressed
+/-	293.4988	µg/mL	Gravimetric												
+/-	1,073.7654	µg/mL	Unstressed												
+/-	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)

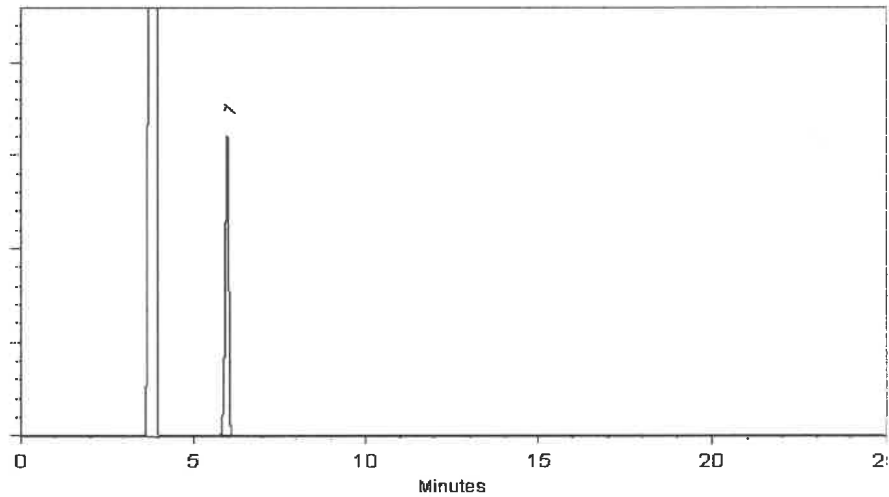
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

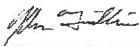
Inj. Temp:
200°C

Det. Temp:
250°C

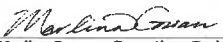
Det. Type:
FID



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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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:

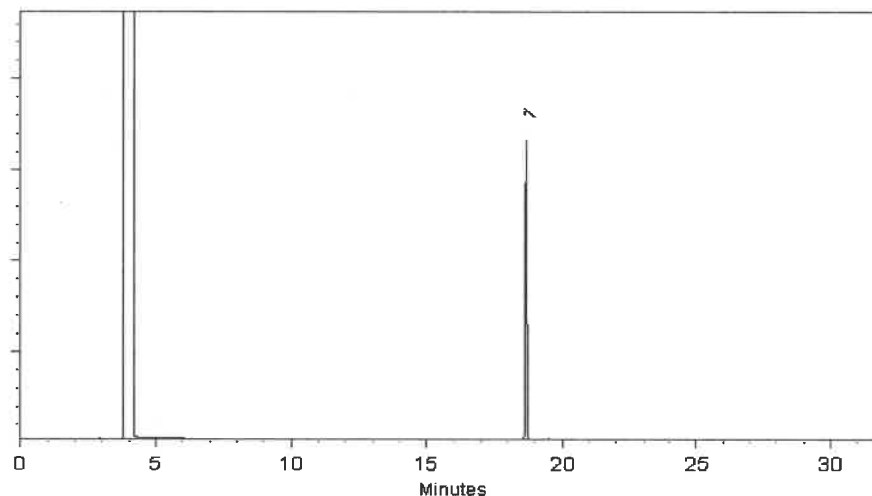
FID

Split Vent:

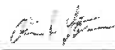
40 ml/min

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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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. : 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:

