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DATA REPORTING QUALIFIERS- ORGANIC

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

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

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LAB CHRONICLE

OrderID:	Q1241	**OrderDate:**	1/30/2025 2:58:00 PM
Client:	RU2 Engineering, LLC	**Project:**	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	**Location:**	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1241-02	**JPP-3.5-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP VOA	8260D			02/04/25	
Q1241-06	**JPP-5.3-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP VOA	8260D			02/03/25	
Q1241-10	**JPP-5.2-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP VOA	8260D			02/03/25	
Q1241-14	**JPP-5.4-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP VOA	8260D			02/03/25	
Q1241-18	**JPP-51.4-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP VOA	8260D			02/03/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units

Client ID:

0

Total Voc :

Total Concentration:

QC SUMMARY

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Surrogate Summary

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
Q1241-02	JPP-3.5-013025	1,2-Dichloroethane-d4	50	49.2	98	74	125
		Dibromofluoromethane	50	48.7	97	75	124
		Toluene-d8	50	51.1	102	86	113
		4-Bromofluorobenzene	50	44.1	88	77	121
Q1241-06	JPP-5.3-013025	1,2-Dichloroethane-d4	50	53.6	107	74	125
		Dibromofluoromethane	50	50.1	100	75	124
		Toluene-d8	50	53.0	106	86	113
		4-Bromofluorobenzene	50	45.3	91	77	121
Q1241-10	JPP-5.2-013025	1,2-Dichloroethane-d4	50	54.9	110	74	125
		Dibromofluoromethane	50	49.5	99	75	124
		Toluene-d8	50	53.5	107	86	113
		4-Bromofluorobenzene	50	47.0	94	77	121
Q1241-14	JPP-5.4-013025	1,2-Dichloroethane-d4	50	54.5	109	74	125
		Dibromofluoromethane	50	49.9	100	75	124
		Toluene-d8	50	53.8	108	86	113
		4-Bromofluorobenzene	50	45.6	91	77	121
Q1241-18	JPP-51.4-013025	1,2-Dichloroethane-d4	50	54.1	108	74	125
		Dibromofluoromethane	50	49.9	100	75	124
		Toluene-d8	50	52.5	105	86	113
		4-Bromofluorobenzene	50	45.1	90	77	121
VN0203WBL01	VN0203WBL01	1,2-Dichloroethane-d4	50	50.4	101	74	125
		Dibromofluoromethane	50	50.6	101	75	124
		Toluene-d8	50	50.1	100	86	113
		4-Bromofluorobenzene	50	42.6	85	77	121
VN0203WBS01	VN0203WBS01	1,2-Dichloroethane-d4	50	47.8	96	74	125
		Dibromofluoromethane	50	52.2	104	75	124
		Toluene-d8	50	54.6	109	86	113
		4-Bromofluorobenzene	50	51.1	102	77	121
VN0203WBSD0	VN0203WBSD01	1,2-Dichloroethane-d4	50	48.0	96	74	125
		Dibromofluoromethane	50	51.0	102	75	124
		Toluene-d8	50	51.7	103	86	113
		4-Bromofluorobenzene	50	48.8	98	77	121

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Surrogate Summary

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
VN0204WBL01	VN0204WBL01	1,2-Dichloroethane-d4	50	49.9	100	74	125
		Dibromofluoromethane	50	50.3	101	75	124
		Toluene-d8	50	49.2	98	86	113
		4-Bromofluorobenzene	50	44.2	88	77	121
VN0204WBS02	VN0204WBS02	1,2-Dichloroethane-d4	50	45.2	90	74	125
		Dibromofluoromethane	50	48.7	97	75	124
		Toluene-d8	50	49.8	100	86	113
		4-Bromofluorobenzene	50	47.8	96	77	121

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8260D **Datafile :** VN085619.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0203WBS01	Vinyl chloride	20	18.0	ug/L	90			65	117	
	1,1-Dichloroethene	20	17.3	ug/L	86			74	110	
	2-Butanone	100	88.6	ug/L	89			65	122	
	Carbon Tetrachloride	20	17.5	ug/L	88			77	113	
	Chloroform	20	19.0	ug/L	95			79	113	
	Benzene	20	18.6	ug/L	93			82	109	
	1,2-Dichloroethane	20	17.2	ug/L	86			80	115	
	Trichloroethene	20	18.4	ug/L	92			77	113	
	Tetrachloroethene	20	19.2	ug/L	96			67	123	
	Chlorobenzene	20	19.0	ug/L	95			82	109	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8260D **Datafile :** VN085620.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0203WBSD01	Vinyl chloride	20	18.9	ug/L	95	5		65	117	20
	1,1-Dichloroethene	20	18.1	ug/L	91	6		74	110	20
	2-Butanone	100	94.6	ug/L	95	7		65	122	20
	Carbon Tetrachloride	20	17.8	ug/L	89	1		77	113	20
	Chloroform	20	19.8	ug/L	99	4		79	113	20
	Benzene	20	18.8	ug/L	94	1		82	109	20
	1,2-Dichloroethane	20	17.5	ug/L	88	2		80	115	20
	Trichloroethene	20	18.2	ug/L	91	1		77	113	20
	Tetrachloroethene	20	19.1	ug/L	96	0		67	123	20
	Chlorobenzene	20	19.6	ug/L	98	3		82	109	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8260-Low **Datafile :** VN085651.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0204WBS02	Vinyl chloride	20	25.2	ug/L	126		*	65	117	
	1,1-Dichloroethene	20	21.6	ug/L	108			74	110	
	2-Butanone	100	99.4	ug/L	99			65	122	
	Carbon Tetrachloride	20	19.1	ug/L	96			77	113	
	Chloroform	20	20.1	ug/L	101			79	113	
	Benzene	20	20.6	ug/L	103			82	109	
	1,2-Dichloroethane	20	18.2	ug/L	91			80	115	
	Trichloroethene	20	19.8	ug/L	99			77	113	
	Tetrachloroethene	20	21.2	ug/L	106			67	123	
	Chlorobenzene	20	20.7	ug/L	104			82	109	

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0203WBL01

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085618.D Lab Sample ID: VN0203WBL01

Date Analyzed: 02/03/2025 Time Analyzed: 13:34

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
VN0203WBS01	VN0203WBS01	VN085619.D	02/03/2025
VN0203WBSD01	VN0203WBSD01	VN085620.D	02/03/2025
JPP-5.3-013025	Q1241-06	VN085636.D	02/03/2025
JPP-5.2-013025	Q1241-10	VN085637.D	02/03/2025
JPP-5.4-013025	Q1241-14	VN085638.D	02/03/2025
JPP-51.4-013025	Q1241-18	VN085639.D	02/03/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0204WBL01

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085647.D Lab Sample ID: VN0204WBL01

Date Analyzed: 02/04/2025 Time Analyzed: 12:31

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
JPP-3.5-013025	Q1241-02	VN085650.D	02/04/2025
VN0204WBS02	VN0204WBS02	VN085651.D	02/04/2025

COMMENTS:

Alliance TECHNICAL GROUP

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085437.D BFB Injection Date: 01/14/2025

Instrument ID: MSVOA_N BFB Injection Time: 14:22

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 60.0% of mass 95	58
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	1.4 (1.8) 1
174	50.0 - 100.0% of mass 95	76
175	5.0 - 9.0% of mass 174	5.4 (7.1) 1
176	95.0 - 101.0% of mass 174	74.1 (97.4) 1
177	5.0 - 9.0% of mass 176	4.9 (6.7) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC100	VSTDICC100	VN085438.D	01/14/2025	14:56
VSTDICCC050	VSTDICCC050	VN085439.D	01/14/2025	15:19
VSTDICC020	VSTDICC020	VN085440.D	01/14/2025	15:43
VSTDICC010	VSTDICC010	VN085441.D	01/14/2025	16:07
VSTDICC005	VSTDICC005	VN085442.D	01/14/2025	16:31
VSTDICC001	VSTDICC001	VN085443.D	01/14/2025	17:19

Raw Data: **VN085616.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085616.D BFB Injection Date: 02/03/2025

Instrument ID: MSVOA_N BFB Injection Time: 12:23

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	20.2
75	30.0 - 60.0% of mass 95	54.4
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	1.4 (1.9) 1
174	50.0 - 100.0% of mass 95	76.2
175	5.0 - 9.0% of mass 174	5.5 (7.2) 1
176	95.0 - 101.0% of mass 174	75 (98.4) 1
177	5.0 - 9.0% of mass 176	5.1 (6.8) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN085617.D	02/03/2025	12:56
VN0203WBL01	VN0203WBL01	VN085618.D	02/03/2025	13:34
VN0203WBS01	VN0203WBS01	VN085619.D	02/03/2025	13:58
VN0203WBSD01	VN0203WBSD01	VN085620.D	02/03/2025	14:22
JPP-5.3-013025	Q1241-06	VN085636.D	02/03/2025	20:49
JPP-5.2-013025	Q1241-10	VN085637.D	02/03/2025	21:13
JPP-5.4-013025	Q1241-14	VN085638.D	02/03/2025	21:37
JPP-51.4-013025	Q1241-18	VN085639.D	02/03/2025	22:01

Raw Data: **VN085644.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085644.D BFB Injection Date: 02/04/2025

Instrument ID: MSVOA_N BFB Injection Time: 09:55

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	19.4
75	30.0 - 60.0% of mass 95	51.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	1.2 (1.4) 1
174	50.0 - 100.0% of mass 95	80.1
175	5.0 - 9.0% of mass 174	5.8 (7.2) 1
176	95.0 - 101.0% of mass 174	77.2 (96.3) 1
177	5.0 - 9.0% of mass 176	4.4 (5.7) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN085645.D	02/04/2025	11:05
VN0204WBL01	VN0204WBL01	VN085647.D	02/04/2025	12:31
JPP-3.5-013025	Q1241-02	VN085650.D	02/04/2025	14:27
VN0204WBS02	VN0204WBS02	VN085651.D	02/04/2025	14:51

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085617.D Date Analyzed: 02/03/2025

Instrument ID: MSVOA_N Time Analyzed: 12:56

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	193909	8.22	331362	9.10	301323	11.87
UPPER LIMIT	387818	8.718	662724	9.6	602646	12.365
LOWER LIMIT	96954.5	7.718	165681	8.6	150662	11.365
EPA SAMPLE NO.						
JPP-5.3-013025	164691	8.22	346323	9.10	326963	11.87
JPP-5.2-013025	157669	8.22	330403	9.10	315638	11.87
JPP-5.4-013025	163991	8.22	343832	9.10	330622	11.87
JPP-51.4-013025	168419	8.22	349686	9.10	332324	11.87
VN0203WBL01	183958	8.22	354826	9.10	307130	11.87
VN0203WBS01	188870	8.22	327054	9.10	287245	11.87
VN0203WBSD01	177381	8.22	316818	9.10	277592	11.87

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085617.D Date Analyzed: 02/03/2025

Instrument ID: MSVOA_N Time Analyzed: 12:56

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

	IS4 AREA #	RT #				
12 HOUR STD	152662	13.788				
UPPER LIMIT	305324	14.288				
LOWER LIMIT	76331	13.288				
EPA SAMPLE NO.						
JPP-5.3-013025	116207	13.79				
JPP-5.2-013025	114334	13.79				
JPP-5.4-013025	116237	13.79				
JPP-51.4-013025	119364	13.79				
VN0203WBL01	111992	13.79				
VN0203WBS01	141185	13.79				
VN0203WBSD01	132351	13.79				

IS4 = 1,4-Dichlorobenzene-d4

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085645.D Date Analyzed: 02/04/2025

Instrument ID: MSVOA_N Time Analyzed: 11:05

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	200704	8.22	345148	9.10	309053	11.87
UPPER LIMIT	401408	8.724	690296	9.6	618106	12.365
LOWER LIMIT	100352	7.724	172574	8.6	154527	11.365
EPA SAMPLE NO.						
JPP-3.5-013025	192282	8.22	373073	9.10	340715	11.87
VN0204WBL01	197983	8.22	379434	9.10	328690	11.87
VN0204WBS02	206401	8.22	367320	9.10	317764	11.87

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: VN085645.D Date Analyzed: 02/04/2025

Instrument ID: MSVOA_N Time Analyzed: 11:05

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

	IS4 AREA #	RT #				
12 HOUR STD	157058	13.788				
UPPER LIMIT	314116	14.288				
LOWER LIMIT	78529	13.288				
EPA SAMPLE NO.						
JPP-3.5-013025	119994	13.79				
VN0204WBL01	132287	13.79				
VN0204WBS02	150317	13.79				

IS4 = 1,4-Dichlorobenzene-d4

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

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

SAMPLE DATA

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-02	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :	SW5035		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085650.D	1		02/04/25 14:27	VN020425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	UQ	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	25.0	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.2		74 - 125	98%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		75 - 124	97%	SPK: 50
2037-26-5	Toluene-d8	51.1		86 - 113	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.1		77 - 121	88%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	192000	8.224			
540-36-3	1,4-Difluorobenzene	373000	9.1			
3114-55-4	Chlorobenzene-d5	341000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	120000	13.794			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085650.D
Acq On : 04 Feb 2025 14:27
Operator : JC\MD
Sample : Q1241-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Quant Time: Feb 05 01:04:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

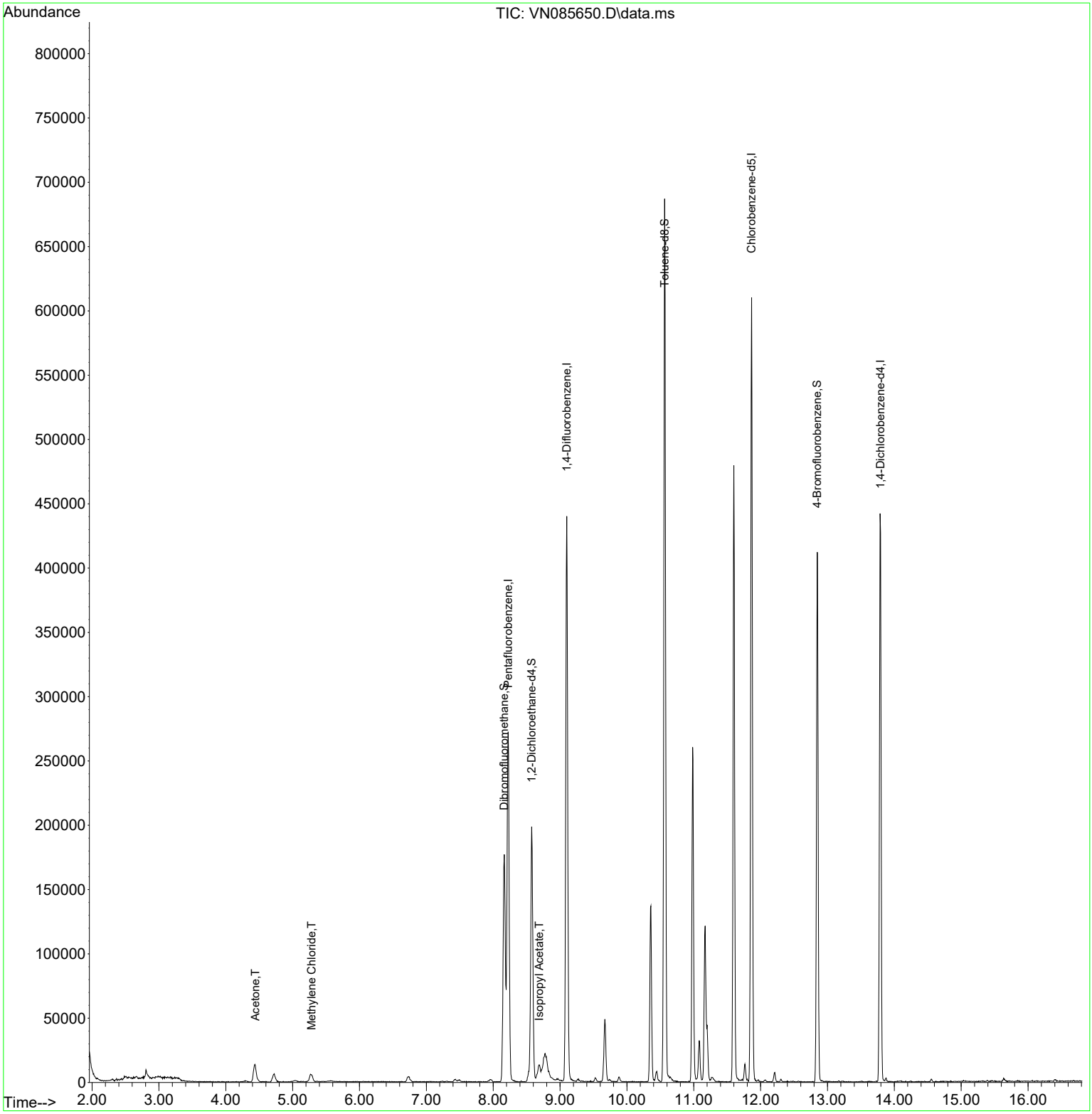
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	192282	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	373073	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	340715	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	119994	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	152796	49.228	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 98.460%			
35) Dibromofluoromethane	8.165	113	126064	48.707	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.420%			
50) Toluene-d8	10.565	98	469617	51.068	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.140%			
62) 4-Bromofluorobenzene	12.847	95	138593	44.058	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 88.120%			
Target Compounds						Qvalue
16) Acetone	4.441	43	26678	26.602	ug/l	91
20) Methylene Chloride	5.283	84	5252	2.115	ug/l #	74
43) Isopropyl Acetate	8.688	43	17288	2.943	ug/l #	72

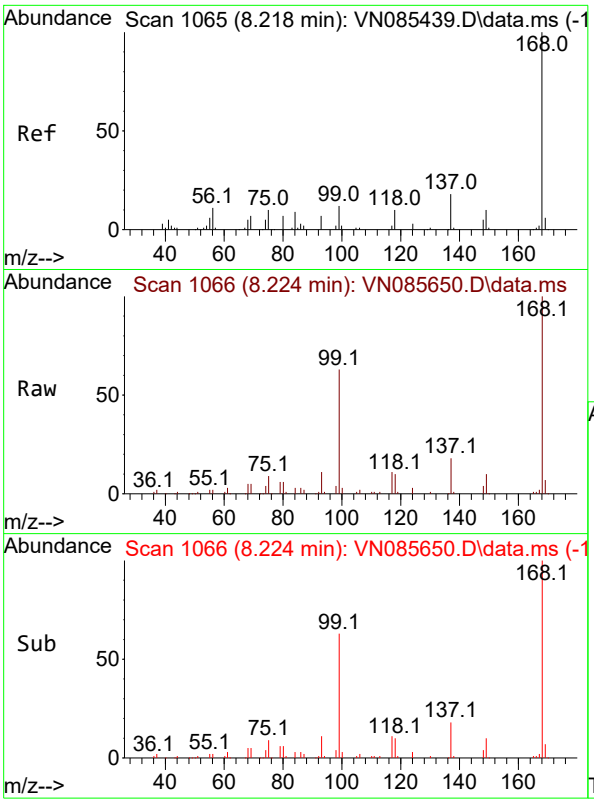
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085650.D
Acq On : 04 Feb 2025 14:27
Operator : JC\MD
Sample : Q1241-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Quant Time: Feb 05 01:04:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



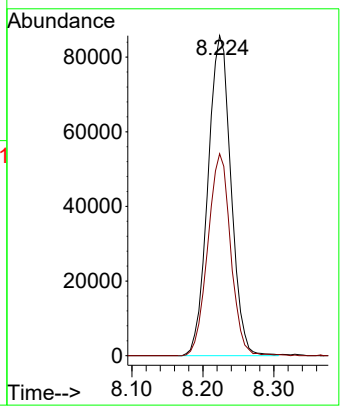


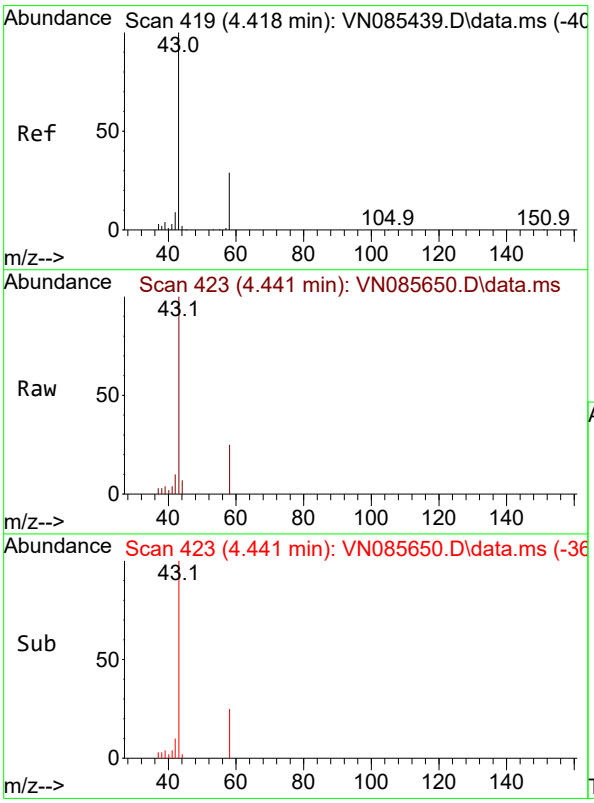
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Tgt Ion:168 Resp: 192282

Ion	Ratio	Lower	Upper
168	100		
99	63.1	53.6	80.4

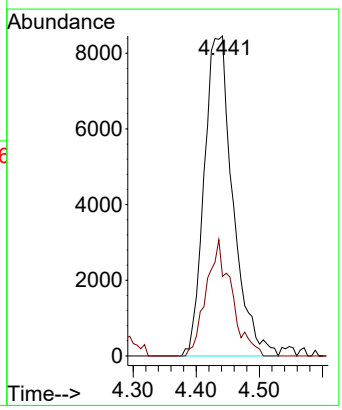


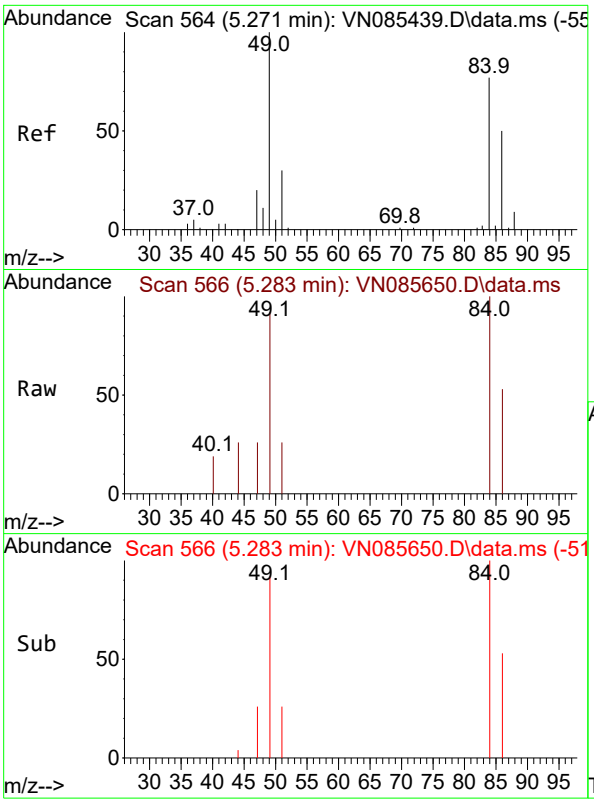


#16
Acetone
Concen: 26.602 ug/l
RT: 4.441 min Scan# 423
Delta R.T. 0.023 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion: 43 Resp: 26678

Ion	Ratio	Lower	Upper
43	100		
58	24.8	23.8	35.6



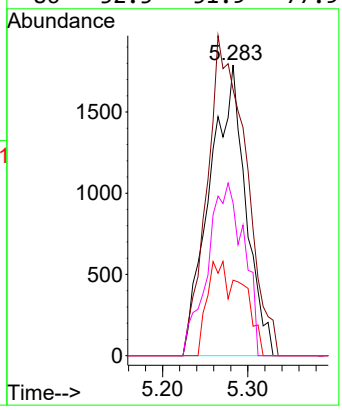


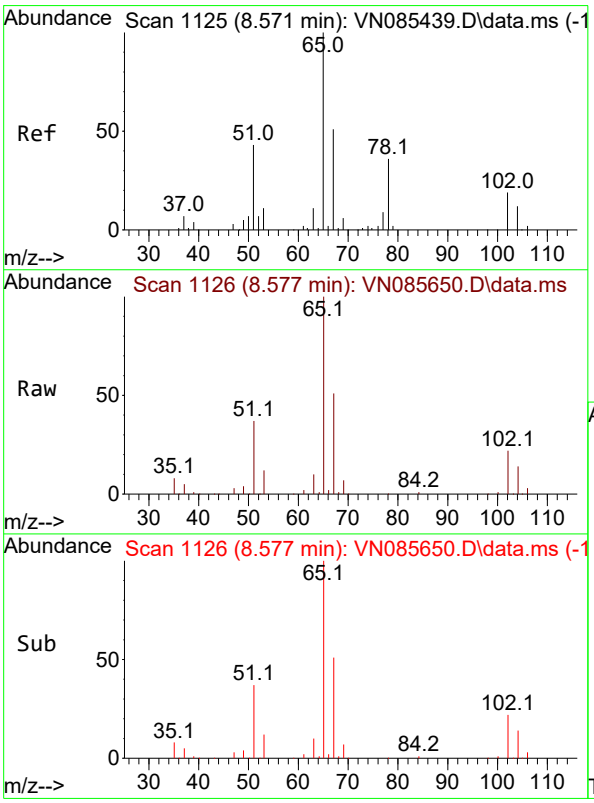
#20
Methylene Chloride
Concen: 2.115 ug/l
RT: 5.283 min Scan# 5
Delta R.T. 0.012 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Tgt Ion: 84 Resp: 5252

Ion	Ratio	Lower	Upper
84	100		
49	91.6	104.1	156.1#
51	26.0	31.0	46.4#
86	52.5	51.9	77.9

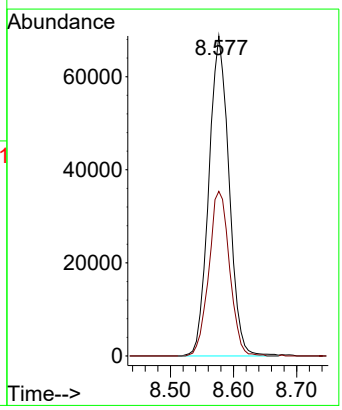


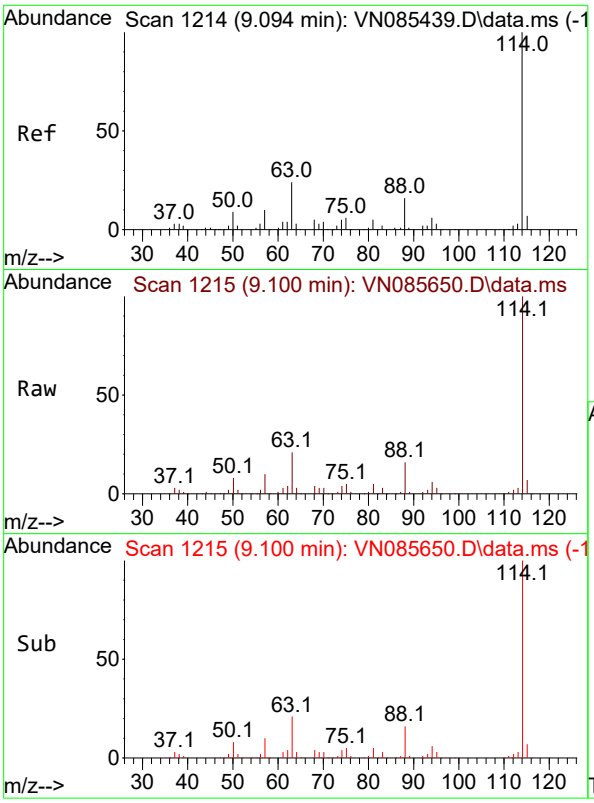


#33
1,2-Dichloroethane-d4
Concen: 49.228 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion: 65 Resp: 152796

Ion	Ratio	Lower	Upper
65	100		
67	52.7	0.0	101.6



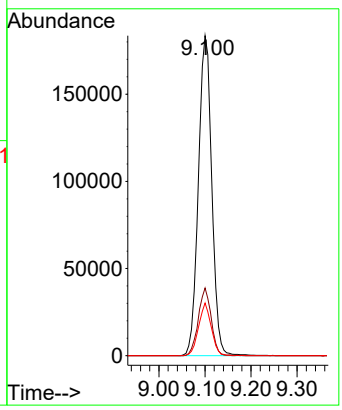


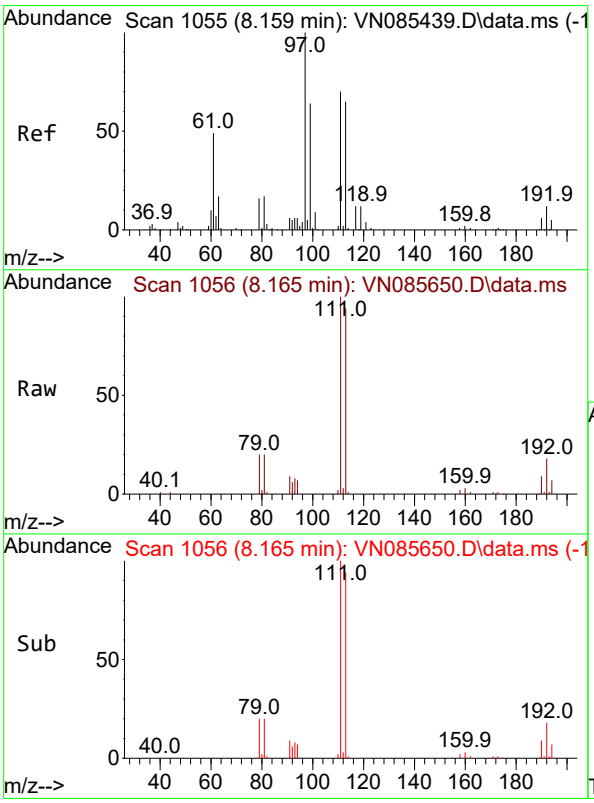
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Tgt Ion:114 Resp: 373073

Ion	Ratio	Lower	Upper
114	100		
63	21.2	0.0	47.6
88	16.4	0.0	32.6

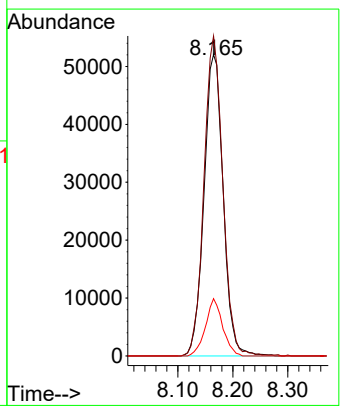


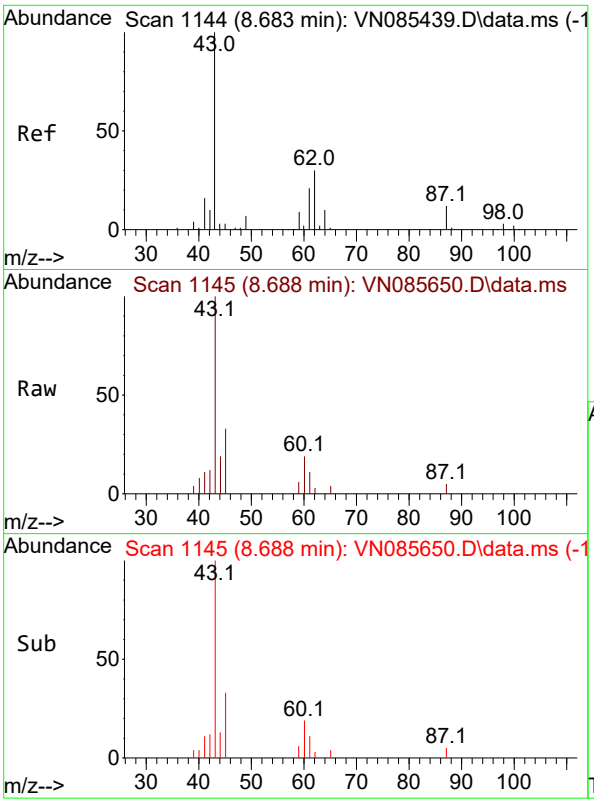


#35
Dibromofluoromethane
Concen: 48.707 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion:113 Resp: 126064

Ion	Ratio	Lower	Upper
113	100		
111	104.1	82.7	124.1
192	17.0	14.3	21.5



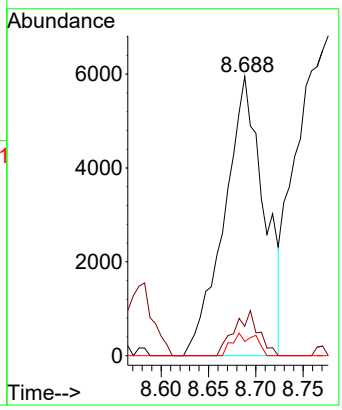


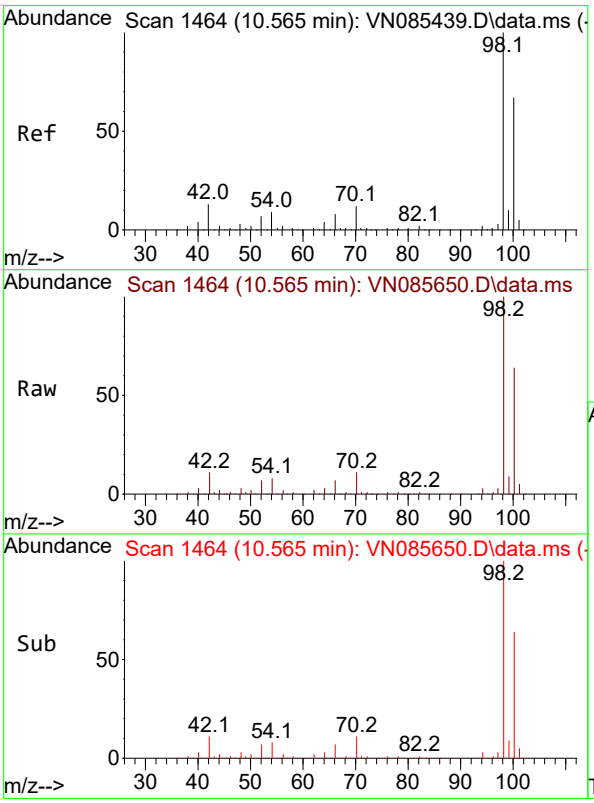
#43
Isopropyl Acetate
Concen: 2.943 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Tgt Ion: 43 Resp: 17288

Ion	Ratio	Lower	Upper
43	100		
61	9.9	20.7	31.1#
87	4.8	9.8	14.8#

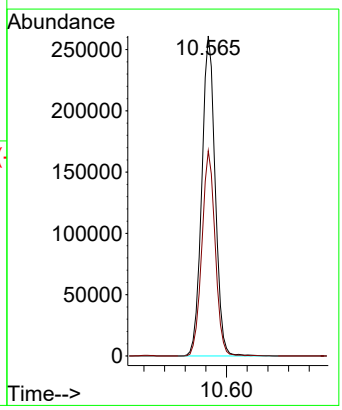


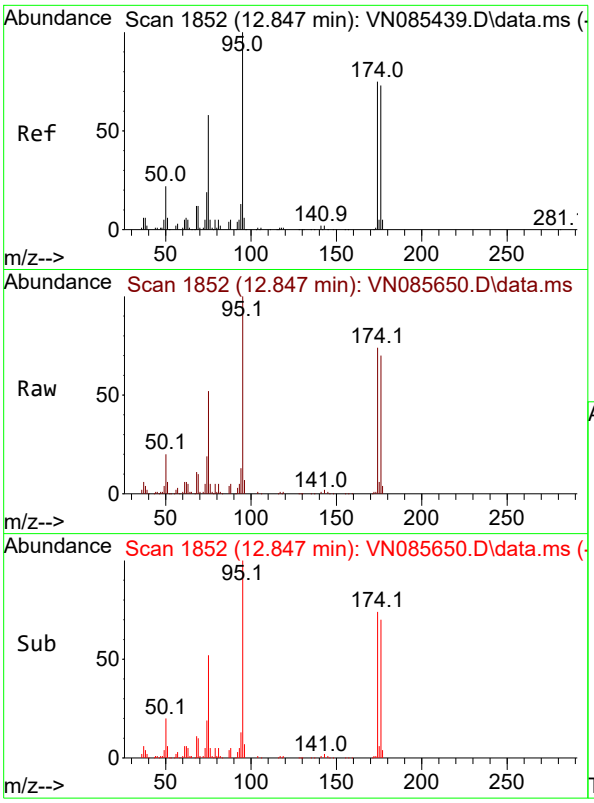


#50
Toluene-d8
Concen: 51.068 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion: 98 Resp: 469617

Ion	Ratio	Lower	Upper
98	100		
100	63.7	52.2	78.4



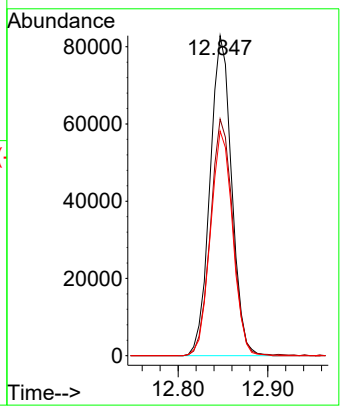


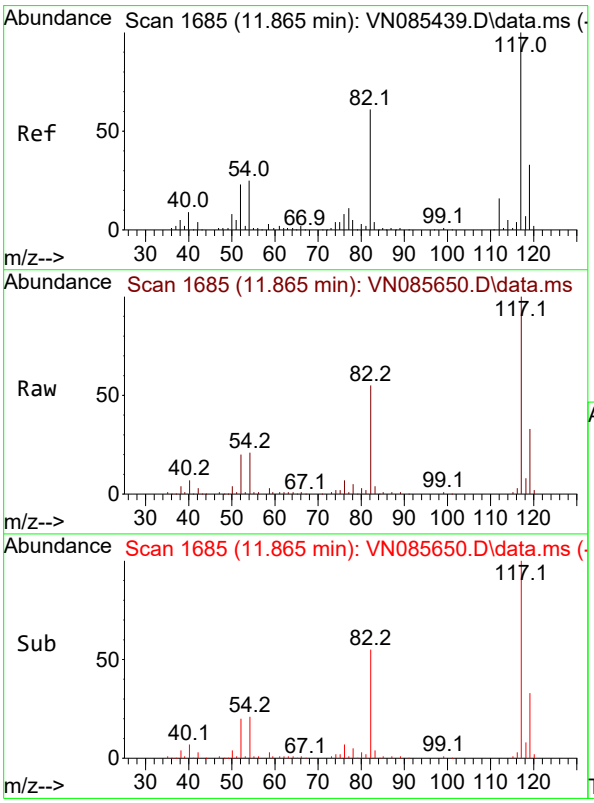
#62
4-Bromofluorobenzene
Concen: 44.058 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Tgt Ion: 95 Resp: 138593

Ion	Ratio	Lower	Upper
95	100		
174	76.4	0.0	145.0
176	72.0	0.0	142.4

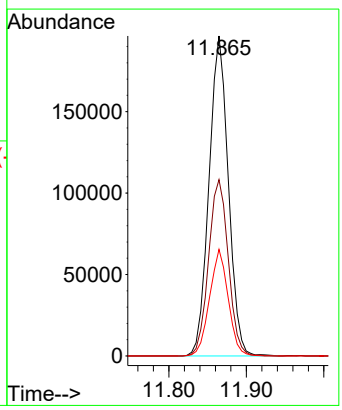


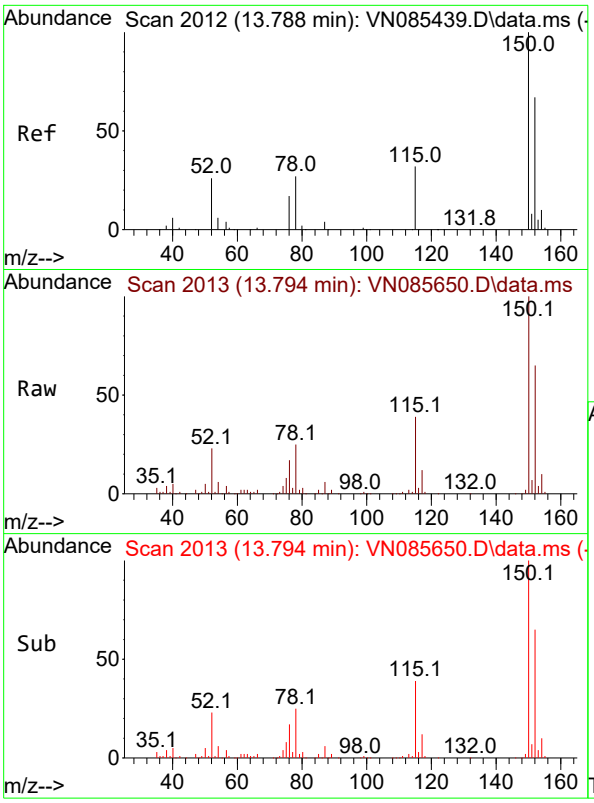


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Tgt Ion:117 Resp: 340715

Ion	Ratio	Lower	Upper
117	100		
82	55.1	48.6	72.8
119	33.3	26.6	39.8



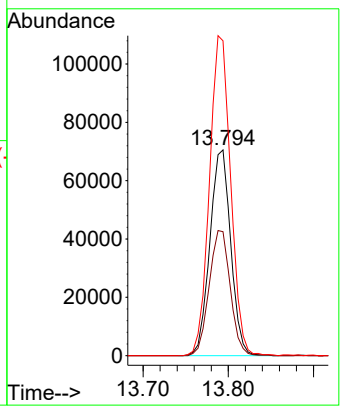


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085650.D
Acq: 04 Feb 2025 14:27

Instrument :
MSVOA_N
ClientSampleId :
JPP-3.5-013025

Tgt Ion:152 Resp: 119994

Ion	Ratio	Lower	Upper
152	100		
115	61.5	31.1	93.3
150	157.7	0.0	343.6



Raw Data: **VN085636.D**

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-06	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :	SW5035		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085636.D	1		02/03/25 20:49	VN020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	25.0	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.6		74 - 125	107%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		75 - 124	100%	SPK: 50
2037-26-5	Toluene-d8	53.0		86 - 113	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.3		77 - 121	91%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	165000	8.224			
540-36-3	1,4-Difluorobenzene	346000	9.1			
3114-55-4	Chlorobenzene-d5	327000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	116000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085636.D
Acq On : 03 Feb 2025 20:49
Operator : JC\MD
Sample : Q1241-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Quant Time: Feb 04 01:00:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

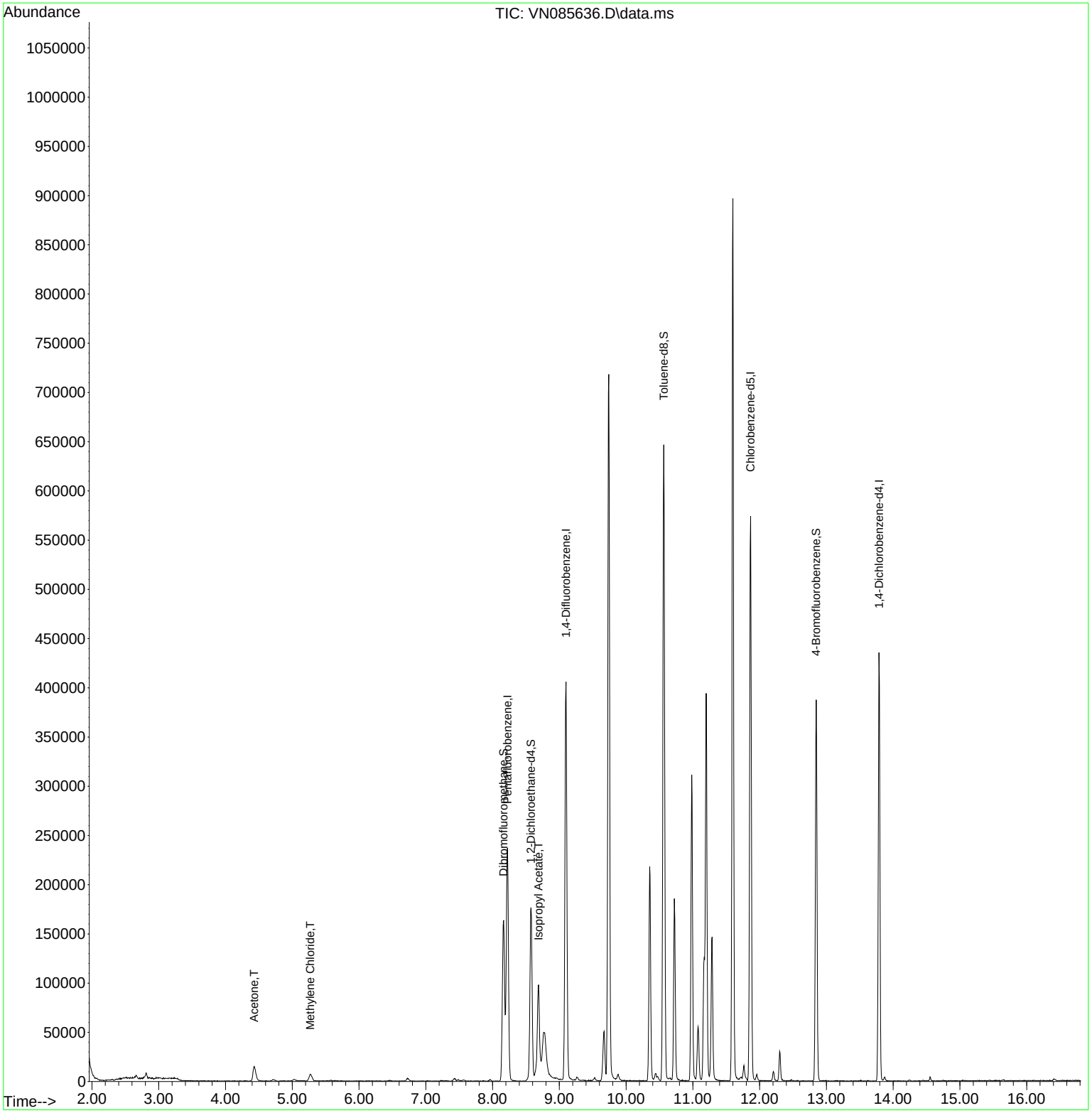
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	164691	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	346323	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	326963	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	116207	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	142506	53.605	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 107.200%			
35) Dibromofluoromethane	8.165	113	120416	50.118	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.240%			
50) Toluene-d8	10.565	98	452786	53.041	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 106.080%			
62) 4-Bromofluorobenzene	12.847	95	132300	45.306	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 90.620%			
Target Compounds						Qvalue
16) Acetone	4.430	43	29731	34.612	ug/l	98
20) Methylene Chloride	5.271	84	5377	2.529	ug/l	94
43) Isopropyl Acetate	8.688	43	113601	20.830	ug/l #	87

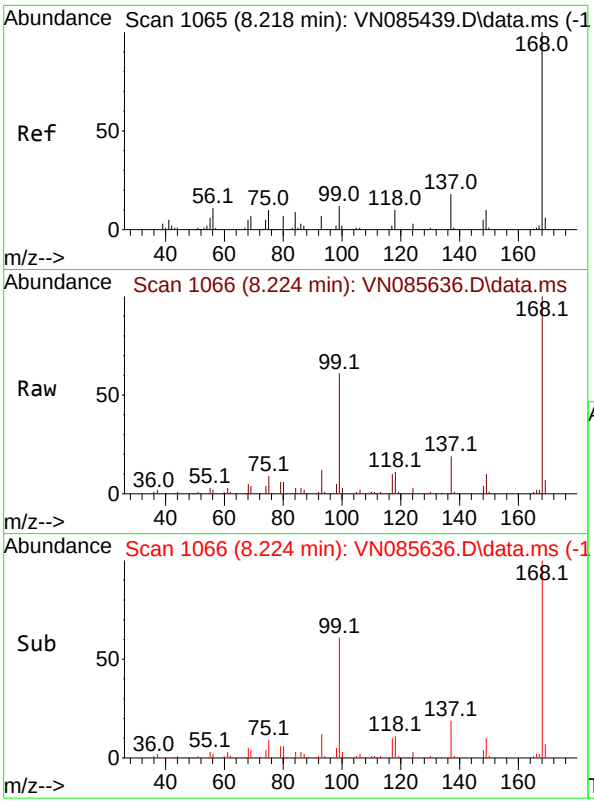
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085636.D
Acq On : 03 Feb 2025 20:49
Operator : JC\MD
Sample : Q1241-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Quant Time: Feb 04 01:00:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



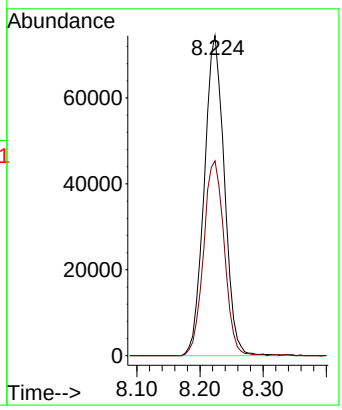


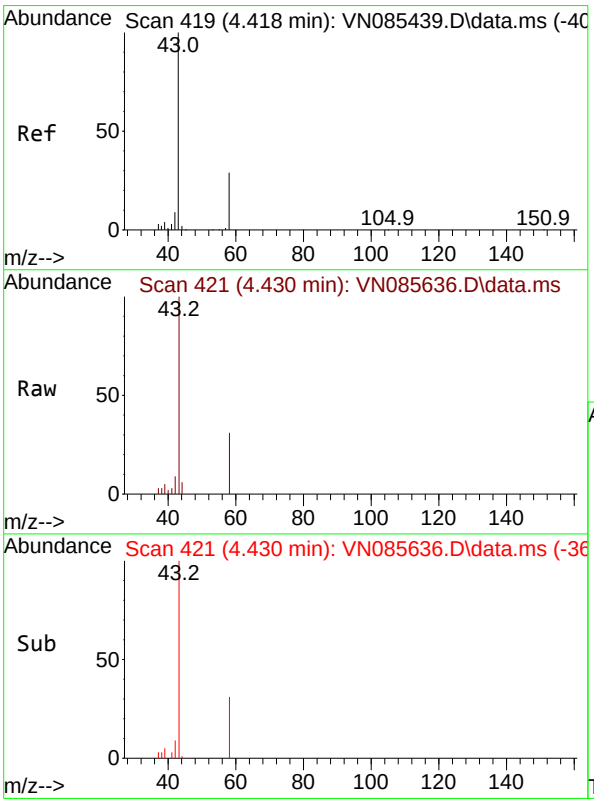
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Tgt Ion:168 Resp: 164691

Ion	Ratio	Lower	Upper
168	100		
99	60.9	53.6	80.4

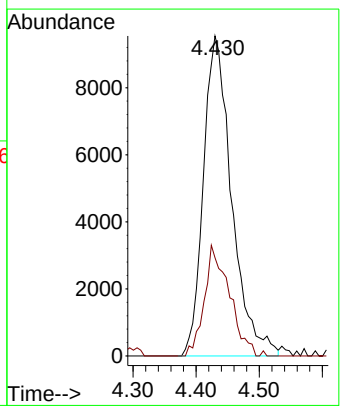


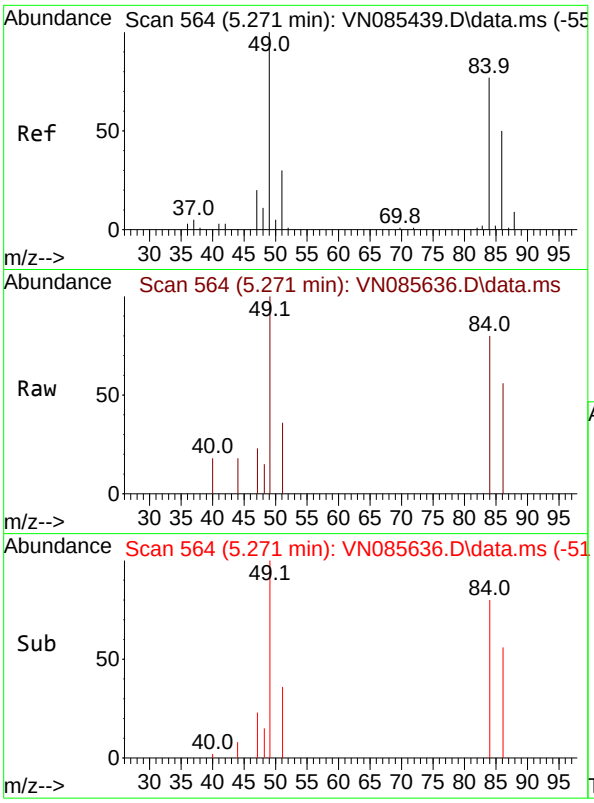


#16
Acetone
Concen: 34.612 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion: 43 Resp: 29731

Ion	Ratio	Lower	Upper
43	100		
58	30.7	23.8	35.6



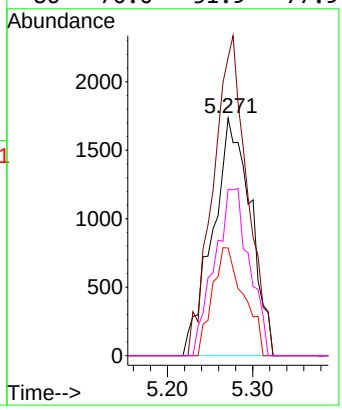


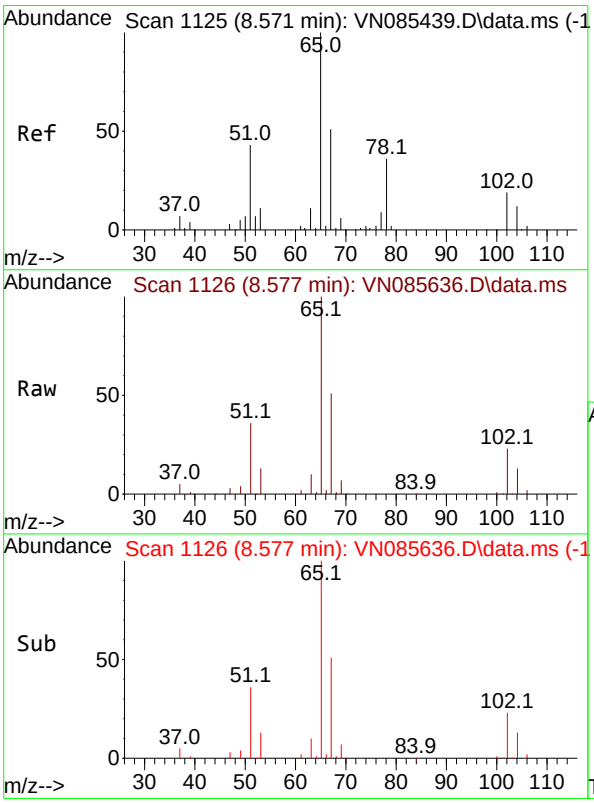
#20
Methylene Chloride
Concen: 2.529 ug/l
RT: 5.271 min Scan# 5
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Tgt Ion: 84 Resp: 5377

Ion	Ratio	Lower	Upper
84	100		
49	125.4	104.1	156.1
51	45.4	31.0	46.4
86	70.0	51.9	77.9

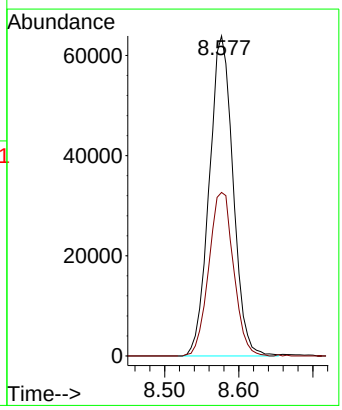


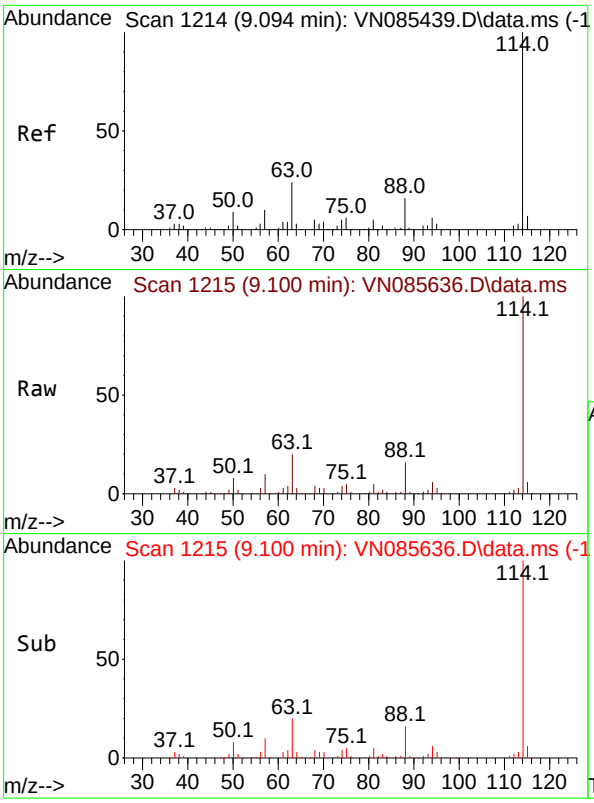


#33
1,2-Dichloroethane-d4
Concen: 53.605 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion: 65 Resp: 142506

Ion	Ratio	Lower	Upper
65	100		
67	53.2	0.0	101.6



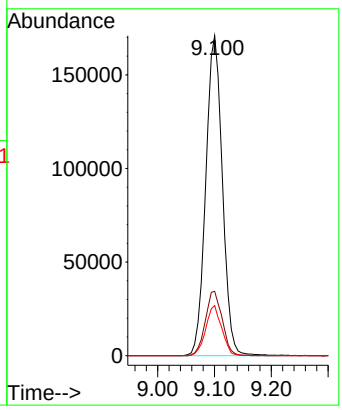


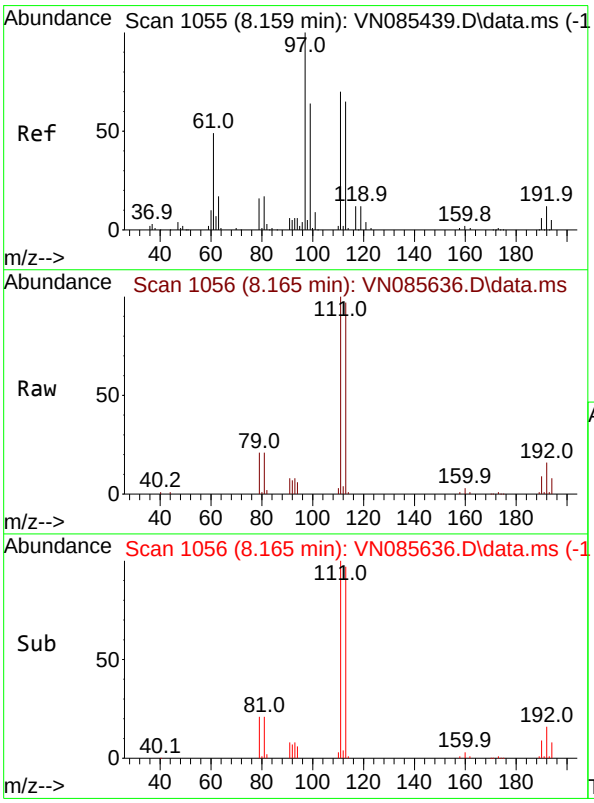
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Tgt Ion:114 Resp: 346323

Ion	Ratio	Lower	Upper
114	100		
63	20.1	0.0	47.6
88	15.6	0.0	32.6

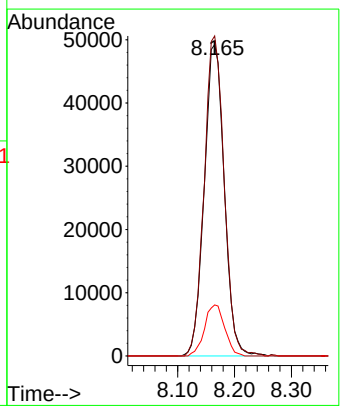


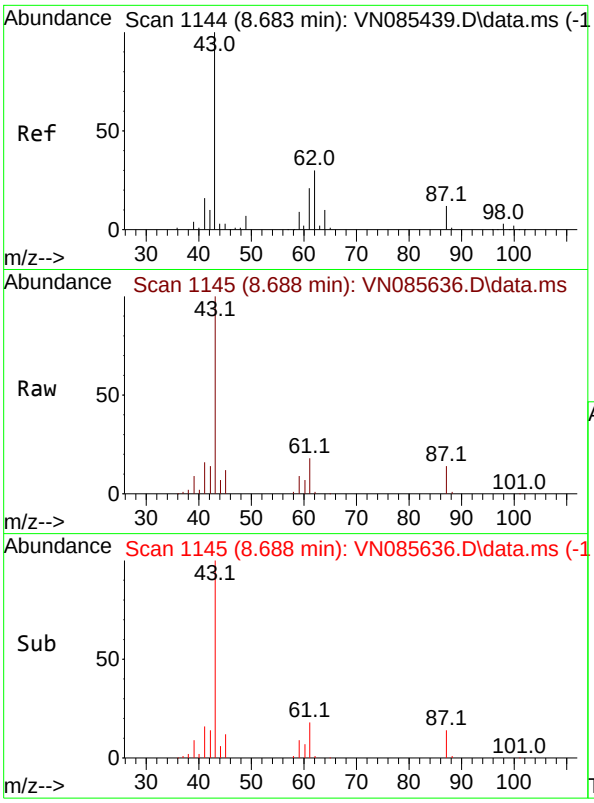


#35
Dibromofluoromethane
Concen: 50.118 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion:113 Resp: 120416

Ion	Ratio	Lower	Upper
113	100		
111	102.4	82.7	124.1
192	16.5	14.3	21.5



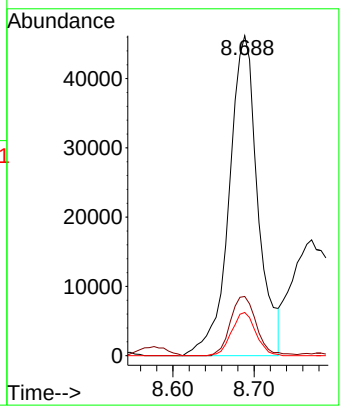


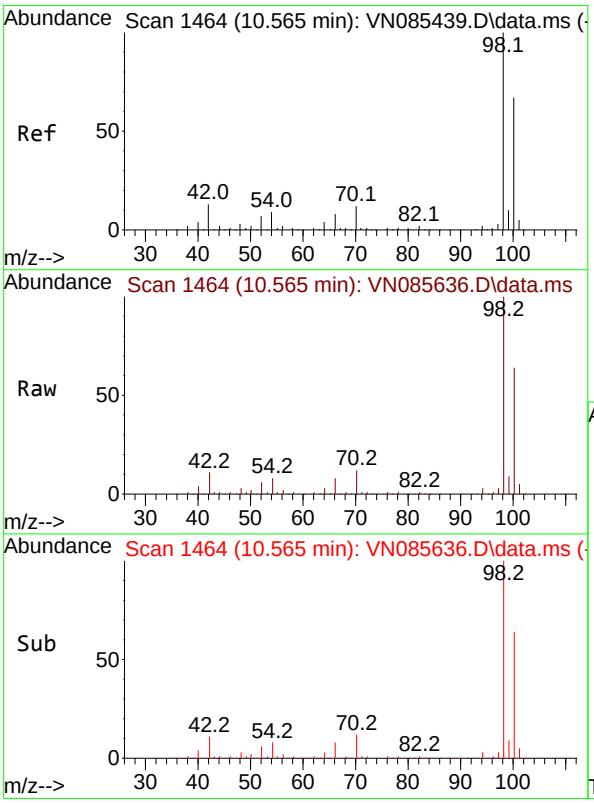
#43
Isopropyl Acetate
Concen: 20.830 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Tgt Ion: 43 Resp: 113601

Ion	Ratio	Lower	Upper
43	100		
61	16.8	20.7	31.1#
87	11.4	9.8	14.8

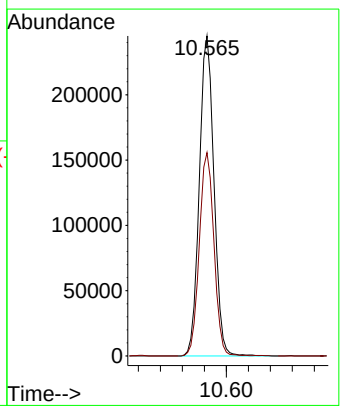


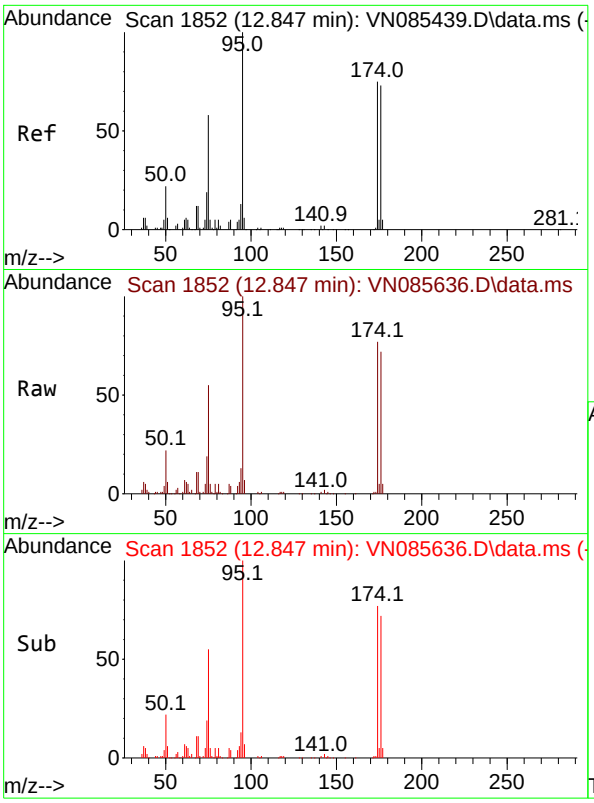


#50
Toluene-d8
Concen: 53.041 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion: 98 Resp: 452786

Ion	Ratio	Lower	Upper
98	100		
100	63.6	52.2	78.4



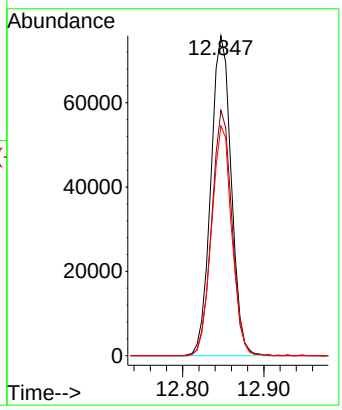


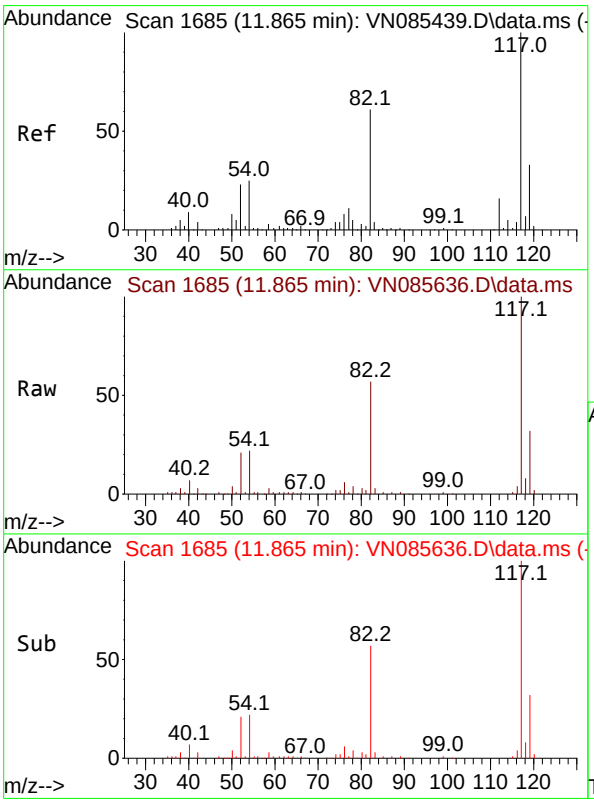
#62
4-Bromofluorobenzene
Concen: 45.306 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Tgt Ion: 95 Resp: 132300

Ion	Ratio	Lower	Upper
95	100		
174	75.8	0.0	145.0
176	71.6	0.0	142.4

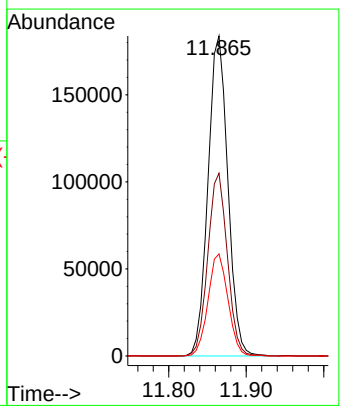


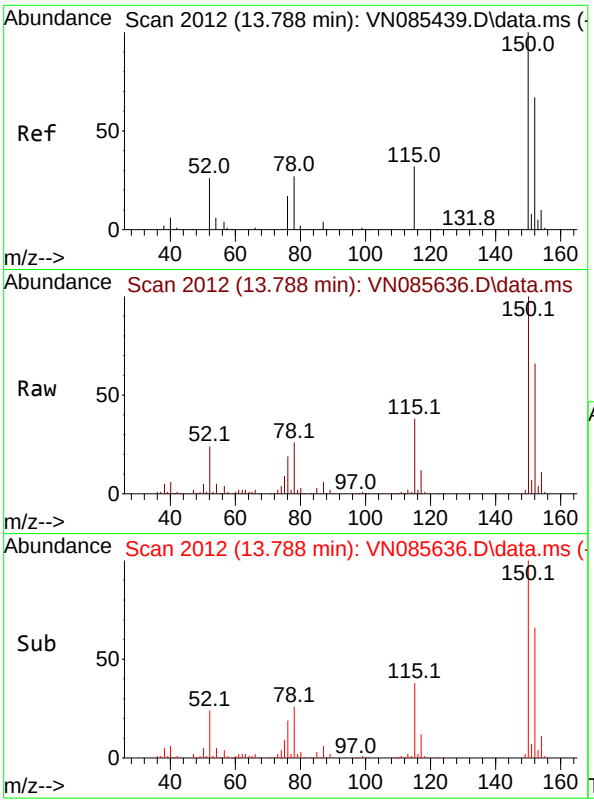


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Tgt Ion:117 Resp: 326963

Ion	Ratio	Lower	Upper
117	100		
82	57.1	48.6	72.8
119	31.9	26.6	39.8



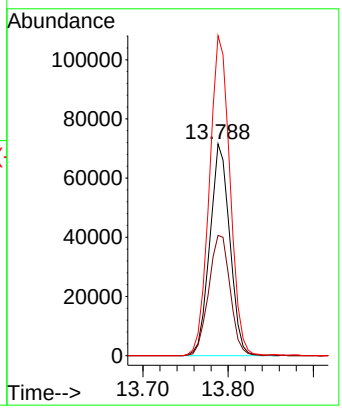


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085636.D
Acq: 03 Feb 2025 20:49

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.3-013025

Tgt Ion:152 Resp: 116207

Ion	Ratio	Lower	Upper
152	100		
115	61.2	31.1	93.3
150	155.9	0.0	343.6



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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-10	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :	SW5035		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085637.D	1		02/03/25 21:13	VN020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	25.0	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.9		74 - 125	110%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		75 - 124	99%	SPK: 50
2037-26-5	Toluene-d8	53.5		86 - 113	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.9		77 - 121	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	158000	8.224			
540-36-3	1,4-Difluorobenzene	330000	9.1			
3114-55-4	Chlorobenzene-d5	316000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	114000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085637.D
Acq On : 03 Feb 2025 21:13
Operator : JC\MD
Sample : Q1241-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Quant Time: Feb 04 01:01:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

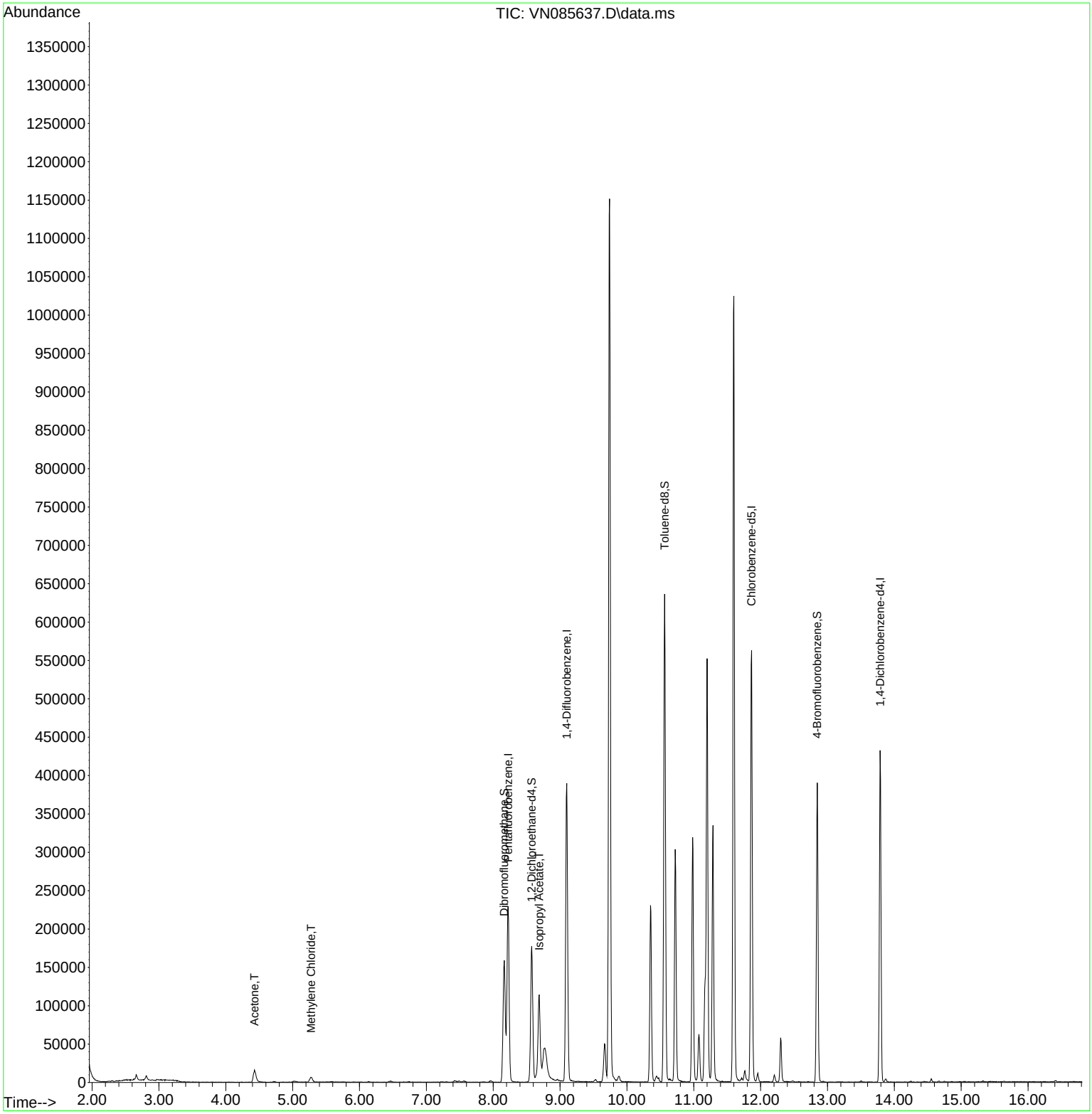
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	157669	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	330403	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	315638	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	114334	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	139635	54.864	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 109.720%			
35) Dibromofluoromethane	8.165	113	113349	49.450	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.900%			
50) Toluene-d8	10.565	98	435589	53.485	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 106.980%			
62) 4-Bromofluorobenzene	12.847	95	130787	46.946	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 93.900%			
Target Compounds						Qvalue
16) Acetone	4.430	43	29252	35.571	ug/l	99
20) Methylene Chloride	5.277	84	5204	2.556	ug/l #	75
43) Isopropyl Acetate	8.688	43	130809	25.141	ug/l #	88

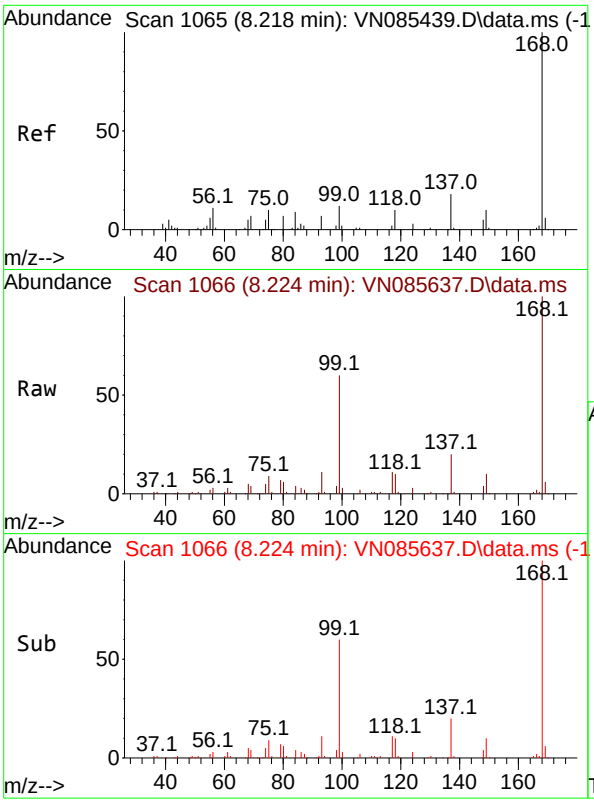
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085637.D
Acq On : 03 Feb 2025 21:13
Operator : JC\MD
Sample : Q1241-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Quant Time: Feb 04 01:01:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



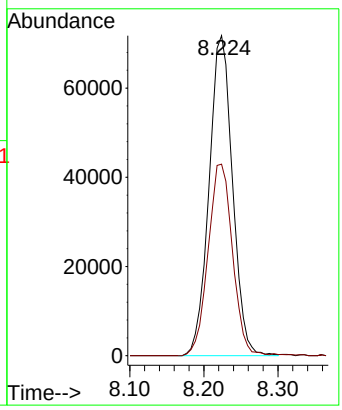


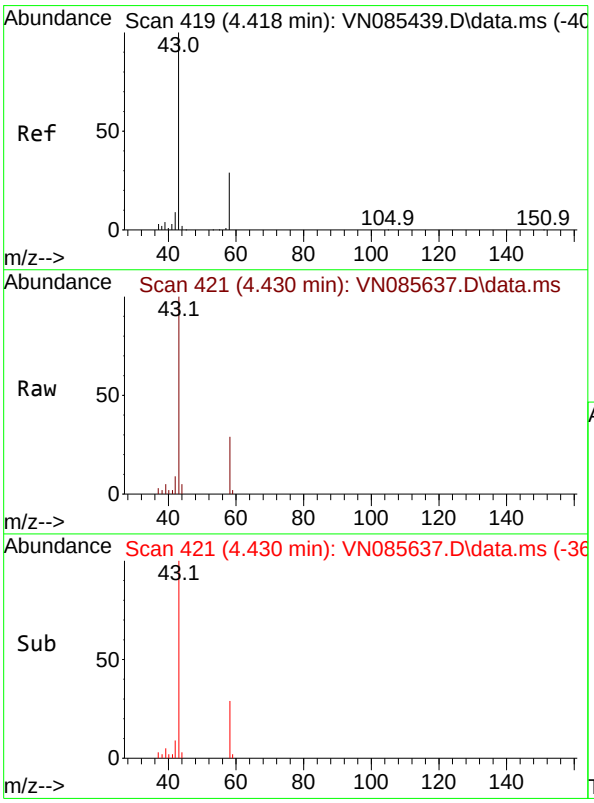
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Tgt Ion:168 Resp: 157669

Ion	Ratio	Lower	Upper
168	100		
99	59.9	53.6	80.4

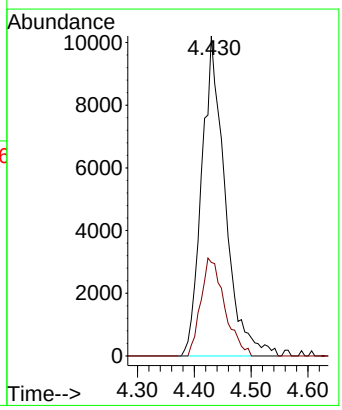


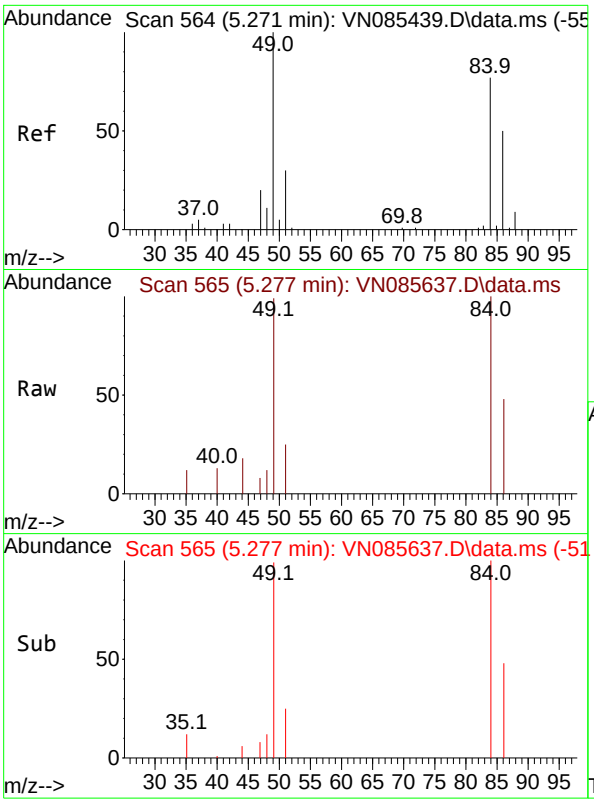


#16
Acetone
Concen: 35.571 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion: 43 Resp: 29252

Ion	Ratio	Lower	Upper
43	100		
58	29.3	23.8	35.6



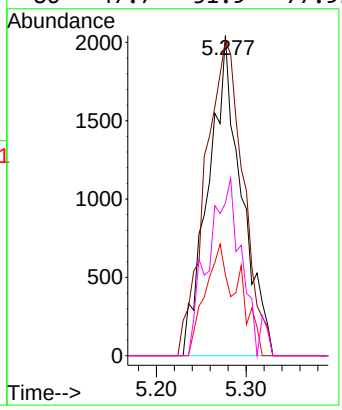


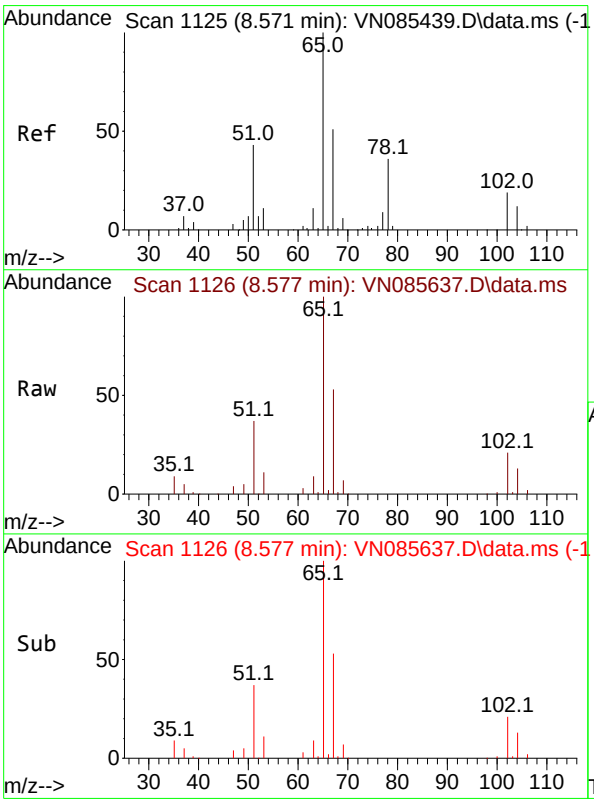
#20
Methylene Chloride
Concen: 2.556 ug/l
RT: 5.277 min Scan# 5
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Tgt Ion: 84 Resp: 5204

Ion	Ratio	Lower	Upper
84	100		
49	98.5	104.1	156.1#
51	25.3	31.0	46.4#
86	47.7	51.9	77.9#

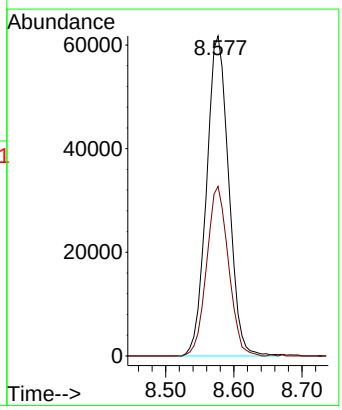


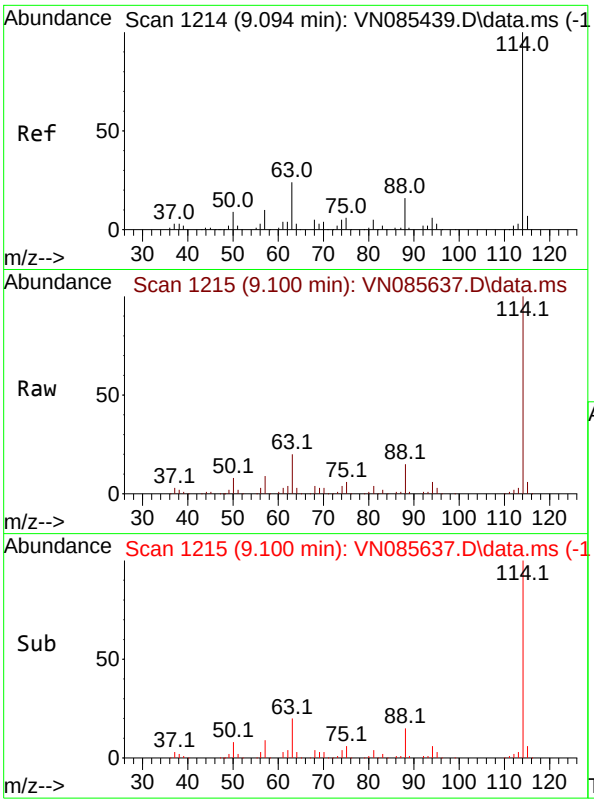


#33
1,2-Dichloroethane-d4
Concen: 54.864 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion: 65 Resp: 139635

Ion	Ratio	Lower	Upper
65	100		
67	52.2	0.0	101.6



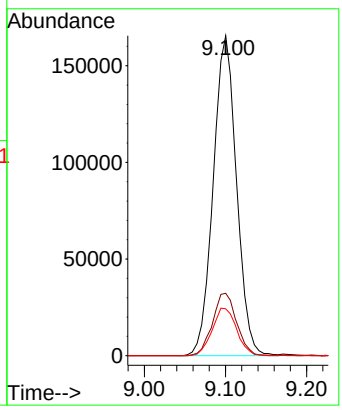


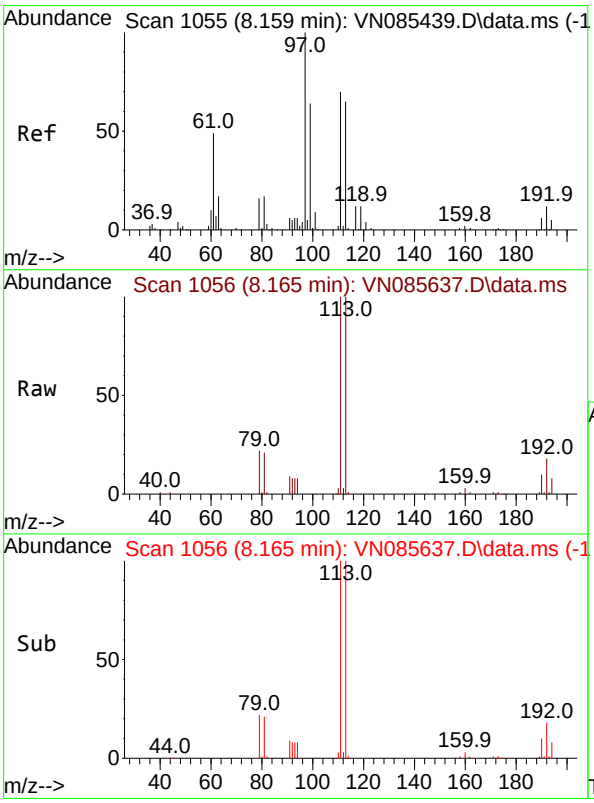
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Tgt Ion:114 Resp: 330403

Ion	Ratio	Lower	Upper
114	100		
63	19.5	0.0	47.6
88	14.7	0.0	32.6

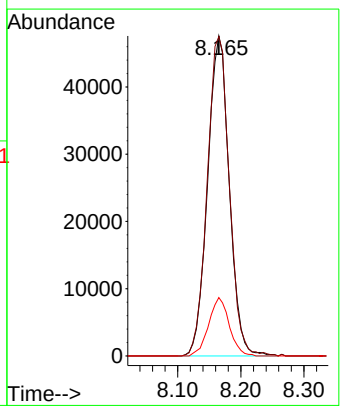


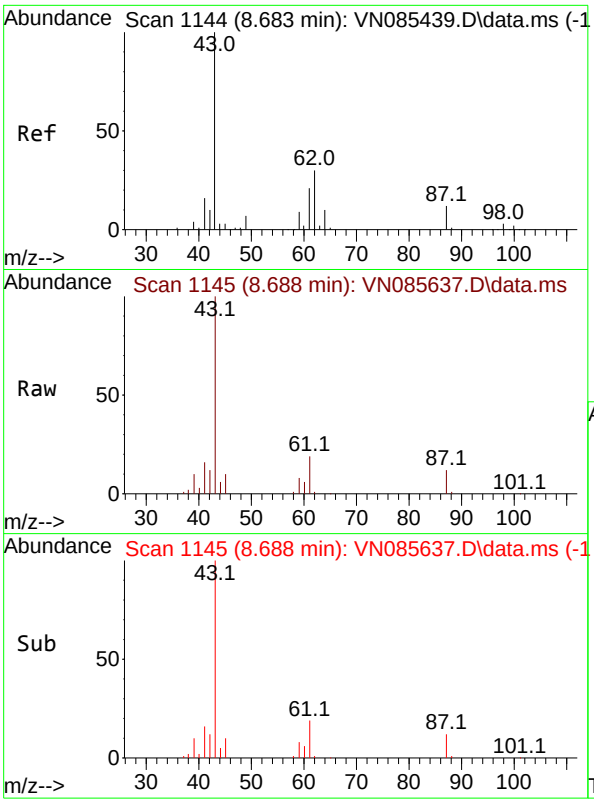


#35
Dibromofluoromethane
Concen: 49.450 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion:113 Resp: 113349

Ion	Ratio	Lower	Upper
113	100		
111	101.6	82.7	124.1
192	17.4	14.3	21.5



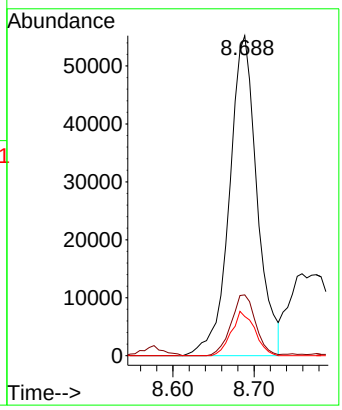


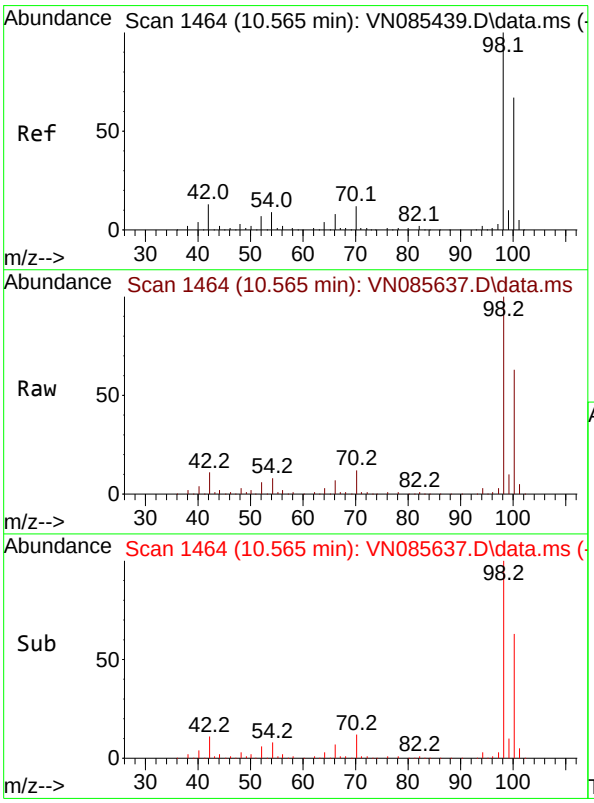
#43
Isopropyl Acetate
Concen: 25.141 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Tgt Ion: 43 Resp: 130809

Ion	Ratio	Lower	Upper
43	100		
61	17.0	20.7	31.1#
87	11.7	9.8	14.8

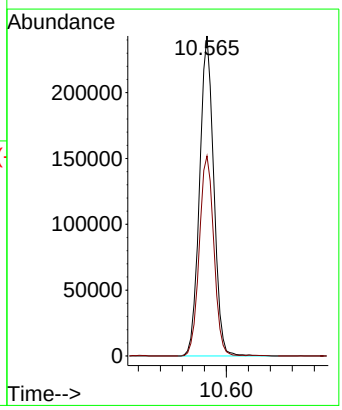


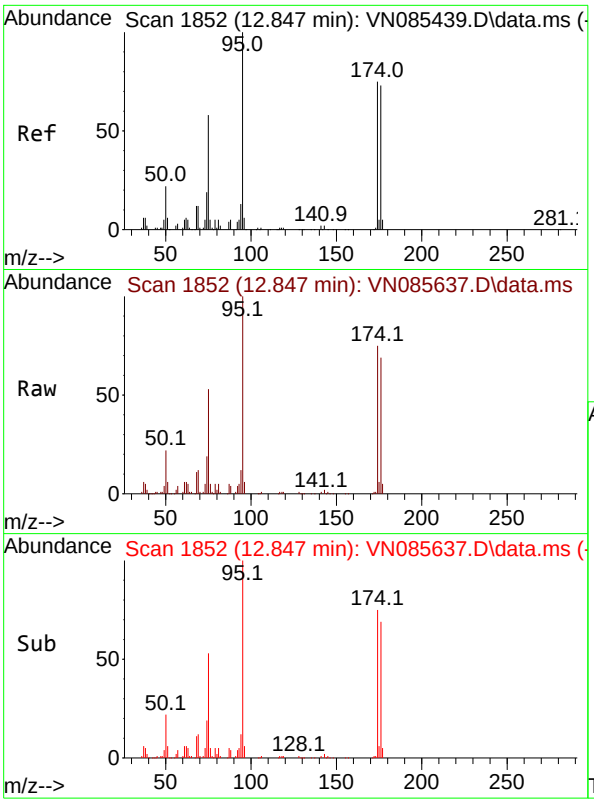


#50
Toluene-d8
Concen: 53.485 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion: 98 Resp: 435589

Ion	Ratio	Lower	Upper
98	100		
100	64.1	52.2	78.4



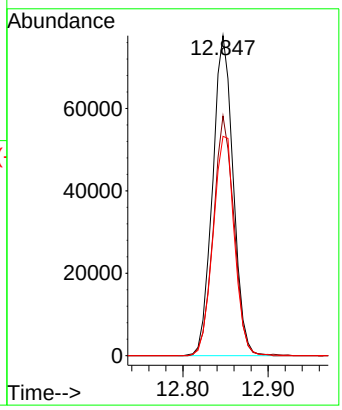


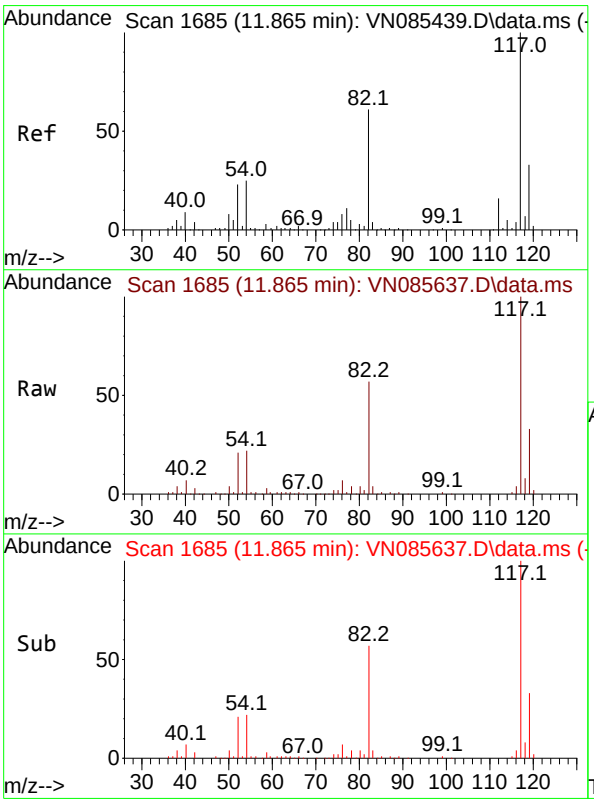
#62
4-Bromofluorobenzene
Concen: 46.946 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Tgt Ion: 95 Resp: 130787

Ion	Ratio	Lower	Upper
95	100		
174	75.0	0.0	145.0
176	71.4	0.0	142.4

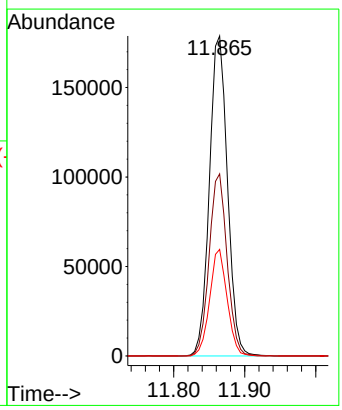


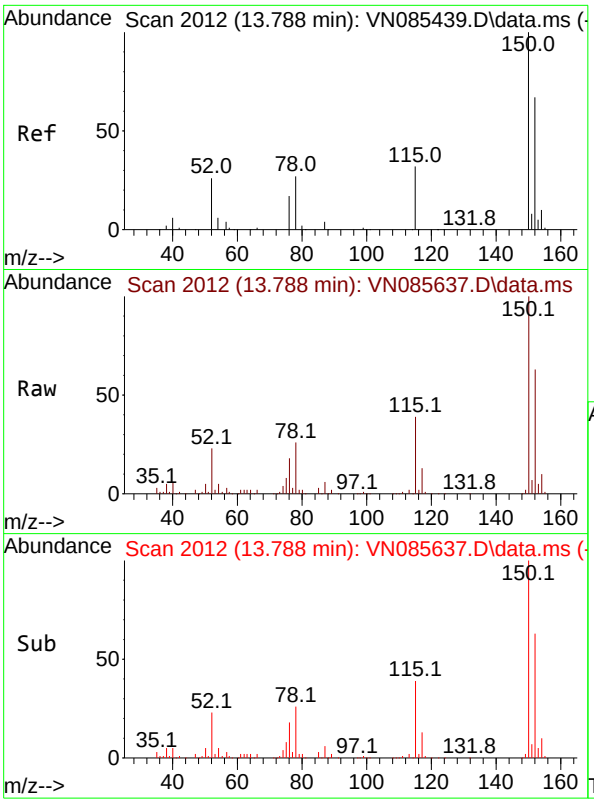


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Tgt Ion:117 Resp: 315638

Ion	Ratio	Lower	Upper
117	100		
82	56.9	48.6	72.8
119	33.3	26.6	39.8



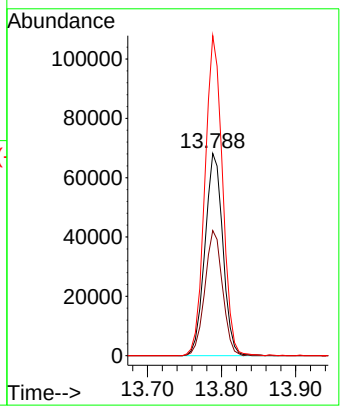


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085637.D
Acq: 03 Feb 2025 21:13

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.2-013025

Tgt Ion:152 Resp: 114334

Ion	Ratio	Lower	Upper
152	100		
115	61.0	31.1	93.3
150	155.3	0.0	343.6



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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-14	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :	SW5035		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085638.D	1		02/03/25 21:37	VN020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	25.0	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.5		74 - 125	109%	SPK: 50
1868-53-7	Dibromofluoromethane	49.9		75 - 124	100%	SPK: 50
2037-26-5	Toluene-d8	53.8		86 - 113	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.6		77 - 121	91%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	8.224			
540-36-3	1,4-Difluorobenzene	344000	9.1			
3114-55-4	Chlorobenzene-d5	331000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	116000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085638.D
Acq On : 03 Feb 2025 21:37
Operator : JC\MD
Sample : Q1241-14
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Quant Time: Feb 04 01:01:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

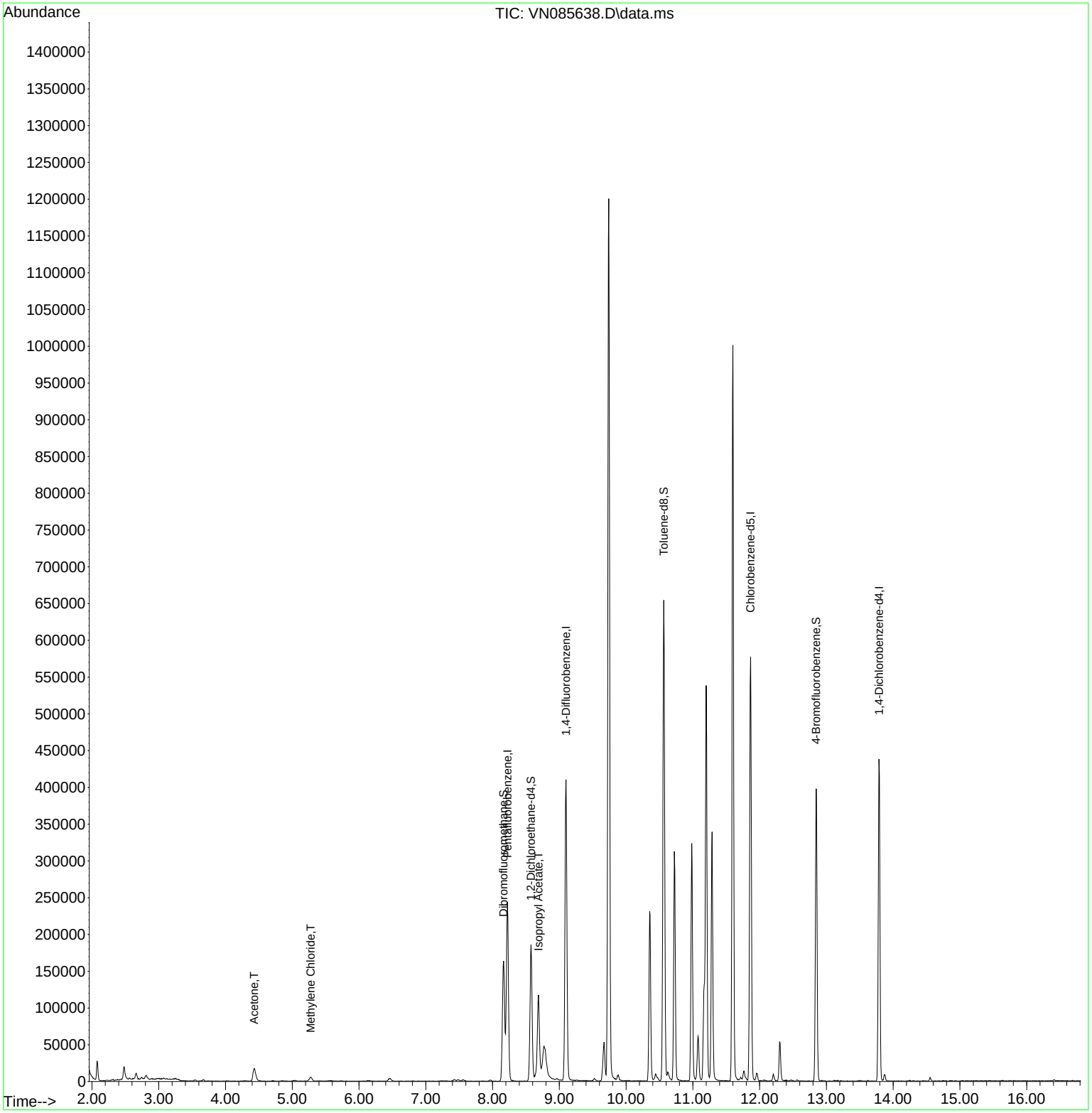
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	163991	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	343832	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	330622	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	116237	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	144365	54.536	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 109.080%			
35) Dibromofluoromethane	8.165	113	119058	49.912	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.820%			
50) Toluene-d8	10.565	98	455608	53.758	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 107.520%			
62) 4-Bromofluorobenzene	12.847	95	132098	45.565	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 91.120%			
Target Compounds						Qvalue
16) Acetone	4.430	43	33701	39.402	ug/l	98
20) Methylene Chloride	5.277	84	4200	1.984	ug/l #	85
43) Isopropyl Acetate	8.688	43	130603	24.121	ug/l #	89

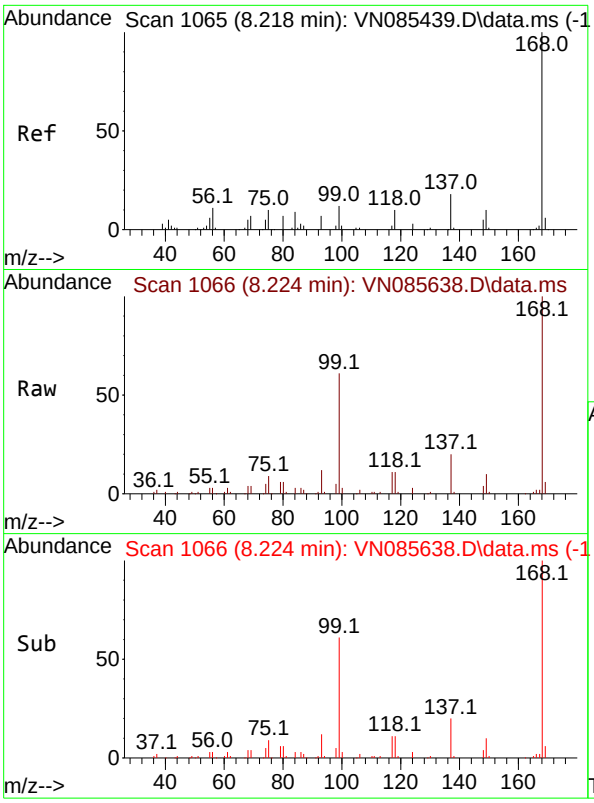
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085638.D
Acq On : 03 Feb 2025 21:37
Operator : JC\MD
Sample : Q1241-14
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Quant Time: Feb 04 01:01:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



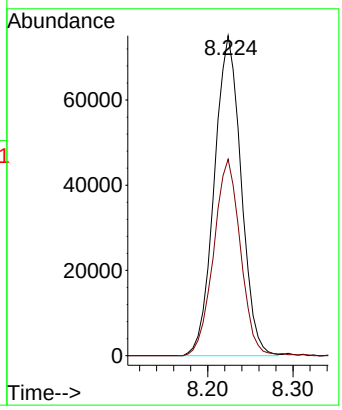


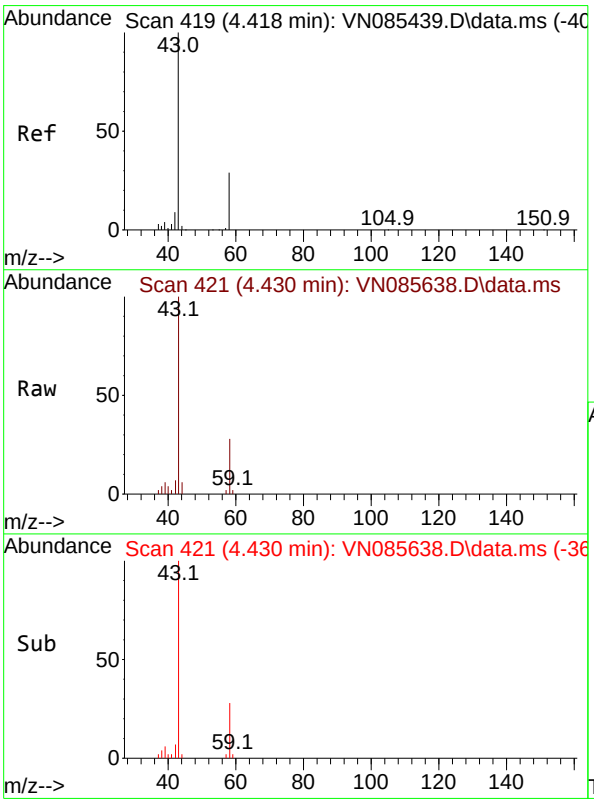
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Tgt Ion:168 Resp: 163991

Ion	Ratio	Lower	Upper
168	100		
99	61.4	53.6	80.4

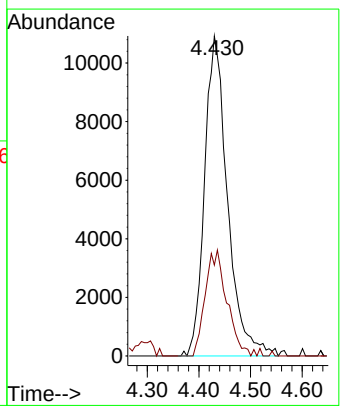


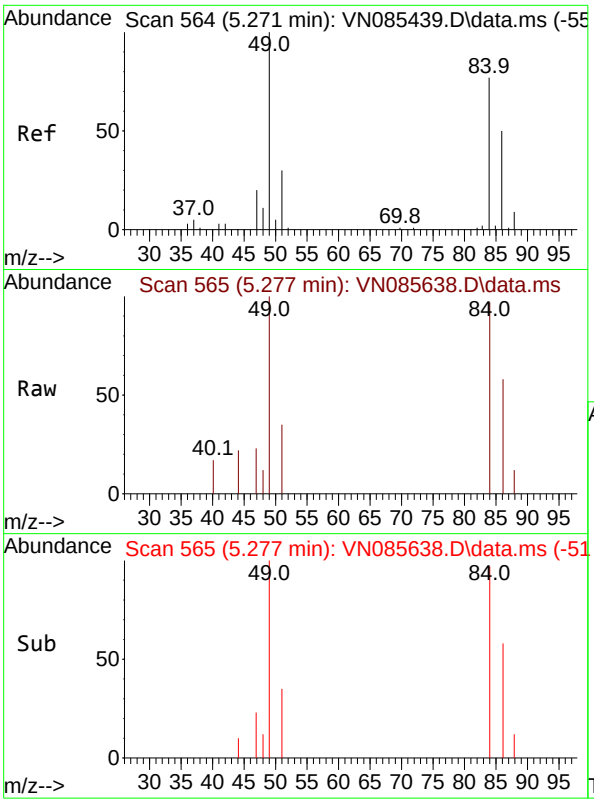


#16
Acetone
Concen: 39.402 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion: 43 Resp: 33701

Ion	Ratio	Lower	Upper
43	100		
58	28.4	23.8	35.6



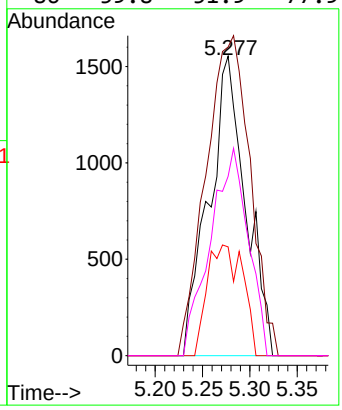


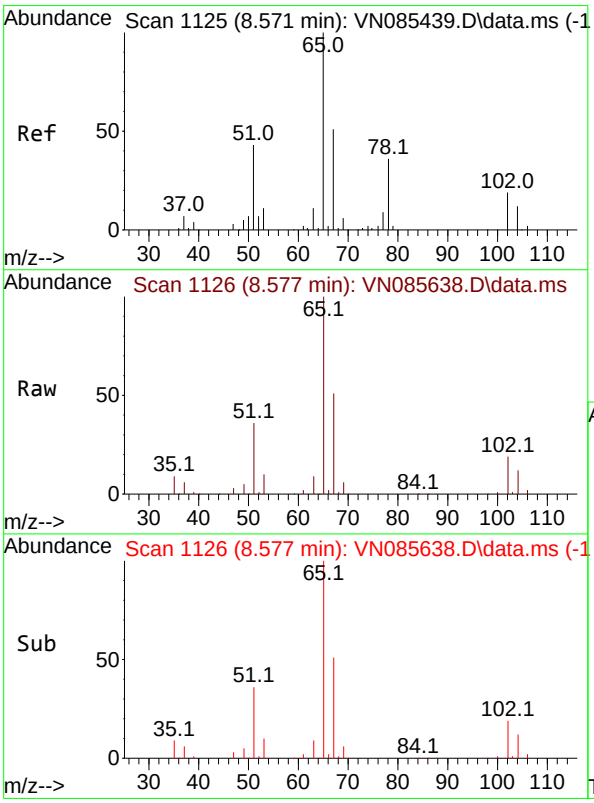
#20
Methylene Chloride
Concen: 1.984 ug/l
RT: 5.277 min Scan# 5
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Tgt Ion: 84 Resp: 4200

Ion	Ratio	Lower	Upper
84	100		
49	103.0	104.1	156.1#
51	36.3	31.0	46.4
86	59.8	51.9	77.9

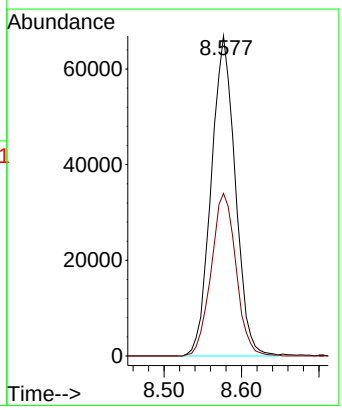


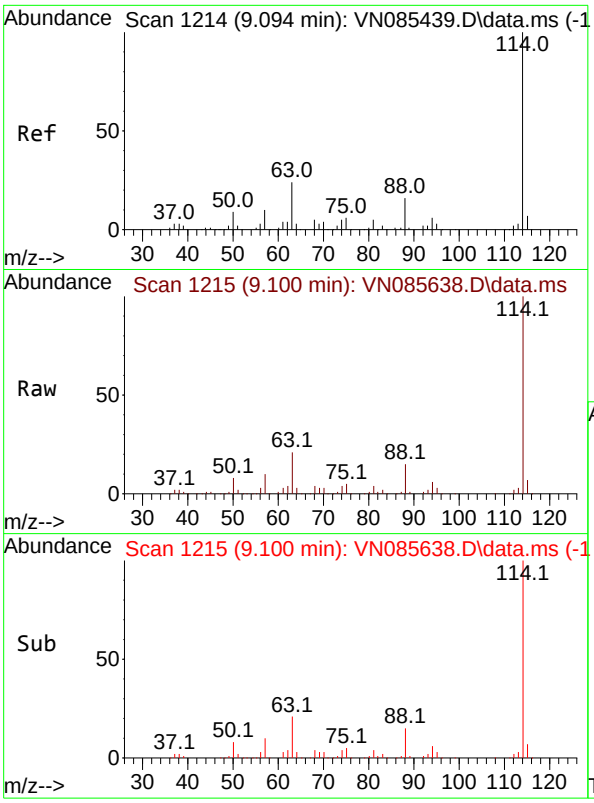


#33
1,2-Dichloroethane-d4
Concen: 54.536 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion: 65 Resp: 144365

Ion	Ratio	Lower	Upper
65	100		
67	52.4	0.0	101.6



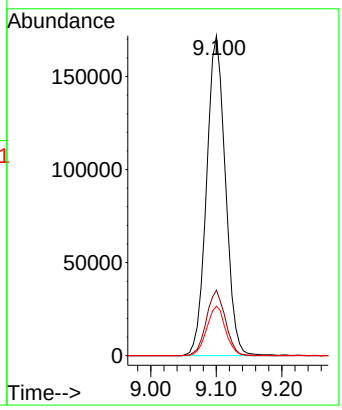


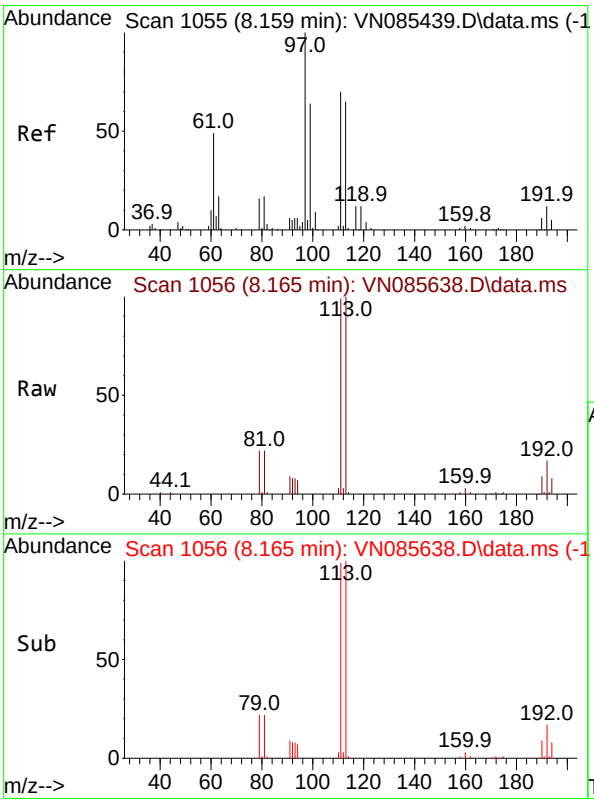
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Tgt Ion:114 Resp: 343832

Ion	Ratio	Lower	Upper
114	100		
63	20.5	0.0	47.6
88	15.5	0.0	32.6

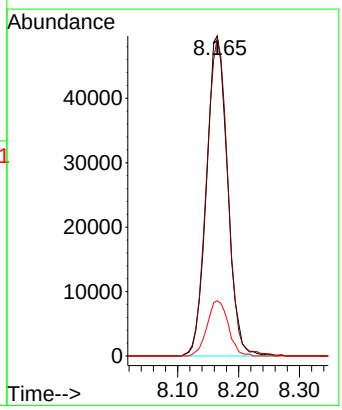


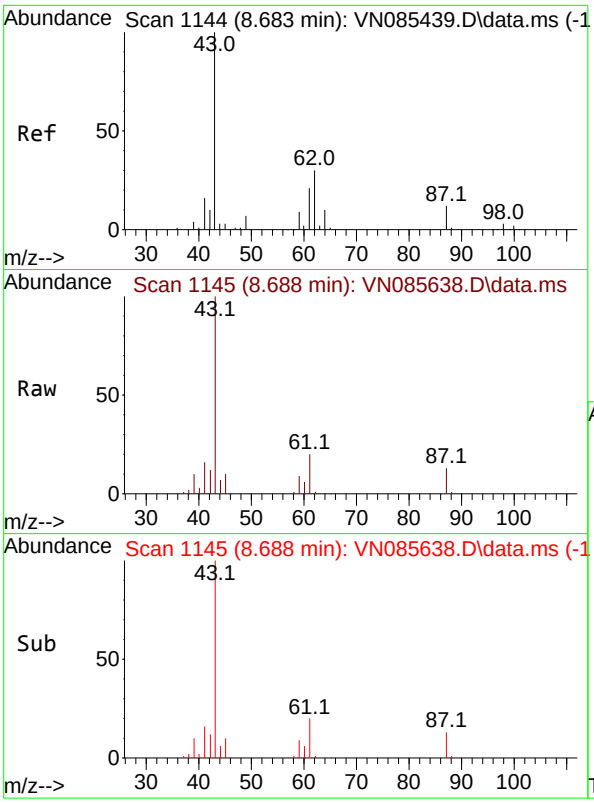


#35
Dibromofluoromethane
Concen: 49.912 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion:113 Resp: 119058

Ion	Ratio	Lower	Upper
113	100		
111	101.1	82.7	124.1
192	17.3	14.3	21.5



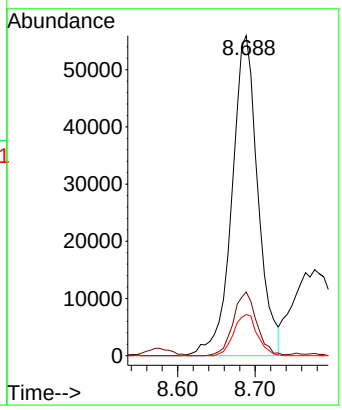


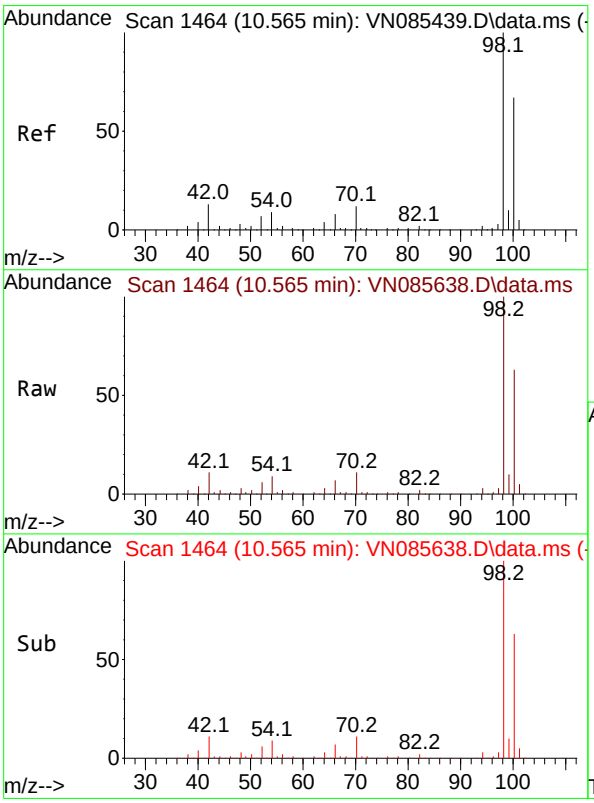
#43
Isopropyl Acetate
Concen: 24.121 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Tgt Ion: 43 Resp: 130603

Ion	Ratio	Lower	Upper
43	100		
61	18.0	20.7	31.1#
87	11.7	9.8	14.8

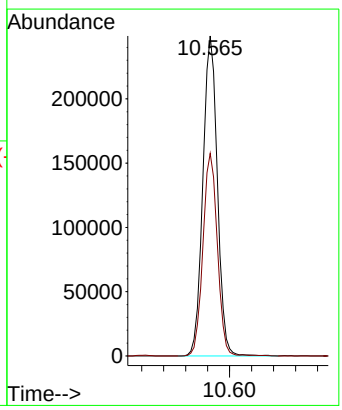


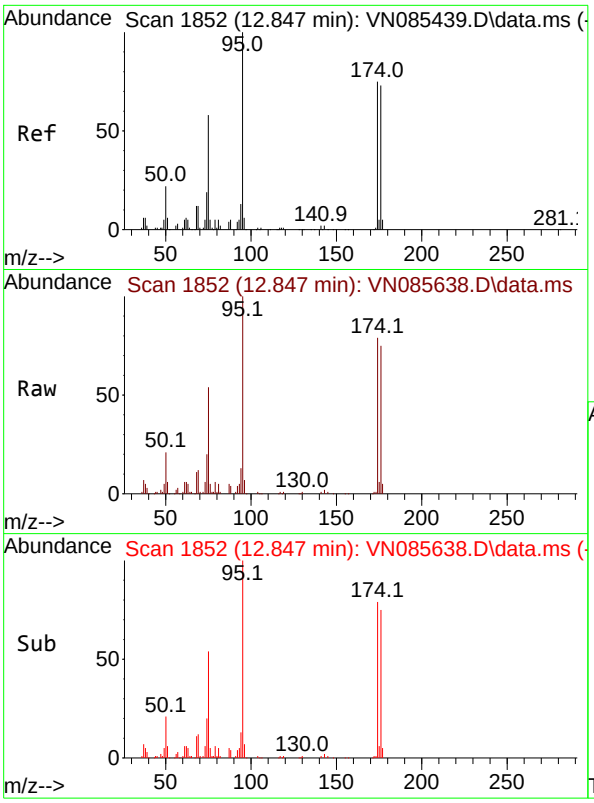


#50
Toluene-d8
Concen: 53.758 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion: 98 Resp: 455608

Ion	Ratio	Lower	Upper
98	100		
100	63.0	52.2	78.4



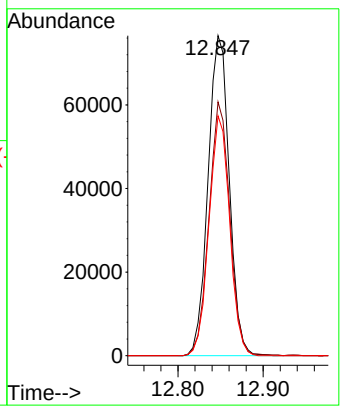


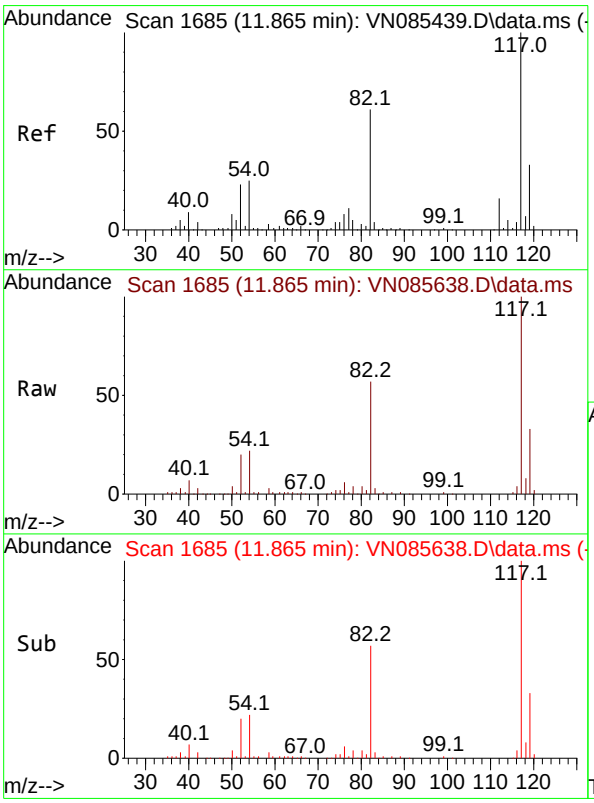
#62
4-Bromofluorobenzene
Concen: 45.565 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Tgt Ion: 95 Resp: 132098

Ion	Ratio	Lower	Upper
95	100		
174	78.2	0.0	145.0
176	73.1	0.0	142.4

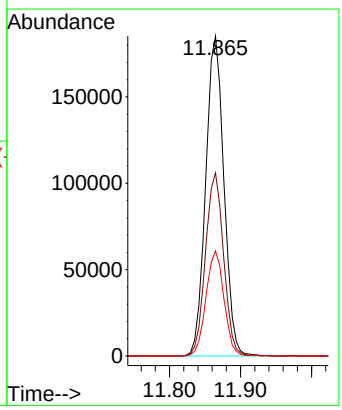


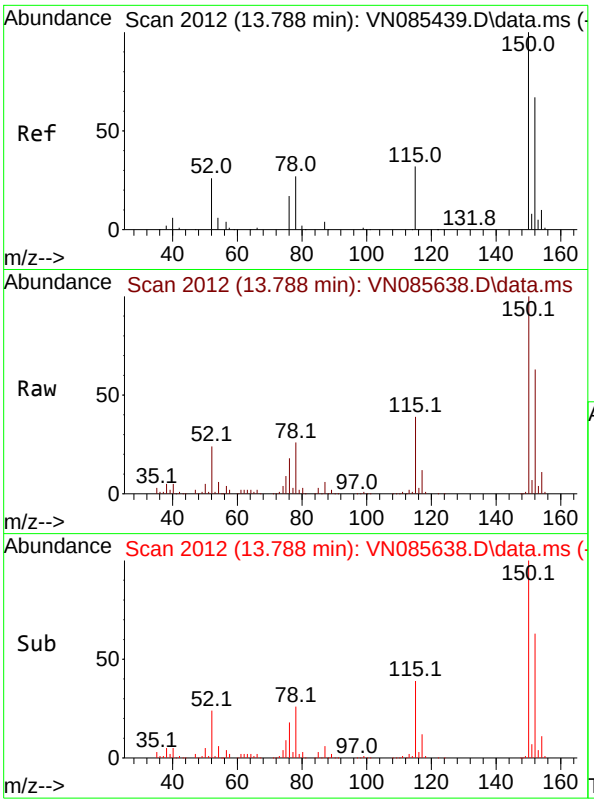


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Tgt Ion:117 Resp: 330622

Ion	Ratio	Lower	Upper
117	100		
82	57.2	48.6	72.8
119	32.8	26.6	39.8



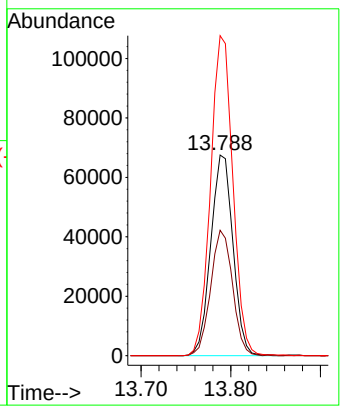


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085638.D
Acq: 03 Feb 2025 21:37

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.4-013025

Tgt Ion:152 Resp: 116237

Ion	Ratio	Lower	Upper
152	100		
115	61.5	31.1	93.3
150	160.0	0.0	343.6



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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-18	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :	SW5035		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085639.D	1		02/03/25 22:01	VN020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	25.0	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.1		74 - 125	108%	SPK: 50
1868-53-7	Dibromofluoromethane	49.9		75 - 124	100%	SPK: 50
2037-26-5	Toluene-d8	52.5		86 - 113	105%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.1		77 - 121	90%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	168000	8.224			
540-36-3	1,4-Difluorobenzene	350000	9.1			
3114-55-4	Chlorobenzene-d5	332000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	119000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085639.D
Acq On : 03 Feb 2025 22:01
Operator : JC\MD
Sample : Q1241-18
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Quant Time: Feb 04 01:01:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

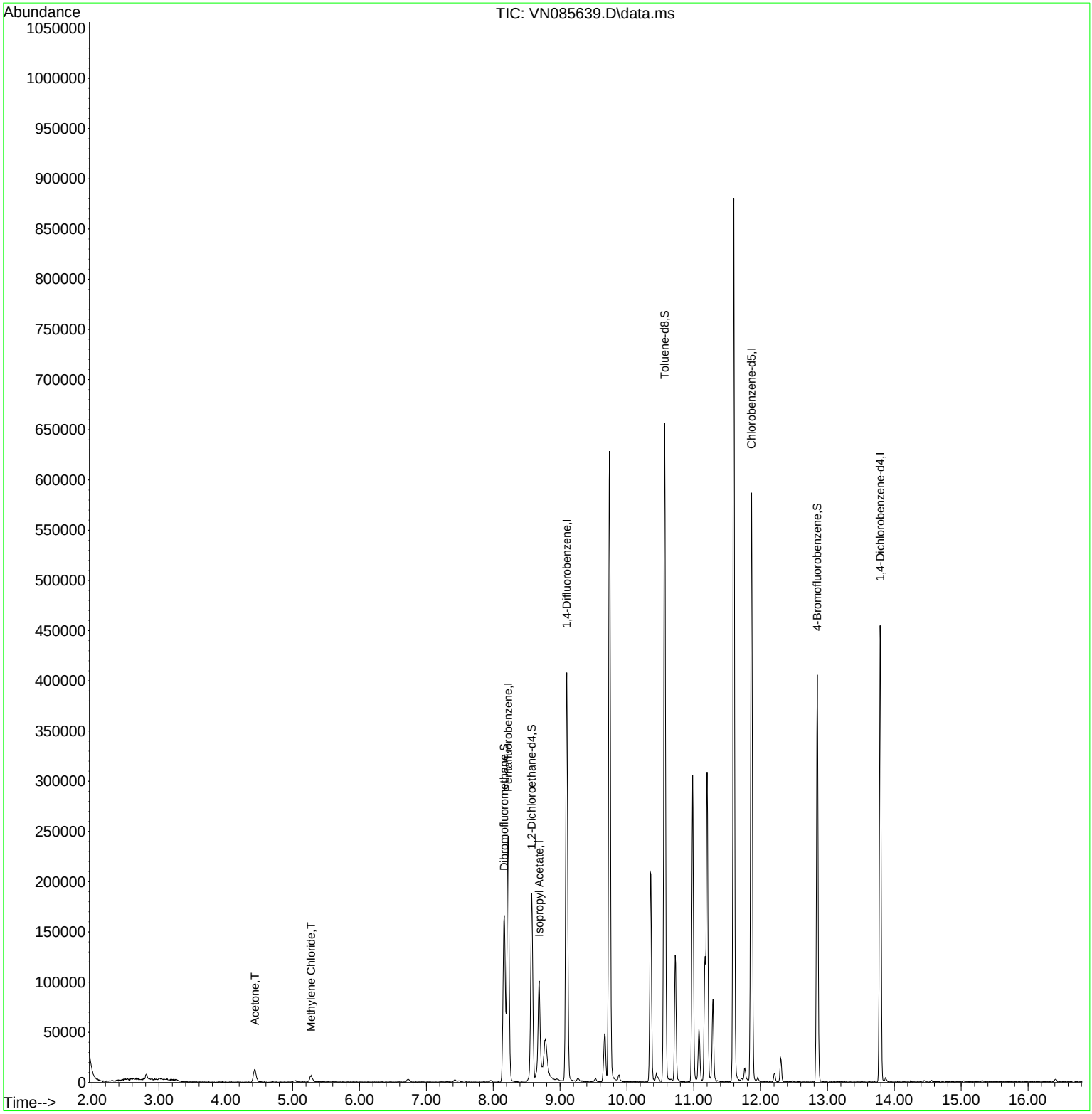
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	168419	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	349686	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	332324	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	119364	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	147102	54.109	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 108.220%			
35) Dibromofluoromethane	8.165	113	121025	49.887	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.780%			
50) Toluene-d8	10.565	98	452380	52.484	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 104.960%			
62) 4-Bromofluorobenzene	12.847	95	132884	45.069	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 90.140%			
Target Compounds						Qvalue
16) Acetone	4.436	43	24974	28.431	ug/l	96
20) Methylene Chloride	5.277	84	4678	2.151	ug/l	93
43) Isopropyl Acetate	8.688	43	113800	20.666	ug/l #	87

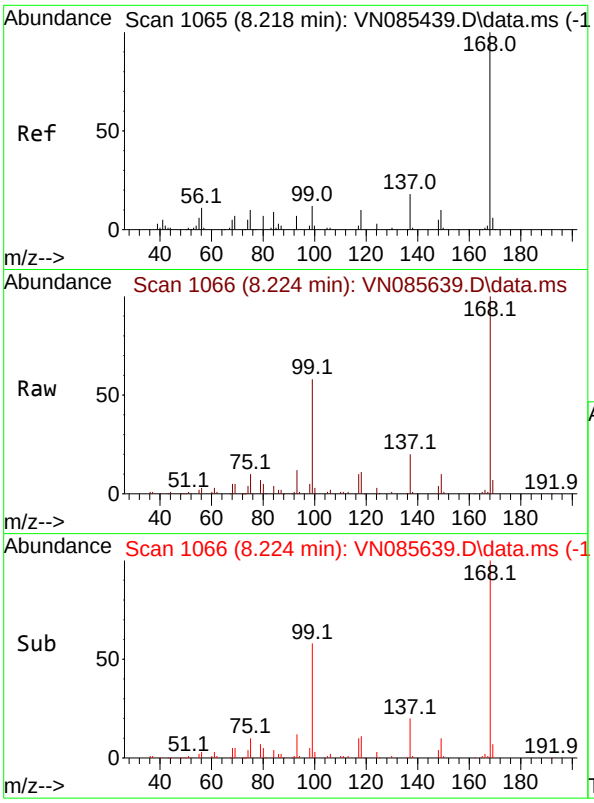
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085639.D
Acq On : 03 Feb 2025 22:01
Operator : JC\MD
Sample : Q1241-18
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Quant Time: Feb 04 01:01:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



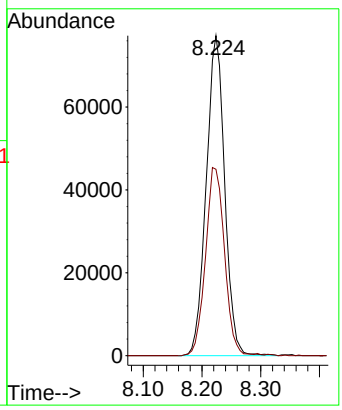


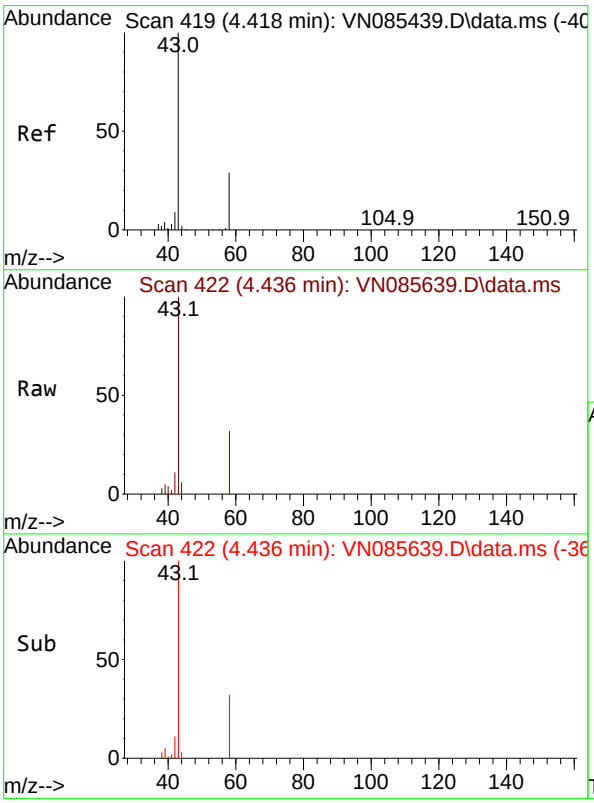
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Tgt Ion:168 Resp: 168419

Ion	Ratio	Lower	Upper
168	100		
99	58.2	53.6	80.4

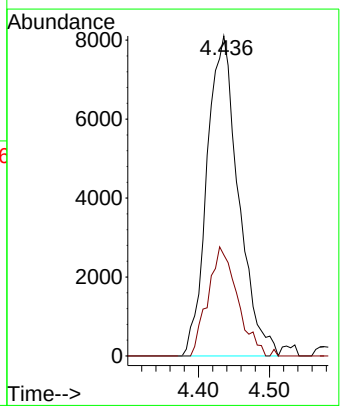


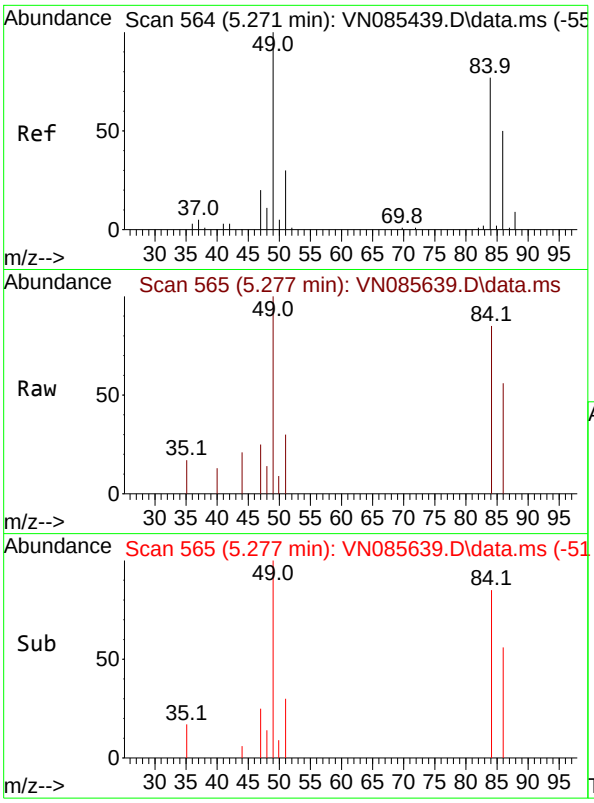


#16
Acetone
Concen: 28.431 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.018 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion: 43 Resp: 24974

Ion	Ratio	Lower	Upper
43	100		
58	31.6	23.8	35.6



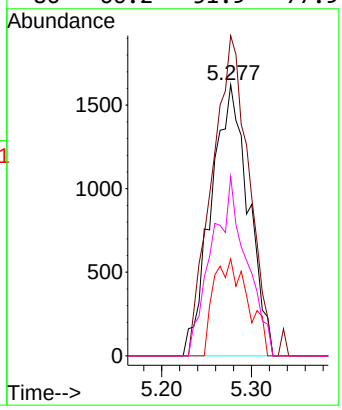


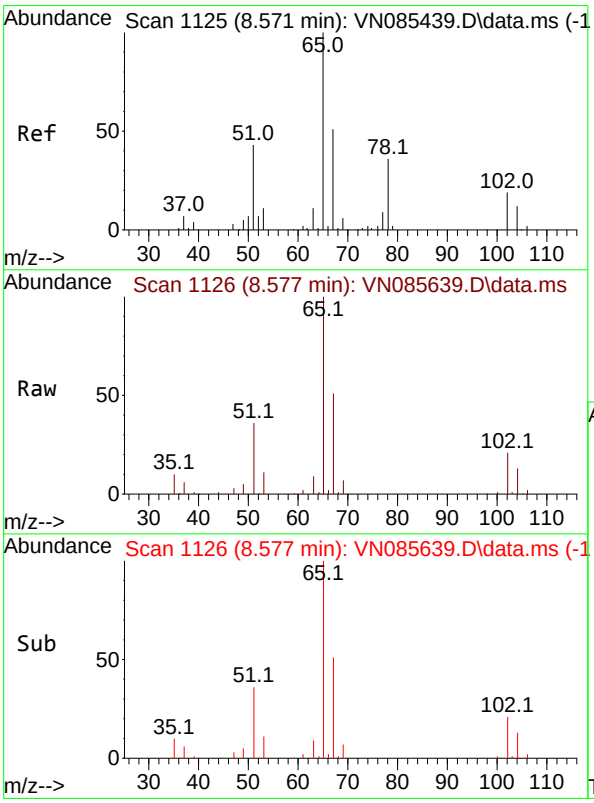
#20
Methylene Chloride
Concen: 2.151 ug/l
RT: 5.277 min Scan# 5
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Tgt Ion: 84 Resp: 4678

Ion	Ratio	Lower	Upper
84	100		
49	118.1	104.1	156.1
51	35.8	31.0	46.4
86	66.2	51.9	77.9

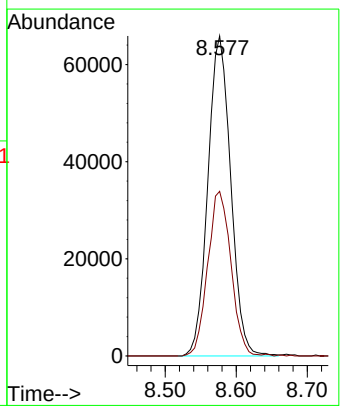


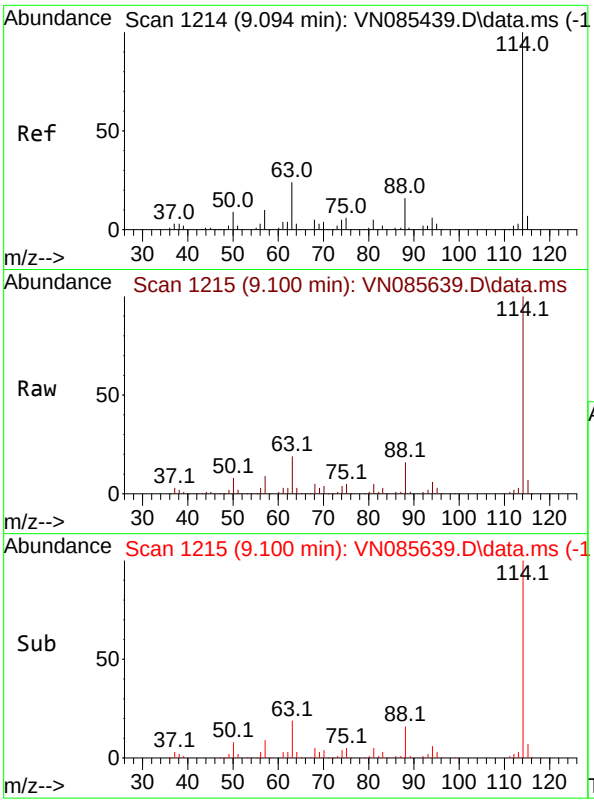


#33
1,2-Dichloroethane-d4
Concen: 54.109 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion: 65 Resp: 147102

Ion	Ratio	Lower	Upper
65	100		
67	52.2	0.0	101.6



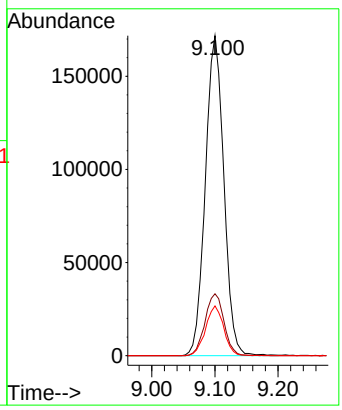


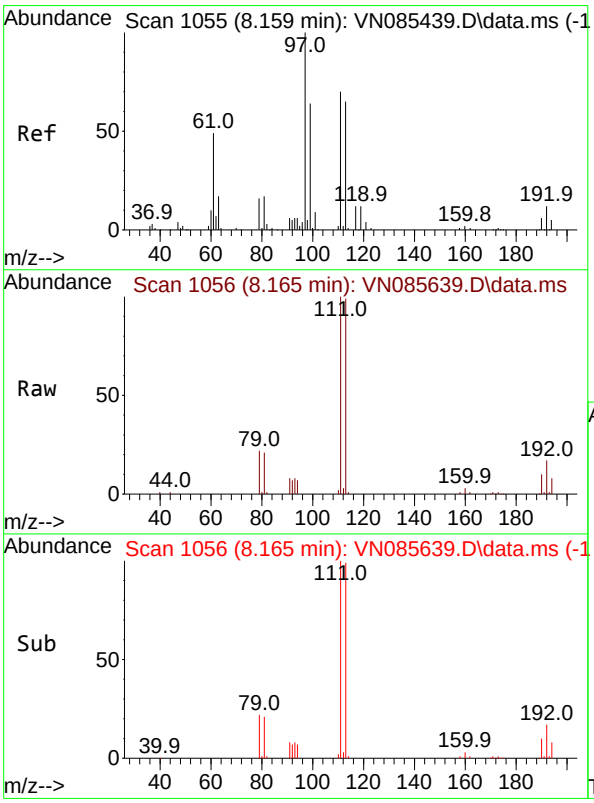
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Tgt Ion:114 Resp: 349686

Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	47.6
88	15.5	0.0	32.6

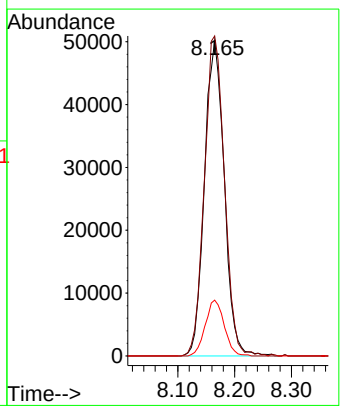


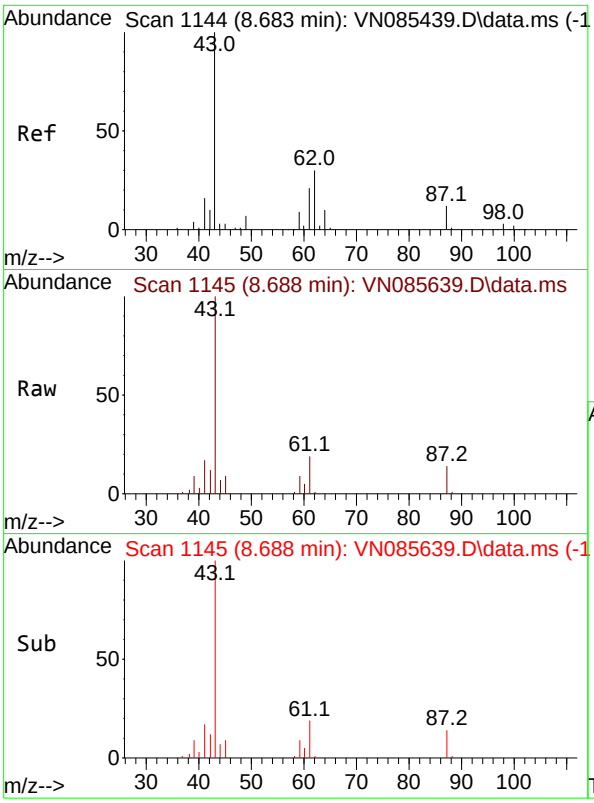


#35
Dibromofluoromethane
Concen: 49.887 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion:113 Resp: 121025

Ion	Ratio	Lower	Upper
113	100		
111	103.1	82.7	124.1
192	17.0	14.3	21.5



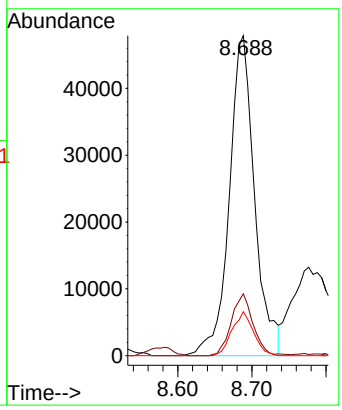


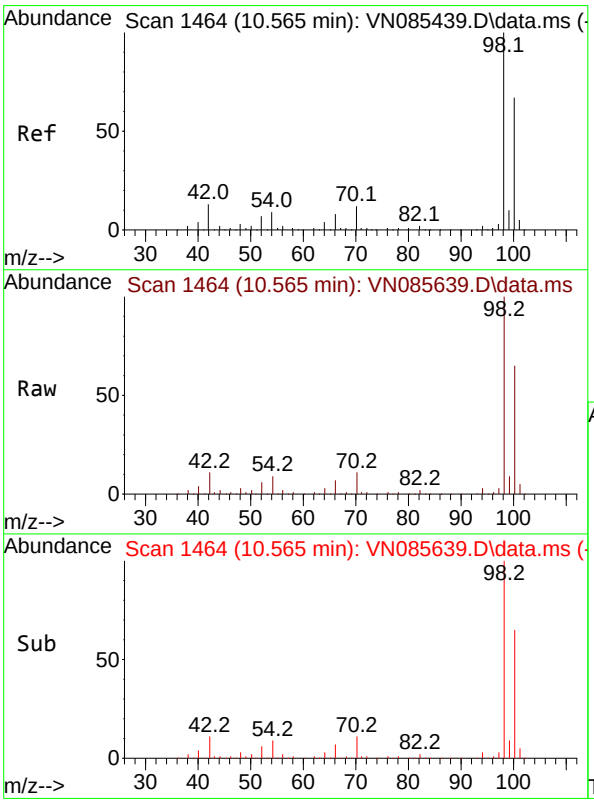
#43
Isopropyl Acetate
Concen: 20.666 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Tgt Ion: 43 Resp: 113800

Ion	Ratio	Lower	Upper
43	100		
61	16.7	20.7	31.1#
87	11.6	9.8	14.8

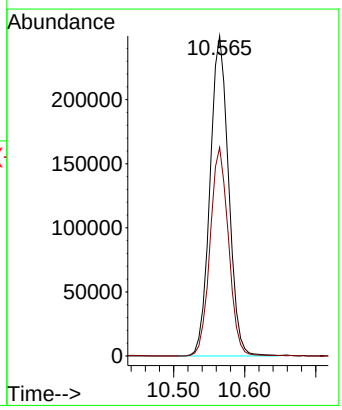


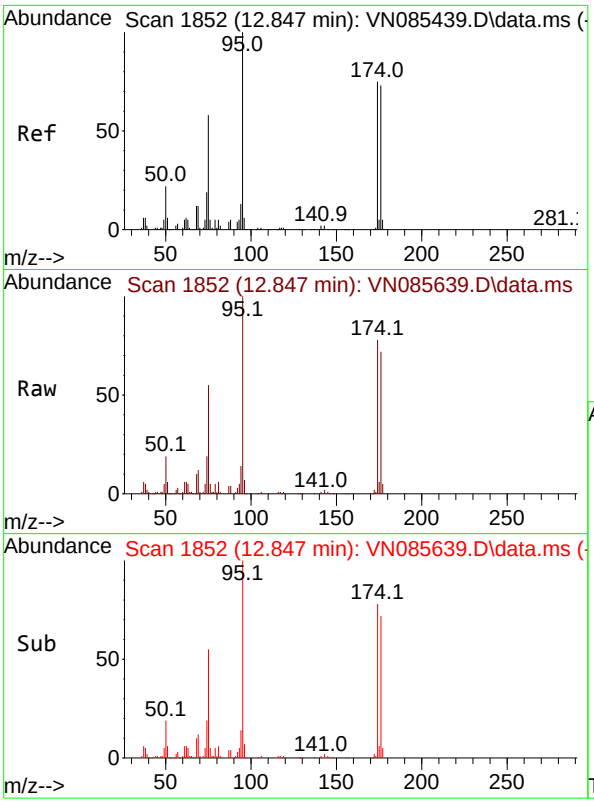


#50
Toluene-d8
Concen: 52.484 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion: 98 Resp: 452380

Ion	Ratio	Lower	Upper
98	100		
100	64.6	52.2	78.4



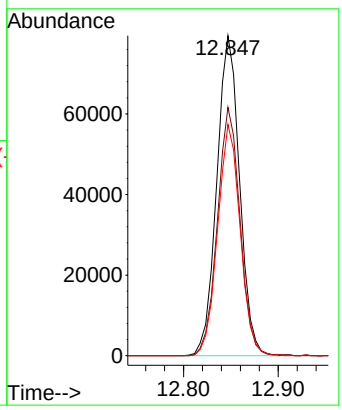


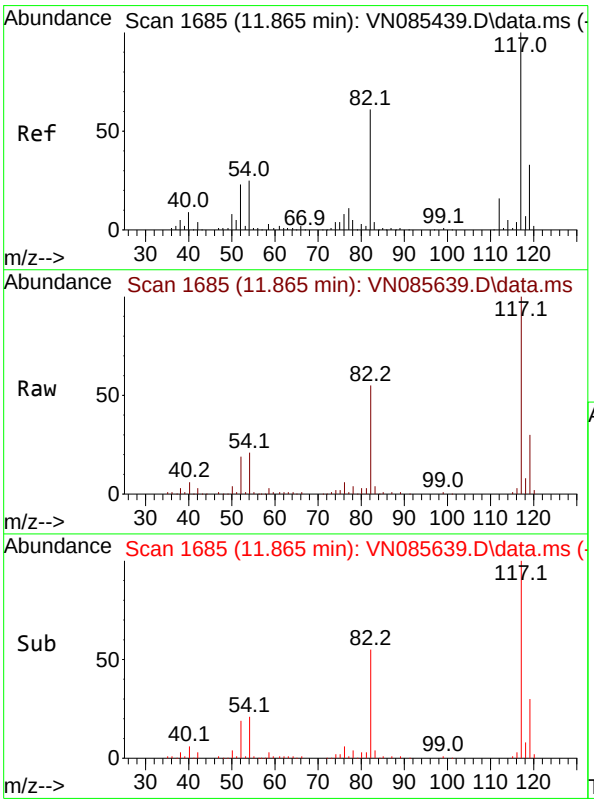
#62
4-Bromofluorobenzene
Concen: 45.069 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Tgt Ion: 95 Resp: 132884

Ion	Ratio	Lower	Upper
95	100		
174	76.9	0.0	145.0
176	71.4	0.0	142.4

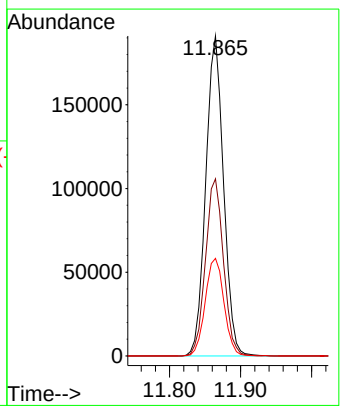


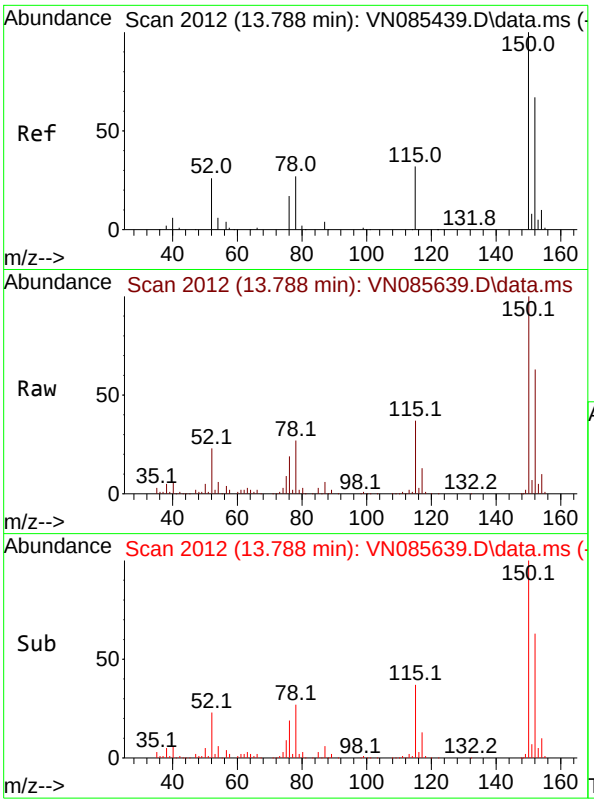


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Tgt Ion:117 Resp: 332324

Ion	Ratio	Lower	Upper
117	100		
82	55.4	48.6	72.8
119	30.5	26.6	39.8



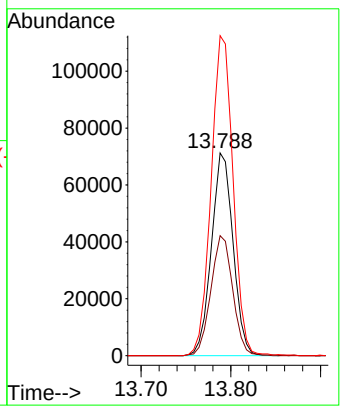


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085639.D
Acq: 03 Feb 2025 22:01

Instrument :
MSVOA_N
ClientSampleId :
JPP-51.4-013025

Tgt Ion:152 Resp: 119364

Ion	Ratio	Lower	Upper
152	100		
115	59.7	31.1	93.3
150	159.9	0.0	343.6



CALIBRATION SUMMARY

Raw Data

Alliance TECHNICAL GROUP

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19

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

LAB FILE ID: RRF100 = VN085438.D RRF050 = VN085439.D RRF020 = VN085440.D
RRF010 = VN085441.D RRF005 = VN085442.D RRF001 = VN085443.D

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

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

Response Factor Report MSVOA_N_NEW

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

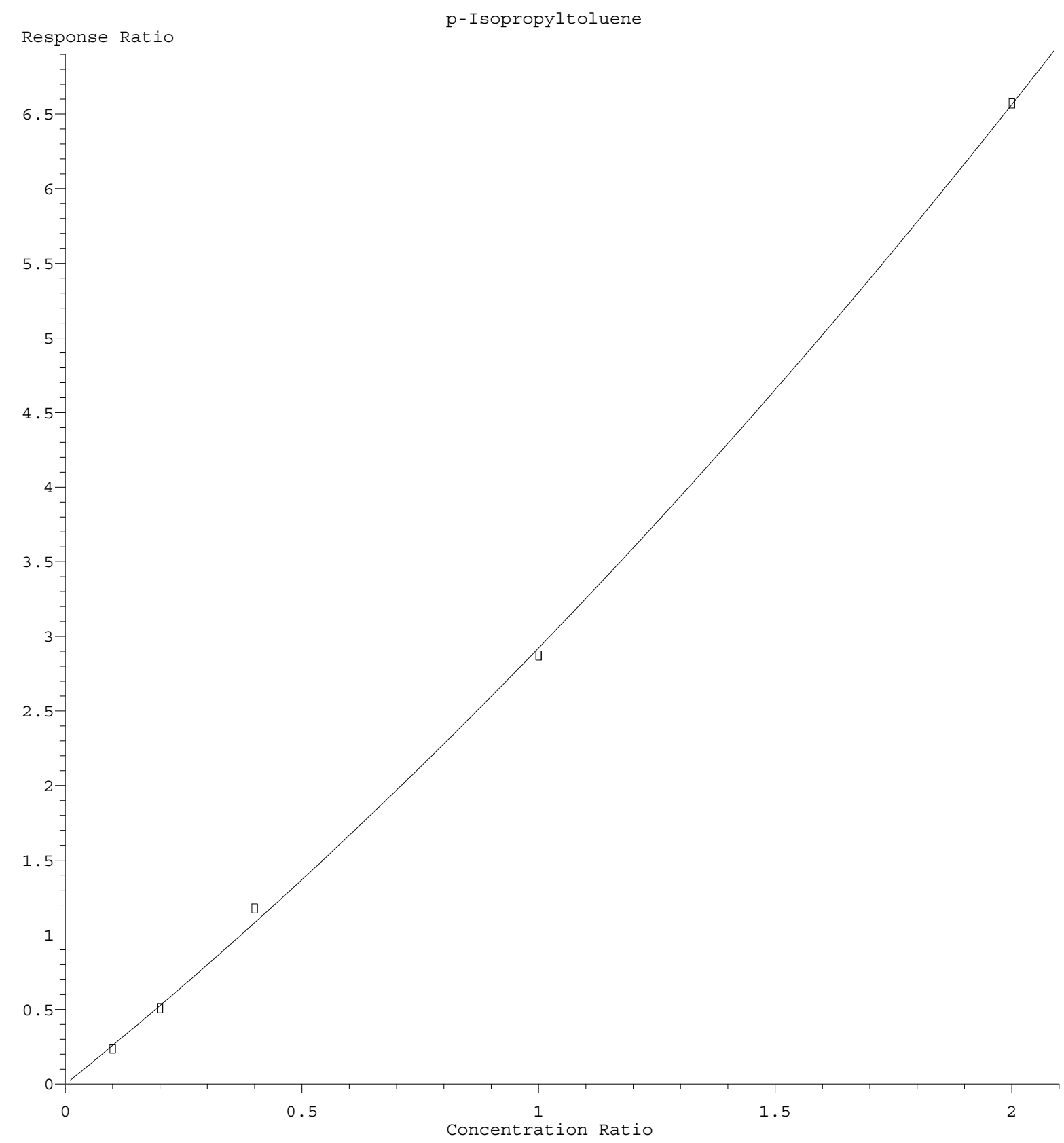
Calibration Files
1 =VN085443.D 5 =VN085442.D 10 =VN085441.D 20 =VN085440.D 50 =VN085439.D 100 =VN085438.D

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

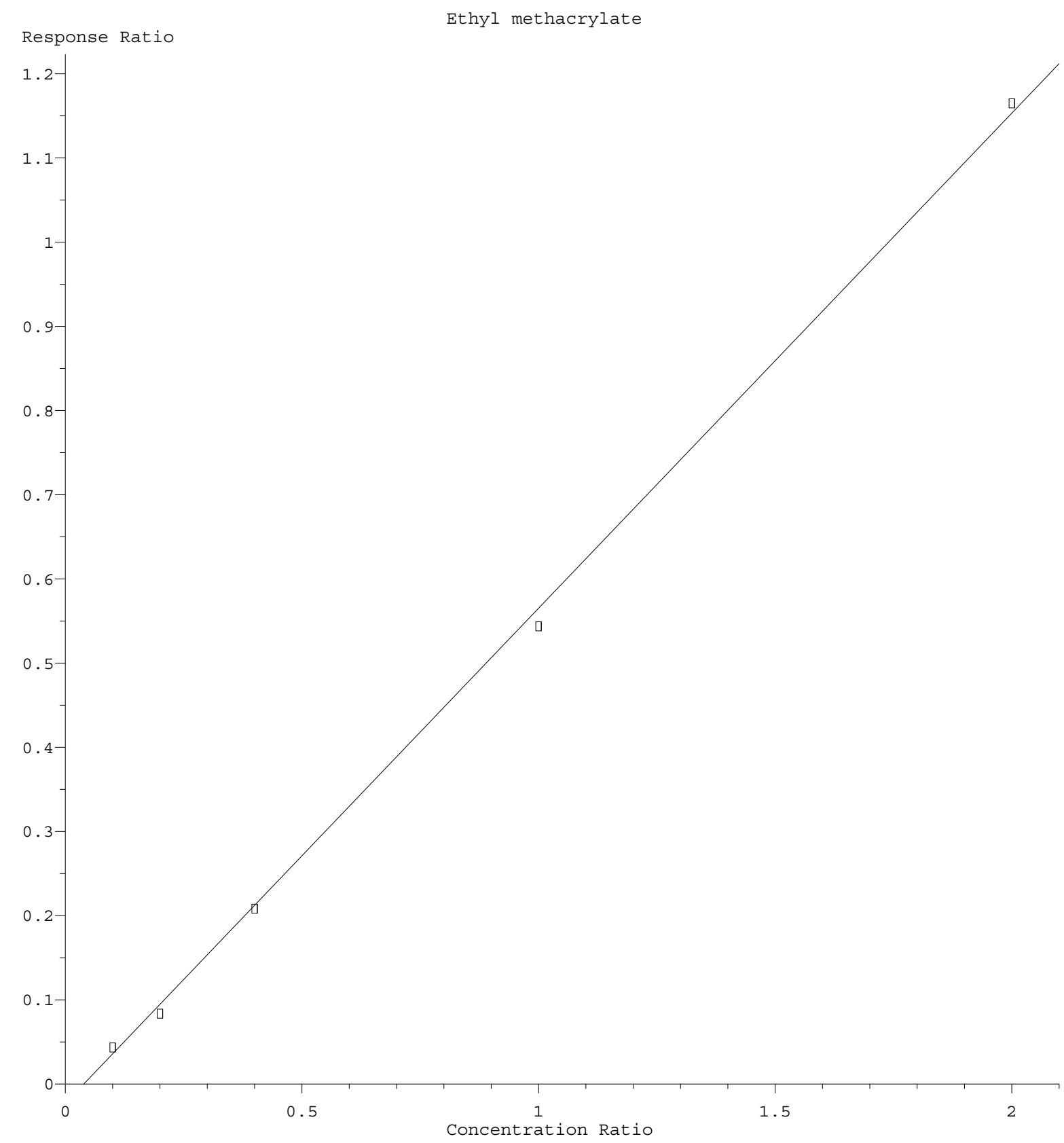
Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N011425W.M

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

(#) = Out of Range



R = 3.594e-001 A*A + 2.563e+000 A - 1.210e-003
Coef of Det (r^2) = 0.999599 Curve Fit: Quadratic
Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N011425W.M
Calibration Table Last Updated: Wed Jan 15 02:16:08 2025



Response = 5.877e-001 * Amt - 2.270e-002
Coef of Det (r^2) = 0.998904 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N011425W.M
Calibration Table Last Updated: Wed Jan 15 02:16:08 2025

Quantitation Report (QT Reviewed)

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	202613	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	329363	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	298938	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	146196	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	313645	95.899	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 191.800%#			
35) Dibromofluoromethane	8.159	113	236159	103.353	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 206.700%#			
50) Toluene-d8	10.565	98	881956	108.636	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 217.280%#			
62) 4-Bromofluorobenzene	12.847	95	313161	112.765	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 225.520%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	269023	98.065	ug/l	99
3) Chloromethane	2.359	50	275415	92.724	ug/l	98
4) Vinyl Chloride	2.512	62	282361	94.576	ug/l	99
5) Bromomethane	2.942	94	158888	88.105	ug/l	98
6) Chloroethane	3.112	64	176111	93.043	ug/l	99
7) Trichlorofluoromethane	3.494	101	423967	97.870	ug/l	100
8) Diethyl Ether	3.953	74	146889	98.154	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	239104	97.997	ug/l	99
10) Methyl Iodide	4.589	142	292983	104.856	ug/l	95
11) Tert butyl alcohol	5.512	59	173044	462.061	ug/l	99
12) 1,1-Dichloroethene	4.336	96	222117	102.146	ug/l	99
13) Acrolein	4.171	56	275350	538.600	ug/l	99
14) Allyl chloride	5.018	41	349717	99.111	ug/l	98
15) Acrylonitrile	5.712	53	585370	492.095	ug/l	99
16) Acetone	4.418	43	483221	457.268	ug/l	96
17) Carbon Disulfide	4.712	76	630294	94.140	ug/l	100
18) Methyl Acetate	5.012	43	304226	94.674	ug/l	99
19) Methyl tert-butyl Ether	5.788	73	743008	105.230	ug/l	100
20) Methylene Chloride	5.271	84	254912	97.440	ug/l	98
21) trans-1,2-Dichloroethene	5.783	96	231503	99.618	ug/l	97
22) Diisopropyl ether	6.665	45	820871	104.812	ug/l	99
23) Vinyl Acetate	6.594	43	3029568	550.850	ug/l	99
24) 1,1-Dichloroethane	6.565	63	471831	98.803	ug/l	99
25) 2-Butanone	7.477	43	764979	491.912	ug/l	98
26) 2,2-Dichloropropane	7.482	77	388140	100.530	ug/l	100
27) cis-1,2-Dichloroethene	7.482	96	280197	102.367	ug/l	99
28) Bromochloromethane	7.806	49	214796	96.679	ug/l	100
29) Tetrahydrofuran	7.830	42	503459	510.635	ug/l	99
30) Chloroform	7.959	83	484941	98.253	ug/l	100
31) Cyclohexane	8.253	56	398641	96.041	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	426782	98.578	ug/l	98
36) 1,1-Dichloropropene	8.365	75	342961	106.945	ug/l	100
37) Ethyl Acetate	7.553	43	326802	100.961	ug/l	97
38) Carbon Tetrachloride	8.359	117	378390	103.065	ug/l	97
39) Methylcyclohexane	9.594	83	371734	123.354	ug/l	99
40) Benzene	8.600	78	1021393	106.001	ug/l	100

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

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

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

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

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

ICAL Form

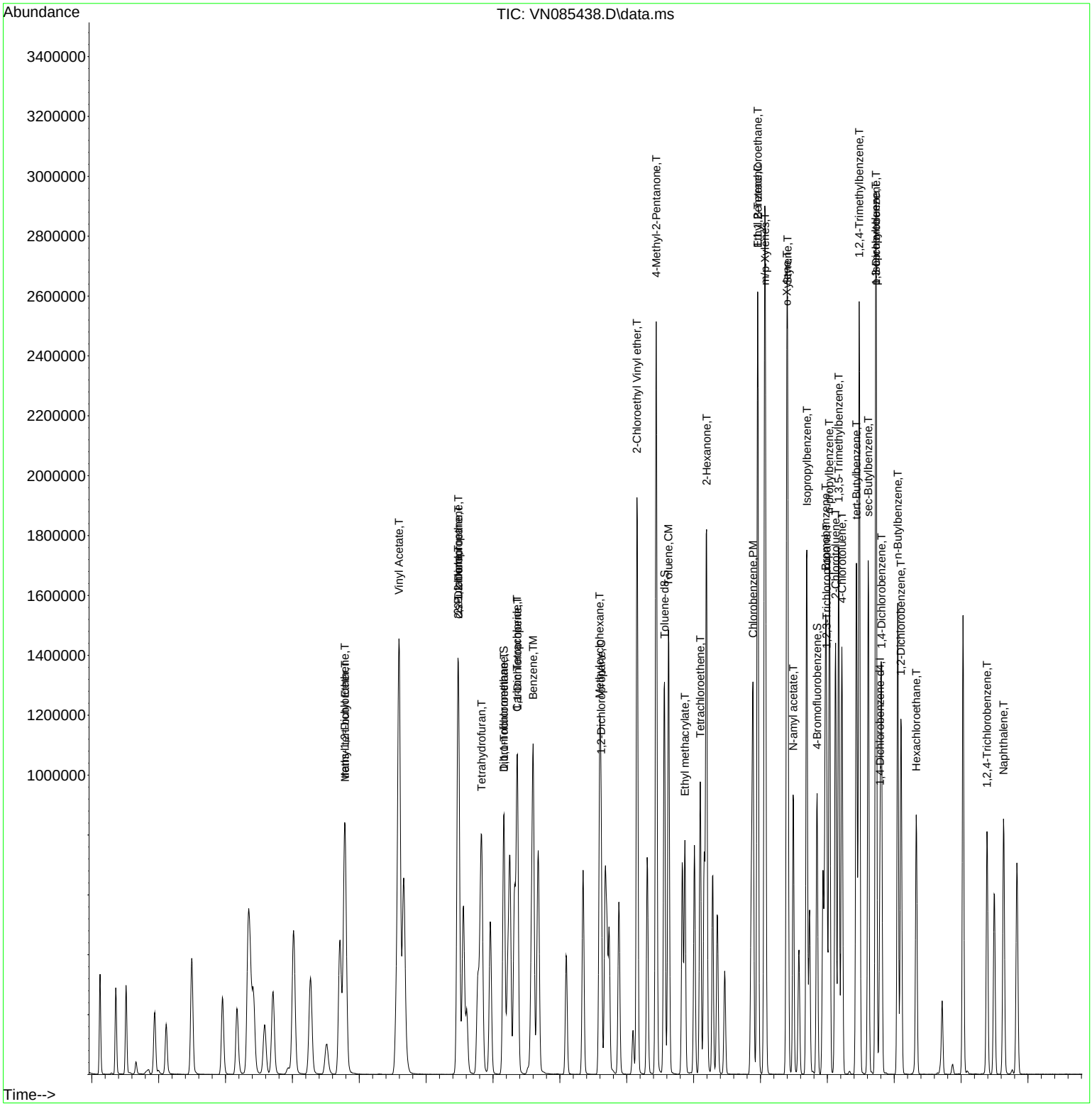
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085438.D
Acq On : 14 Jan 2025 14:56
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

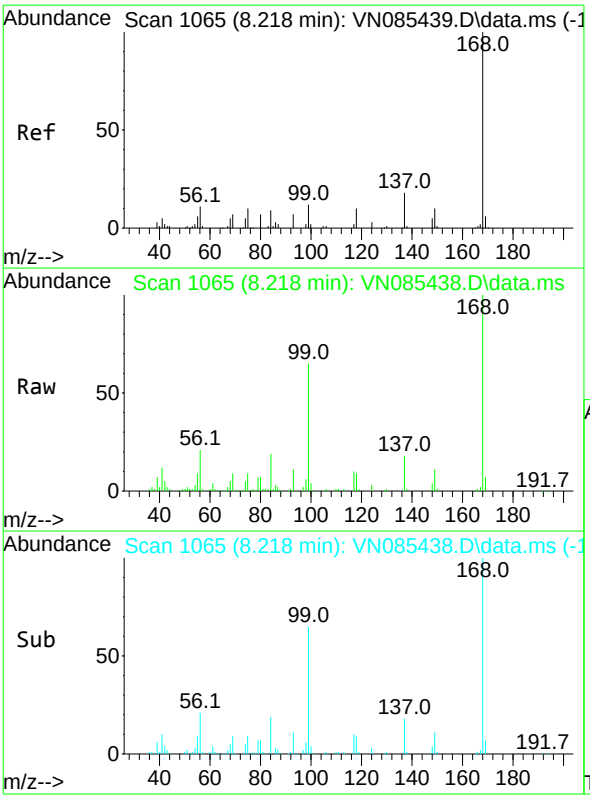
Quant Time: Jan 15 01:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

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

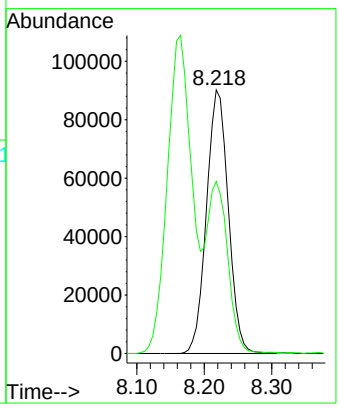




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:168 Resp: 202613

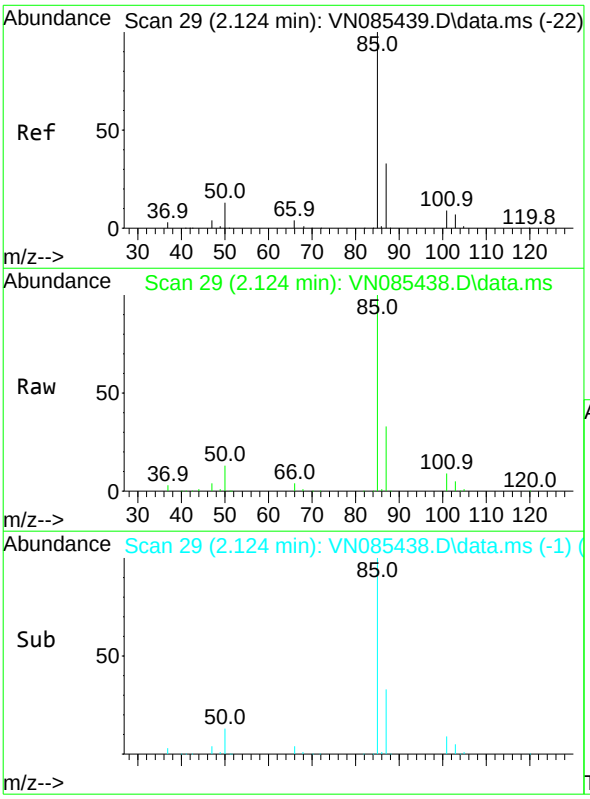
Ion	Ratio	Lower	Upper
168	100		
99	64.9	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

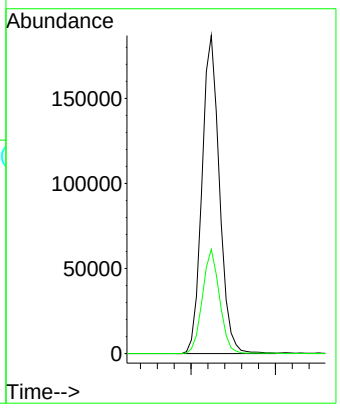
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

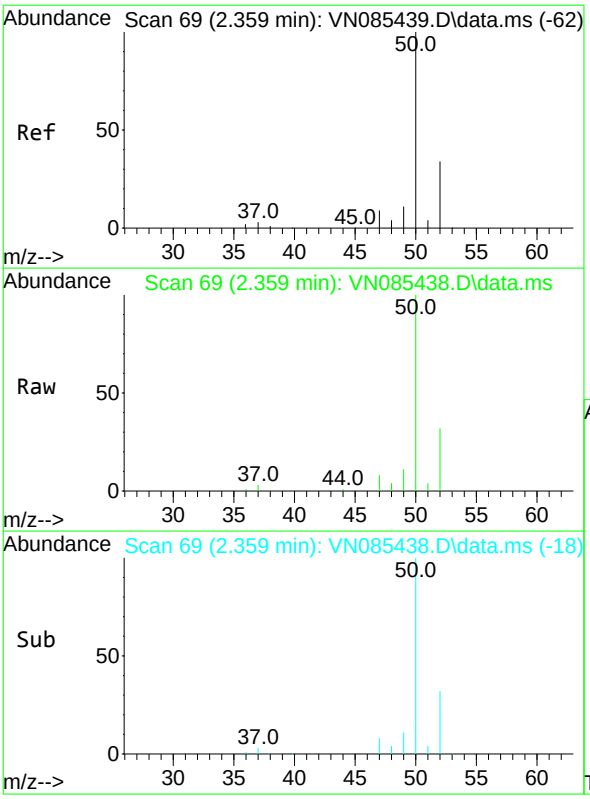


#2
Dichlorodifluoromethane
Concen: 98.065 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 85 Resp: 269023

Ion	Ratio	Lower	Upper
85	100		
87	32.7	16.7	50.1

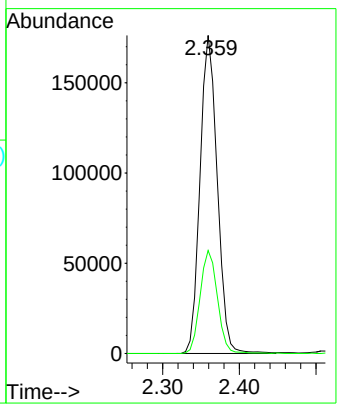




#3
Chloromethane
Concen: 92.724 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 50 Resp: 275415

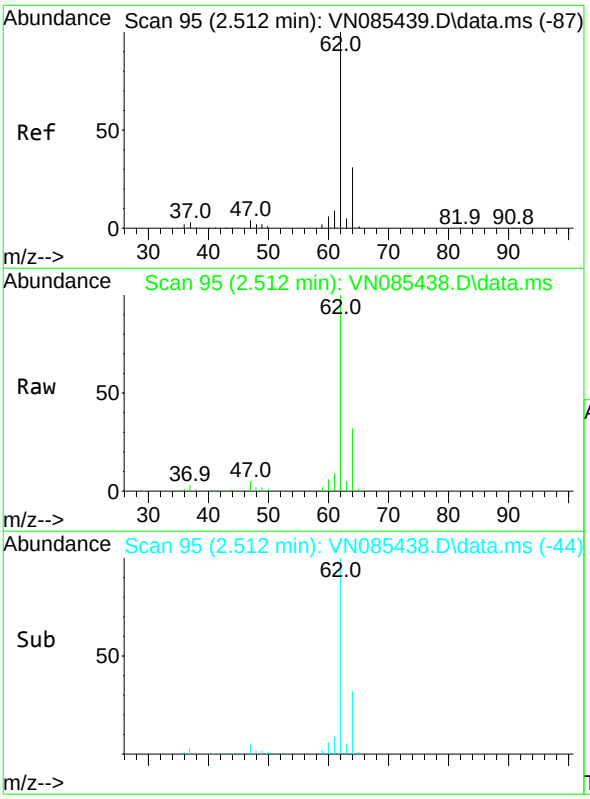
Ion	Ratio	Lower	Upper
50	100		
52	32.4	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

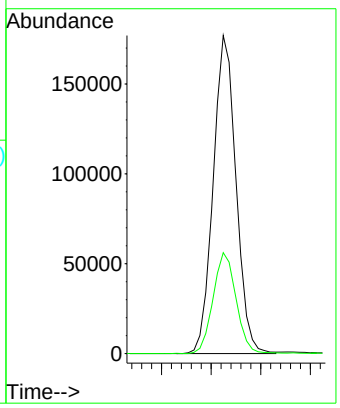
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

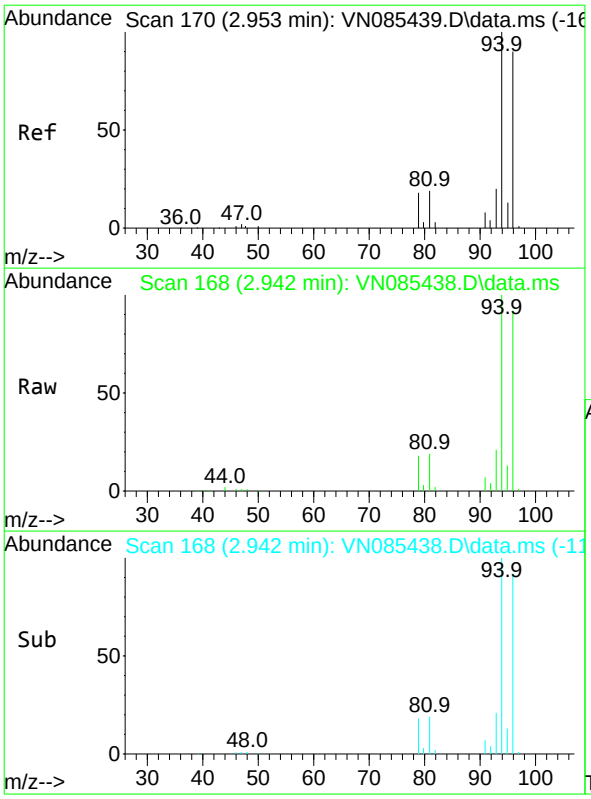


#4
Vinyl Chloride
Concen: 94.576 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 62 Resp: 282361

Ion	Ratio	Lower	Upper
62	100		
64	31.6	24.8	37.2

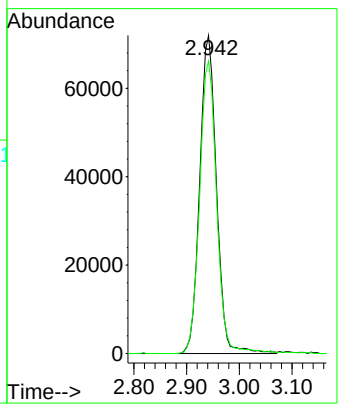




#5
Bromomethane
Concen: 88.105 ug/l
RT: 2.942 min Scan# 16
Delta R.T. -0.012 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 94 Resp: 158888

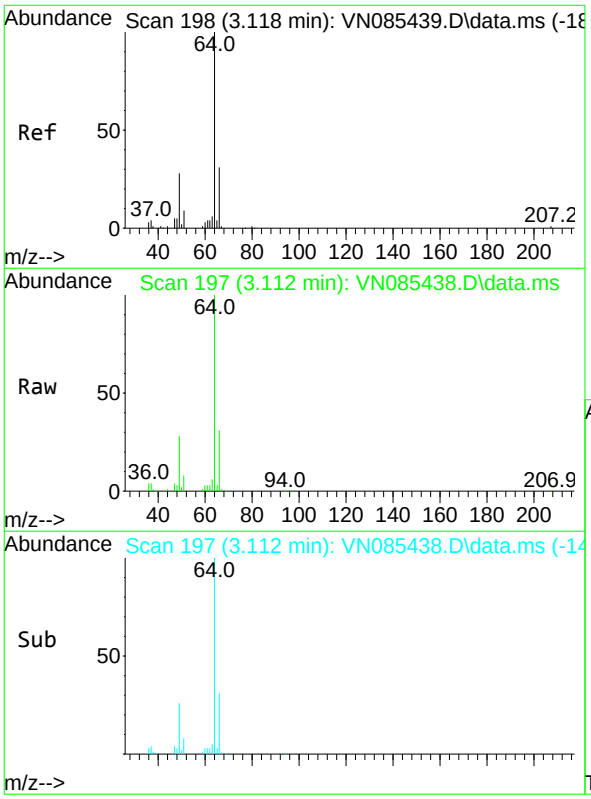
Ion	Ratio	Lower	Upper
94	100		
96	91.9	71.8	107.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

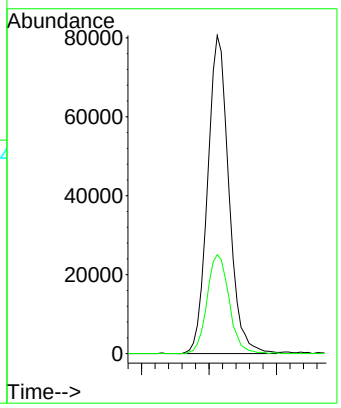
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

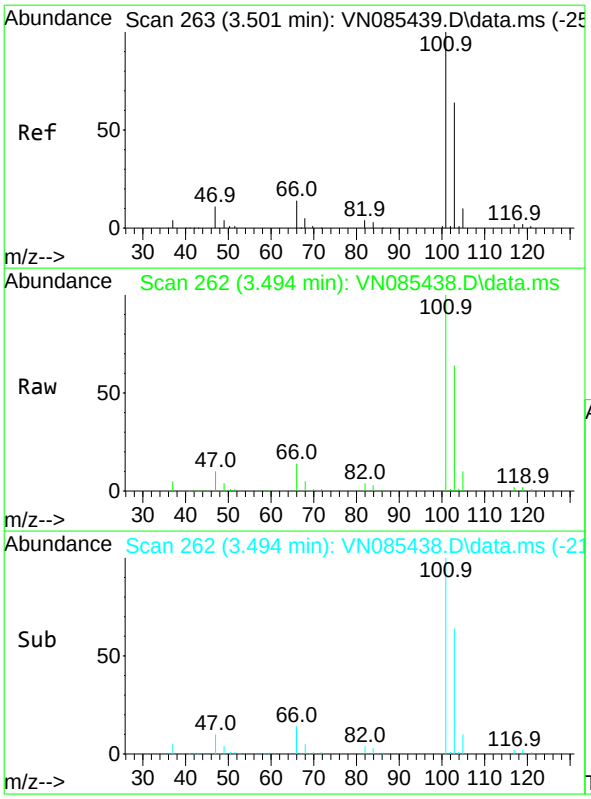


#6
Chloroethane
Concen: 93.043 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 64 Resp: 176111

Ion	Ratio	Lower	Upper
64	100		
66	31.1	24.6	36.8

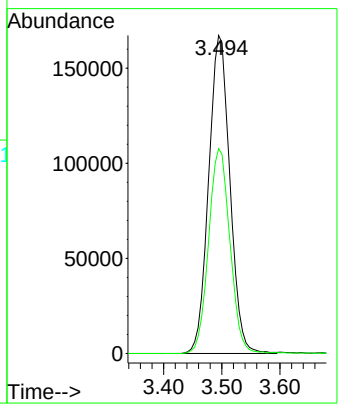




#7
Trichlorofluoromethane
Concen: 97.870 ug/l
RT: 3.494 min Scan# 26
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:101 Resp: 423967

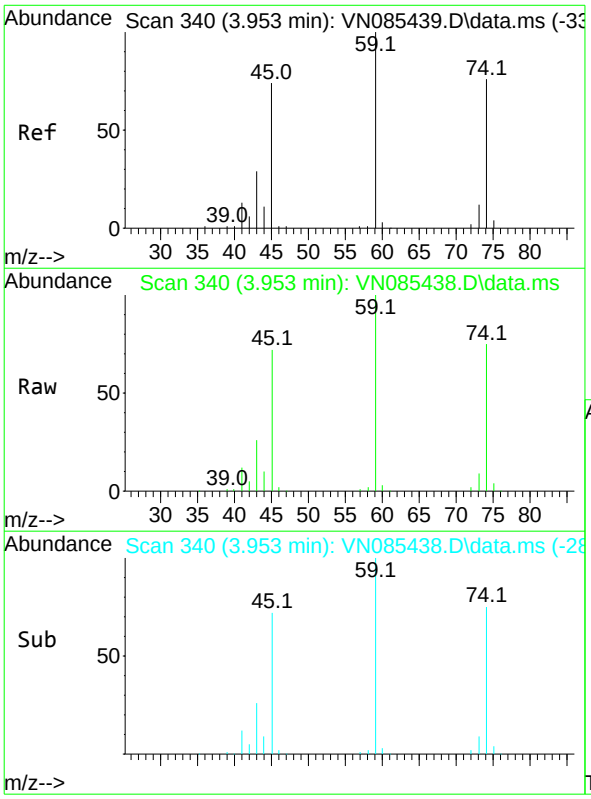
Ion	Ratio	Lower	Upper
101	100		
103	64.4	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

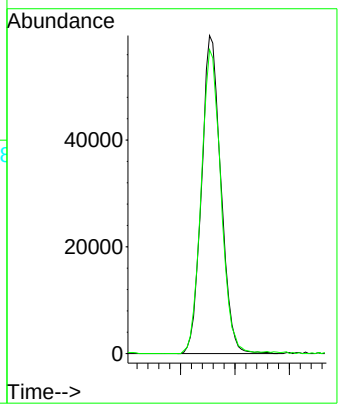
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

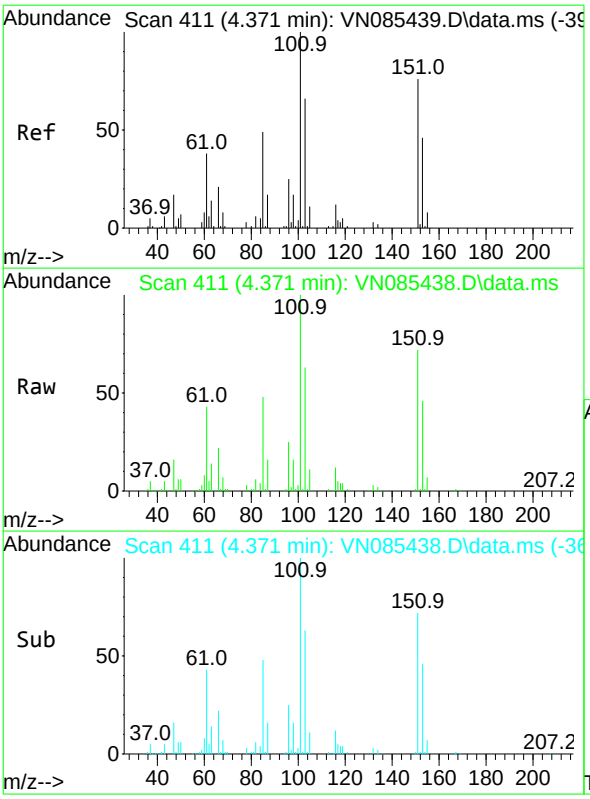


#8
Diethyl Ether
Concen: 98.154 ug/l
RT: 3.953 min Scan# 340
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 74 Resp: 146889

Ion	Ratio	Lower	Upper
74	100		
45	97.4	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 97.997 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

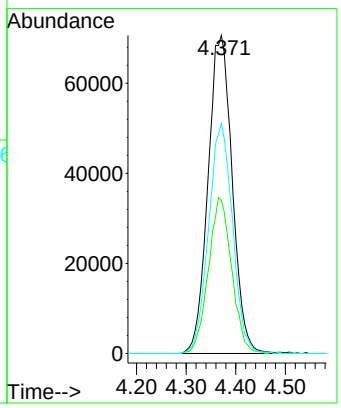
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

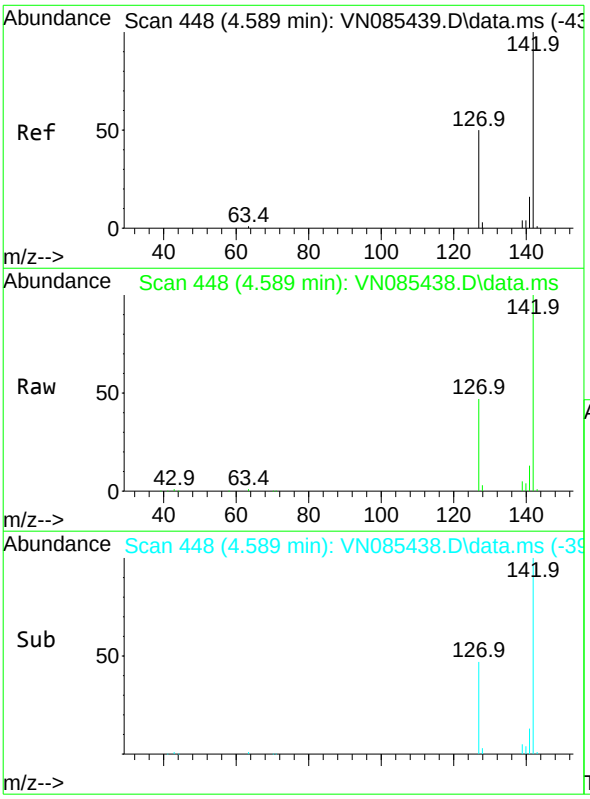
Tgt Ion:101 Resp: 239104

Ion	Ratio	Lower	Upper
101	100		
85	47.1	37.8	56.8
151	71.8	58.8	88.2

Manual Integrations
APPROVED

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

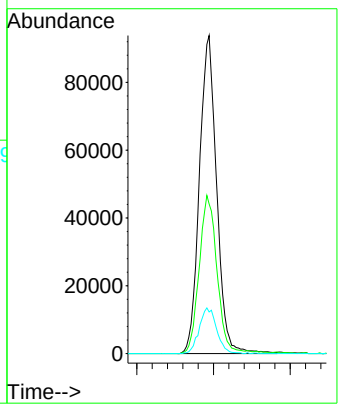


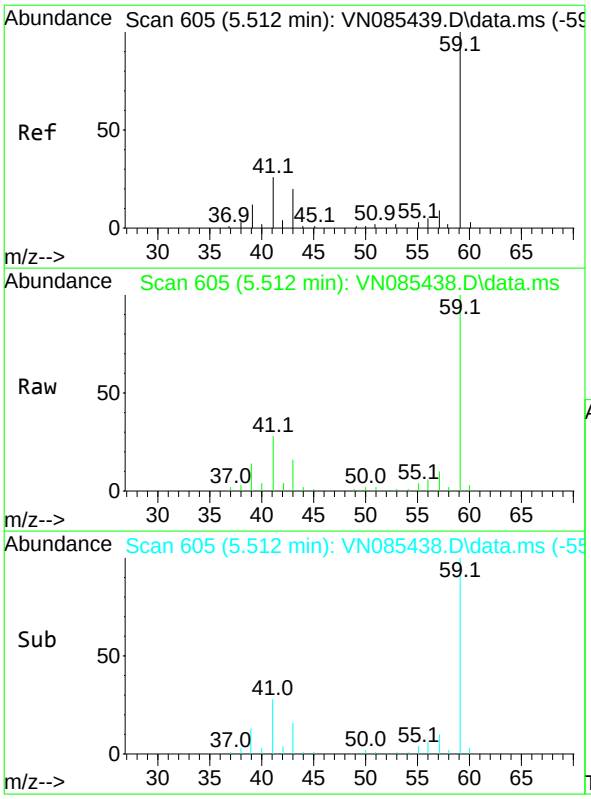


#10
Methyl Iodide
Concen: 104.856 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:142 Resp: 292983

Ion	Ratio	Lower	Upper
142	100		
127	47.1	40.3	60.5
141	13.1	12.8	19.2





#11
Tert butyl alcohol
Concen: 462.061 ug/l
RT: 5.512 min Scan# 60
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

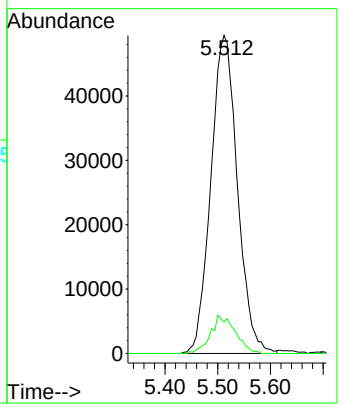
Tgt Ion: 59 Resp: 173044

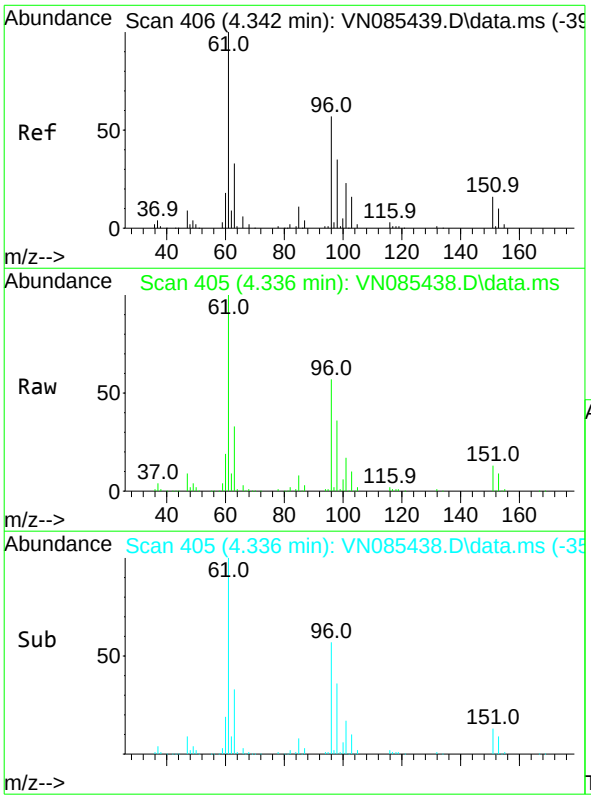
Ion	Ratio	Lower	Upper
59	100		
57	11.1	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

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

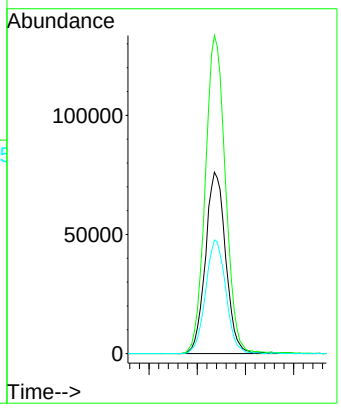


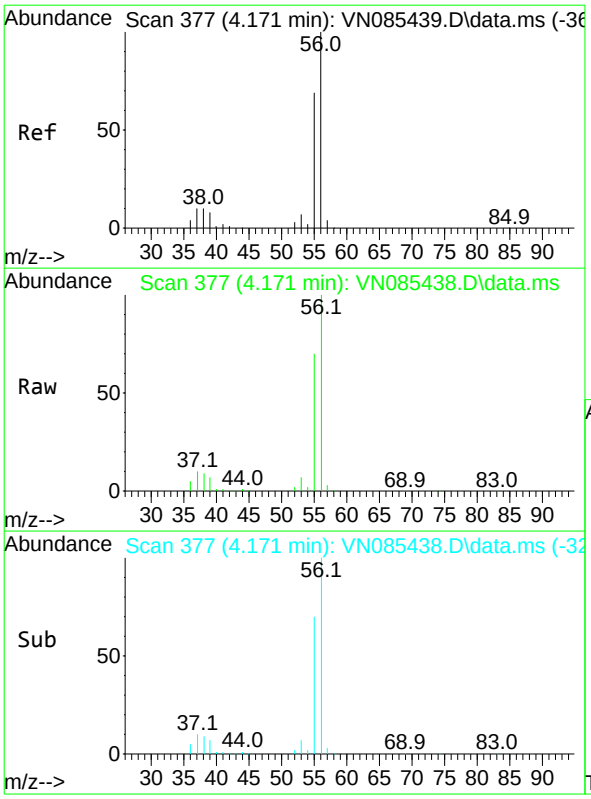


#12
1,1-Dichloroethene
Concen: 102.146 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 96 Resp: 222117

Ion	Ratio	Lower	Upper
96	100		
61	175.3	141.0	211.4
98	62.7	49.0	73.6

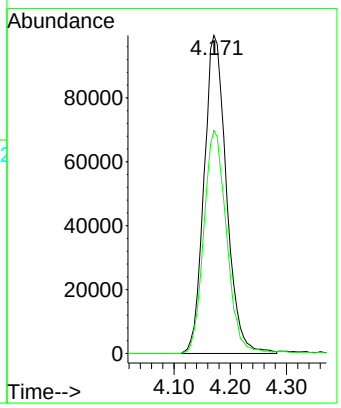




#13
Acrolein
Concen: 538.600 ug/l
RT: 4.171 min Scan# 37
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 56 Resp: 275350

Ion	Ratio	Lower	Upper
56	100		
55	71.1	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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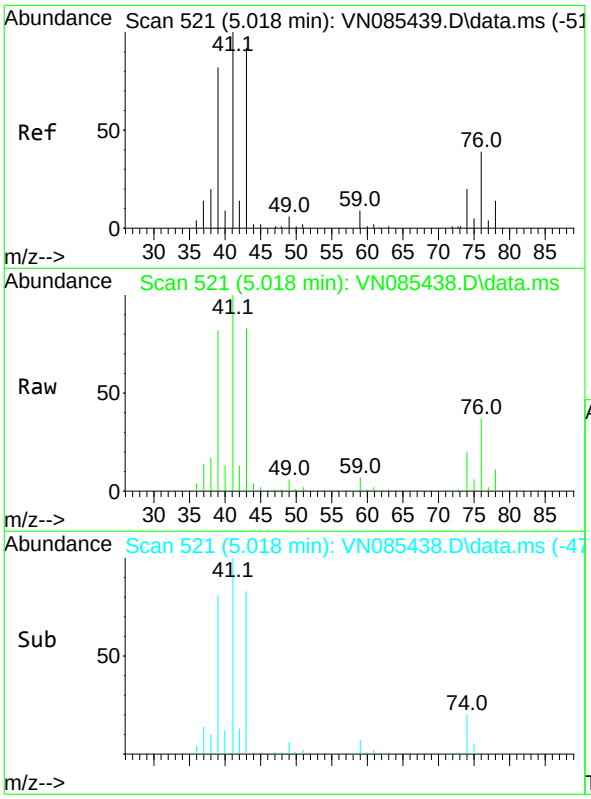
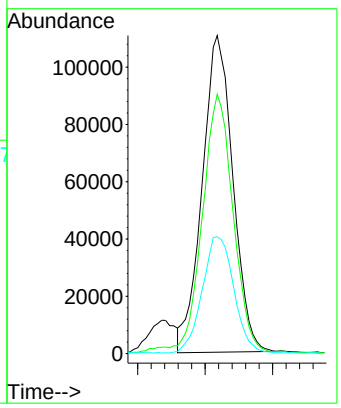
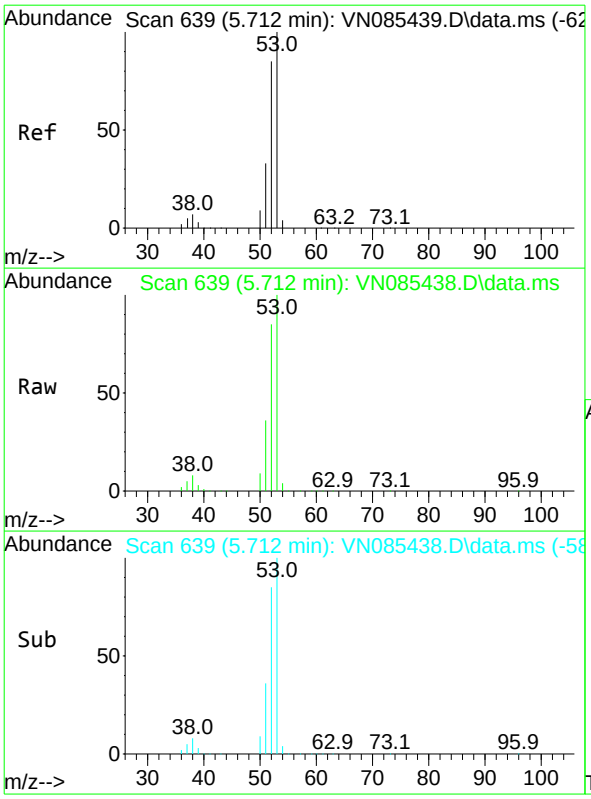


#14
Allyl chloride
Concen: 99.111 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 41 Resp: 349717

Ion	Ratio	Lower	Upper
41	100		
39	83.3	64.4	96.6
76	37.9	30.5	45.7

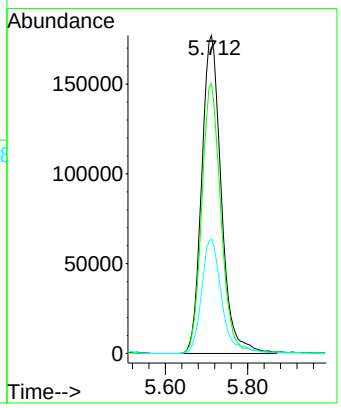




#15
Acrylonitrile
Concen: 492.095 ug/l
RT: 5.712 min Scan# 63
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 53 Resp: 585370

Ion	Ratio	Lower	Upper
53	100		
52	83.0	65.5	98.3
51	37.1	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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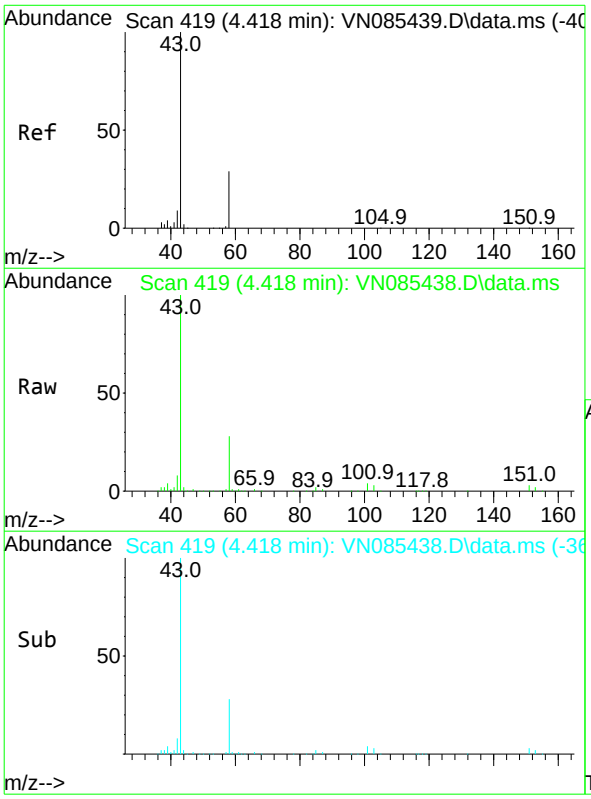
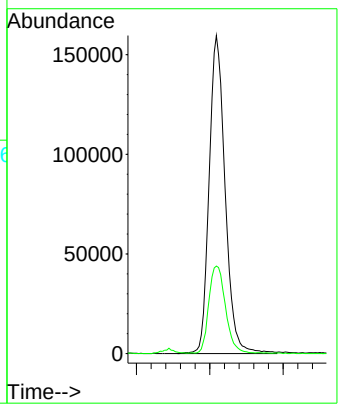
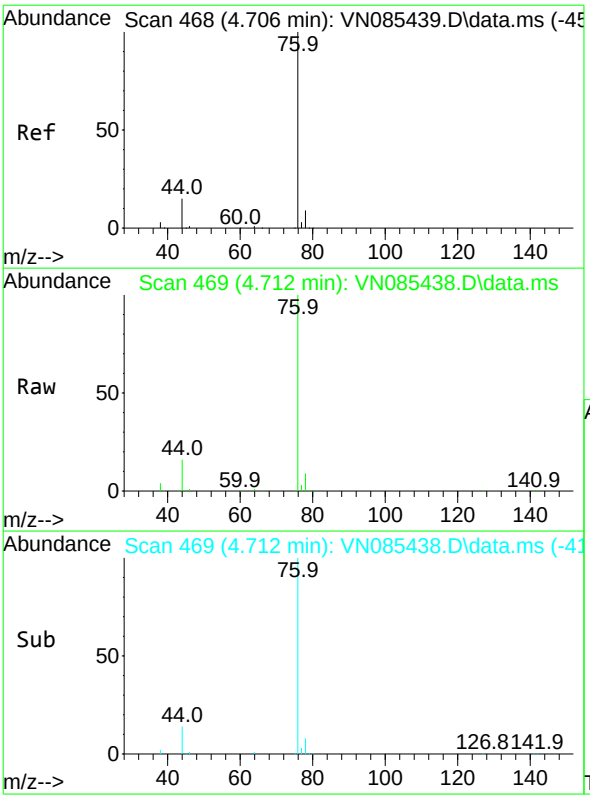


#16
Acetone
Concen: 457.268 ug/l
RT: 4.418 min Scan# 419
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 483221

Ion	Ratio	Lower	Upper
43	100		
58	27.3	23.8	35.6

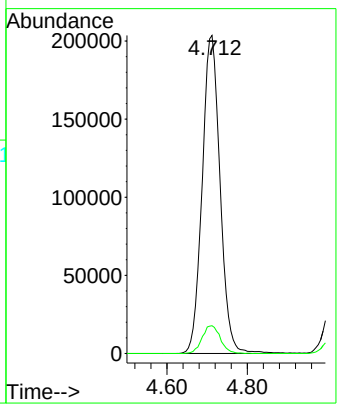




#17
Carbon Disulfide
Concen: 94.140 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 76 Resp: 630294

Ion	Ratio	Lower	Upper
76	100		
78	8.7	6.9	10.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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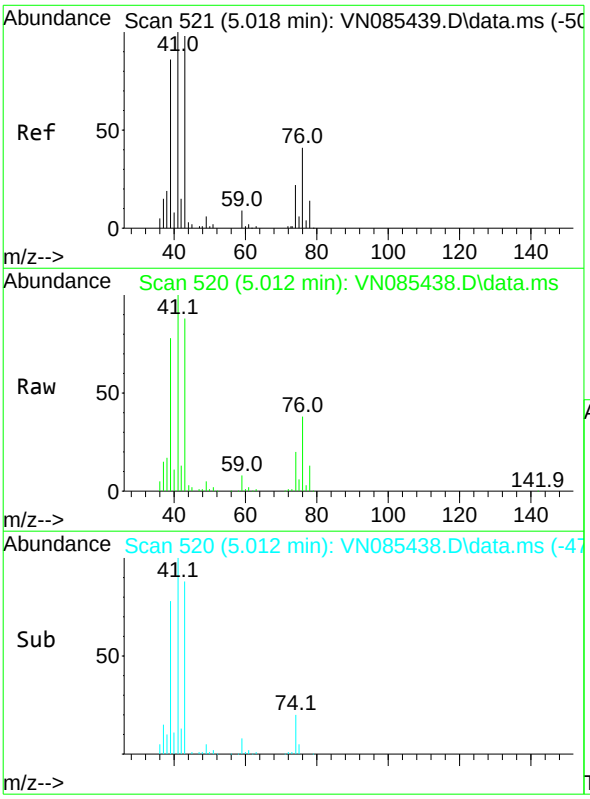
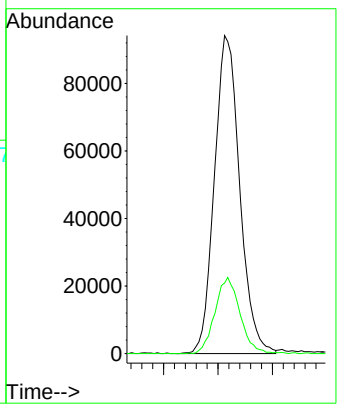
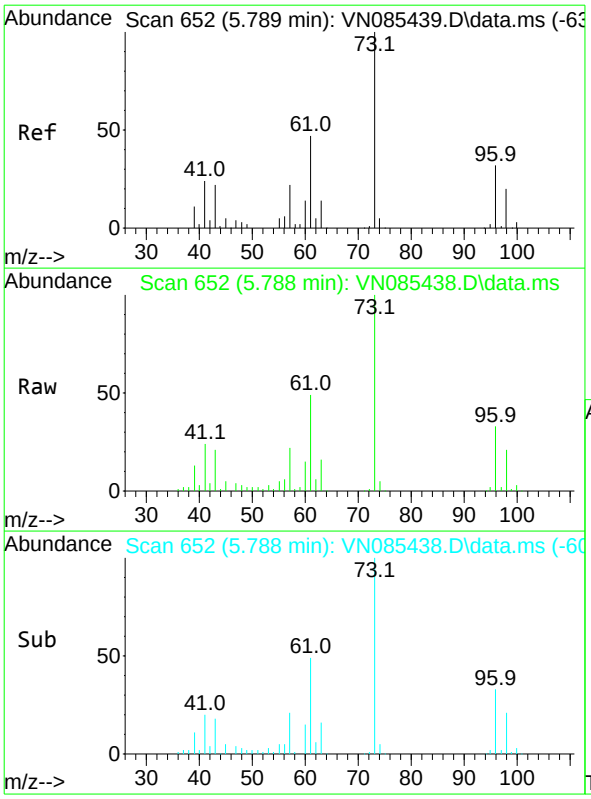