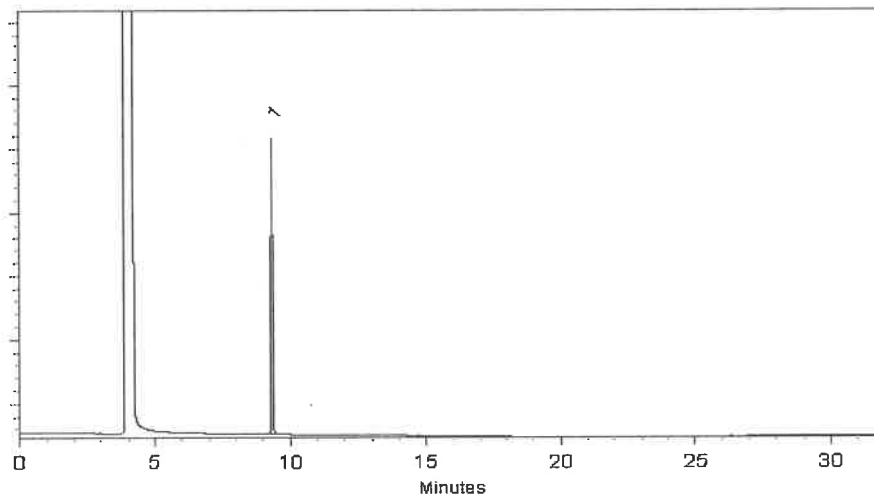
FID

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:

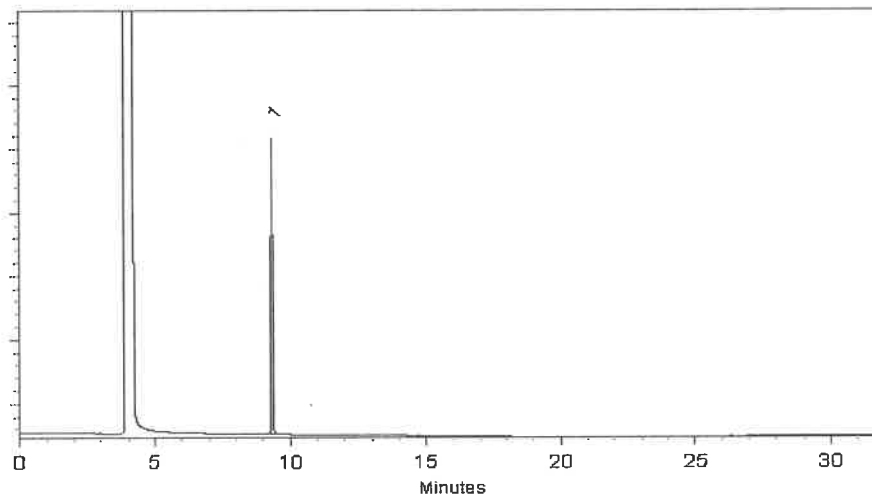
FID

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.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0194279

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 : October 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00012554	99%	2,001.5 µg/mL	+/- 112.7231
2	Chloromethane (methyl chloride)	74-87-3	SHBK6571	99%	2,001.2 µg/mL	+/- 112.5863
3	Vinyl chloride	75-01-4	00015559	99%	2,001.4 µg/mL	+/- 112.6561
4	Bromomethane (methyl bromide)	74-83-9	101604	99%	2,006.4 µg/mL	+/- 112.8262
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,001.9 µg/mL	+/- 112.5897
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCL8411	99%	2,000.8 µg/mL	+/- 112.6473

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

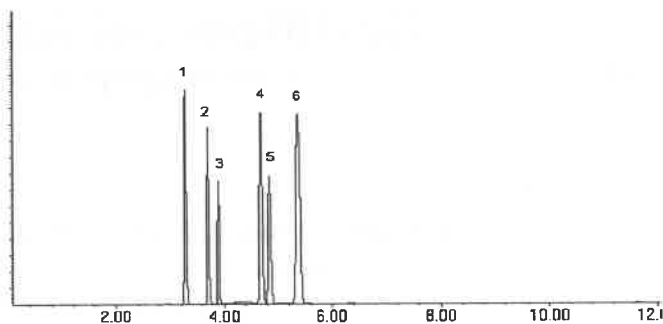
MSD

Split Vent:

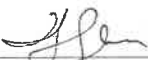
Split ratio 10:1

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 03-Feb-2023

Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Feb-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:

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Catalog No. : 30042 **Lot No.:** A0194279

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 : October 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00012554	99%	2,001.5 µg/mL	+/- 112.7231
2	Chloromethane (methyl chloride)	74-87-3	SHBK6571	99%	2,001.2 µg/mL	+/- 112.5863
3	Vinyl chloride	75-01-4	00015559	99%	2,001.4 µg/mL	+/- 112.6561
4	Bromomethane (methyl bromide)	74-83-9	101604	99%	2,006.4 µg/mL	+/- 112.8262
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6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCL8411	99%	2,000.8 µg/mL	+/- 112.6473

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

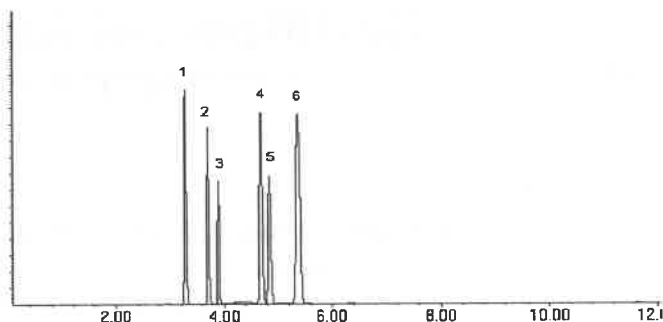
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 03-Feb-2023

Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Feb-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.
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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. : 30489 **Lot No.:** A0196115
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, 2024 **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%	2,013.7 µg/mL	+/- 69.6015
2	Vinyl acetate	108-05-4	RD220630	99%	2,020.0 µg/mL	+/- 69.8205
3	Ethyl acetate	141-78-6	SHBP9289	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,014.0 µg/mL	+/- 69.6131
5	Propyl acetate	109-60-4	TFFKL	99%	2,014.7 µg/mL	+/- 69.6361
6	Butyl acetate	123-86-4	SHBP6314	99%	2,014.0 µg/mL	+/- 69.6131
7	Amyl acetate	628-63-7	41325/1	97%	2,016.3 µg/mL	+/- 69.6928

* 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:

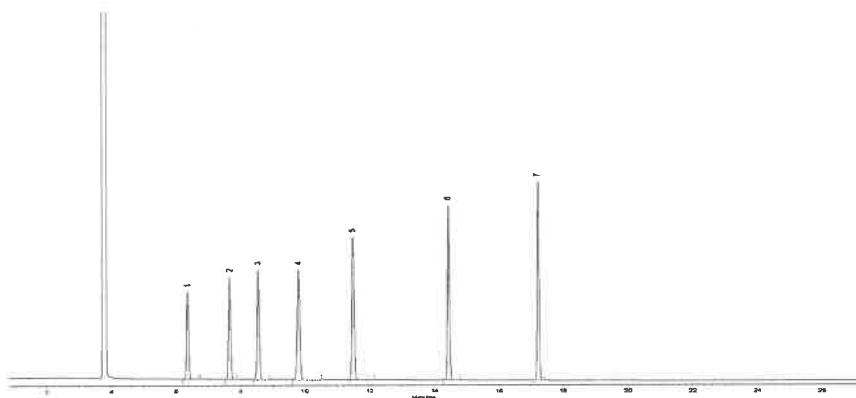
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

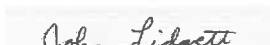


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Bethany Lowery - Operations Tech I

Date Mixed: 21-Mar-2023

Balance Serial # B251644995


John Lidgett - AD Chemist

Date Passed: 29-Mar-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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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.:** A0196115
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, 2024 **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%	2,013.7 µg/mL	+/- 69.6015
2	Vinyl acetate	108-05-4	RD220630	99%	2,020.0 µg/mL	+/- 69.8205
3	Ethyl acetate	141-78-6	SHBP9289	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,014.0 µg/mL	+/- 69.6131
5	Propyl acetate	109-60-4	TFFKL	99%	2,014.7 µg/mL	+/- 69.6361
6	Butyl acetate	123-86-4	SHBP6314	99%	2,014.0 µg/mL	+/- 69.6131
7	Amyl acetate	628-63-7	41325/1	97%	2,016.3 µg/mL	+/- 69.6928