#18
Methyl Acetate
Concen: 94.674 ug/l
RT: 5.012 min Scan# 520
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 304226

Ion	Ratio	Lower	Upper
43	100		
74	23.6	18.6	28.0

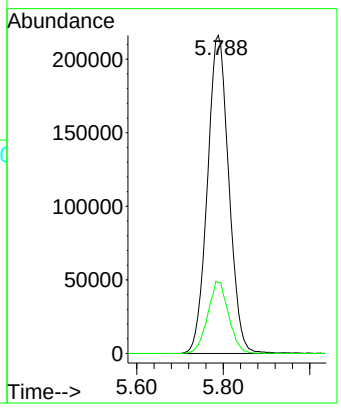




#19
Methyl tert-butyl Ether
Concen: 105.230 ug/l
RT: 5.788 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 73 Resp: 743008

Ion	Ratio	Lower	Upper
73	100		
57	22.3	17.8	26.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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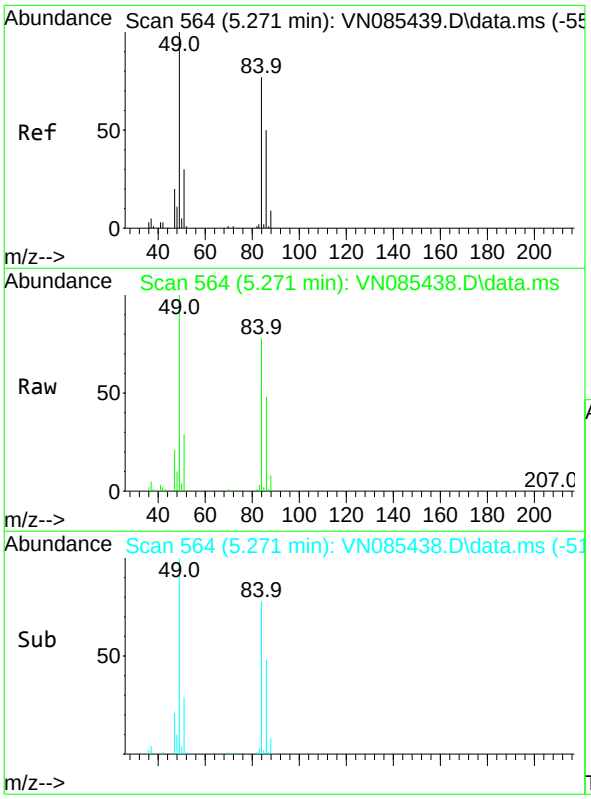
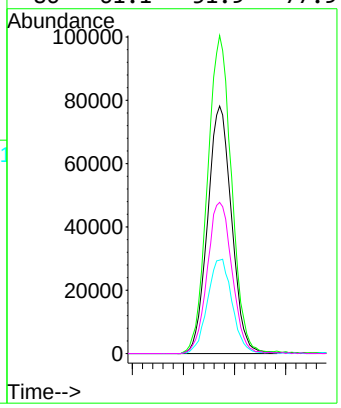
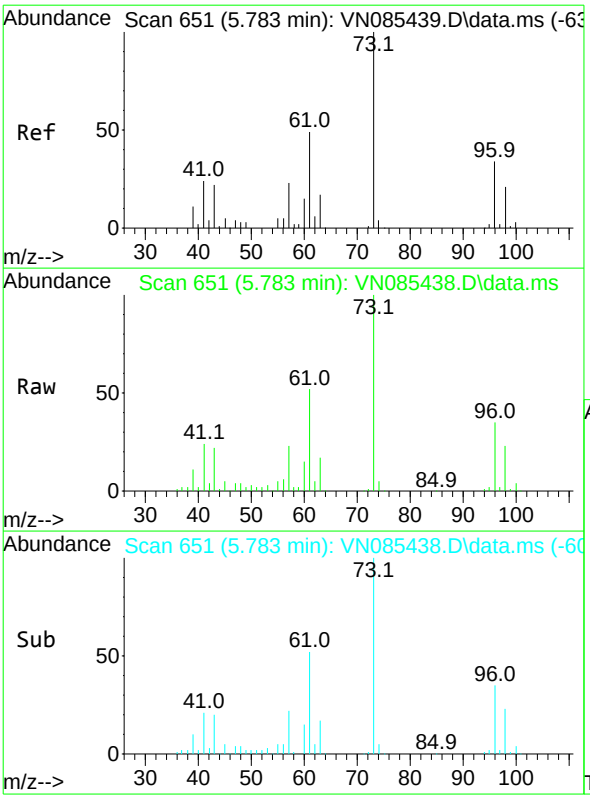


#20
Methylene Chloride
Concen: 97.440 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 84 Resp: 254912

Ion	Ratio	Lower	Upper
84	100		
49	128.5	104.1	156.1
51	37.8	31.0	46.4
86	61.1	51.9	77.9

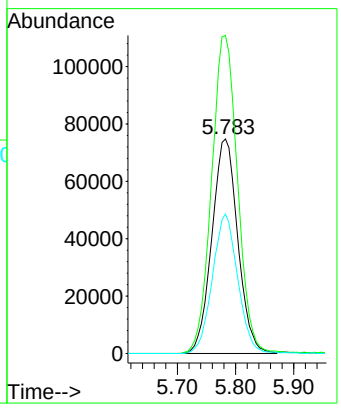




#21
trans-1,2-Dichloroethene
Concen: 99.618 ug/l
RT: 5.783 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 96 Resp: 231503

Ion	Ratio	Lower	Upper
96	100		
61	148.3	115.7	173.5
98	65.0	49.8	74.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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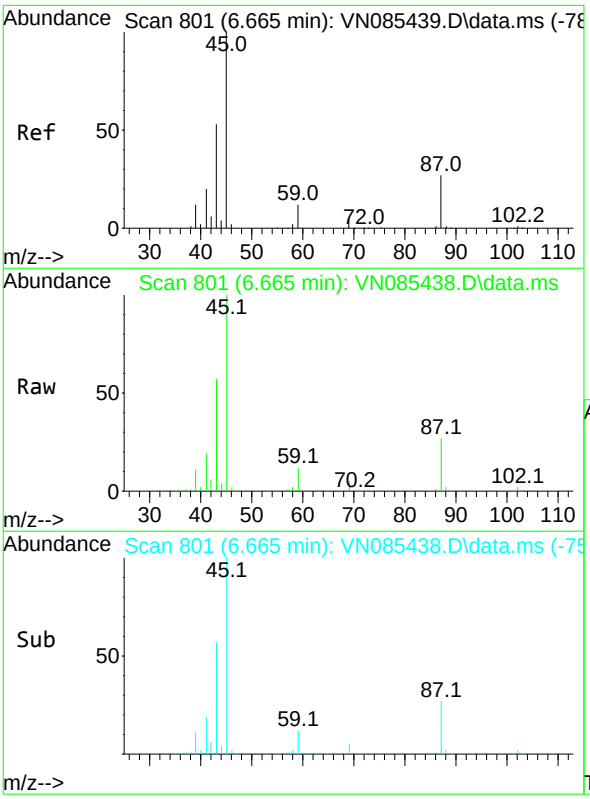
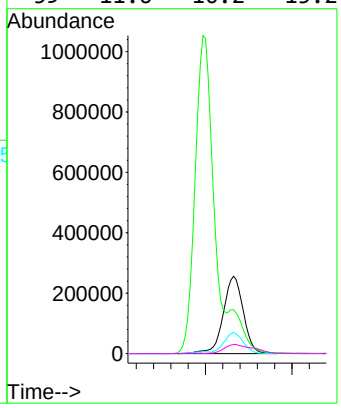
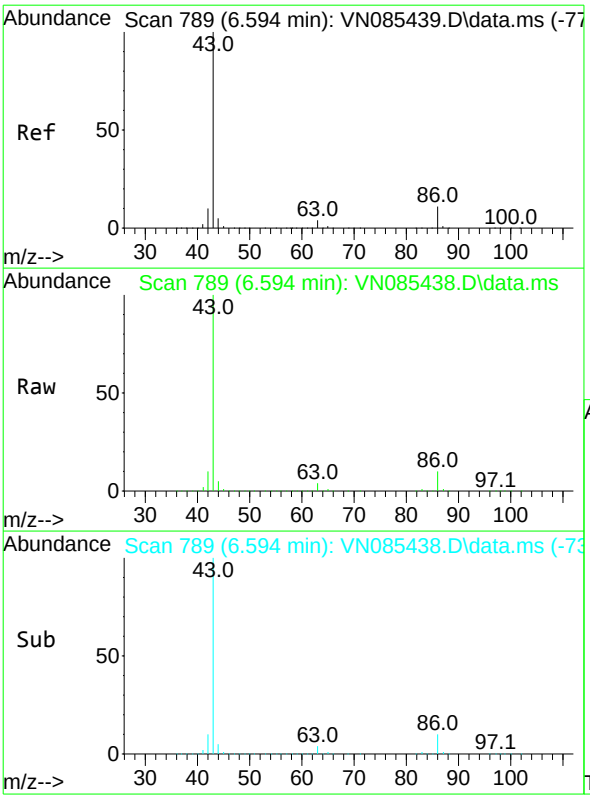


#22
Diisopropyl ether
Concen: 104.812 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 45 Resp: 820871

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

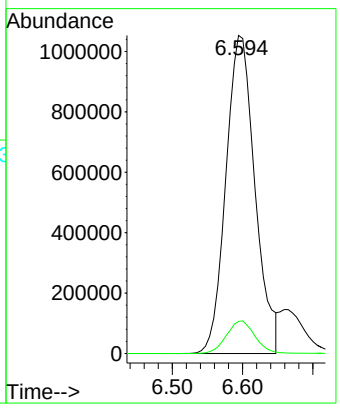




#23
Vinyl Acetate
Concen: 550.850 ug/l
RT: 6.594 min Scan# 78
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 3029568

Ion	Ratio	Lower	Upper
43	100		
86	10.1	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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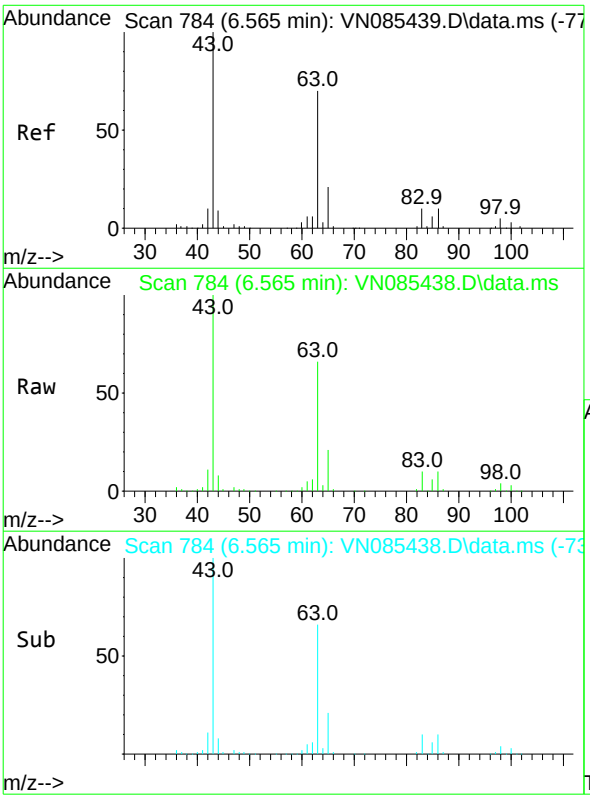
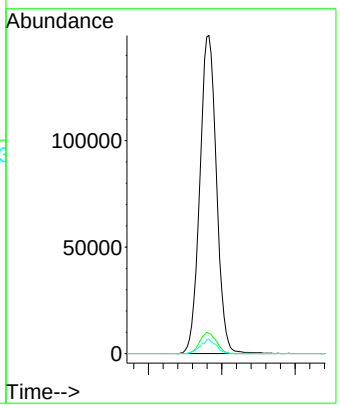
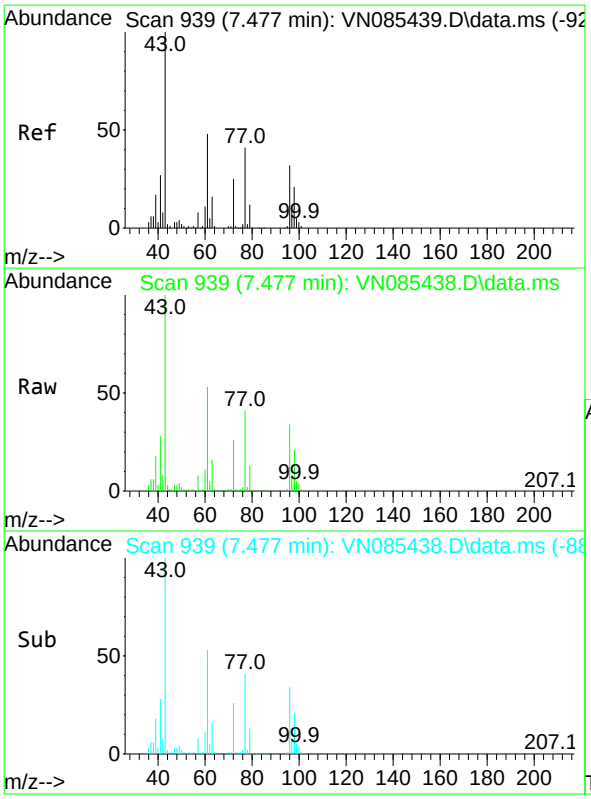


#24
1,1-Dichloroethane
Concen: 98.803 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 63 Resp: 471831

Ion	Ratio	Lower	Upper
63	100		
98	6.4	3.3	9.8
100	4.6	2.0	6.0

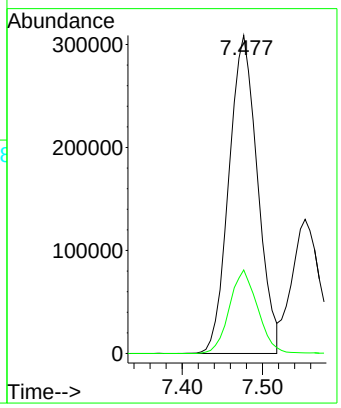




#25
2-Butanone
Concen: 491.912 ug/l
RT: 7.477 min Scan# 93
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 764979

Ion	Ratio	Lower	Upper
43	100		
72	26.3	20.2	30.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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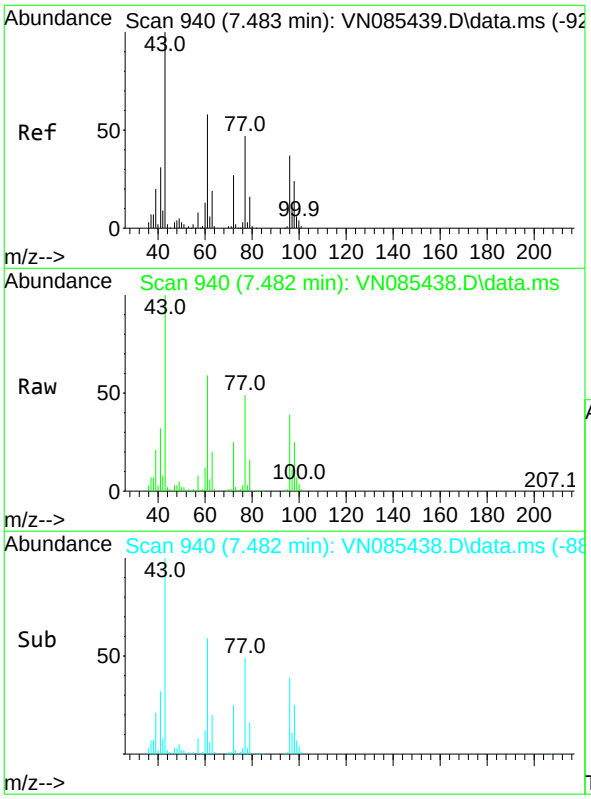
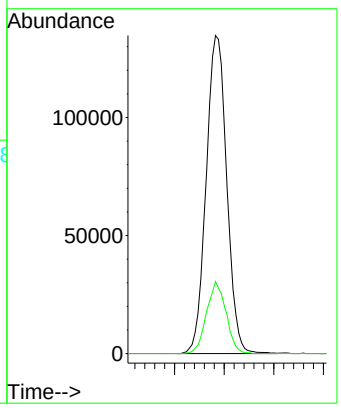
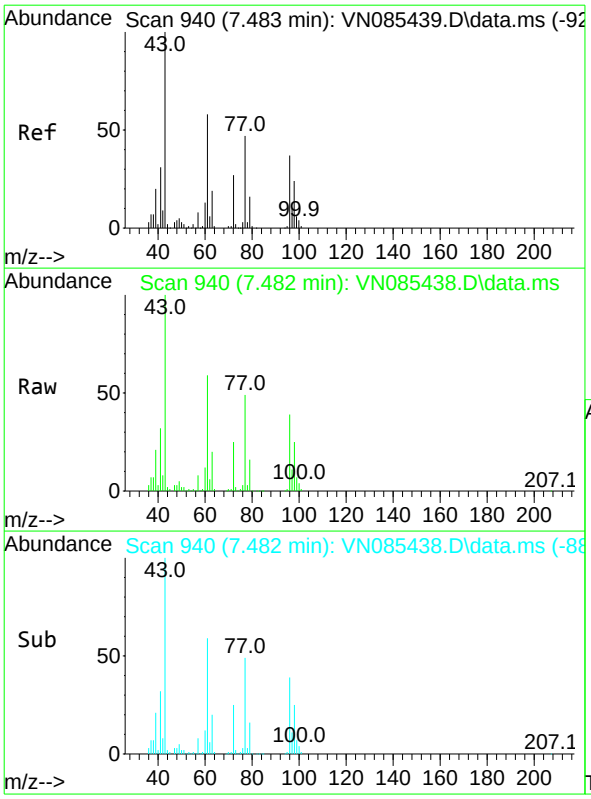


#26
2,2-Dichloropropane
Concen: 100.530 ug/l
RT: 7.482 min Scan# 940
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 77 Resp: 388140

Ion	Ratio	Lower	Upper
77	100		
97	21.4	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 102.367 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 96 Resp: 280197

Ion	Ratio	Lower	Upper
96	100		
61	156.8	0.0	311.8
98	65.0	0.0	126.0

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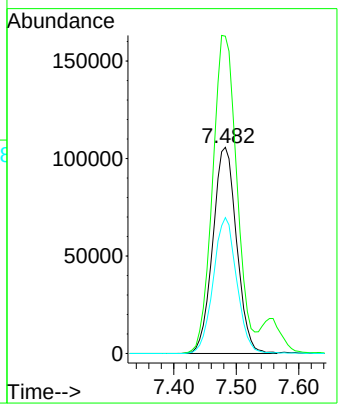
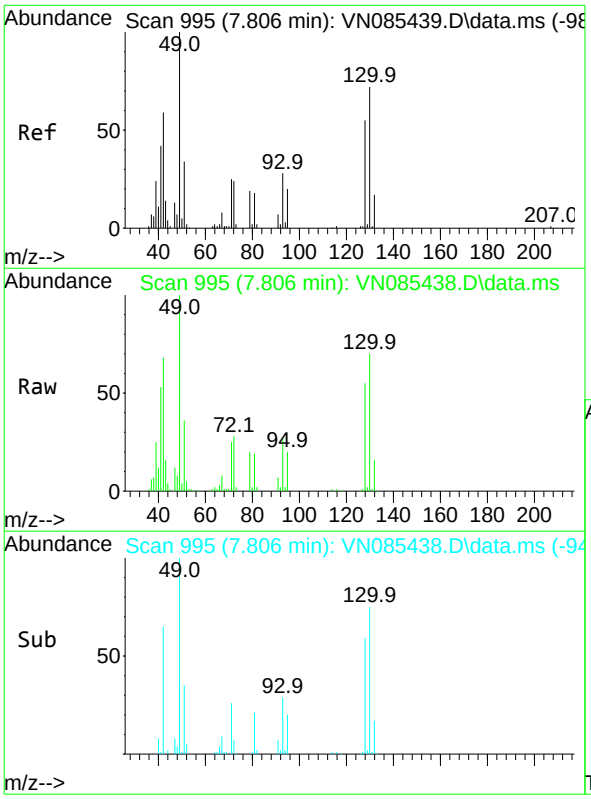
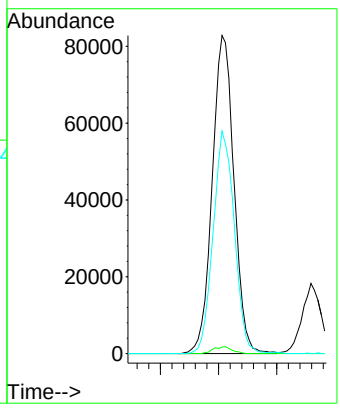


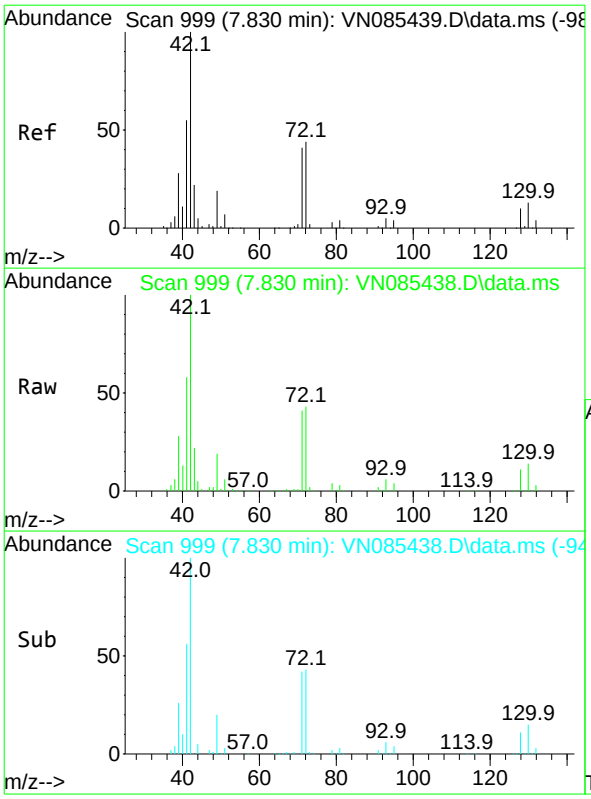


#28
Bromochloromethane
Concen: 96.679 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 49 Resp: 214796

Ion	Ratio	Lower	Upper
49	100		
129	1.9	0.0	4.4
130	68.4	55.0	82.4

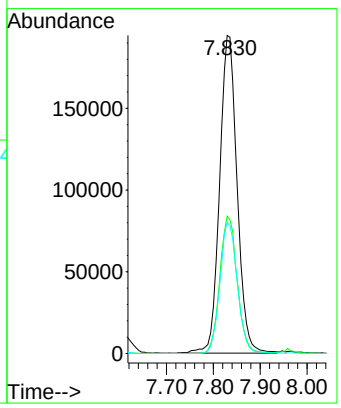




#29
Tetrahydrofuran
Concen: 510.635 ug/l
RT: 7.830 min Scan# 99
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 42 Resp: 503459

Ion	Ratio	Lower	Upper
42	100		
72	43.1	34.2	51.2
71	40.9	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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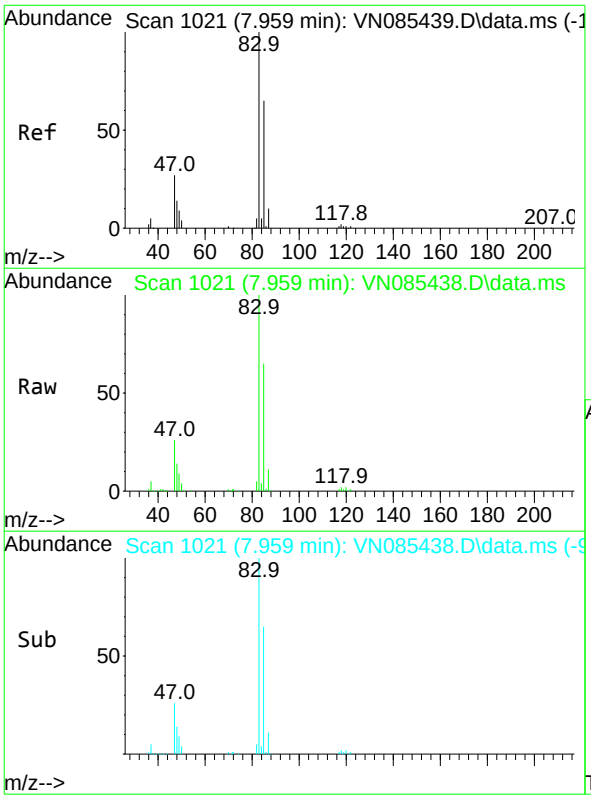
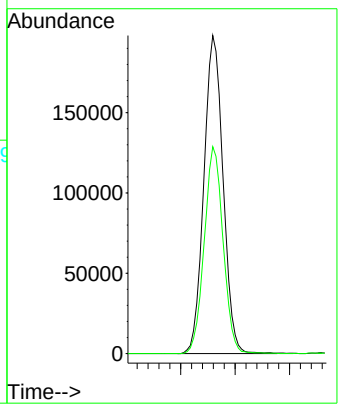
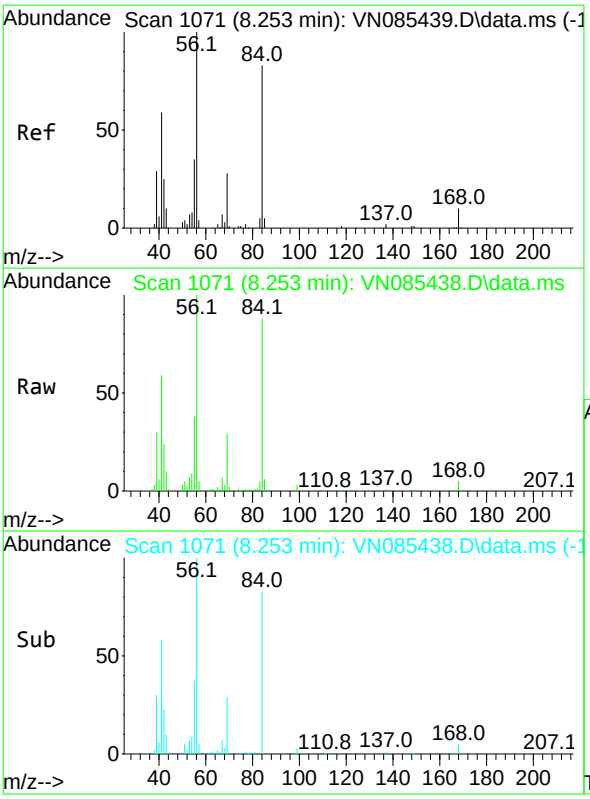


#30
Chloroform
Concen: 98.253 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 484941

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.8	77.6





#31
Cyclohexane
Concen: 96.041 ug/l
RT: 8.253 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 56 Resp: 398641

Ion	Ratio	Lower	Upper
56	100		
69	29.2	22.2	33.4
84	86.4	66.4	99.6

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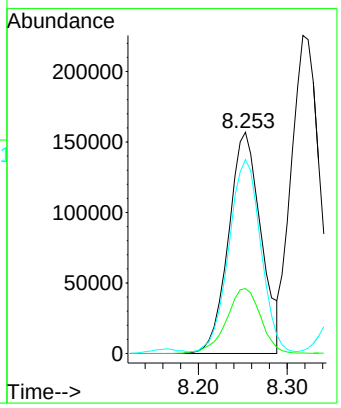
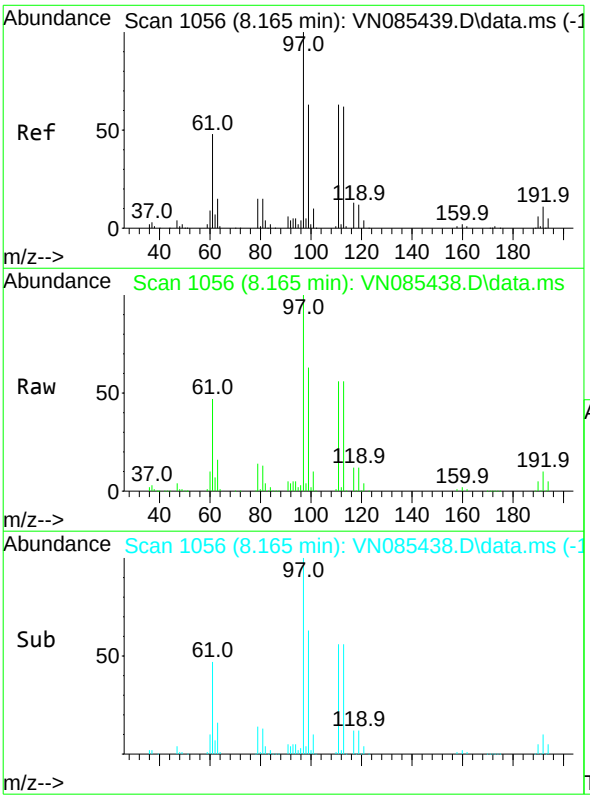
Supervised By :Mahesh Dadoda 01/15/2025

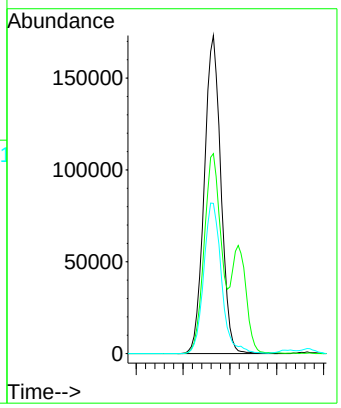


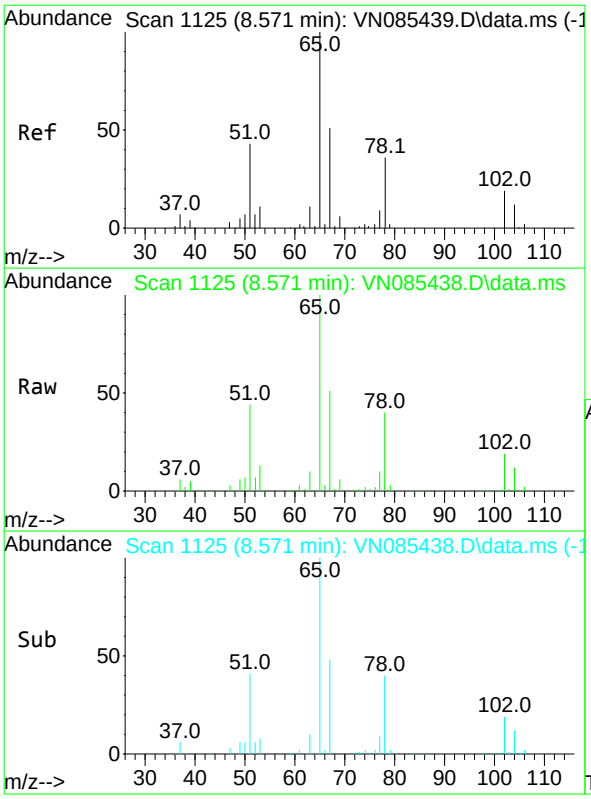


#32
1,1,1-Trichloroethane
Concen: 98.578 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 97 Resp: 426782

Ion	Ratio	Lower	Upper
97	100		
99	64.2	49.8	74.6
61	50.6	41.4	62.2





#33
1,2-Dichloroethane-d4
Concen: 95.899 ug/l
RT: 8.571 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 65 Resp: 313645

Ion	Ratio	Lower	Upper
65	100		
67	51.1	0.0	101.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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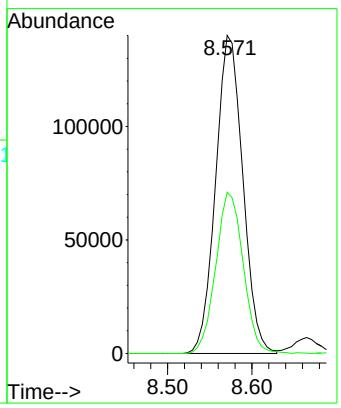
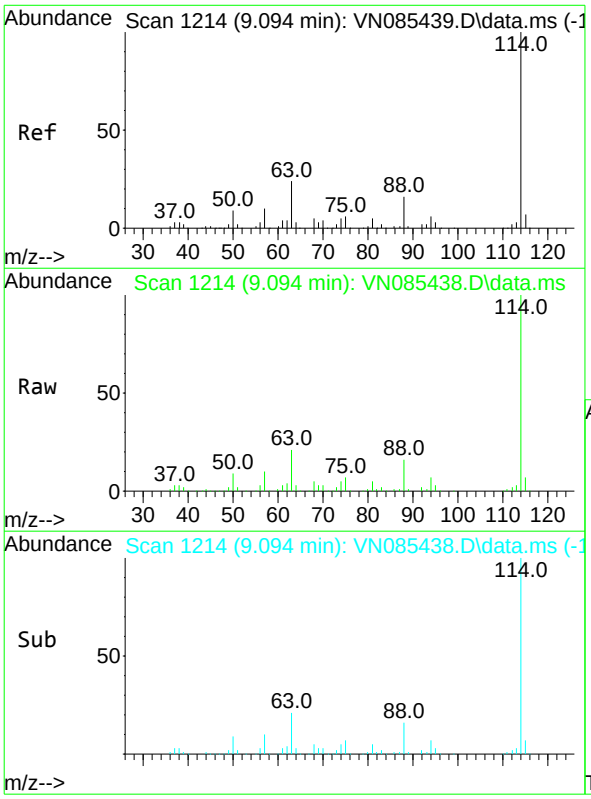
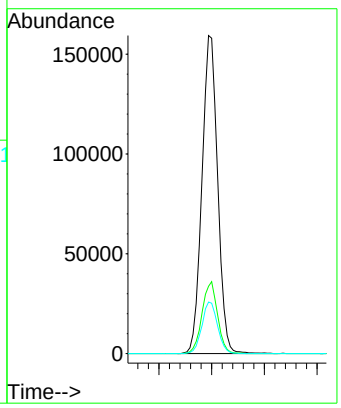


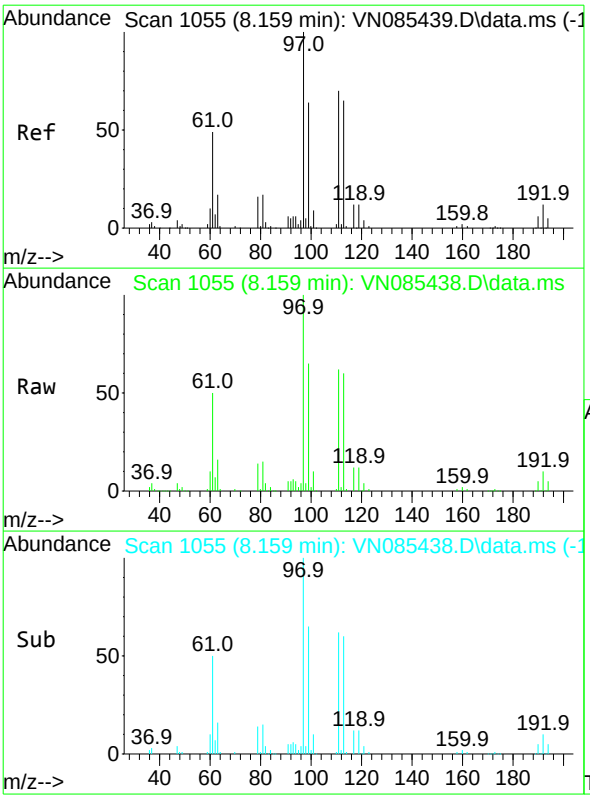


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:114 Resp: 329363

Ion	Ratio	Lower	Upper
114	100		
63	21.2	0.0	47.6
88	16.2	0.0	32.6

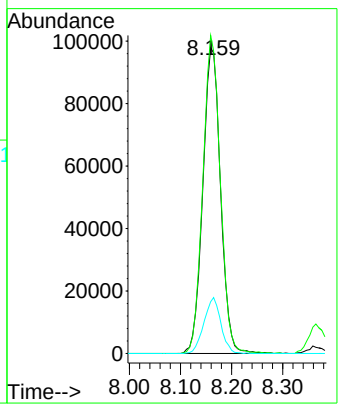




#35
Dibromofluoromethane
Concen: 103.353 ug/l
RT: 8.159 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:113 Resp: 236159

Ion	Ratio	Lower	Upper
113	100		
111	102.3	82.7	124.1
192	17.4	14.3	21.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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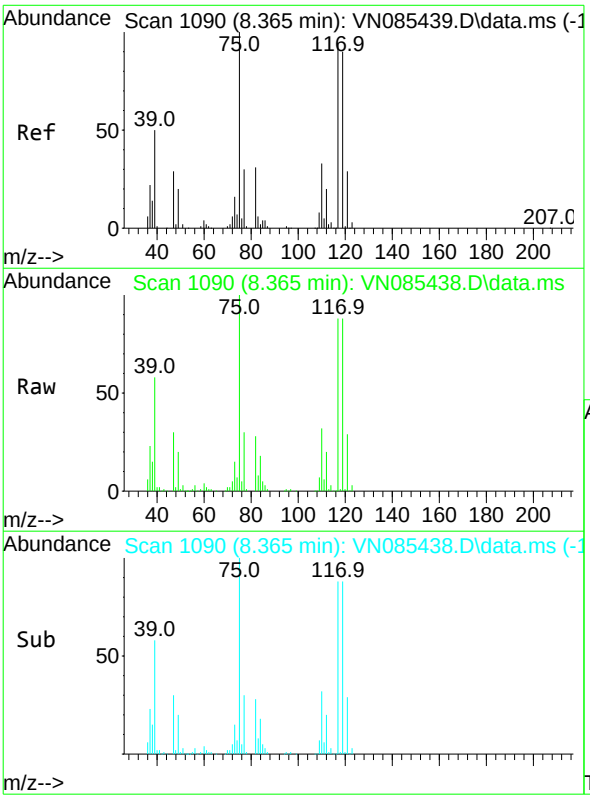
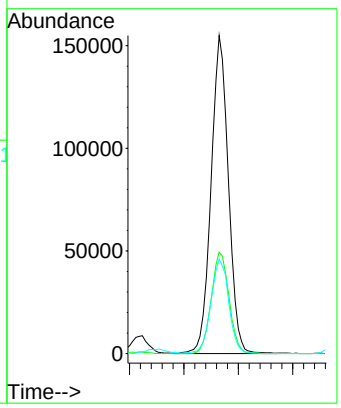
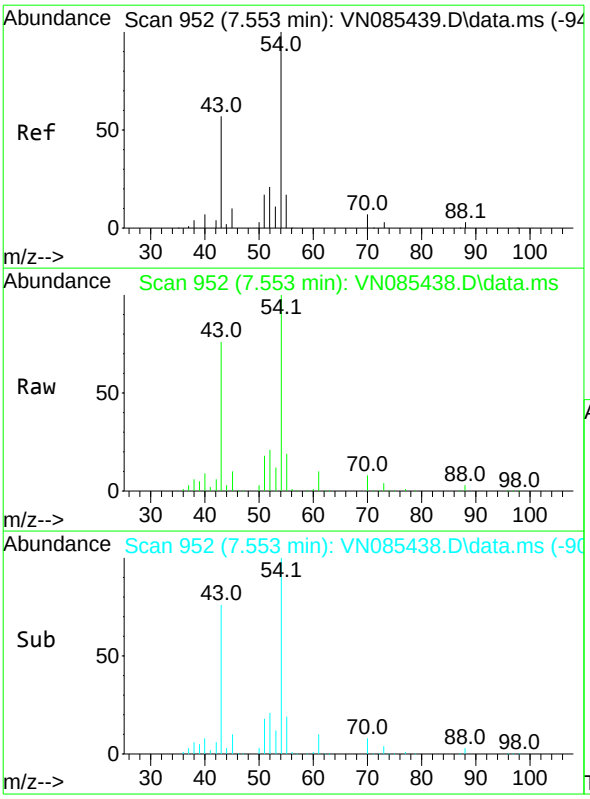


#36
1,1-Dichloropropene
Concen: 106.945 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 342961

Ion	Ratio	Lower	Upper
75	100		
110	32.6	16.5	49.5
77	30.6	24.4	36.6





#37
Ethyl Acetate
Concen: 100.961 ug/l
RT: 7.553 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 43 Resp: 326802

Ion	Ratio	Lower	Upper
43	100		
61	12.0	10.9	16.3
70	9.6	7.5	11.3

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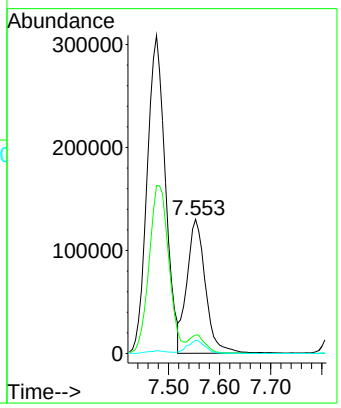
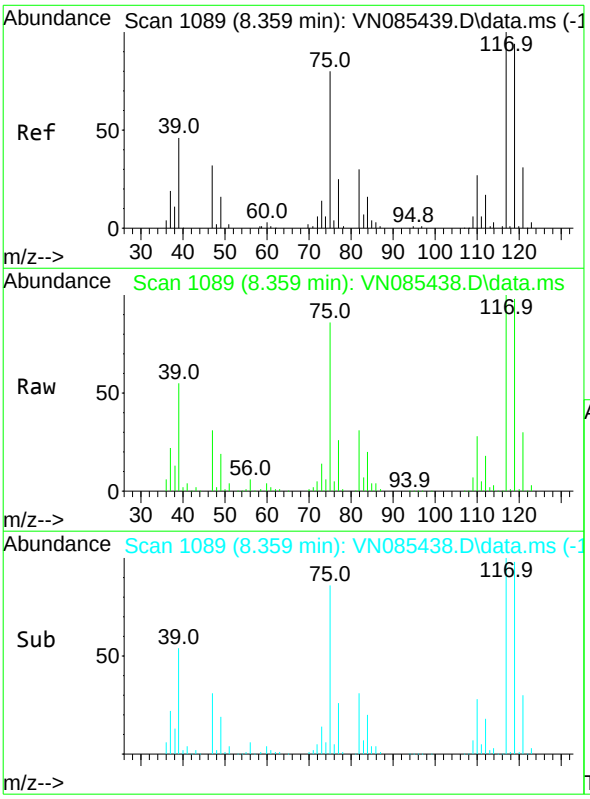
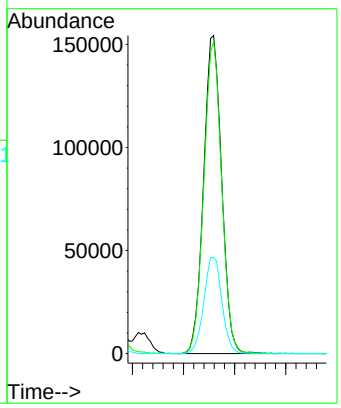


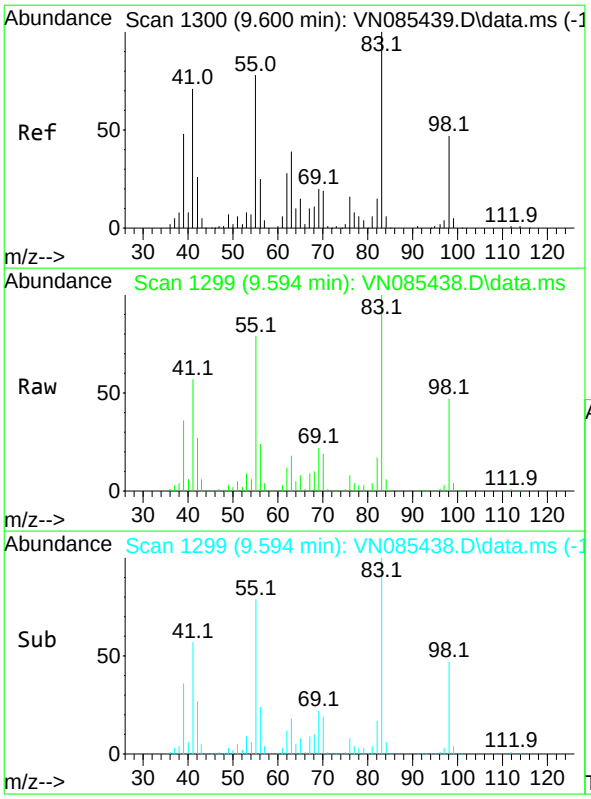


#38
Carbon Tetrachloride
Concen: 103.065 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:117 Resp: 378390

Ion	Ratio	Lower	Upper
117	100		
119	98.1	75.4	113.2
121	30.2	24.6	37.0

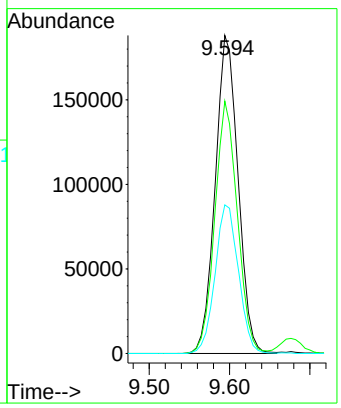




#39
Methylcyclohexane
Concen: 123.354 ug/l
RT: 9.594 min Scan# 12
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 371734

Ion	Ratio	Lower	Upper
83	100		
55	79.3	62.6	94.0
98	46.7	37.7	56.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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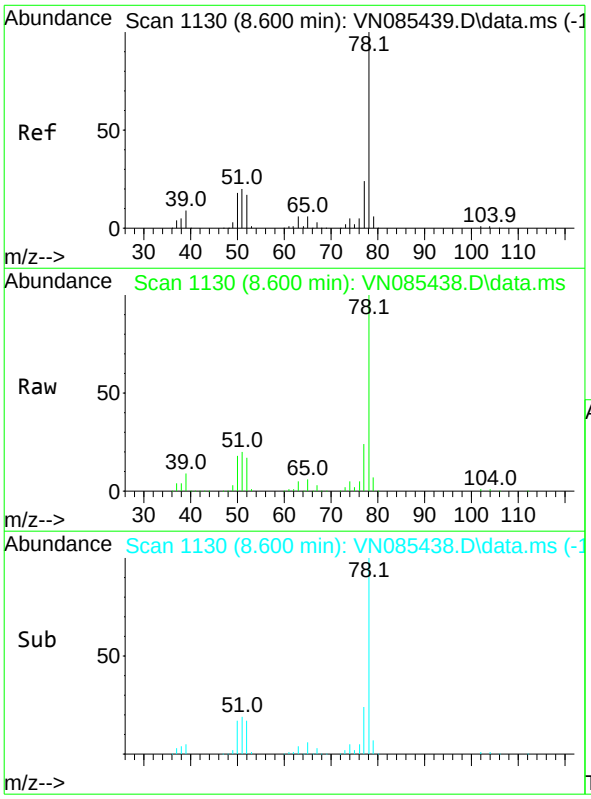
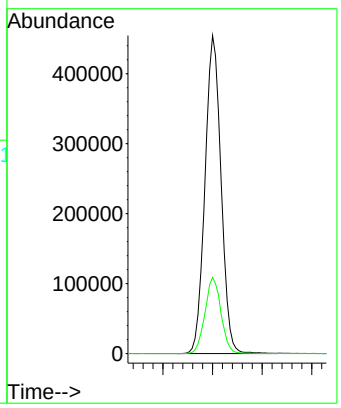
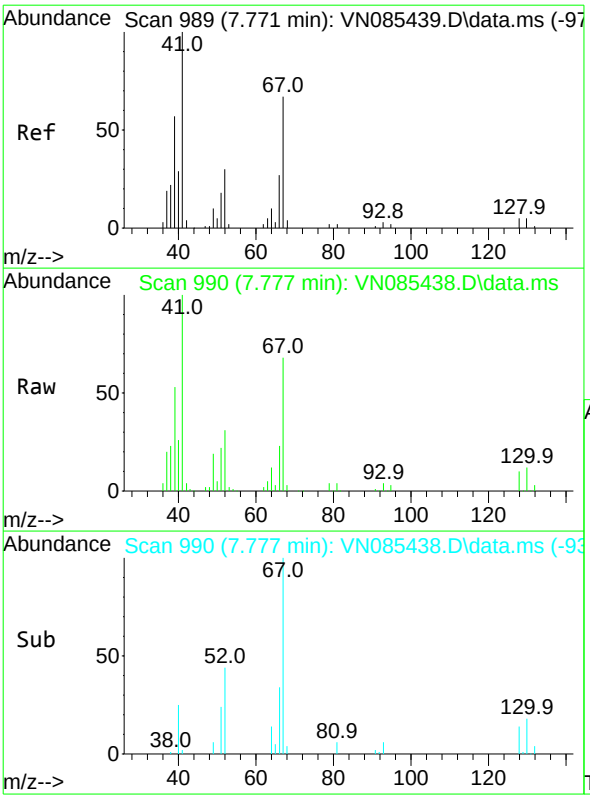


#40
Benzene
Concen: 106.001 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 78 Resp: 1021393

Ion	Ratio	Lower	Upper
78	100		
77	23.9	19.0	28.6

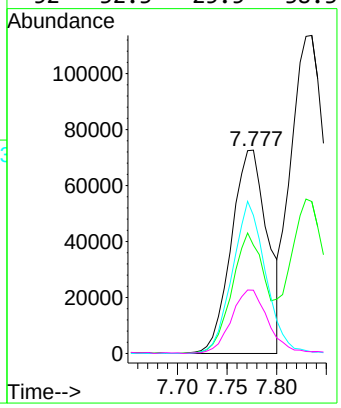




#41
Methacrylonitrile
Concen: 109.454 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 41 Resp: 184326

Ion	Ratio	Lower	Upper
41	100		
39	52.8	46.0	69.0
67	68.8	57.4	86.2
52	32.3	25.5	38.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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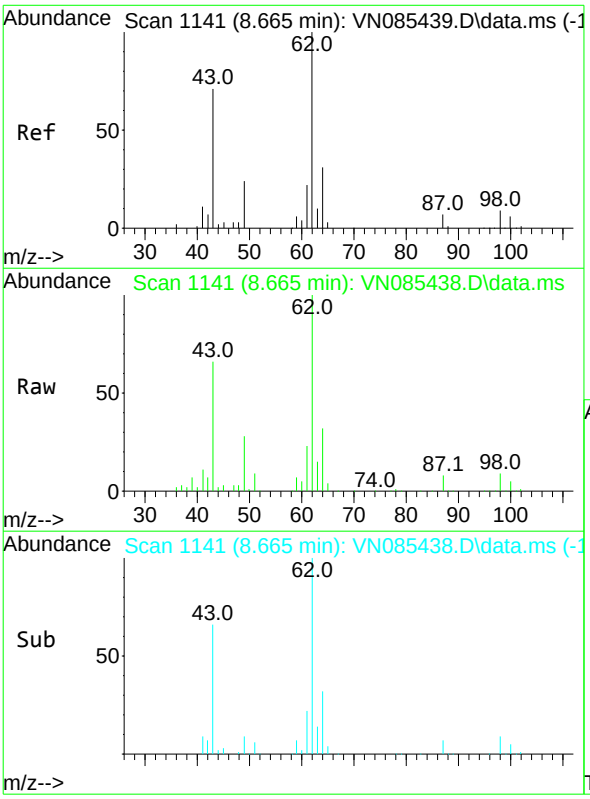
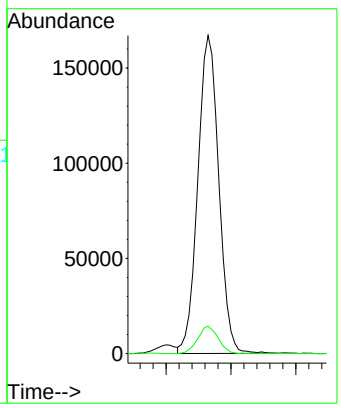
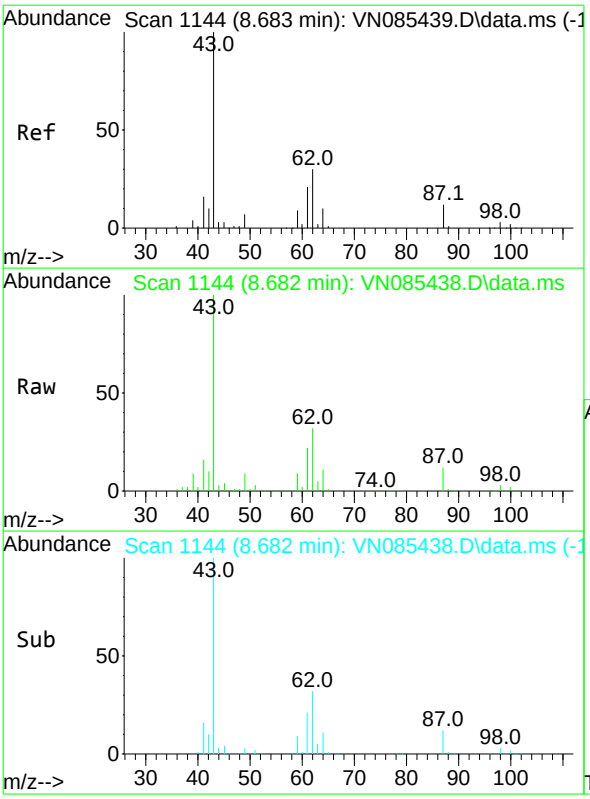


#42
1,2-Dichloroethane
Concen: 103.314 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 62 Resp: 374938

Ion	Ratio	Lower	Upper
62	100		
98	8.4	0.0	17.0





#43
Isopropyl Acetate
Concen: 106.035 ug/l
RT: 8.682 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 549969

Ion	Ratio	Lower	Upper
43	100		
61	25.7	20.7	31.1
87	12.2	9.8	14.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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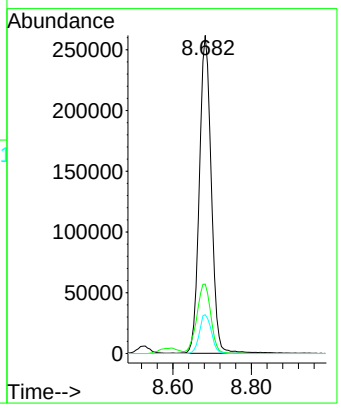
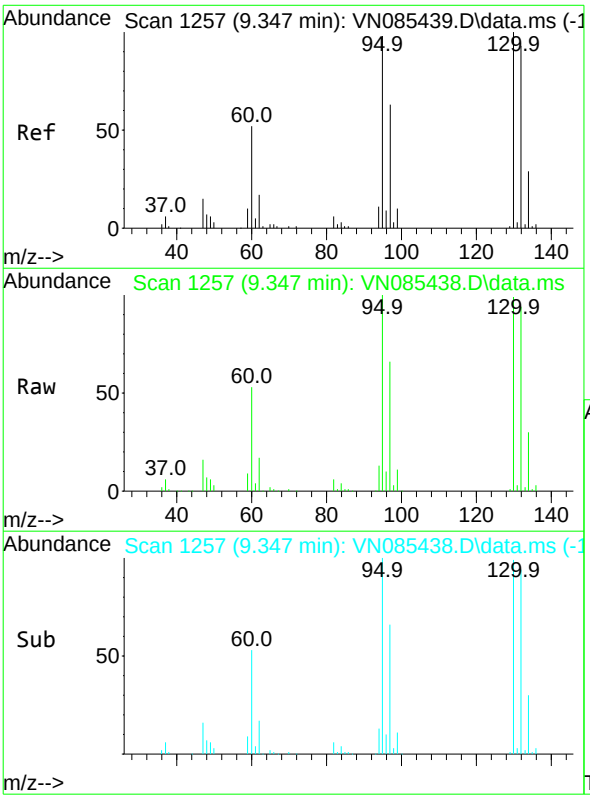
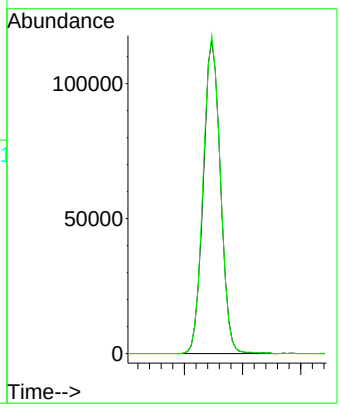


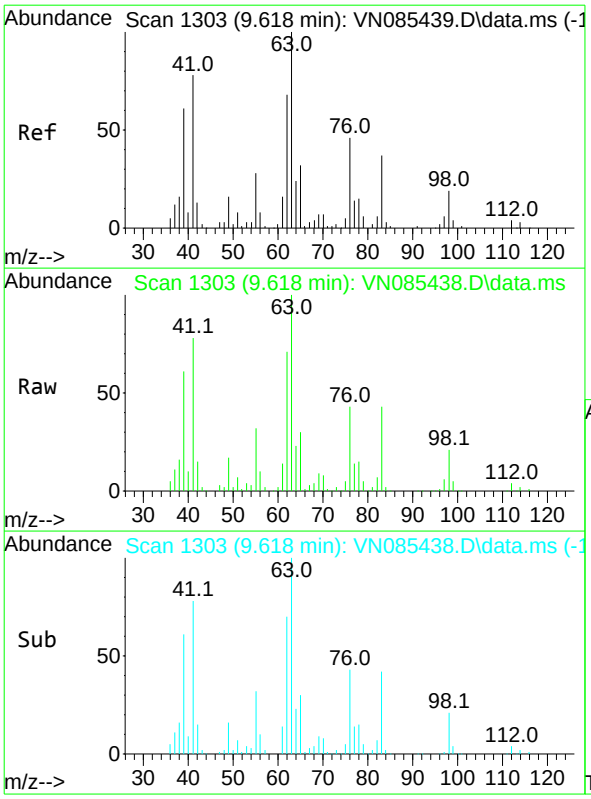


#44
Trichloroethene
Concen: 106.242 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:130 Resp: 238296

Ion	Ratio	Lower	Upper
130	100		
95	101.5	0.0	195.8

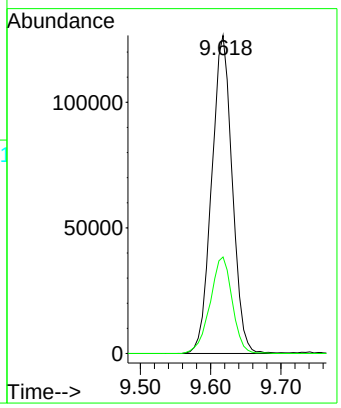




#45
1,2-Dichloropropane
Concen: 104.405 ug/l
RT: 9.618 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 63 Resp: 256964

Ion	Ratio	Lower	Upper
63	100		
65	30.3	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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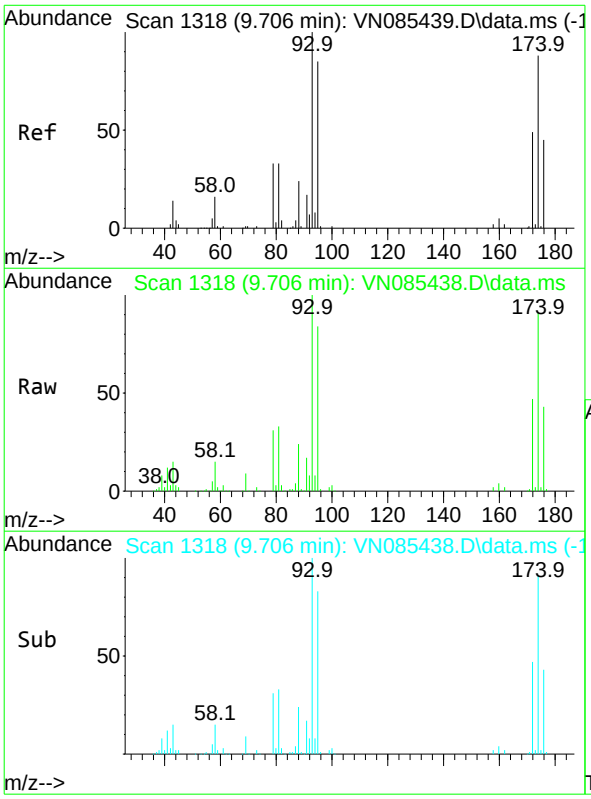
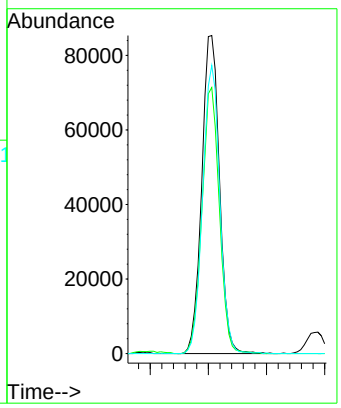
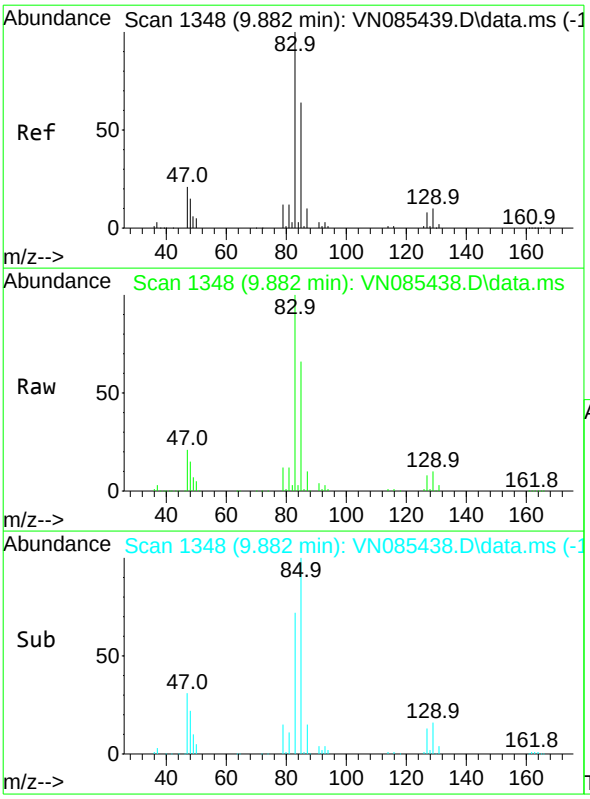


#46
Dibromomethane
Concen: 101.913 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 93 Resp: 180990

Ion	Ratio	Lower	Upper
93	100		
95	81.6	64.7	97.1
174	87.5	69.0	103.4

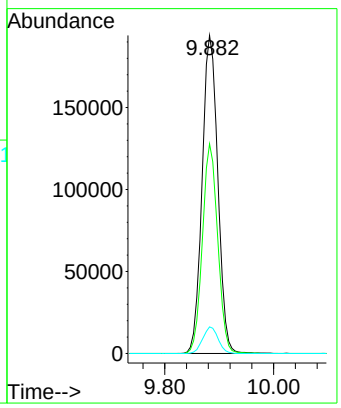




#47
Bromodichloromethane
Concen: 107.377 ug/l
RT: 9.882 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 388499

Ion	Ratio	Lower	Upper
83	100		
85	65.9	51.2	76.8
127	8.4	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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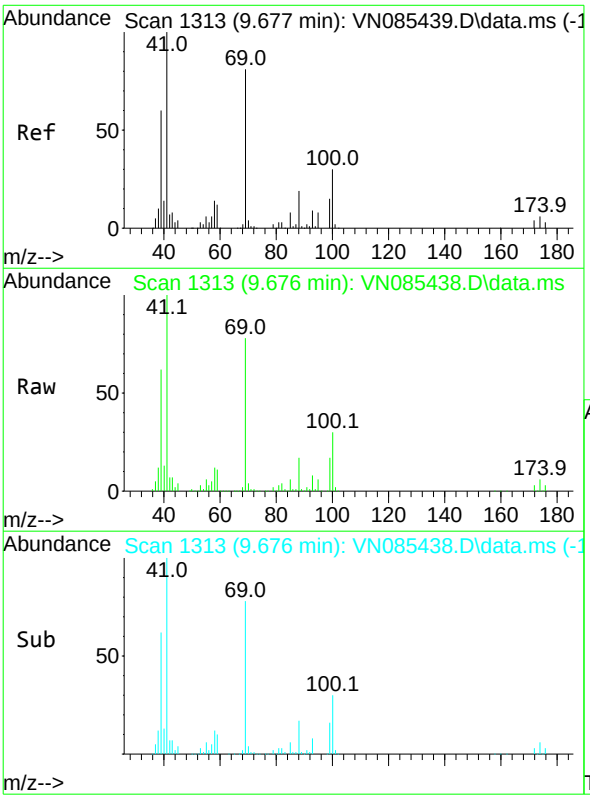
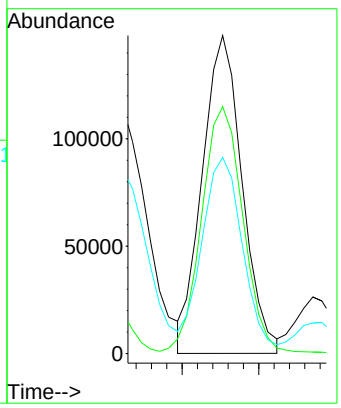
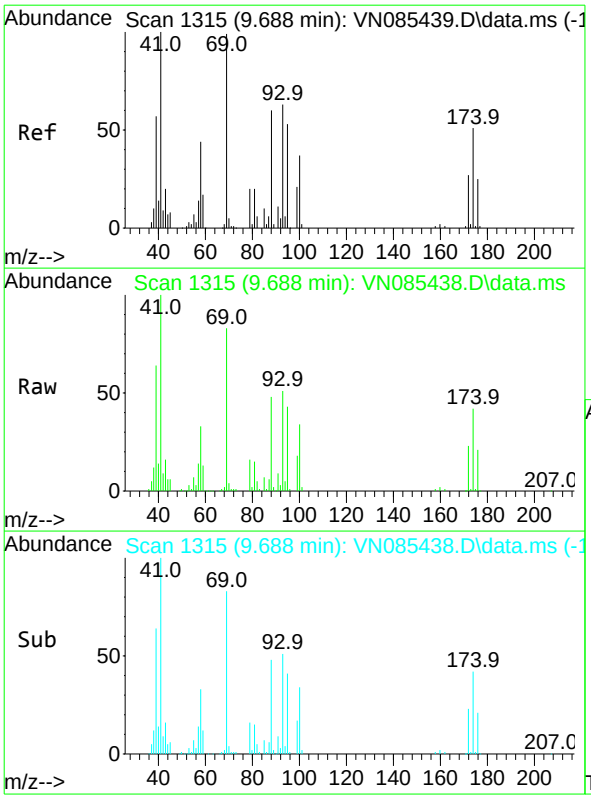


#48
Methyl methacrylate
Concen: 114.685 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 41 Resp: 267689

Ion	Ratio	Lower	Upper
41	100		
69	80.9	64.7	97.1
39	63.1	49.0	73.6





#49
1,4-Dioxane
Concen: 2133.992 ug/l
RT: 9.688 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 88 Resp: 83879

Ion	Ratio	Lower	Upper
88	100		
43	31.3	26.6	39.8
58	72.1	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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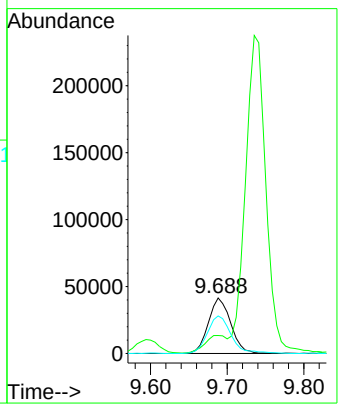
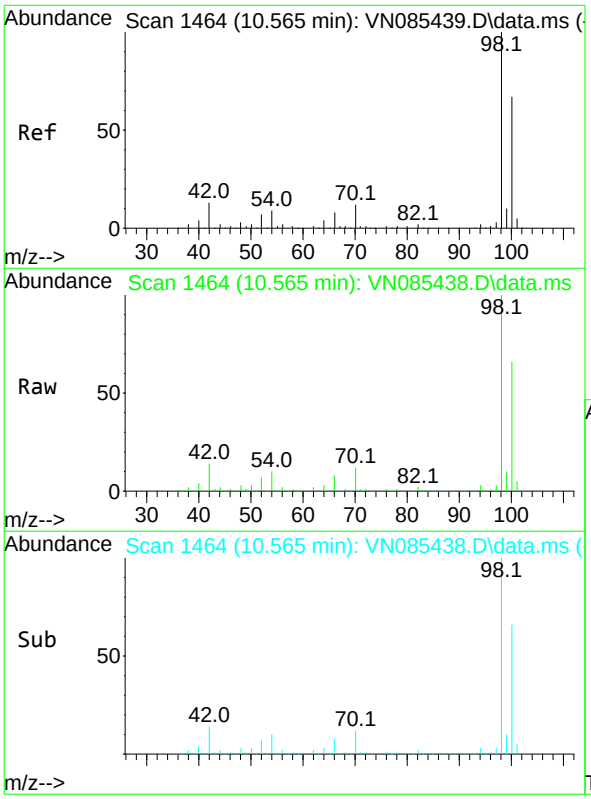
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

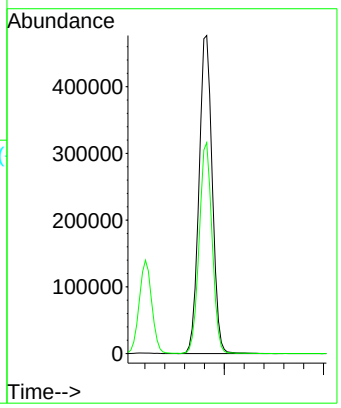


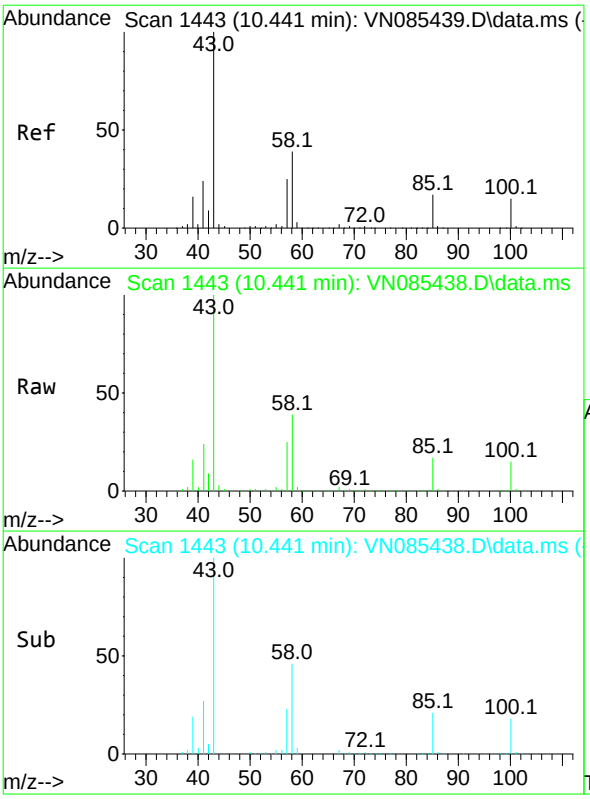


#50
Toluene-d8
Concen: 108.636 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 98 Resp: 881956

Ion	Ratio	Lower	Upper
98	100		
100	64.5	52.2	78.4

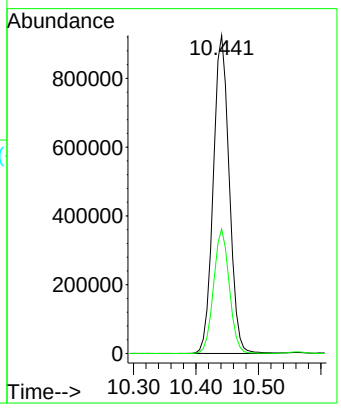




#51
4-Methyl-2-Pentanone
Concen: 546.159 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 1643800

Ion	Ratio	Lower	Upper
43	100		
58	38.4	30.5	45.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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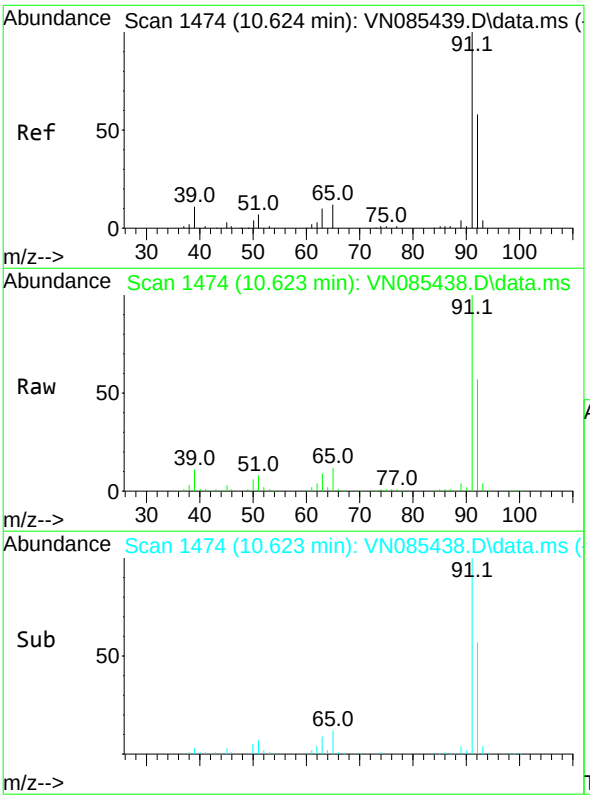
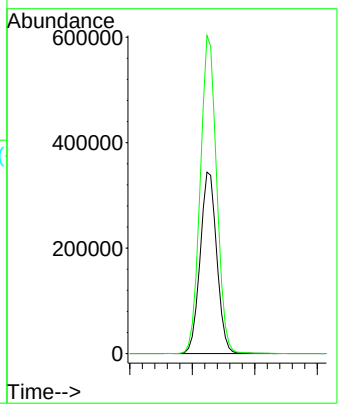
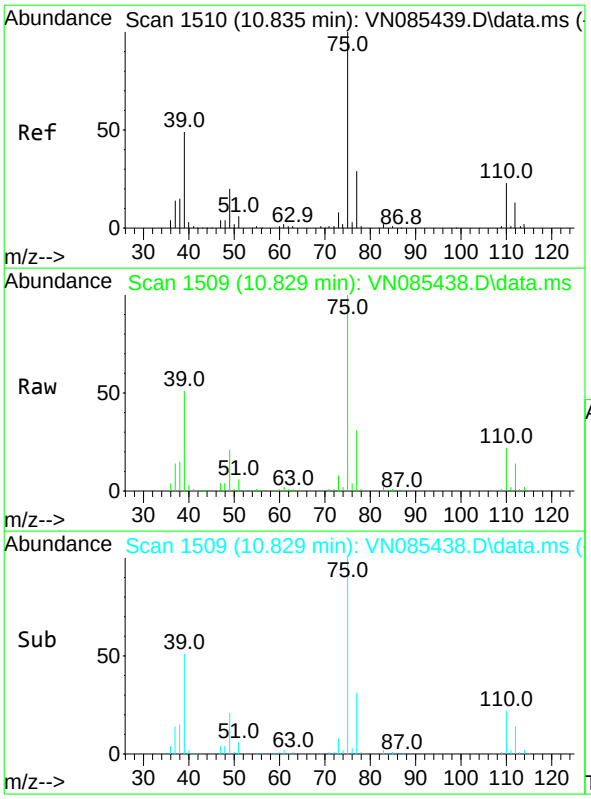


#52
Toluene
Concen: 113.689 ug/l
RT: 10.623 min Scan# 1474
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 92 Resp: 634743

Ion	Ratio	Lower	Upper
92	100		
91	173.1	139.2	208.8

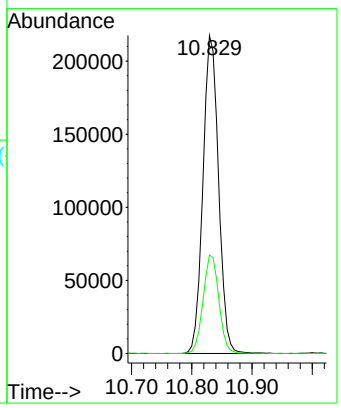




#53
t-1,3-Dichloropropene
Concen: 114.424 ug/l
RT: 10.829 min Scan# 15
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 391238

Ion	Ratio	Lower	Upper
75	100		
77	31.0	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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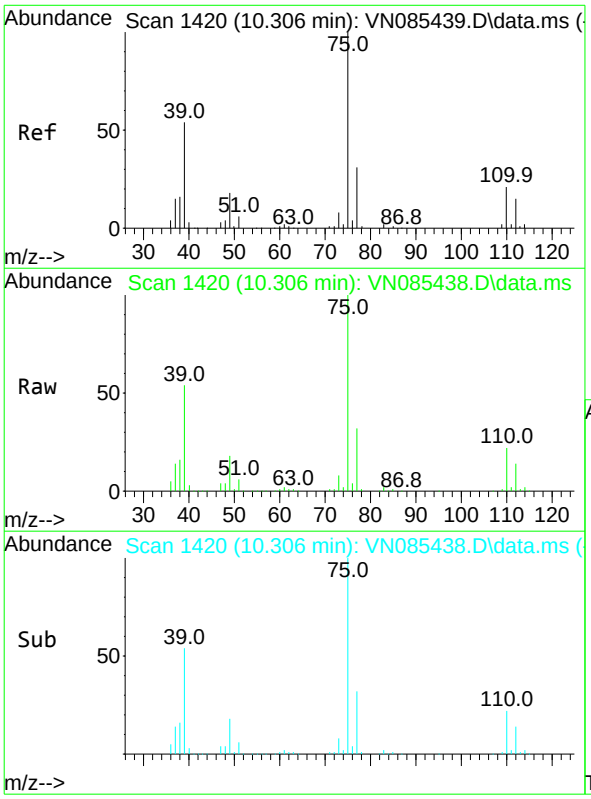
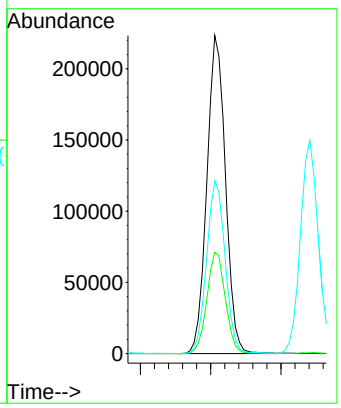
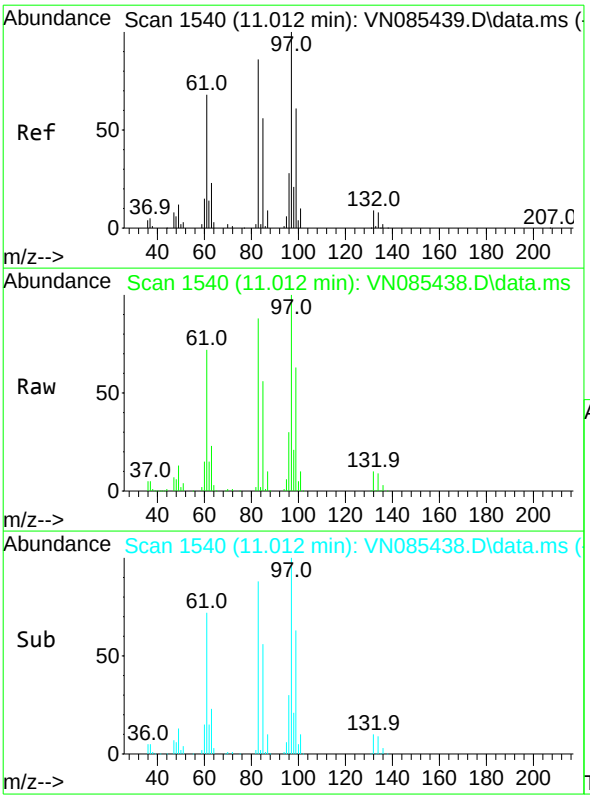


#54
cis-1,3-Dichloropropene
Concen: 112.369 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 410403

Ion	Ratio	Lower	Upper
75	100		
77	31.9	25.0	37.4
39	54.3	43.1	64.7

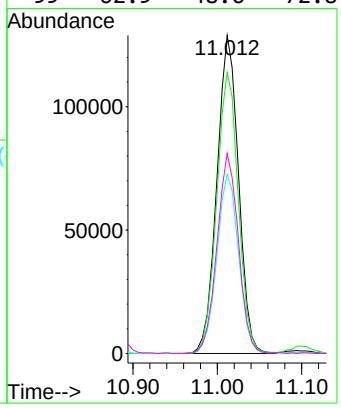




#55
1,1,2-Trichloroethane
Concen: 103.879 ug/l
RT: 11.012 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 97 Resp: 229522

Ion	Ratio	Lower	Upper
97	100		
83	88.4	69.0	103.6
85	56.3	44.6	66.8
99	62.9	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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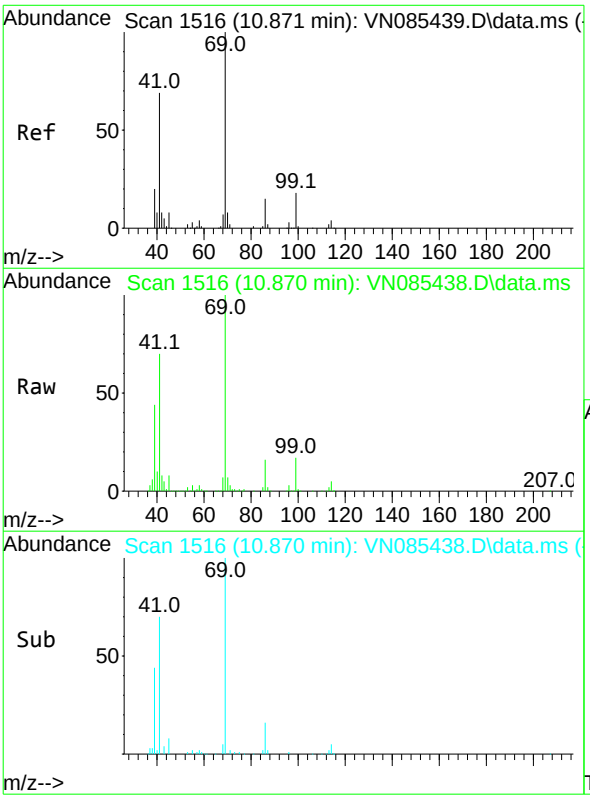
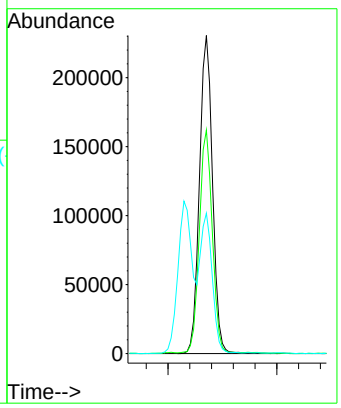
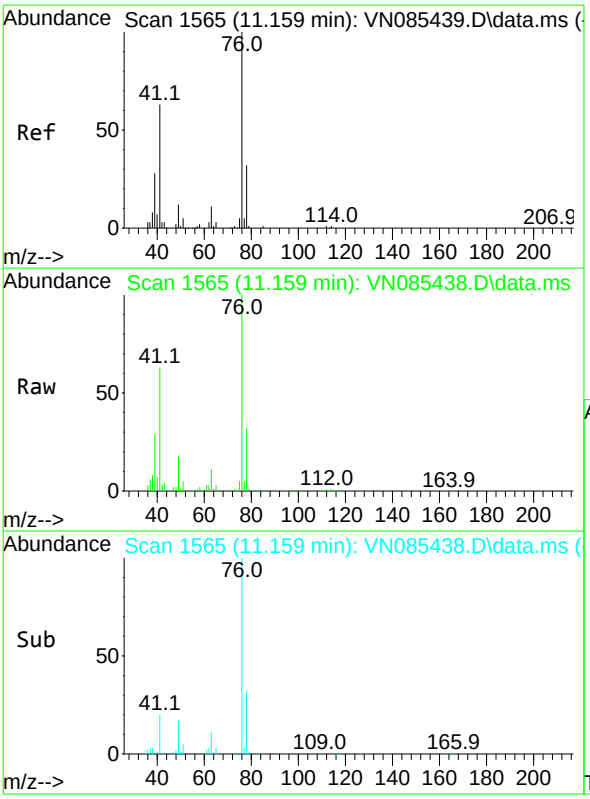


#56
Ethyl methacrylate
Concen: 101.029 ug/l
RT: 10.870 min Scan# 1516
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 69 Resp: 383663

Ion	Ratio	Lower	Upper
69	100		
41	69.1	54.6	82.0
39	40.1	32.4	48.6

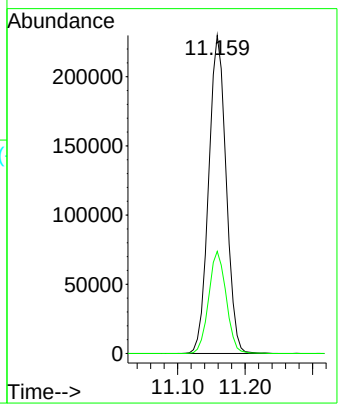




#57
1,3-Dichloropropane
Concen: 107.469 ug/l
RT: 11.159 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 76 Resp: 412886

Ion	Ratio	Lower	Upper
76	100		
78	32.2	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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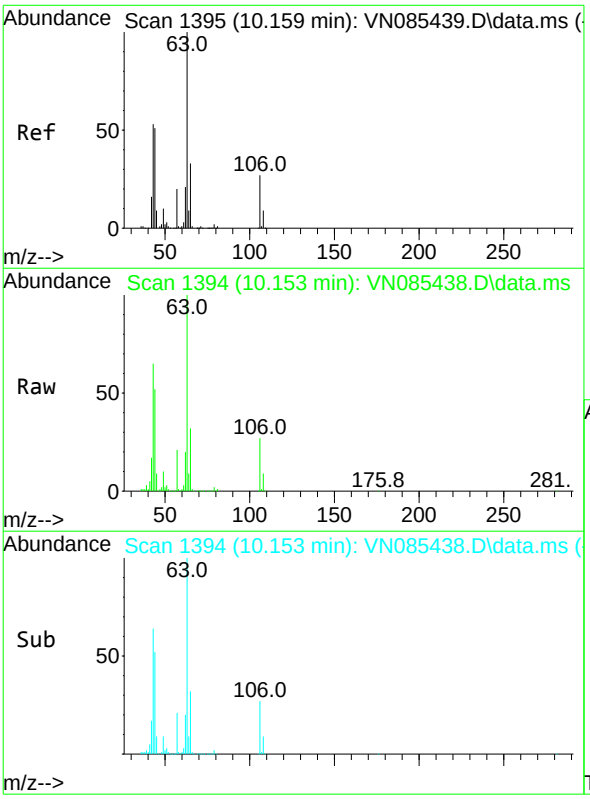
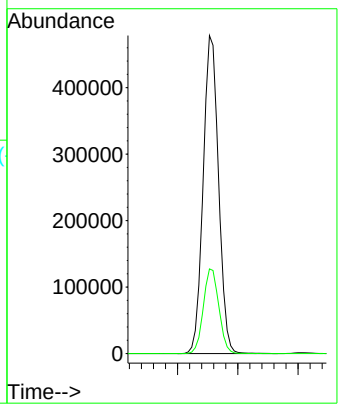
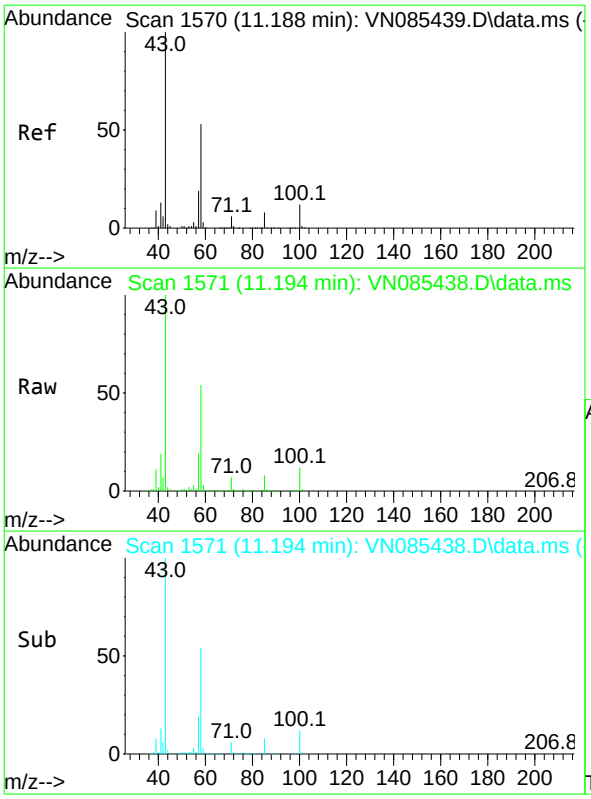


#58
2-Chloroethyl Vinyl ether
Concen: 605.243 ug/l
RT: 10.153 min Scan# 1394
Delta R.T. -0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 63 Resp: 848636

Ion	Ratio	Lower	Upper
63	100		
106	26.8	21.6	32.4

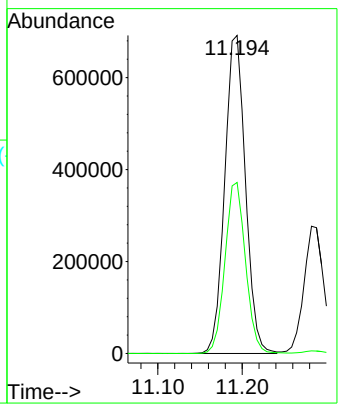




#59
2-Hexanone
Concen: 556.643 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 1178831

Ion	Ratio	Lower	Upper
43	100		
58	53.2	26.2	78.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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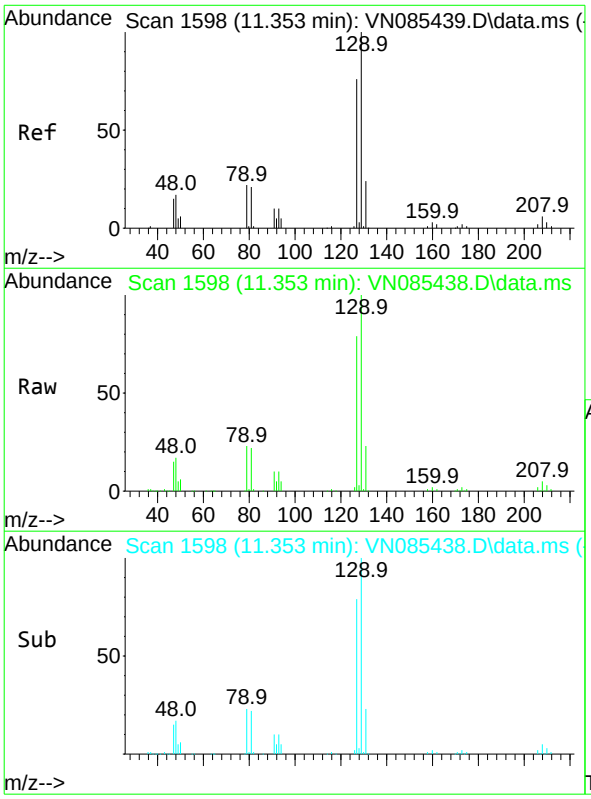
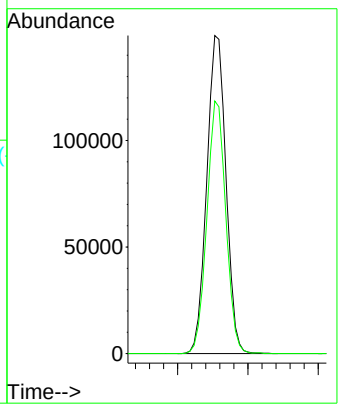
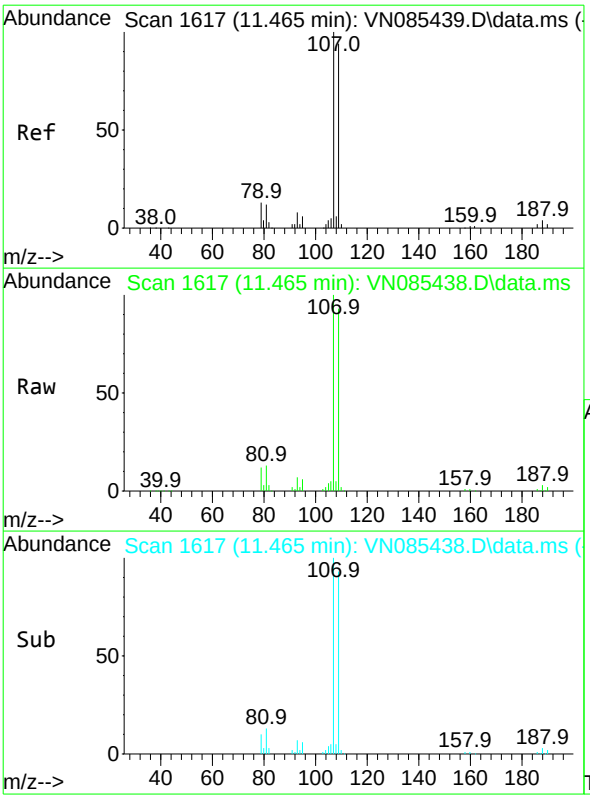


#60
Dibromochloromethane
Concen: 106.227 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:129 Resp: 283361

Ion	Ratio	Lower	Upper
129	100		
127	78.1	38.6	115.8





#61
1,2-Dibromoethane
Concen: 104.623 ug/l
RT: 11.465 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:107 Resp: 230104

Ion	Ratio	Lower	Upper
107	100		
109	93.1	75.9	113.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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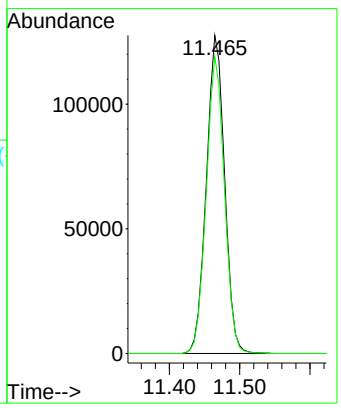
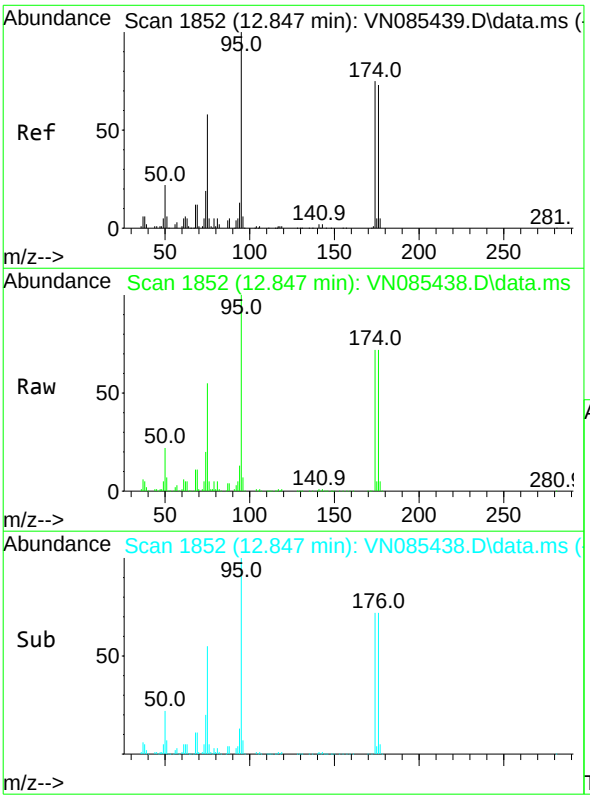
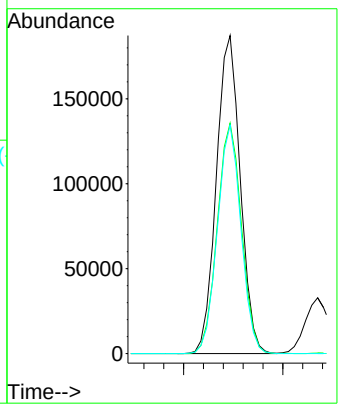


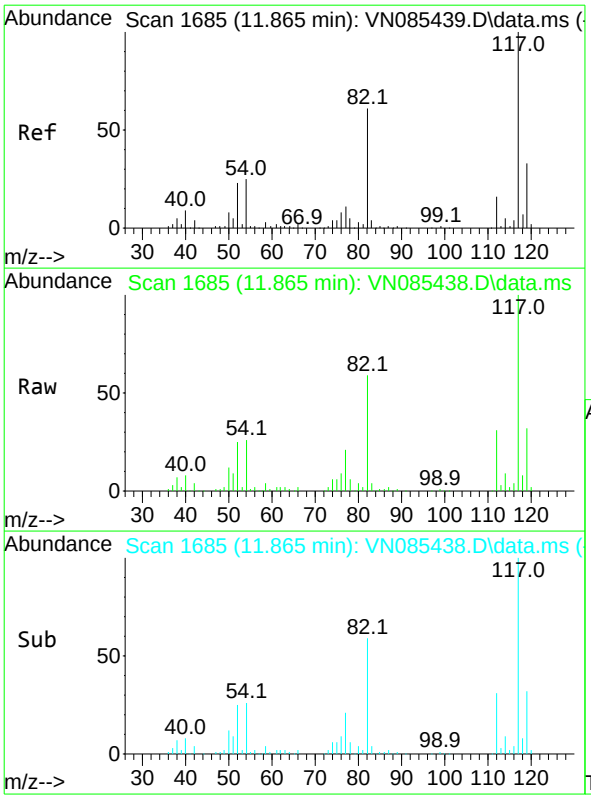


#62
4-Bromofluorobenzene
Concen: 112.765 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 95 Resp: 313161

Ion	Ratio	Lower	Upper
95	100		
174	73.4	0.0	145.0
176	70.5	0.0	142.4





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:117 Resp: 298938

Ion	Ratio	Lower	Upper
117	100		
82	59.3	48.6	72.8
119	31.6	26.6	39.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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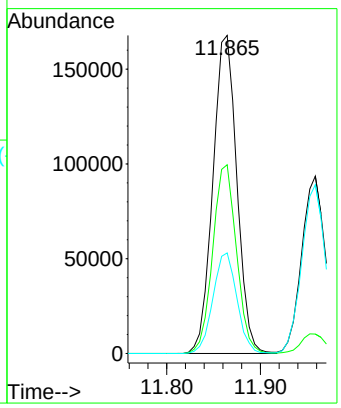
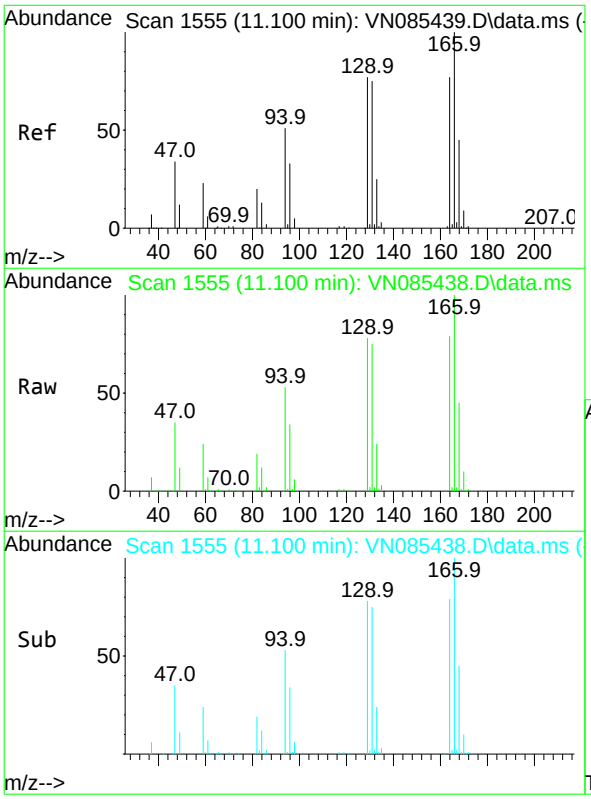
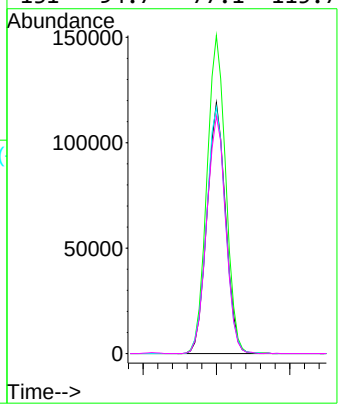


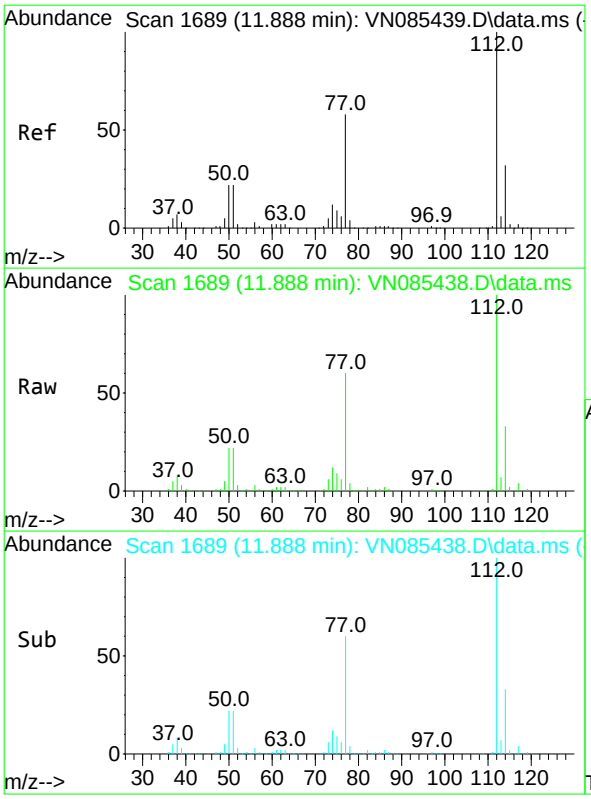


#64
Tetrachloroethene
Concen: 102.980 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:164 Resp: 209870

Ion	Ratio	Lower	Upper
164	100		
166	126.8	103.4	155.2
129	98.3	79.2	118.8
131	94.7	77.1	115.7

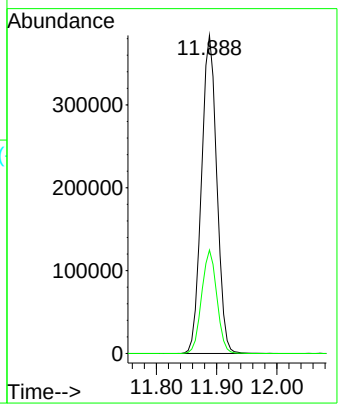




#65
Chlorobenzene
Concen: 103.482 ug/l
RT: 11.888 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:112 Resp: 677679

Ion	Ratio	Lower	Upper
112	100		
114	32.5	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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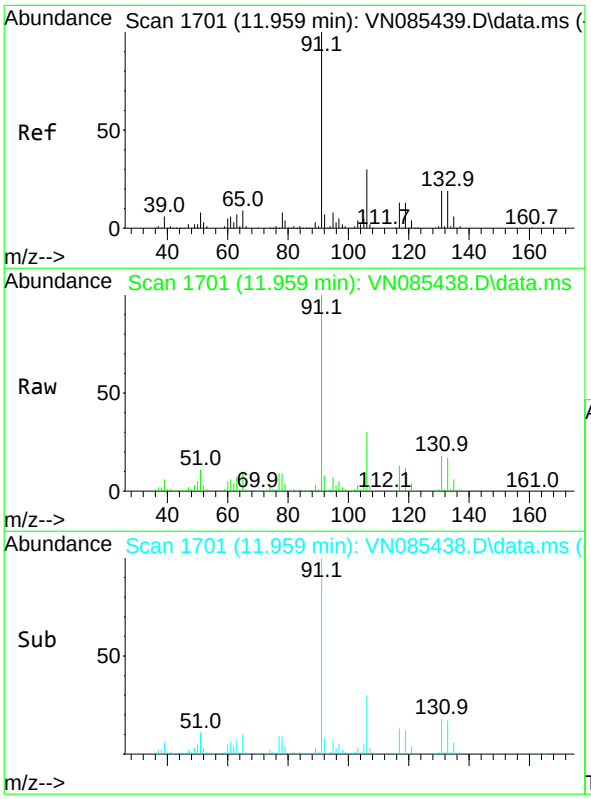
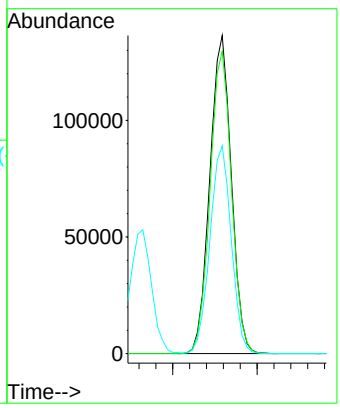
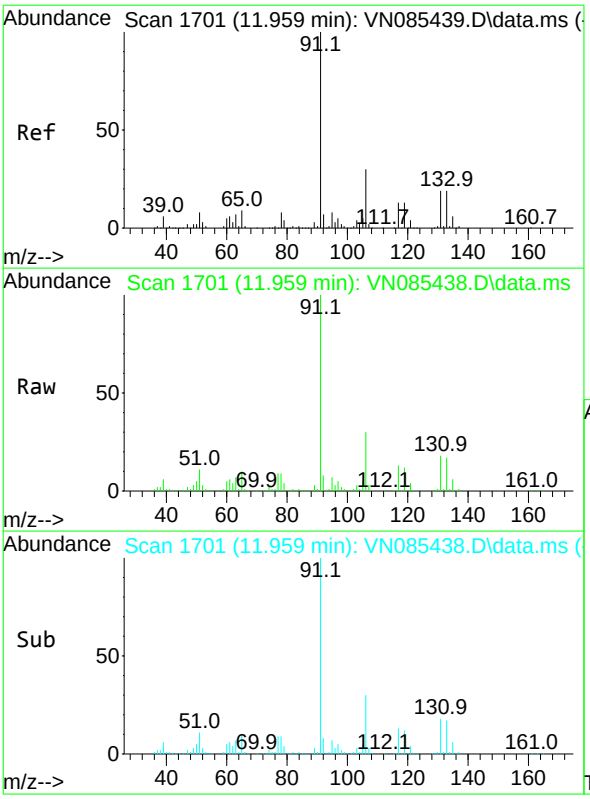


#66
1,1,1,2-Tetrachloroethane
Concen: 100.517 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:131 Resp: 241593

Ion	Ratio	Lower	Upper
131	100		
133	94.3	47.4	142.3
119	64.9	33.1	99.5





#67
Ethyl Benzene
Concen: 116.169 ug/l
RT: 11.959 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

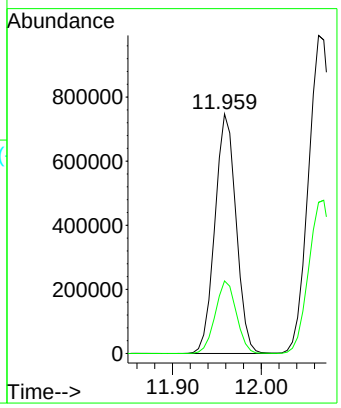
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

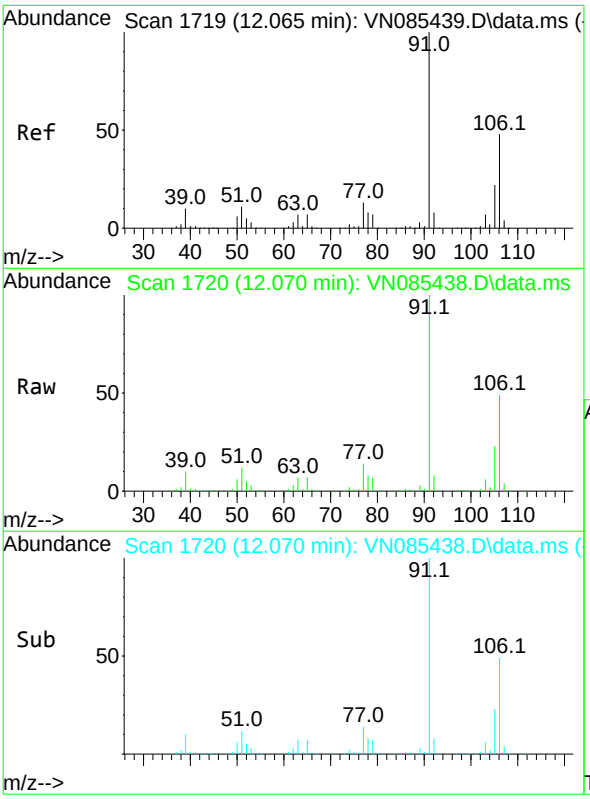
Tgt Ion: 91 Resp: 1239080

Ion	Ratio	Lower	Upper
91	100		
106	30.3	23.8	35.8

Manual Integrations APPROVED

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

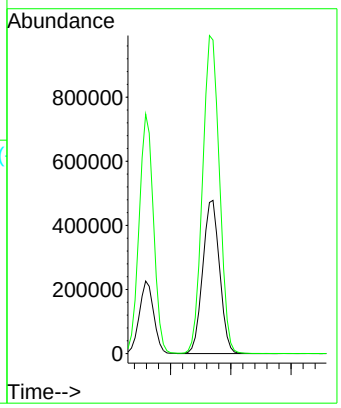


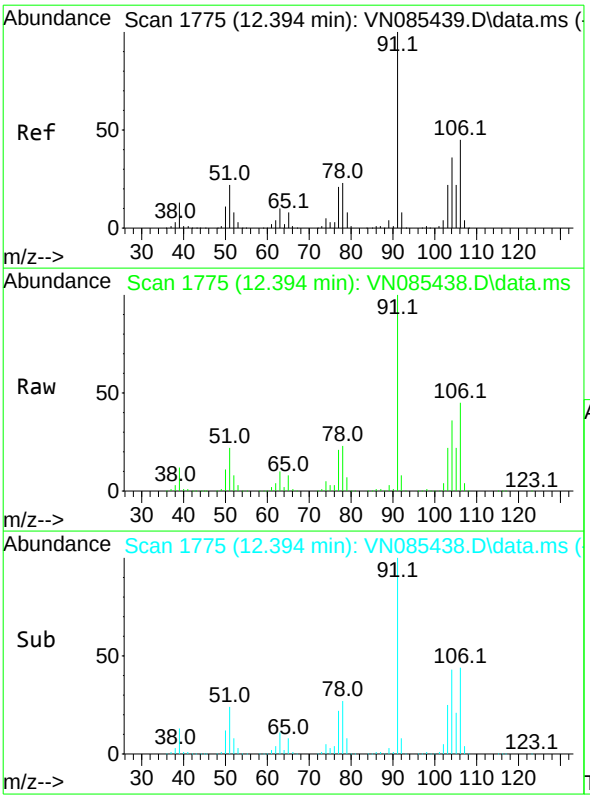


#68
m/p-Xylenes
Concen: 235.219 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:106 Resp: 927244

Ion	Ratio	Lower	Upper
106	100		
91	208.0	167.7	251.5

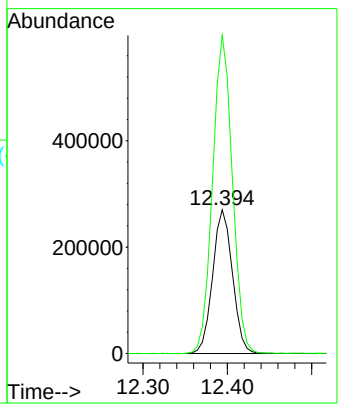




#69
o-Xylene
Concen: 117.135 ug/l
RT: 12.394 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:106 Resp: 441279

Ion	Ratio	Lower	Upper
106	100		
91	221.3	110.4	331.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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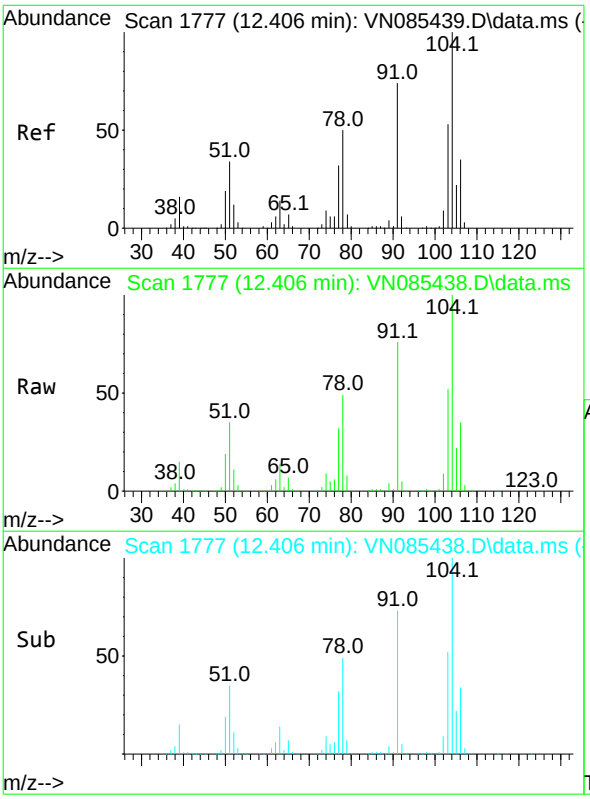
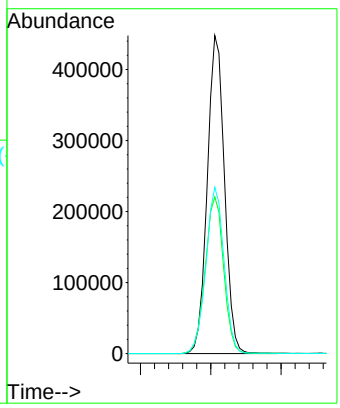
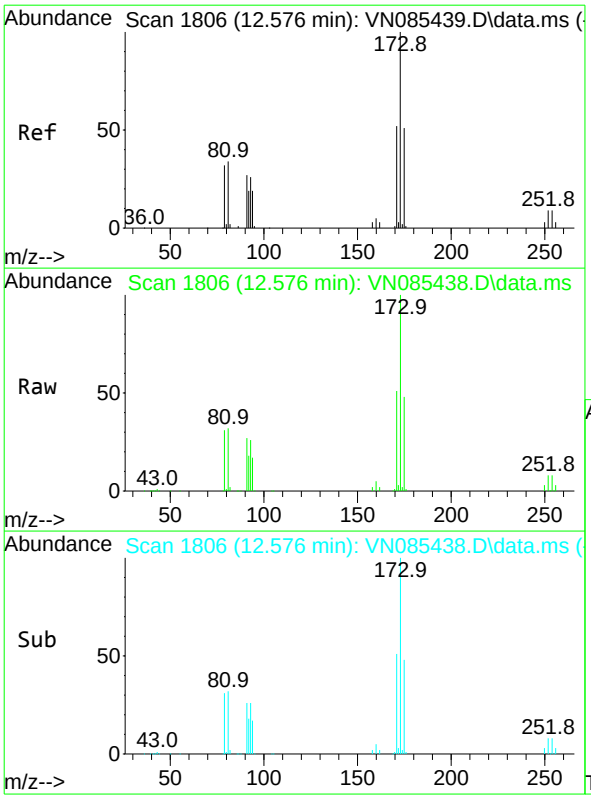


#70
Styrene
Concen: 121.919 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:104 Resp: 760136

Ion	Ratio	Lower	Upper
104	100		
78	52.8	42.5	63.7
103	55.3	43.8	65.8





#71
Bromoform
Concen: 108.227 ug/l
RT: 12.576 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:173 Resp: 186124

Ion	Ratio	Lower	Upper
173	100		
175	48.4	24.4	73.2
254	0.1	0.0	0.0#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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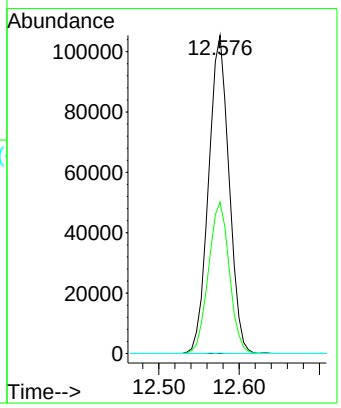
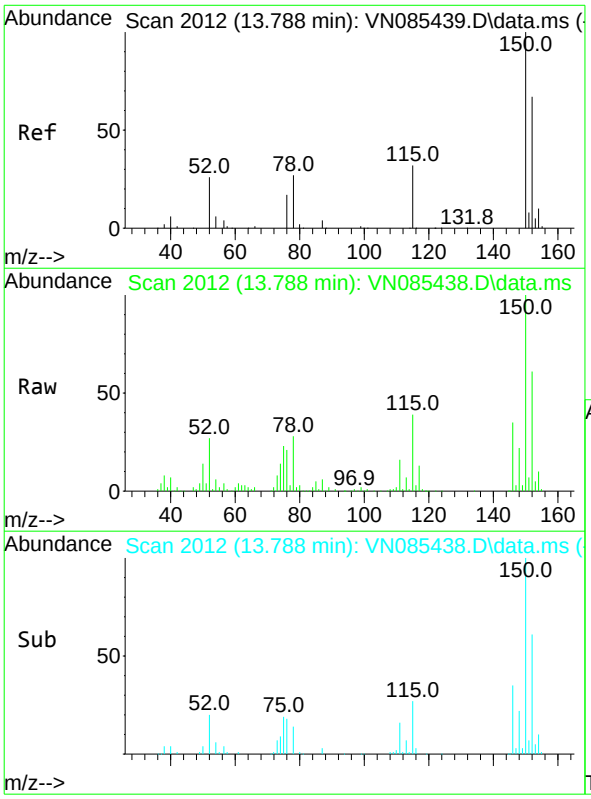
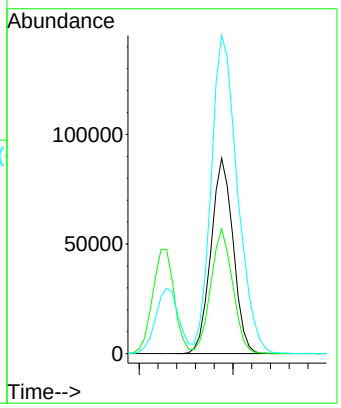


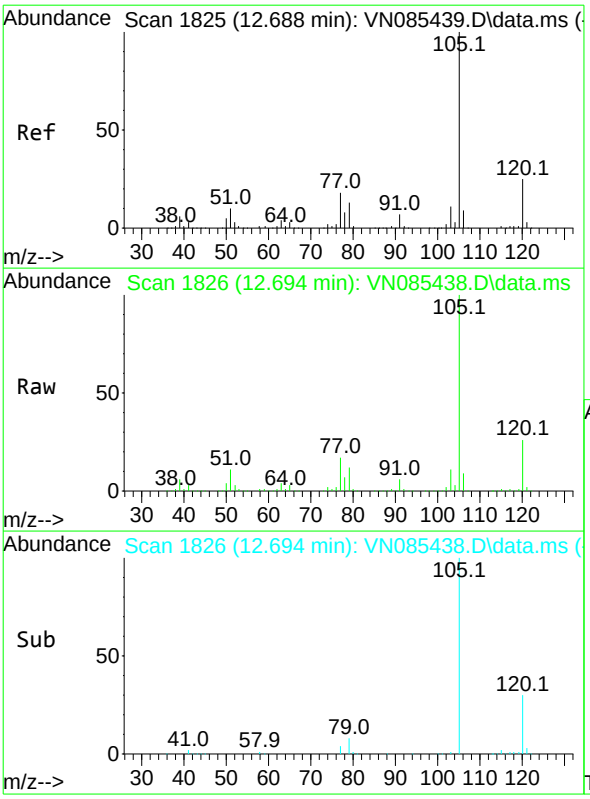


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:152 Resp: 146196

Ion	Ratio	Lower	Upper
152	100		
115	62.7	31.1	93.3
150	193.1	0.0	343.6





#73
Isopropylbenzene
Concen: 116.221 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 1146752

Ion	Ratio	Lower	Upper
105	100		
120	25.7	12.8	38.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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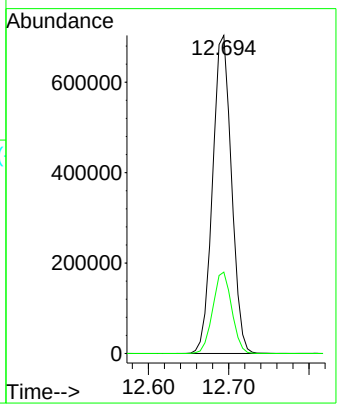
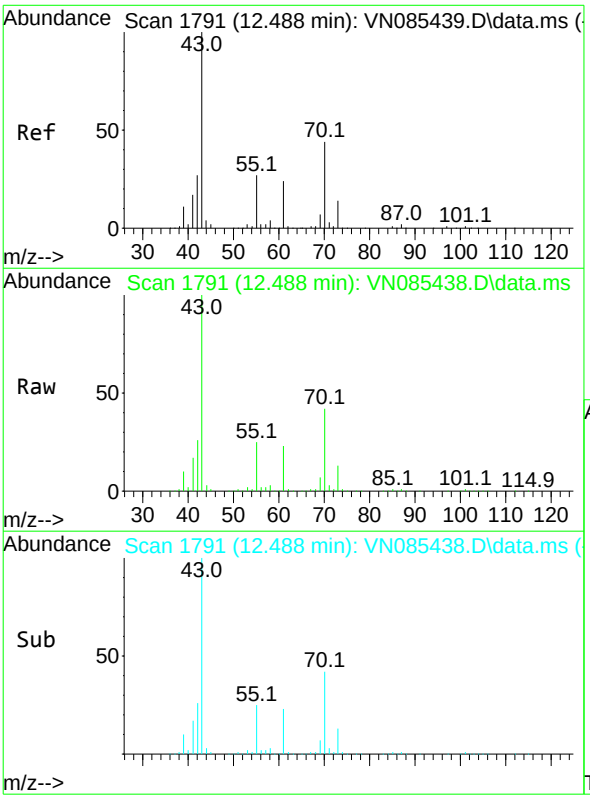
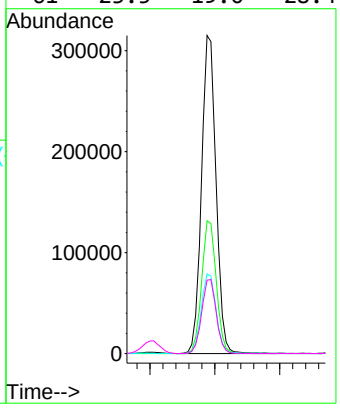


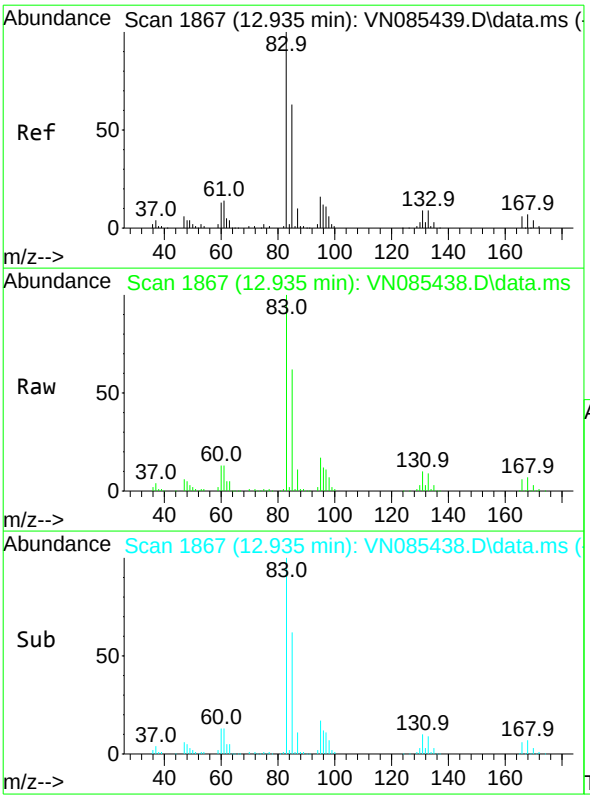


#74
N-amyl acetate
Concen: 110.308 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 489217

Ion	Ratio	Lower	Upper
43	100		
70	41.9	34.0	51.0
55	25.7	21.4	32.2
61	23.5	19.0	28.4

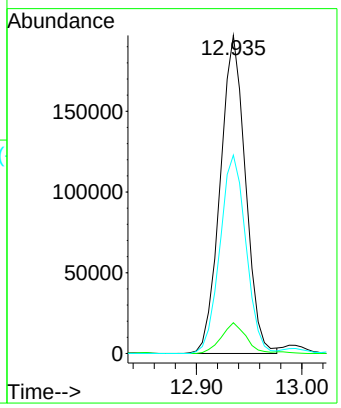




#75
1,1,2,2-Tetrachloroethane
Concen: 94.039 ug/l
RT: 12.935 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 83 Resp: 327767

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.8	14.4
85	64.1	32.2	96.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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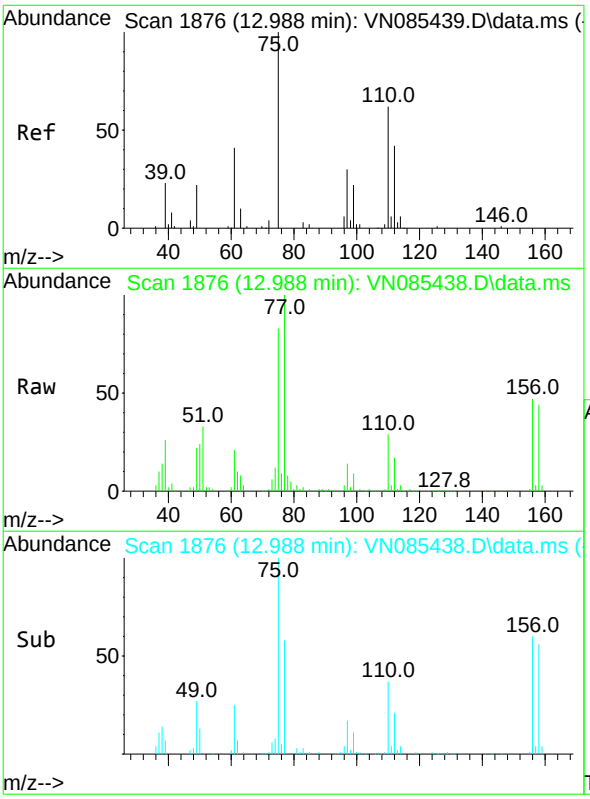
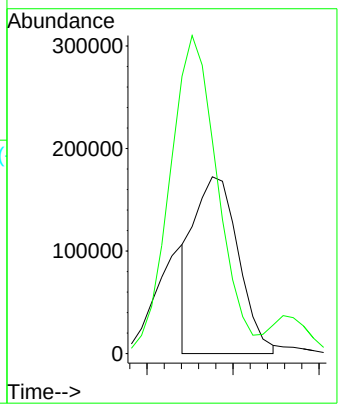
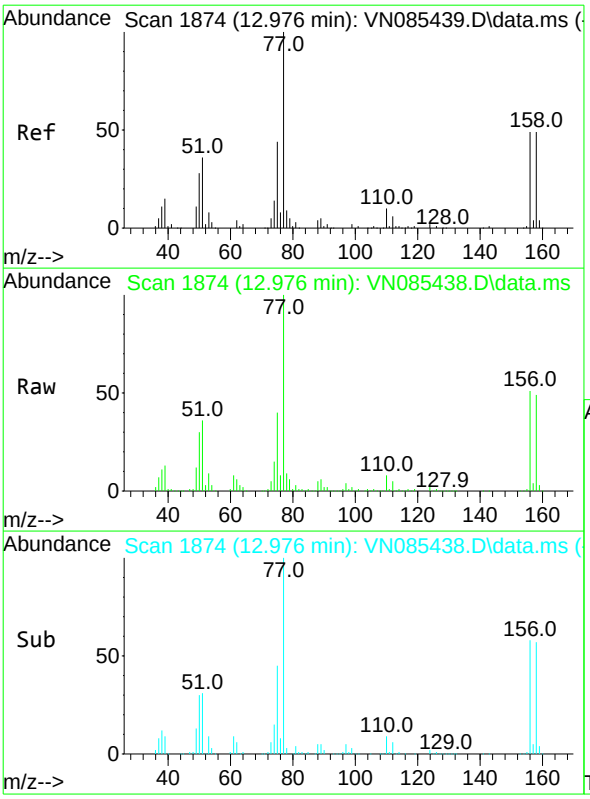


#76
1,2,3-Trichloropropane
Concen: 104.530 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 310115

Ion	Ratio	Lower	Upper
75	100		
77	192.6	109.7	329.2





#77
Bromobenzene
Concen: 104.200 ug/l
RT: 12.976 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:156 Resp: 268616

Ion	Ratio	Lower	Upper
156	100		
77	222.4	114.1	342.4
158	96.3	48.9	146.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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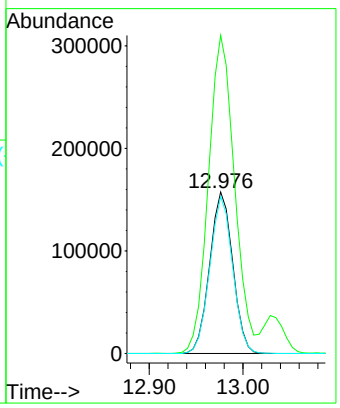
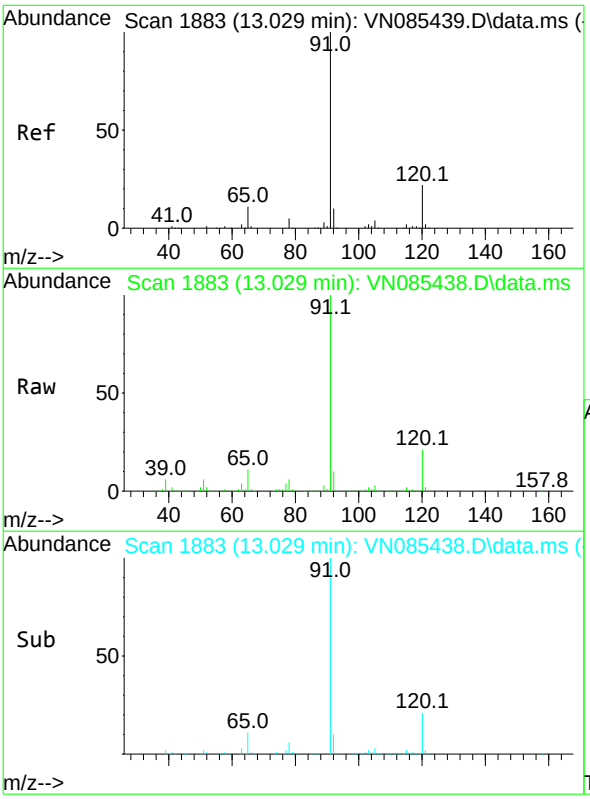
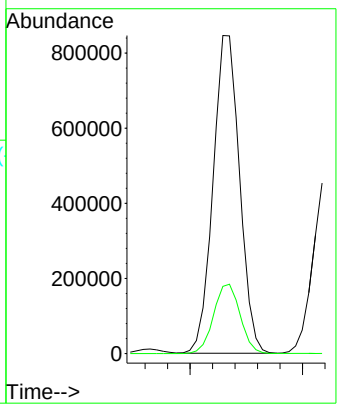


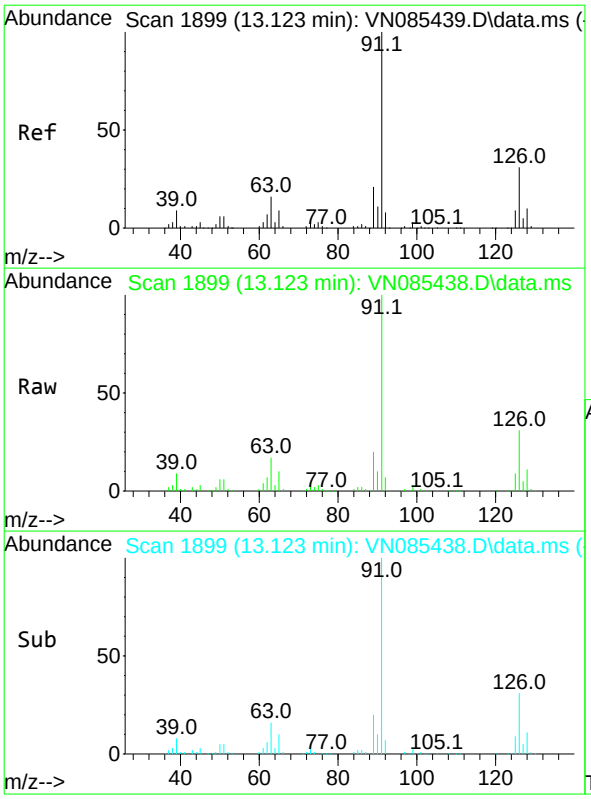


#78
n-propylbenzene
Concen: 118.600 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 1385353

Ion	Ratio	Lower	Upper
91	100		
120	21.8	10.9	32.6

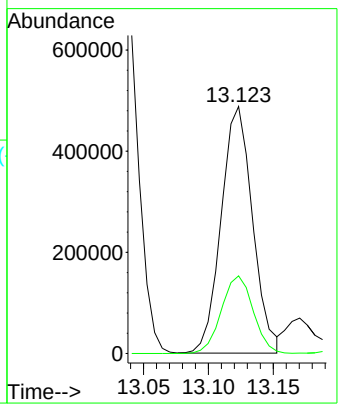




#79
2-Chlorotoluene
Concen: 108.767 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 822258

Ion	Ratio	Lower	Upper
91	100		
126	31.8	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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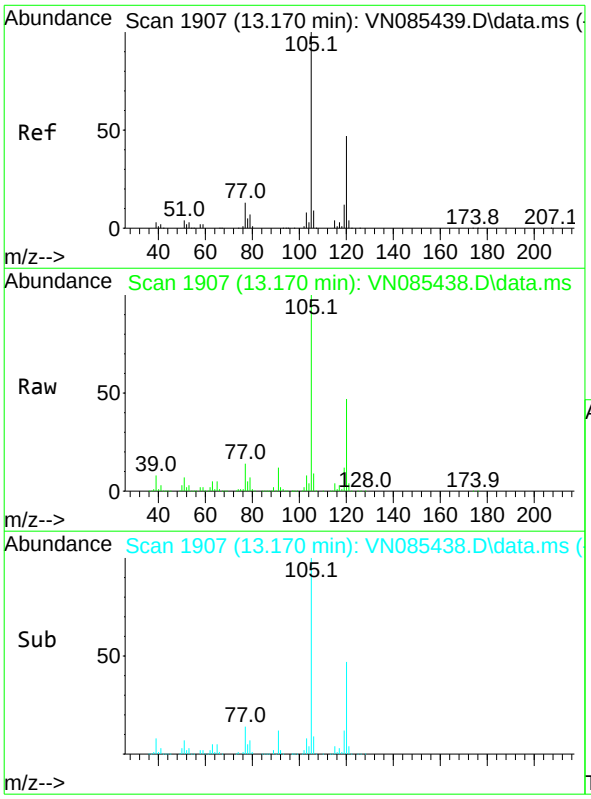
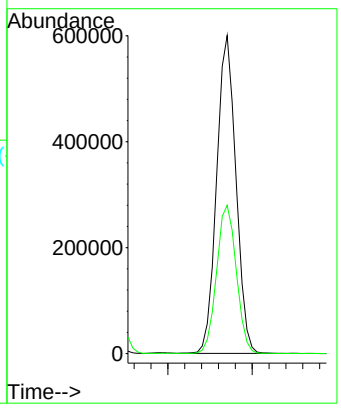
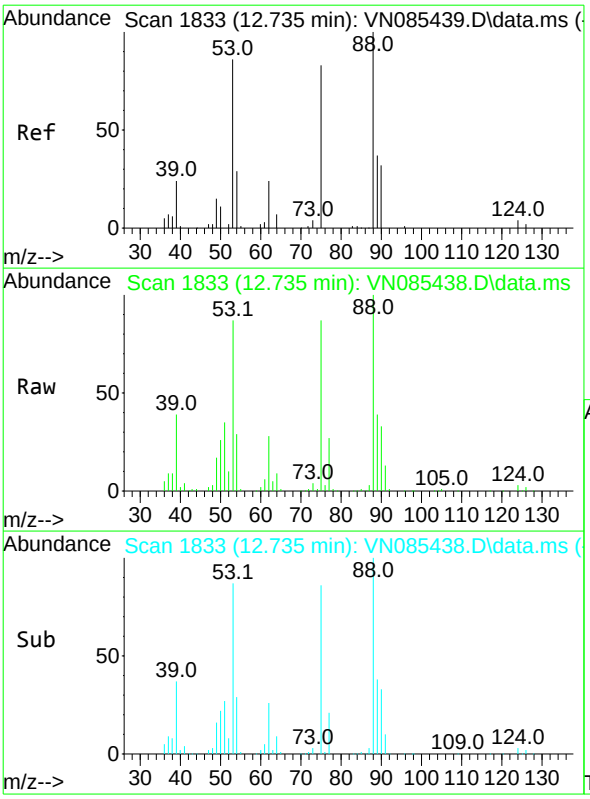


#80
1,3,5-Trimethylbenzene
Concen: 116.938 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 953066

Ion	Ratio	Lower	Upper
105	100		
120	47.8	23.9	71.7





#81
trans-1,4-Dichloro-2-butene
Concen: 111.544 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 75 Resp: 122508

Ion	Ratio	Lower	Upper
75	100		
53	100.9	95.6	143.4
89	44.4	37.0	55.6

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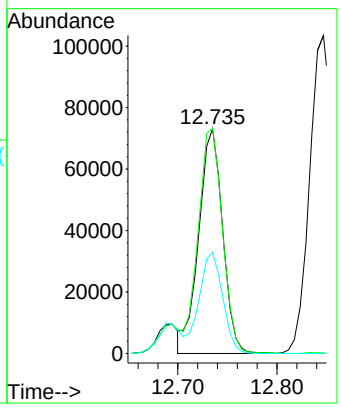
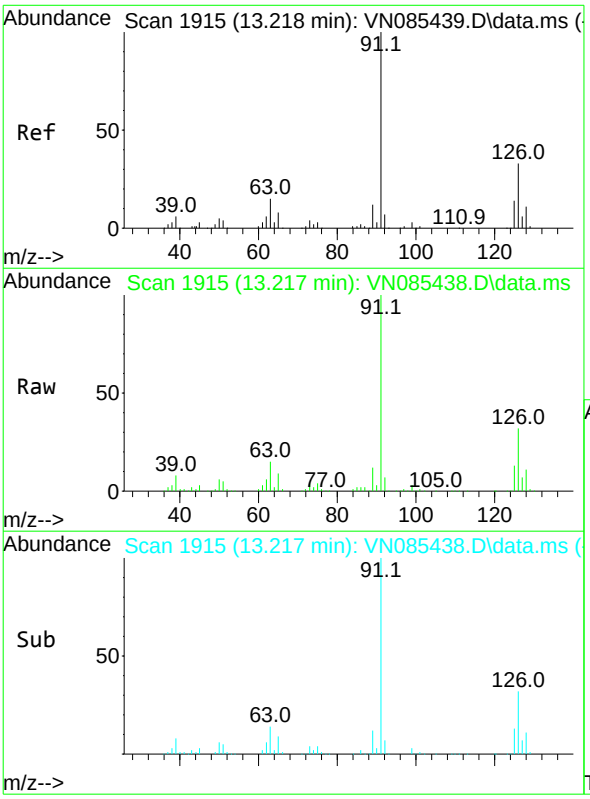
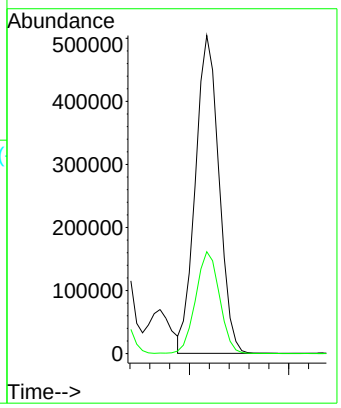


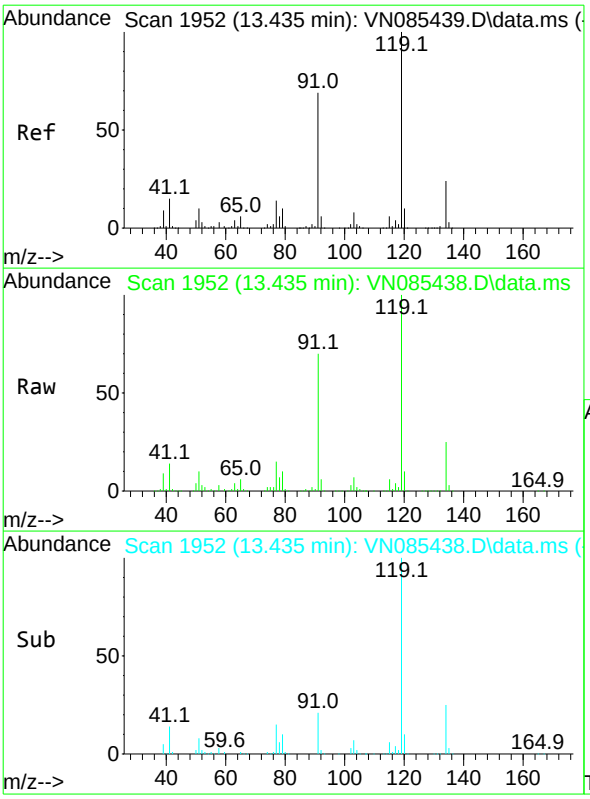


#82
4-Chlorotoluene
Concen: 110.574 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 832317

Ion	Ratio	Lower	Upper
91	100		
126	32.5	15.9	47.7

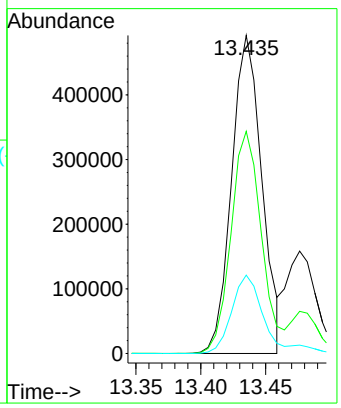




#83
tert-Butylbenzene
Concen: 116.457 ug/l
RT: 13.435 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:119 Resp: 797069

Ion	Ratio	Lower	Upper
119	100		
91	70.7	35.1	105.3
134	26.6	12.0	36.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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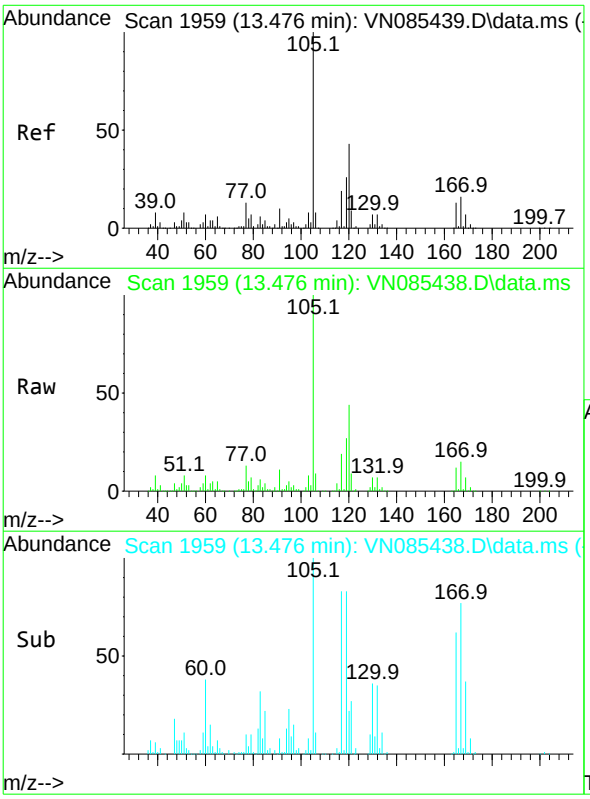
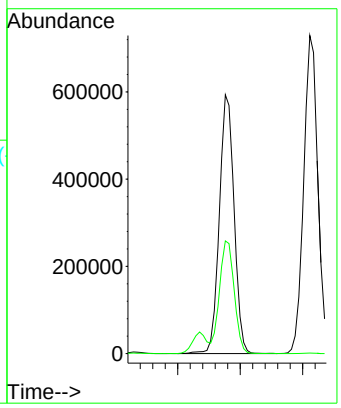
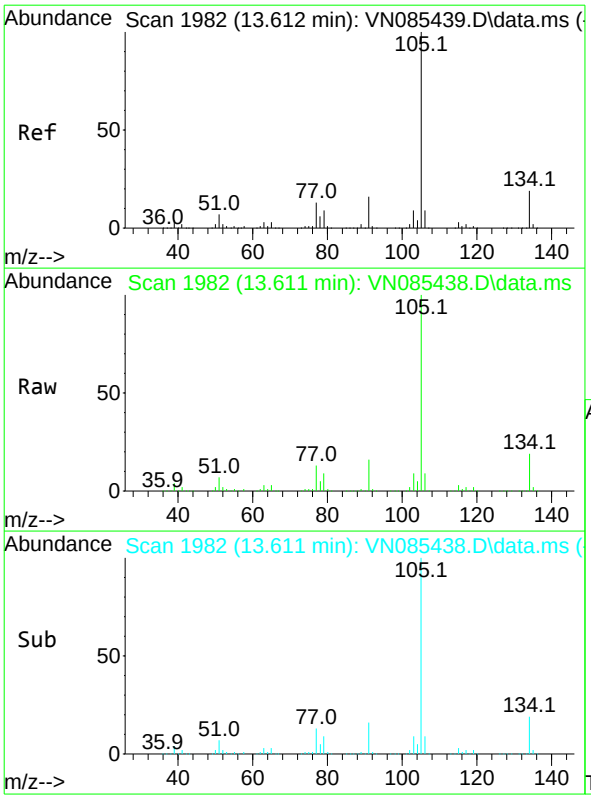


#84
1,2,4-Trimethylbenzene
Concen: 119.625 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 971729

Ion	Ratio	Lower	Upper
105	100		
120	43.4	21.6	65.0

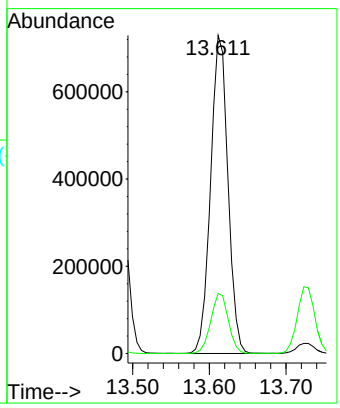




#85
sec-Butylbenzene
Concen: 120.587 ug/l
RT: 13.611 min Scan# 19
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:105 Resp: 1143885

Ion	Ratio	Lower	Upper
105	100		
134	19.2	9.7	28.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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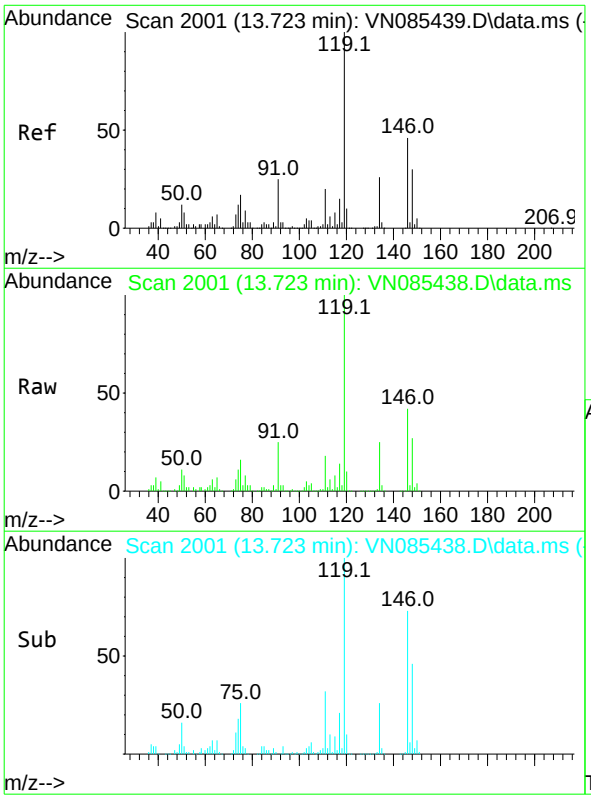
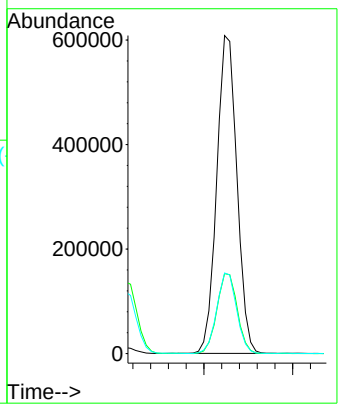
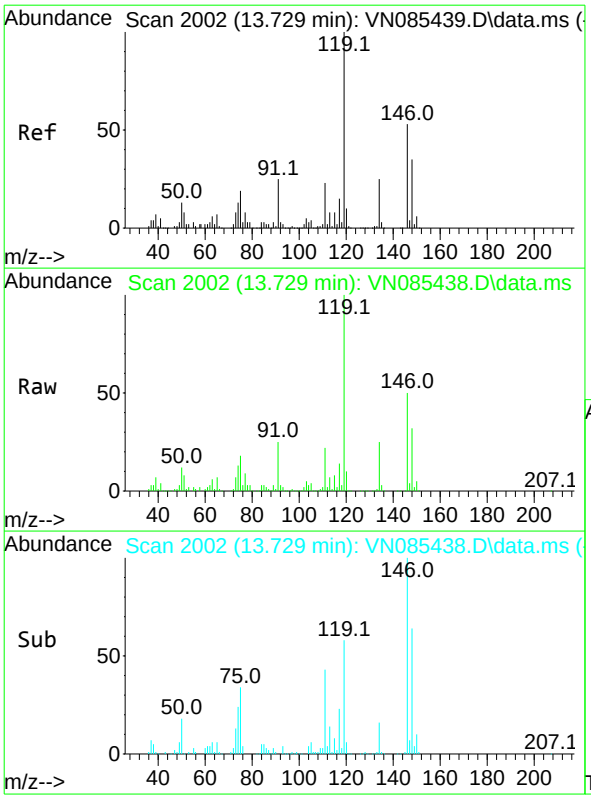


#86
p-Isopropyltoluene
Concen: 100.111 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:119 Resp: 960747

Ion	Ratio	Lower	Upper
119	100		
134	25.3	12.7	38.0
91	25.0	12.7	38.1

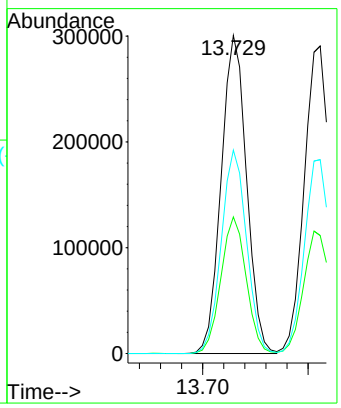




#87
1,3-Dichlorobenzene
Concen: 105.943 ug/l
RT: 13.729 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:146 Resp: 502960

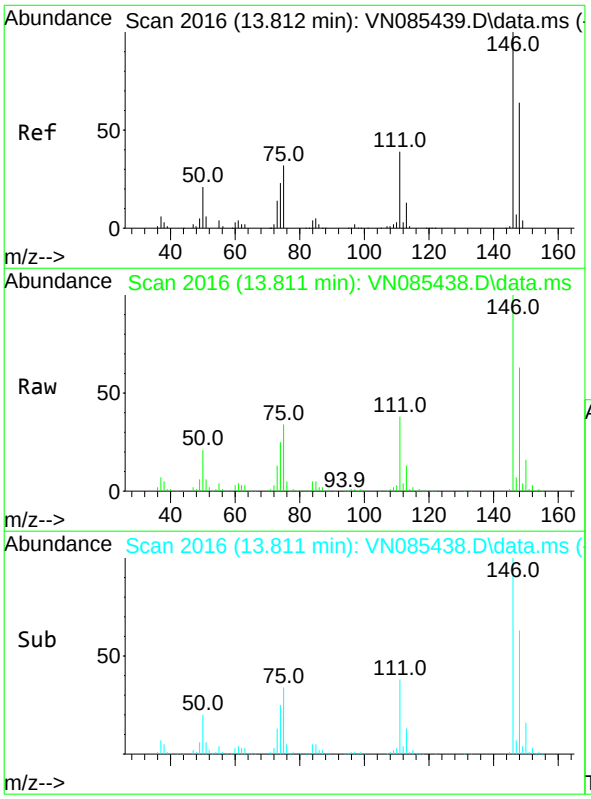
Ion	Ratio	Lower	Upper
146	100		
111	42.8	21.4	64.3
148	63.6	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

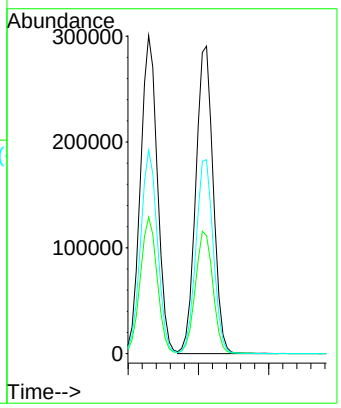
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

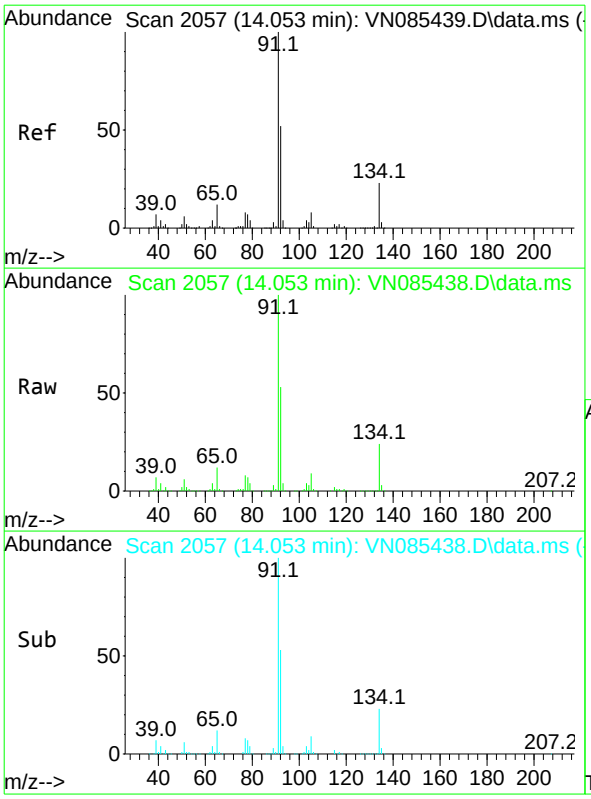


#88
1,4-Dichlorobenzene
Concen: 101.341 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:146 Resp: 498709

Ion	Ratio	Lower	Upper
146	100		
111	40.1	21.3	63.7
148	63.1	32.4	97.0

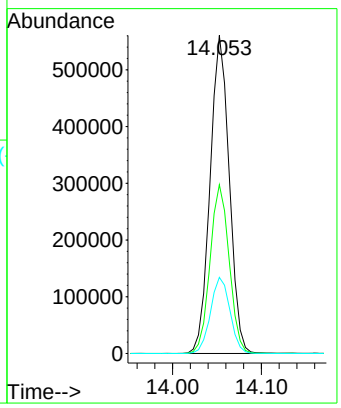




#89
n-Butylbenzene
Concen: 123.781 ug/l
RT: 14.053 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 91 Resp: 842368

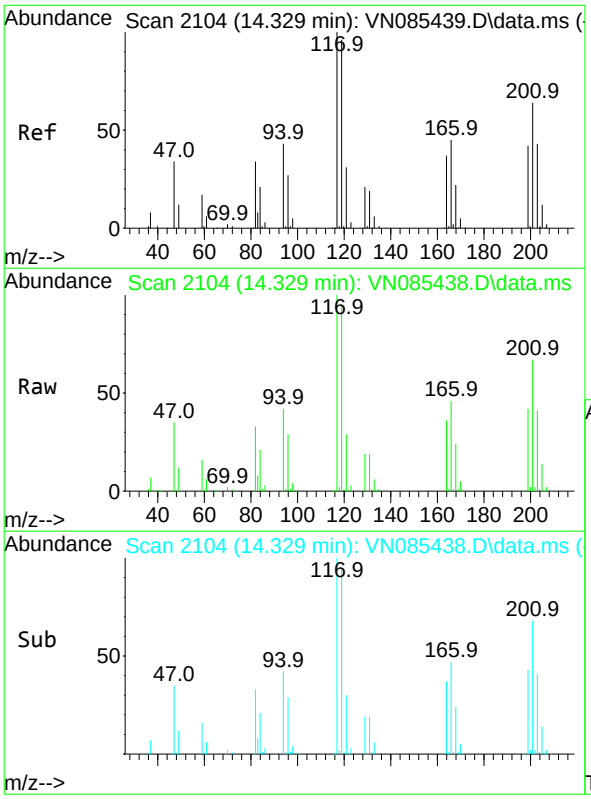
Ion	Ratio	Lower	Upper
91	100		
92	52.8	25.8	77.3
134	24.3	11.7	35.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

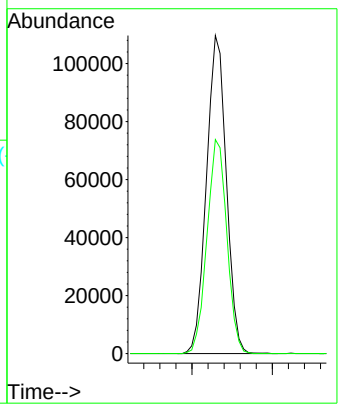
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

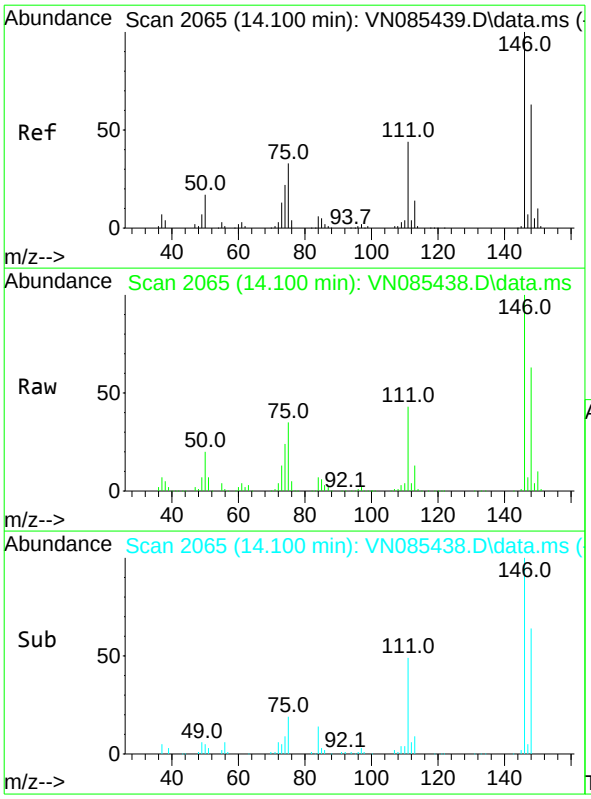


#90
Hexachloroethane
Concen: 104.405 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:117 Resp: 188541

Ion	Ratio	Lower	Upper
117	100		
201	67.2	33.7	101.0

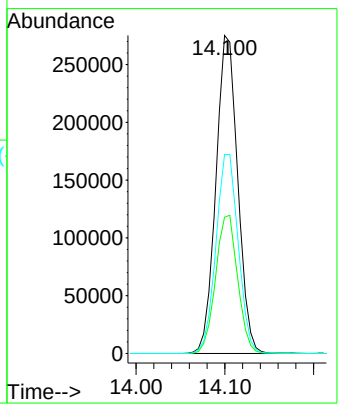




#91
1,2-Dichlorobenzene
Concen: 99.445 ug/l
RT: 14.100 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:146 Resp: 470919

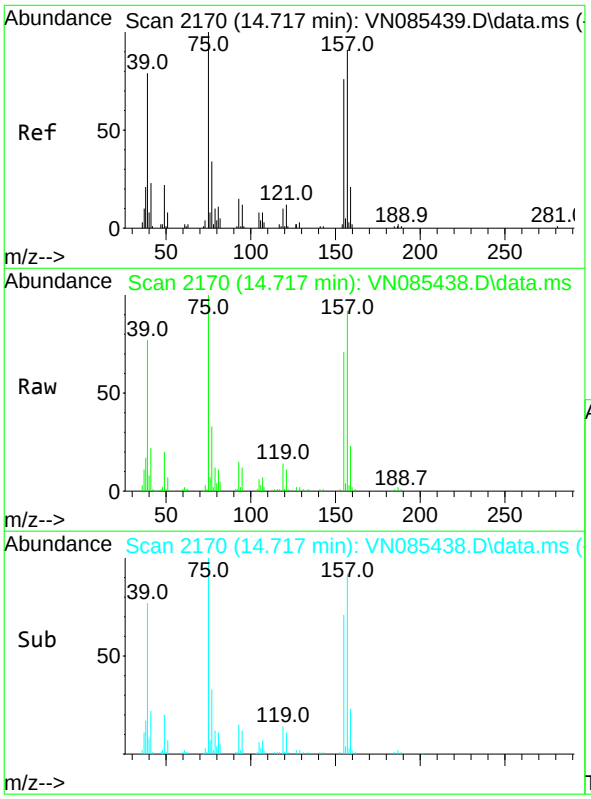
Ion	Ratio	Lower	Upper
146	100		
111	43.9	21.7	65.1
148	64.0	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

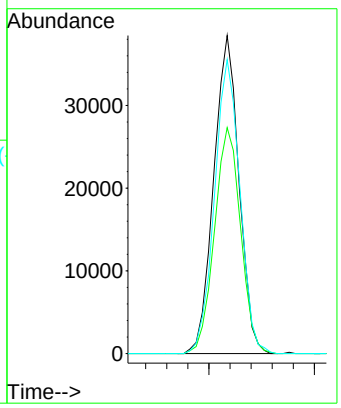
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

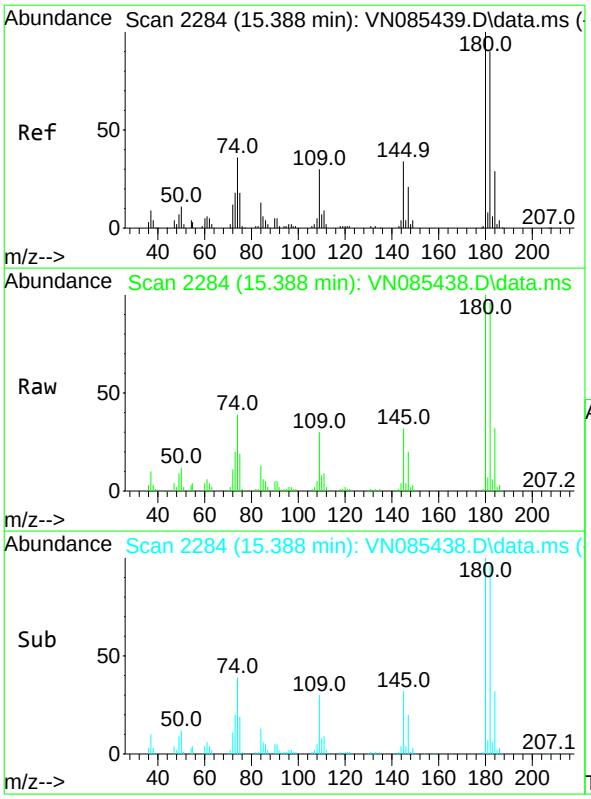


#92
1,2-Dibromo-3-Chloropropane
Concen: 100.313 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 75 Resp: 63846

Ion	Ratio	Lower	Upper
75	100		
155	73.5	36.4	109.2
157	93.0	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 113.946 ug/l
RT: 15.388 min Scan# 22
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

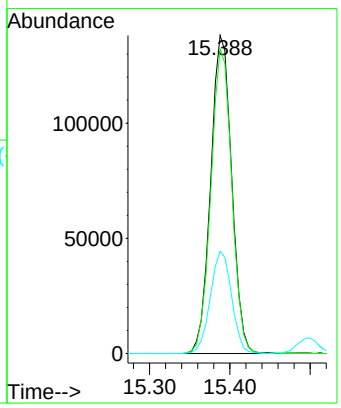
Tgt Ion:180 Resp: 250787

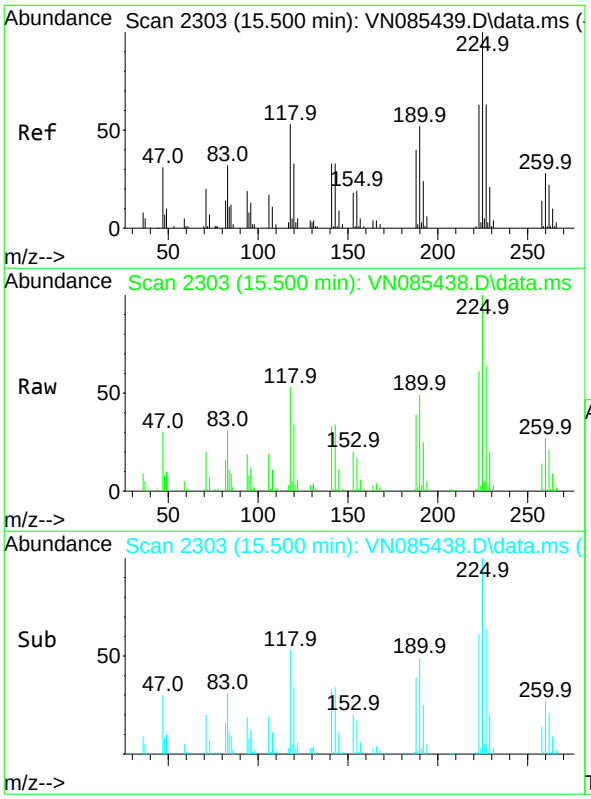
Ion	Ratio	Lower	Upper
180	100		
182	94.9	46.8	140.3
145	32.6	16.0	48.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

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

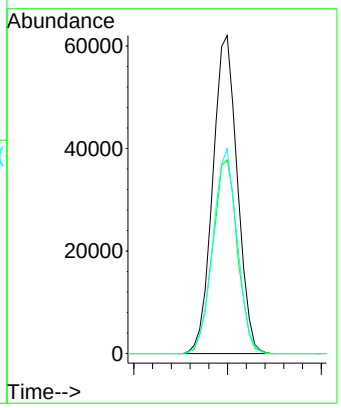


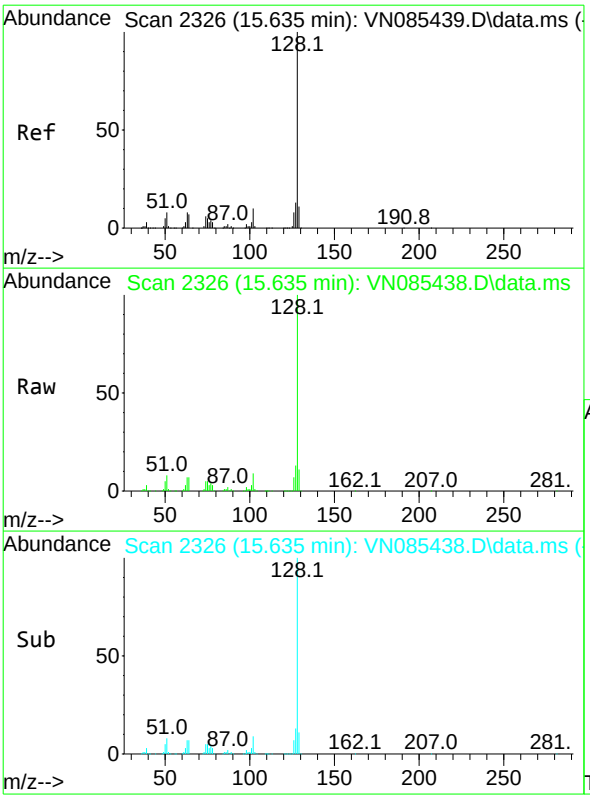


#94
Hexachlorobutadiene
Concen: 96.619 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:225 Resp: 112899

Ion	Ratio	Lower	Upper
225	100		
223	61.8	30.7	92.1
227	63.6	30.9	92.5

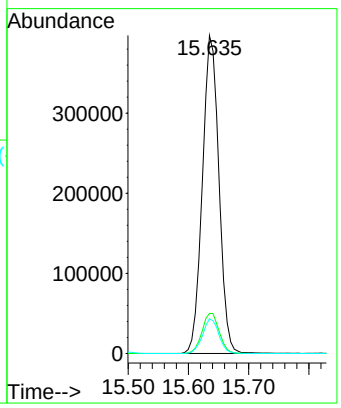




#95
Naphthalene
Concen: 115.234 ug/l
RT: 15.635 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:128 Resp: 756816

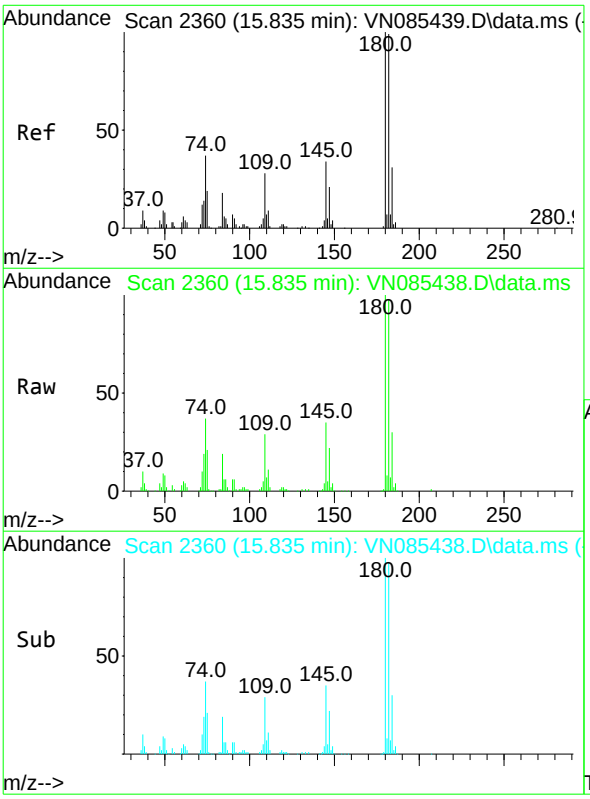
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.6	16.0
129	10.8	8.8	13.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

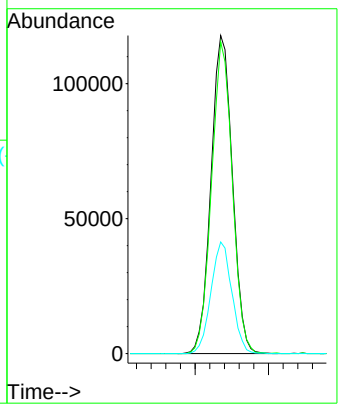
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#96
1,2,3-Trichlorobenzene
Concen: 107.256 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:180 Resp: 238860

Ion	Ratio	Lower	Upper
180	100		
182	95.0	47.4	142.2
145	34.3	16.9	50.7



Quantitation Report (QT Reviewed)

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	199403	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	339872	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	297366	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	146624	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	165768	51.500	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 103.000%			
35) Dibromofluoromethane	8.159	113	121554	51.552	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 103.100%			
50) Toluene-d8	10.565	98	430698	51.411	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.820%			
62) 4-Bromofluorobenzene	12.847	95	152568	53.239	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 106.480%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	125504	46.486	ug/l	100
3) Chloromethane	2.359	50	135631	46.398	ug/l	100
4) Vinyl Chloride	2.512	62	136831	46.569	ug/l	100
5) Bromomethane	2.953	94	83199	46.877	ug/l	100
6) Chloroethane	3.118	64	84517	45.371	ug/l	100
7) Trichlorofluoromethane	3.501	101	198726	46.613	ug/l	100
8) Diethyl Ether	3.953	74	71764	48.726	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	108081	45.010	ug/l	100
10) Methyl Iodide	4.589	142	143383	52.142	ug/l	100
11) Tert butyl alcohol	5.512	59	92841	251.894	ug/l	100
12) 1,1-Dichloroethene	4.342	96	106247	49.647	ug/l	100
13) Acrolein	4.171	56	139234	276.734	ug/l	100
14) Allyl chloride	5.018	41	168654	48.567	ug/l	100
15) Acrylonitrile	5.712	53	296781	253.507	ug/l	100
16) Acetone	4.418	43	251271	241.603	ug/l	100
17) Carbon Disulfide	4.706	76	294604	44.710	ug/l	100
18) Methyl Acetate	5.018	43	157485	49.798	ug/l	100
19) Methyl tert-butyl Ether	5.789	73	373561	53.758	ug/l	100
20) Methylene Chloride	5.271	84	125508	48.748	ug/l	100
21) trans-1,2-Dichloroethene	5.783	96	110684	48.395	ug/l	100
22) Diisopropyl ether	6.665	45	406253	52.707	ug/l	100
23) Vinyl Acetate	6.594	43	1491031	275.471	ug/l	100
24) 1,1-Dichloroethane	6.565	63	233336	49.648	ug/l	100
25) 2-Butanone	7.477	43	388457	253.815	ug/l	100
26) 2,2-Dichloropropane	7.483	77	186591	49.106	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	136229	50.571	ug/l	100
28) Bromochloromethane	7.806	49	108148	49.461	ug/l	100
29) Tetrahydrofuran	7.830	42	259683	267.624	ug/l	100
30) Chloroform	7.959	83	234271	48.229	ug/l	100
31) Cyclohexane	8.253	56	175588	42.984	ug/l	100
32) 1,1,1-Trichloroethane	8.165	97	202590	47.547	ug/l	100
36) 1,1-Dichloropropene	8.365	75	157031	47.453	ug/l	100
37) Ethyl Acetate	7.553	43	165866	49.658	ug/l	100
38) Carbon Tetrachloride	8.359	117	180199	47.564	ug/l	100
39) Methylcyclohexane	9.600	83	157234	50.562	ug/l	100
40) Benzene	8.600	78	492606	49.542	ug/l	100

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

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

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

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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Supervised By :Mahesh Dadoda 01/15/2025

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

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

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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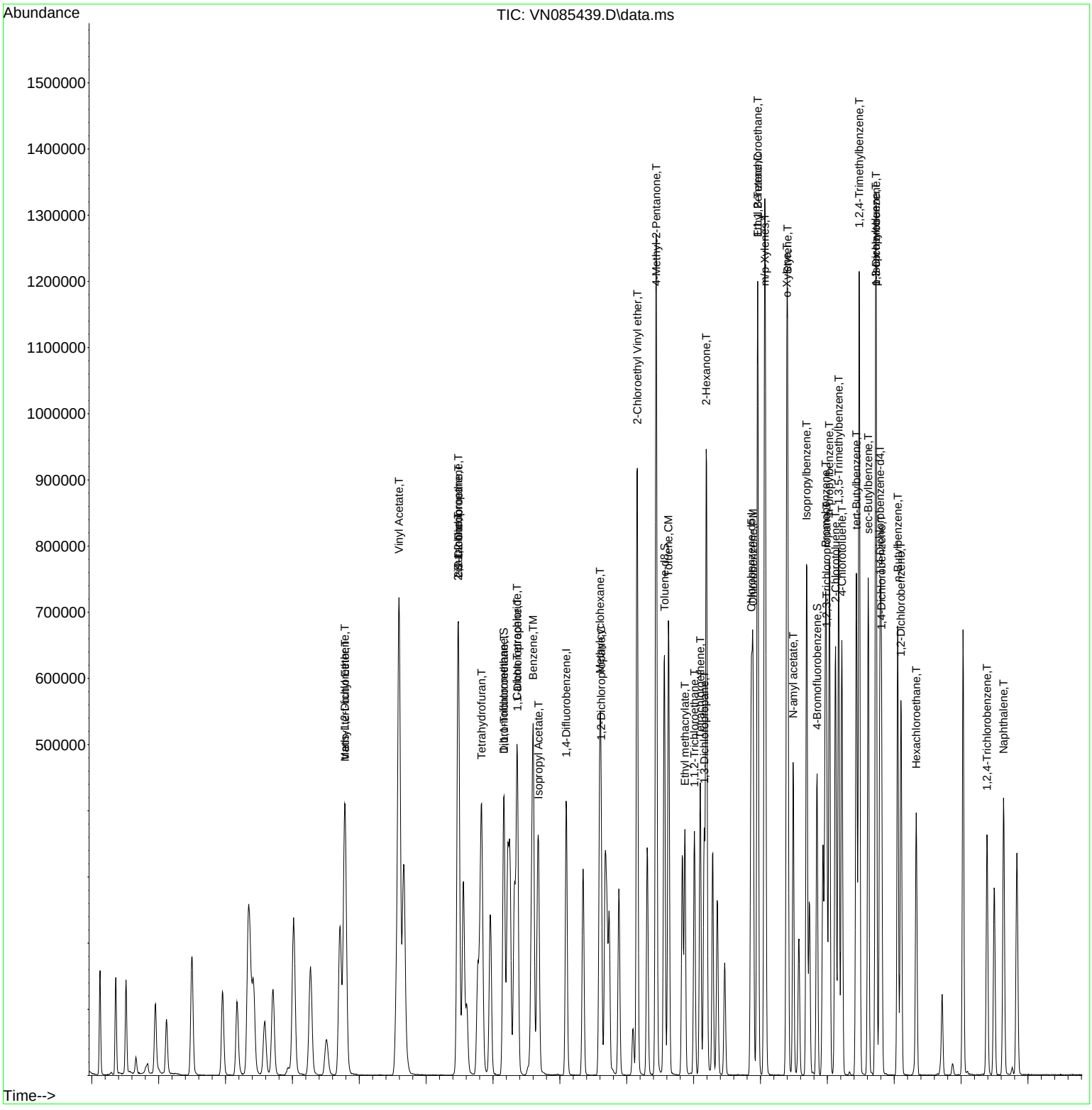
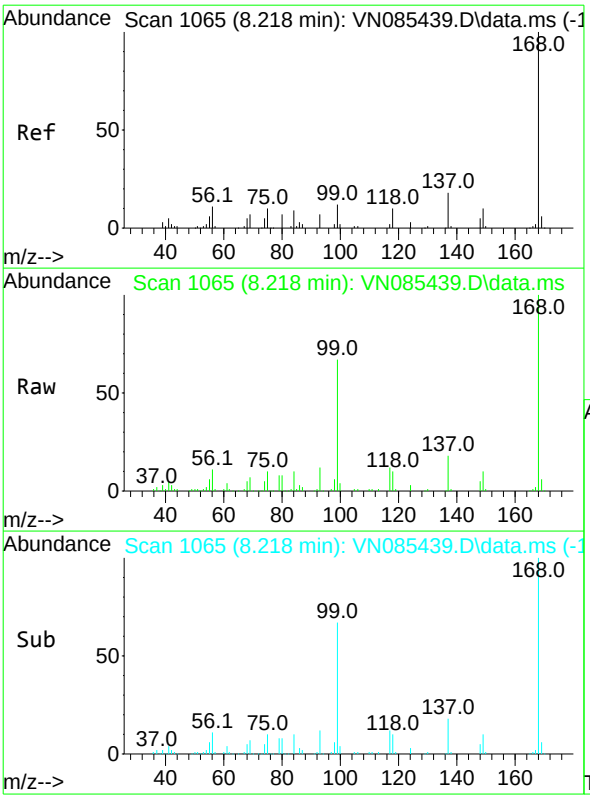
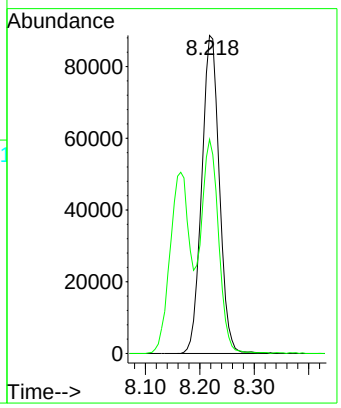




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:168 Resp: 199403

Ion	Ratio	Lower	Upper
168	100		
99	67.0	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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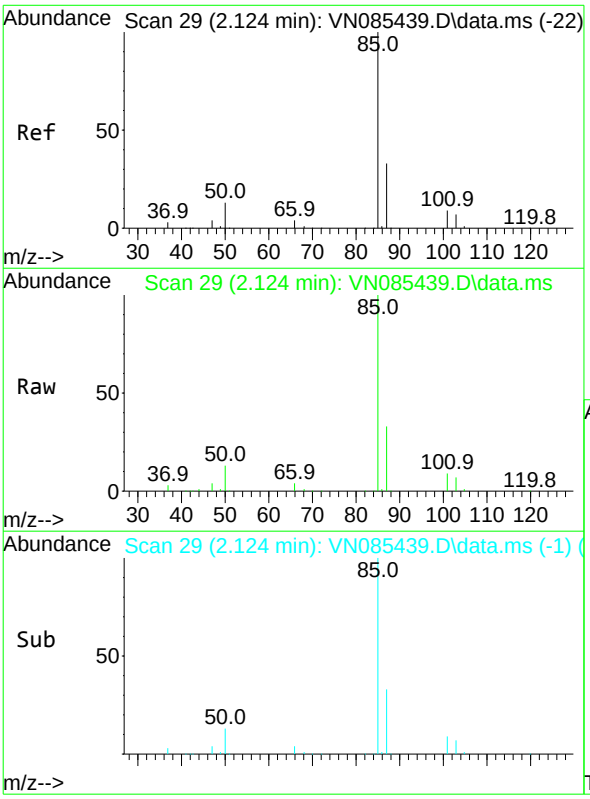
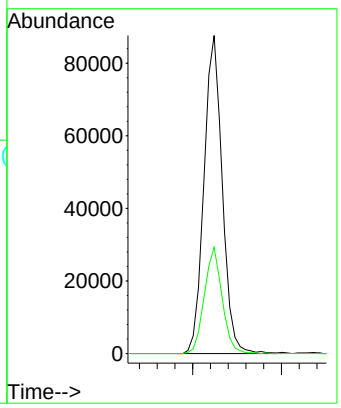
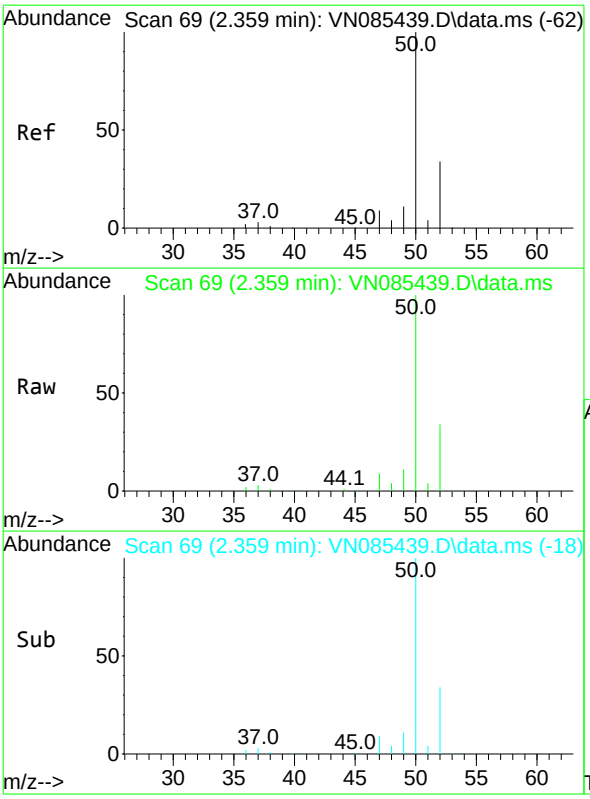


#2
Dichlorodifluoromethane
Concen: 46.486 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 85 Resp: 125504

Ion	Ratio	Lower	Upper
85	100		
87	33.4	16.7	50.1

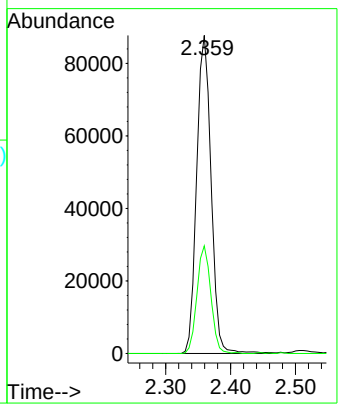




#3
Chloromethane
Concen: 46.398 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 50 Resp: 135631

Ion	Ratio	Lower	Upper
50	100		
52	33.8	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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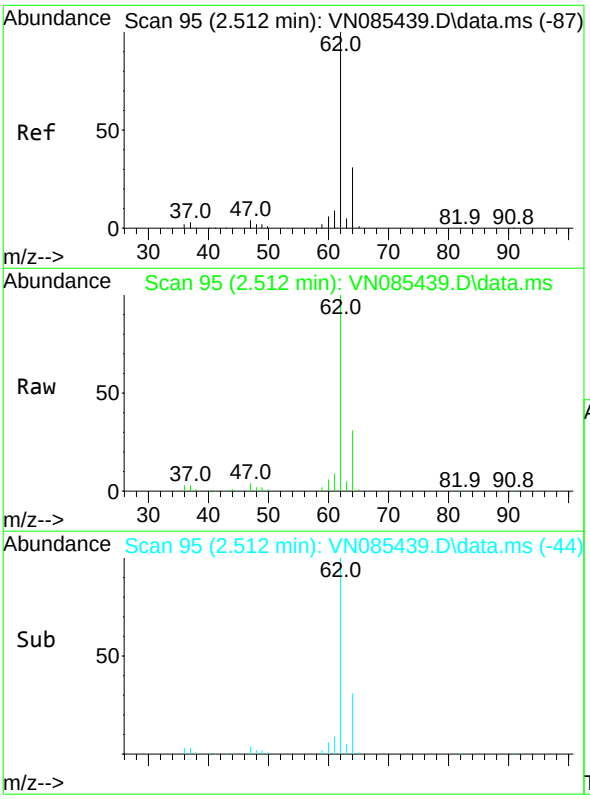
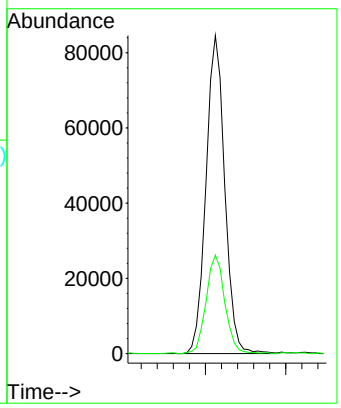
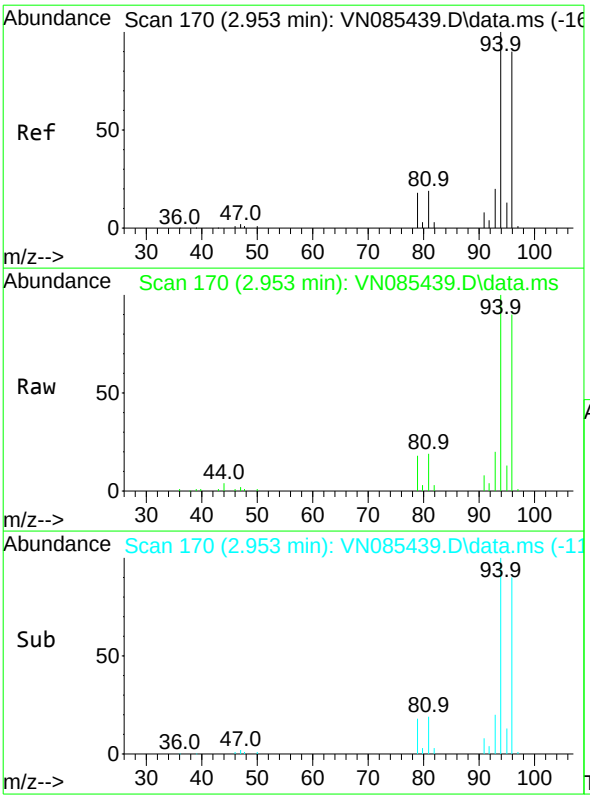


#4
Vinyl Chloride
Concen: 46.569 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 62 Resp: 136831

Ion	Ratio	Lower	Upper
62	100		
64	31.0	24.8	37.2

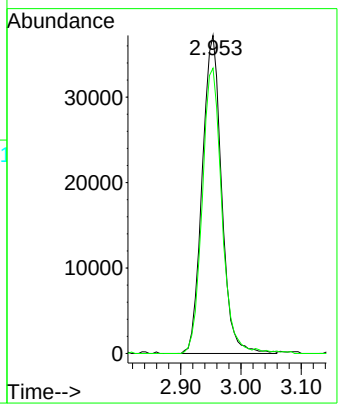




#5
Bromomethane
Concen: 46.877 ug/l
RT: 2.953 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 94 Resp: 83199

Ion	Ratio	Lower	Upper
94	100		
96	89.7	71.8	107.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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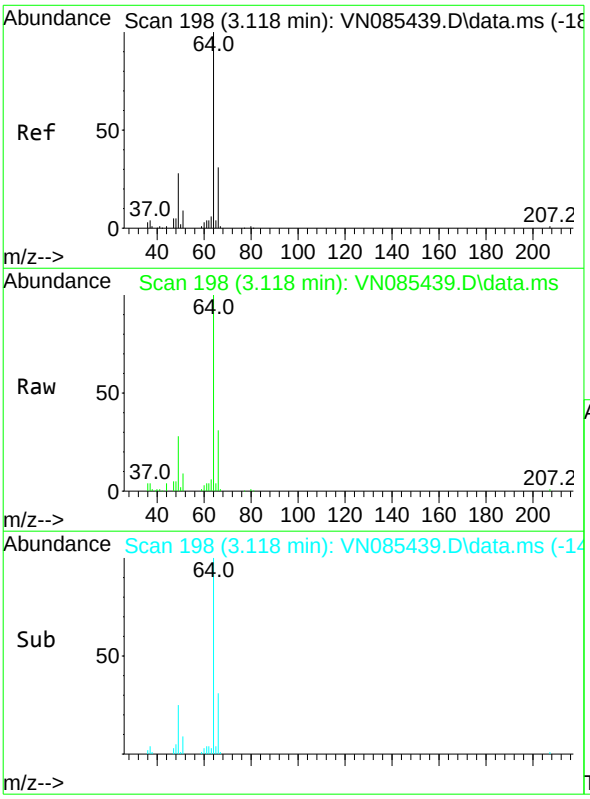
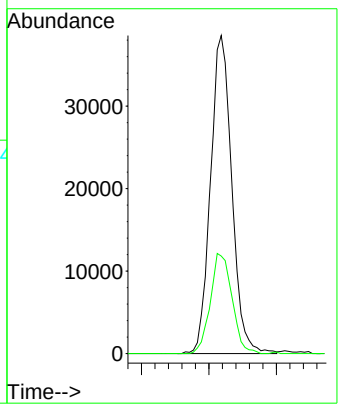
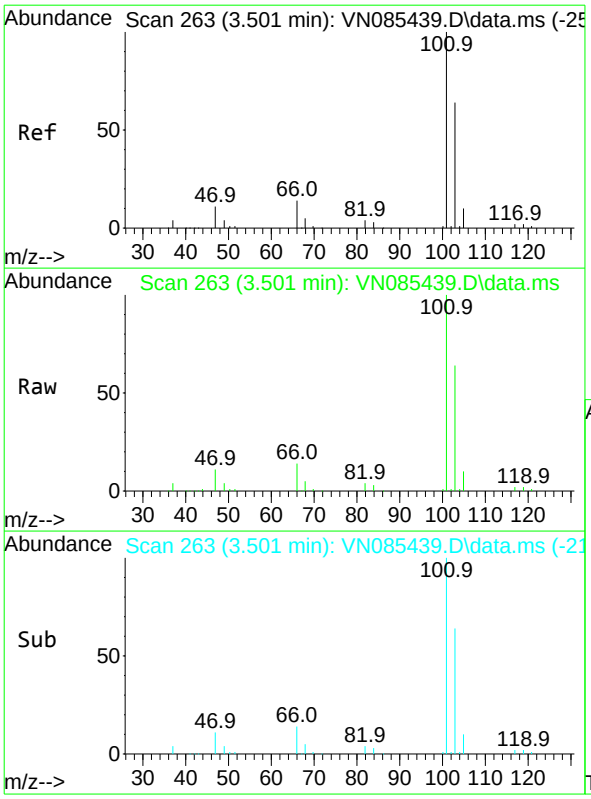


#6
Chloroethane
Concen: 45.371 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 64 Resp: 84517

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	36.8

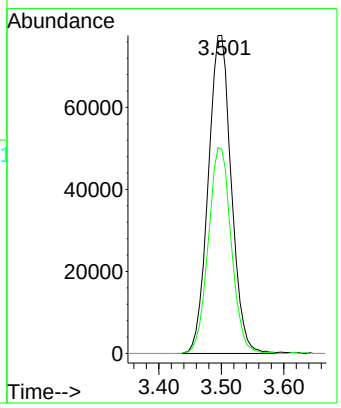




#7
Trichlorofluoromethane
Concen: 46.613 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:101 Resp: 198726

Ion	Ratio	Lower	Upper
101	100		
103	64.3	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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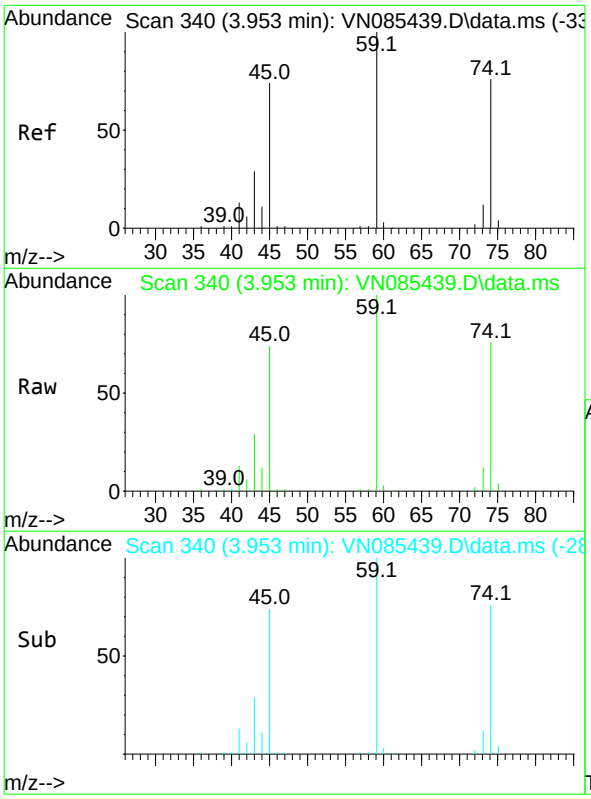
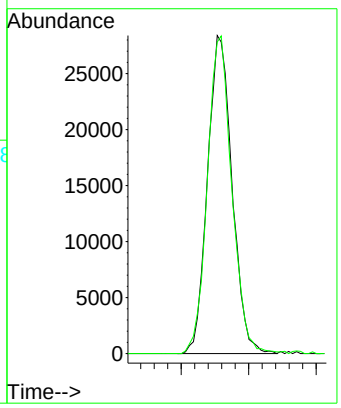
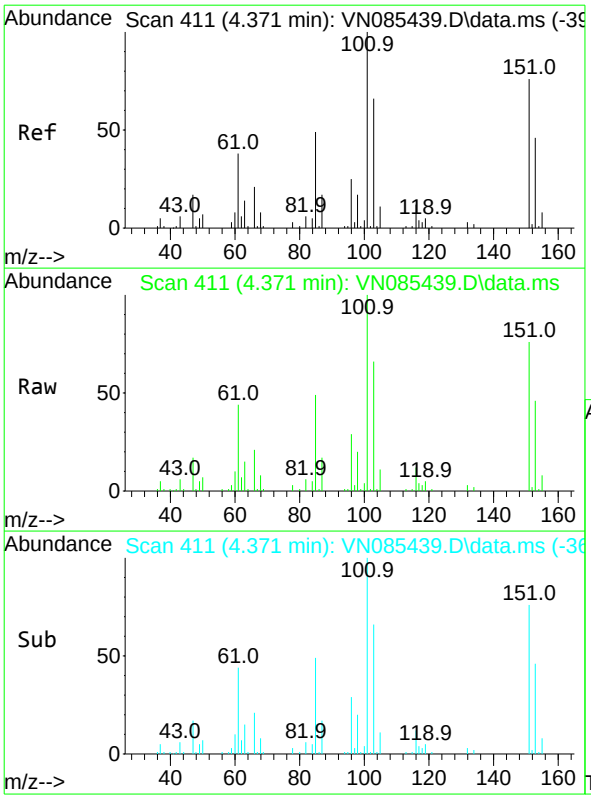


#8
Diethyl Ether
Concen: 48.726 ug/l
RT: 3.953 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 74 Resp: 71764

Ion	Ratio	Lower	Upper
74	100		
45	99.4	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 45.010 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion:101 Resp: 108081

Ion	Ratio	Lower	Upper
101	100		
85	47.3	37.8	56.8
151	73.5	58.8	88.2

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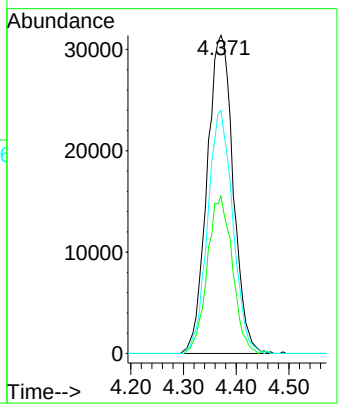
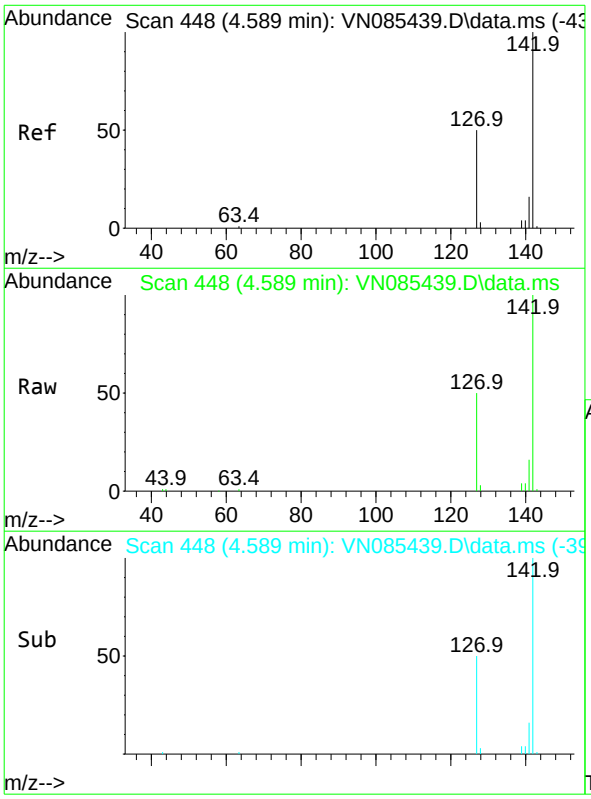
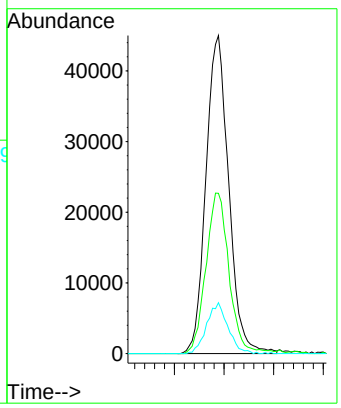


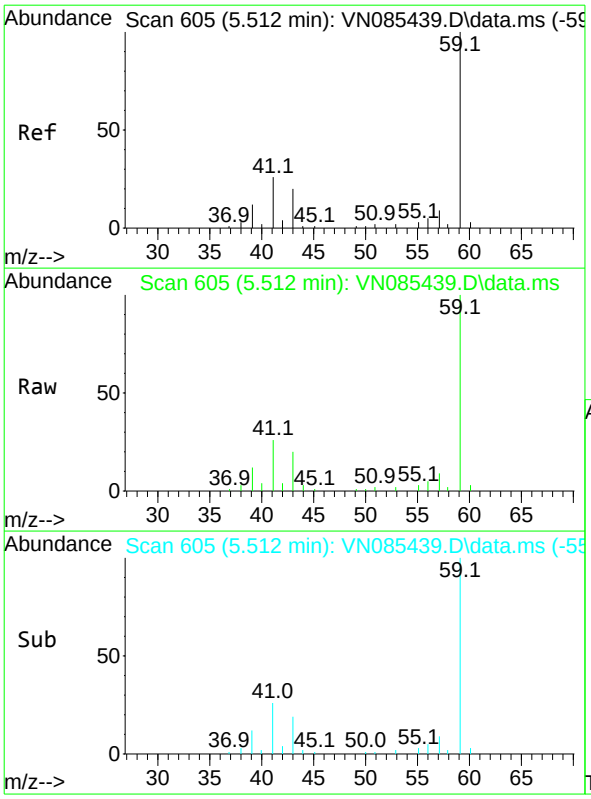


#10
Methyl Iodide
Concen: 52.142 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:142 Resp: 143383

Ion	Ratio	Lower	Upper
142	100		
127	50.4	40.3	60.5
141	16.0	12.8	19.2





#11
Tert butyl alcohol
Concen: 251.894 ug/l
RT: 5.512 min Scan# 60
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 59 Resp: 92841

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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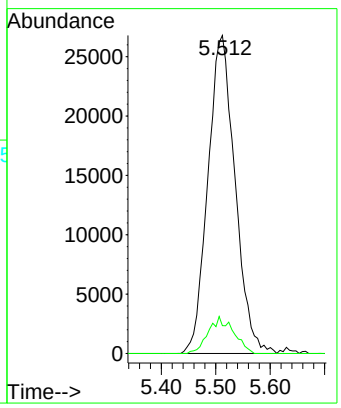
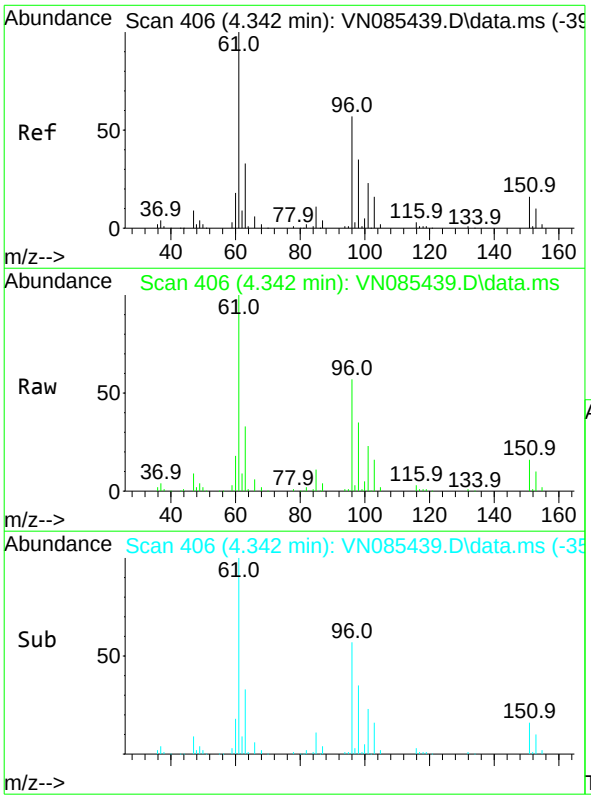
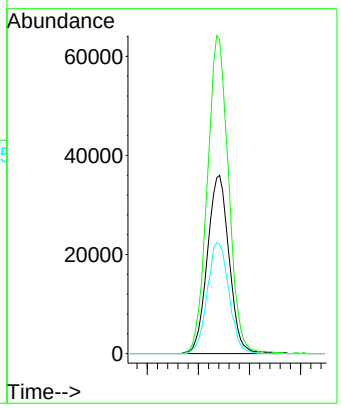


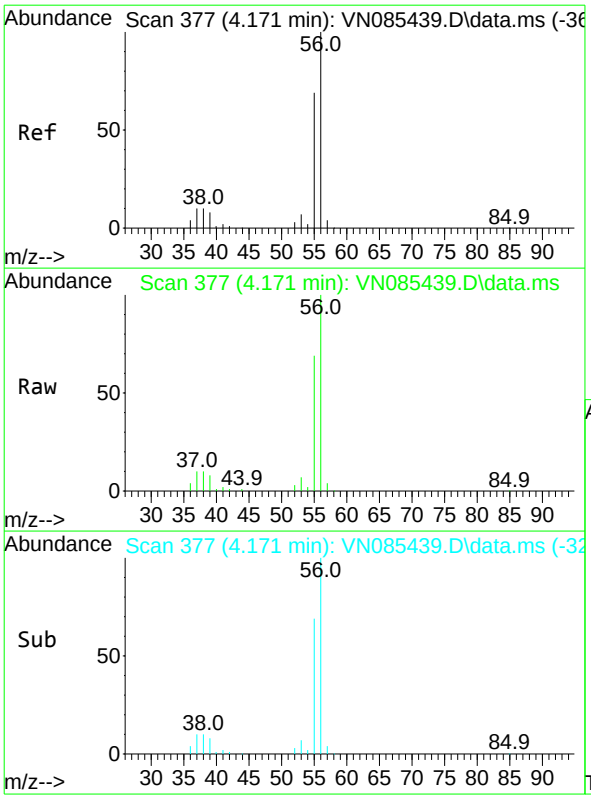


#12
1,1-Dichloroethene
Concen: 49.647 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 96 Resp: 106247

Ion	Ratio	Lower	Upper
96	100		
61	176.2	141.0	211.4
98	61.3	49.0	73.6

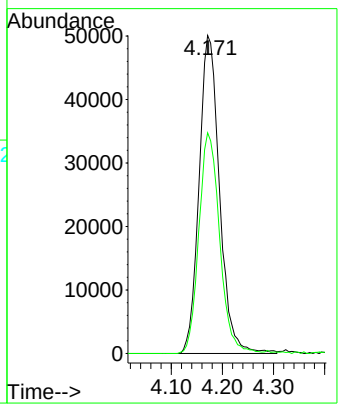




#13
Acrolein
Concen: 276.734 ug/l
RT: 4.171 min Scan# 37
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 56 Resp: 139234

Ion	Ratio	Lower	Upper
56	100		
55	70.4	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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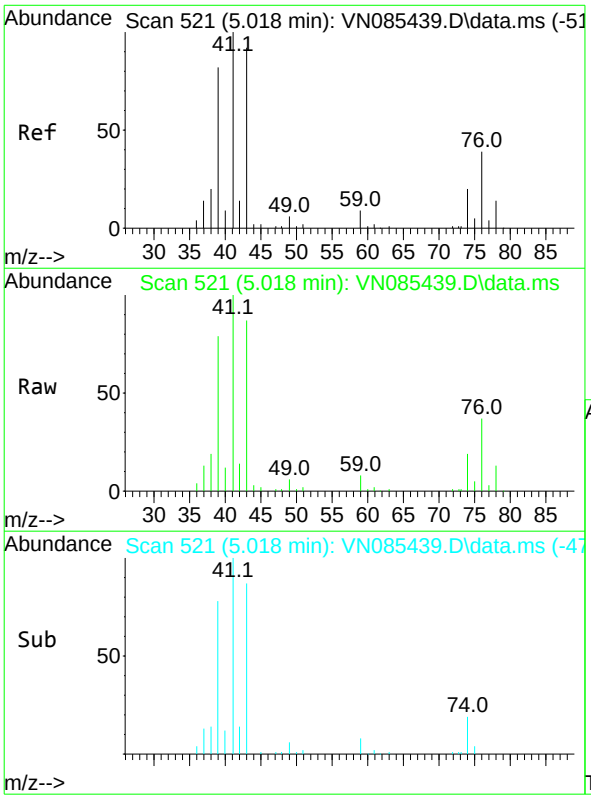
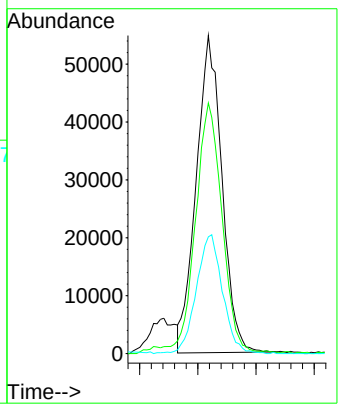
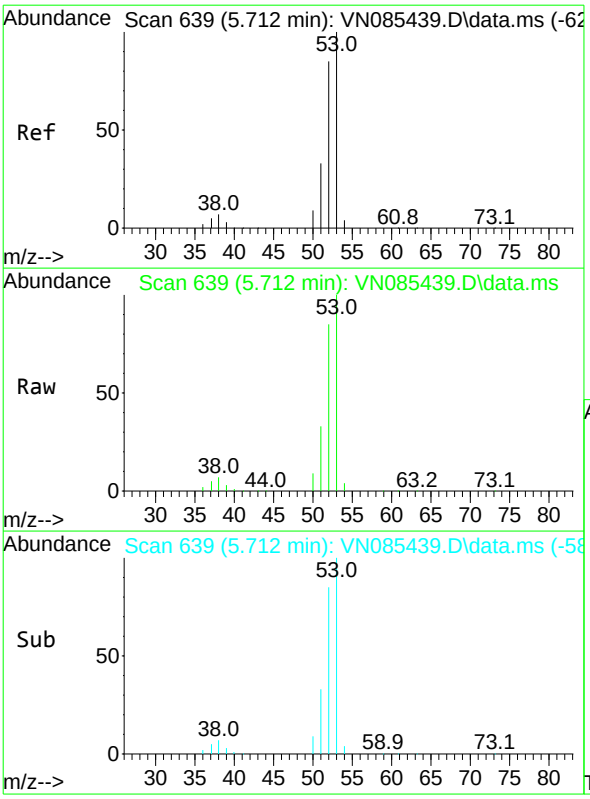


#14
Allyl chloride
Concen: 48.567 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 41 Resp: 168654

Ion	Ratio	Lower	Upper
41	100		
39	80.5	64.4	96.6
76	38.1	30.5	45.7

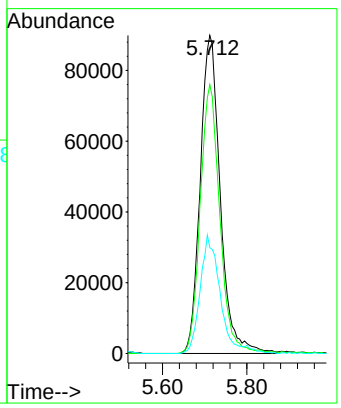




#15
Acrylonitrile
Concen: 253.507 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 53 Resp: 296781

Ion	Ratio	Lower	Upper
53	100		
52	81.9	65.5	98.3
51	37.3	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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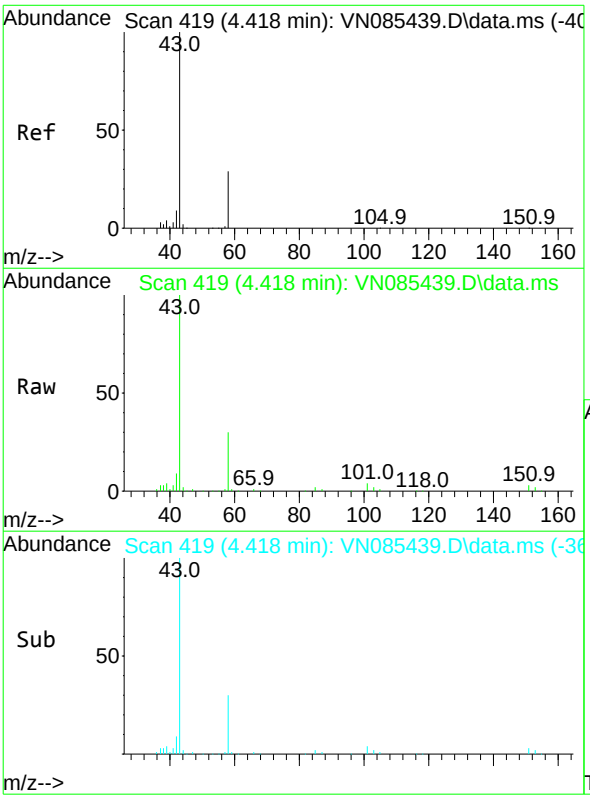
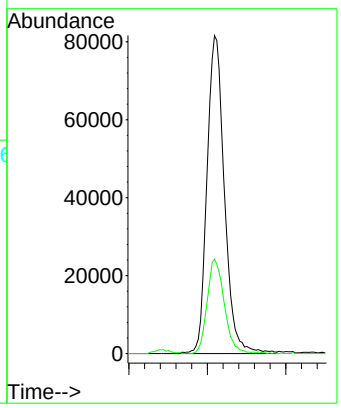
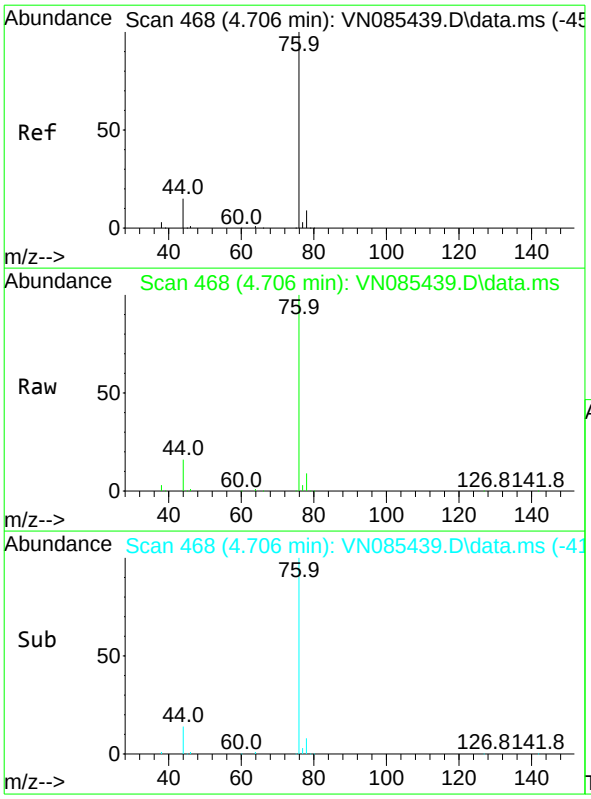