* 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:

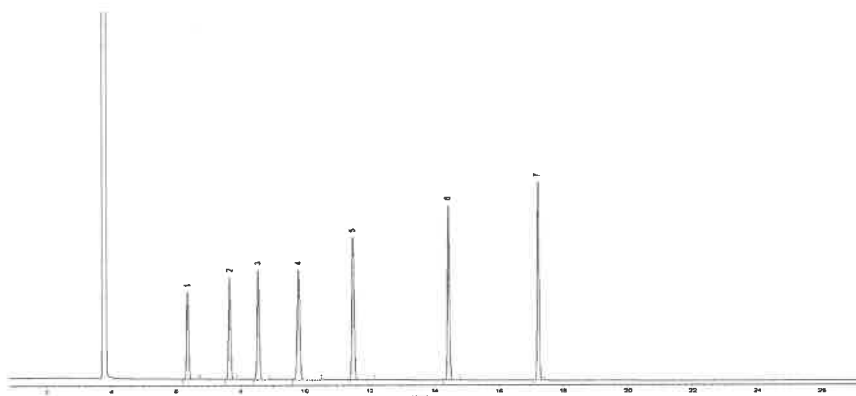
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

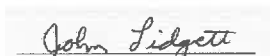


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Bethany Lowery - Operations Tech I

Date Mixed: 21-Mar-2023

Balance Serial # B251644995


John Lidgett - AD Chemist

Date Passed: 29-Mar-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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Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0196865

Description : Custom 8260A/B Surrogate Mix
Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol,
1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023

Balance: 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- 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

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. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1
VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

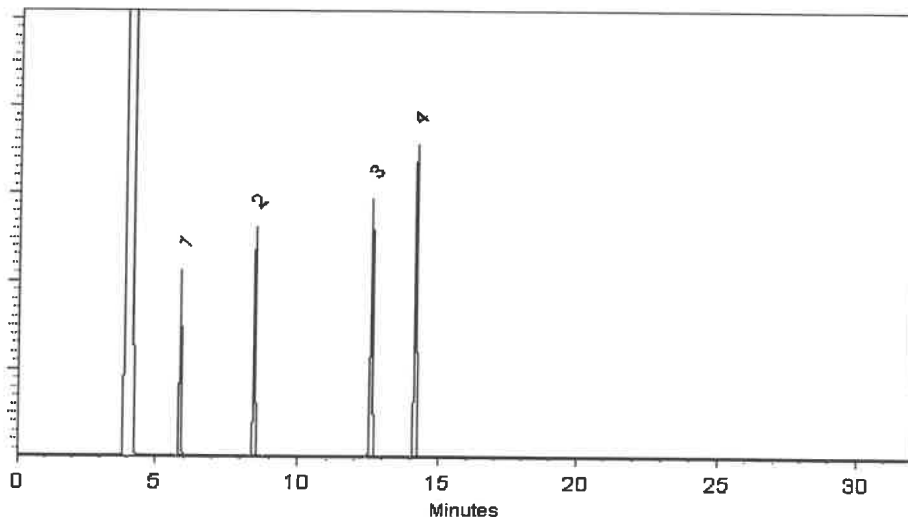
FID

Split Vent:

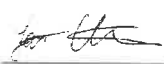
40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023

Balance Serial # B707717271


Marlina Cowan - Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Manufacturing Notes:

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chromatographic plus



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Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
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4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