#16
Acetone
Concen: 241.603 ug/l
RT: 4.418 min Scan# 419
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 251271

Ion	Ratio	Lower	Upper
43	100		
58	29.7	23.8	35.6

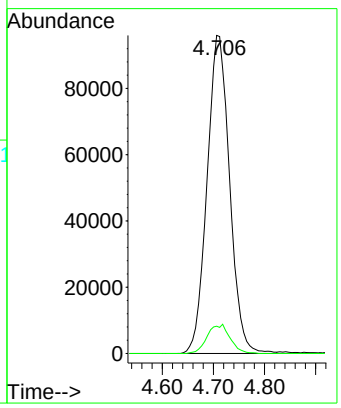




#17
Carbon Disulfide
Concen: 44.710 ug/l
RT: 4.706 min Scan# 46
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 76 Resp: 294604

Ion	Ratio	Lower	Upper
76	100		
78	8.6	6.9	10.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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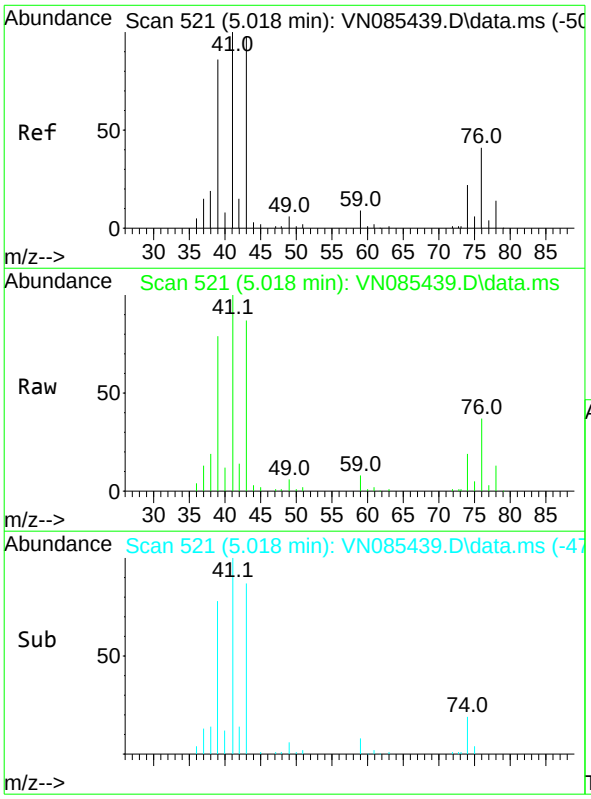
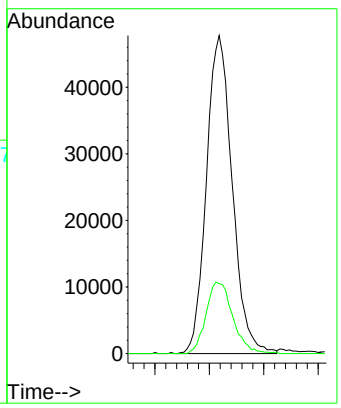
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

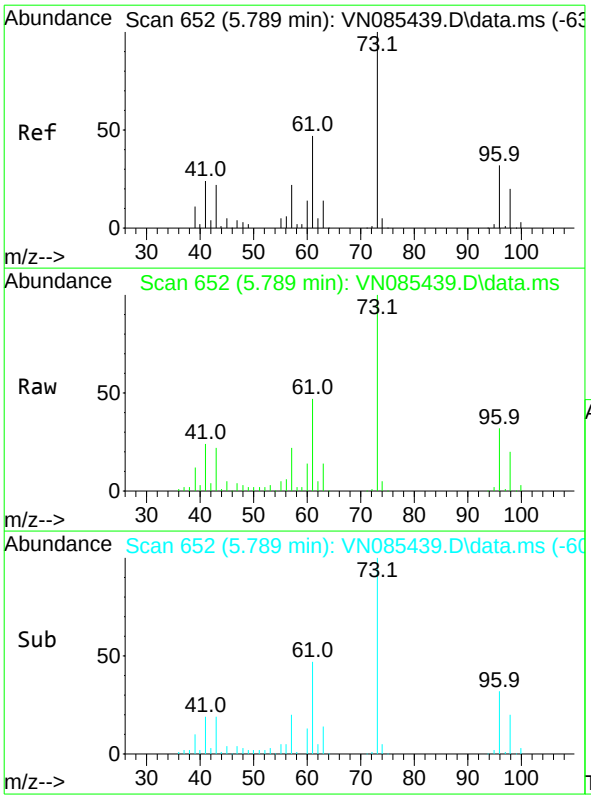


#18
Methyl Acetate
Concen: 49.798 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 157485

Ion	Ratio	Lower	Upper
43	100		
74	23.3	18.6	28.0

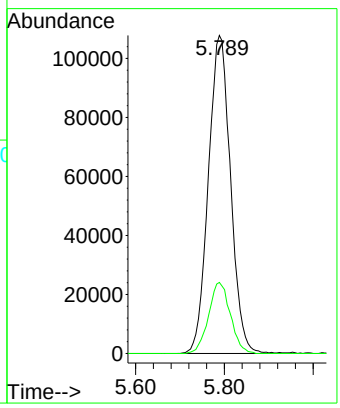




#19
Methyl tert-butyl Ether
Concen: 53.758 ug/l
RT: 5.789 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 73 Resp: 373561

Ion	Ratio	Lower	Upper
73	100		
57	22.3	17.8	26.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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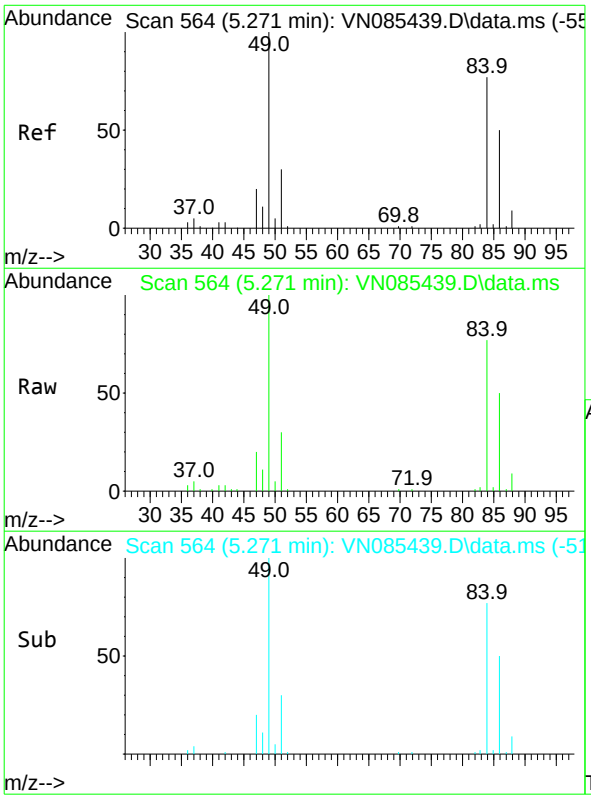
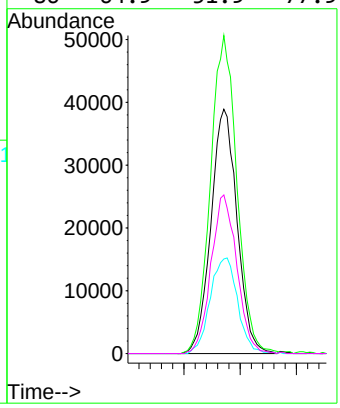
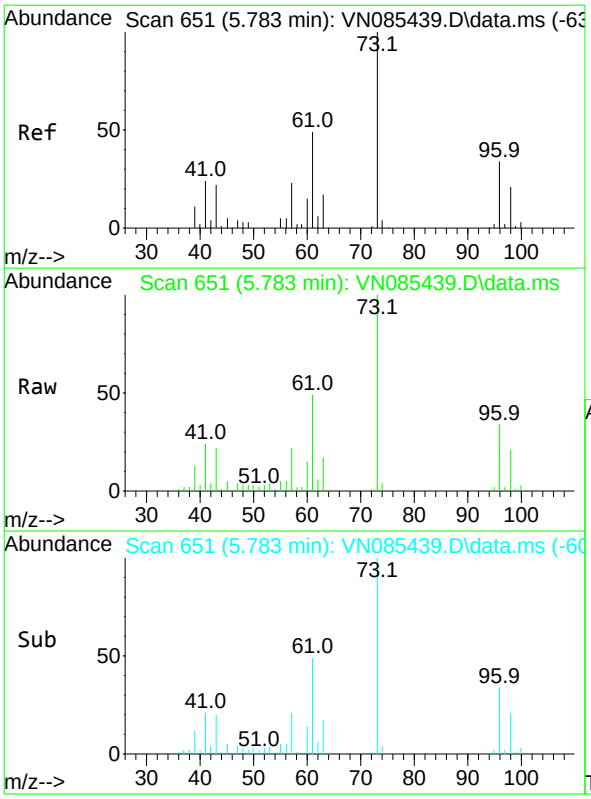


#20
Methylene Chloride
Concen: 48.748 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 84 Resp: 125508

Ion	Ratio	Lower	Upper
84	100		
49	130.1	104.1	156.1
51	38.7	31.0	46.4
86	64.9	51.9	77.9

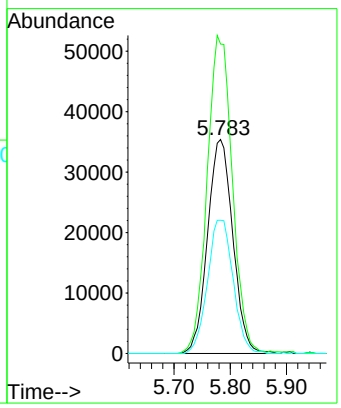




#21
trans-1,2-Dichloroethene
Concen: 48.395 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 96 Resp: 110684

Ion	Ratio	Lower	Upper
96	100		
61	144.6	115.7	173.5
98	62.3	49.8	74.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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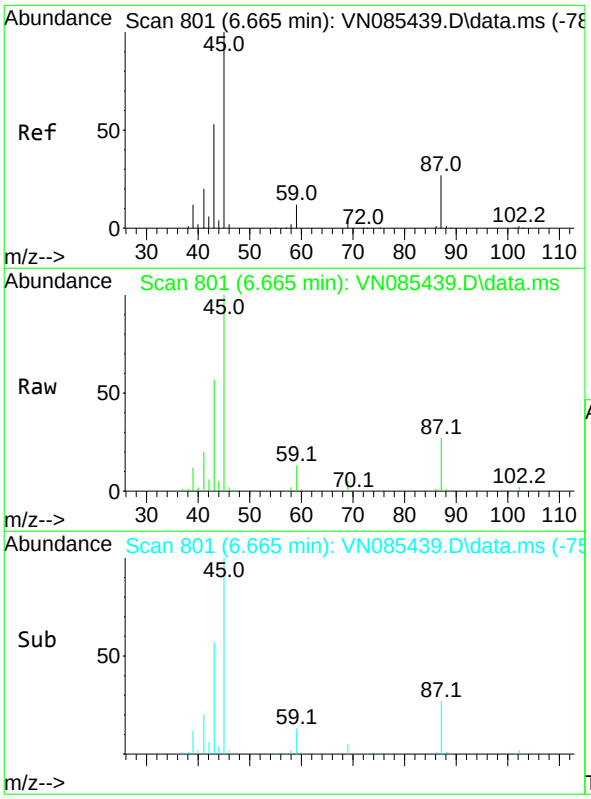
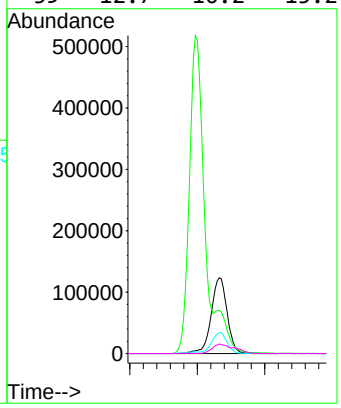
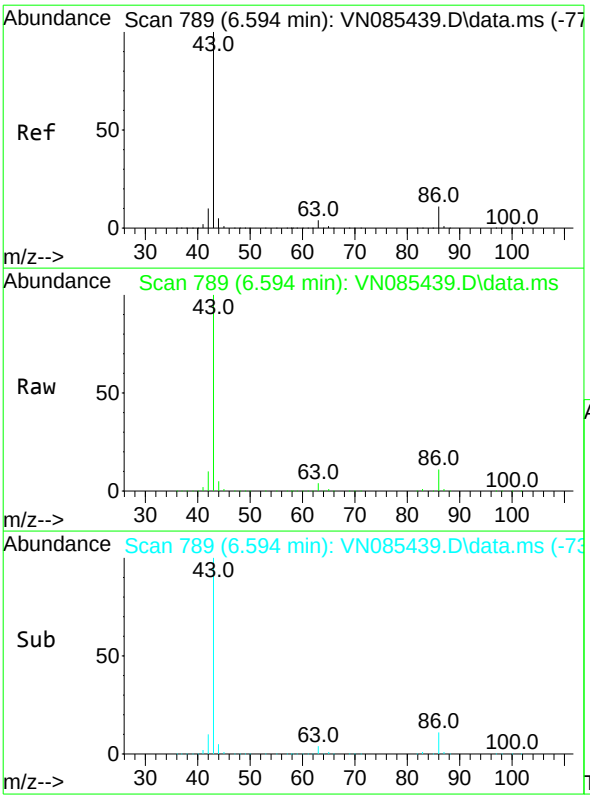


#22
Diisopropyl ether
Concen: 52.707 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 45 Resp: 406253

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

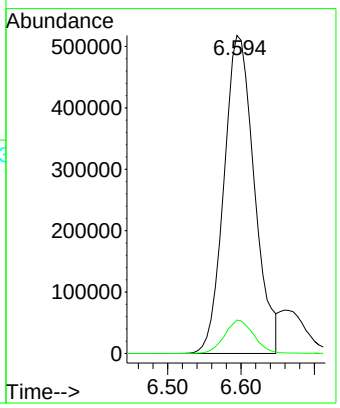




#23
Vinyl Acetate
Concen: 275.471 ug/l
RT: 6.594 min Scan# 78
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 1491031

Ion	Ratio	Lower	Upper
43	100		
86	10.5	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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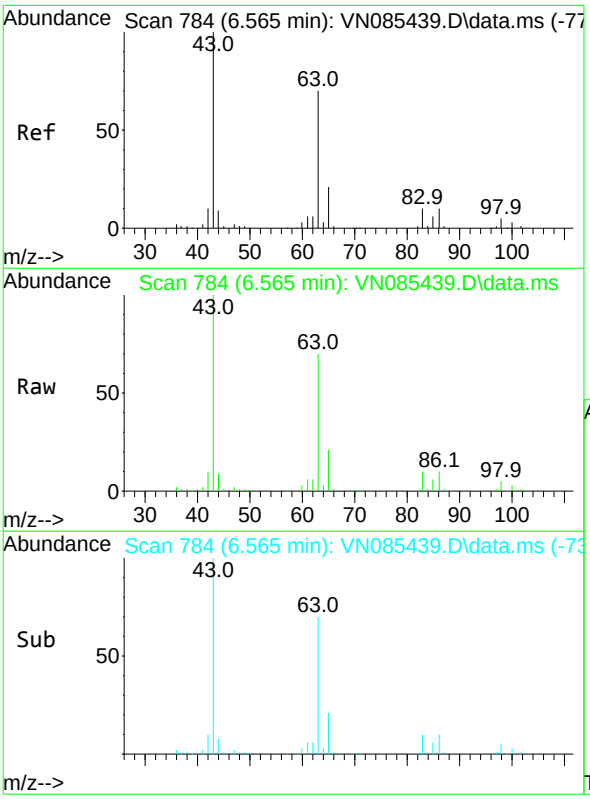
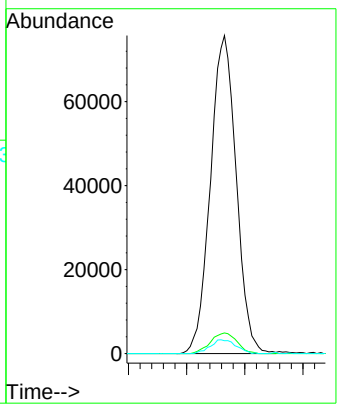
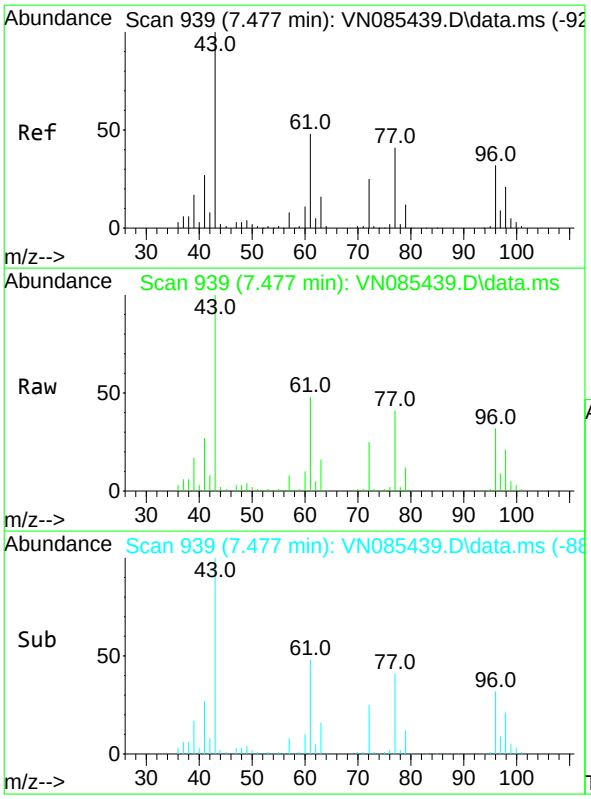


#24
1,1-Dichloroethane
Concen: 49.648 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 63 Resp: 233336

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.8
100	4.0	2.0	6.0





#25
2-Butanone
Concen: 253.815 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 388457

Ion	Ratio	Lower	Upper
43	100		
72	25.3	20.2	30.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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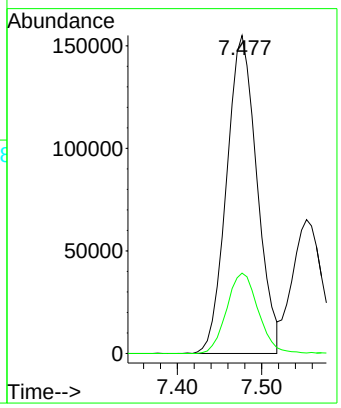
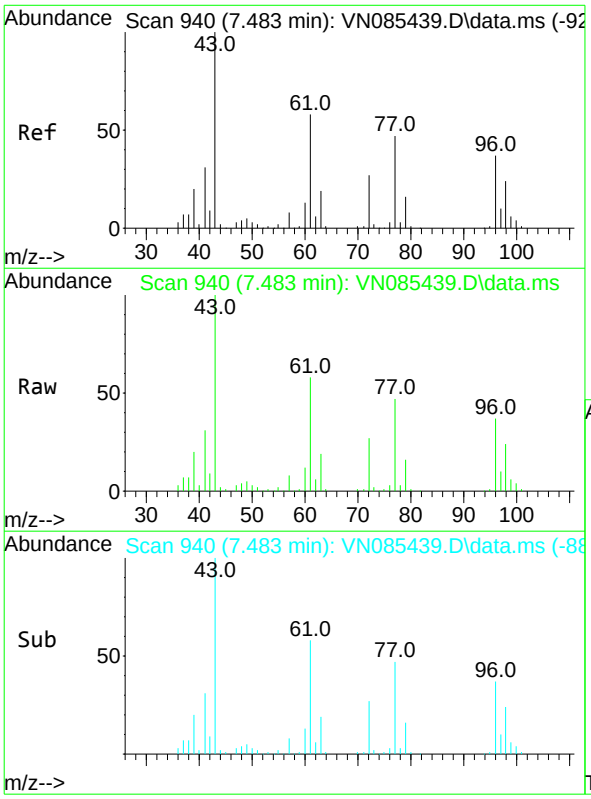
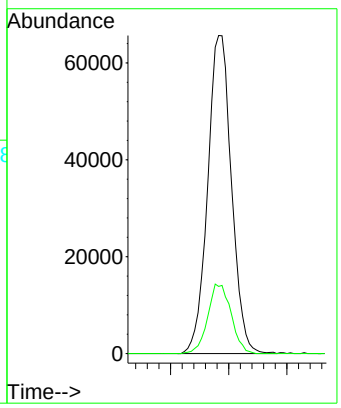


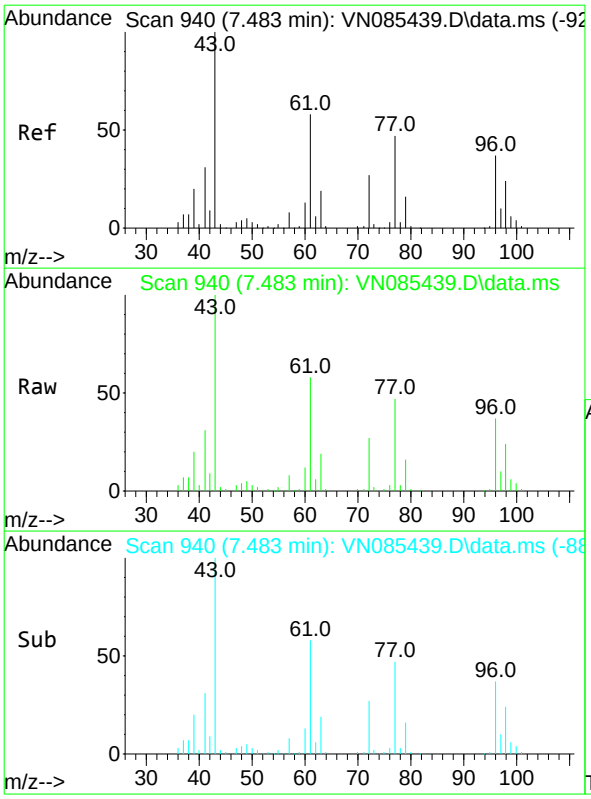


#26
2,2-Dichloropropane
Concen: 49.106 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 77 Resp: 186591

Ion	Ratio	Lower	Upper
77	100		
97	21.4	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 50.571 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 96 Resp: 136229

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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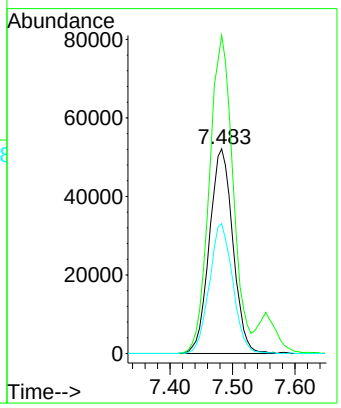
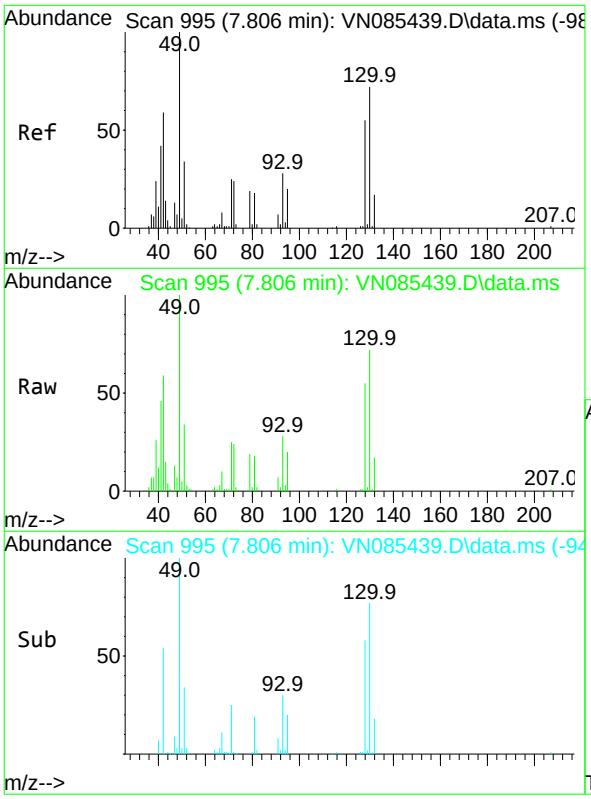
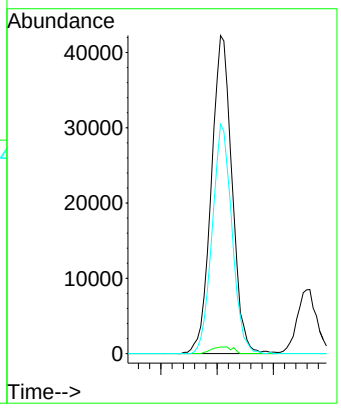


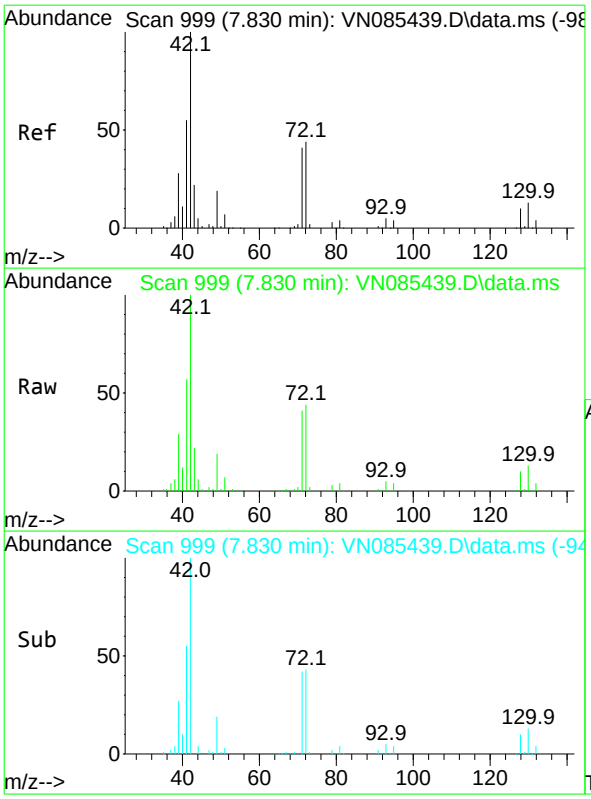


#28
Bromochloromethane
Concen: 49.461 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 49 Resp: 108148

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

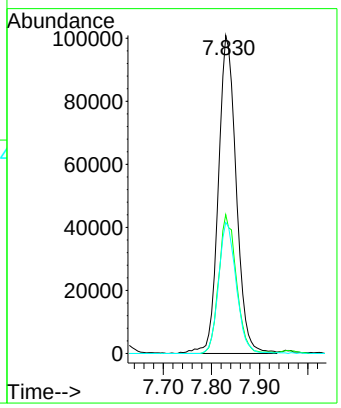




#29
Tetrahydrofuran
Concen: 267.624 ug/l
RT: 7.830 min Scan# 99
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 42 Resp: 259683

Ion	Ratio	Lower	Upper
42	100		
72	42.7	34.2	51.2
71	40.6	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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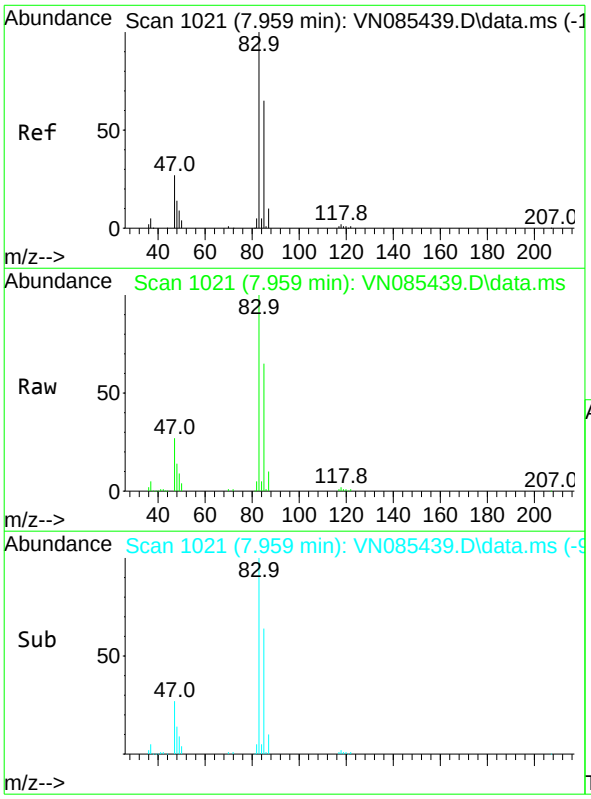
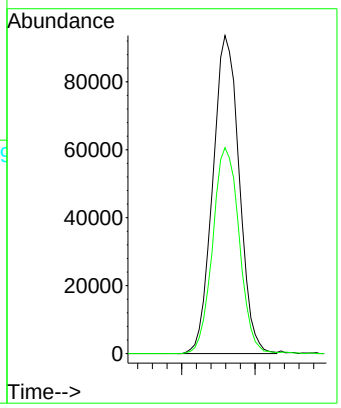
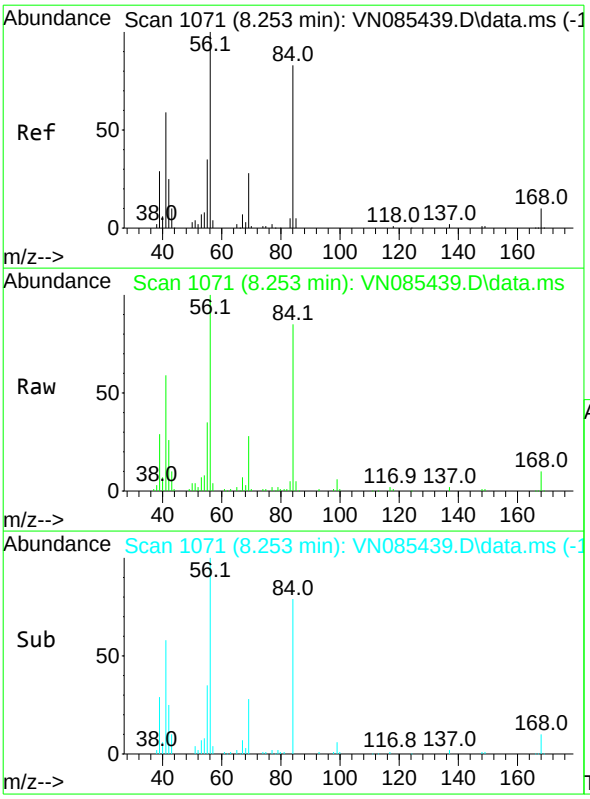


#30
Chloroform
Concen: 48.229 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 234271

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.8	77.6

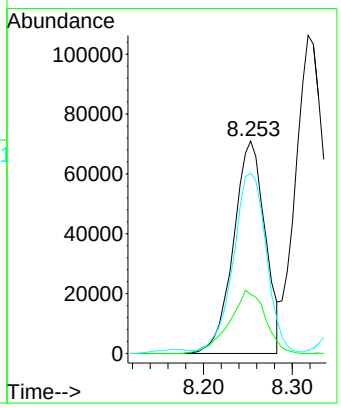




#31
Cyclohexane
Concen: 42.984 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 56 Resp: 175588

Ion	Ratio	Lower	Upper
56	100		
69	27.8	22.2	33.4
84	83.0	66.4	99.6



Instrument :
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VSTDICCC050

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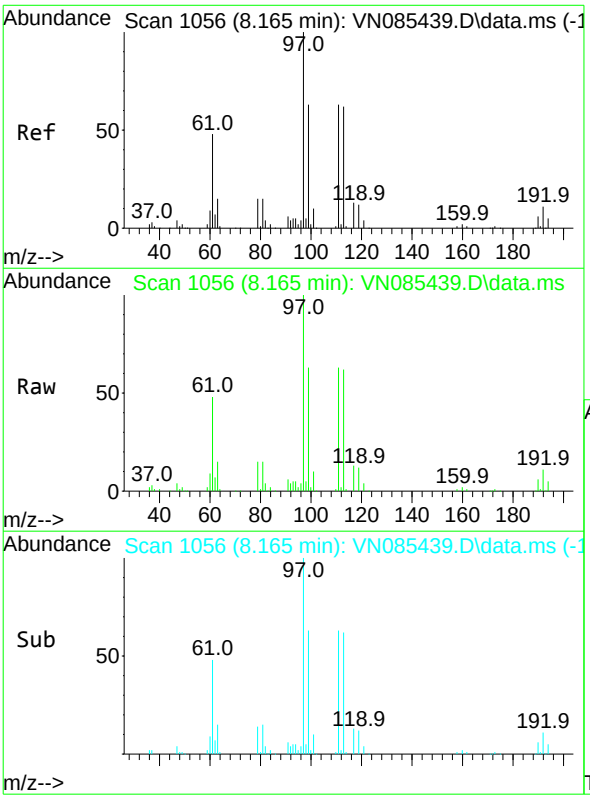
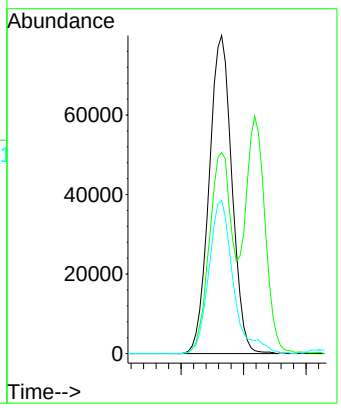
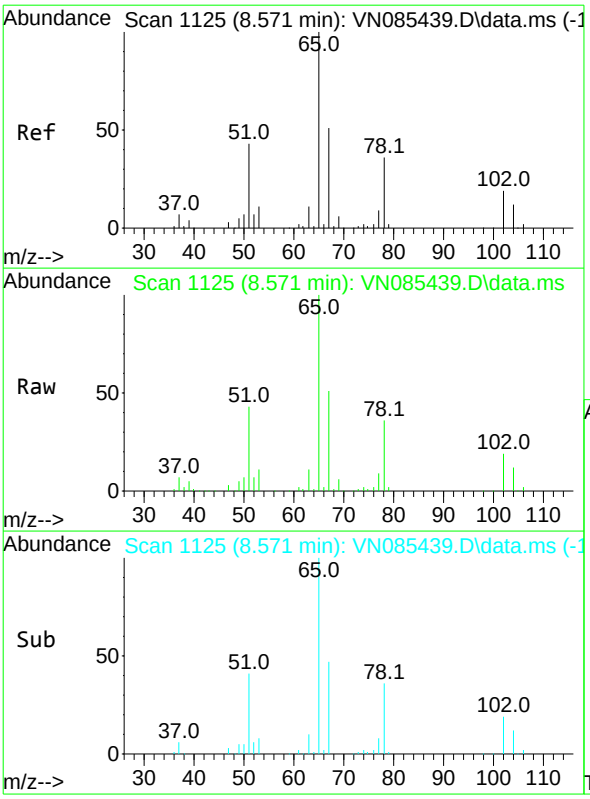


#32
1,1,1-Trichloroethane
Concen: 47.547 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 97 Resp: 202590

Ion	Ratio	Lower	Upper
97	100		
99	62.2	49.8	74.6
61	51.8	41.4	62.2

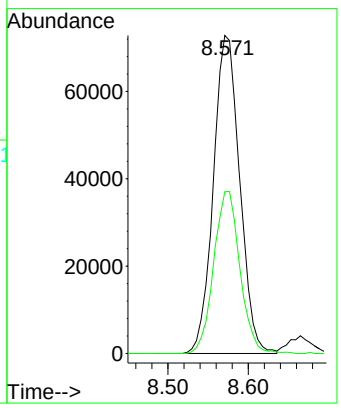




#33
1,2-Dichloroethane-d4
Concen: 51.500 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 65 Resp: 165768

Ion	Ratio	Lower	Upper
65	100		
67	50.8	0.0	101.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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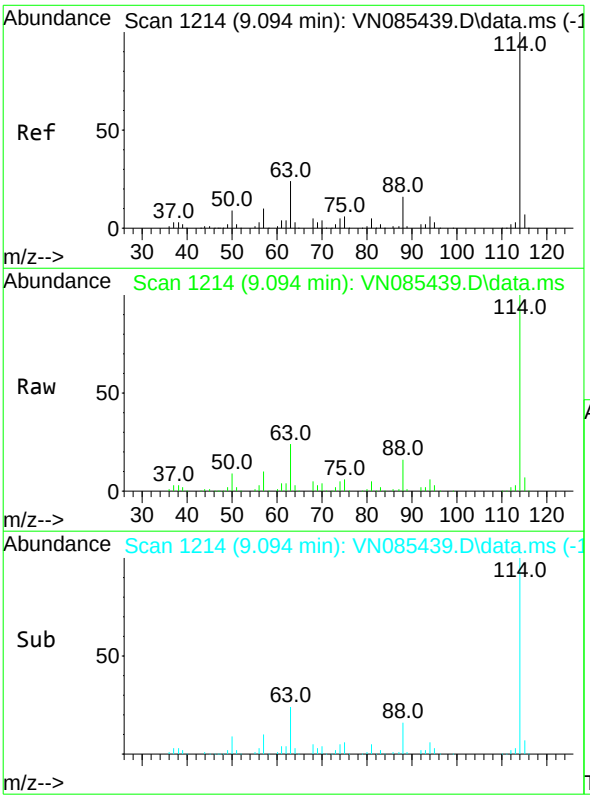
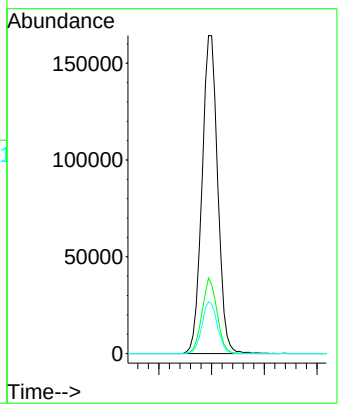
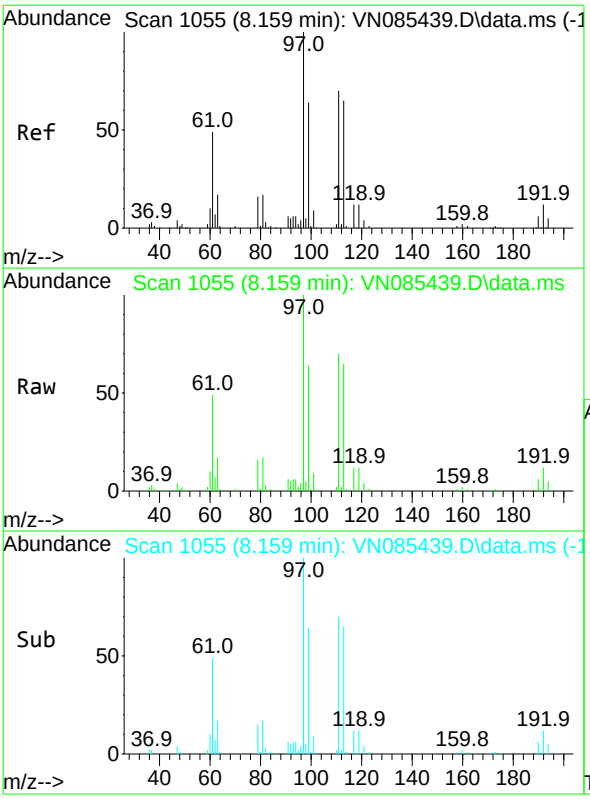


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:114 Resp: 339872

Ion	Ratio	Lower	Upper
114	100		
63	23.8	0.0	47.6
88	16.3	0.0	32.6





#35
Dibromofluoromethane
Concen: 51.552 ug/l
RT: 8.159 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion:113 Resp: 121554

Ion	Ratio	Lower	Upper
113	100		
111	103.4	82.7	124.1
192	17.9	14.3	21.5

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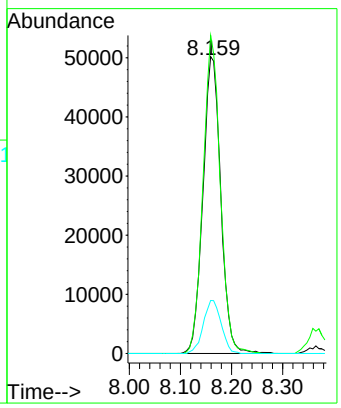
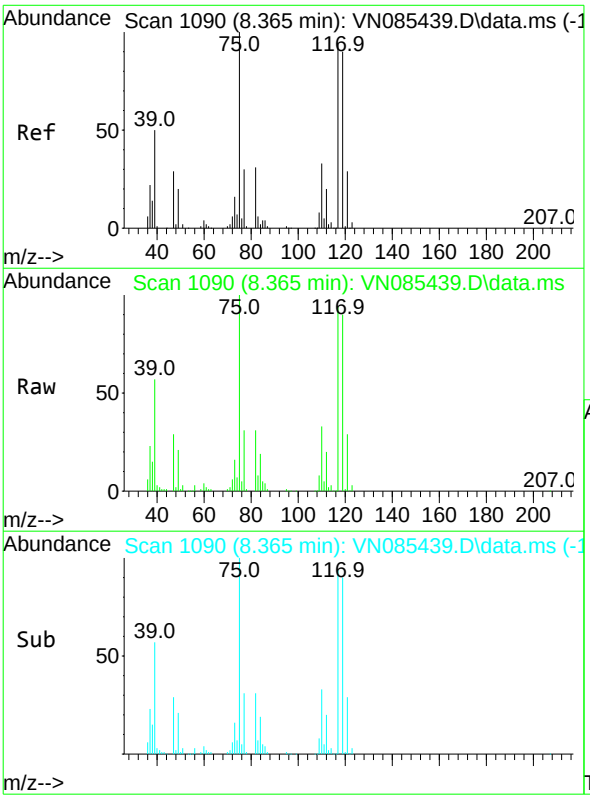
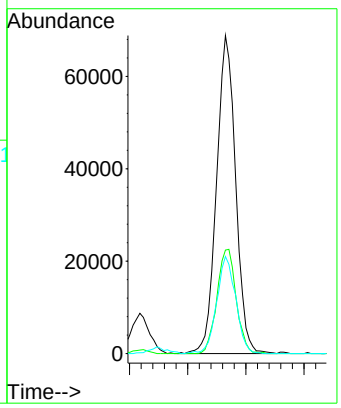


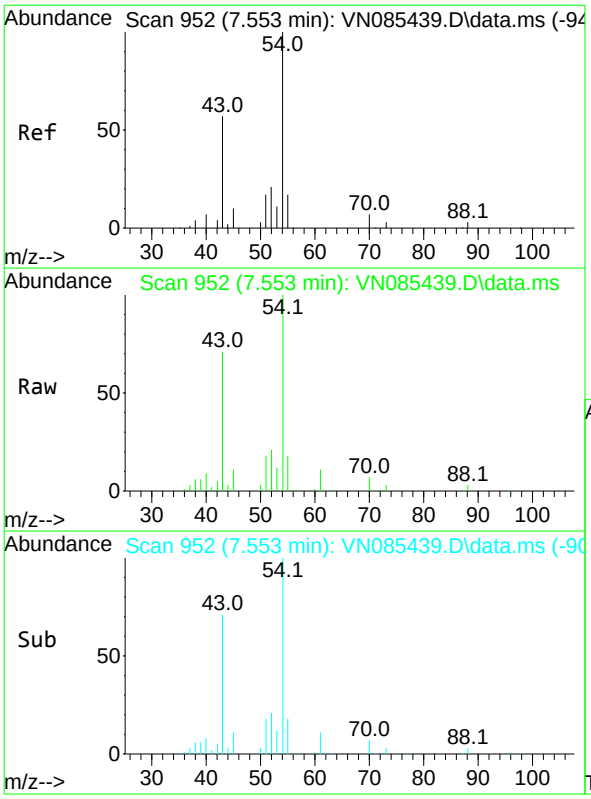


#36
1,1-Dichloropropene
Concen: 47.453 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 157031

Ion	Ratio	Lower	Upper
75	100		
110	33.0	16.5	49.5
77	30.5	24.4	36.6

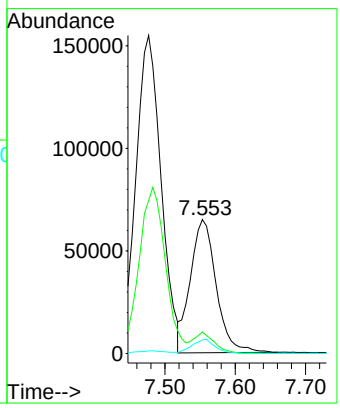




#37
Ethyl Acetate
Concen: 49.658 ug/l
RT: 7.553 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 165866

Ion	Ratio	Lower	Upper
43	100		
61	13.6	10.9	16.3
70	9.4	7.5	11.3



Instrument :
MSVOA_N
ClientSampleId :
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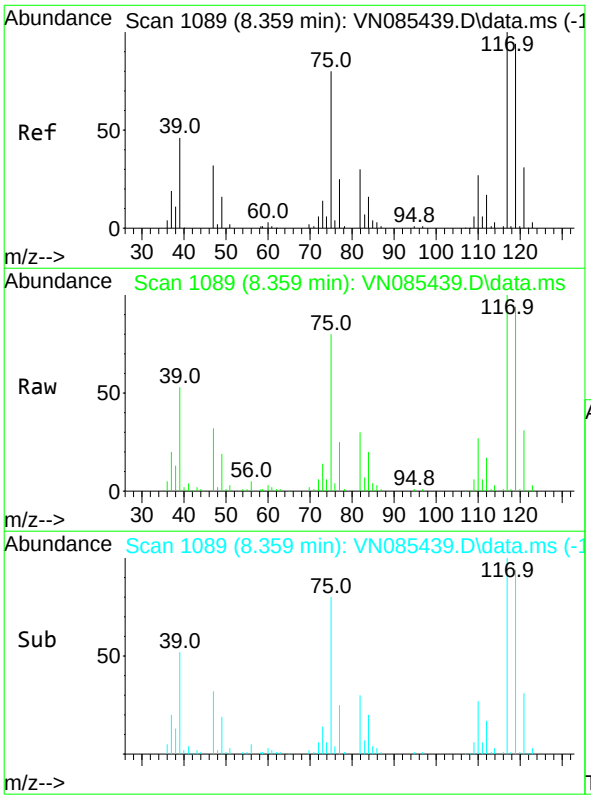
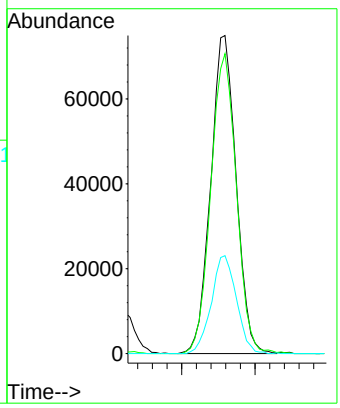
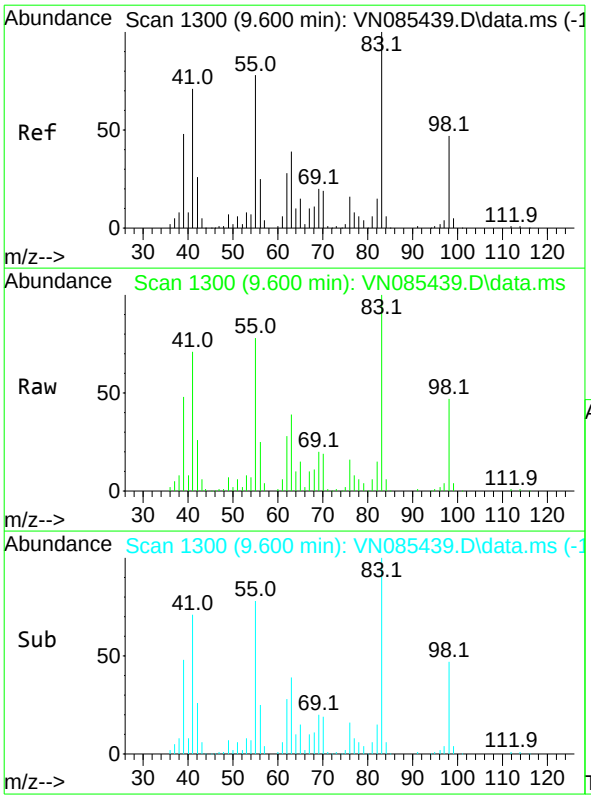


#38
Carbon Tetrachloride
Concen: 47.564 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:117 Resp: 180199

Ion	Ratio	Lower	Upper
117	100		
119	94.3	75.4	113.2
121	30.8	24.6	37.0

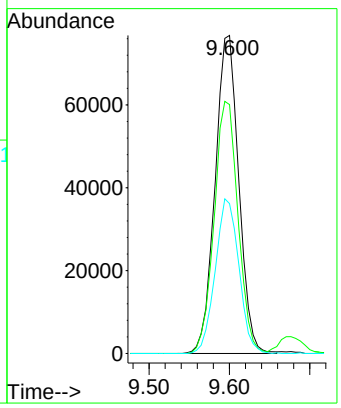




#39
Methylcyclohexane
Concen: 50.562 ug/l
RT: 9.600 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 157234

Ion	Ratio	Lower	Upper
83	100		
55	78.3	62.6	94.0
98	47.1	37.7	56.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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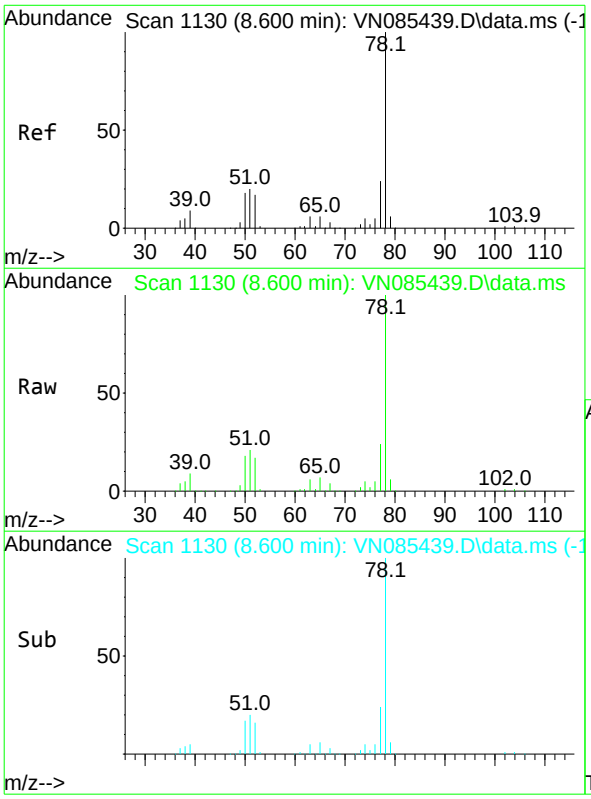
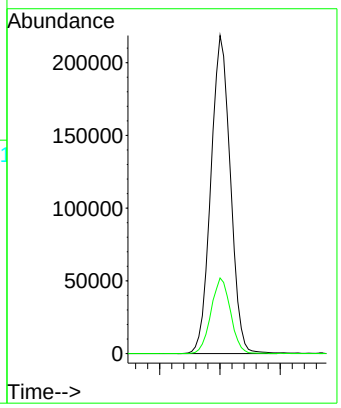
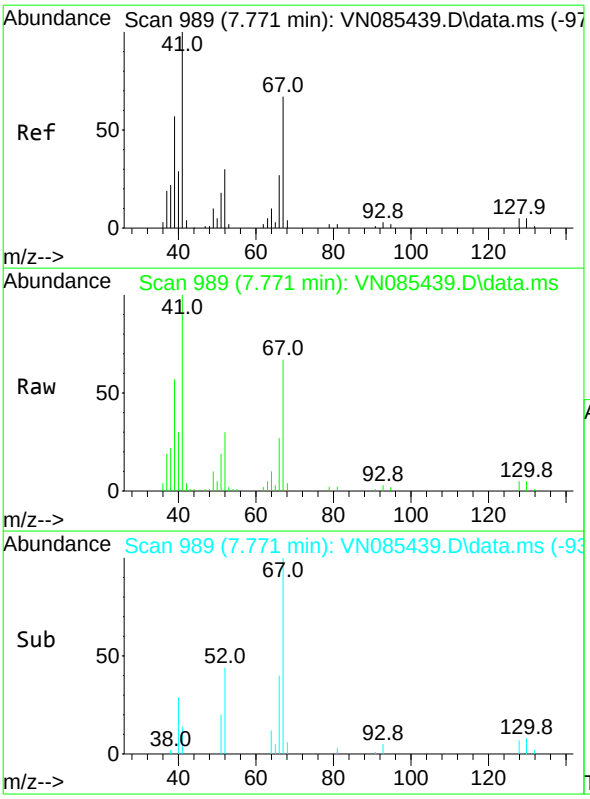


#40
Benzene
Concen: 49.542 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 78 Resp: 492606

Ion	Ratio	Lower	Upper
78	100		
77	23.8	19.0	28.6

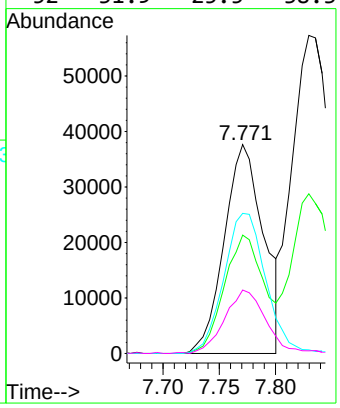




#41
Methacrylonitrile
Concen: 52.775 ug/l
RT: 7.771 min Scan# 98
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 41 Resp: 91711

Ion	Ratio	Lower	Upper
41	100		
39	57.5	46.0	69.0
67	71.8	57.4	86.2
52	31.9	25.5	38.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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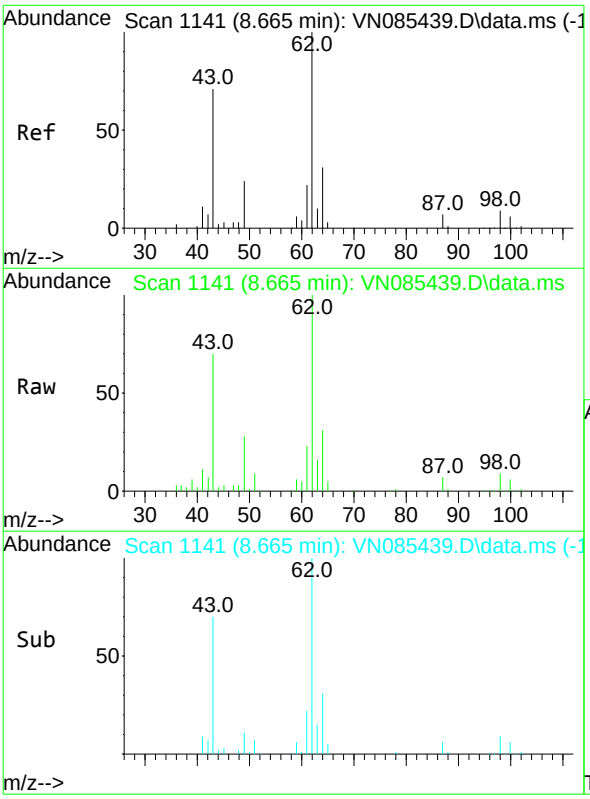
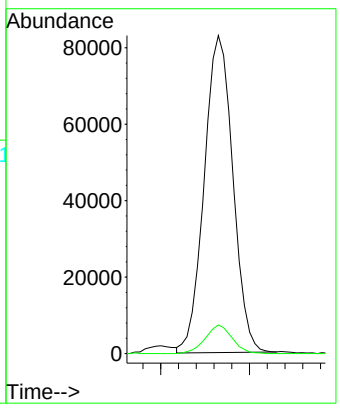
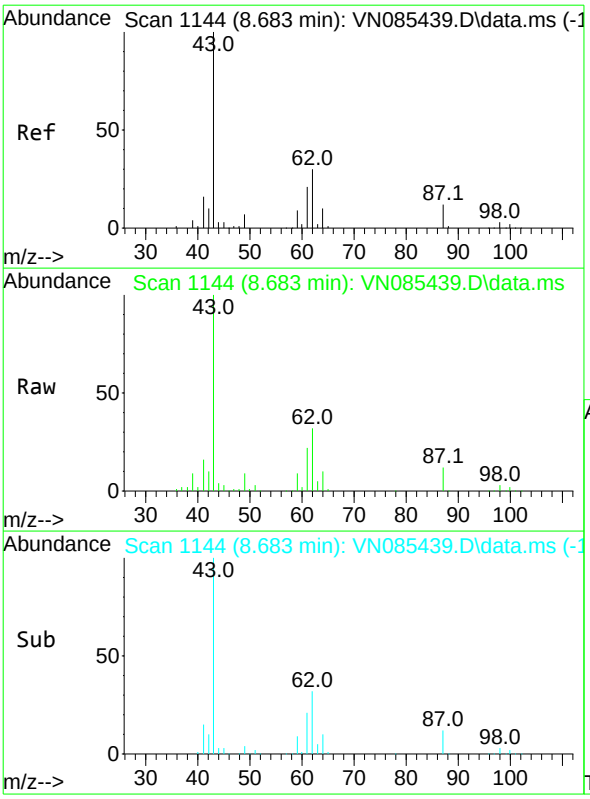


#42
1,2-Dichloroethane
Concen: 49.685 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 62 Resp: 186065

Ion	Ratio	Lower	Upper
62	100		
98	8.5	0.0	17.0

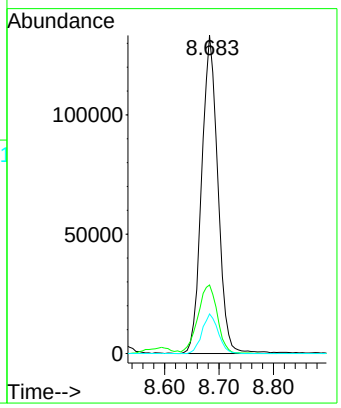




#43
Isopropyl Acetate
Concen: 51.611 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 276228

Ion	Ratio	Lower	Upper
43	100		
61	25.9	20.7	31.1
87	12.3	9.8	14.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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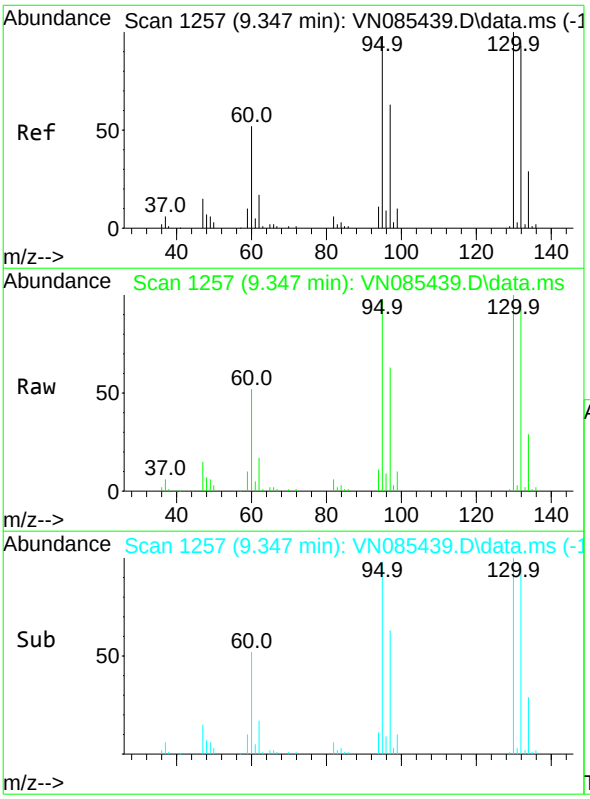
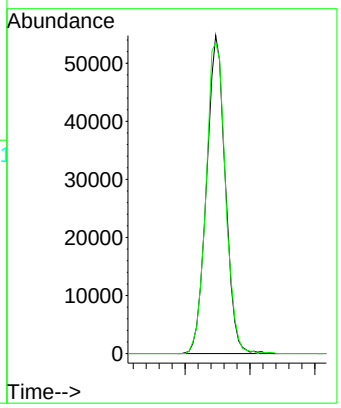
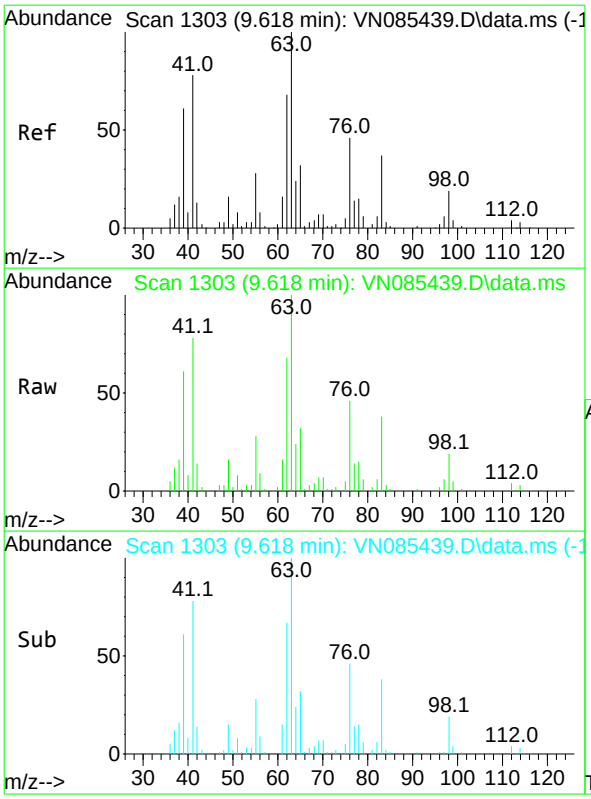


#44
Trichloroethene
Concen: 47.506 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:130 Resp: 109953

Ion	Ratio	Lower	Upper
130	100		
95	97.9	0.0	195.8

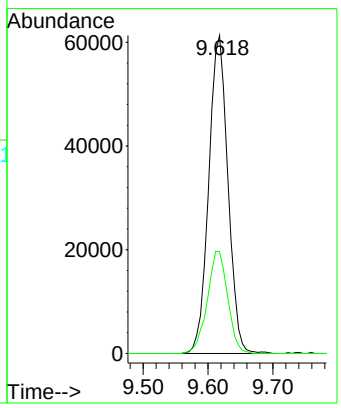




#45
1,2-Dichloropropane
Concen: 49.644 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 63 Resp: 126084

Ion	Ratio	Lower	Upper
63	100		
65	32.0	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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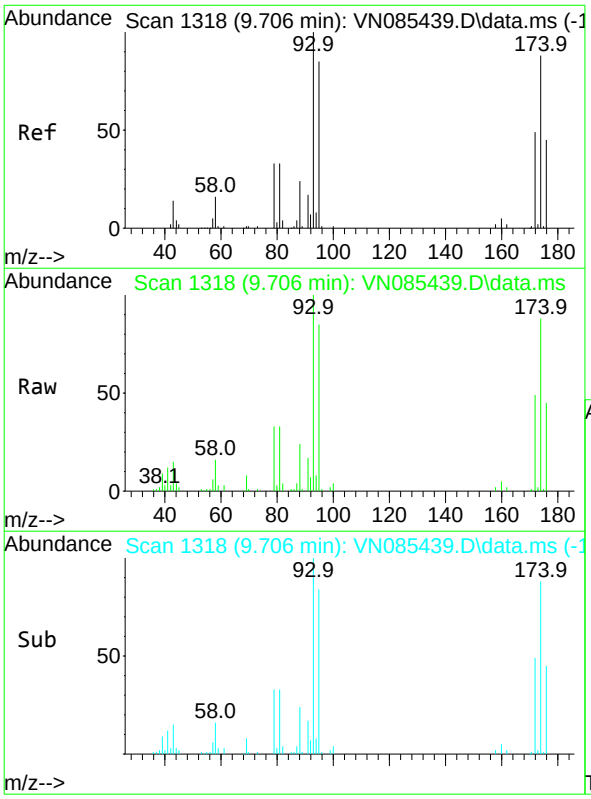
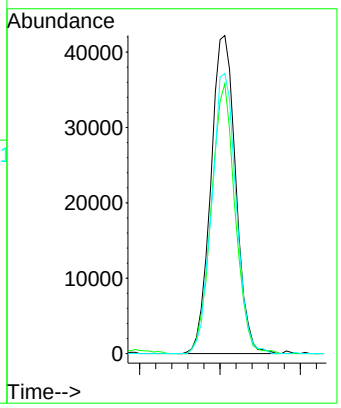
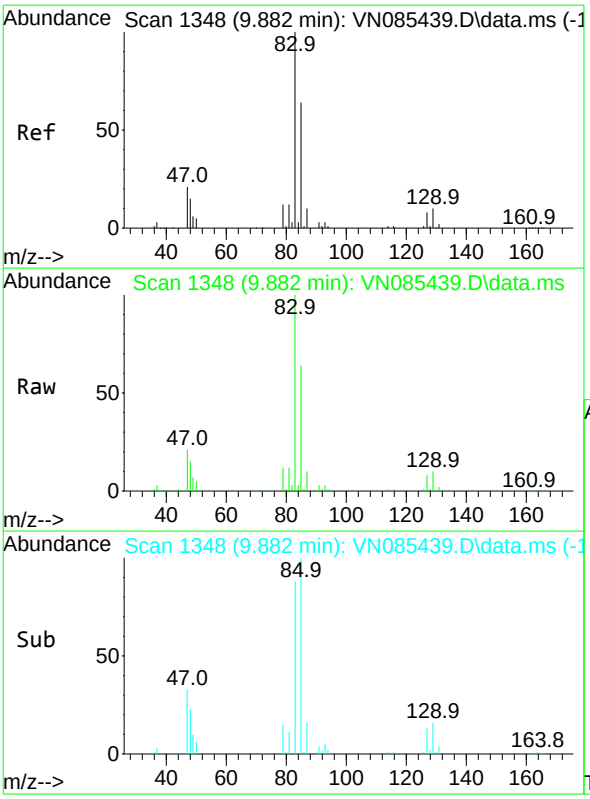


#46
Dibromomethane
Concen: 49.476 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 93 Resp: 90670

Ion	Ratio	Lower	Upper
93	100		
95	80.9	64.7	97.1
174	86.2	69.0	103.4

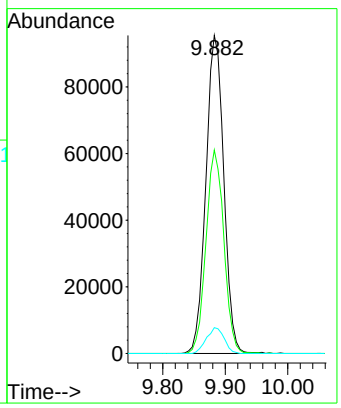




#47
Bromodichloromethane
Concen: 50.867 ug/l
RT: 9.882 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 189915

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.2	76.8
127	8.1	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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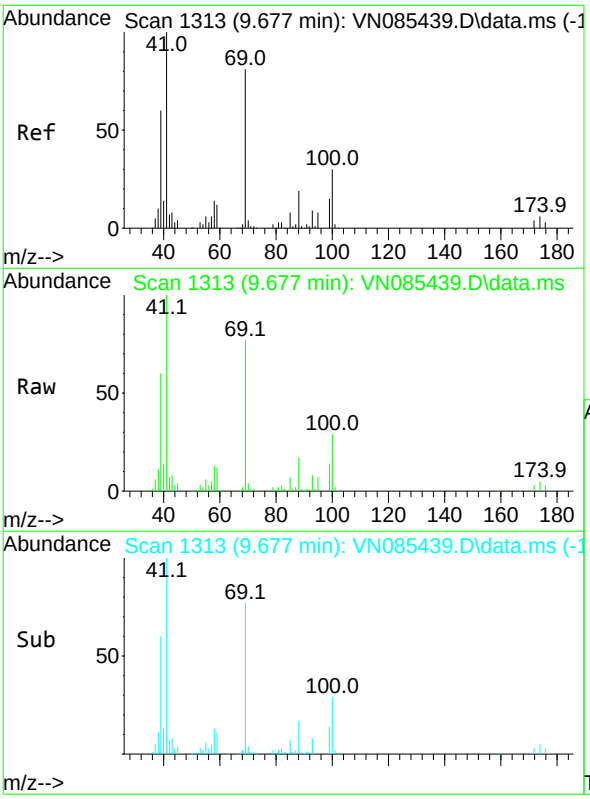
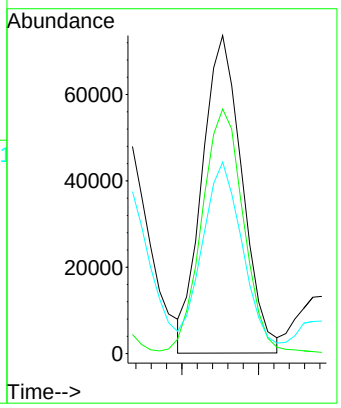
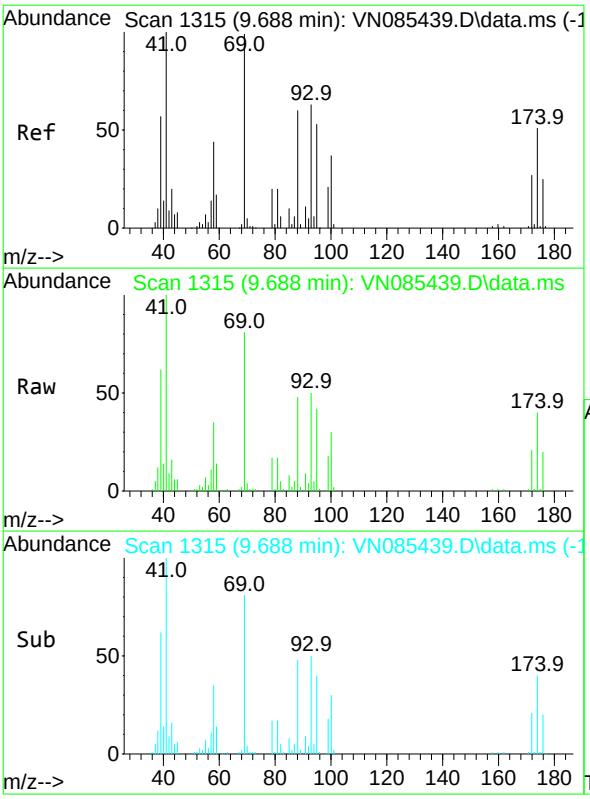


#48
Methyl methacrylate
Concen: 55.385 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 41 Resp: 133399

Ion	Ratio	Lower	Upper
41	100		
69	80.9	64.7	97.1
39	61.3	49.0	73.6





#49
1,4-Dioxane
Concen: 1061.334 ug/l
RT: 9.688 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 88 Resp: 43048

Ion	Ratio	Lower	Upper
88	100		
43	33.2	26.6	39.8
58	74.4	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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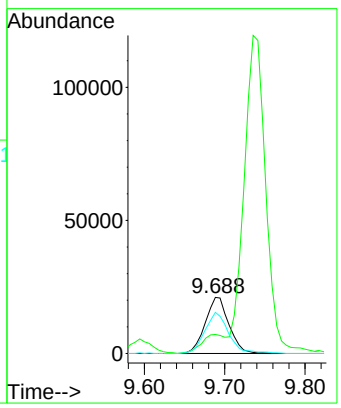
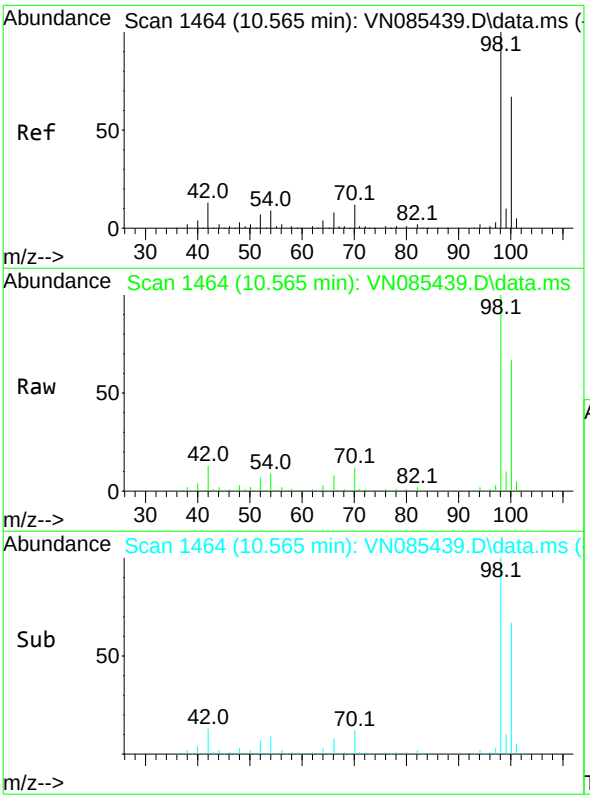
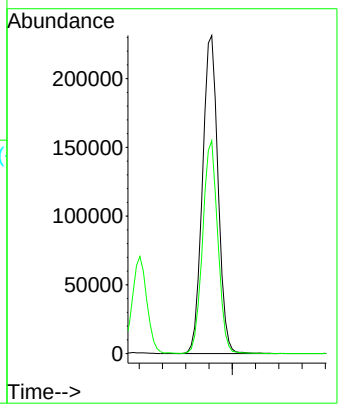


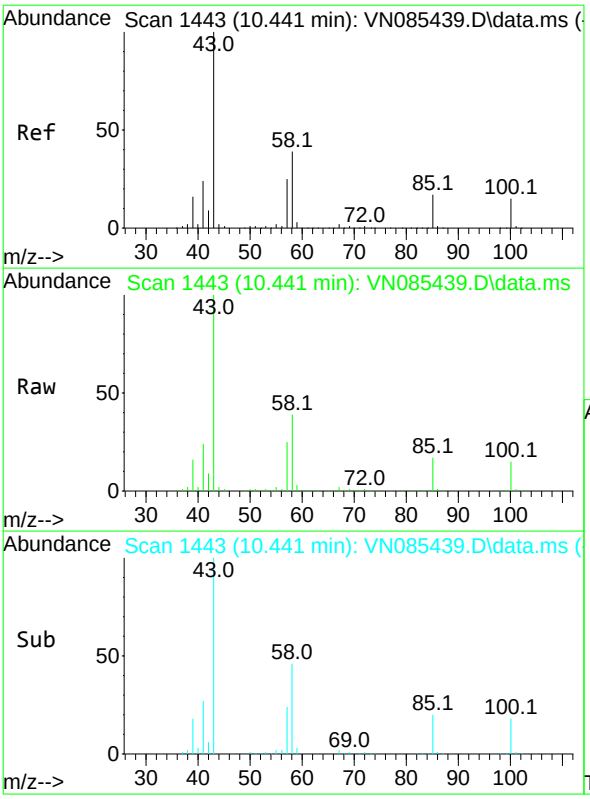


#50
Toluene-d8
Concen: 51.411 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 98 Resp: 430698

Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.2	78.4

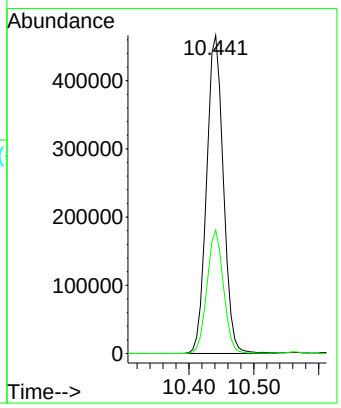




#51
4-Methyl-2-Pentanone
Concen: 269.403 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 836707

Ion	Ratio	Lower	Upper
43	100		
58	38.1	30.5	45.7



Instrument :
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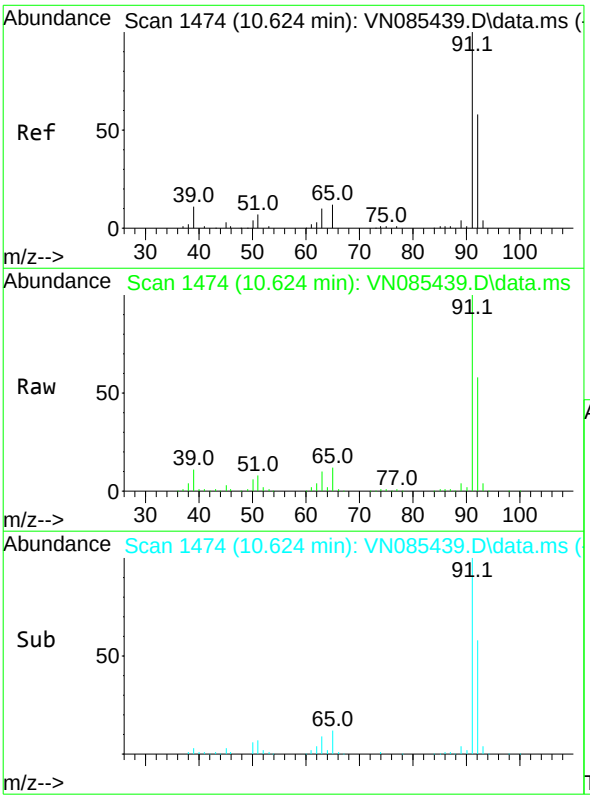
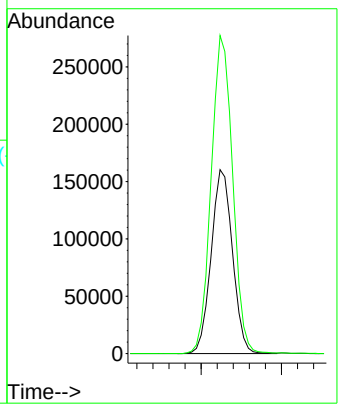
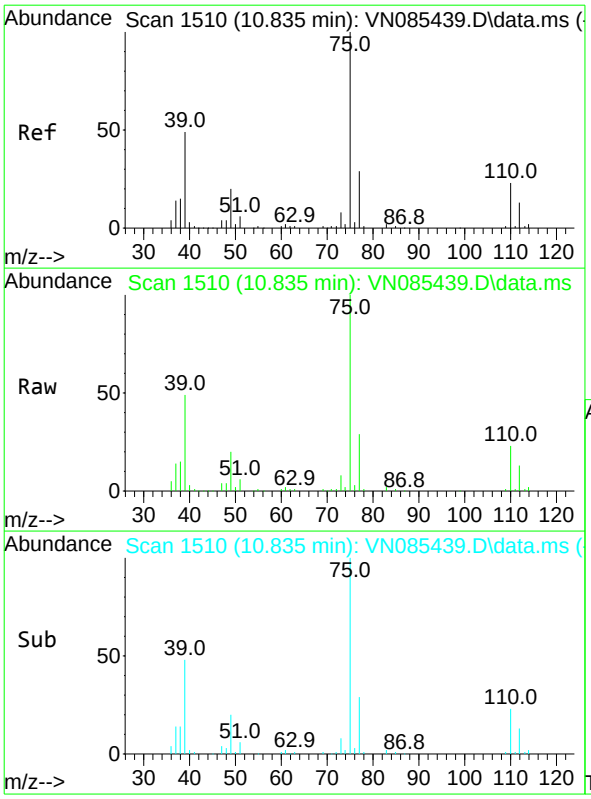


#52
Toluene
Concen: 51.341 ug/l
RT: 10.624 min Scan# 1474
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 92 Resp: 295792

Ion	Ratio	Lower	Upper
92	100		
91	174.0	139.2	208.8

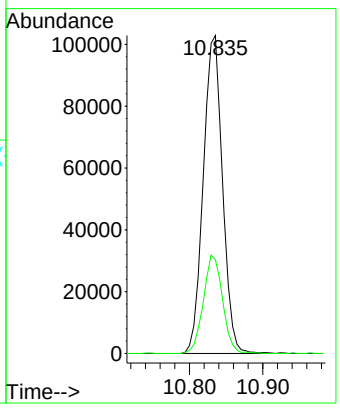




#53
t-1,3-Dichloropropene
Concen: 53.125 ug/l
RT: 10.835 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 187439

Ion	Ratio	Lower	Upper
75	100		
77	29.4	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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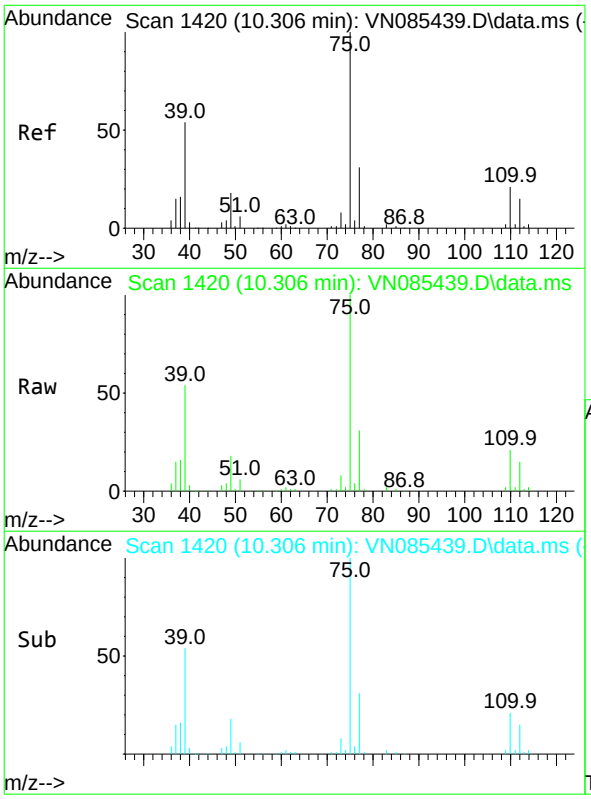
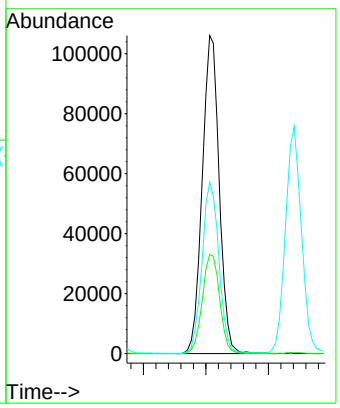
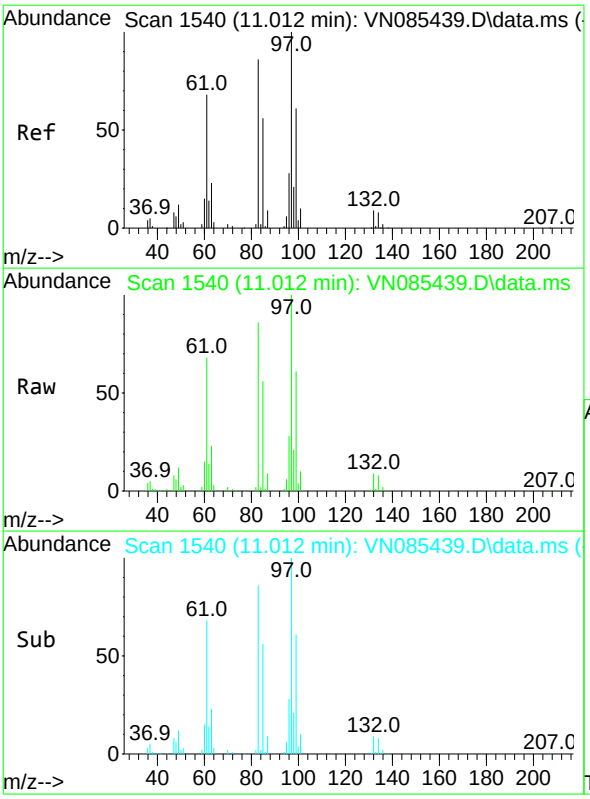


#54
cis-1,3-Dichloropropene
Concen: 53.006 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 199771

Ion	Ratio	Lower	Upper
75	100		
77	31.2	25.0	37.4
39	53.9	43.1	64.7

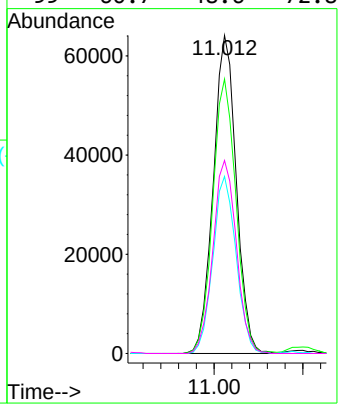




#55
1,1,2-Trichloroethane
Concen: 50.641 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 97 Resp: 115462

Ion	Ratio	Lower	Upper
97	100		
83	86.3	69.0	103.6
85	55.7	44.6	66.8
99	60.7	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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Reviewed By :John Carlone 01/15/2025
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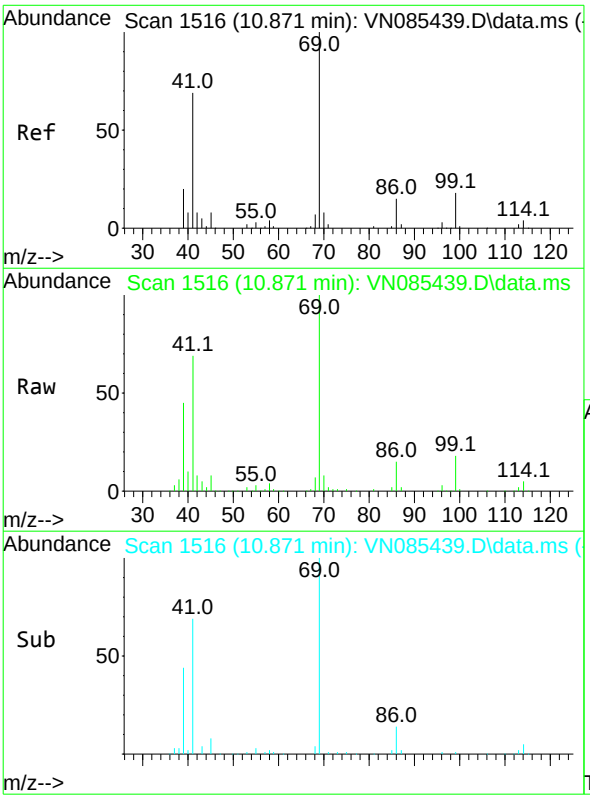
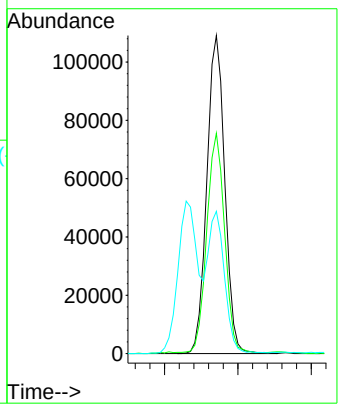
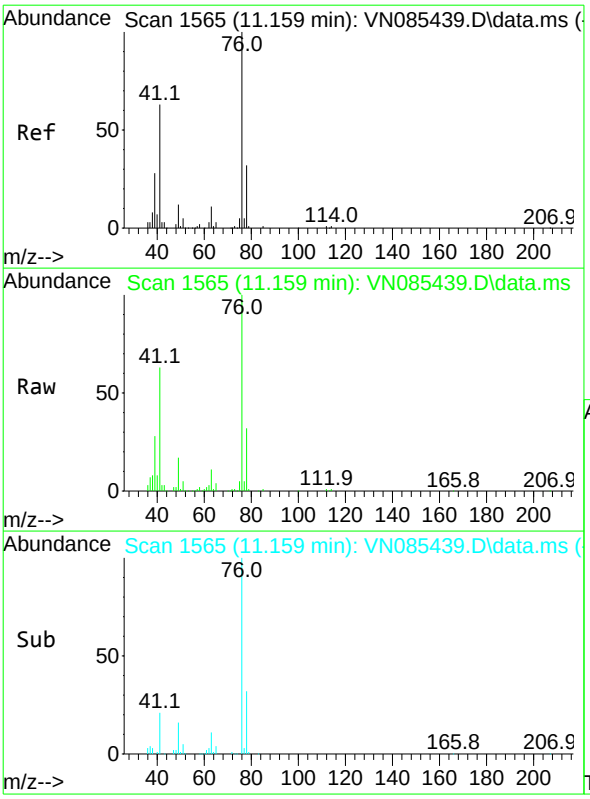


#56
Ethyl methacrylate
Concen: 48.182 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 69 Resp: 184775

Ion	Ratio	Lower	Upper
69	100		
41	68.3	54.6	82.0
39	40.5	32.4	48.6

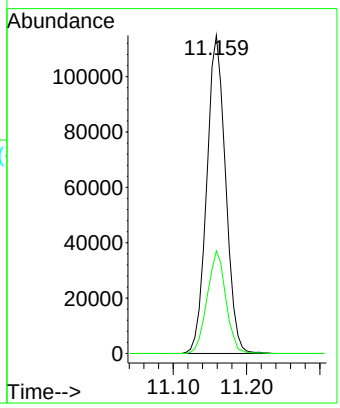




#57
1,3-Dichloropropane
Concen: 51.606 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 76 Resp: 204590

Ion	Ratio	Lower	Upper
76	100		
78	32.0	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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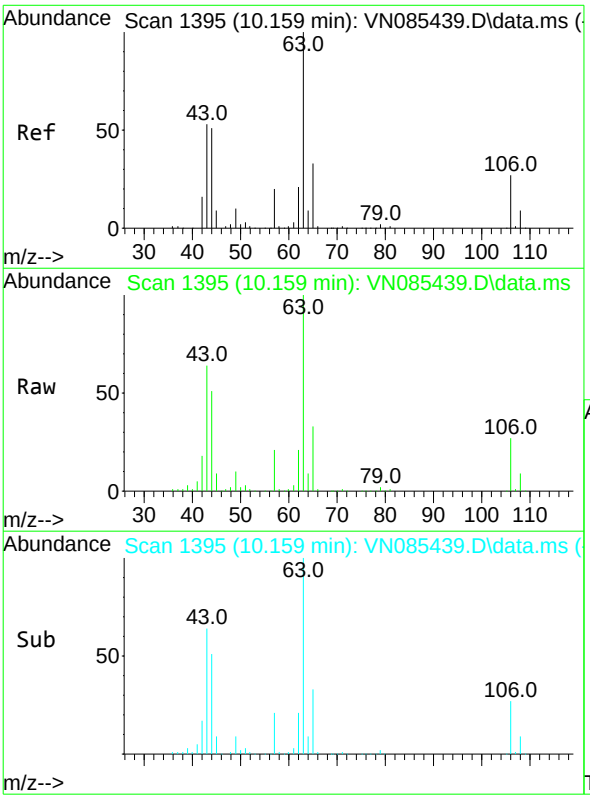
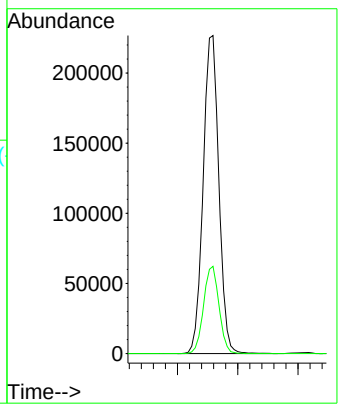
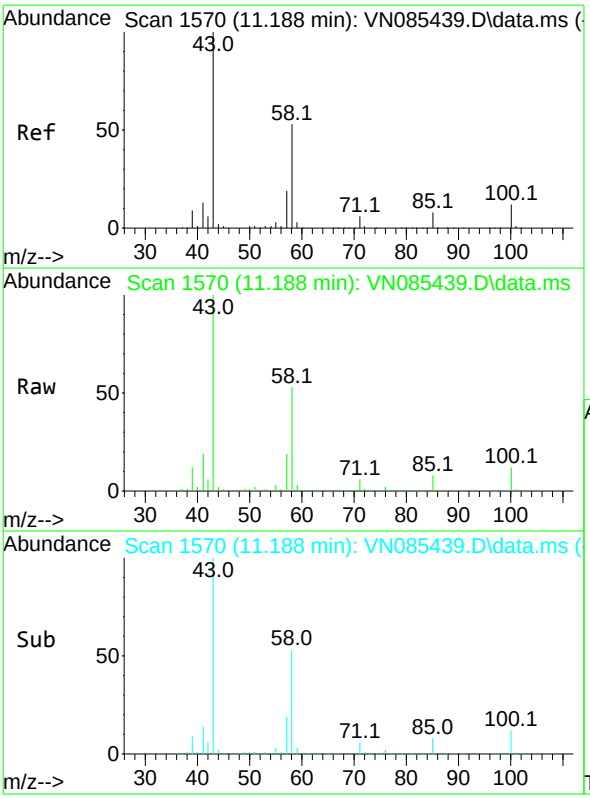


#58
2-Chloroethyl Vinyl ether
Concen: 283.088 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 63 Resp: 409594

Ion	Ratio	Lower	Upper
63	100		
106	27.0	21.6	32.4

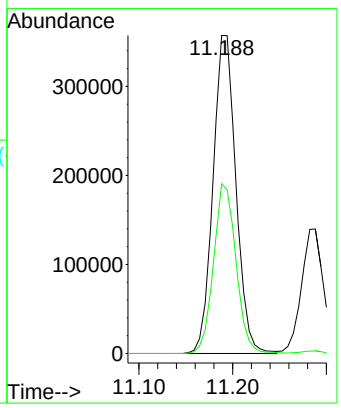




#59
2-Hexanone
Concen: 277.643 ug/l
RT: 11.188 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 606740

Ion	Ratio	Lower	Upper
43	100		
58	52.4	26.2	78.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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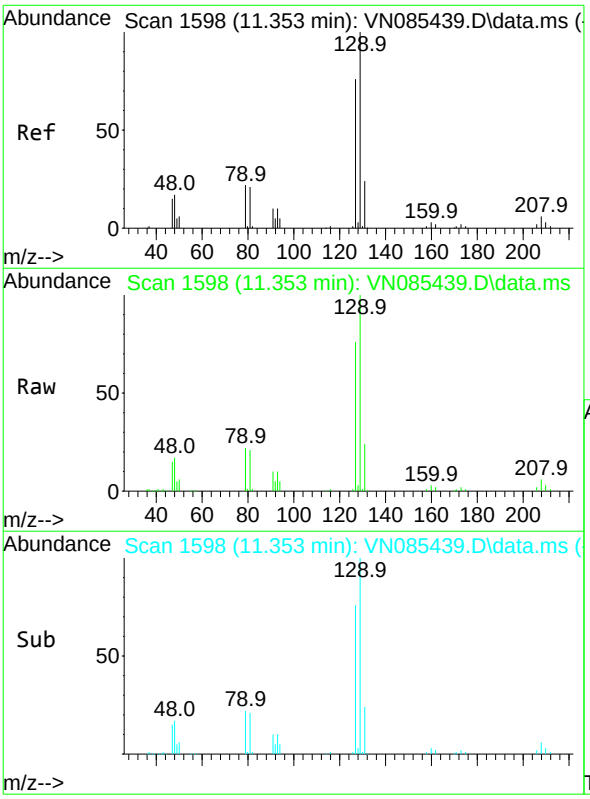
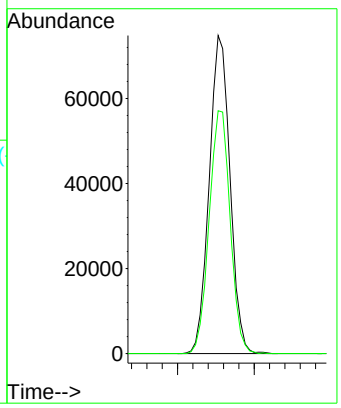
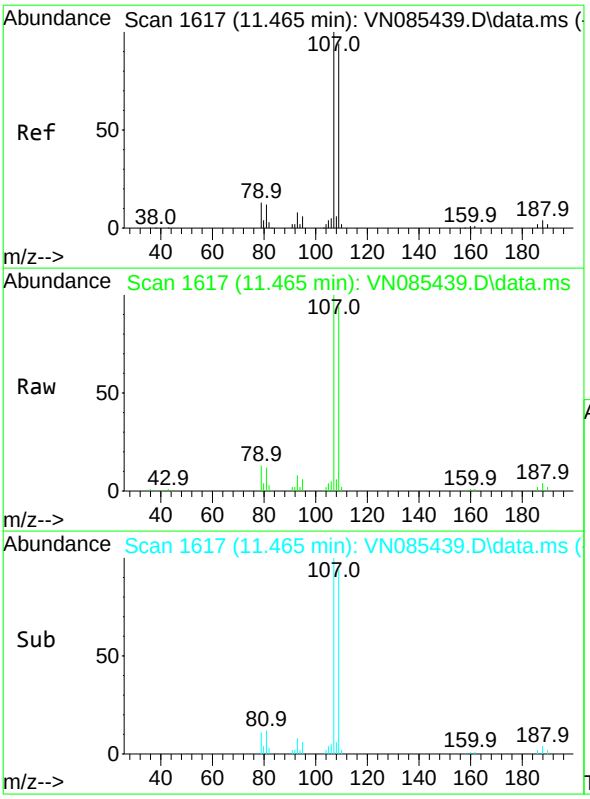


#60
Dibromochloromethane
Concen: 51.116 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:129 Resp: 140704

Ion	Ratio	Lower	Upper
129	100		
127	77.2	38.6	115.8





#61
1,2-Dibromoethane
Concen: 50.028 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:107 Resp: 113541

Ion	Ratio	Lower	Upper
107	100		
109	94.9	75.9	113.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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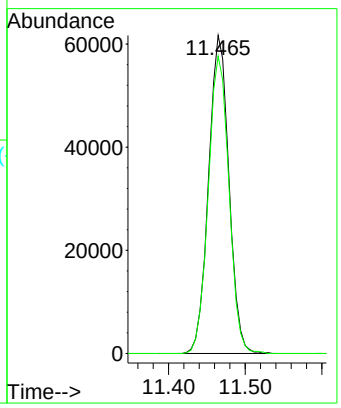
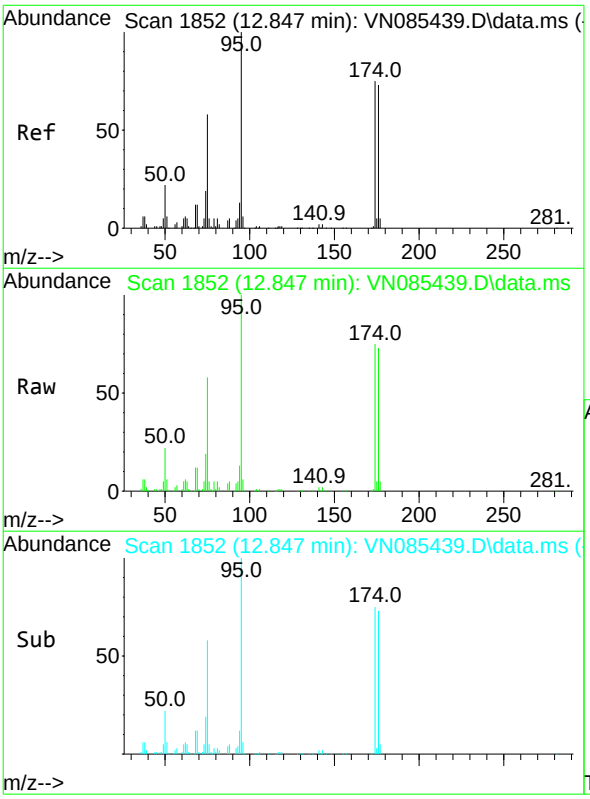
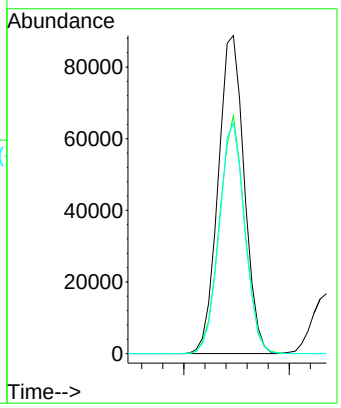


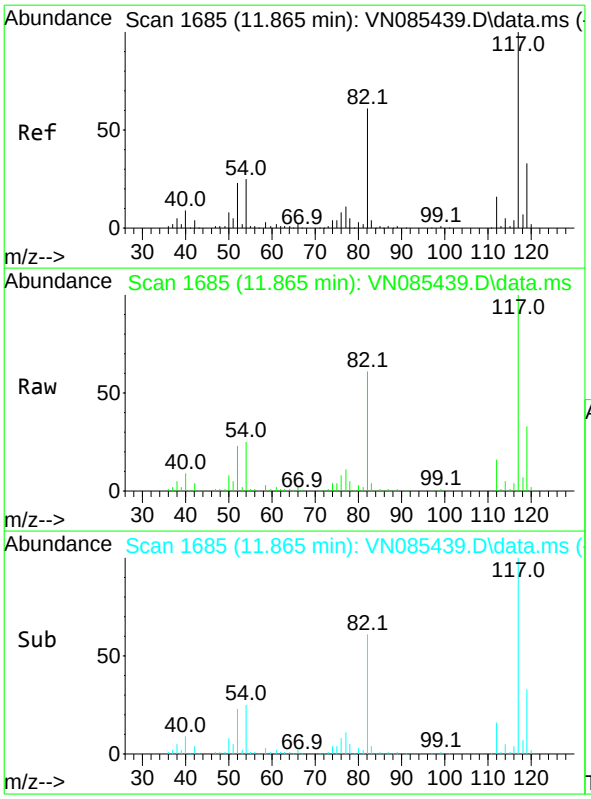


#62
4-Bromofluorobenzene
Concen: 53.239 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 95 Resp: 152568

Ion	Ratio	Lower	Upper
95	100		
174	72.5	0.0	145.0
176	71.2	0.0	142.4

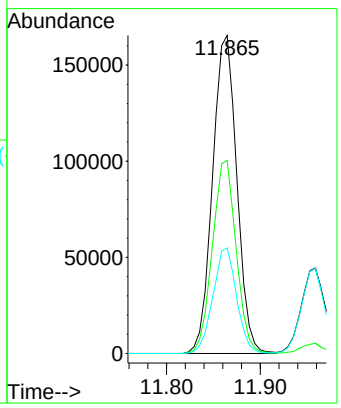




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:117 Resp: 297366

Ion	Ratio	Lower	Upper
117	100		
82	60.7	48.6	72.8
119	33.2	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
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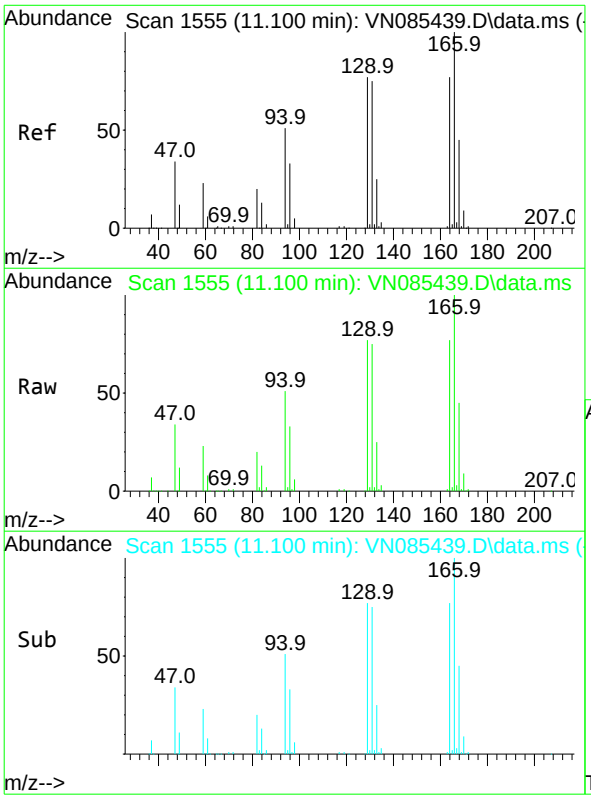
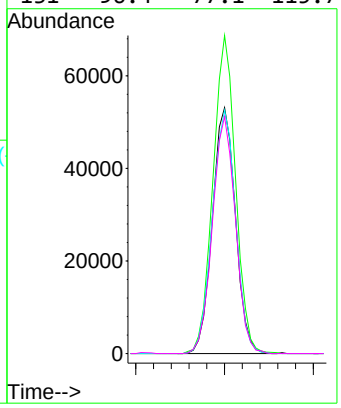
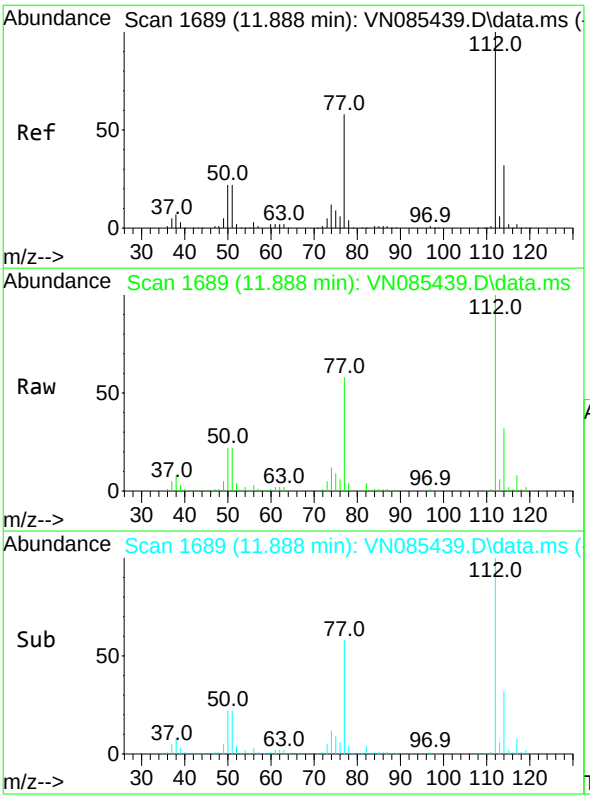


#64
Tetrachloroethene
Concen: 47.295 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:164 Resp: 95879

Ion	Ratio	Lower	Upper
164	100		
166	129.3	103.4	155.2
129	99.0	79.2	118.8
131	96.4	77.1	115.7

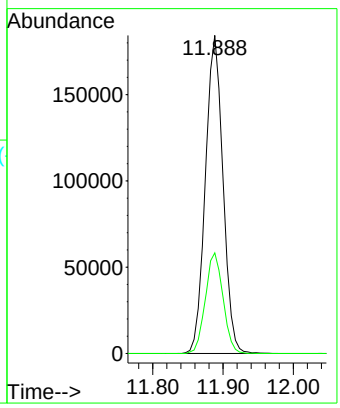




#65
Chlorobenzene
Concen: 49.121 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:112 Resp: 319992

Ion	Ratio	Lower	Upper
112	100		
114	31.6	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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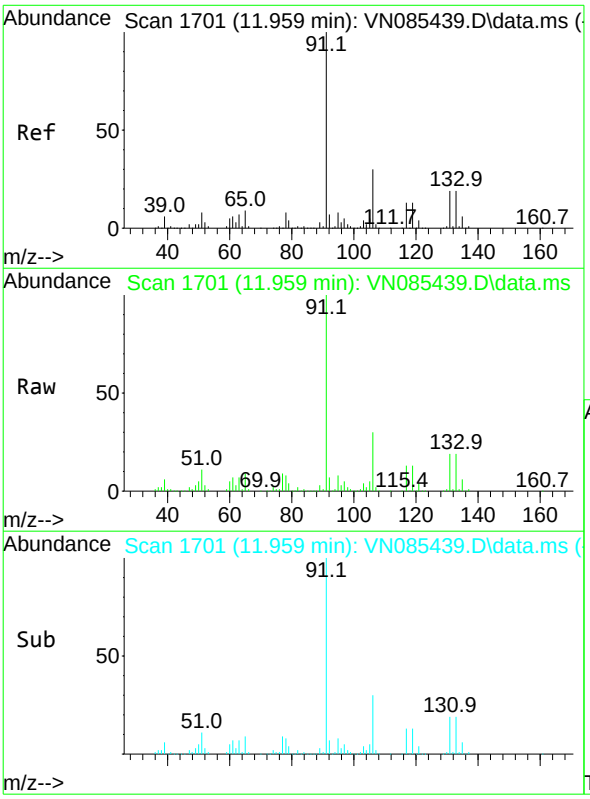
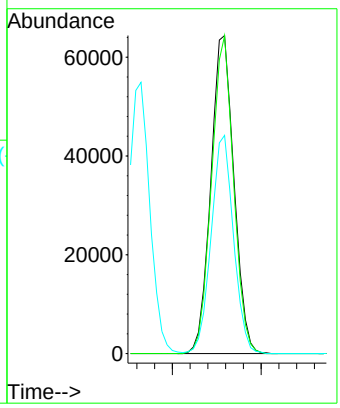
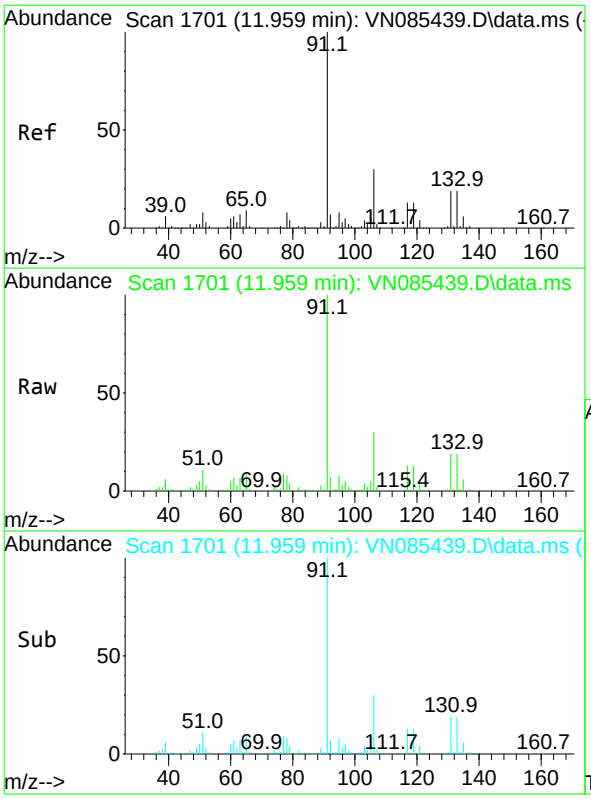


#66
1,1,1,2-Tetrachloroethane
Concen: 48.722 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:131 Resp: 116488

Ion	Ratio	Lower	Upper
131	100		
133	94.9	47.4	142.3
119	66.3	33.1	99.5





#67
Ethyl Benzene
Concen: 52.339 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 555322

Ion	Ratio	Lower	Upper
91	100		
106	29.8	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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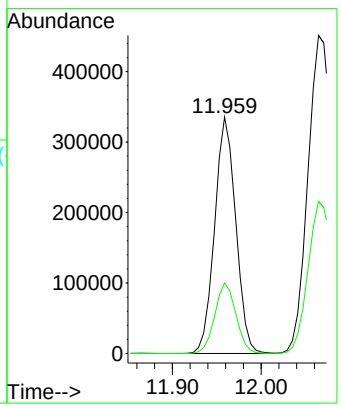
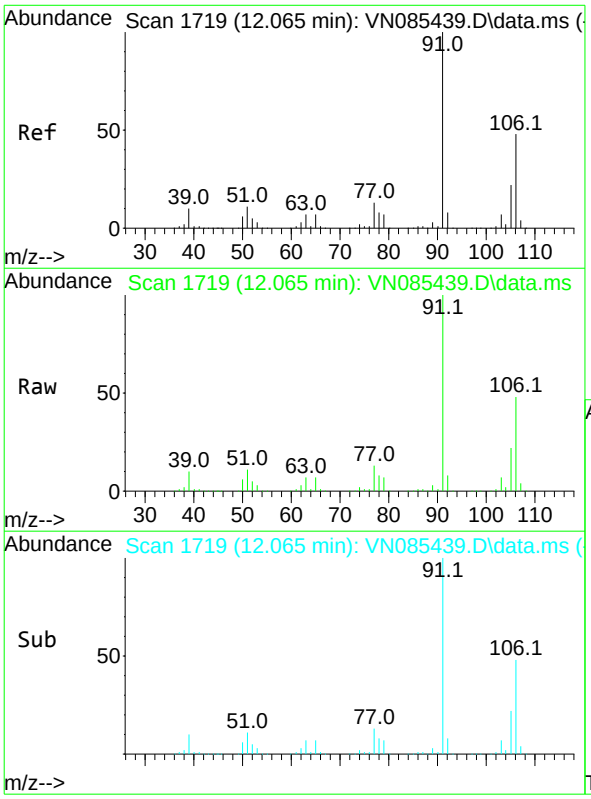
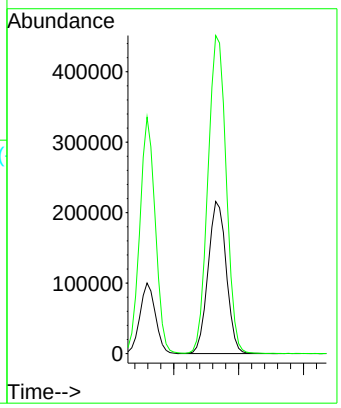


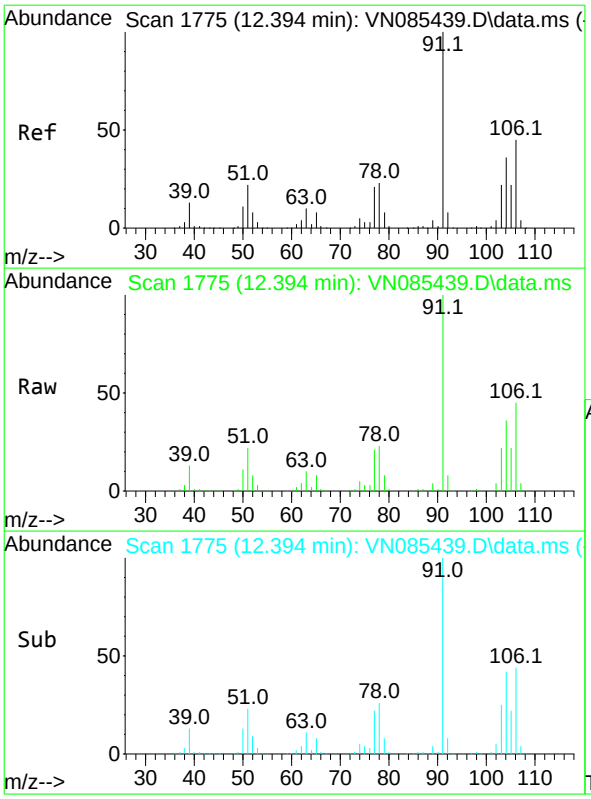


#68
m/p-Xylenes
Concen: 107.286 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:106 Resp: 420702

Ion	Ratio	Lower	Upper
106	100		
91	209.6	167.7	251.5





#69
o-Xylene
Concen: 54.062 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:106 Resp: 202597

Ion	Ratio	Lower	Upper
106	100		
91	220.8	110.4	331.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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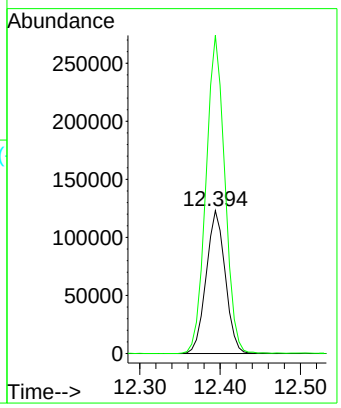
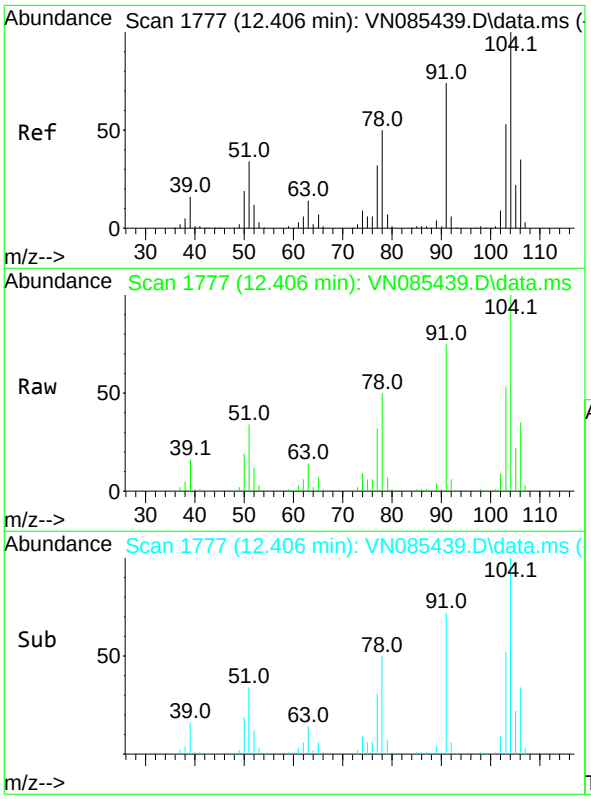
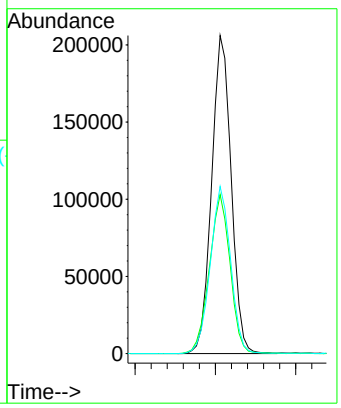


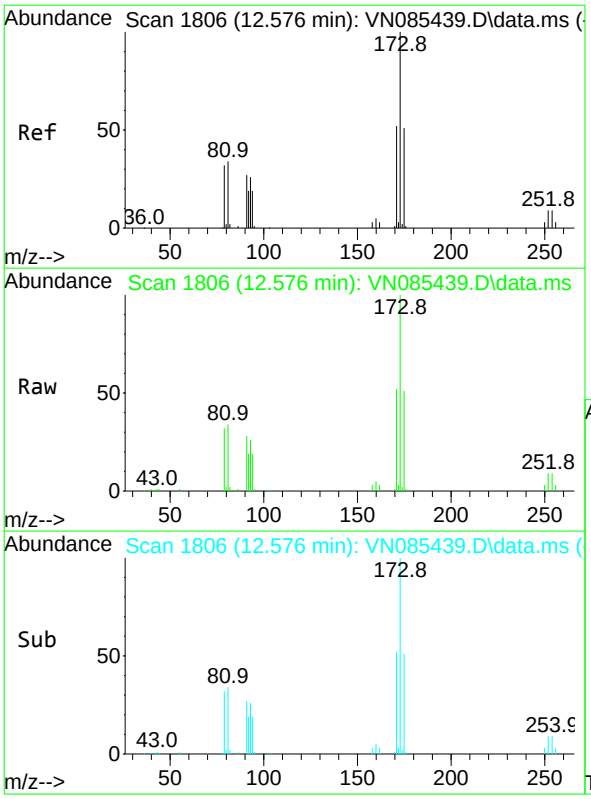


#70
Styrene
Concen: 56.227 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:104 Resp: 348720

Ion	Ratio	Lower	Upper
104	100		
78	53.1	42.5	63.7
103	54.8	43.8	65.8





#71
Bromoform
Concen: 53.993 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion:173 Resp: 92366

Ion	Ratio	Lower	Upper
173	100		
175	48.8	24.4	73.2
254	0.0	0.0	0.0

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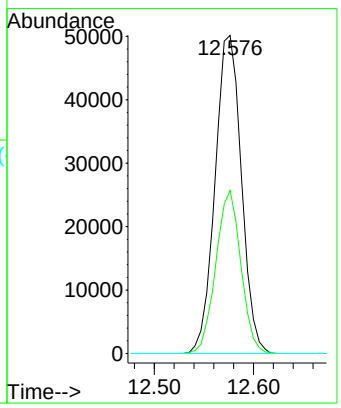
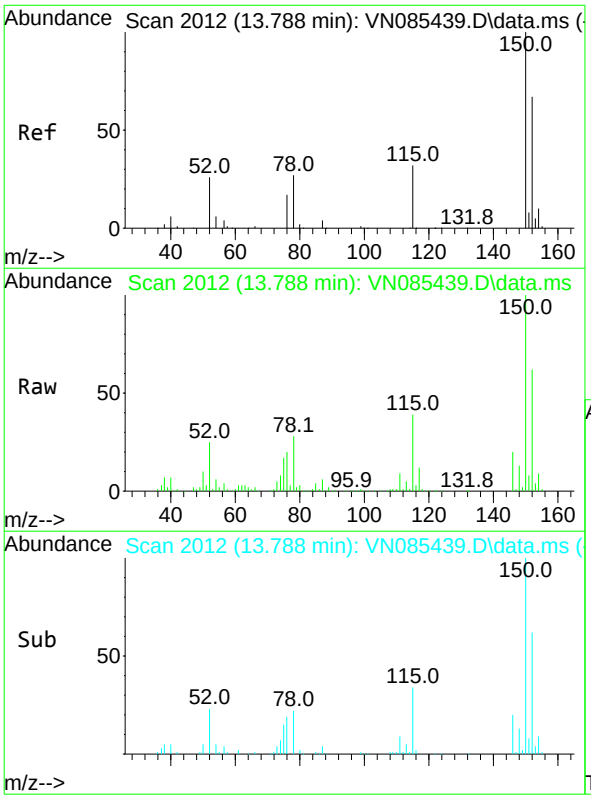
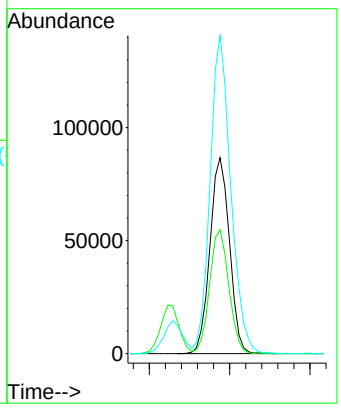


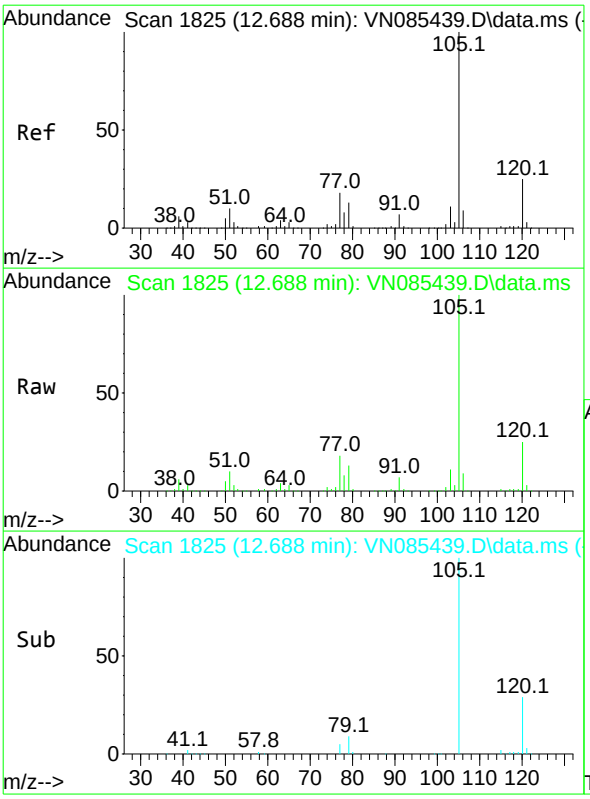


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:152 Resp: 146624

Ion	Ratio	Lower	Upper
152	100		
115	62.2	31.1	93.3
150	171.8	0.0	343.6

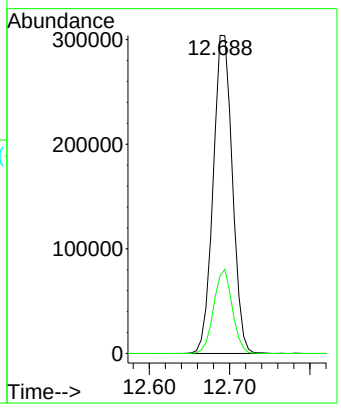




#73
Isopropylbenzene
Concen: 51.094 ug/l
RT: 12.688 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 505619

Ion	Ratio	Lower	Upper
105	100		
120	25.5	12.8	38.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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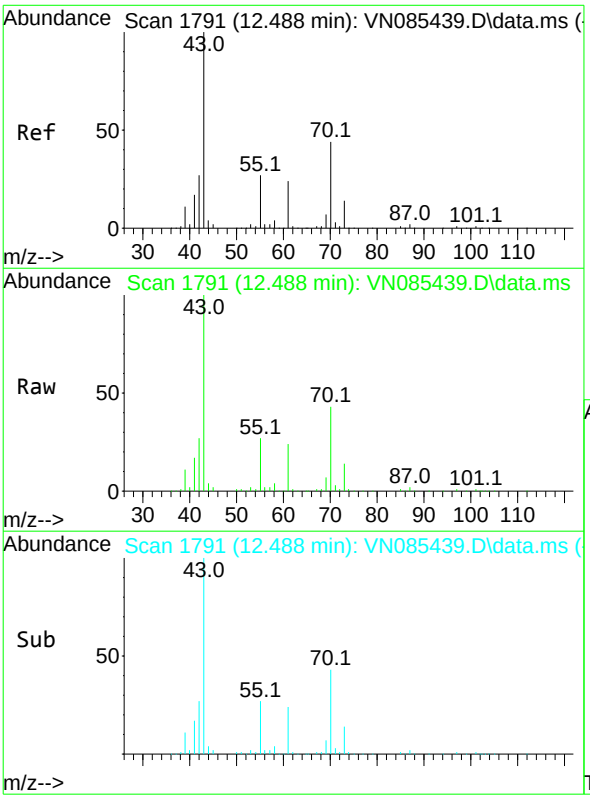
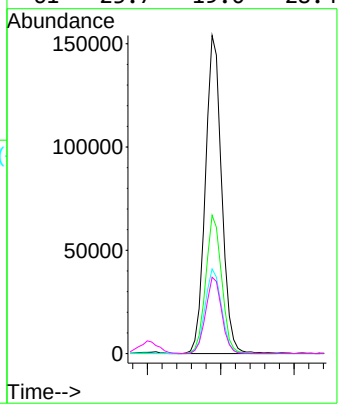
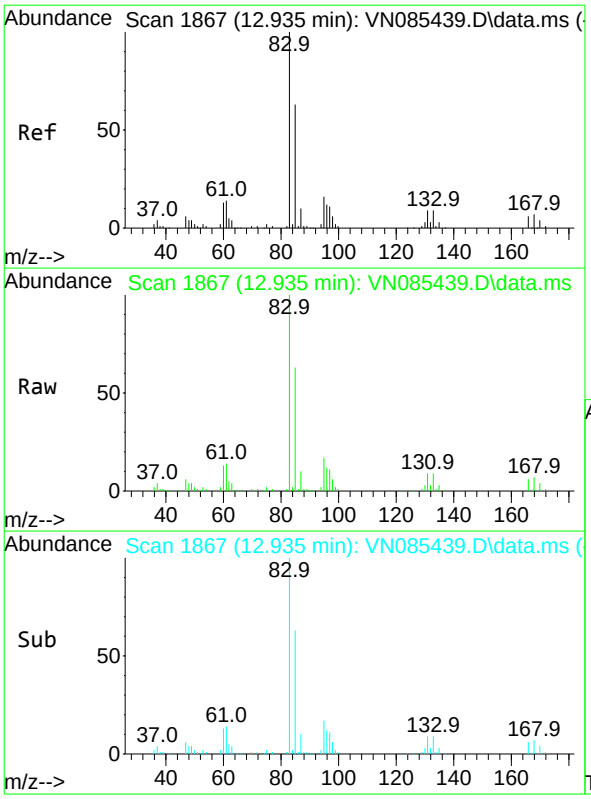


#74
N-amyl acetate
Concen: 53.478 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 237870

Ion	Ratio	Lower	Upper
43	100		
70	42.5	34.0	51.0
55	26.8	21.4	32.2
61	23.7	19.0	28.4

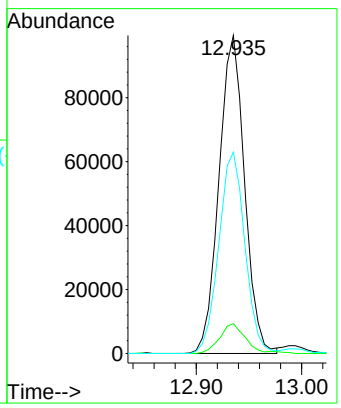




#75
1,1,2,2-Tetrachloroethane
Concen: 48.019 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 83 Resp: 167856

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.4	32.2	96.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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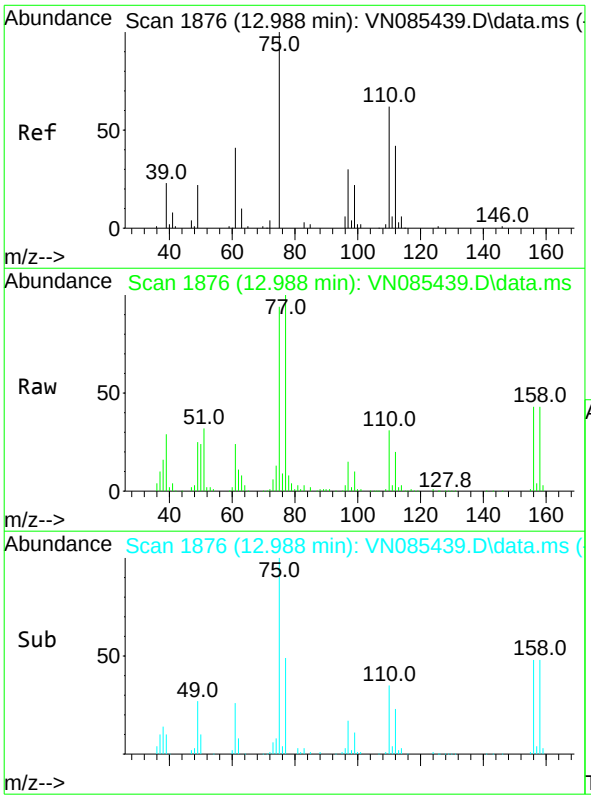
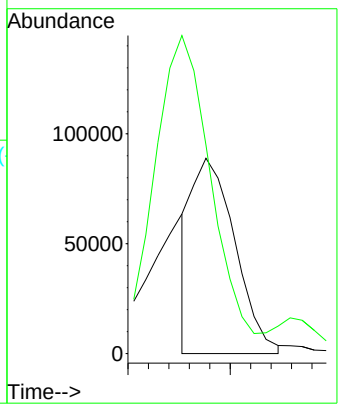
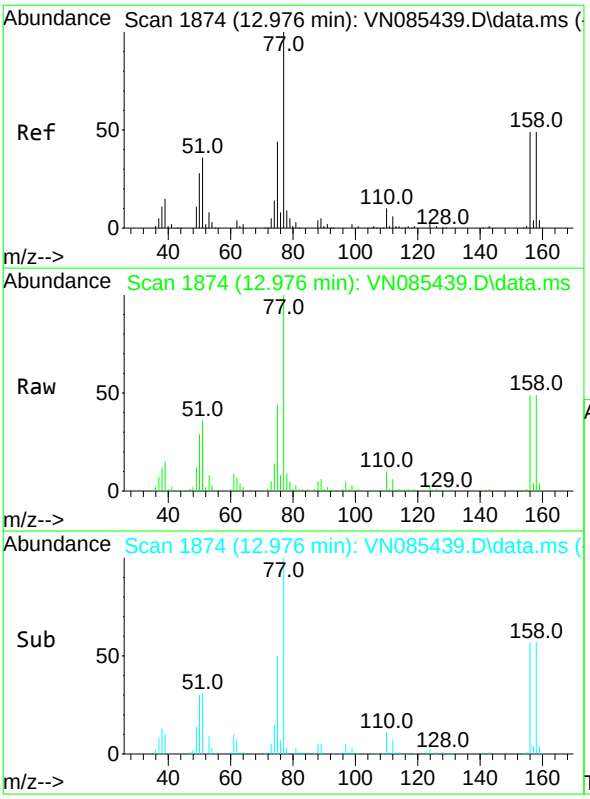


#76
1,2,3-Trichloropropane
Concen: 43.982 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 130866

Ion	Ratio	Lower	Upper
75	100		
77	219.5	109.7	329.2

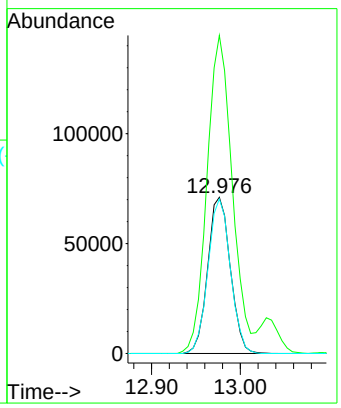




#77
Bromobenzene
Concen: 48.657 ug/l
RT: 12.976 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:156 Resp: 125800

Ion	Ratio	Lower	Upper
156	100		
77	228.3	114.1	342.4
158	97.9	48.9	146.8



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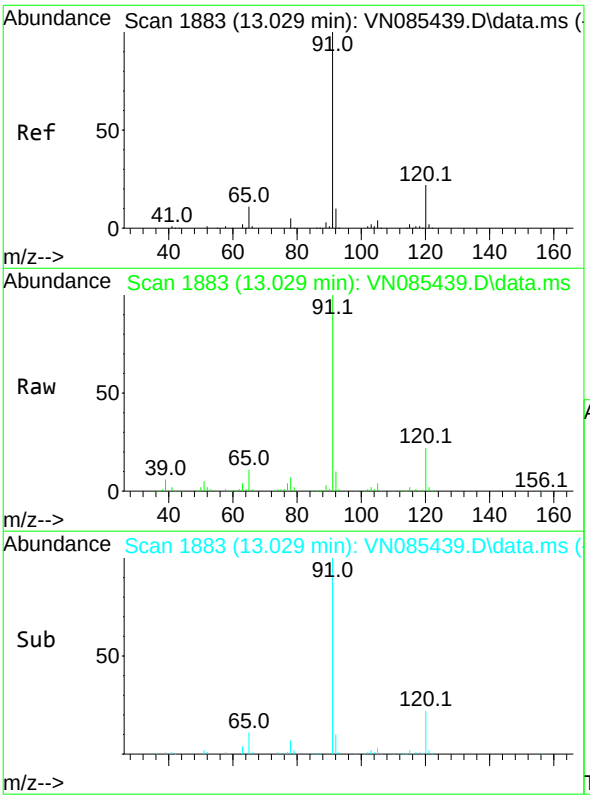
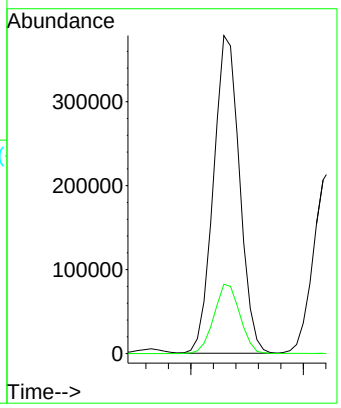
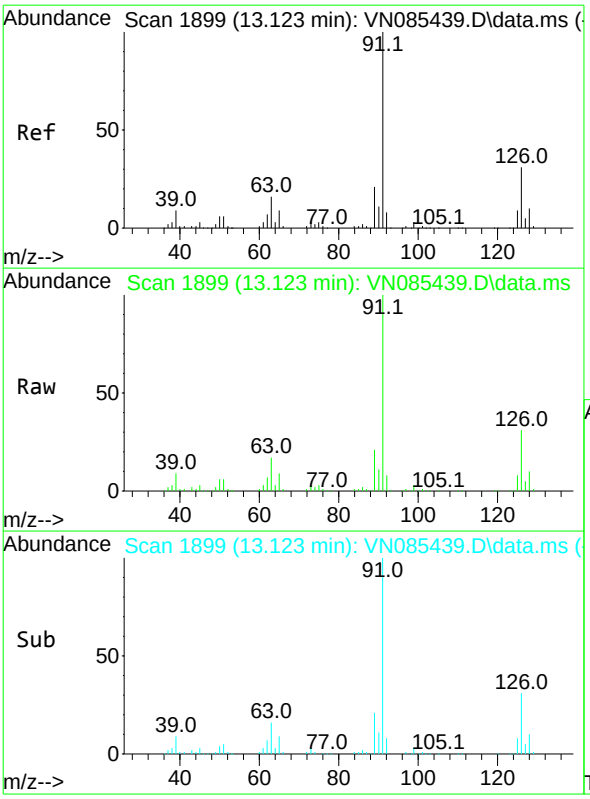


#78
n-propylbenzene
Concen: 51.986 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 609022

Ion	Ratio	Lower	Upper
91	100		
120	21.7	10.9	32.6





#79
2-Chlorotoluene
Concen: 49.985 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 378981

Ion	Ratio	Lower	Upper
91	100		
126	31.4	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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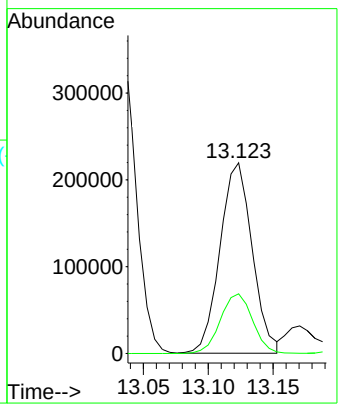
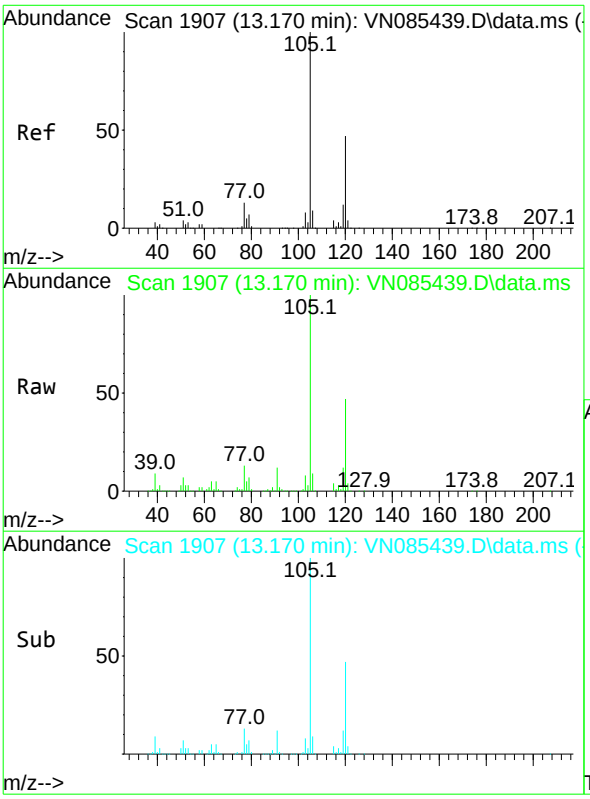
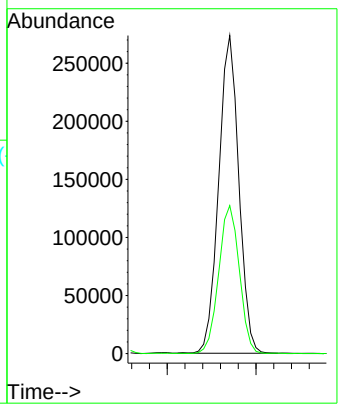


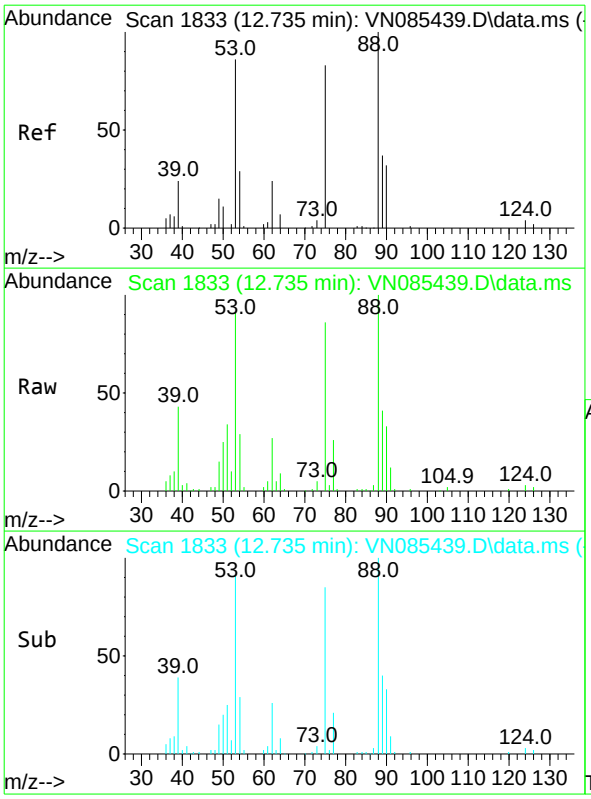


#80
1,3,5-Trimethylbenzene
Concen: 52.730 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 431021

Ion	Ratio	Lower	Upper
105	100		
120	47.8	23.9	71.7

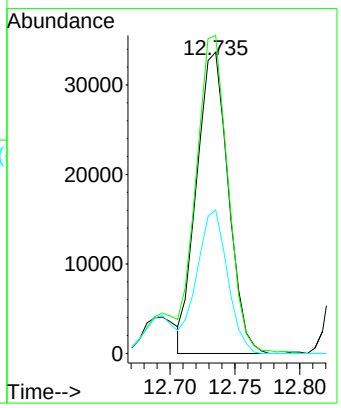




#81
trans-1,4-Dichloro-2-butene
Concen: 51.914 ug/l
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 57184

Ion	Ratio	Lower	Upper
75	100		
53	119.5	95.6	143.4
89	46.3	37.0	55.6



Instrument :
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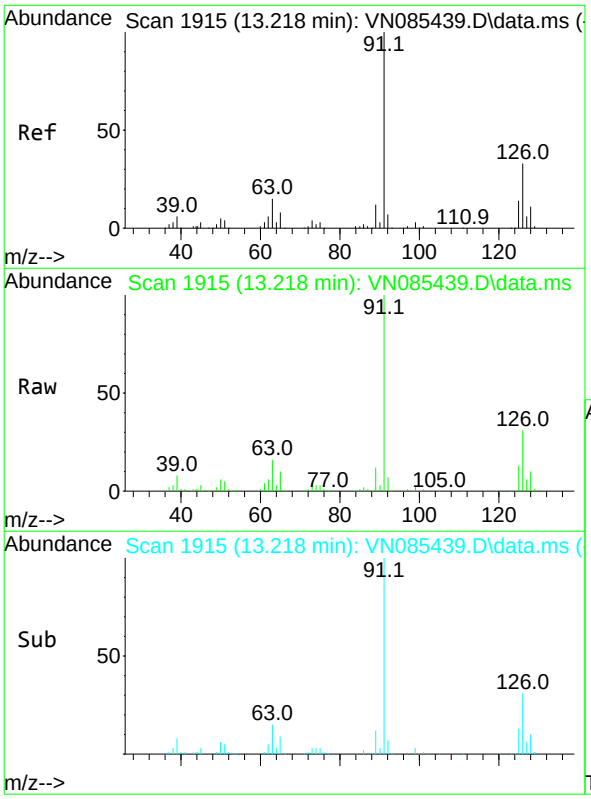
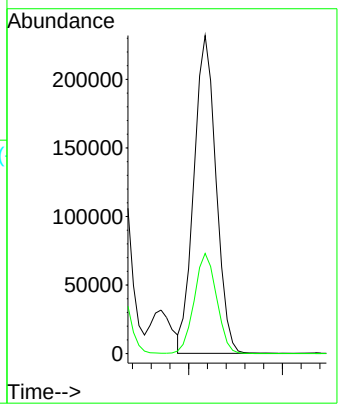
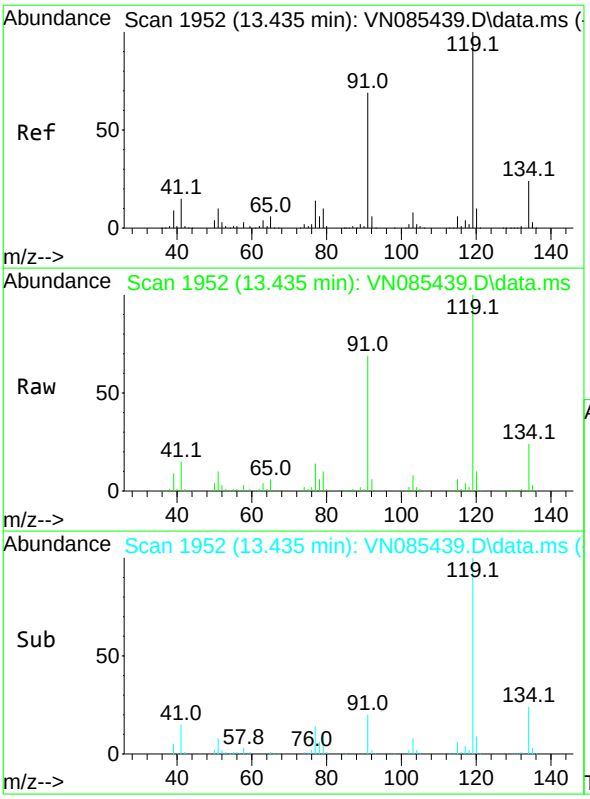


#82
4-Chlorotoluene
Concen: 50.273 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 379524

Ion	Ratio	Lower	Upper
91	100		
126	31.8	15.9	47.7

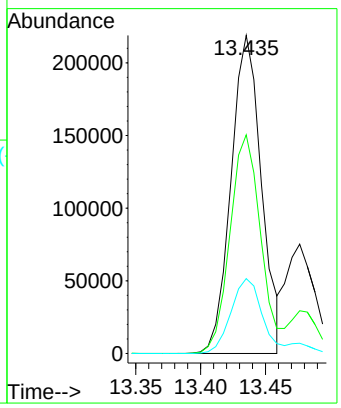




#83
tert-Butylbenzene
Concen: 52.090 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:119 Resp: 357563

Ion	Ratio	Lower	Upper
119	100		
91	70.2	35.1	105.3
134	24.1	12.0	36.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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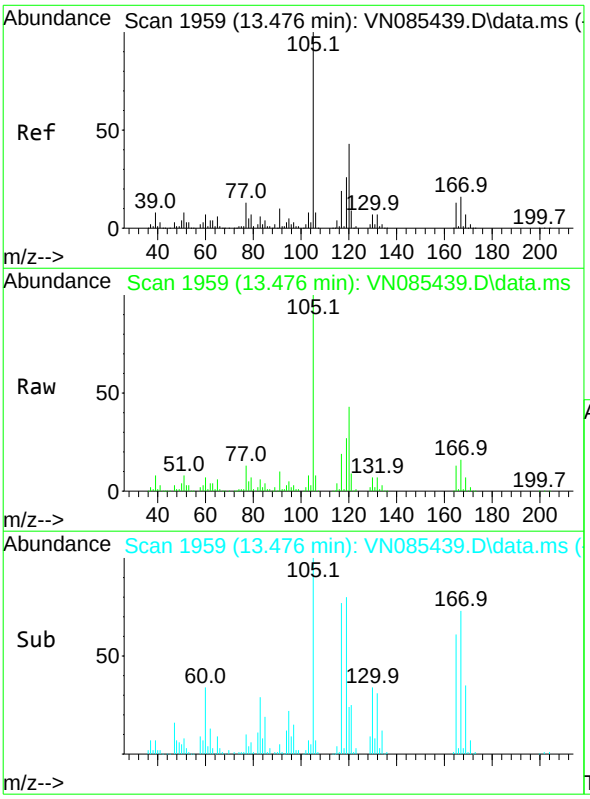
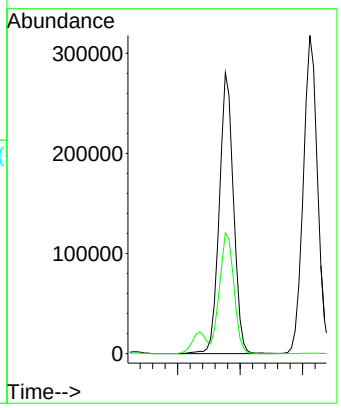
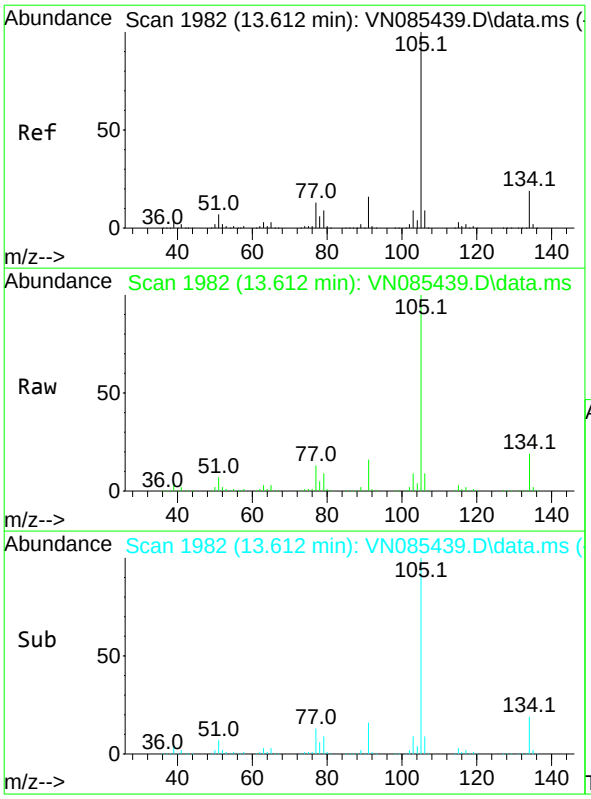


#84
1,2,4-Trimethylbenzene
Concen: 54.275 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 442175

Ion	Ratio	Lower	Upper
105	100		
120	43.3	21.6	65.0

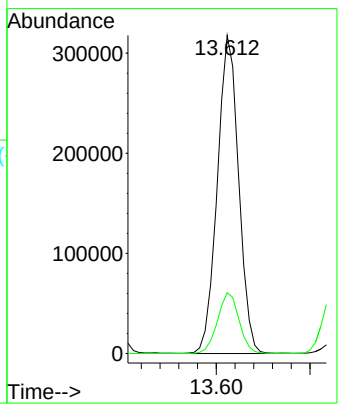




#85
sec-Butylbenzene
Concen: 52.719 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:105 Resp: 501561

Ion	Ratio	Lower	Upper
105	100		
134	19.3	9.7	28.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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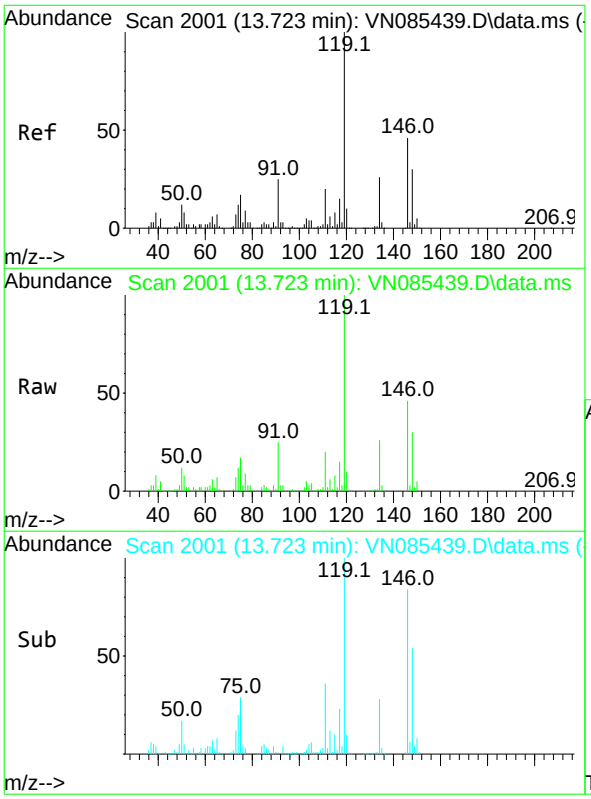
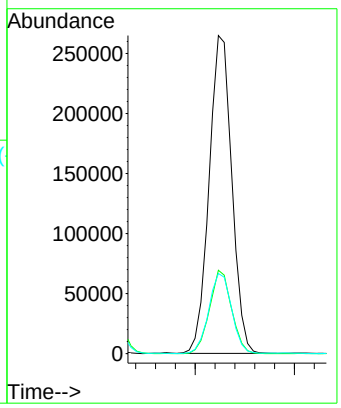
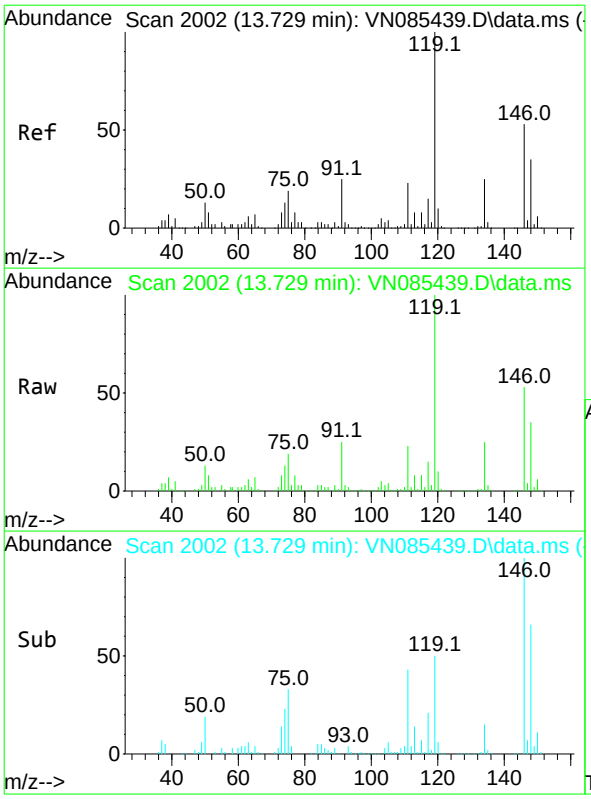


#86
p-Isopropyltoluene
Concen: 49.240 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:119 Resp: 421052

Ion	Ratio	Lower	Upper
119	100		
134	25.3	12.7	38.0
91	25.4	12.7	38.1

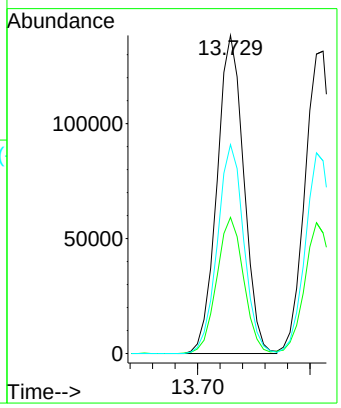




#87
1,3-Dichlorobenzene
Concen: 48.204 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:146 Resp: 229518

Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.4	64.3
148	64.6	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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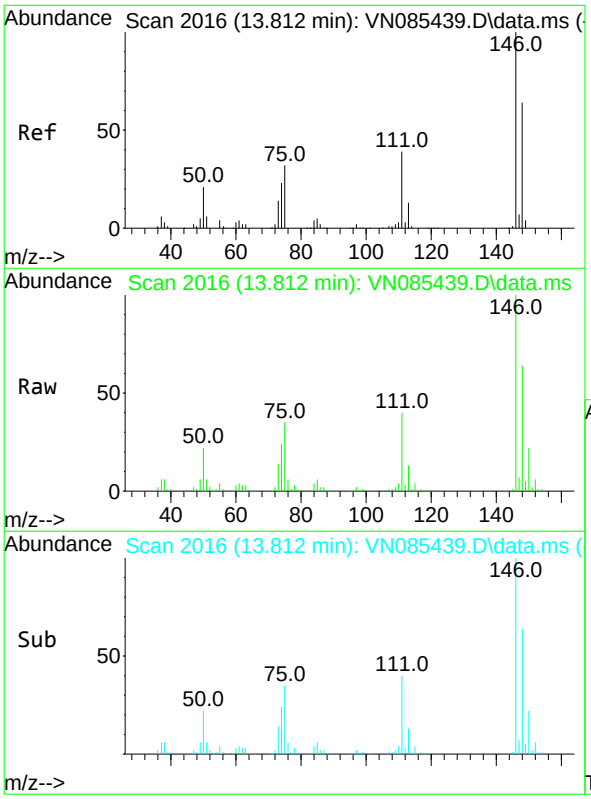
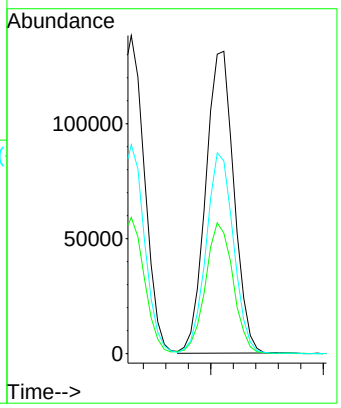
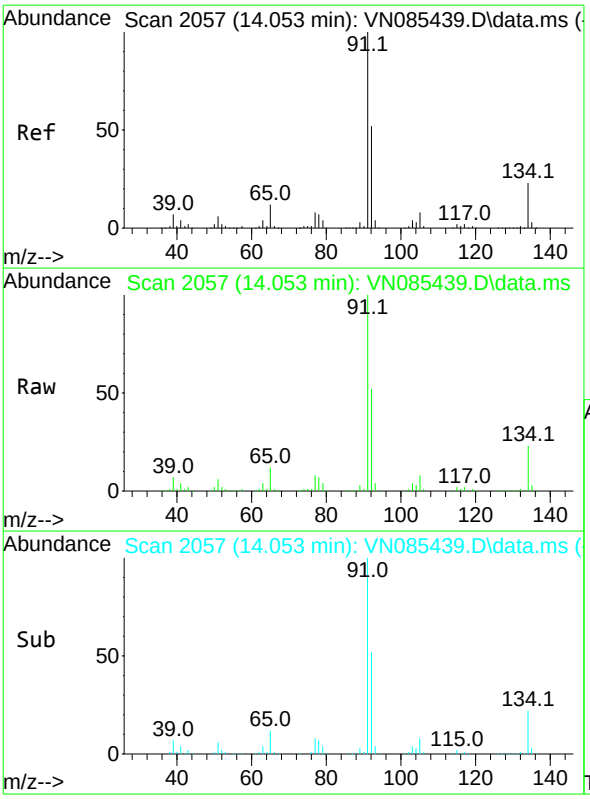


#88
1,4-Dichlorobenzene
Concen: 46.416 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:146 Resp: 229084

Ion	Ratio	Lower	Upper
146	100		
111	42.5	21.3	63.7
148	64.7	32.4	97.0

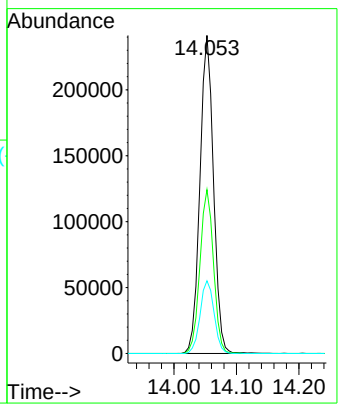




#89
n-Butylbenzene
Concen: 53.348 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 91 Resp: 364111

Ion	Ratio	Lower	Upper
91	100		
92	51.5	25.8	77.3
134	23.4	11.7	35.1



Instrument :
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VSTDICCC050

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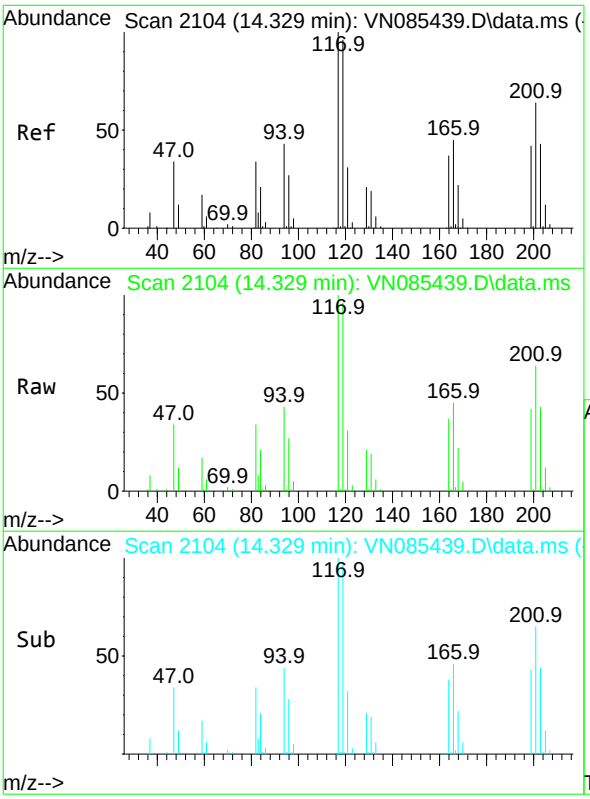
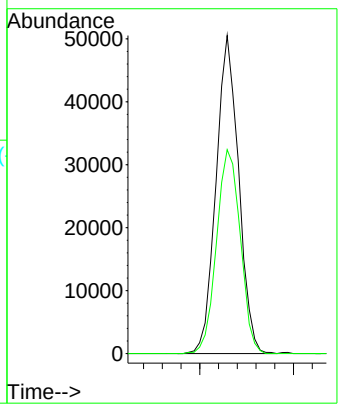
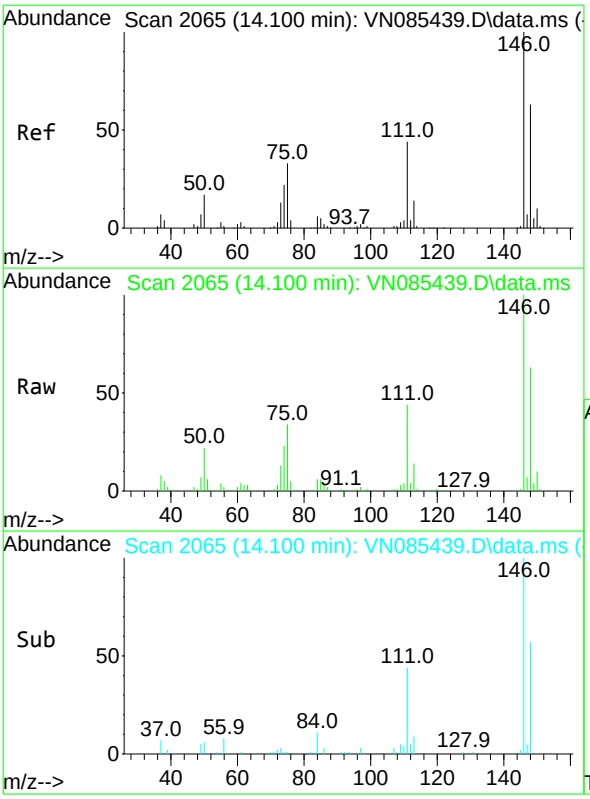


#90
Hexachloroethane
Concen: 46.712 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:117 Resp: 84602

Ion	Ratio	Lower	Upper
117	100		
201	67.3	33.7	101.0

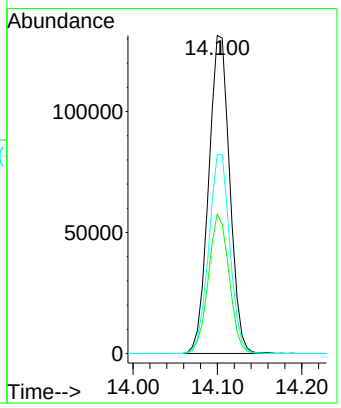




#91
1,2-Dichlorobenzene
Concen: 48.012 ug/l
RT: 14.100 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:146 Resp: 228024

Ion	Ratio	Lower	Upper
146	100		
111	43.4	21.7	65.1
148	62.8	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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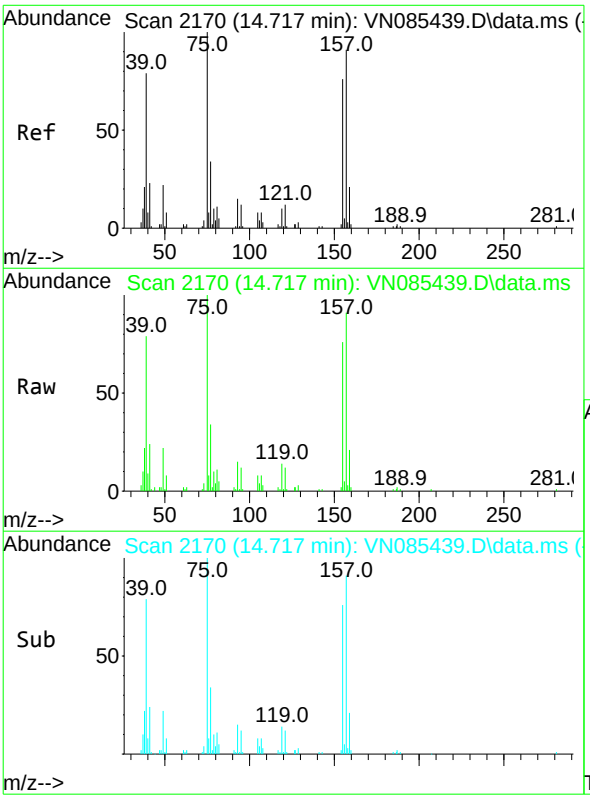
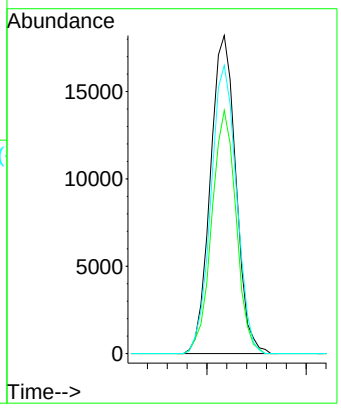
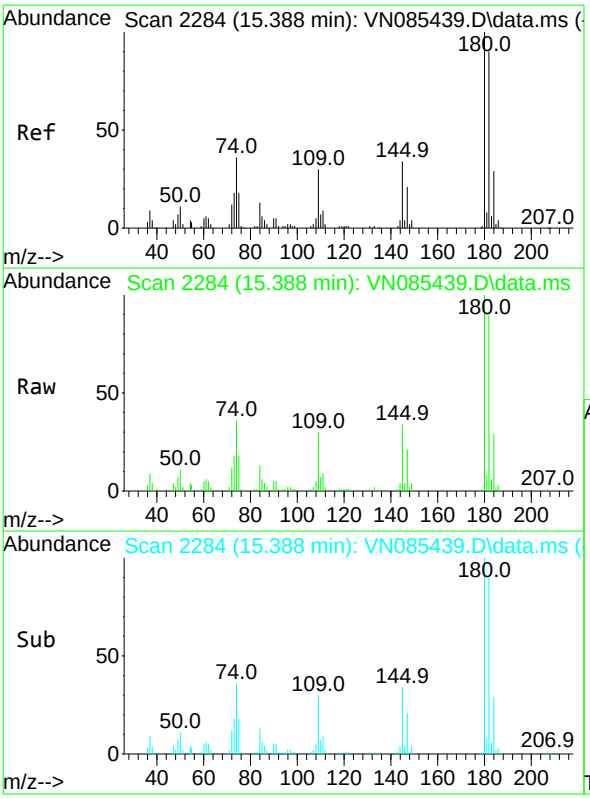


#92
1,2-Dibromo-3-Chloropropane
Concen: 50.971 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 32536

Ion	Ratio	Lower	Upper
75	100		
155	72.8	36.4	109.2
157	90.7	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 51.857 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

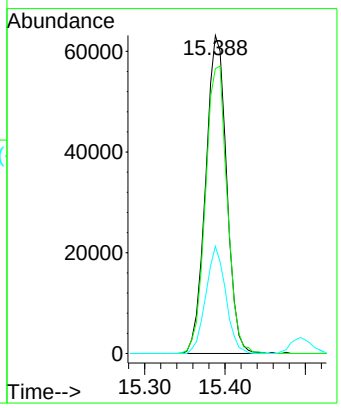
Tgt Ion:180 Resp: 114468

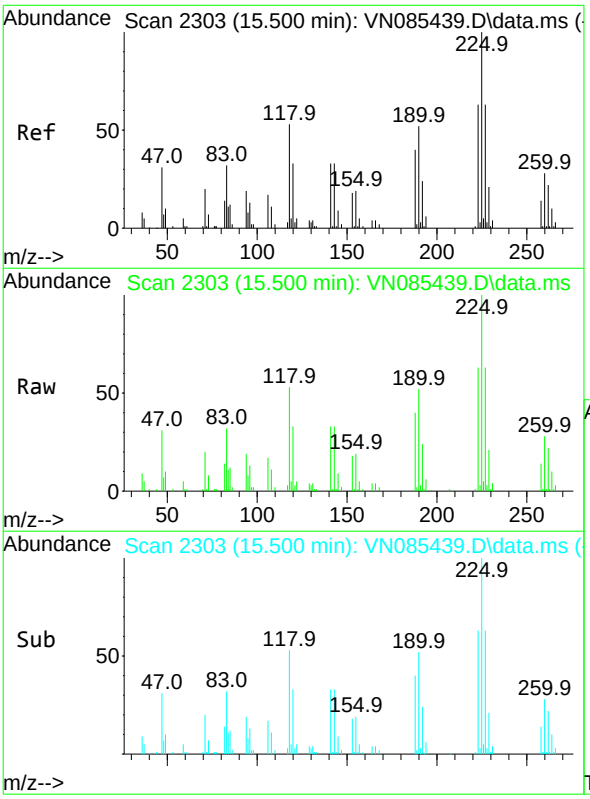
Ion	Ratio	Lower	Upper
180	100		
182	93.5	46.8	140.3
145	32.0	16.0	48.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

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

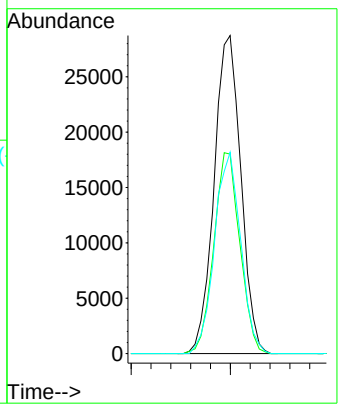


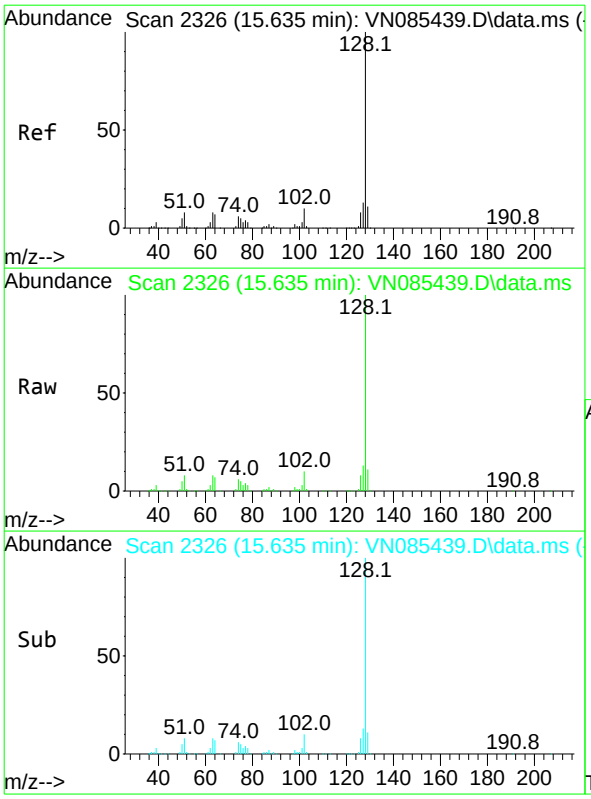


#94
Hexachlorobutadiene
Concen: 45.947 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:225 Resp: 53846

Ion	Ratio	Lower	Upper
225	100		
223	61.4	30.7	92.1
227	61.7	30.9	92.5





#95
Naphthalene
Concen: 55.243 ug/l
RT: 15.635 min Scan# 23
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

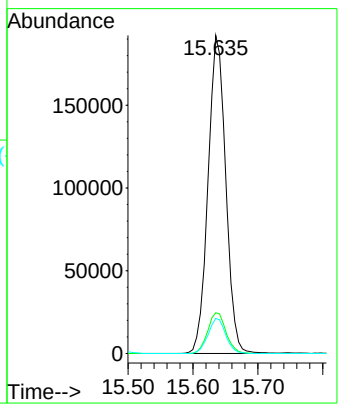
Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

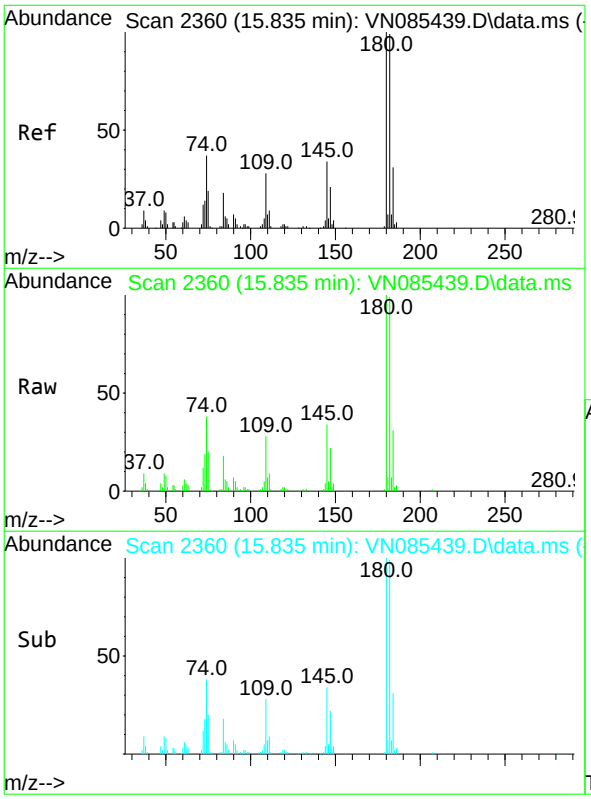
Tgt Ion:128 Resp: 363882

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.6	16.0
129	11.0	8.8	13.2

Manual Integrations
APPROVED

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

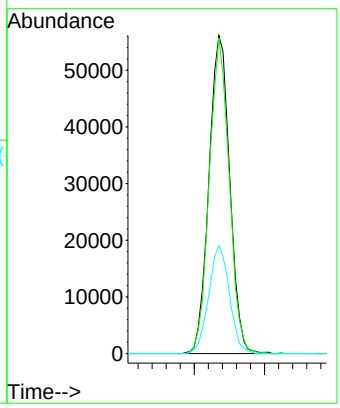




#96
1,2,3-Trichlorobenzene
Concen: 51.601 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:180 Resp: 115251

Ion	Ratio	Lower	Upper
180	100		
182	94.8	47.4	142.2
145	33.8	16.9	50.7



Quantitation Report (QT Reviewed)

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	200796	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	340593	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	296298	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	143526	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	60593	18.694	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	37.380%#		
35) Dibromofluoromethane	8.165	113	45655	19.322	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	38.640%#		
50) Toluene-d8	10.559	98	164391	19.581	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	39.160%#		
62) 4-Bromofluorobenzene	12.847	95	55798	19.430	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	38.860%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	54666	20.107	ug/l	98
3) Chloromethane	2.359	50	58426	19.848	ug/l	100
4) Vinyl Chloride	2.512	62	58403	19.739	ug/l	99
5) Bromomethane	2.954	94	36440	20.389	ug/l	94
6) Chloroethane	3.118	64	37594	20.041	ug/l	93
7) Trichlorofluoromethane	3.501	101	88121	20.526	ug/l	99
8) Diethyl Ether	3.965	74	29138	19.647	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	48933	20.237	ug/l	99
10) Methyl Iodide	4.589	142	56567	20.428	ug/l	93
11) Tert butyl alcohol	5.506	59	37984	102.342	ug/l	100
12) 1,1-Dichloroethene	4.342	96	44670	20.728	ug/l	95
13) Acrolein	4.171	56	49649	97.995	ug/l	99
14) Allyl chloride	5.024	41	67705	19.362	ug/l	96
15) Acrylonitrile	5.712	53	121626	103.171	ug/l	99
16) Acetone	4.424	43	101065	96.502	ug/l	96
17) Carbon Disulfide	4.712	76	132300	19.939	ug/l	98
18) Methyl Acetate	5.018	43	60873	19.115	ug/l	99
19) Methyl tert-butyl Ether	5.795	73	148847	21.272	ug/l	100
20) Methylene Chloride	5.271	84	52813	20.370	ug/l	97
21) trans-1,2-Dichloroethene	5.789	96	46115	20.023	ug/l	98
22) Diisopropyl ether	6.671	45	166719	21.480	ug/l	97
23) Vinyl Acetate	6.594	43	588567m	107.984	ug/l	
24) 1,1-Dichloroethane	6.565	63	96875	20.469	ug/l #	96
25) 2-Butanone	7.477	43	159952	103.786	ug/l	98
26) 2,2-Dichloropropane	7.483	77	79145	20.684	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	57454	21.180	ug/l	98
28) Bromochloromethane	7.812	49	41181	18.703	ug/l	99
29) Tetrahydrofuran	7.836	42	104792	107.247	ug/l	99
30) Chloroform	7.959	83	99655	20.374	ug/l	99
31) Cyclohexane	8.253	56	82980	20.173	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	87659	20.431	ug/l	98
36) 1,1-Dichloropropene	8.371	75	67949	20.490	ug/l	98
37) Ethyl Acetate	7.553	43	66443	19.850	ug/l	96
38) Carbon Tetrachloride	8.359	117	78842	20.767	ug/l	96
39) Methylcyclohexane	9.594	83	65012	20.862	ug/l	96
40) Benzene	8.600	78	207985	20.873	ug/l	99

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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

Manual Integrations APPROVED

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

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

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

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085440.D
Acq On : 14 Jan 2025 15:43
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
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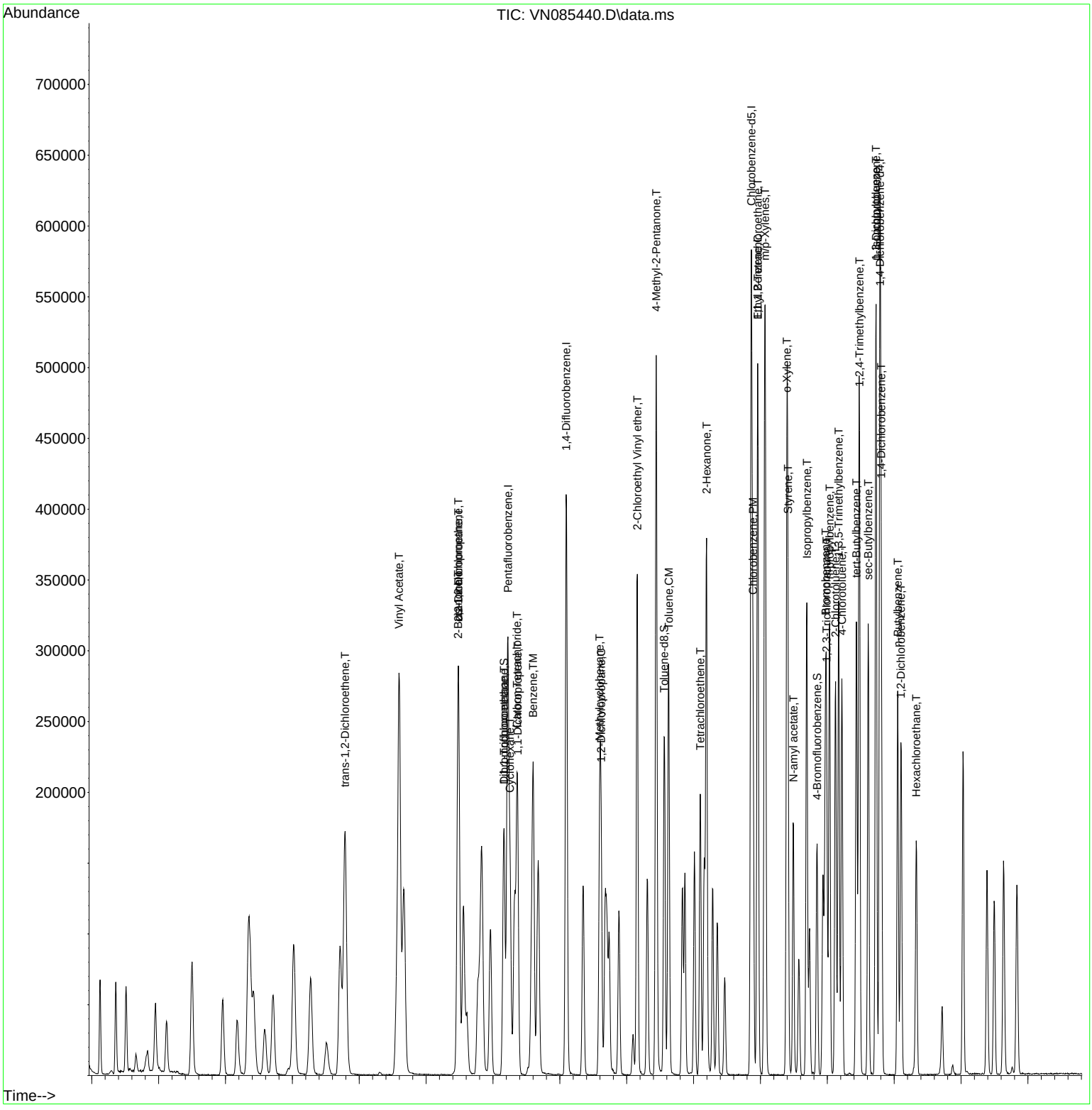
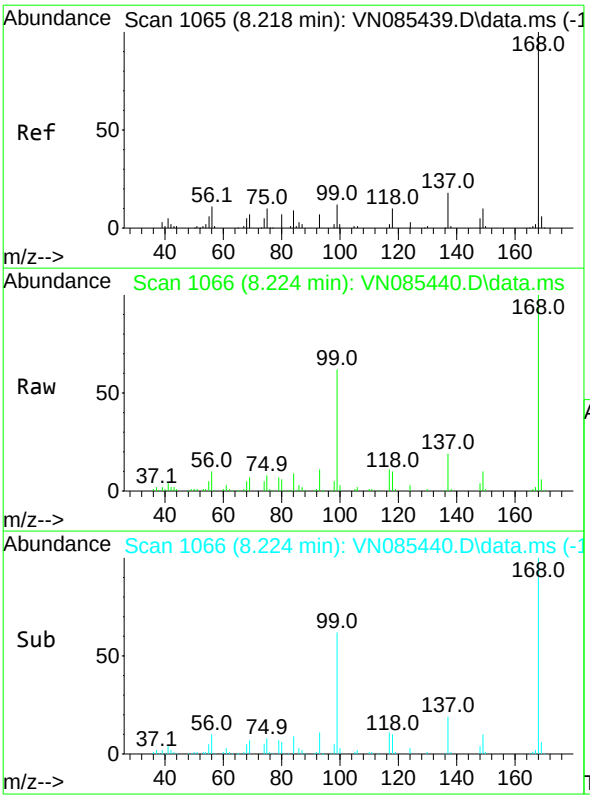
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

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

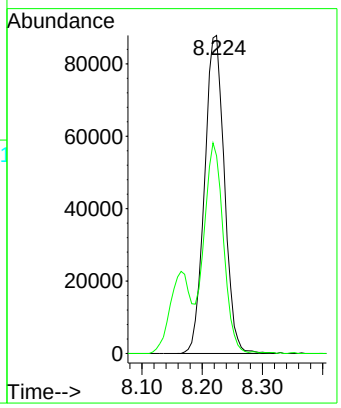




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:168 Resp: 200796

Ion	Ratio	Lower	Upper
168	100		
99	62.2	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
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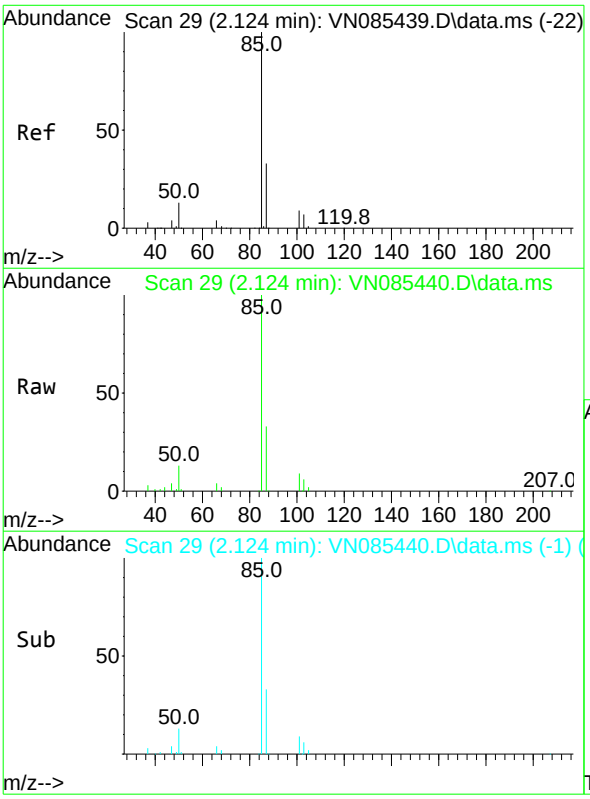
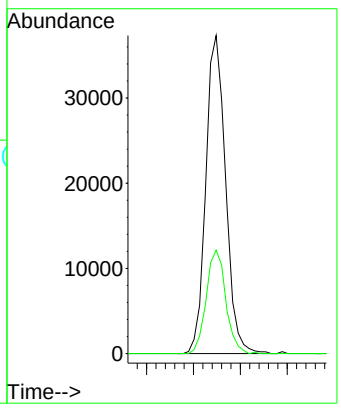
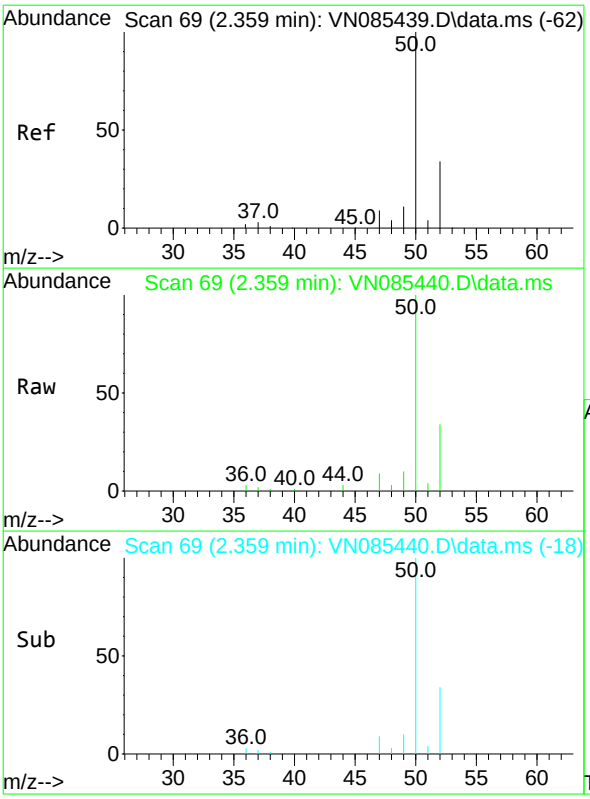


#2
Dichlorodifluoromethane
Concen: 20.107 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 85 Resp: 54666

Ion	Ratio	Lower	Upper
85	100		
87	32.5	16.7	50.1

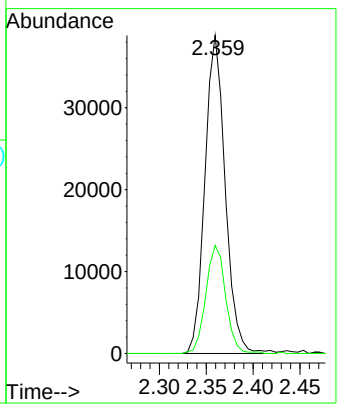




#3
Chloromethane
Concen: 19.848 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 50 Resp: 58426

Ion	Ratio	Lower	Upper
50	100		
52	34.0	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
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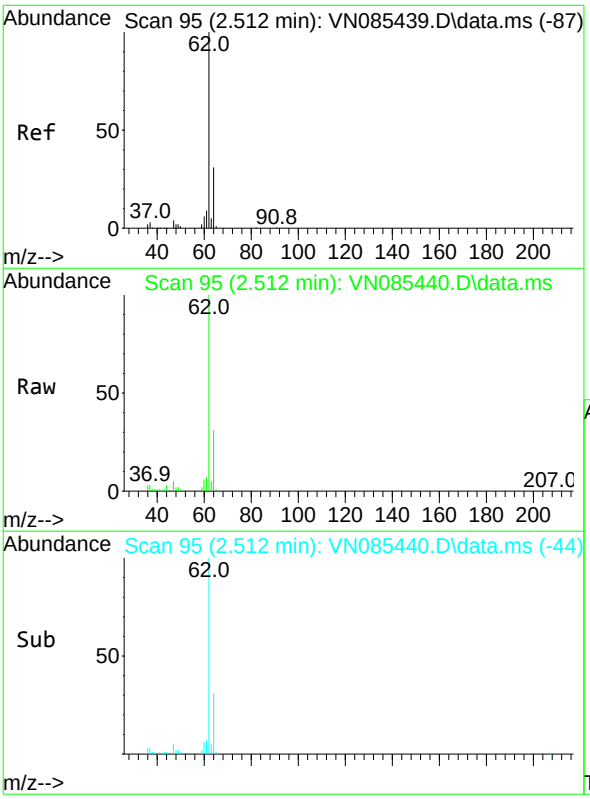
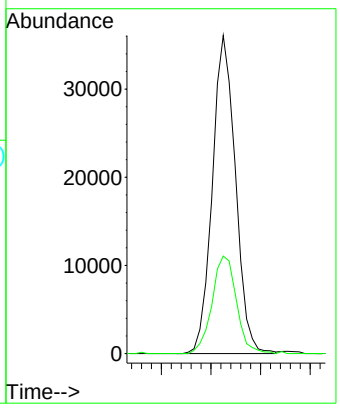
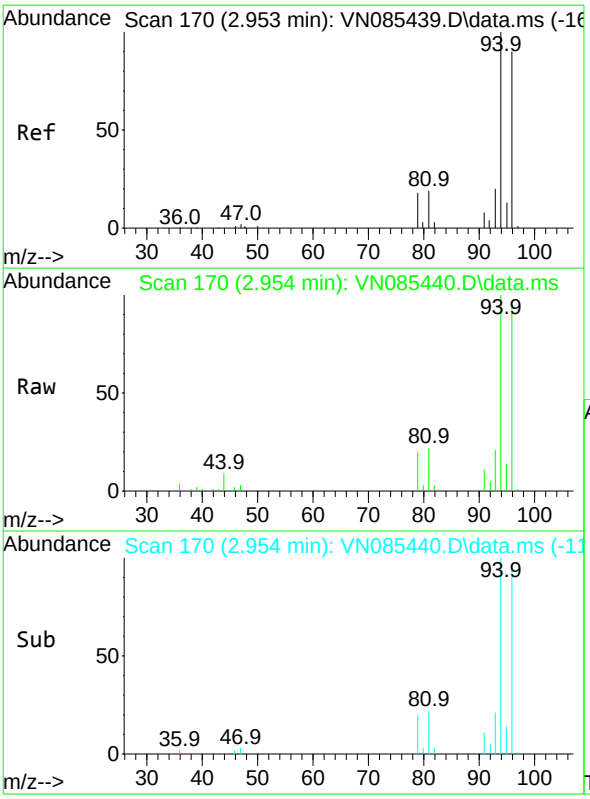


#4
Vinyl Chloride
Concen: 19.739 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 62 Resp: 58403

Ion	Ratio	Lower	Upper
62	100		
64	30.7	24.8	37.2

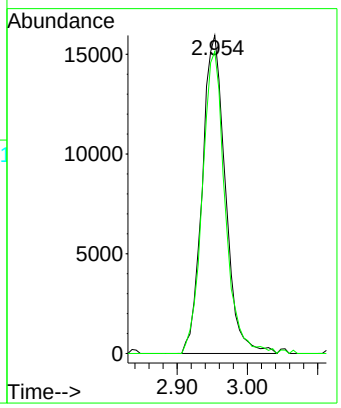




#5
Bromomethane
Concen: 20.389 ug/l
RT: 2.954 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 94 Resp: 36440

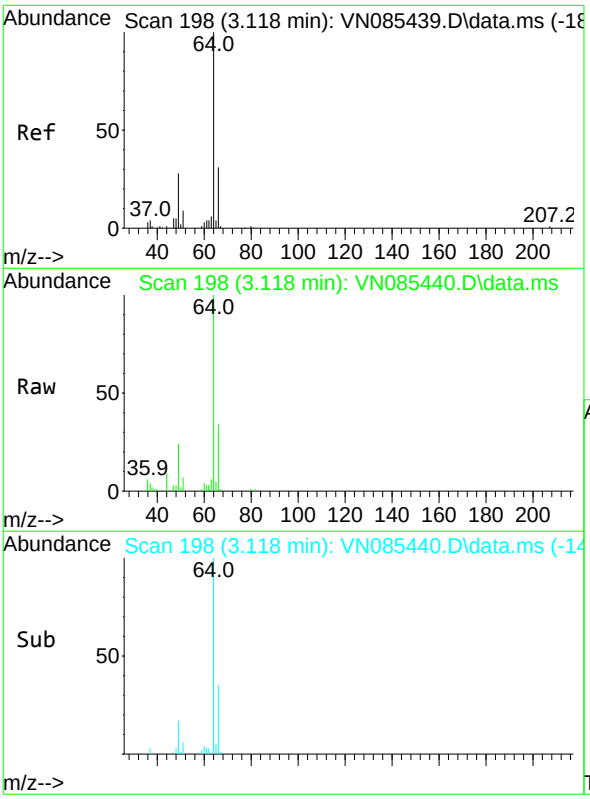
Ion	Ratio	Lower	Upper
94	100		
96	94.9	71.8	107.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

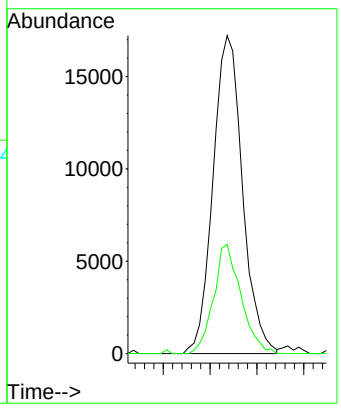
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

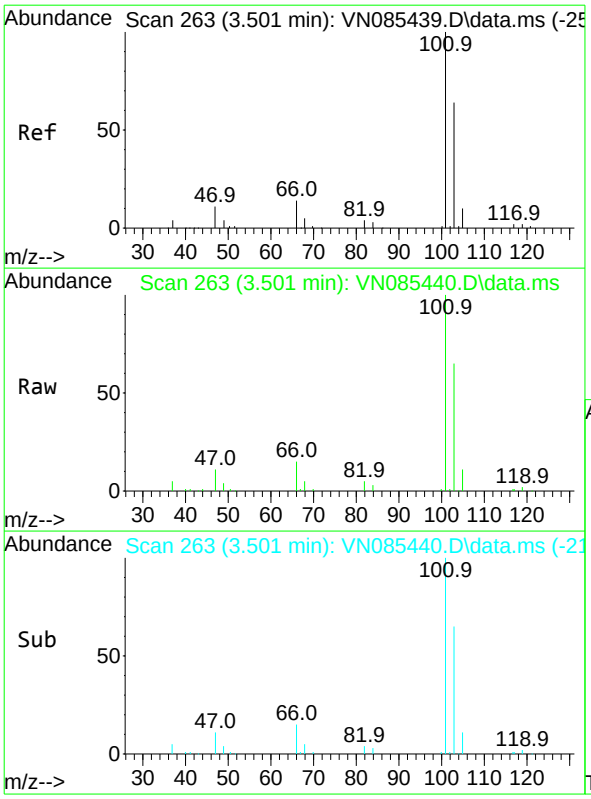


#6
Chloroethane
Concen: 20.041 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 64 Resp: 37594

Ion	Ratio	Lower	Upper
64	100		
66	34.3	24.6	36.8

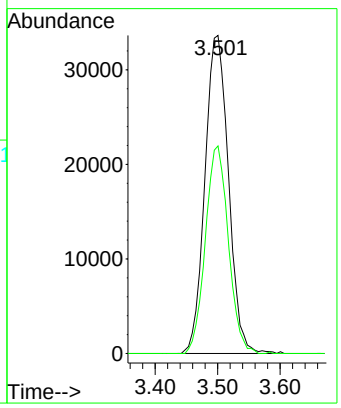




#7
Trichlorofluoromethane
Concen: 20.526 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:101 Resp: 88121

Ion	Ratio	Lower	Upper
101	100		
103	65.3	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
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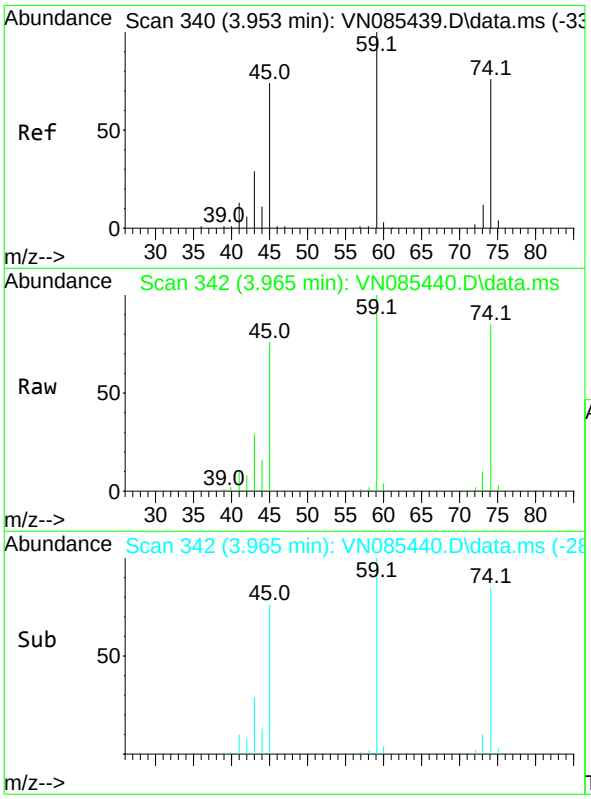
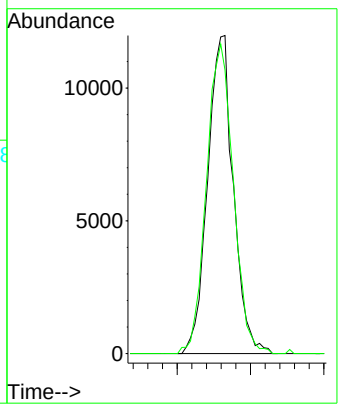
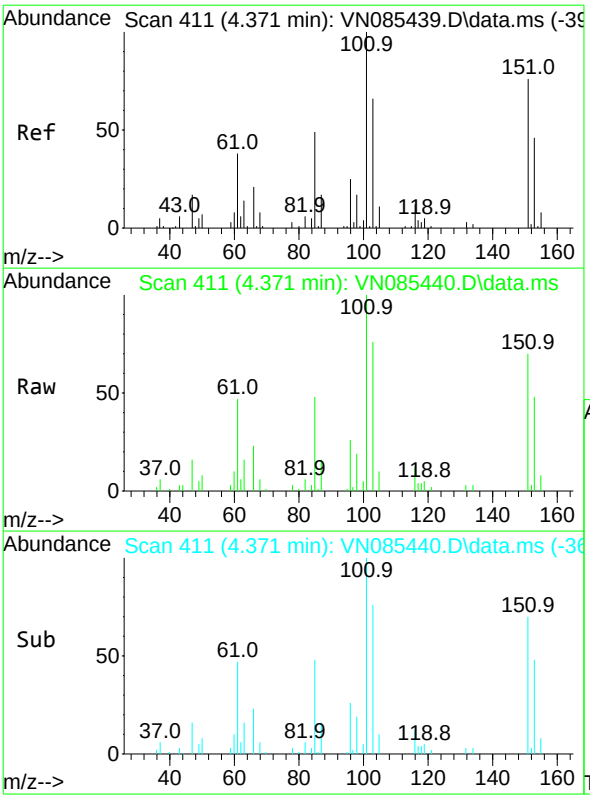


#8
Diethyl Ether
Concen: 19.647 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 74 Resp: 29138

Ion	Ratio	Lower	Upper
74	100		
45	101.8	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.237 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion:101 Resp: 48933

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

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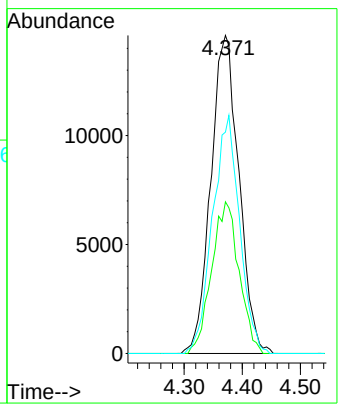
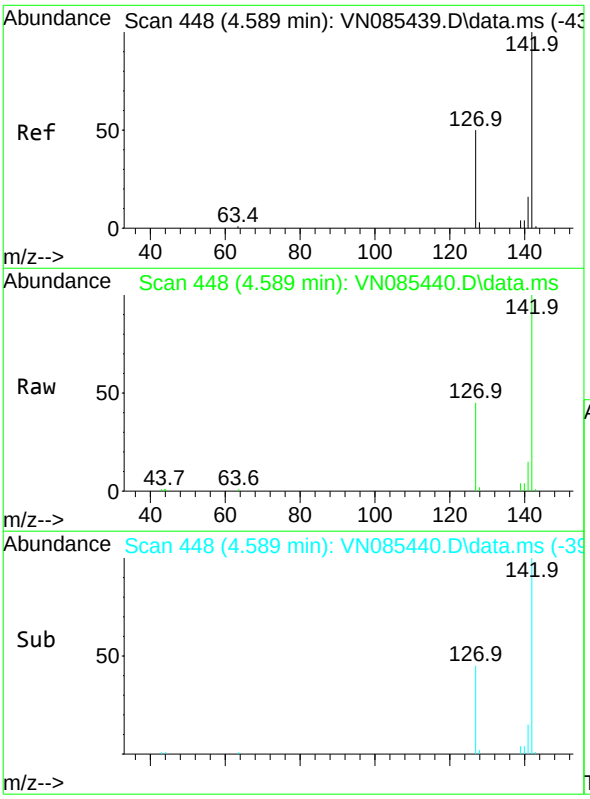
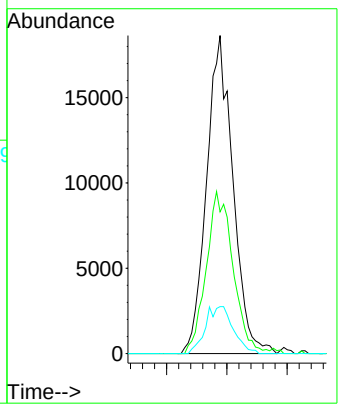


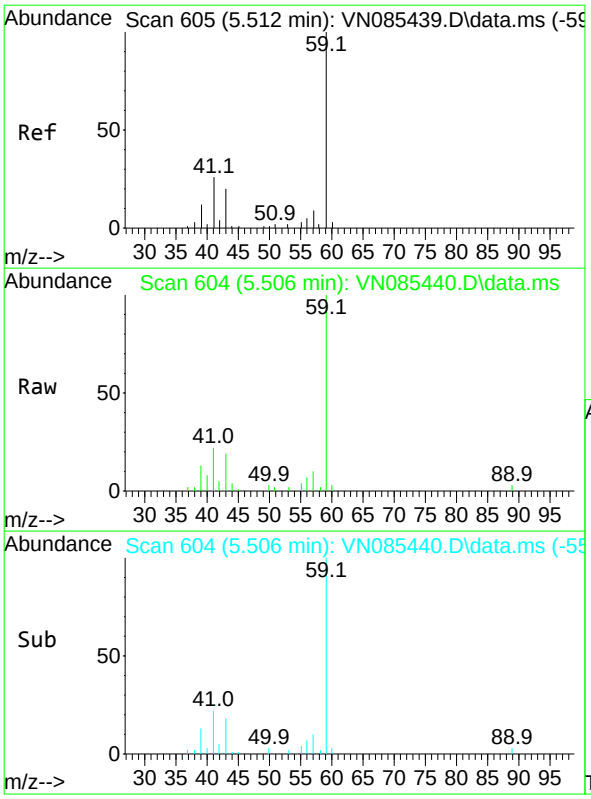


#10
Methyl Iodide
Concen: 20.428 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:142 Resp: 56567

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

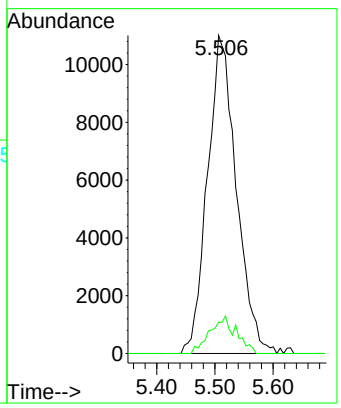




#11
Tert butyl alcohol
Concen: 102.342 ug/l
RT: 5.506 min Scan# 60
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 59 Resp: 37984

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.6	13.0



Instrument :
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ClientSampleId :
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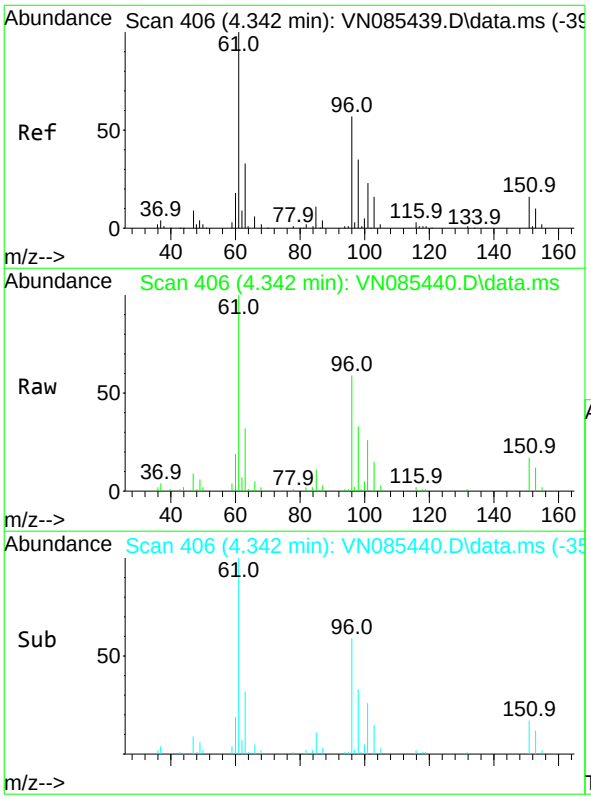
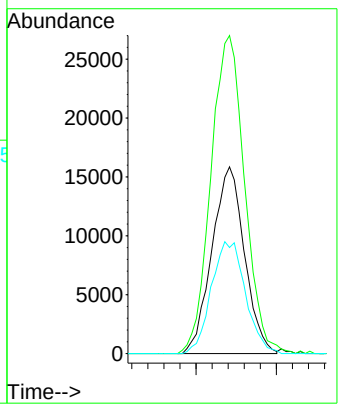
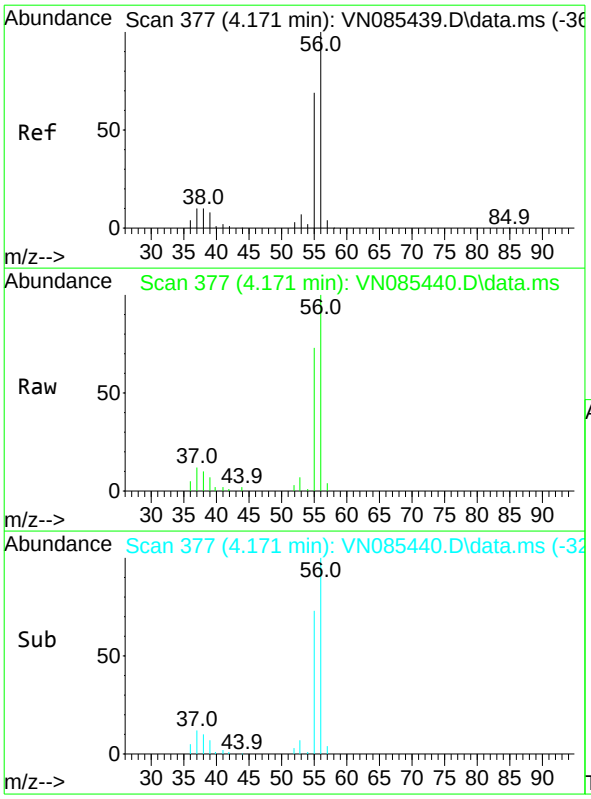


#12
1,1-Dichloroethene
Concen: 20.728 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 96 Resp: 44670

Ion	Ratio	Lower	Upper
96	100		
61	170.3	141.0	211.4
98	56.8	49.0	73.6

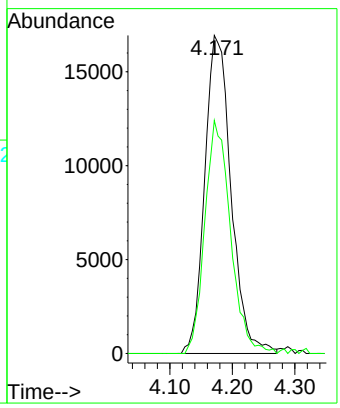




#13
Acrolein
Concen: 97.995 ug/l
RT: 4.171 min Scan# 37
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 56 Resp: 49649

Ion	Ratio	Lower	Upper
56	100		
55	71.4	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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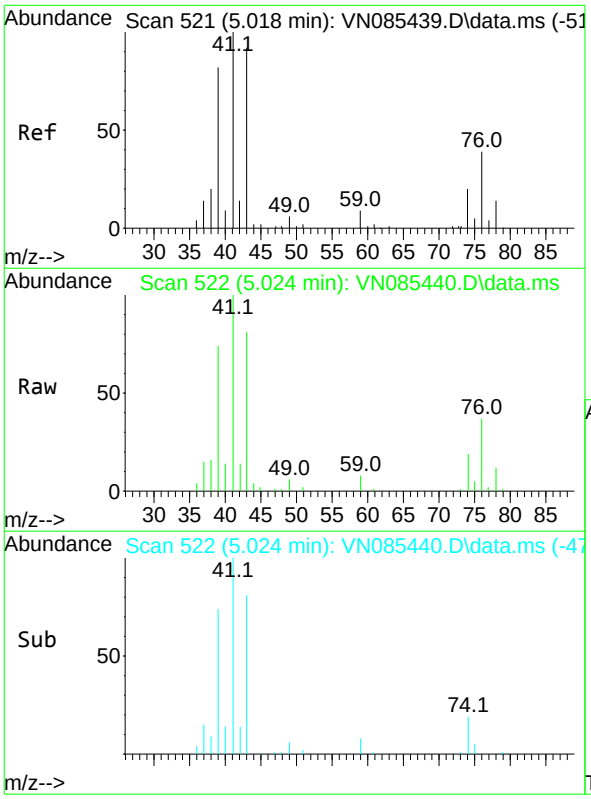
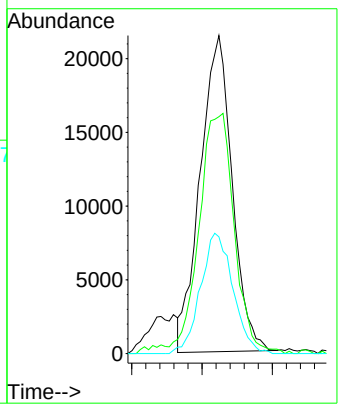
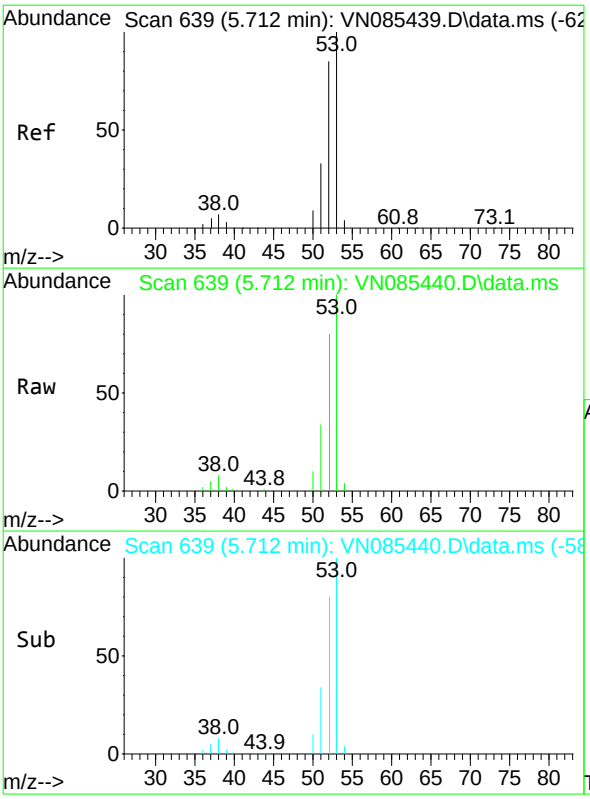


#14
Allyl chloride
Concen: 19.362 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 41 Resp: 67705

Ion	Ratio	Lower	Upper
41	100		
39	85.0	64.4	96.6
76	38.6	30.5	45.7

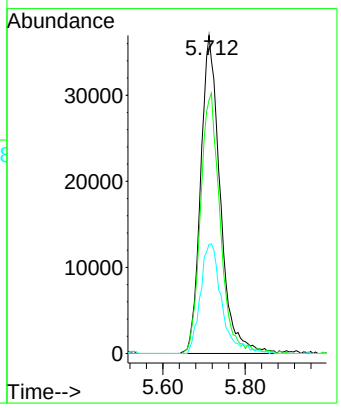




#15
Acrylonitrile
Concen: 103.171 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 53 Resp: 121626