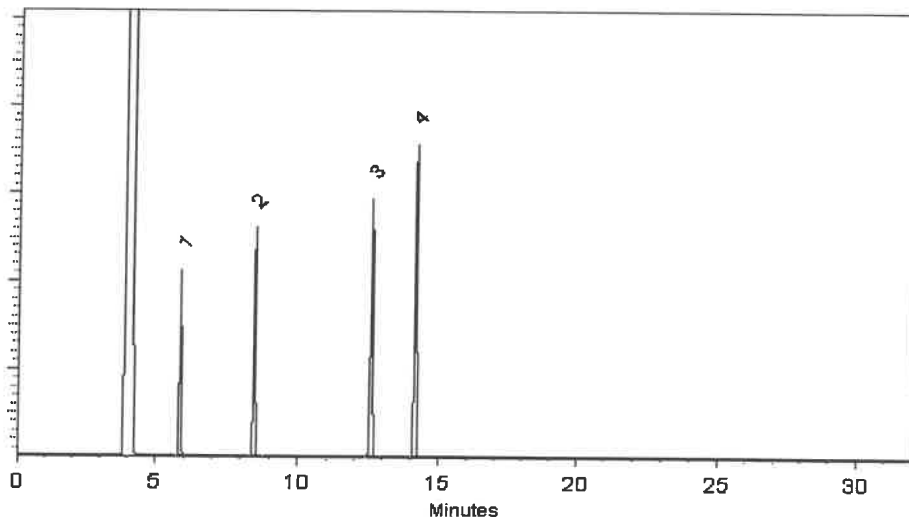
FID

Split Vent:

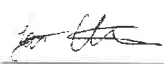
40 ml/min

Inj. Vol

1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023

Balance Serial # B707717271


Marlina Cowan - Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Manufacturing Notes:

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Handling Notes:

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chromatographic plus



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Catalog No. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1
VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
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4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

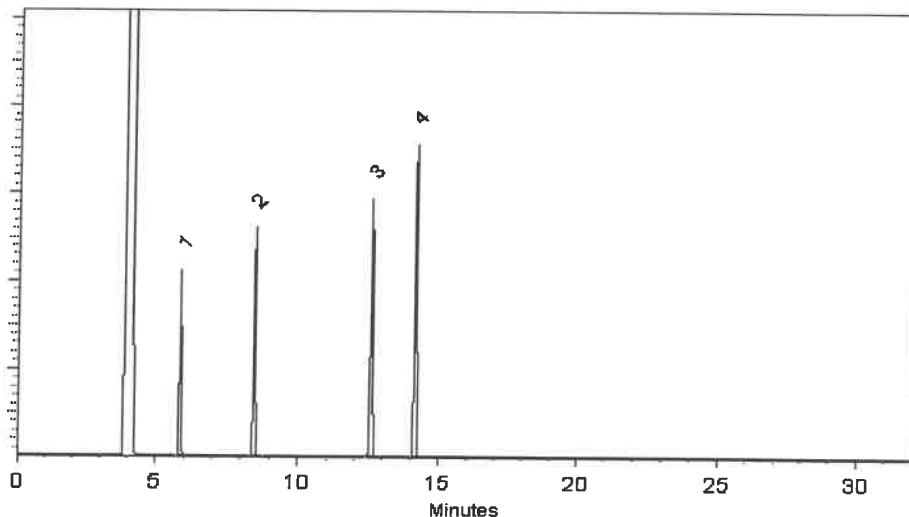
FID

Split Vent:

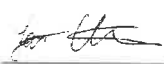
40 ml/min

Inj. Vol

1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023

Balance Serial # B707717271


Marlina Cowan - Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
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Certified Uncertainty Value Notes:

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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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12
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic



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.:** A0205179
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, 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	Vinyl acetate	108-05-4	RP231030CTH	98%	8,075.2 µg/mL	+/- 279.1159

* 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:

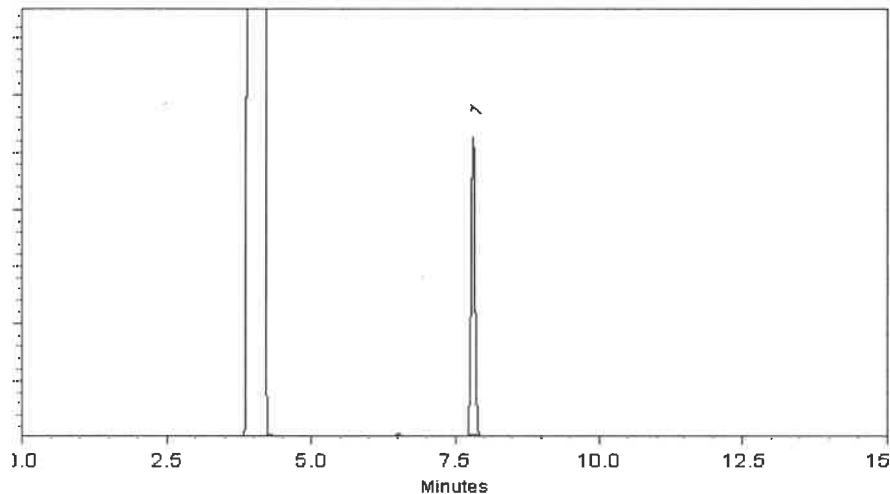
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Daniel Wasson - Operations Tech I

Date Mixed: 06-Dec-2023 Balance Serial # 1127510105


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Dec-2023

APPROVED
By: Jennifer Pollino (Date: 11-Dec-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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12
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chromatographic



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Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
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Tech Tips:

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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
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Inj. Temp:

200°C

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Det. Type:

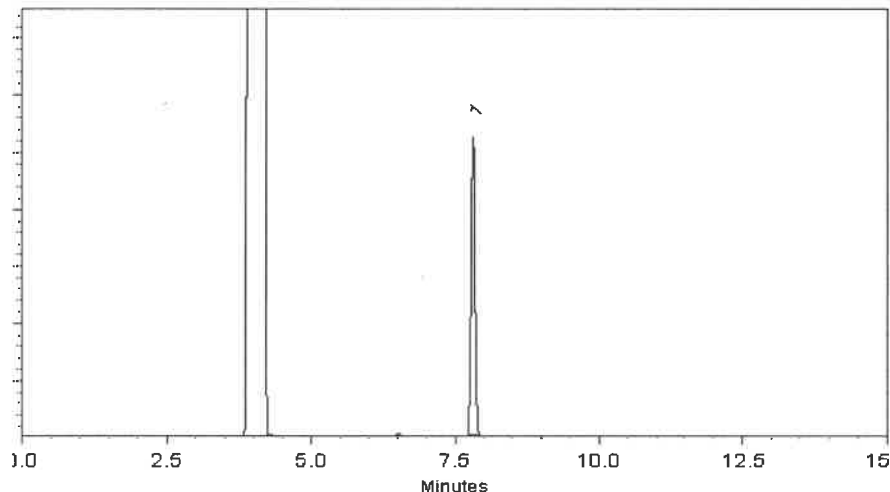
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Daniel Wasson - Operations Tech I

Date Mixed: 06-Dec-2023

Balance Serial # 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Dec-2023

APPROVED
(Signature Required for Log to File)

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 REFERENCE MATERIAL

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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.: 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

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024

Balance: 1127510105



Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

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.



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555584 Lot No.: A0179624
Description : Custom CLP VOA Surrogate Standard Mix
Custom CLP VOA Surrogate Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : December 31, 2024 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,2-Dichloroethane-d4	25,032.0 µg/mL	+/-	231.6508	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-29377)		+/-	1,415.0433	µg/mL	Unstressed
	Purity 99%		+/-	1,447.6224	µg/mL	Stressed
2	1-Bromo-4-fluorobenzene (BFB)	25,072.0 µg/mL	+/-	232.0210	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/-	1,417.3044	µg/mL	Unstressed
	Purity 99%		+/-	1,449.9357	µg/mL	Stressed
3	Toluene-d8	25,024.0 µg/mL	+/-	231.5768	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-31958)		+/-	1,414.5910	µg/mL	Unstressed
	Purity 99%		+/-	1,447.1598	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Cathleen Soltis - Mix Technician

Date Mixed: 16-Dec-2021 Balance: B251644995

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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.