Ion	Ratio	Lower	Upper
53	100		
52	81.1	65.5	98.3
51	36.1	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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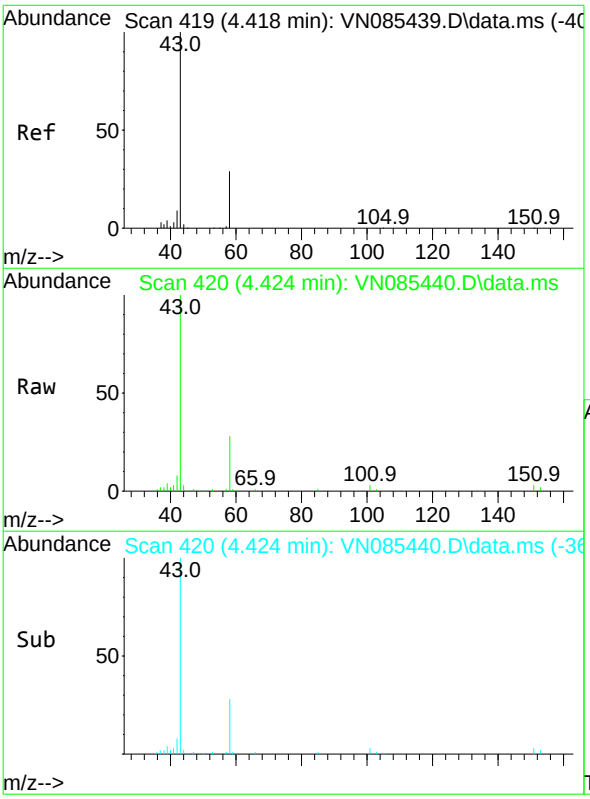
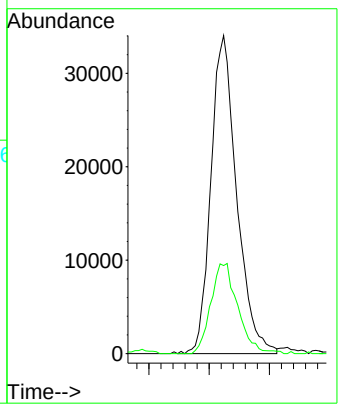
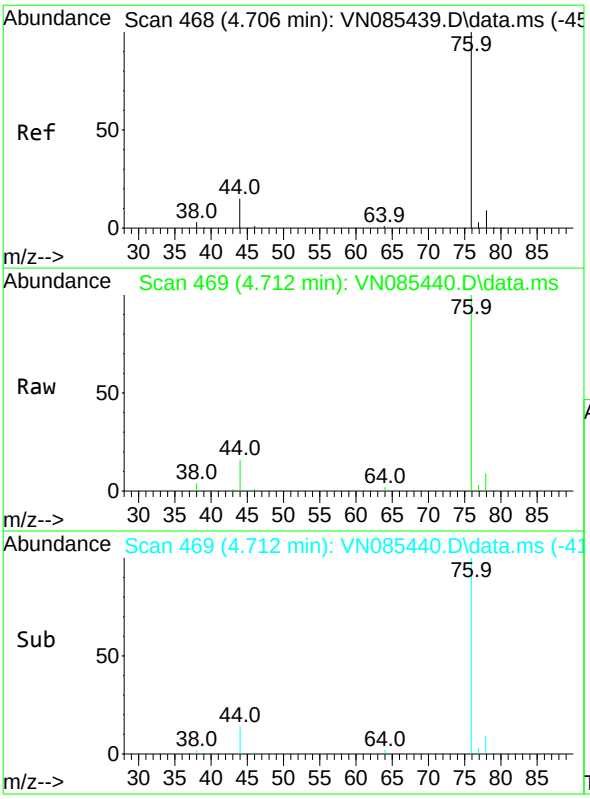


#16
Acetone
Concen: 96.502 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 101065

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.8	35.6

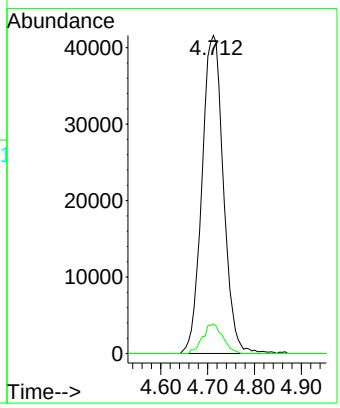




#17
Carbon Disulfide
Concen: 19.939 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 76 Resp: 132300

Ion	Ratio	Lower	Upper
76	100		
78	9.3	6.9	10.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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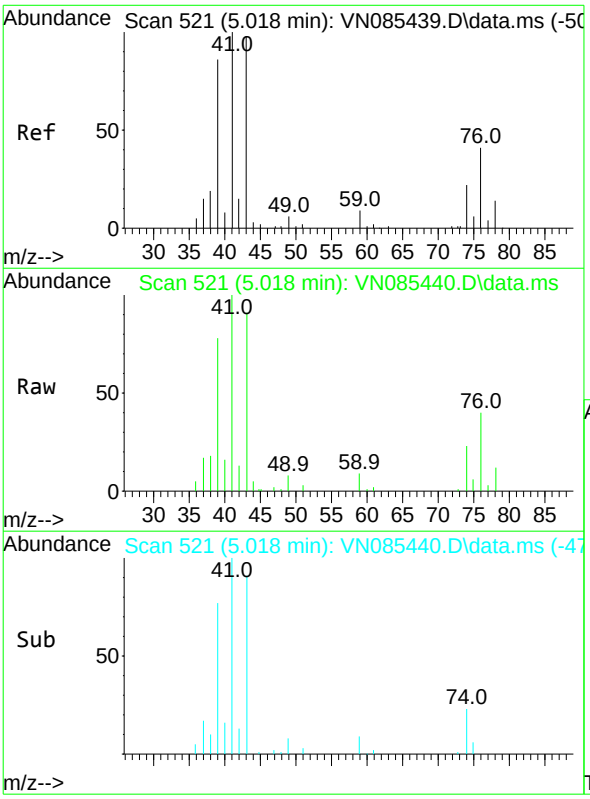
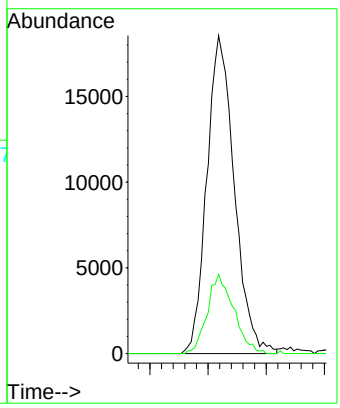
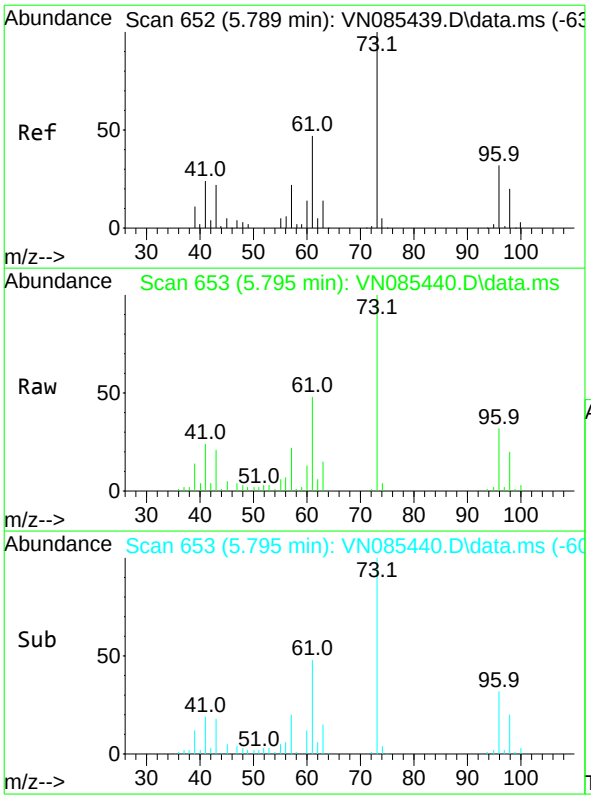


#18
Methyl Acetate
Concen: 19.115 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 60873

Ion	Ratio	Lower	Upper
43	100		
74	24.0	18.6	28.0

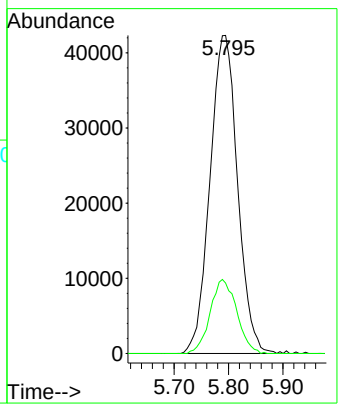




#19
Methyl tert-butyl Ether
Concen: 21.272 ug/l
RT: 5.795 min Scan# 65
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 73 Resp: 148847

Ion	Ratio	Lower	Upper
73	100		
57	22.1	17.8	26.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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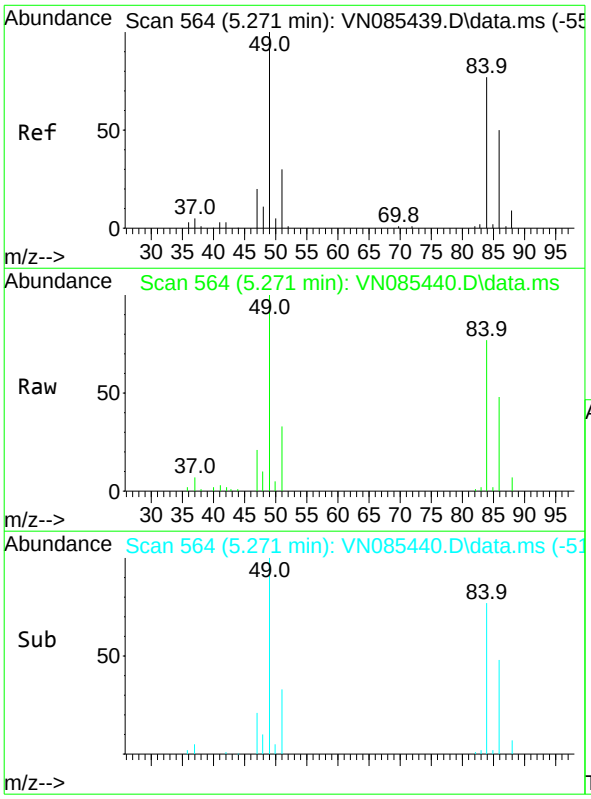
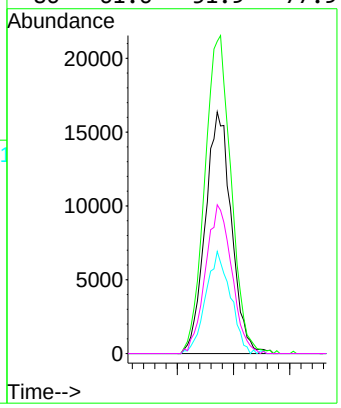
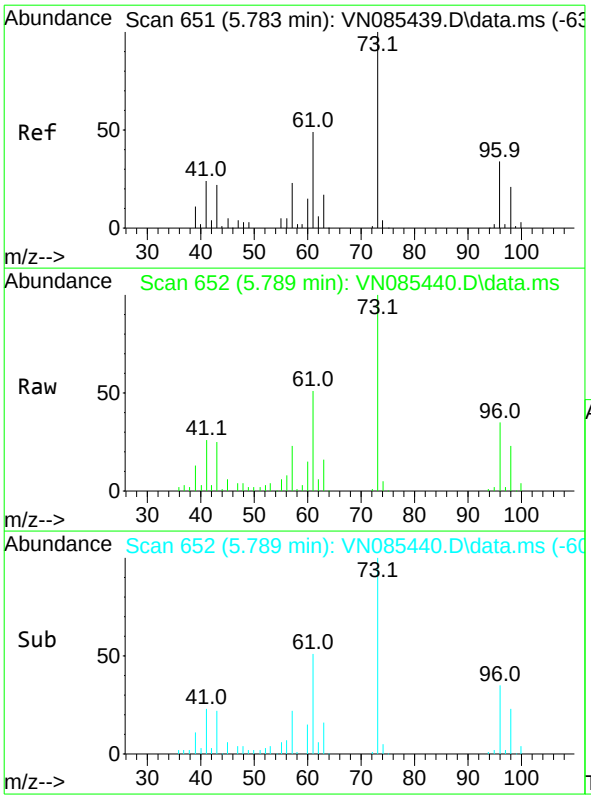


#20
Methylene Chloride
Concen: 20.370 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 84 Resp: 52813

Ion	Ratio	Lower	Upper
84	100		
49	129.2	104.1	156.1
51	42.2	31.0	46.4
86	61.6	51.9	77.9

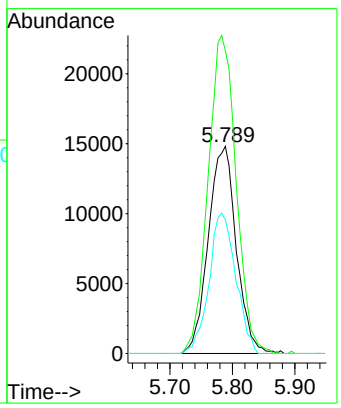




#21
trans-1,2-Dichloroethene
Concen: 20.023 ug/l
RT: 5.789 min Scan# 65
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 96 Resp: 46115

Ion	Ratio	Lower	Upper
96	100		
61	146.1	115.7	173.5
98	64.5	49.8	74.8



Instrument :
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ClientSampleId :
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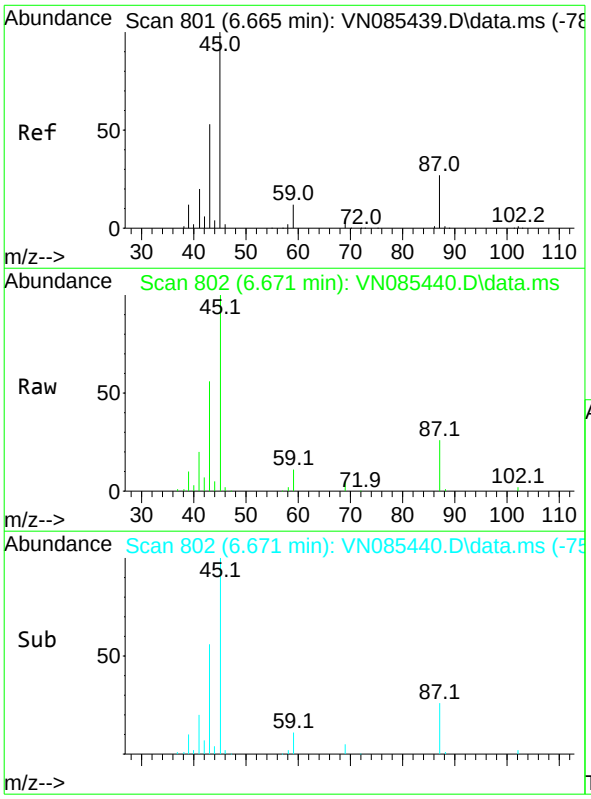
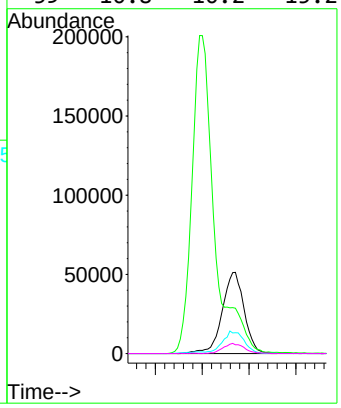
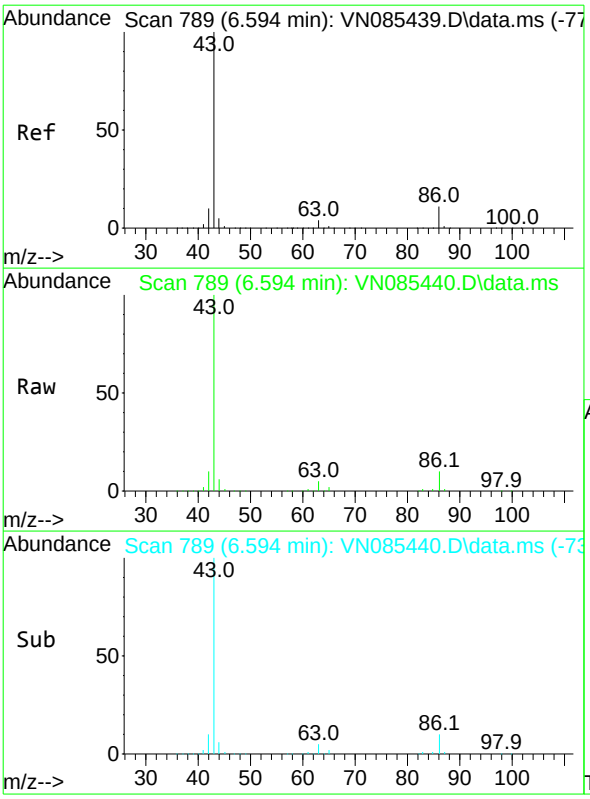


#22
Diisopropyl ether
Concen: 21.480 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 45 Resp: 166719

Ion	Ratio	Lower	Upper
45	100		
43	54.3	45.0	67.6
87	25.3	21.8	32.8
59	10.8	10.2	15.2

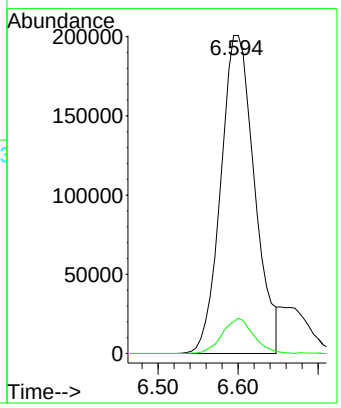




#23
Vinyl Acetate
Concen: 107.984 ug/l m
RT: 6.594 min Scan# 78
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 588567

Ion	Ratio	Lower	Upper
43	100		
86	10.1	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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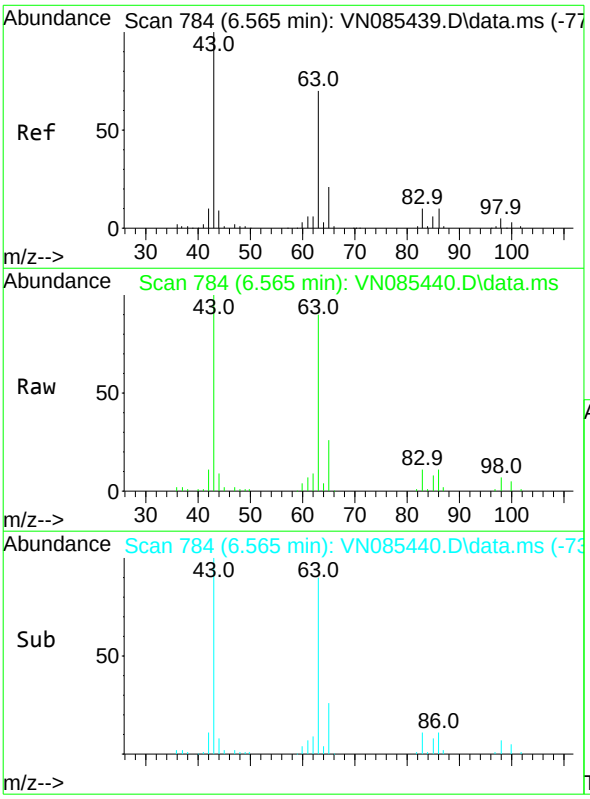
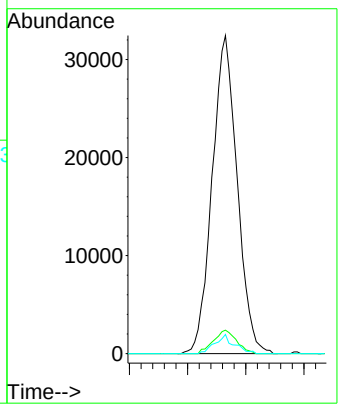
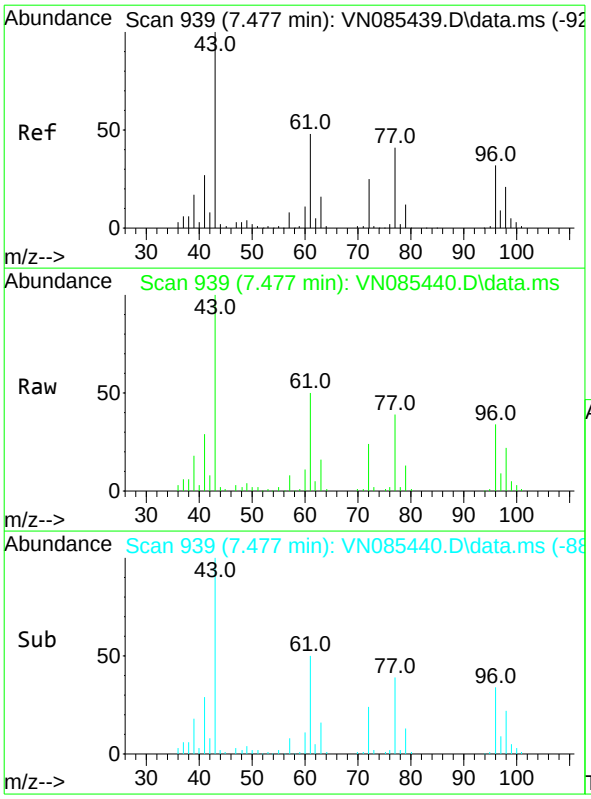


#24
1,1-Dichloroethane
Concen: 20.469 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 96875

Ion	Ratio	Lower	Upper
63	100		
98	7.4	3.3	9.8
100	6.0	2.0	6.0#





#25
2-Butanone
Concen: 103.786 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 159952

Ion	Ratio	Lower	Upper
43	100		
72	24.1	20.2	30.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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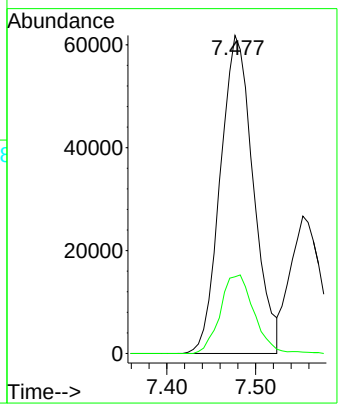
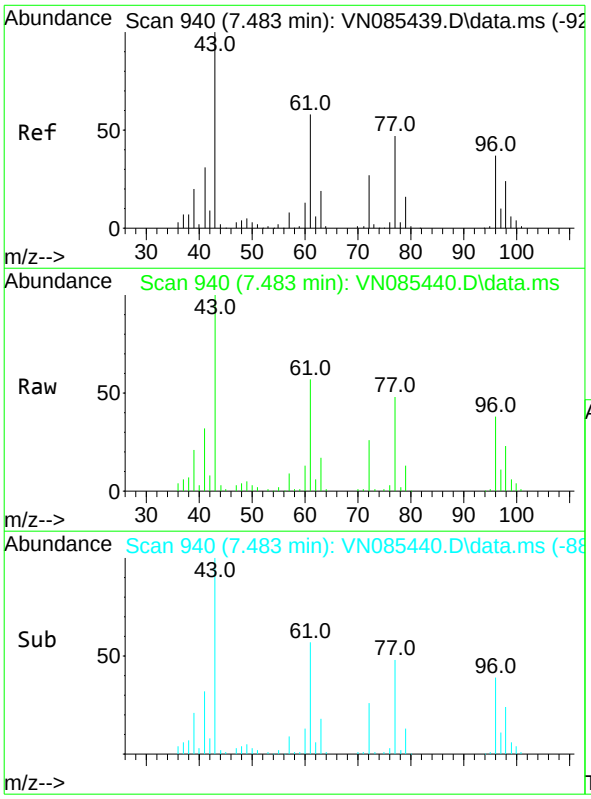
Supervised By :Mahesh Dadoda 01/15/2025

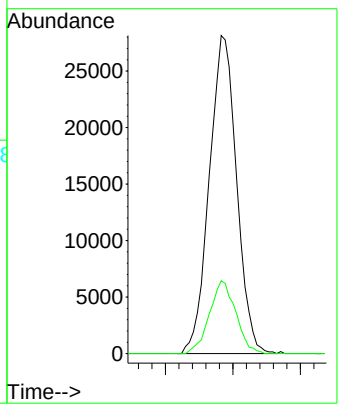


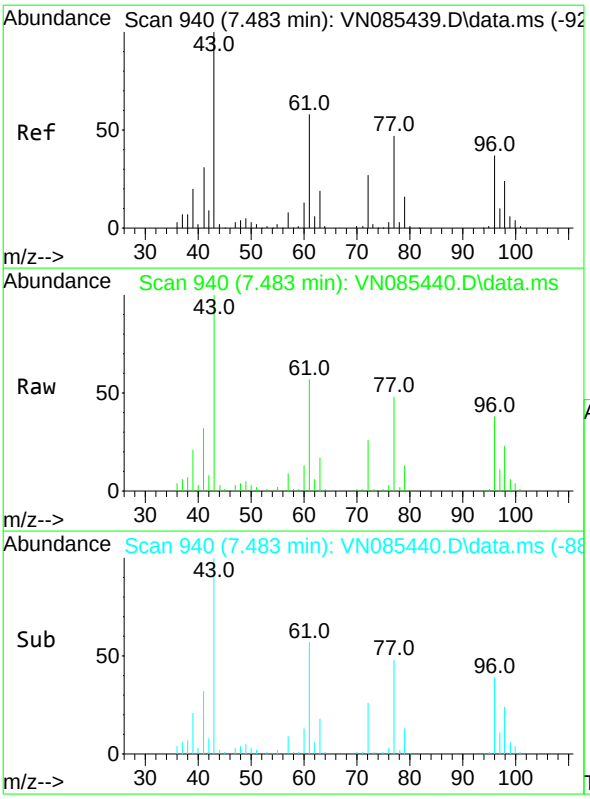


#26
2,2-Dichloropropane
Concen: 20.684 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 77 Resp: 79145

Ion	Ratio	Lower	Upper
77	100		
97	22.0	10.7	32.1

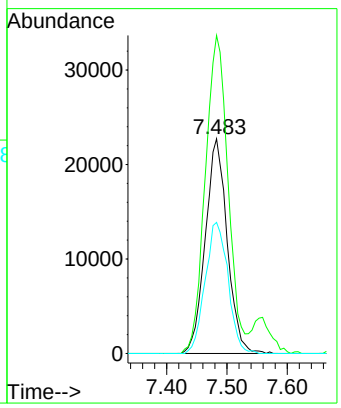




#27
cis-1,2-Dichloroethene
Concen: 21.180 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 96 Resp: 57454

Ion	Ratio	Lower	Upper
96	100		
61	153.0	0.0	311.8
98	63.7	0.0	126.0



Instrument :
MSVOA_N
ClientSampleId :
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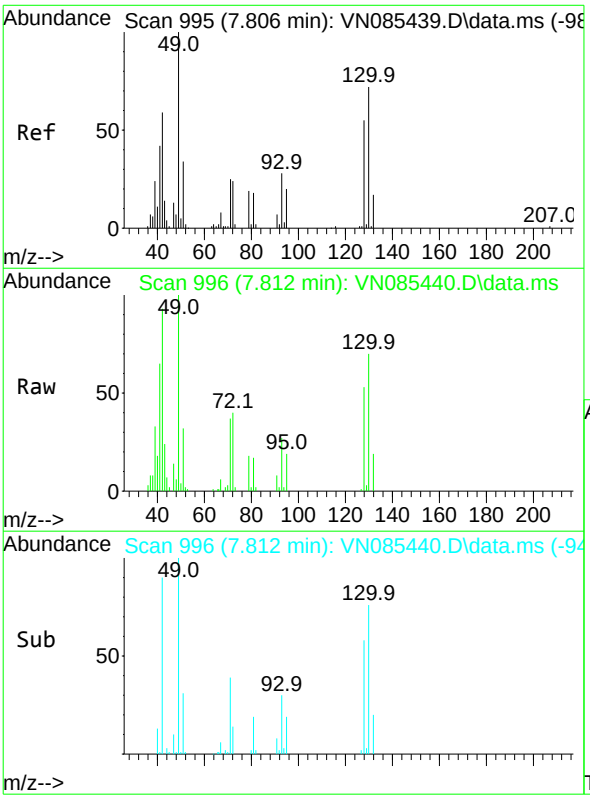
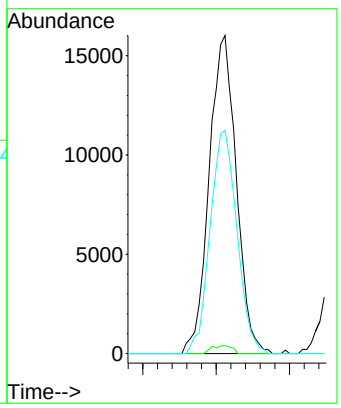
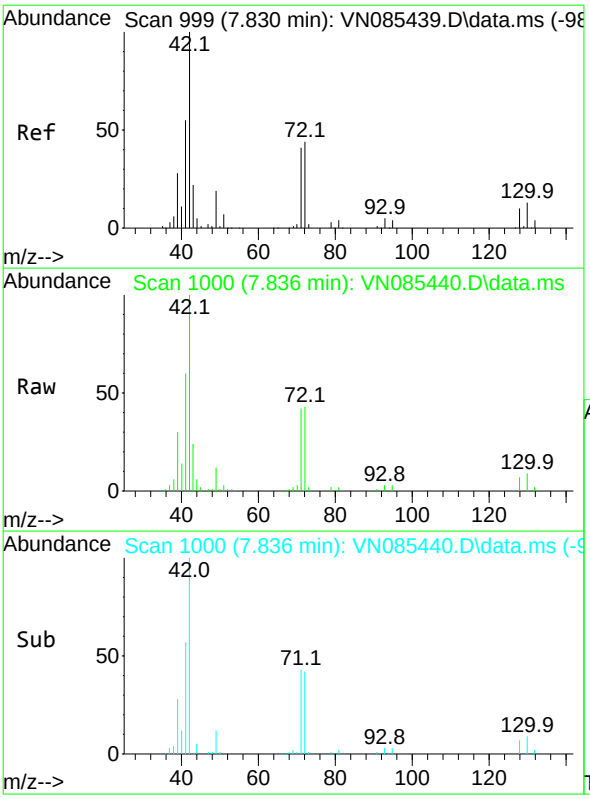


#28
Bromochloromethane
Concen: 18.703 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 49 Resp: 41181

Ion	Ratio	Lower	Upper
49	100		
129	1.9	0.0	4.4
130	69.3	55.0	82.4

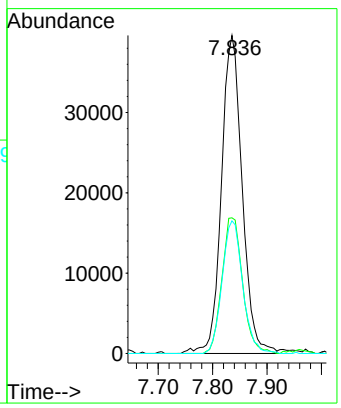




#29
Tetrahydrofuran
Concen: 107.247 ug/l
RT: 7.836 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 42 Resp: 104792

Ion	Ratio	Lower	Upper
42	100		
72	42.6	34.2	51.2
71	41.4	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
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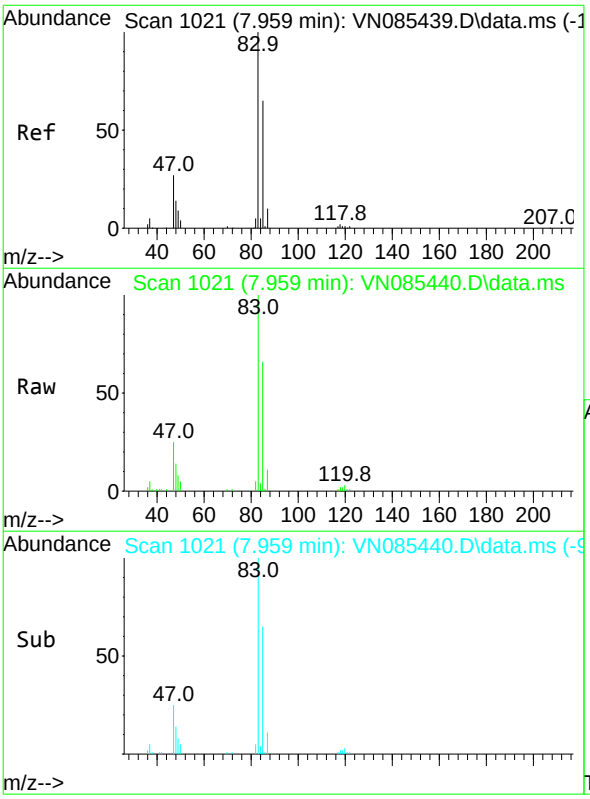
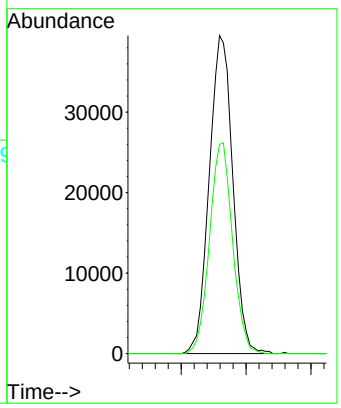
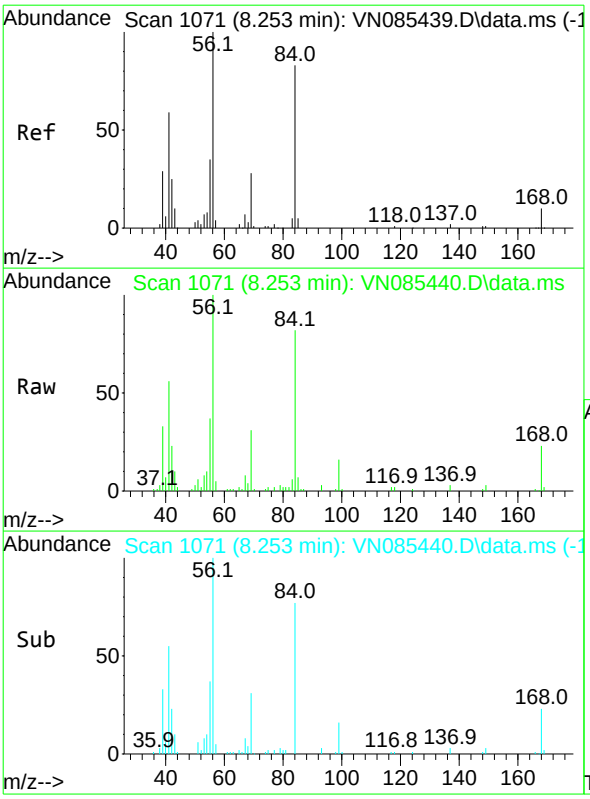


#30
Chloroform
Concen: 20.374 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 99655

Ion	Ratio	Lower	Upper
83	100		
85	65.8	51.8	77.6

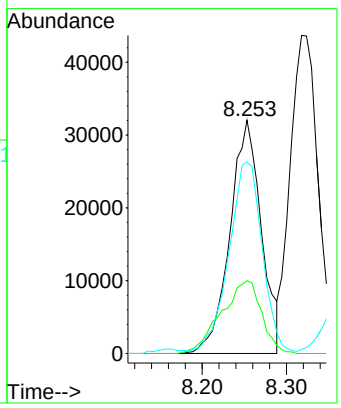




#31
Cyclohexane
Concen: 20.173 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 56 Resp: 82980

Ion	Ratio	Lower	Upper
56	100		
69	31.2	22.2	33.4
84	80.8	66.4	99.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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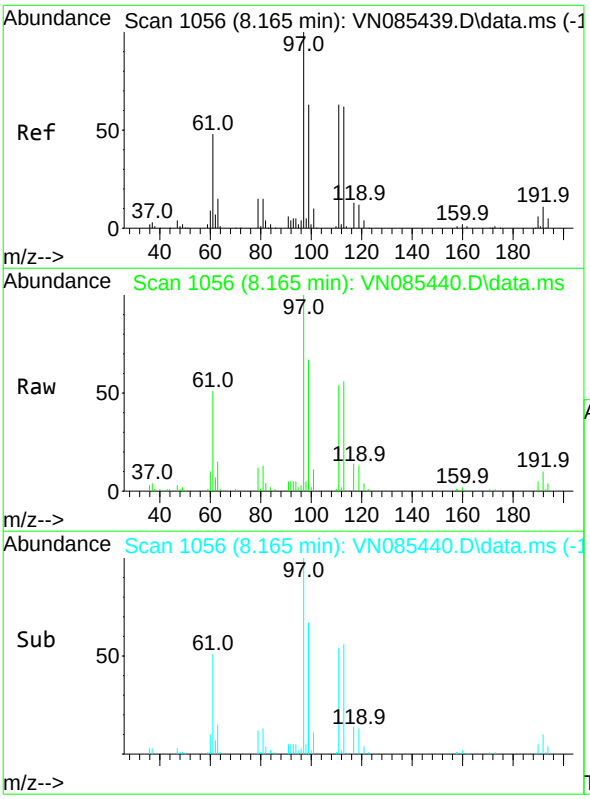
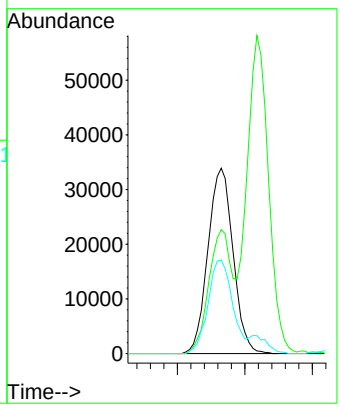
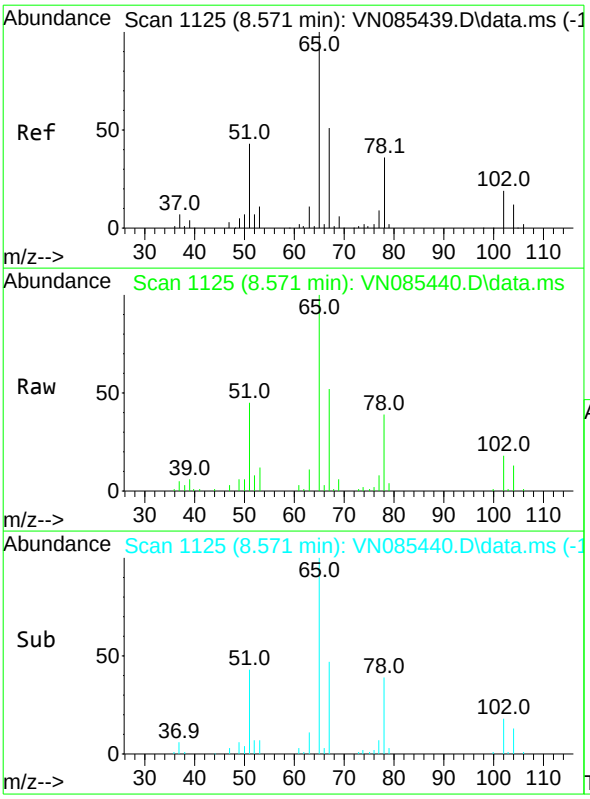


#32
1,1,1-Trichloroethane
Concen: 20.431 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 97 Resp: 87659

Ion	Ratio	Lower	Upper
97	100		
99	64.2	49.8	74.6
61	50.3	41.4	62.2

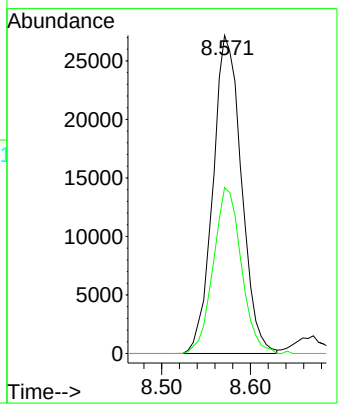




#33
1,2-Dichloroethane-d4
Concen: 18.694 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 65 Resp: 60593

Ion	Ratio	Lower	Upper
65	100		
67	51.2	0.0	101.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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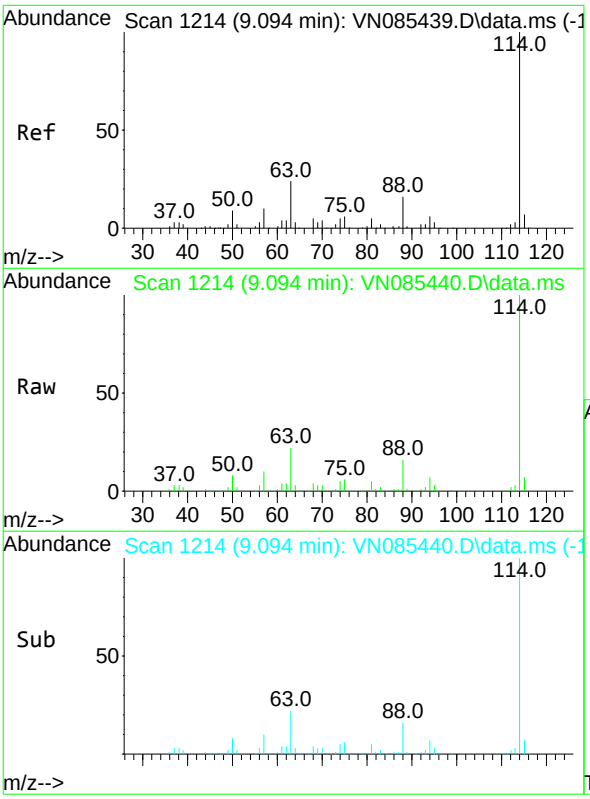
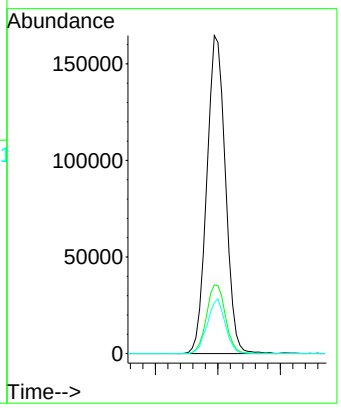
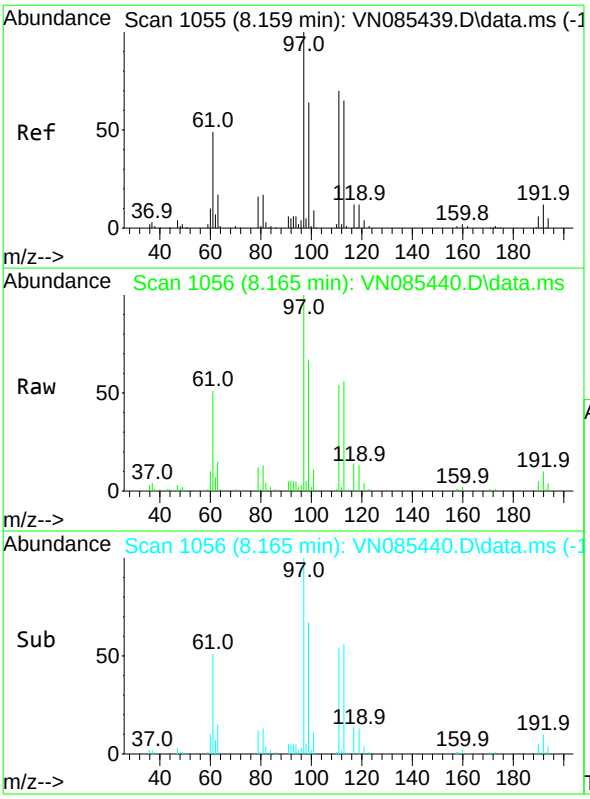


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:114 Resp: 340593

Ion	Ratio	Lower	Upper
114	100		
63	21.6	0.0	47.6
88	16.0	0.0	32.6





#35
Dibromofluoromethane
Concen: 19.322 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion:113 Resp: 45655

Ion	Ratio	Lower	Upper
113	100		
111	100.6	82.7	124.1
192	17.9	14.3	21.5

Manual Integrations
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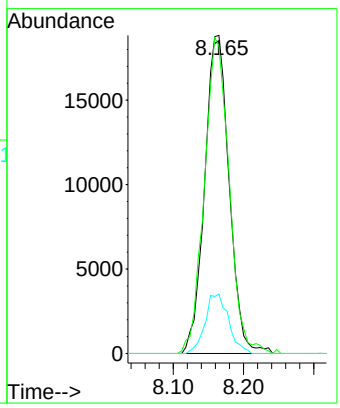
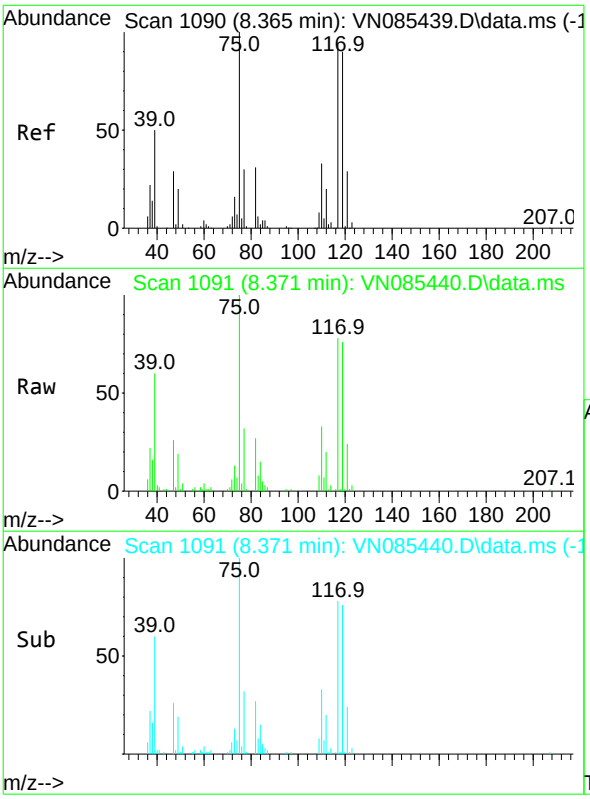
Supervised By :Mahesh Dadoda 01/15/2025

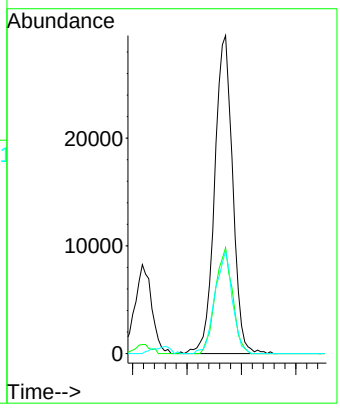


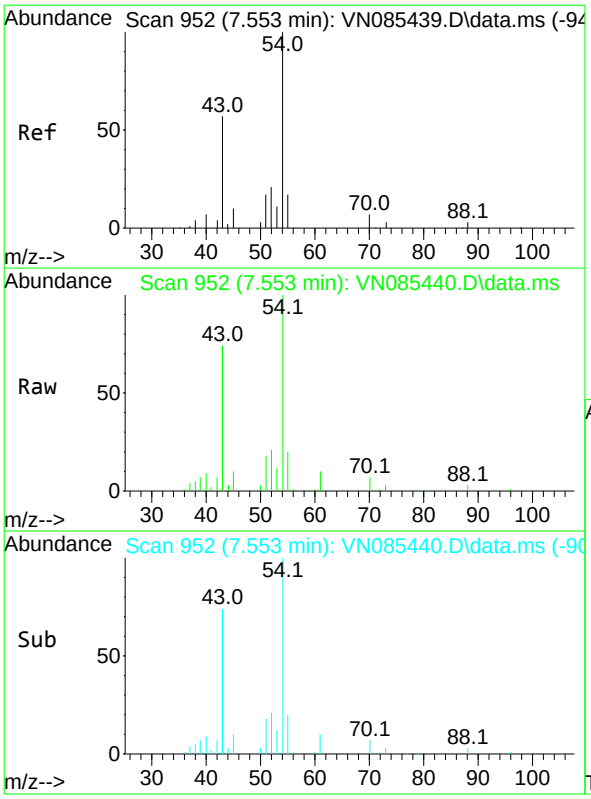


#36
1,1-Dichloropropene
Concen: 20.490 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 67949

Ion	Ratio	Lower	Upper
75	100		
110	31.8	16.5	49.5
77	31.1	24.4	36.6





#37
Ethyl Acetate
Concen: 19.850 ug/l
RT: 7.553 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 66443

Ion	Ratio	Lower	Upper
43	100		
61	11.9	10.9	16.3
70	10.6	7.5	11.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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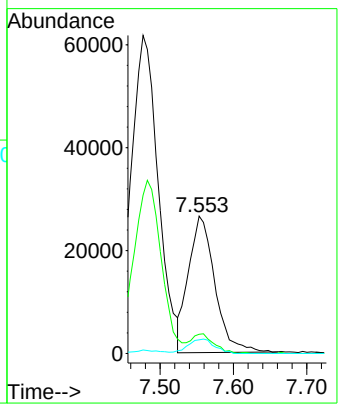
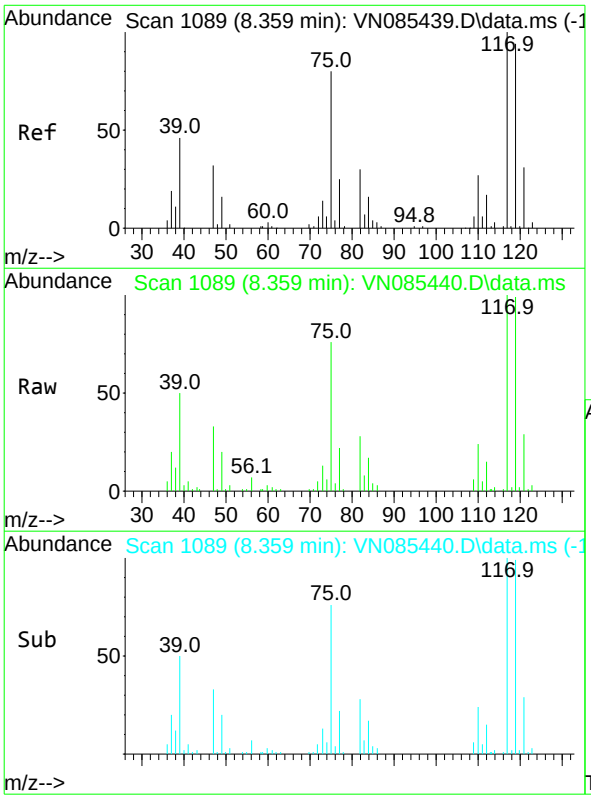
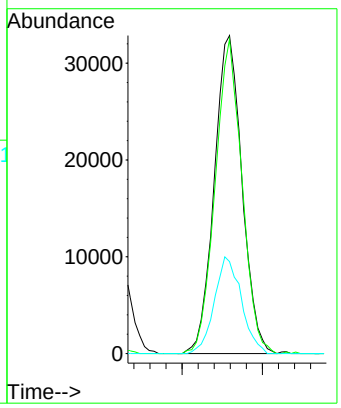


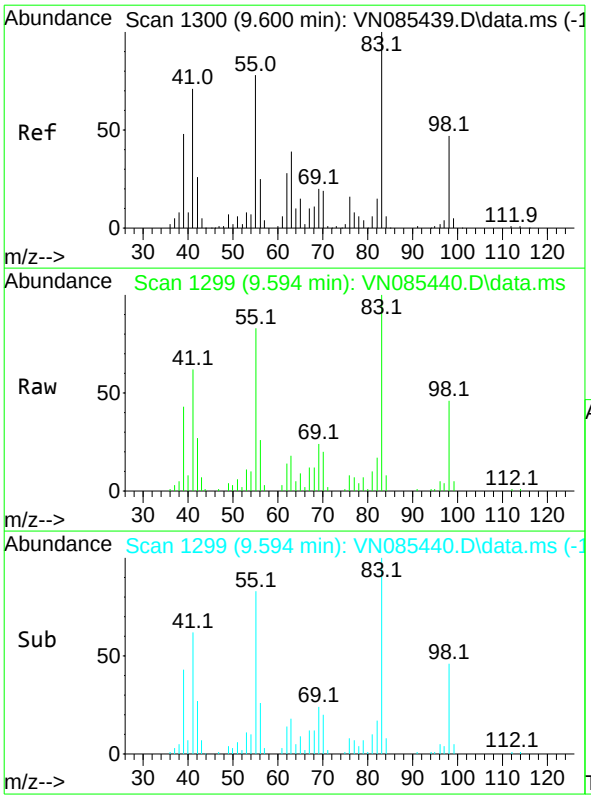


#38
Carbon Tetrachloride
Concen: 20.767 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:117 Resp: 78842

Ion	Ratio	Lower	Upper
117	100		
119	98.9	75.4	113.2
121	28.9	24.6	37.0

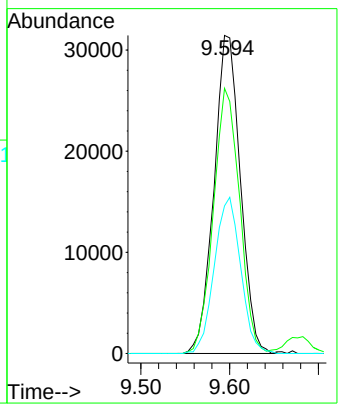




#39
Methylcyclohexane
Concen: 20.862 ug/l
RT: 9.594 min Scan# 12
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 65012

Ion	Ratio	Lower	Upper
83	100		
55	83.4	62.6	94.0
98	46.4	37.7	56.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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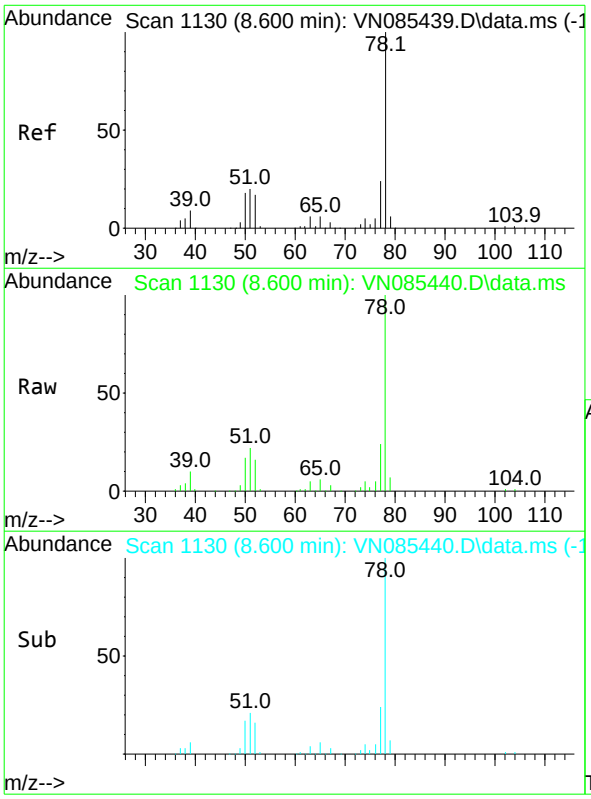
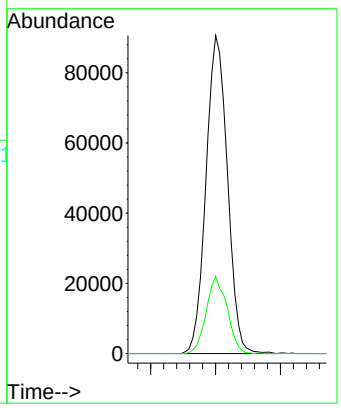
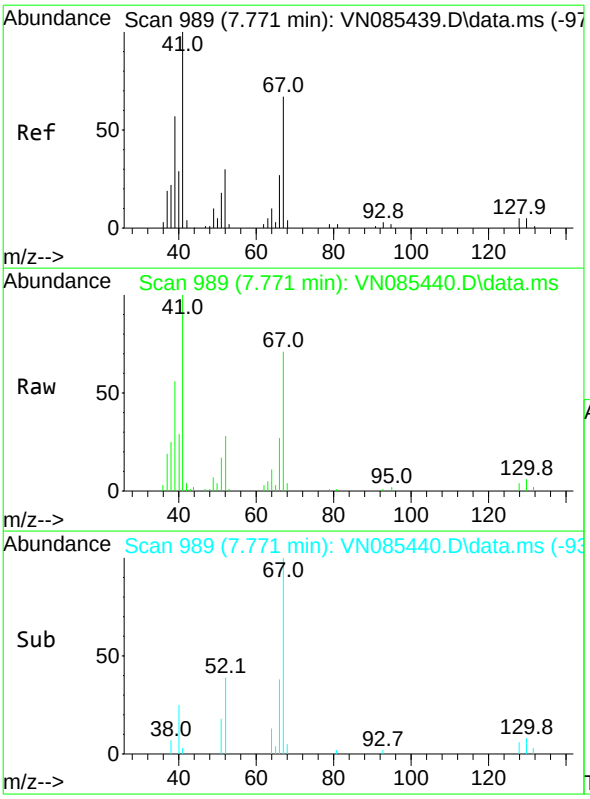


#40
Benzene
Concen: 20.873 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 78 Resp: 207985

Ion	Ratio	Lower	Upper
78	100		
77	24.4	19.0	28.6

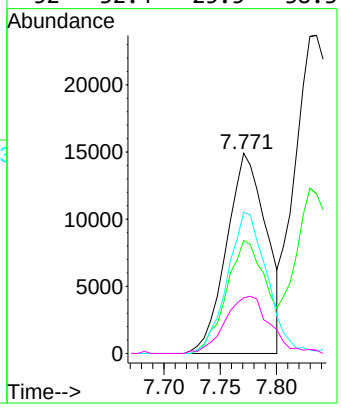




#41
Methacrylonitrile
Concen: 21.004 ug/l
RT: 7.771 min Scan# 98
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 41 Resp: 36578

Ion	Ratio	Lower	Upper
41	100		
39	56.6	46.0	69.0
67	70.3	57.4	86.2
52	32.4	25.5	38.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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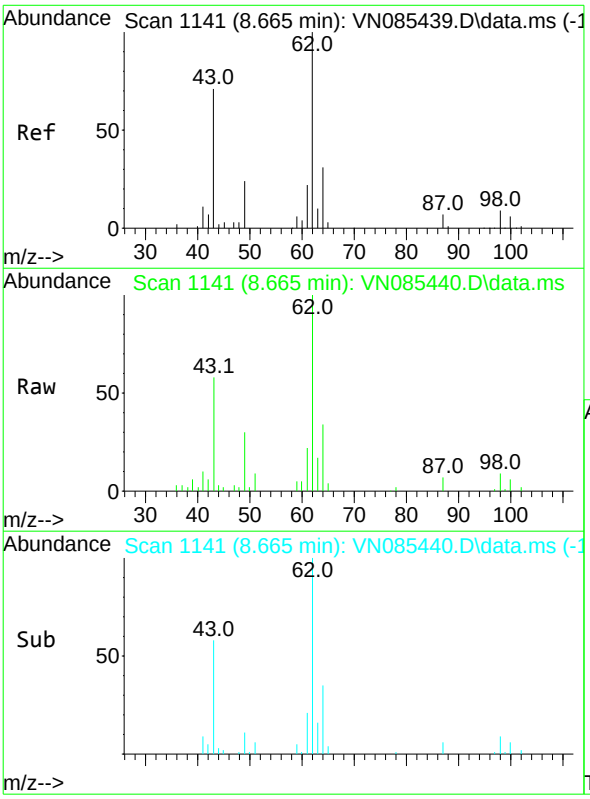
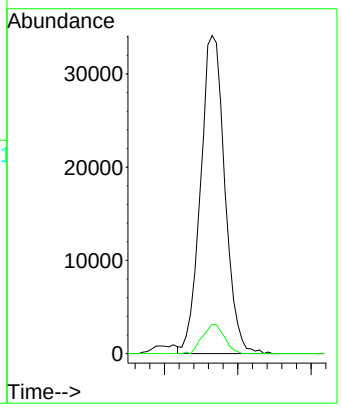
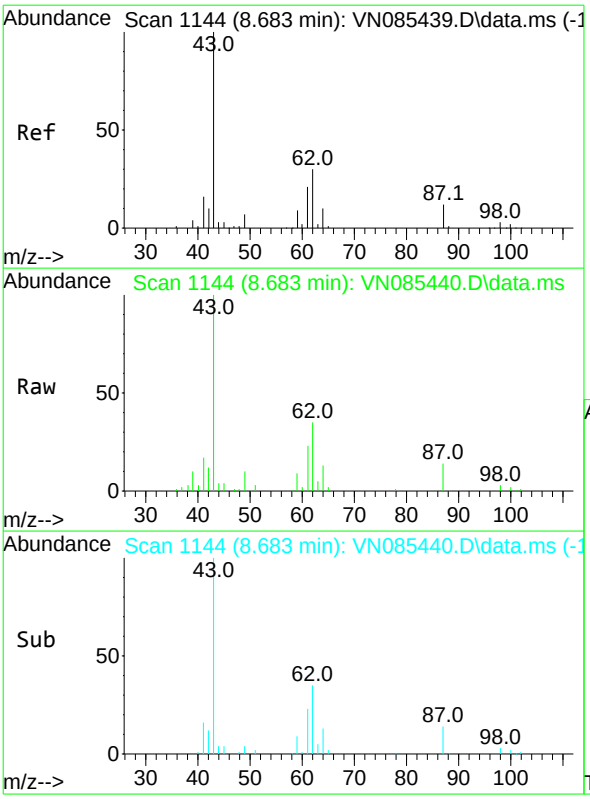


#42
1,2-Dichloroethane
Concen: 20.891 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 62 Resp: 78402

Ion	Ratio	Lower	Upper
62	100		
98	8.3	0.0	17.0





#43
Isopropyl Acetate
Concen: 20.347 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 109131

Ion	Ratio	Lower	Upper
43	100		
61	27.2	20.7	31.1
87	12.3	9.8	14.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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Reviewed By :John Carlone 01/15/2025
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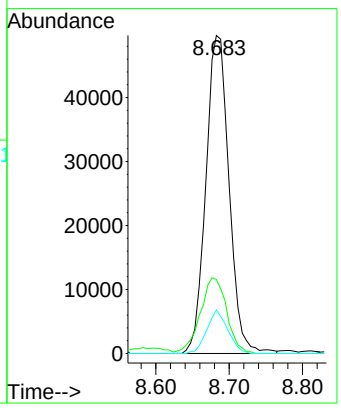
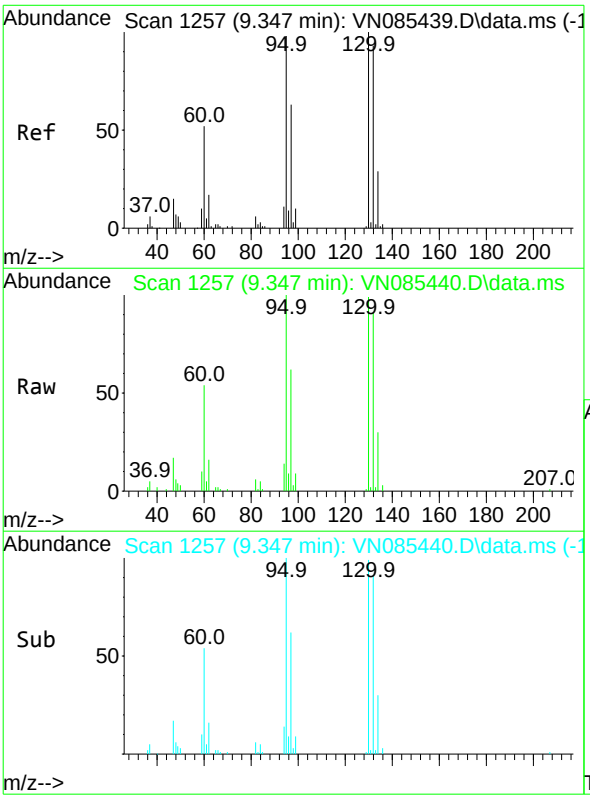
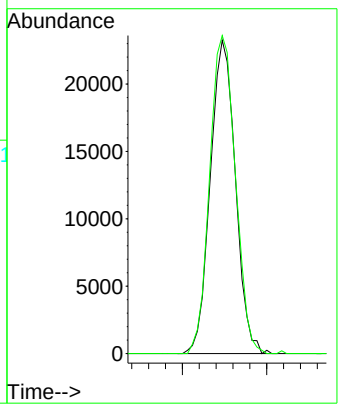


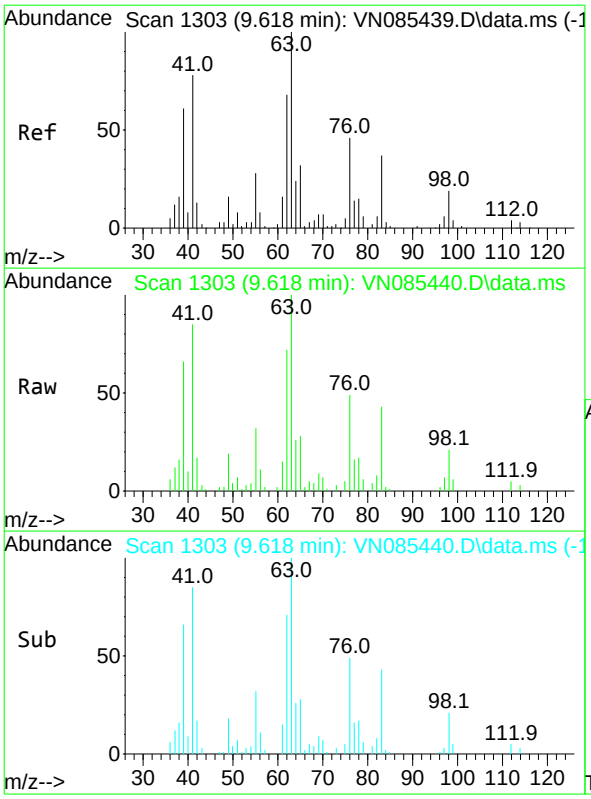


#44
Trichloroethene
Concen: 20.699 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:130 Resp: 48009

Ion	Ratio	Lower	Upper
130	100		
95	101.5	0.0	195.8

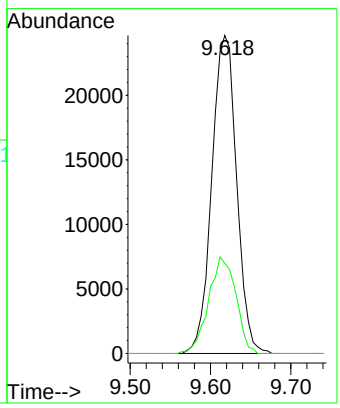




#45
1,2-Dichloropropane
Concen: 20.758 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 52833

Ion	Ratio	Lower	Upper
63	100		
65	28.3	25.6	38.4



Instrument :
MSVOA_N
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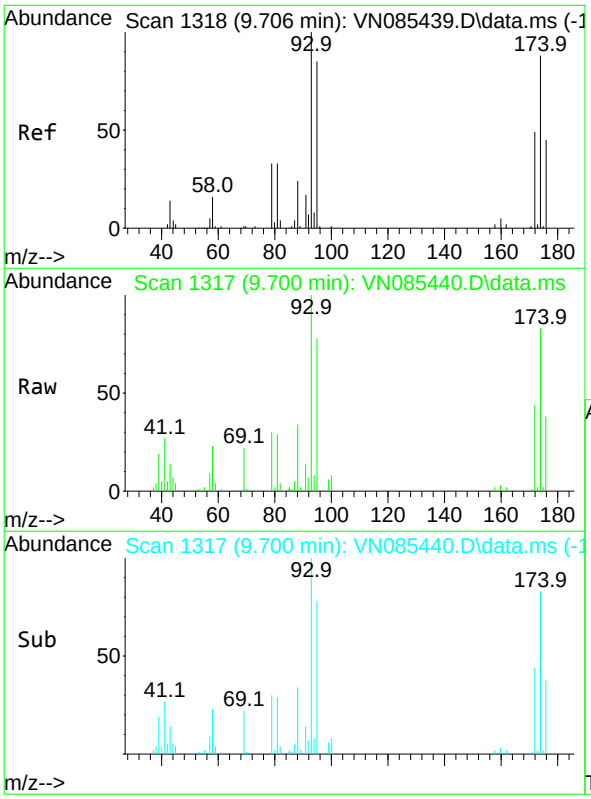
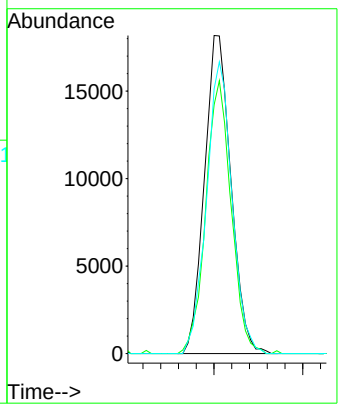
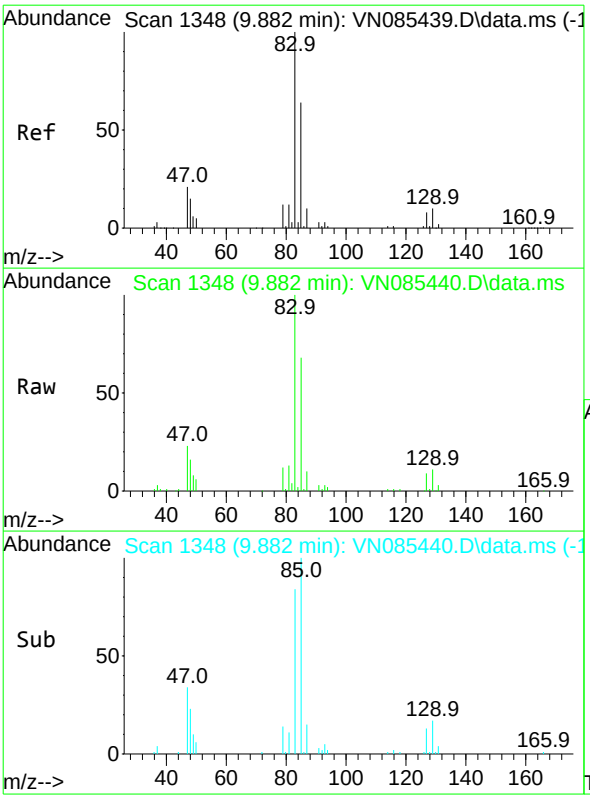


#46
Dibromomethane
Concen: 20.540 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 93 Resp: 37721

Ion	Ratio	Lower	Upper
93	100		
95	82.0	64.7	97.1
174	88.4	69.0	103.4

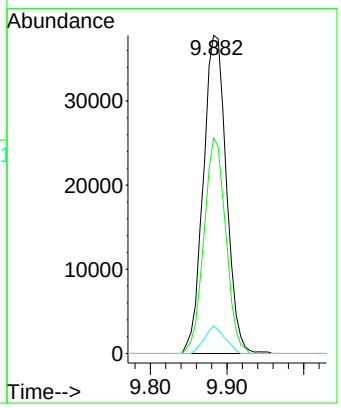




#47
Bromodichloromethane
Concen: 21.093 ug/l
RT: 9.882 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 78918

Ion	Ratio	Lower	Upper
83	100		
85	67.8	51.2	76.8
127	8.6	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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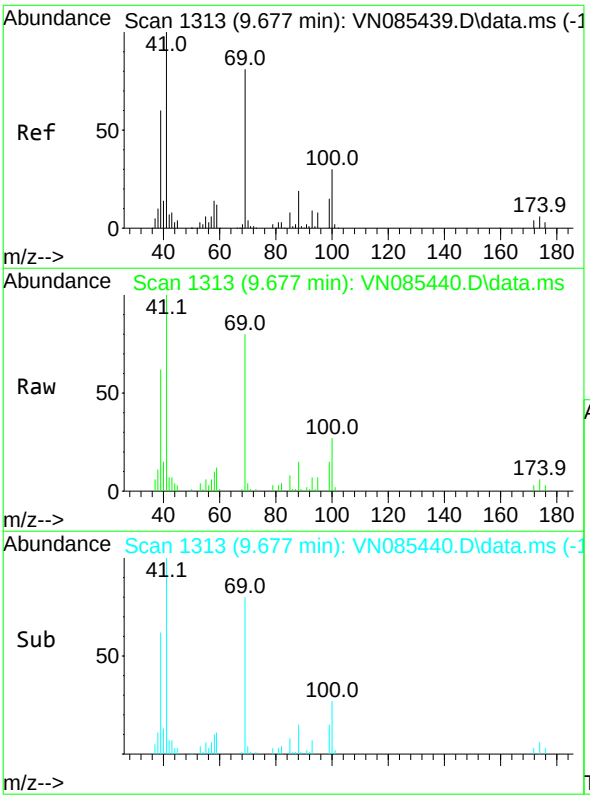
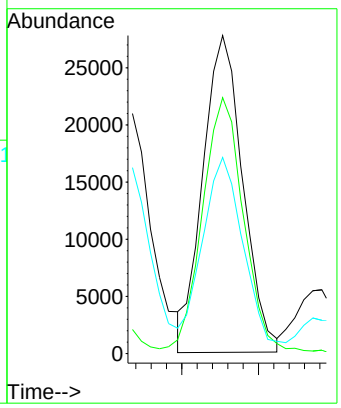
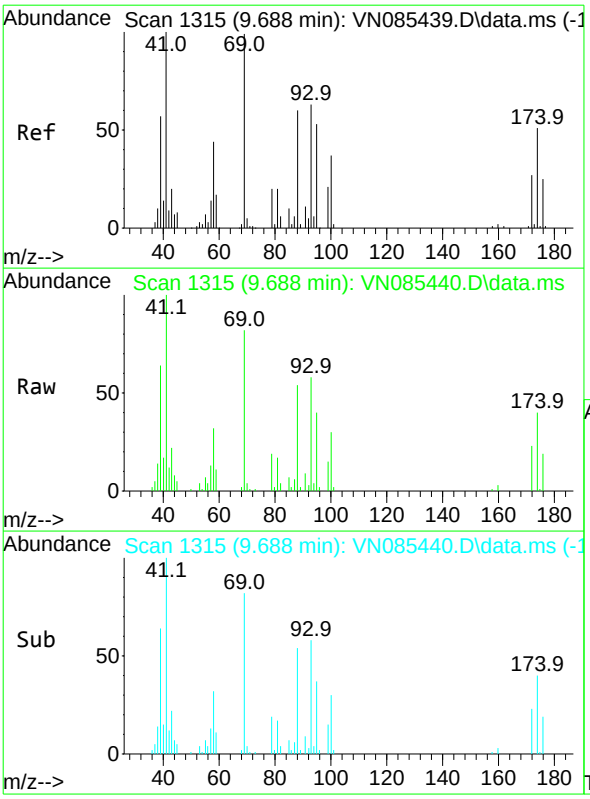


#48
Methyl methacrylate
Concen: 20.808 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 41 Resp: 50224

Ion	Ratio	Lower	Upper
41	100		
69	84.3	64.7	97.1
39	64.2	49.0	73.6

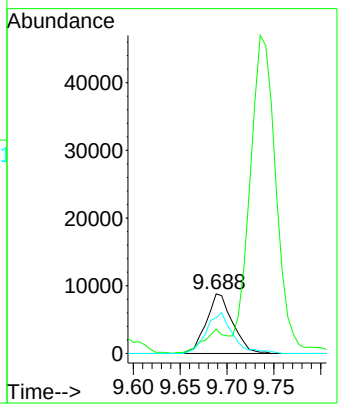




#49
1,4-Dioxane
Concen: 421.686 ug/l
RT: 9.688 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 88 Resp: 17140

Ion	Ratio	Lower	Upper
88	100		
43	34.9	26.6	39.8
58	69.0	59.5	89.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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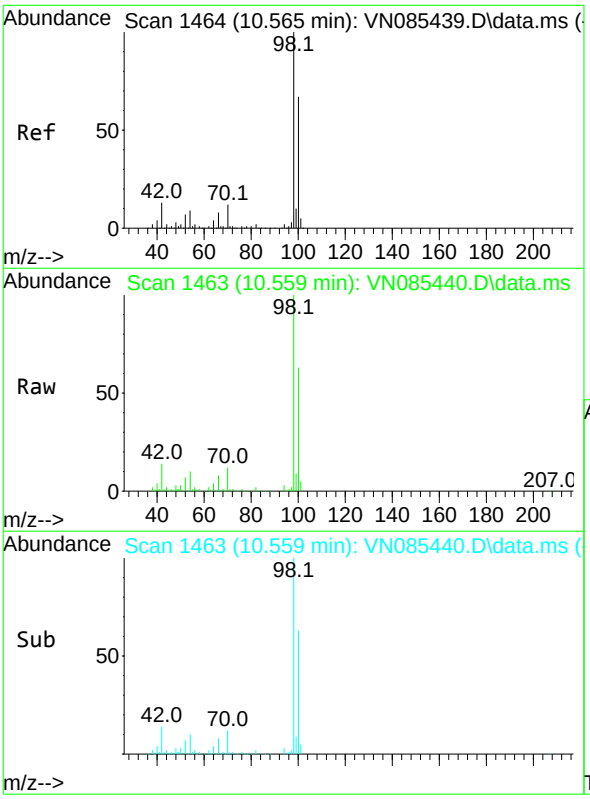
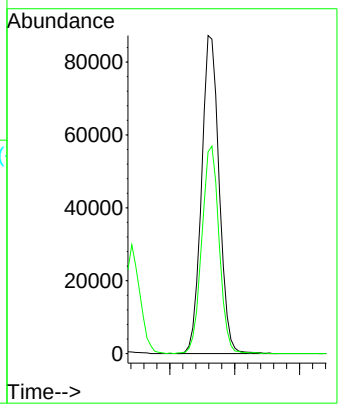
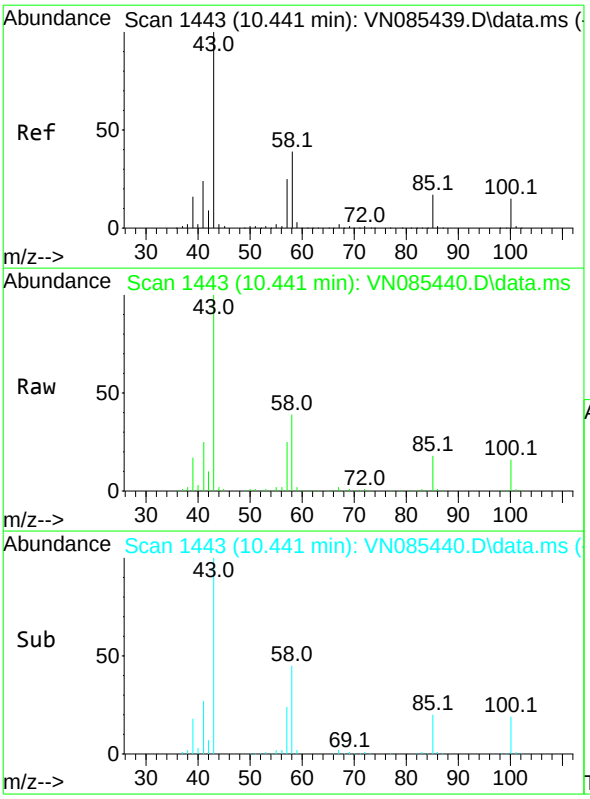


#50
Toluene-d8
Concen: 19.581 ug/l
RT: 10.559 min Scan# 1463
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 98 Resp: 164391

Ion	Ratio	Lower	Upper
98	100		
100	64.4	52.2	78.4





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

Tgt Ion: 43 Resp: 336911

Ion	Ratio	Lower	Upper
43	100		
58	38.1	30.5	45.7

Instrument :
MSVOA_N
ClientSampleId :
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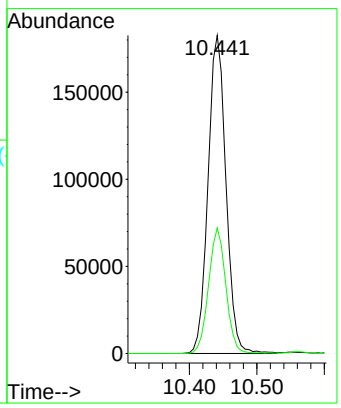
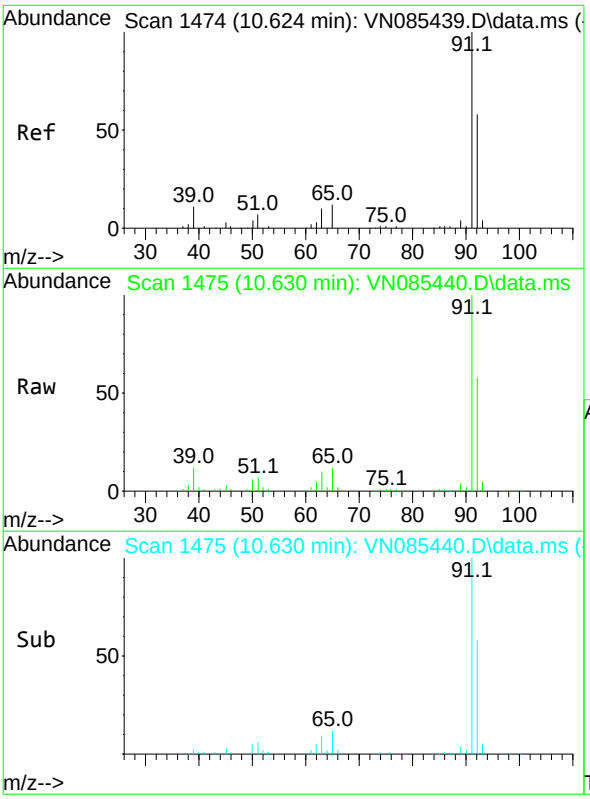
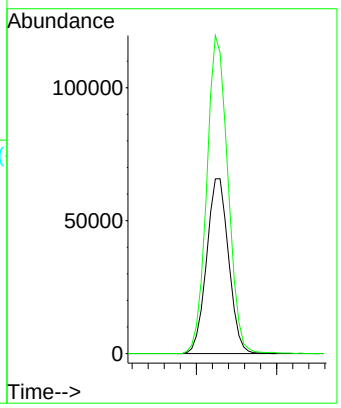


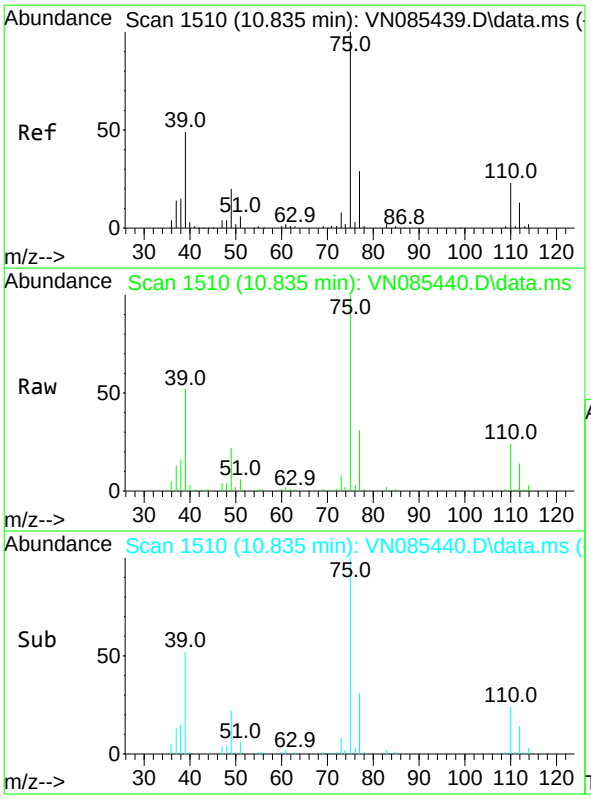


#52
Toluene
Concen: 21.680 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 92 Resp: 125172

Ion	Ratio	Lower	Upper
92	100		
91	175.1	139.2	208.8

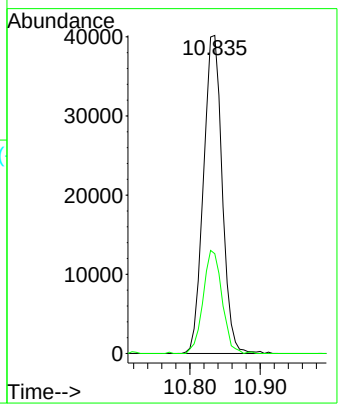




#53
t-1,3-Dichloropropene
Concen: 20.965 ug/l
RT: 10.835 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 74129

Ion	Ratio	Lower	Upper
75	100		
77	31.4	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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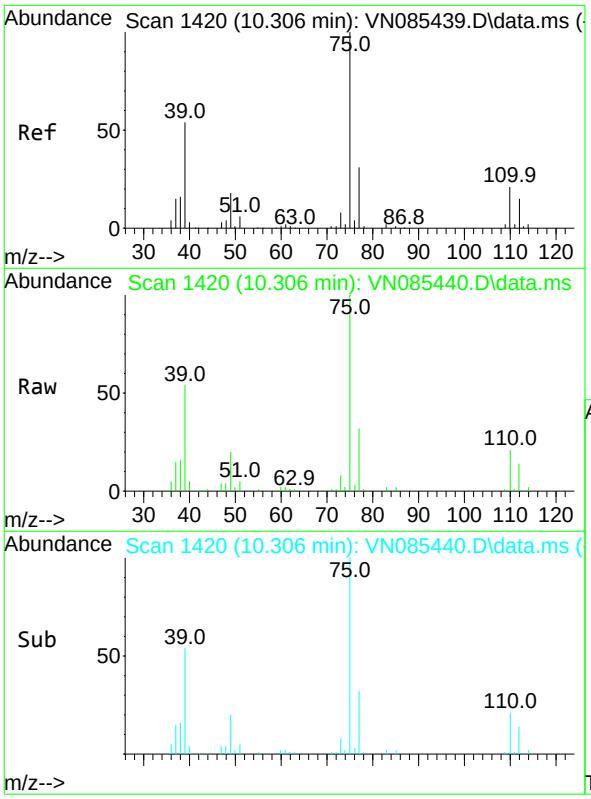
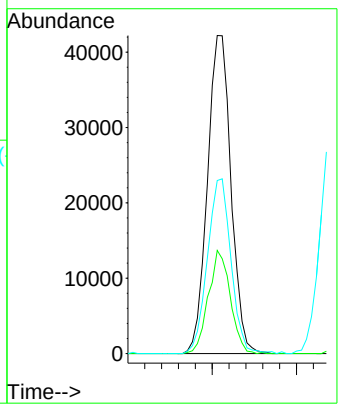
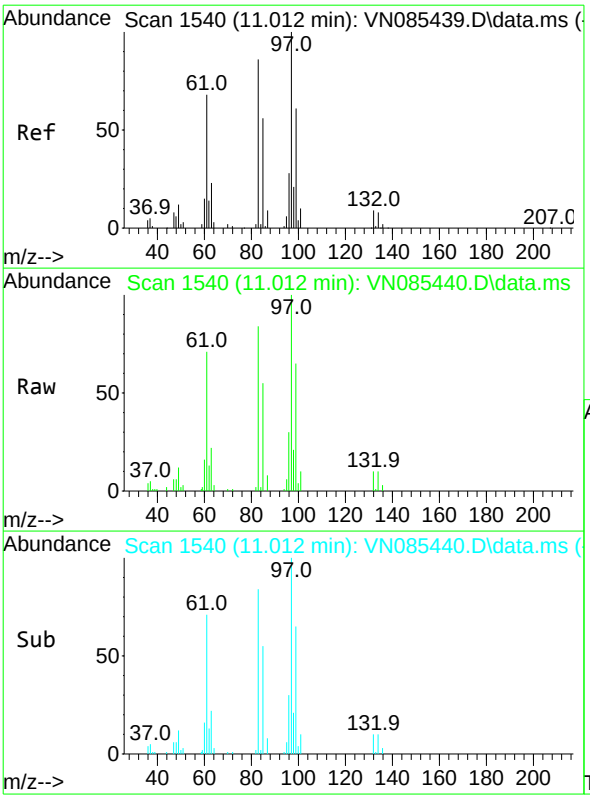


#54
cis-1,3-Dichloropropene
Concen: 21.684 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 81897

Ion	Ratio	Lower	Upper
75	100		
77	32.4	25.0	37.4
39	54.4	43.1	64.7

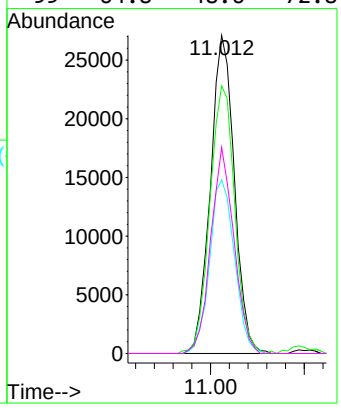




#55
1,1,2-Trichloroethane
Concen: 21.025 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 97 Resp: 48039

Ion	Ratio	Lower	Upper
97	100		
83	84.1	69.0	103.6
85	54.6	44.6	66.8
99	64.8	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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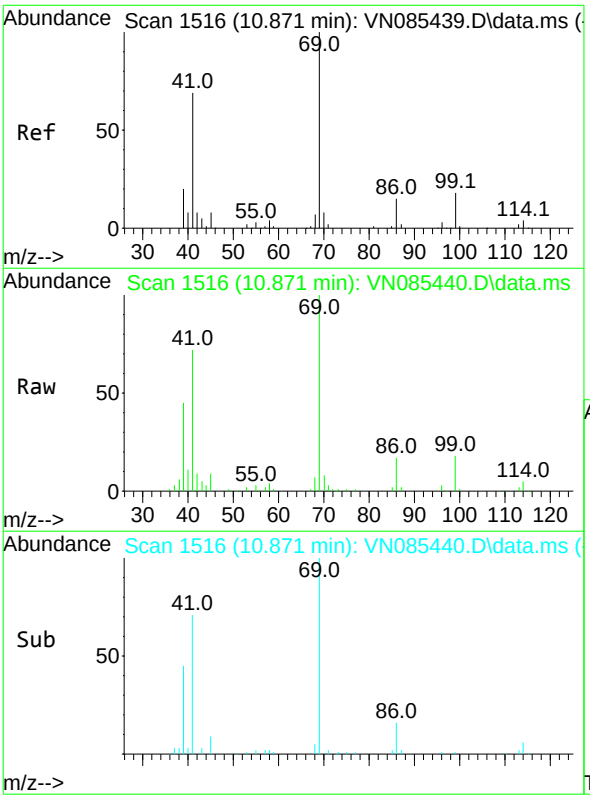
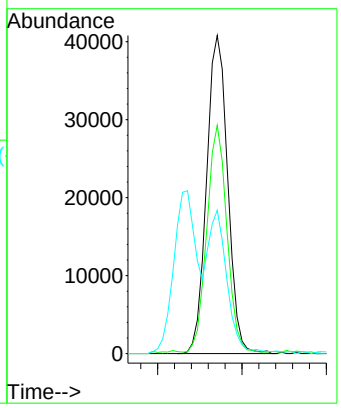
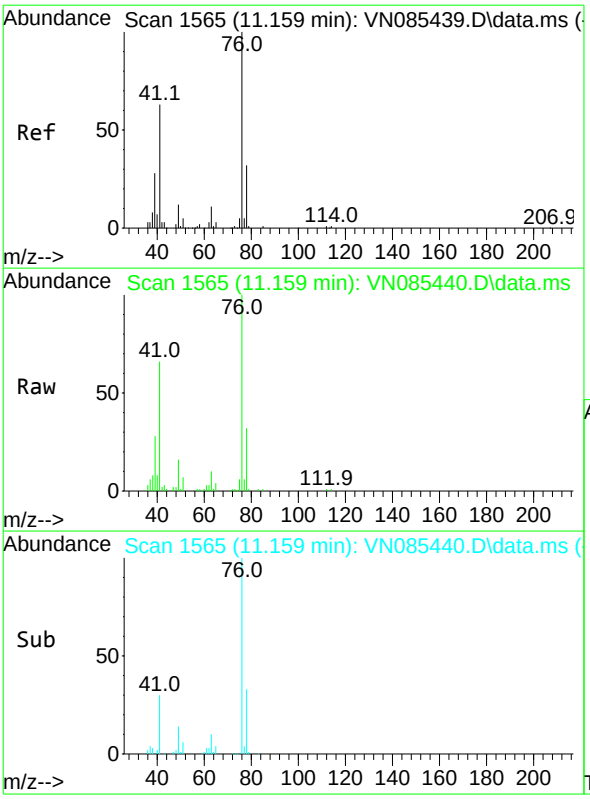


#56
Ethyl methacrylate
Concen: 19.649 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 69 Resp: 70934

Ion	Ratio	Lower	Upper
69	100		
41	67.6	54.6	82.0
39	41.7	32.4	48.6





#57
1,3-Dichloropropane
Concen: 21.196 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 76 Resp: 84210

Ion	Ratio	Lower	Upper
76	100		
78	32.7	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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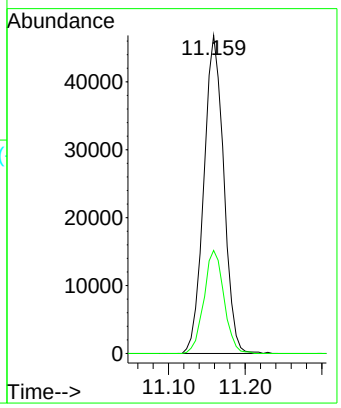
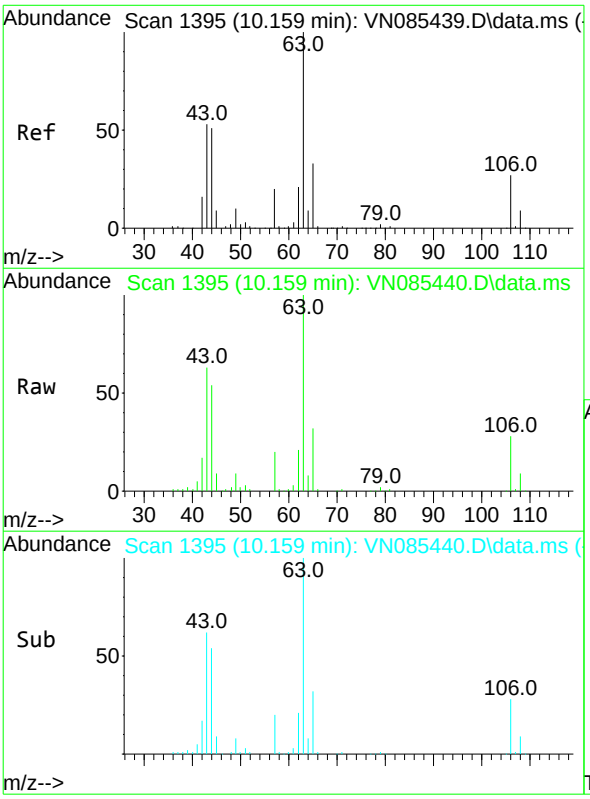
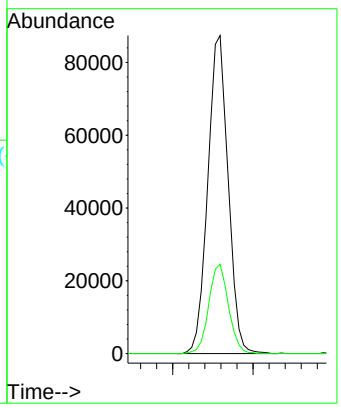


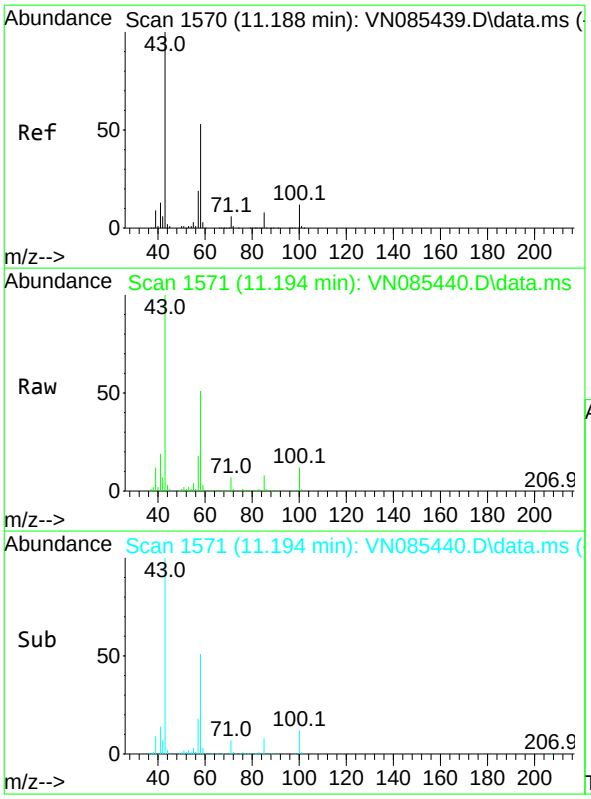


#58
2-Chloroethyl Vinyl ether
Concen: 105.991 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 63 Resp: 153681

Ion	Ratio	Lower	Upper
63	100		
106	27.2	21.6	32.4





#59
2-Hexanone
Concen: 109.863 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 240595

Ion	Ratio	Lower	Upper
43	100		
58	51.1	26.2	78.6

Instrument :
MSVOA_N
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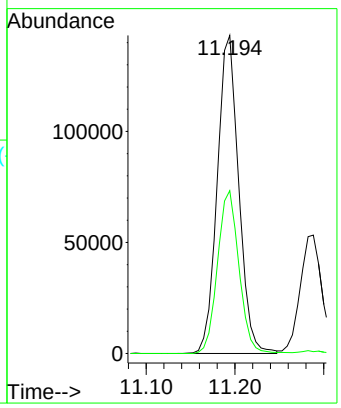
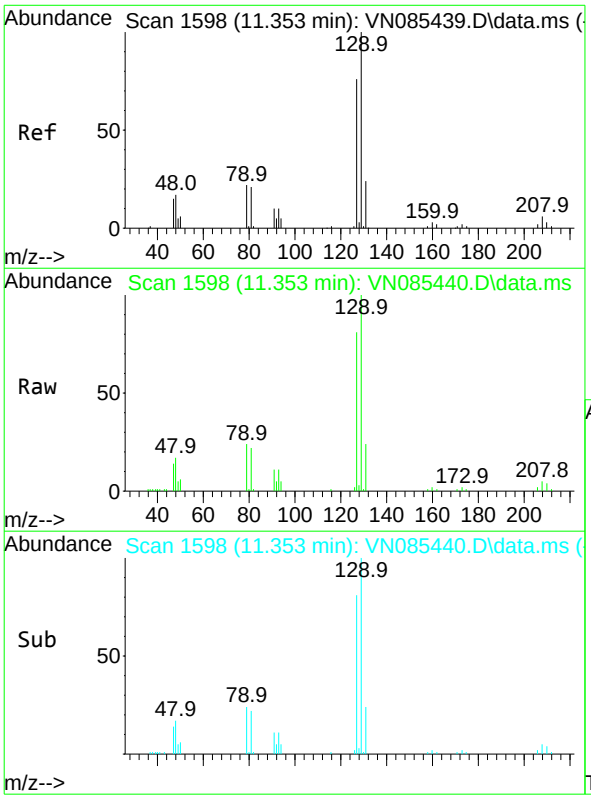
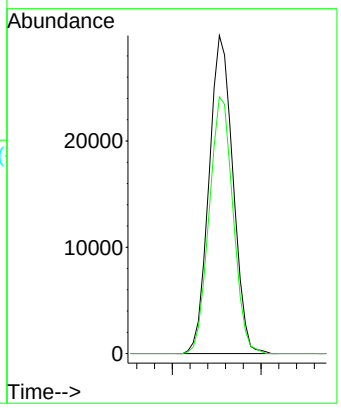


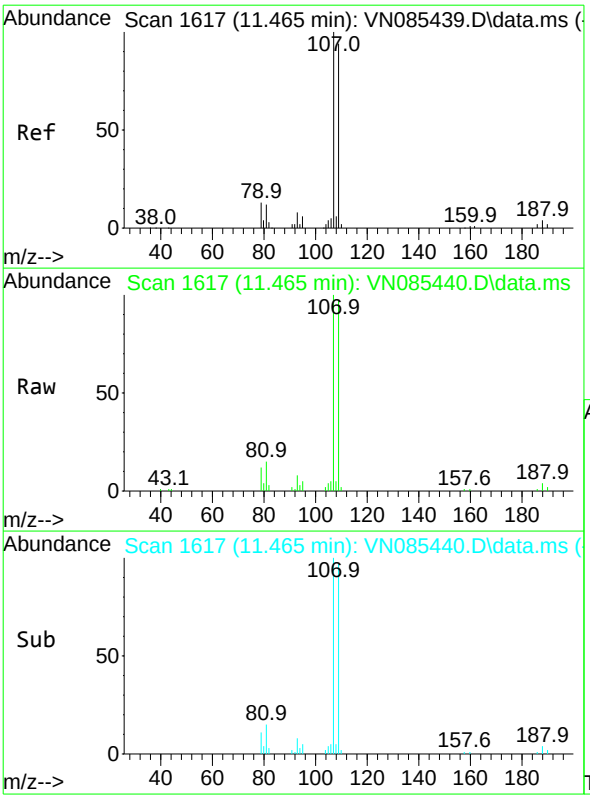


#60
Dibromochloromethane
Concen: 20.326 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:129 Resp: 56069

Ion	Ratio	Lower	Upper
129	100		
127	80.4	38.6	115.8

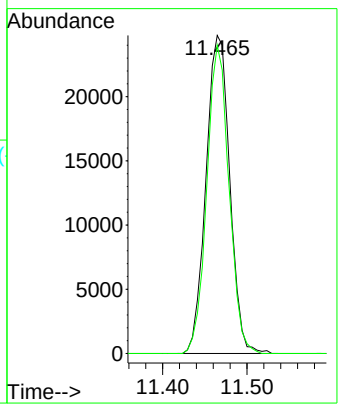




#61
1,2-Dibromoethane
Concen: 21.309 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:107 Resp: 48465

Ion	Ratio	Lower	Upper
107	100		
109	90.6	75.9	113.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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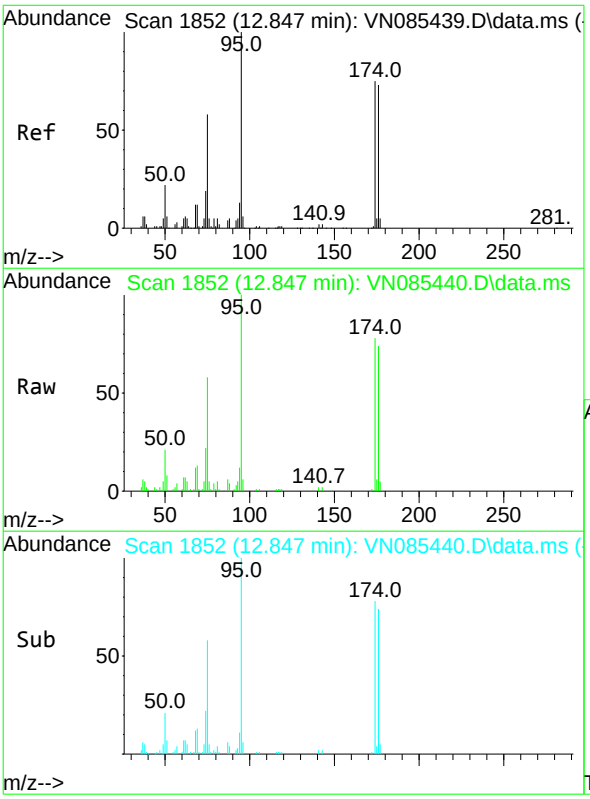
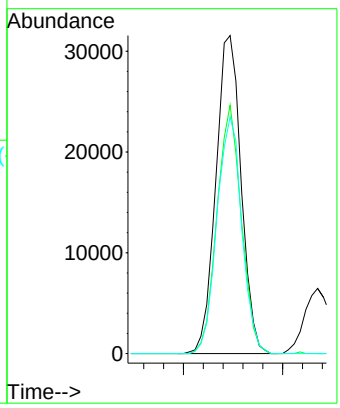
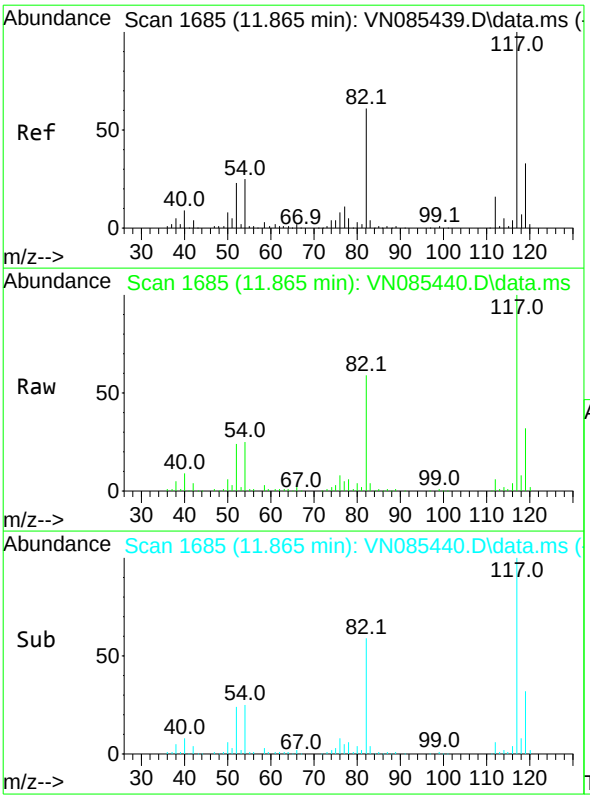


#62
4-Bromofluorobenzene
Concen: 19.430 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 95 Resp: 55798

Ion	Ratio	Lower	Upper
95	100		
174	75.2	0.0	145.0
176	73.2	0.0	142.4





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion:117 Resp: 296298

Ion	Ratio	Lower	Upper
117	100		
82	59.3	48.6	72.8
119	32.2	26.6	39.8

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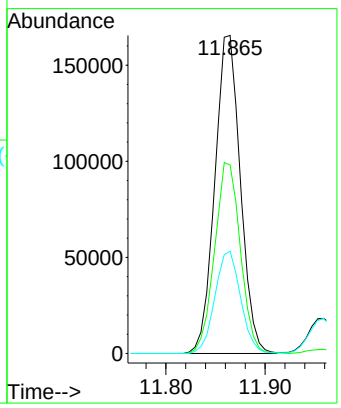
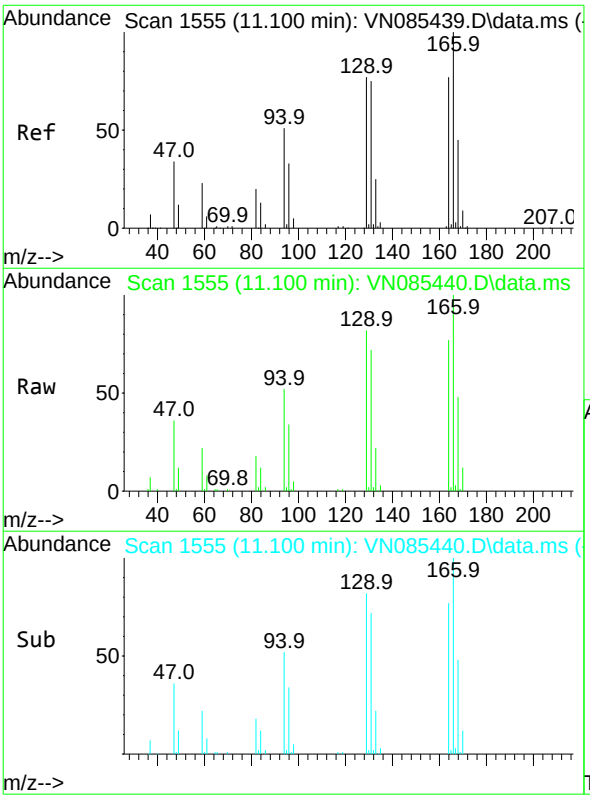
Supervised By :Mahesh Dadoda 01/15/2025