NTP:

Chemical Name
No data available

CAS No.

IARC:

Chemical Name

CAS No.

Group No.

12. ECOLOGICAL INFORMATION**Overview:**

Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.

Mobility:

No data

Persistence:

No data

Bioaccumulation:

No data

Degradability:

Biodegrades slowly.

Ecological Toxicity Data:

No data available

13. DISPOSAL CONSIDERATIONS**Waste Description of Spent Product:**

Spent or discarded material is a hazardous waste. Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures.

Disposal Methods:

Dispose of by incineration following Federal, State, Local, or Provincial regulations.

Waste Disposal of Packaging:

Comply with all Local, State, Federal, and Provincial Environmental Regulations.

14. TRANSPORTATION INFORMATION**United States:****DOT Proper Shipping Name:**

Flammable liquids, n.o.s (Methanol, Toluene-d8)

UN Number:

UN1993

Hazard Class:

3

Packing Group:

II

International:**IATA Proper Shipping Name:**

Flammable liquids, n.o.s (Methanol, Toluene-d8)

UN Number:

UN1993

Hazard Class:

3

Packing Group:

II

Marine Pollutant: No

Chemical Name	CAS#	Marine Pollutant	Severe Marine Pollutant
No data available			

15. REGULATORY INFORMATION**United States:**

Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
P&T Methanol	67-56-1	X	X	-	X
1-Bromo-4-fluorobenzene (BFB)	460-00-4	-	-	-	X
1,2-dichloroethane-d4	17060-07-0	-	-	-	-
toluene-d8	2037-26-5	-	-	-	-

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS #	Regulation
Methanol	67-56-1	Prop 65 Develop Tox

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
P&T Methanol	67-56-1	X	X	X	X
1-Bromo-4-	460-00-4	-	-	-	-

fluorobenzene (BFB)					
1,2-dichloroethane-d4	17060-07-0	-	-	-	-
toluene-d8	2037-26-5	-	-	-	-

16. OTHER INFORMATION

Prior Version Date: 01/05/17

Other Information: Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.

References: No data available

Disclaimer: Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.

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



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Jamie Ethier
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Jamie Ethier
Vice President Global Quality



SHIPPING DOCUMENTS

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Packing List

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Date	Order #
09/03/2024	318988



Ship To

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
9/5/2024
9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0924	8259-04
1	1	0	PT-HG-WP	WP Mercury	WP0924	8259-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0924	8259-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0924	8259-06
1	1	0	PT-DEM-WP	WP Demand	WP0924	8259-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0924	8259-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0924	8259-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0924	8259-72
1	1	0	PT-SOL-WP	WP Solids	WP0924	8259-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0924	8259-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0924	8259-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0924	8259-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0924	8259-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0924	8259-13
1	1	0	PT-PH-WP	WP pH	WP0924	8259-15
1	1	0	PT-CN-WP	WP Cyanide	WP0924	8259-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0924	8259-16

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Packing List

Date	Order #
09/03/2024	318988



Ship To

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
9/5/2024
9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0924	8259-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0924	8259-17
1	1	0	PT-VSOL-WP	WP Volatile Solids	WP0924	8259-18
1	1	0	PT-TURB-WP	WP Turbidity	WP0924	8259-20
1	1	0	PT-SIO2-WP	WP Silica	WP0924	8259-21
1	1	0	PT-COL-WP	WP Color	WP0924	8259-51
1	1	0	PT-VOA-WP	WP Volatiles	WP0924	8259-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0924	8259-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0924	8259-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0924	8259-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0924	8259-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0924	8259-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0924	8259-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0924	8259-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R39151	R39151-104
1	1	0	RR-PAH-WP	WP PAH-Low Level	R39151	R39151-37
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R39151	R39151-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R39151	R39151-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R39151	R39151-98
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R39151	R39151-108

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488