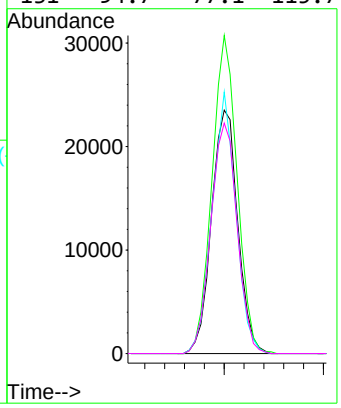


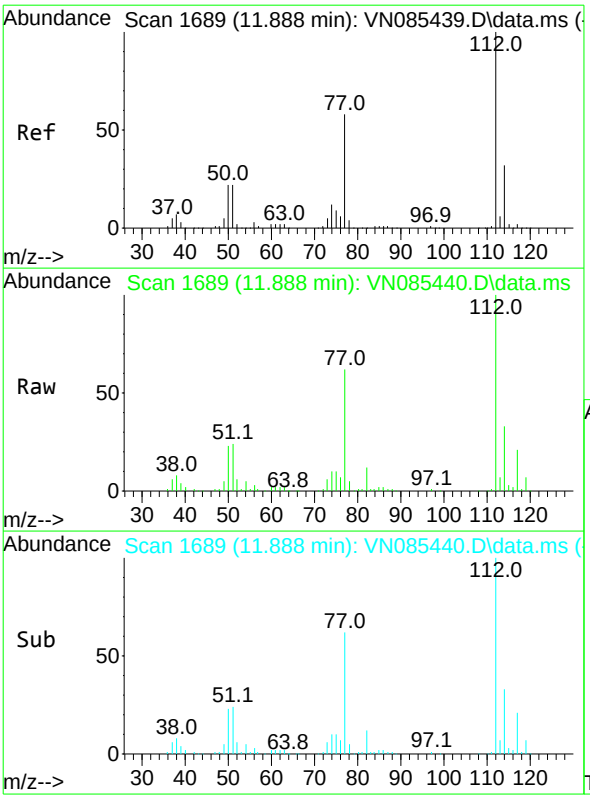


#64
Tetrachloroethene
Concen: 21.408 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:164 Resp: 43243

Ion	Ratio	Lower	Upper
164	100		
166	130.6	103.4	155.2
129	107.4	79.2	118.8
131	94.7	77.1	115.7

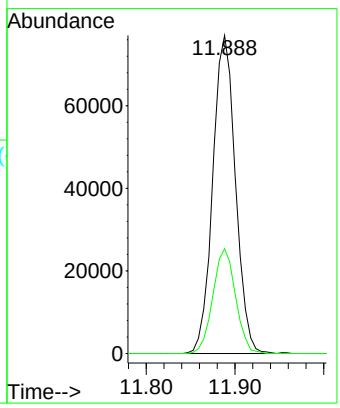




#65
Chlorobenzene
Concen: 21.077 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:112 Resp: 136809

Ion	Ratio	Lower	Upper
112	100		
114	32.9	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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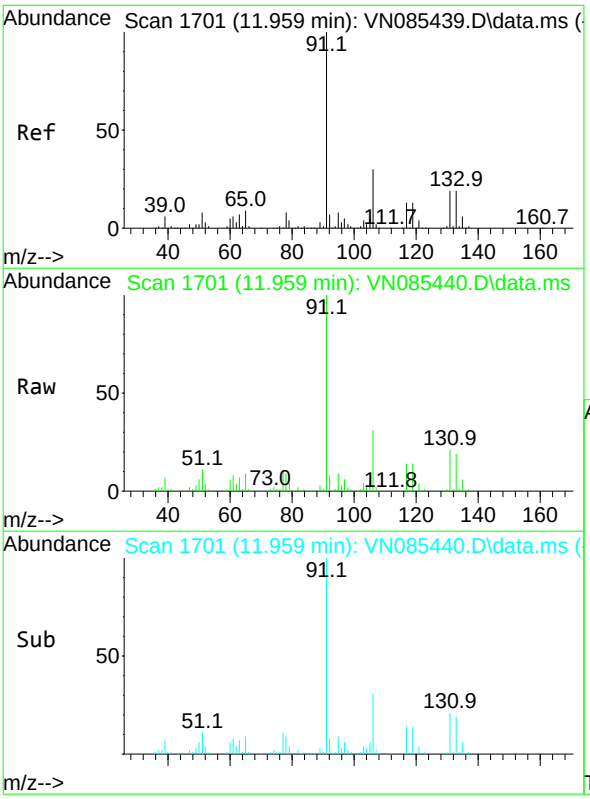
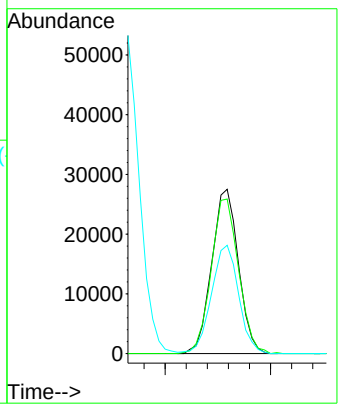
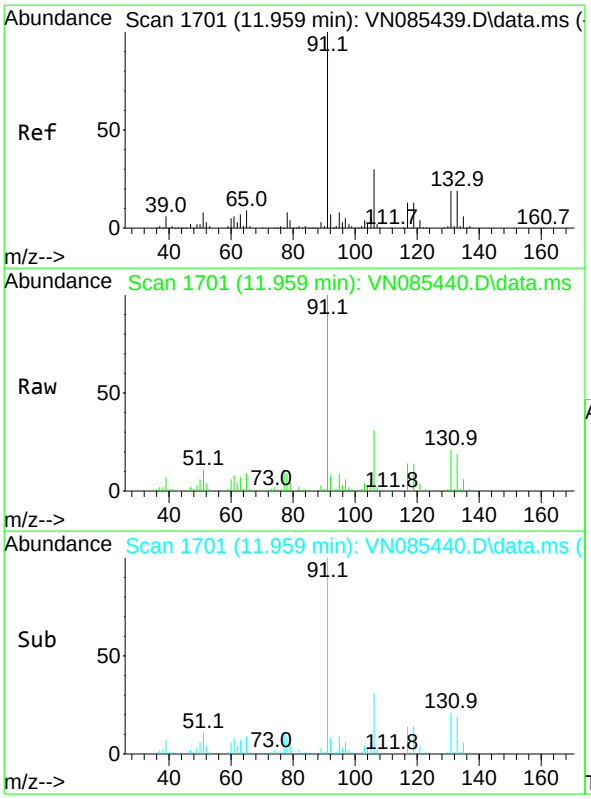


#66
1,1,1,2-Tetrachloroethane
Concen: 20.304 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:131 Resp: 48370

Ion	Ratio	Lower	Upper
131	100		
133	96.9	47.4	142.3
119	67.2	33.1	99.5

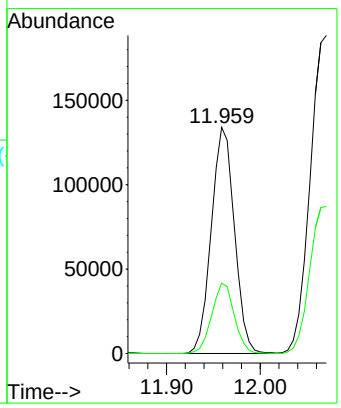




#67
Ethyl Benzene
Concen: 21.753 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 229978

Ion	Ratio	Lower	Upper
91	100		
106	31.1	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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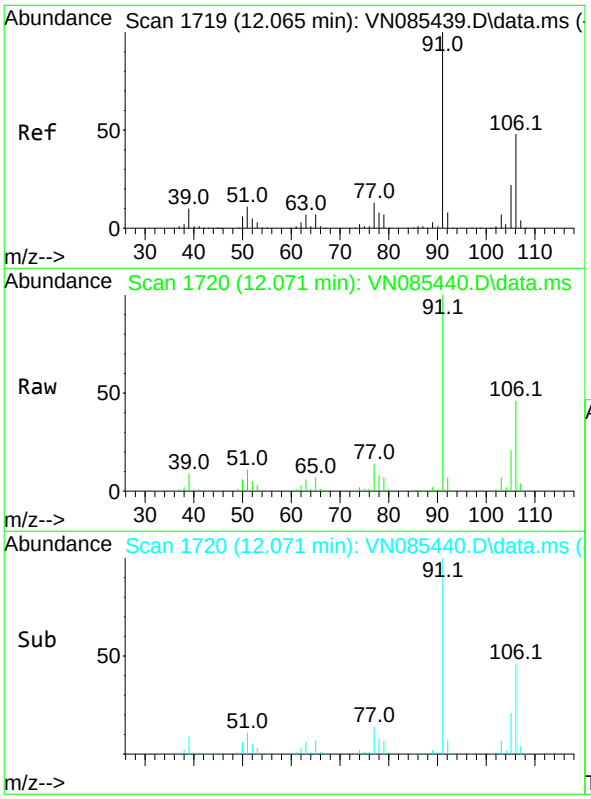
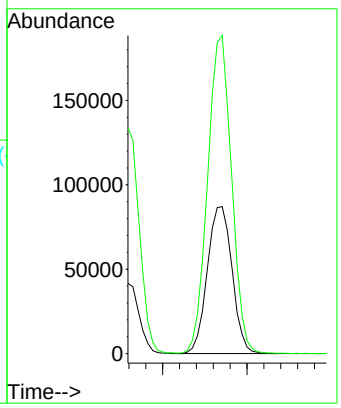
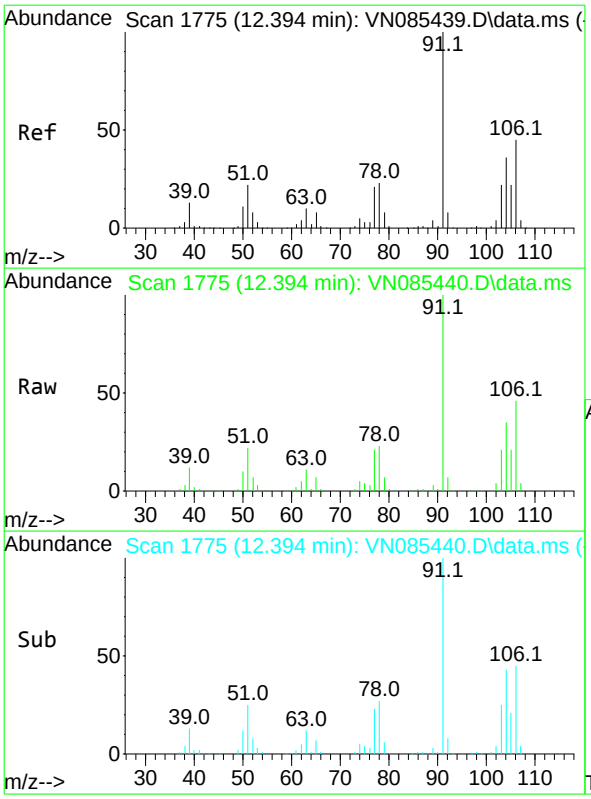


#68
m/p-Xylenes
Concen: 45.494 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:106 Resp: 177755

Ion	Ratio	Lower	Upper
106	100		
91	209.3	167.7	251.5

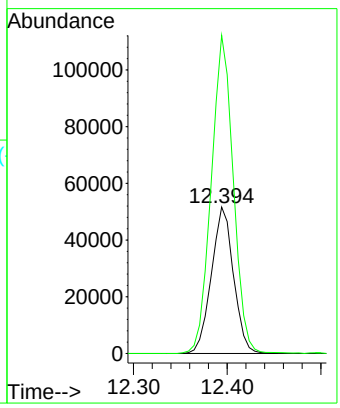




#69
o-Xylene
Concen: 22.643 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:106 Resp: 84548

Ion	Ratio	Lower	Upper
106	100		
91	217.0	110.4	331.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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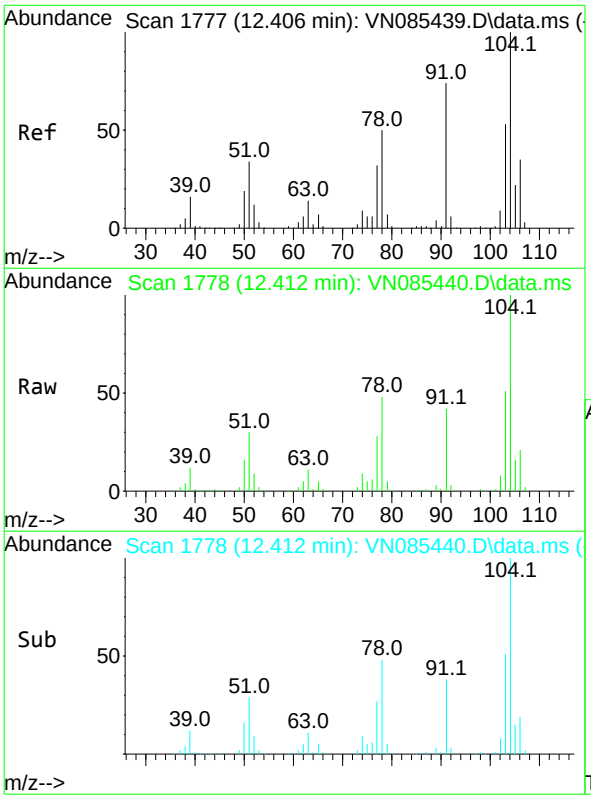
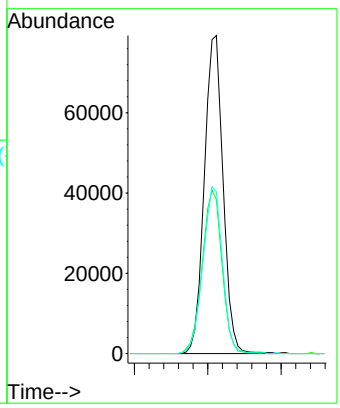
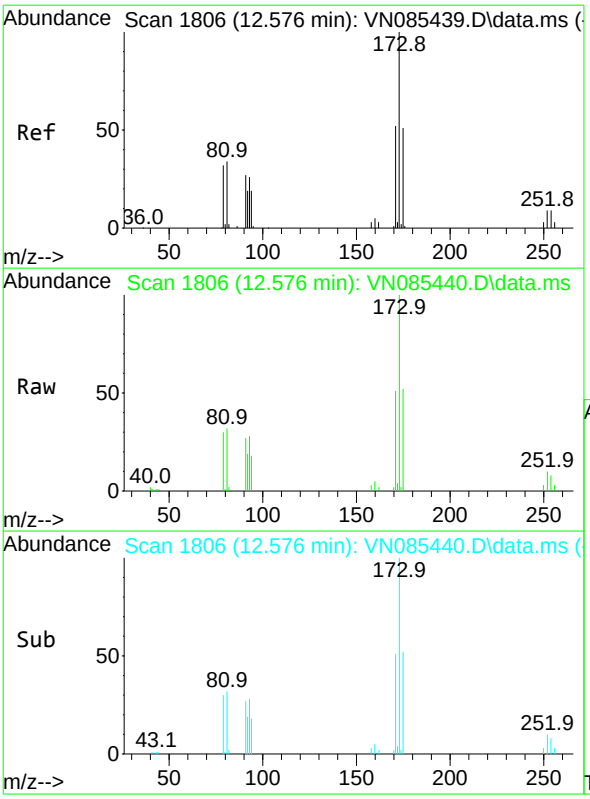


#70
Styrene
Concen: 22.749 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:104 Resp: 140581

Ion	Ratio	Lower	Upper
104	100		
78	54.4	42.5	63.7
103	54.8	43.8	65.8

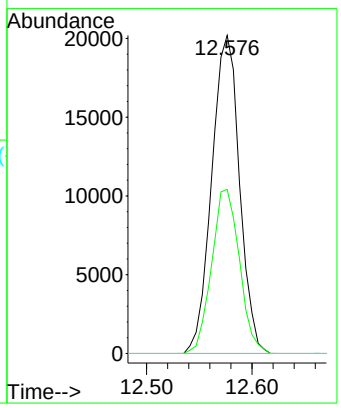




#71
Bromoform
Concen: 21.683 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:173 Resp: 36961

Ion	Ratio	Lower	Upper
173	100		
175	51.7	24.4	73.2
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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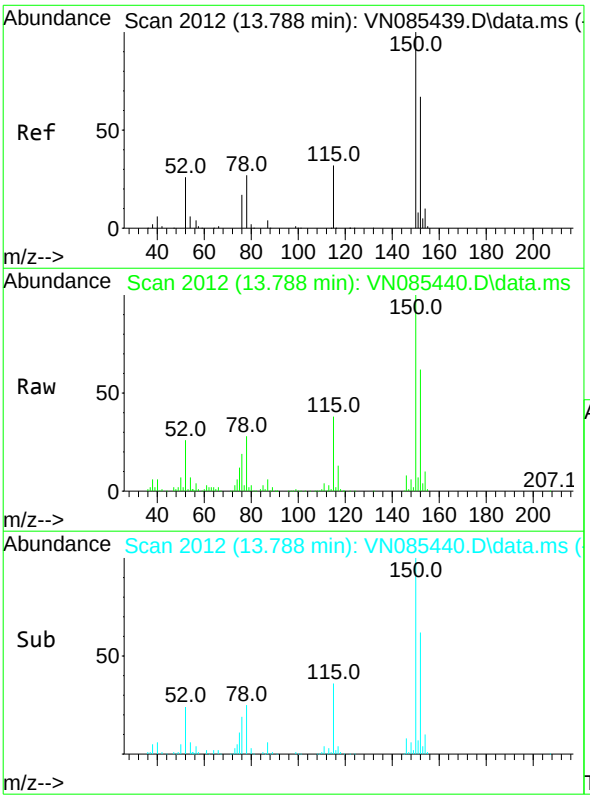
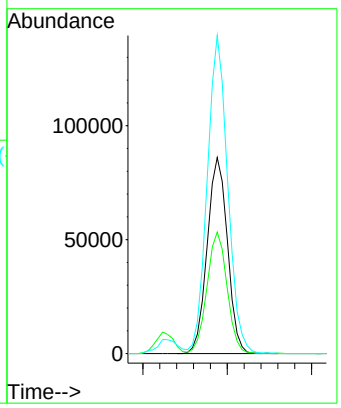
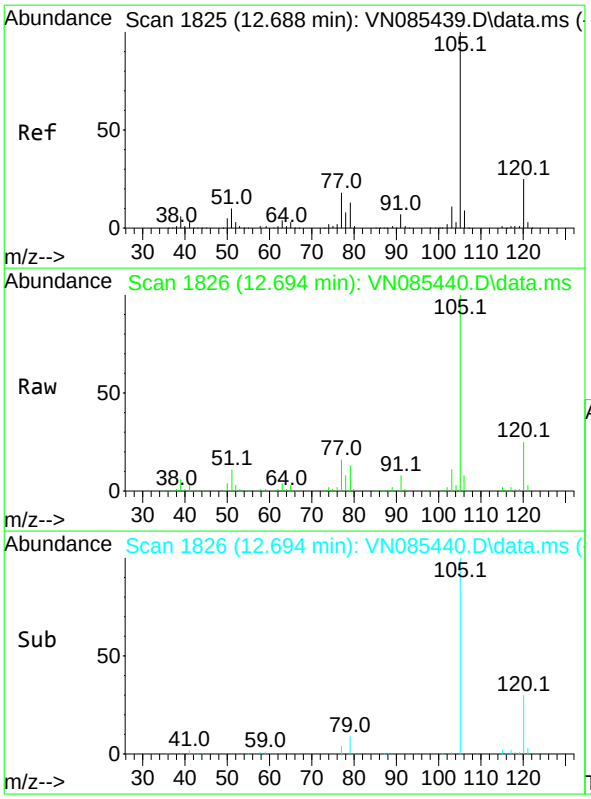


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:152 Resp: 143526

Ion	Ratio	Lower	Upper
152	100		
115	61.4	31.1	93.3
150	163.9	0.0	343.6

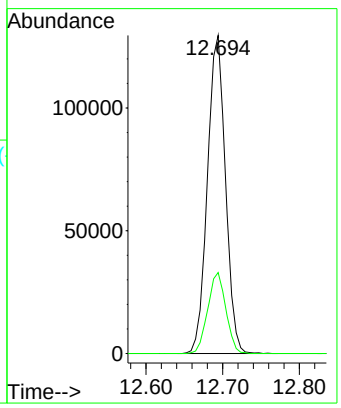




#73
Isopropylbenzene
Concen: 21.819 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 211354

Ion	Ratio	Lower	Upper
105	100		
120	25.5	12.8	38.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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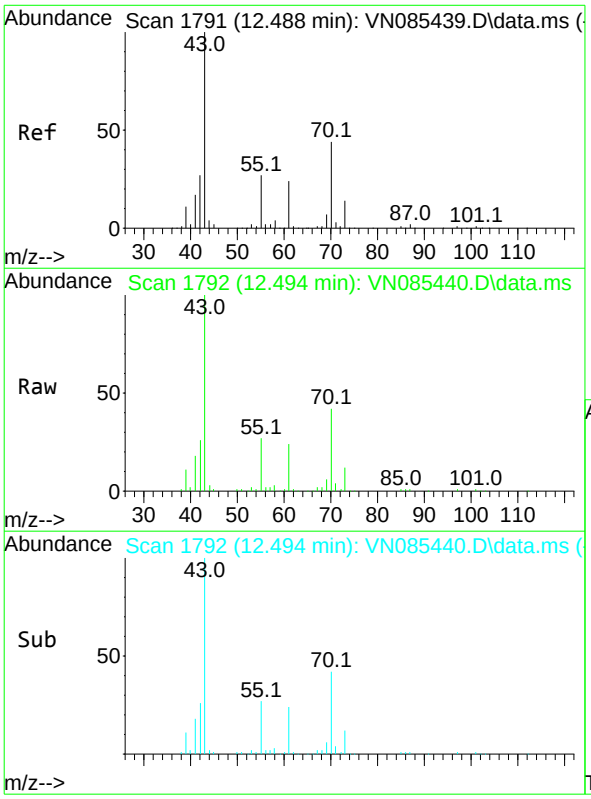
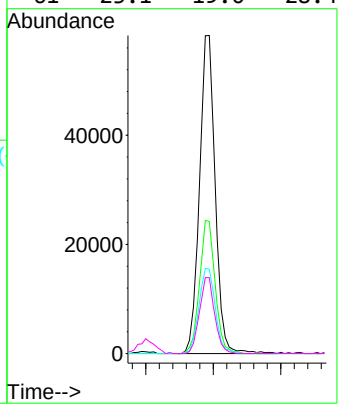
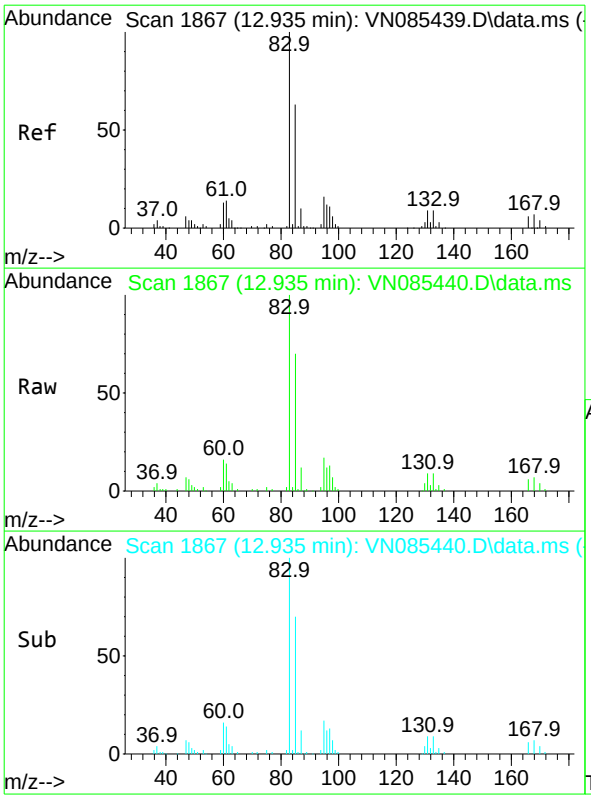


#74
N-amyl acetate
Concen: 21.656 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 94292

Ion	Ratio	Lower	Upper
43	100		
70	41.4	34.0	51.0
55	27.9	21.4	32.2
61	23.1	19.0	28.4





#75
1,1,2,2-Tetrachloroethane
Concen: 19.917 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 83 Resp: 68151

Ion	Ratio	Lower	Upper
83	100		
131	9.9	4.8	14.4
85	65.5	32.2	96.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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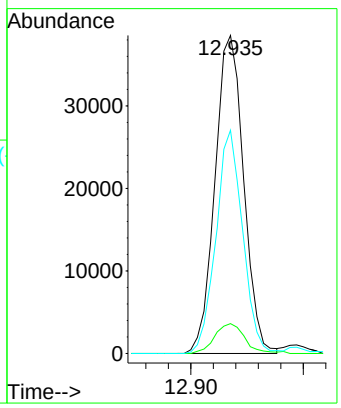
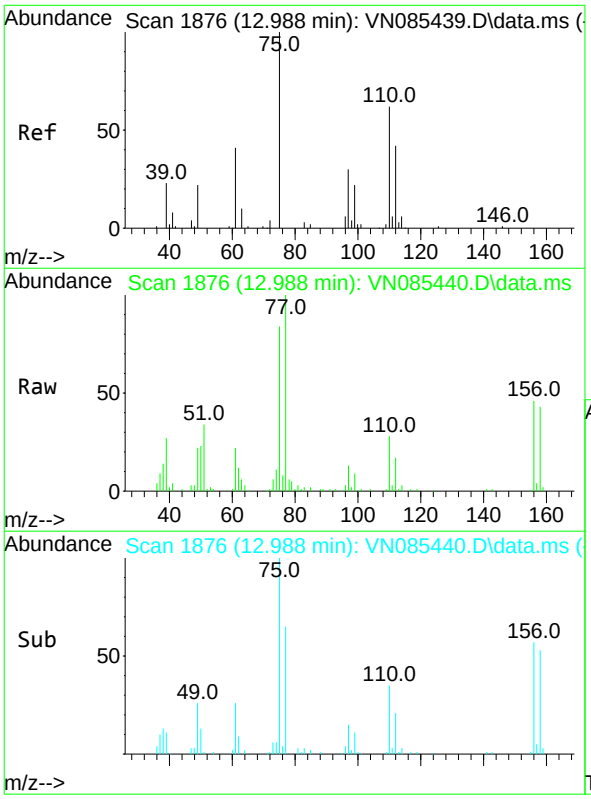
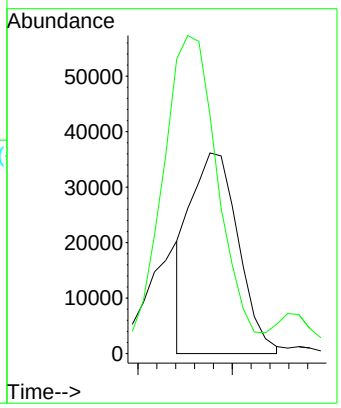


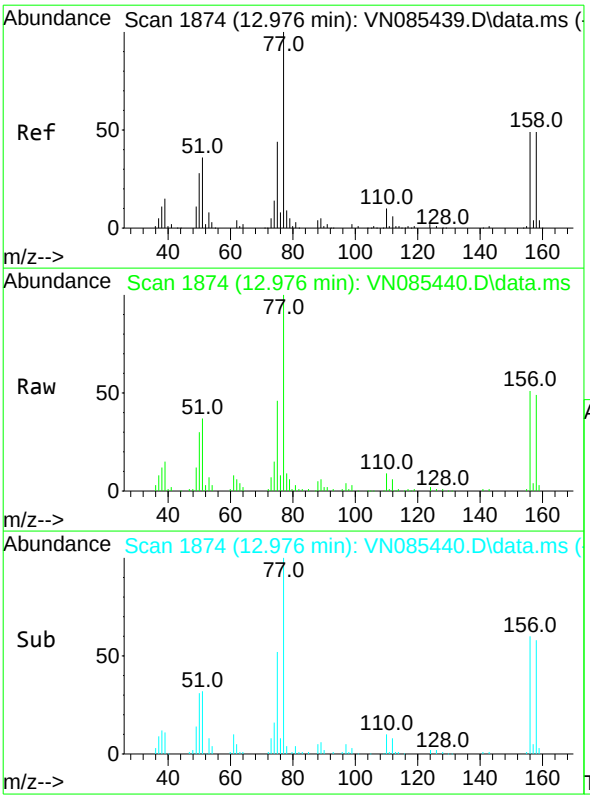


#76
1,2,3-Trichloropropane
Concen: 22.036 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 64180

Ion	Ratio	Lower	Upper
75	100		
77	186.8	109.7	329.2





#77
Bromobenzene
Concen: 20.556 ug/l
RT: 12.976 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:156 Resp: 52022

Ion	Ratio	Lower	Upper
156	100		
77	230.4	114.1	342.4
158	97.0	48.9	146.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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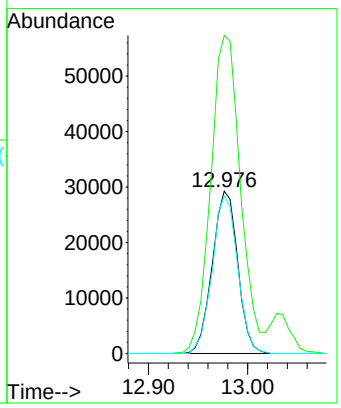
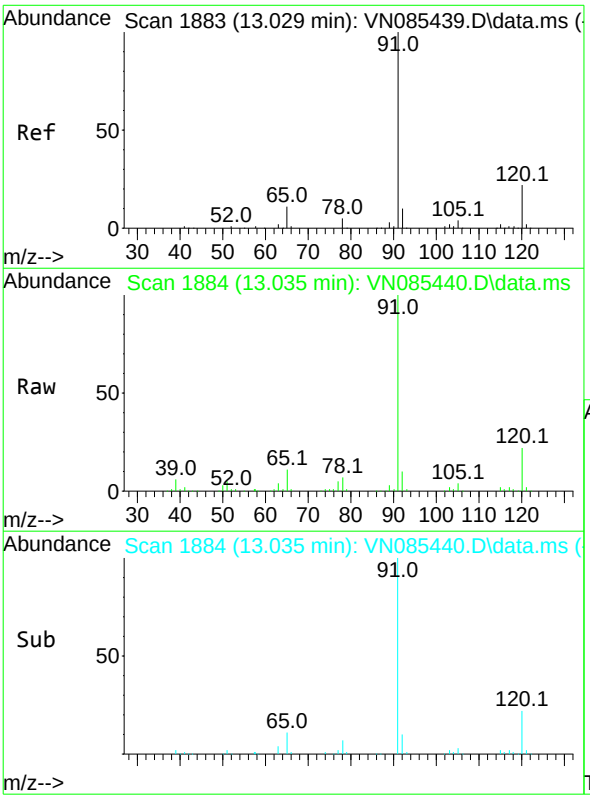
Supervised By :Mahesh Dadoda 01/15/2025

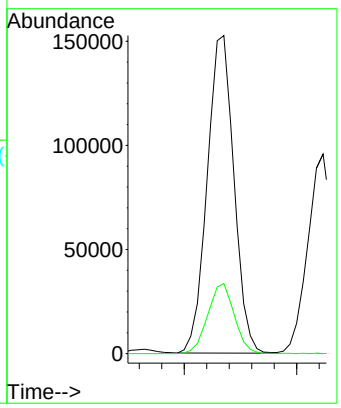


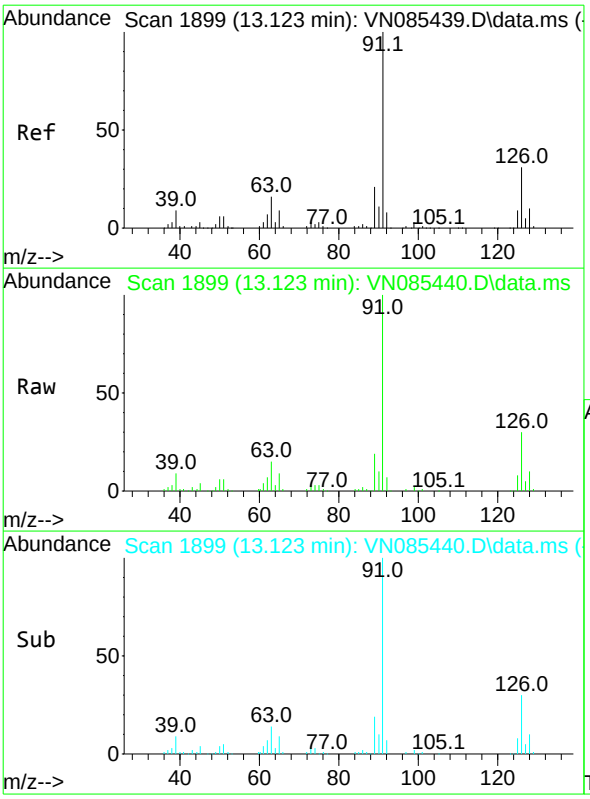


#78
n-propylbenzene
Concen: 22.028 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 252610

Ion	Ratio	Lower	Upper
91	100		
120	21.8	10.9	32.6

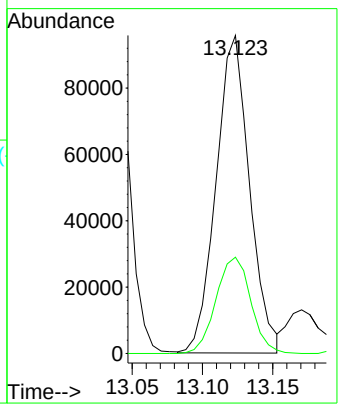




#79
2-Chlorotoluene
Concen: 21.358 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 158511

Ion	Ratio	Lower	Upper
91	100		
126	31.5	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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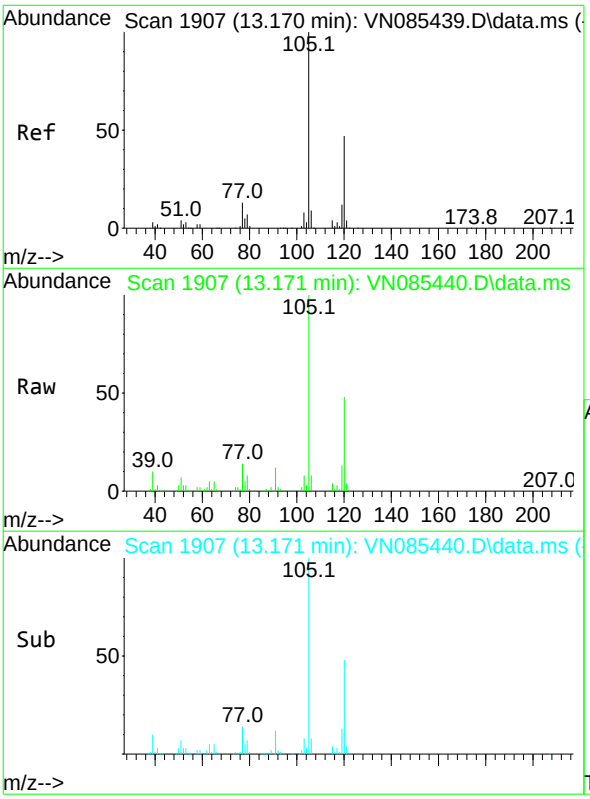
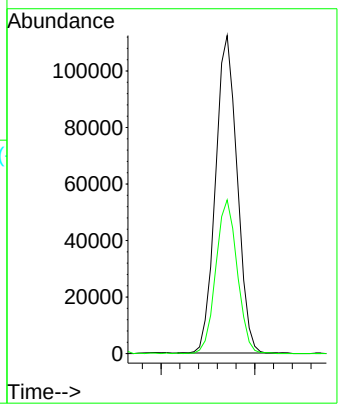
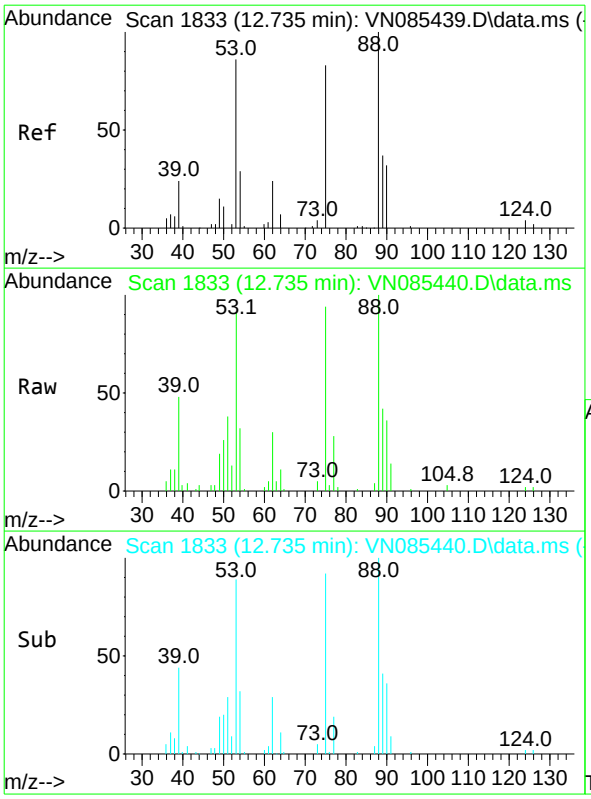


#80
1,3,5-Trimethylbenzene
Concen: 22.533 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 180294

Ion	Ratio	Lower	Upper
105	100		
120	47.9	23.9	71.7

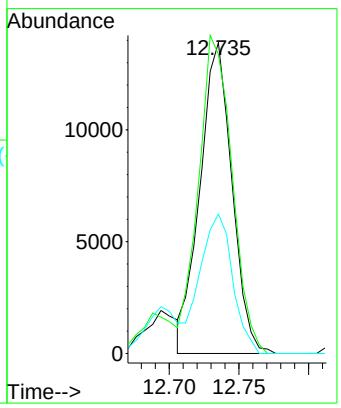




#81
trans-1,4-Dichloro-2-butene
Concen: 20.569 ug/l m
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 22178

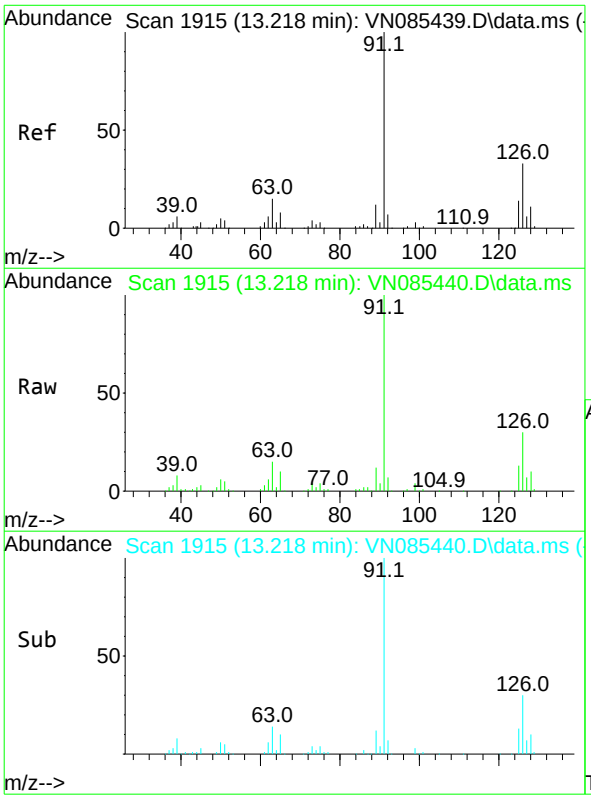
Ion	Ratio	Lower	Upper
75	100		
53	107.2	95.6	143.4
89	46.9	37.0	55.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

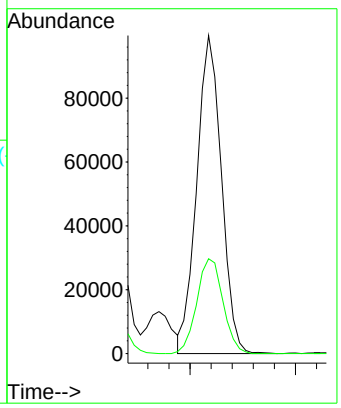
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

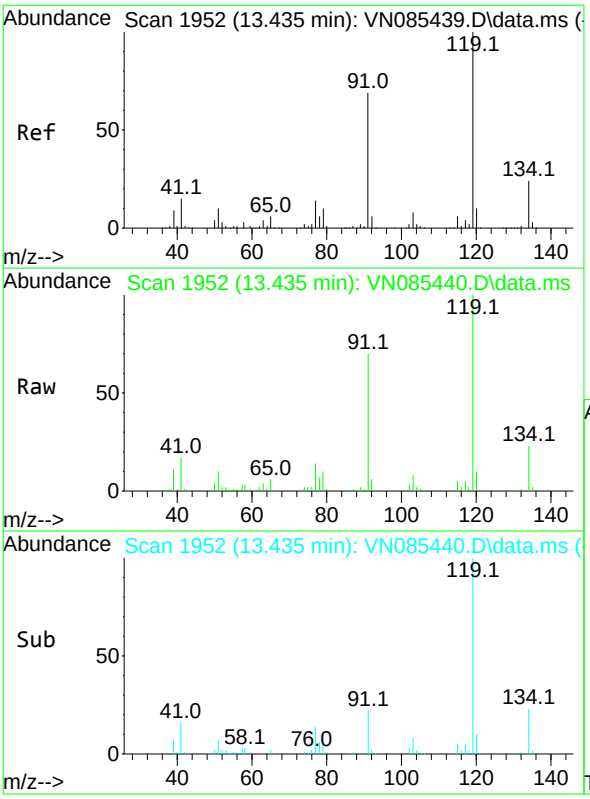


#82
4-Chlorotoluene
Concen: 21.906 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 161880

Ion	Ratio	Lower	Upper
91	100		
126	31.6	15.9	47.7

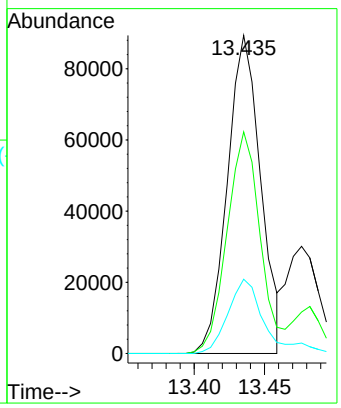




#83
tert-Butylbenzene
Concen: 21.958 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:119 Resp: 147541

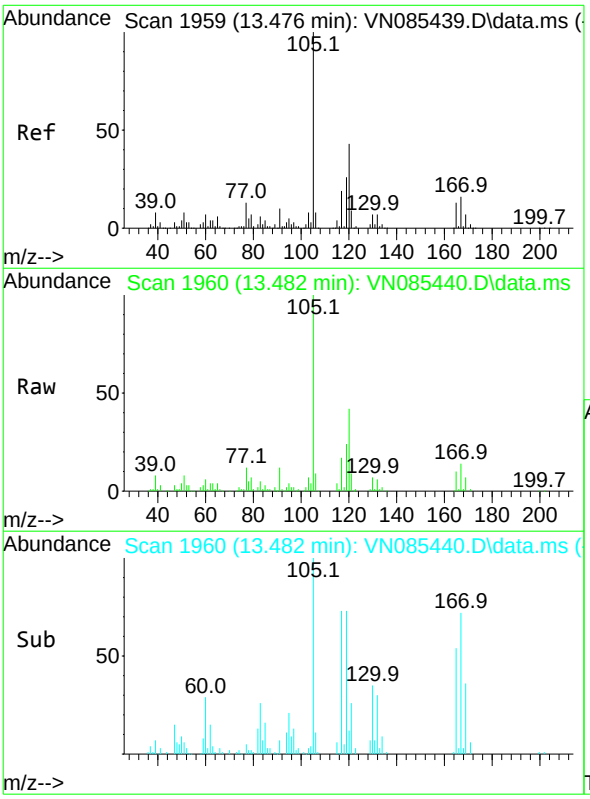
Ion	Ratio	Lower	Upper
119	100		
91	69.5	35.1	105.3
134	25.5	12.0	36.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

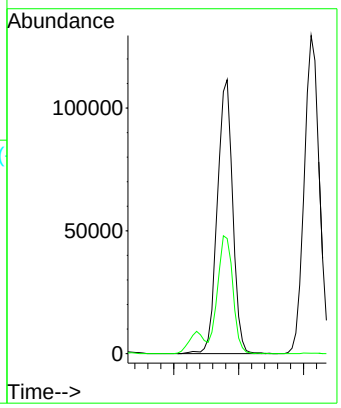
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

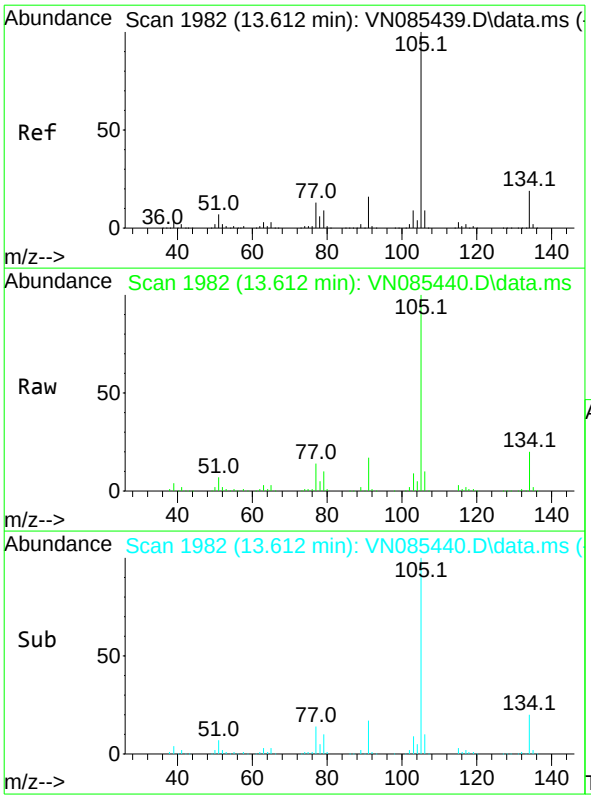


#84
1,2,4-Trimethylbenzene
Concen: 22.965 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 183144

Ion	Ratio	Lower	Upper
105	100		
120	42.8	21.6	65.0

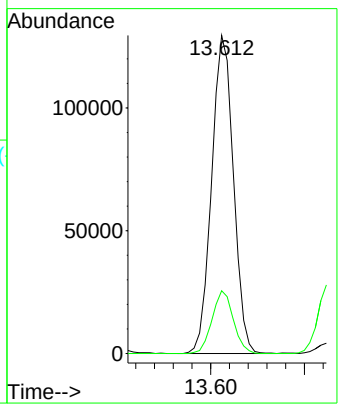




#85
sec-Butylbenzene
Concen: 22.457 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:105 Resp: 209133

Ion	Ratio	Lower	Upper
105	100		
134	19.2	9.7	28.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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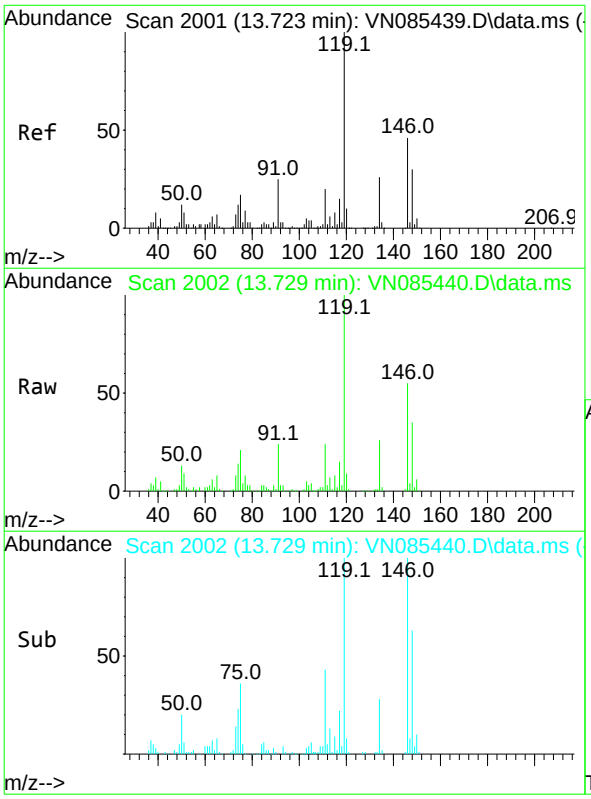
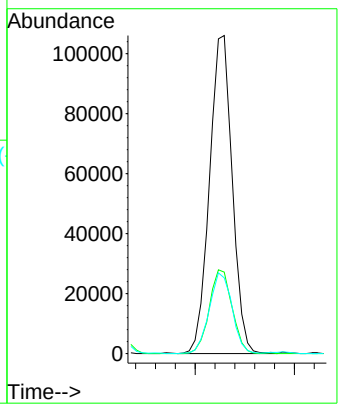
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

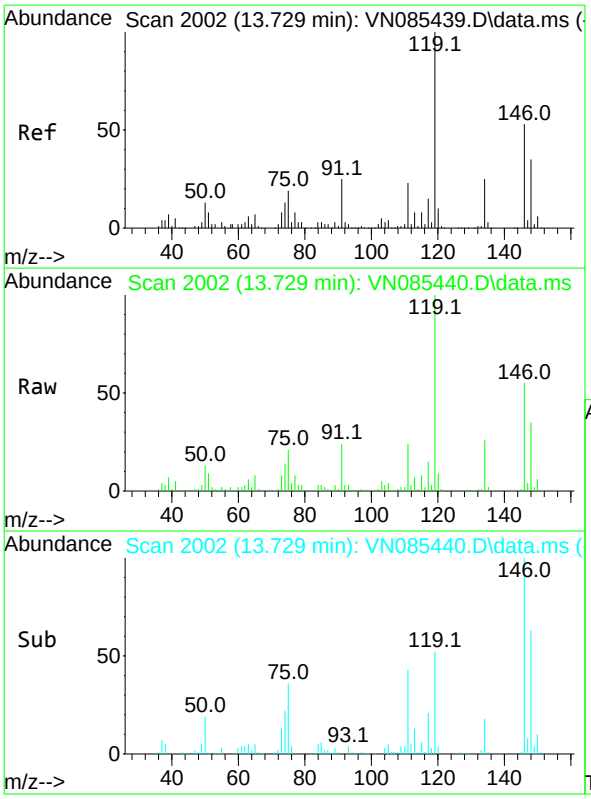


#86
p-Isopropyltoluene
Concen: 21.661 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:119 Resp: 168888

Ion	Ratio	Lower	Upper
119	100		
134	26.4	12.7	38.0
91	25.5	12.7	38.1

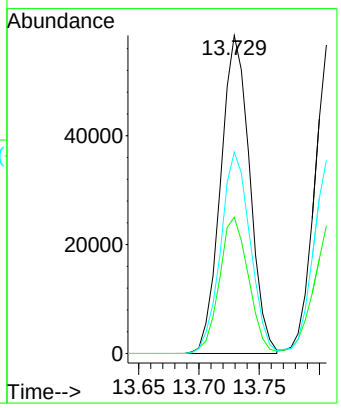




#87
1,3-Dichlorobenzene
Concen: 20.952 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 97652

Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.4	64.3
148	64.3	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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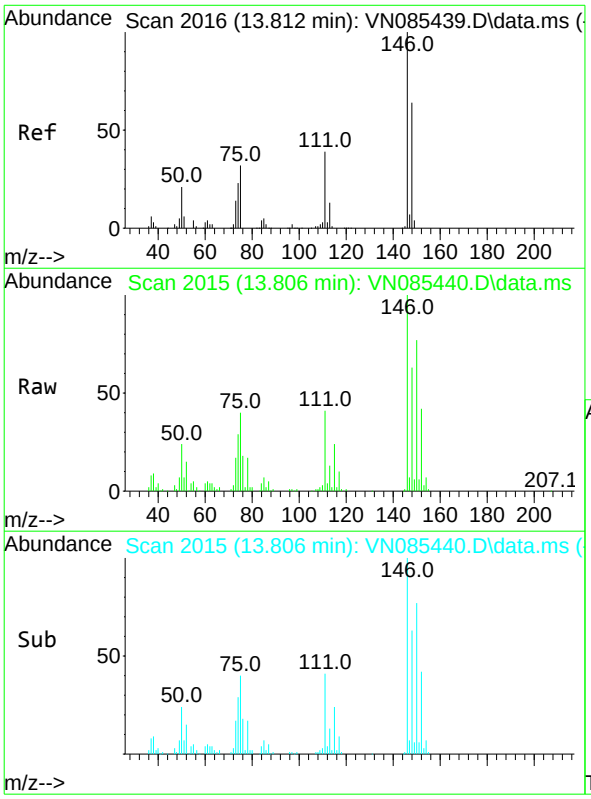
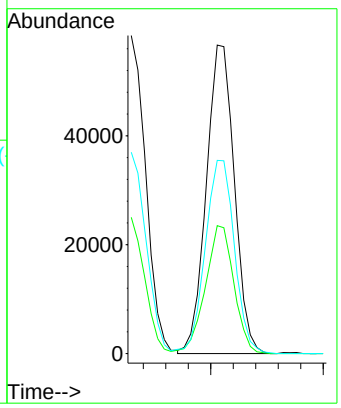
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

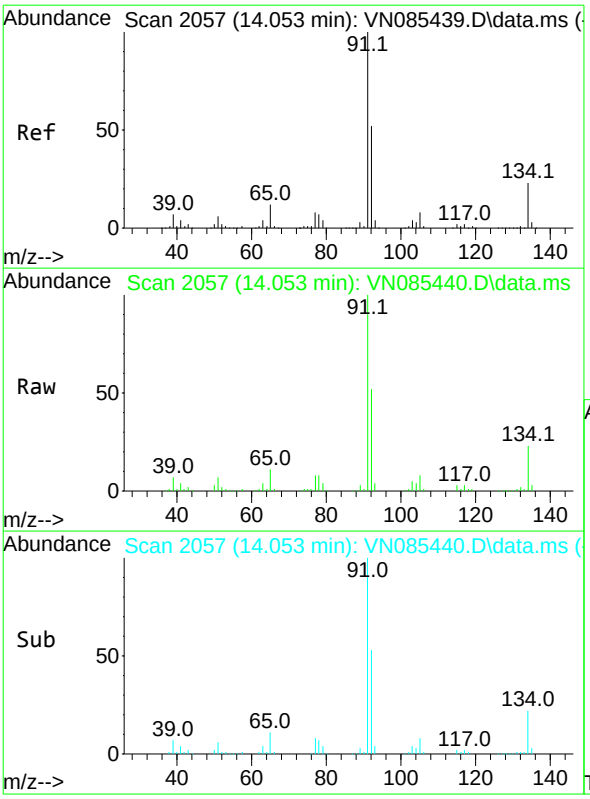


#88
1,4-Dichlorobenzene
Concen: 20.351 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 98321

Ion	Ratio	Lower	Upper
146	100		
111	42.2	21.3	63.7
148	65.1	32.4	97.0

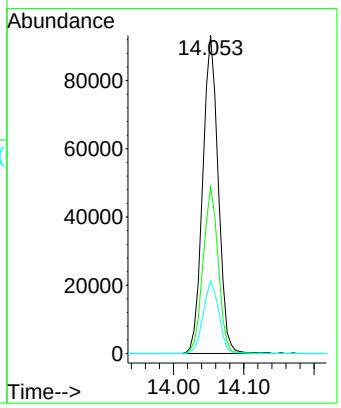




#89
n-Butylbenzene
Concen: 21.355 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 91 Resp: 142673

Ion	Ratio	Lower	Upper
91	100		
92	51.0	25.8	77.3
134	23.0	11.7	35.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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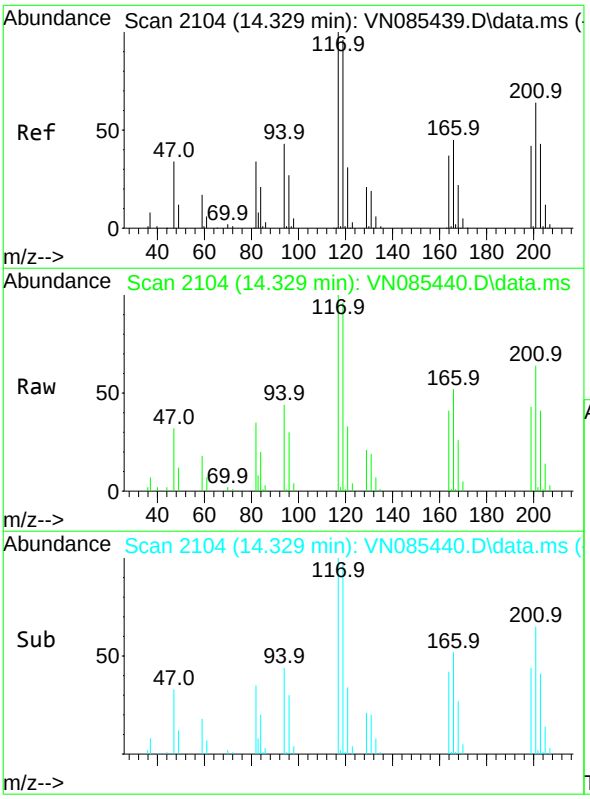
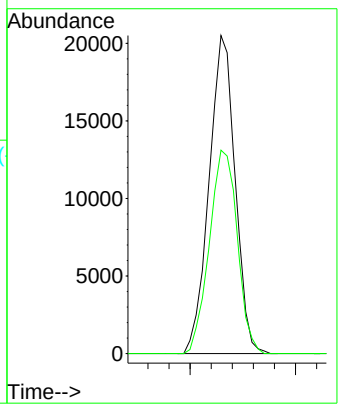
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

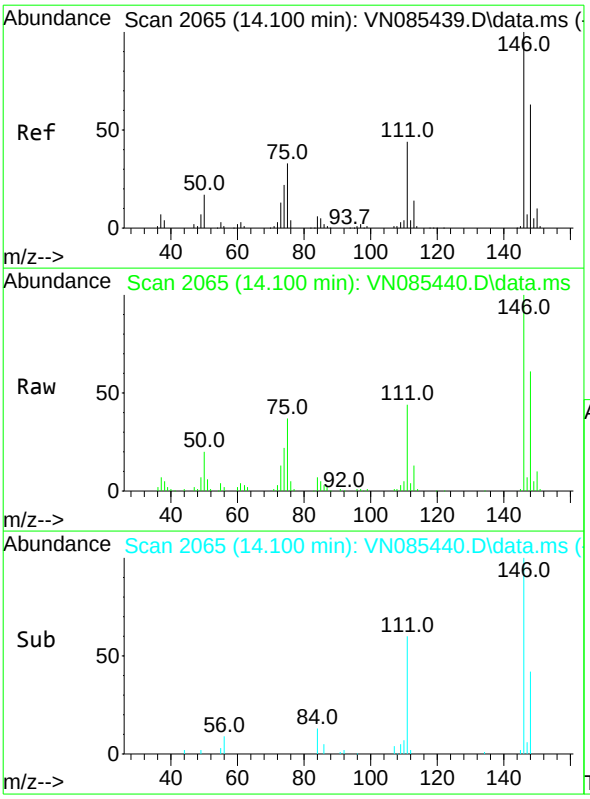


#90
Hexachloroethane
Concen: 19.858 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:117 Resp: 35205

Ion	Ratio	Lower	Upper
117	100		
201	68.8	33.7	101.0

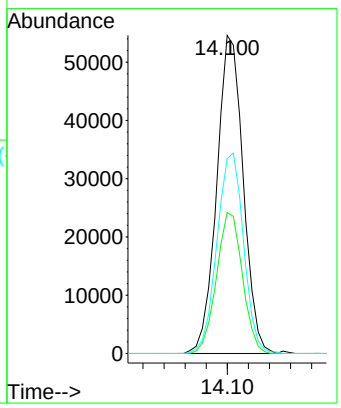




#91
1,2-Dichlorobenzene
Concen: 20.425 ug/l
RT: 14.100 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:146 Resp: 94954

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.7	65.1
148	63.5	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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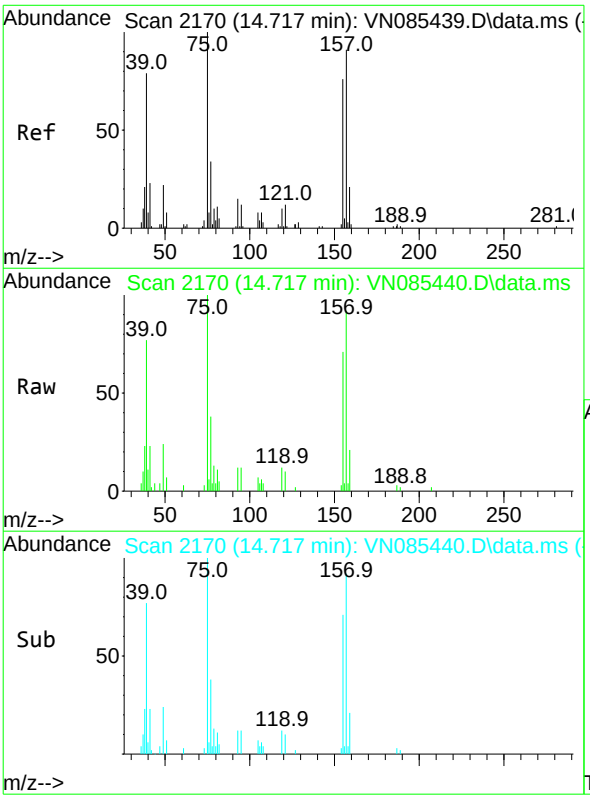
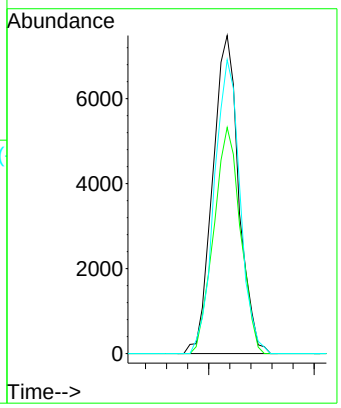
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

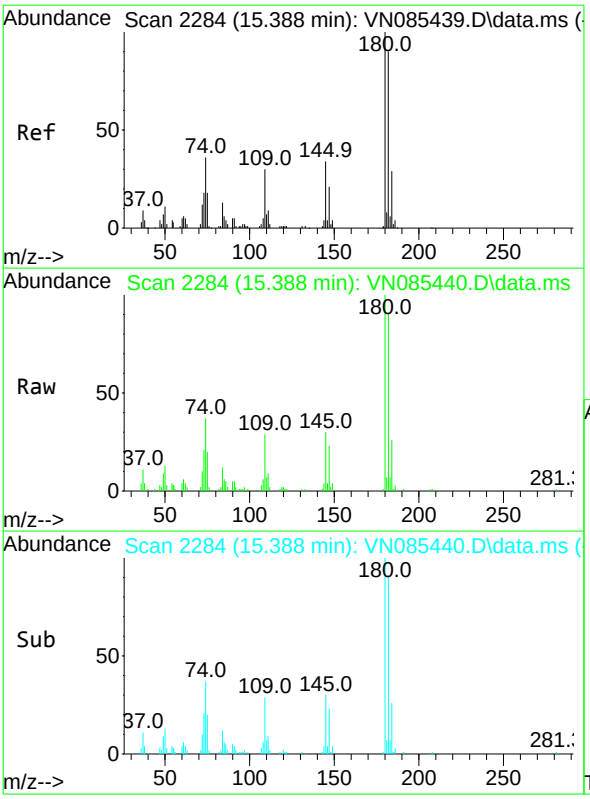


#92
1,2-Dibromo-3-Chloropropane
Concen: 20.580 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 75 Resp: 12859

Ion	Ratio	Lower	Upper
75	100		
155	72.7	36.4	109.2
157	90.9	45.4	136.1

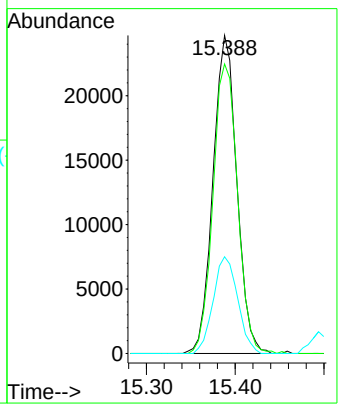




#93
1,2,4-Trichlorobenzene
Concen: 21.233 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:180 Resp: 45878

Ion	Ratio	Lower	Upper
180	100		
182	94.2	46.8	140.3
145	31.4	16.0	48.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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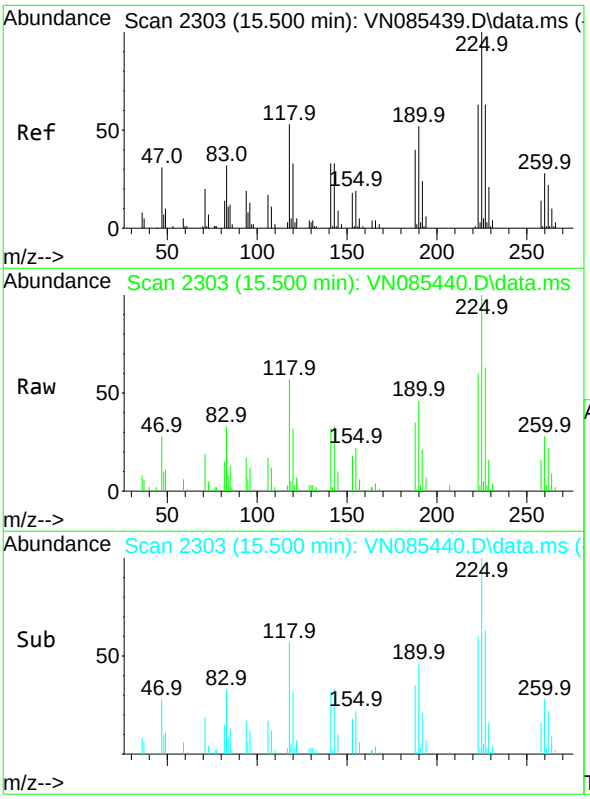
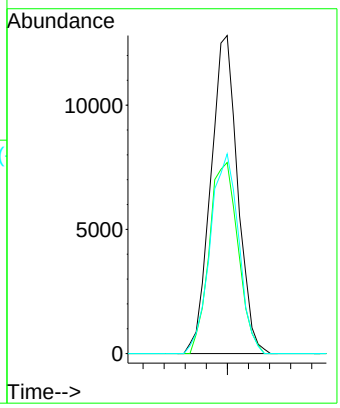
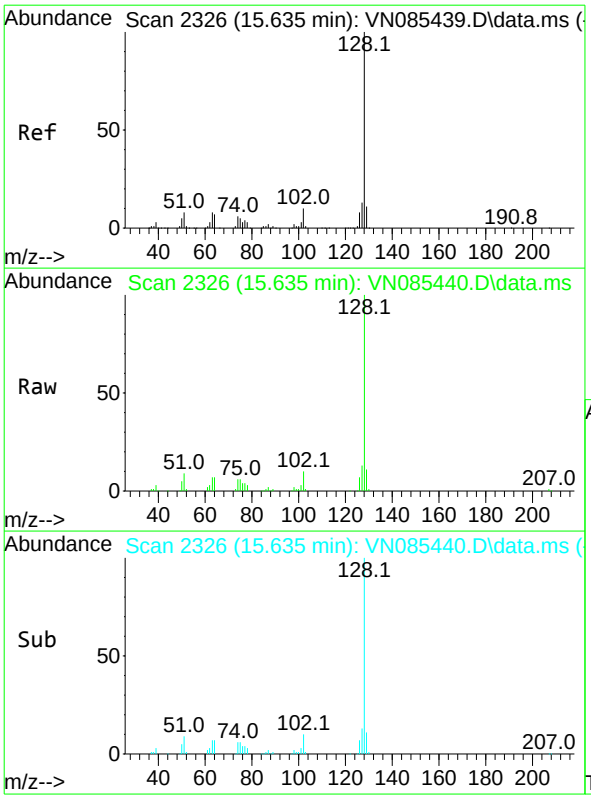


#94
Hexachlorobutadiene
Concen: 19.805 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:225 Resp: 22719

Ion	Ratio	Lower	Upper
225	100		
223	64.3	30.7	92.1
227	66.3	30.9	92.5





#95
Naphthalene
Concen: 20.906 ug/l
RT: 15.635 min Scan# 23
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

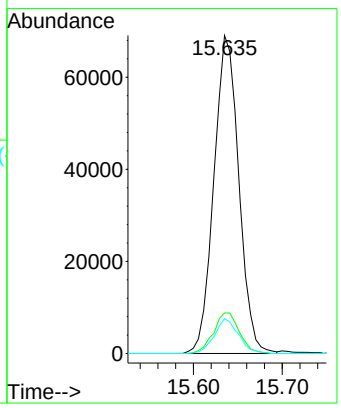
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

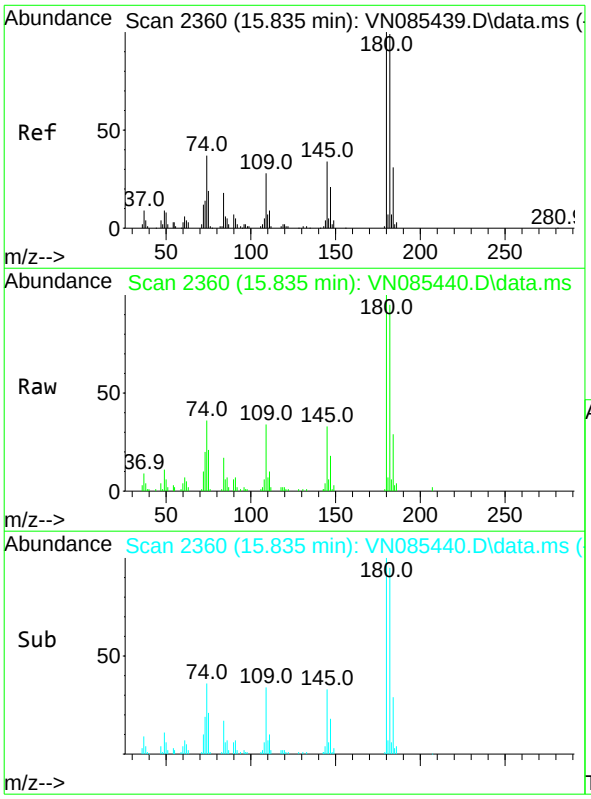
Tgt Ion:128 Resp: 134793

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.6	16.0
129	10.6	8.8	13.2

Manual Integrations
APPROVED

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

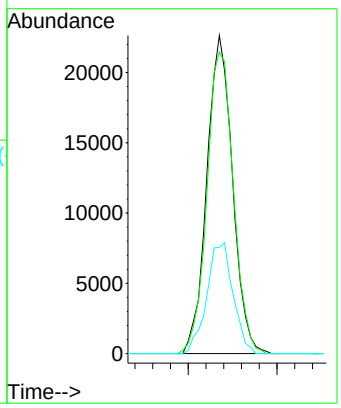




#96
1,2,3-Trichlorobenzene
Concen: 20.797 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:180 Resp: 45468

Ion	Ratio	Lower	Upper
180	100		
182	97.9	47.4	142.2
145	35.7	16.9	50.7



Quantitation Report (QT Reviewed)

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	195889	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	340403	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	294508	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	132934	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	29856	9.442	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 18.880%#			
35) Dibromofluoromethane	8.165	113	21110	8.939	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 17.880%#			
50) Toluene-d8	10.565	98	73223	8.727	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 17.460%#			
62) 4-Bromofluorobenzene	12.847	95	24327	8.476	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 16.960%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	26124	9.850	ug/l	96
3) Chloromethane	2.359	50	27143	9.452	ug/l	99
4) Vinyl Chloride	2.512	62	27862	9.653	ug/l	100
5) Bromomethane	2.965	94	17139	9.830	ug/l	87
6) Chloroethane	3.130	64	16791	9.175	ug/l	96
7) Trichlorofluoromethane	3.501	101	40755	9.731	ug/l	98
8) Diethyl Ether	3.953	74	12415	8.581	ug/l	94
9) 1,1,2-Trichlorotrifluo...	4.371	101	22982	9.742	ug/l	98
10) Methyl Iodide	4.589	142	25085	9.286	ug/l	99
11) Tert butyl alcohol	5.512	59	17962	49.608	ug/l	97
12) 1,1-Dichloroethene	4.342	96	20615	9.806	ug/l	99
13) Acrolein	4.177	56	25568	51.729	ug/l	99
14) Allyl chloride	5.018	41	32240	9.451	ug/l	97
15) Acrylonitrile	5.712	53	53959	46.918	ug/l	98
16) Acetone	4.424	43	48475	47.446	ug/l	98
17) Carbon Disulfide	4.712	76	60201	9.300	ug/l #	94
18) Methyl Acetate	5.030	43	30500	9.817	ug/l	98
19) Methyl tert-butyl Ether	5.789	73	65207	9.552	ug/l	91
20) Methylene Chloride	5.277	84	23723	9.379	ug/l	96
21) trans-1,2-Dichloroethene	5.783	96	21127	9.403	ug/l	97
22) Diisopropyl ether	6.671	45	71857	9.490	ug/l	97
23) Vinyl Acetate	6.600	43	250575	47.125	ug/l	98
24) 1,1-Dichloroethane	6.565	63	43099	9.335	ug/l	95
25) 2-Butanone	7.477	43	71191	47.350	ug/l	99
26) 2,2-Dichloropropane	7.483	77	36105	9.672	ug/l	99
27) cis-1,2-Dichloroethene	7.489	96	25049	9.466	ug/l	97
28) Bromochloromethane	7.806	49	19037	8.863	ug/l	97
29) Tetrahydrofuran	7.836	42	45641	47.881	ug/l	98
30) Chloroform	7.965	83	45792	9.596	ug/l	100
31) Cyclohexane	8.253	56	40211	10.020	ug/l #	93
32) 1,1,1-Trichloroethane	8.165	97	39170	9.358	ug/l	99
36) 1,1-Dichloropropene	8.371	75	30015	9.056	ug/l	97
37) Ethyl Acetate	7.559	43	30760	9.195	ug/l	97
38) Carbon Tetrachloride	8.359	117	36015	9.492	ug/l	94
39) Methylcyclohexane	9.594	83	27721	8.900	ug/l	95
40) Benzene	8.600	78	93680	9.407	ug/l	96

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

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

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

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

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

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

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

ICAL Form

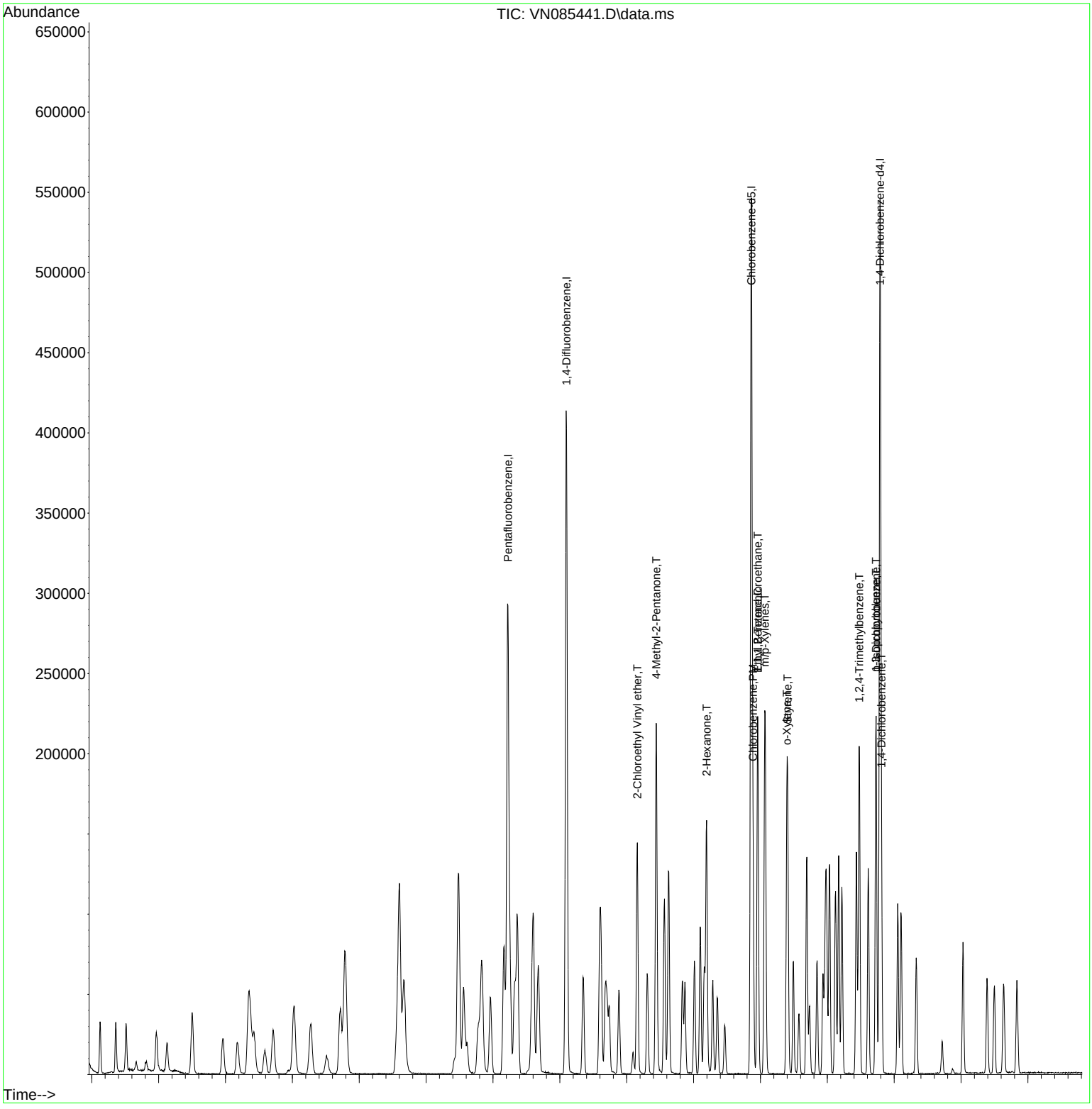
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085441.D
Acq On : 14 Jan 2025 16:07
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

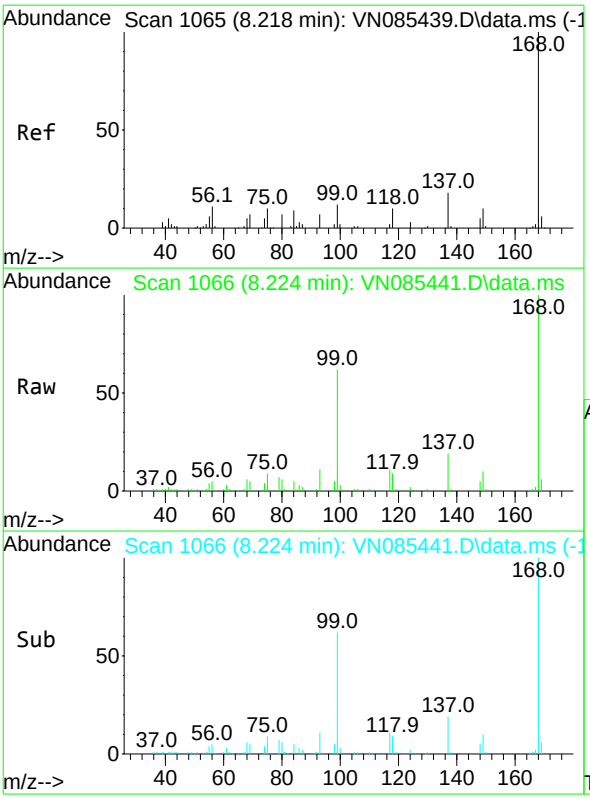
Quant Time: Jan 15 01:44:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

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

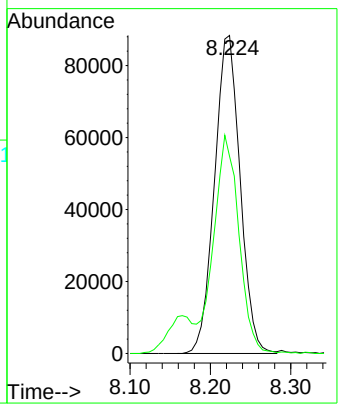




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:168 Resp: 195889

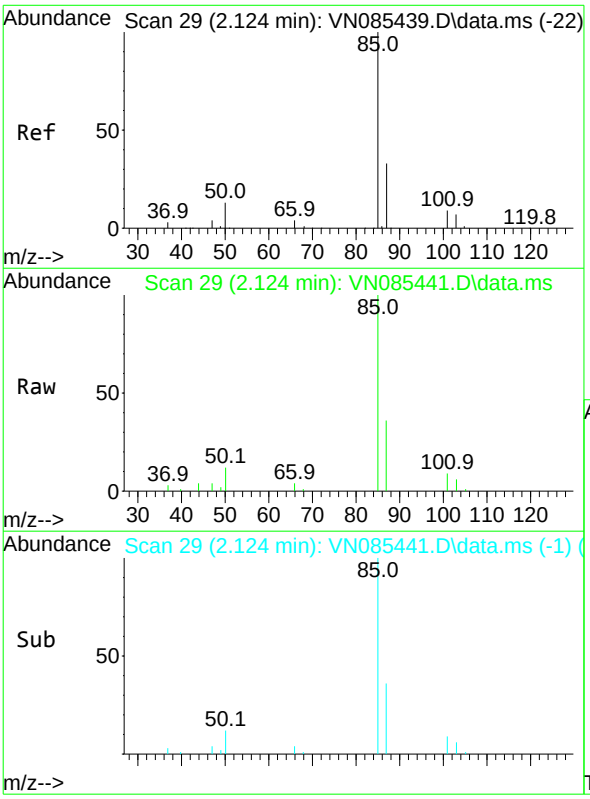
Ion	Ratio	Lower	Upper
168	100		
99	61.7	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

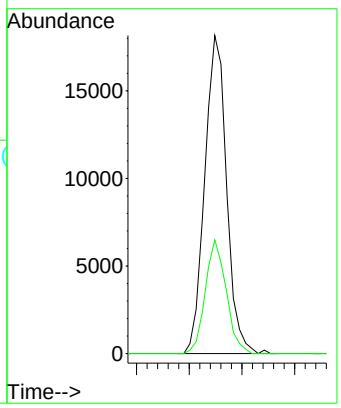
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

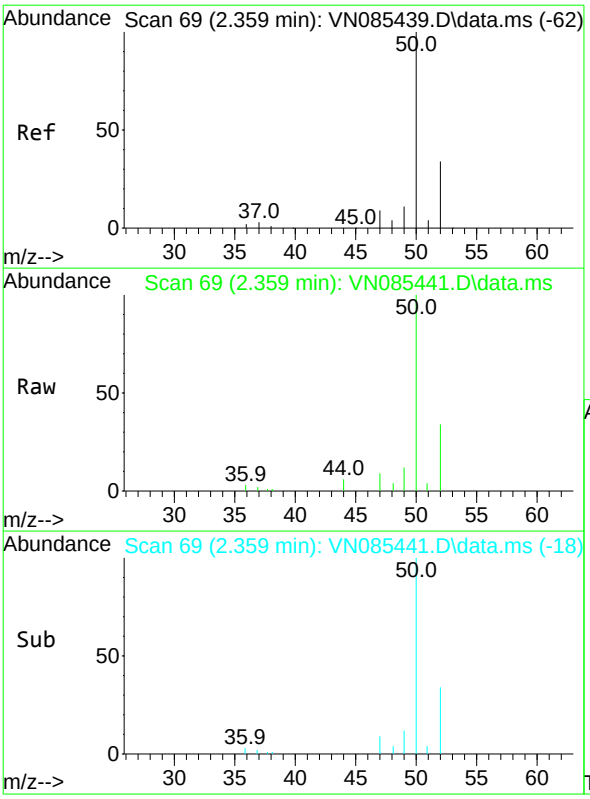


#2
Dichlorodifluoromethane
Concen: 9.850 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 85 Resp: 26124

Ion	Ratio	Lower	Upper
85	100		
87	35.8	16.7	50.1

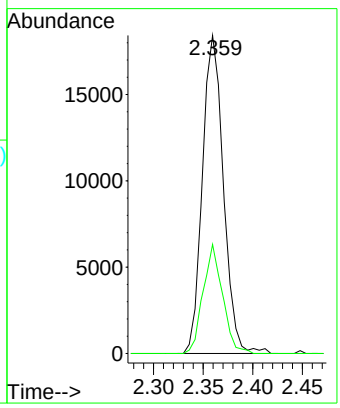




#3
Chloromethane
Concen: 9.452 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 50 Resp: 27143

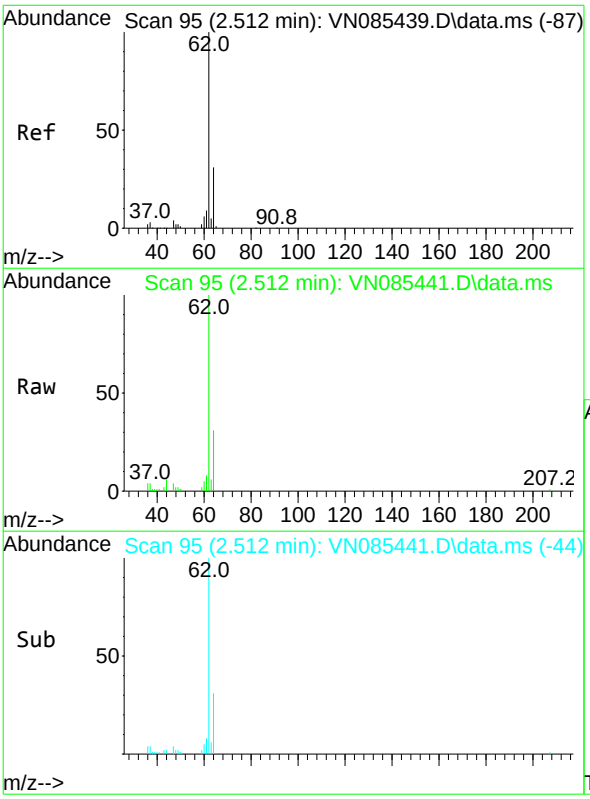
Ion	Ratio	Lower	Upper
50	100		
52	34.3	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

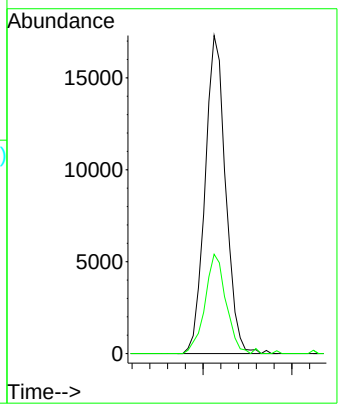
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

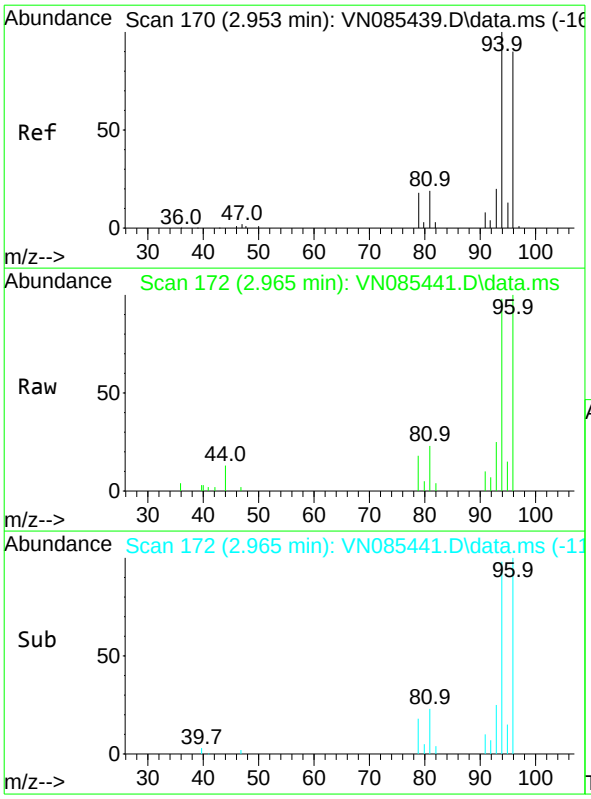


#4
Vinyl Chloride
Concen: 9.653 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 62 Resp: 27862

Ion	Ratio	Lower	Upper
62	100		
64	31.2	24.8	37.2

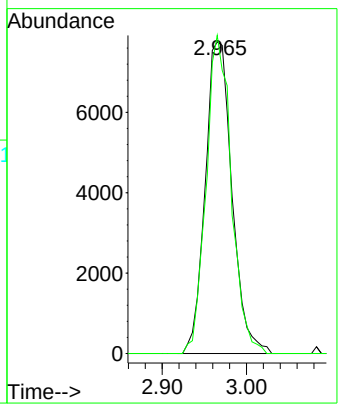




#5
Bromomethane
Concen: 9.830 ug/l
RT: 2.965 min Scan# 17
Delta R.T. 0.012 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 94 Resp: 17139

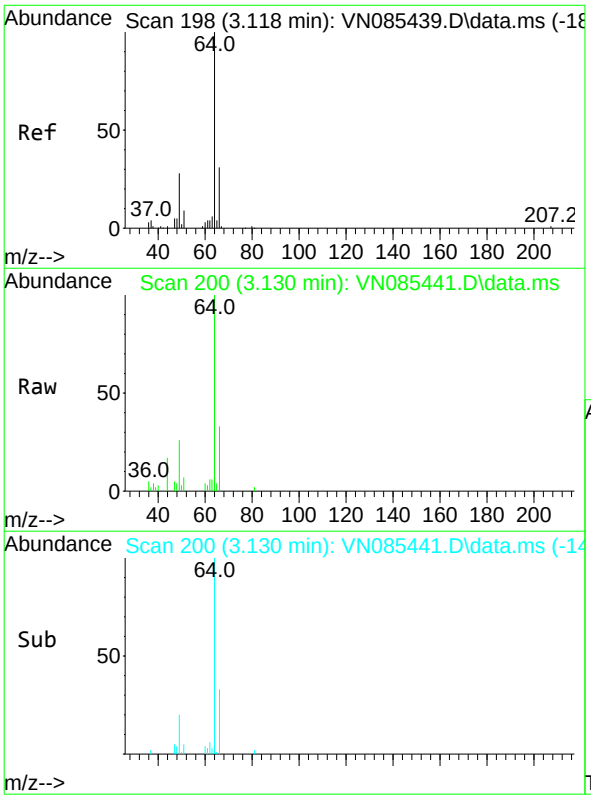
Ion	Ratio	Lower	Upper
94	100		
96	102.1	71.8	107.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

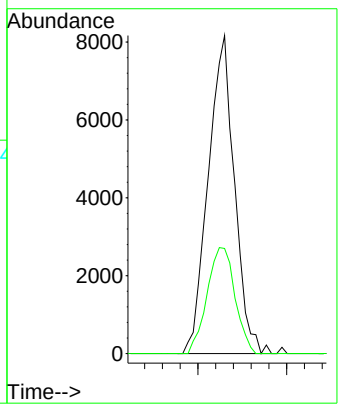
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

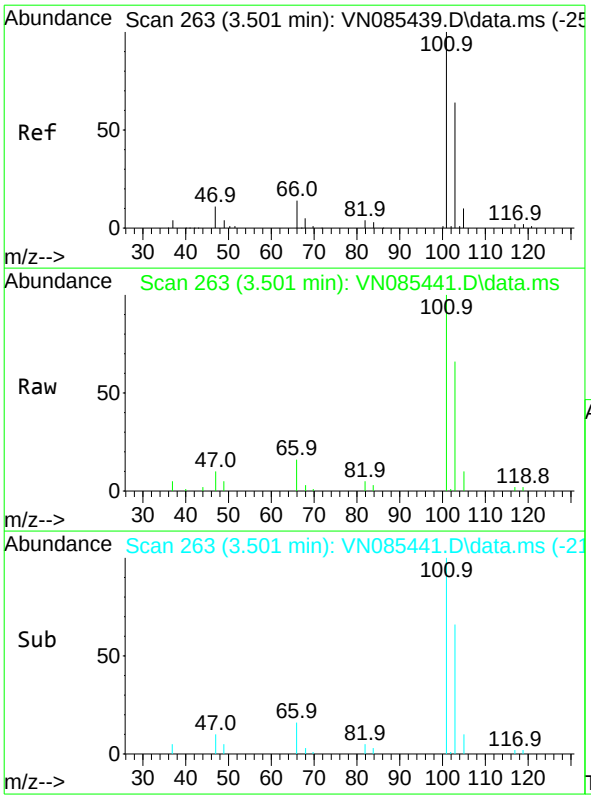


#6
Chloroethane
Concen: 9.175 ug/l
RT: 3.130 min Scan# 200
Delta R.T. 0.012 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 64 Resp: 16791

Ion	Ratio	Lower	Upper
64	100		
66	33.1	24.6	36.8

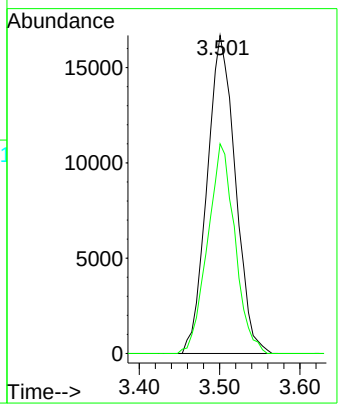




#7
Trichlorofluoromethane
Concen: 9.731 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:101 Resp: 40755

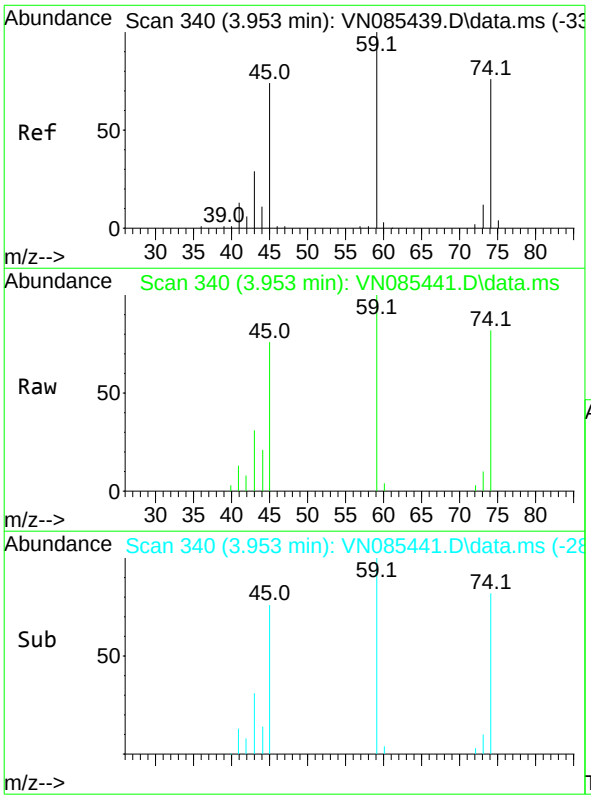
Ion	Ratio	Lower	Upper
101	100		
103	65.9	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

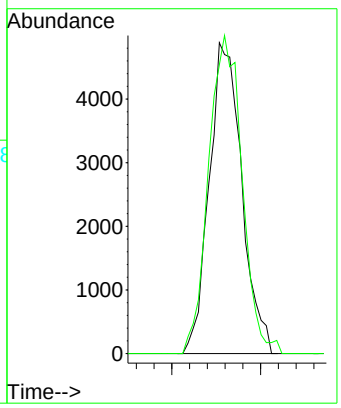
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

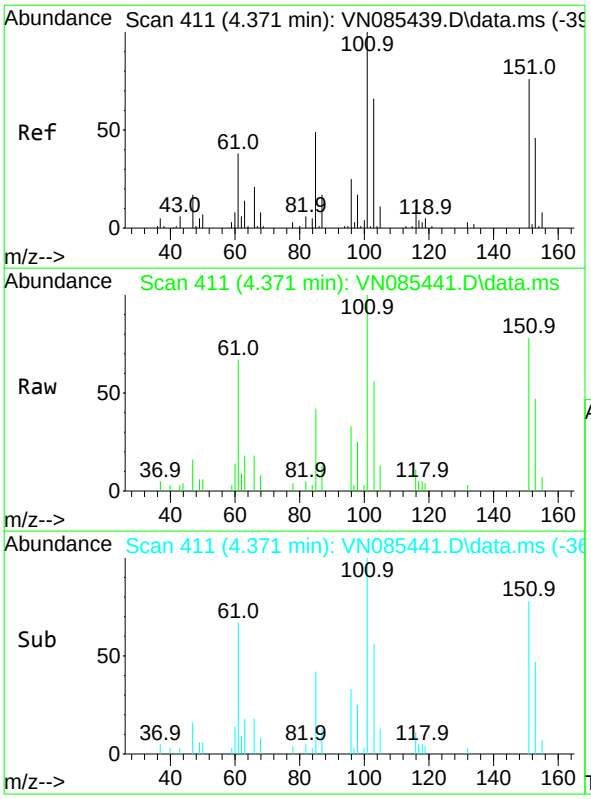


#8
Diethyl Ether
Concen: 8.581 ug/l
RT: 3.953 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 74 Resp: 12415

Ion	Ratio	Lower	Upper
74	100		
45	105.3	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 9.742 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

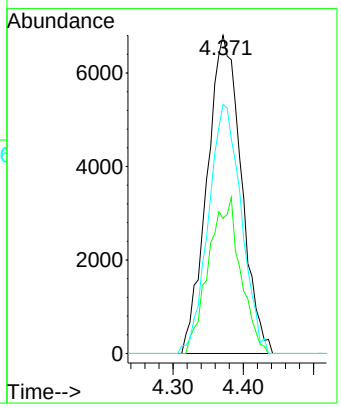
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

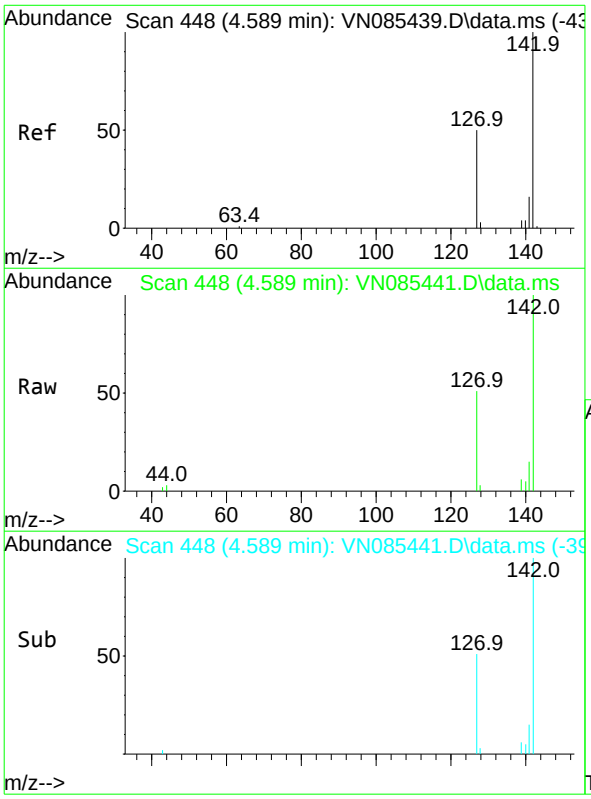
Tgt Ion:101 Resp: 22982

Ion	Ratio	Lower	Upper
101	100		
85	45.8	37.8	56.8
151	75.2	58.8	88.2

Manual Integrations
APPROVED

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

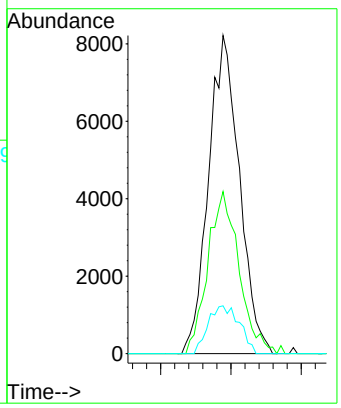


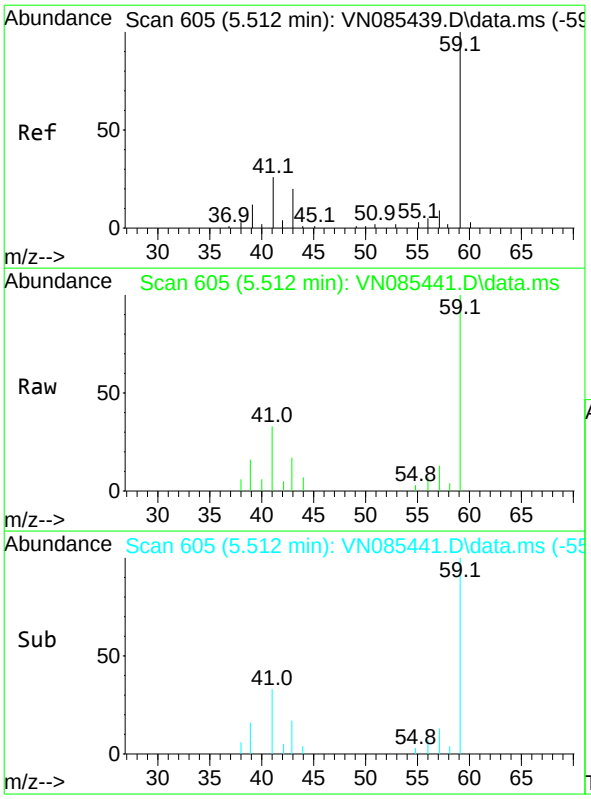


#10
Methyl Iodide
Concen: 9.286 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:142 Resp: 25085

Ion	Ratio	Lower	Upper
142	100		
127	50.9	40.3	60.5
141	15.0	12.8	19.2

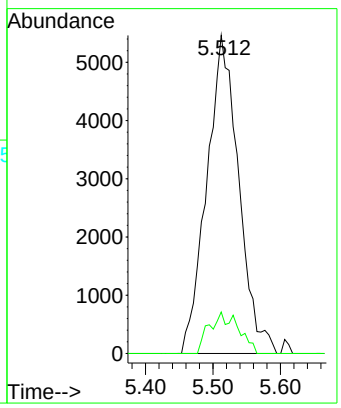




#11
Tert butyl alcohol
Concen: 49.608 ug/l
RT: 5.512 min Scan# 60
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 59 Resp: 17962

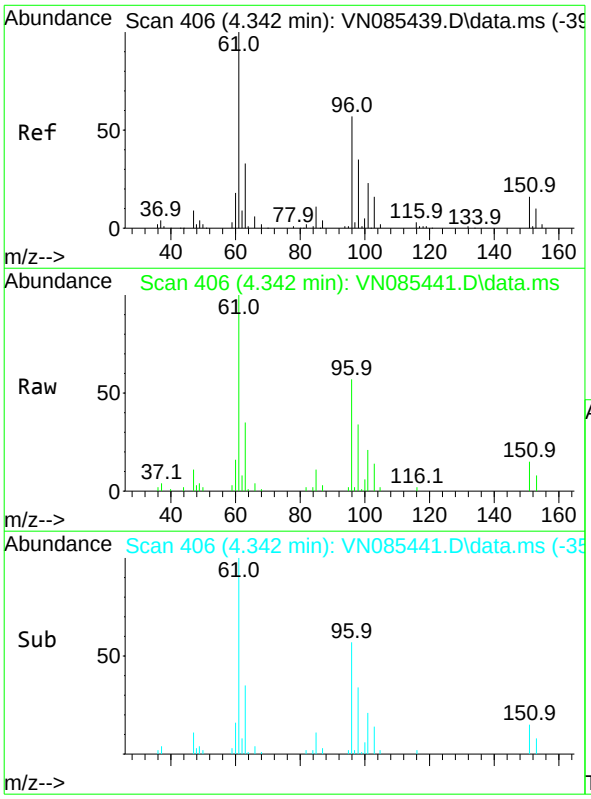
Ion	Ratio	Lower	Upper
59	100		
57	11.9	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

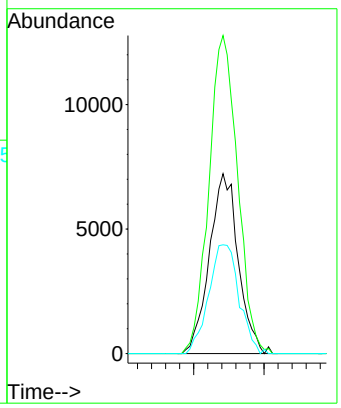
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

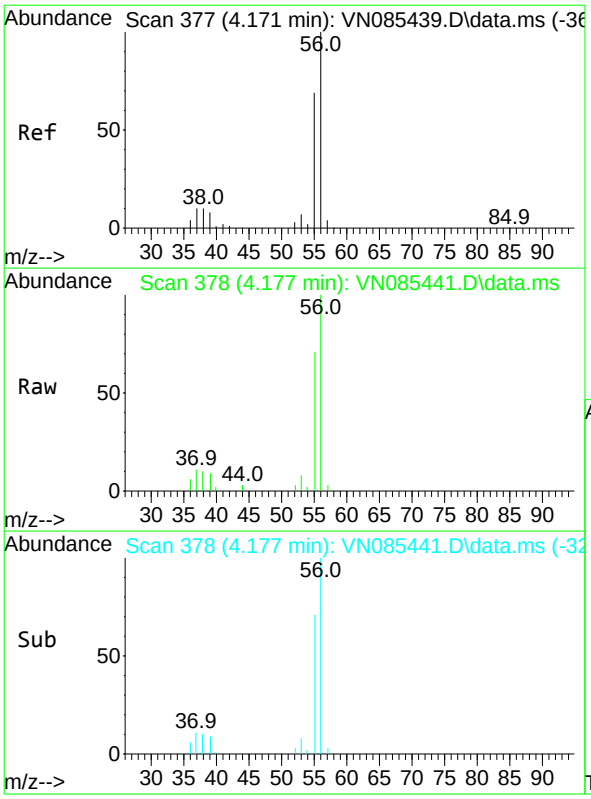


#12
1,1-Dichloroethene
Concen: 9.806 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 96 Resp: 20615

Ion	Ratio	Lower	Upper
96	100		
61	176.8	141.0	211.4
98	60.5	49.0	73.6

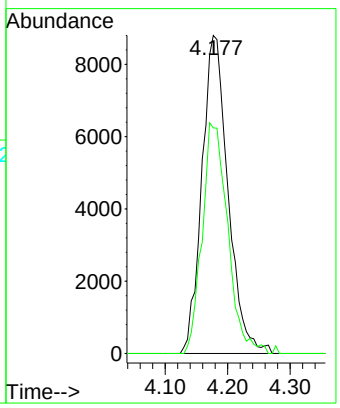




#13
Acrolein
Concen: 51.729 ug/l
RT: 4.177 min Scan# 37
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 56 Resp: 25568

Ion	Ratio	Lower	Upper
56	100		
55	70.9	56.3	84.5



Instrument :
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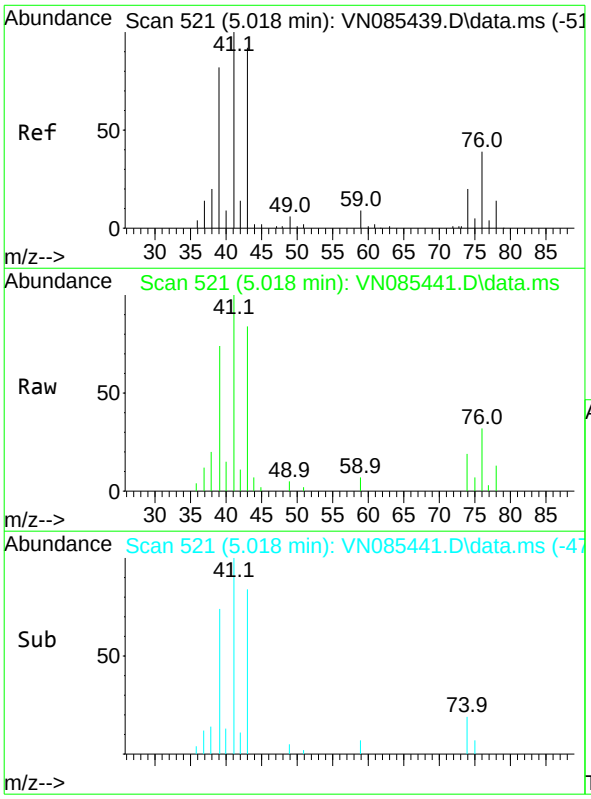
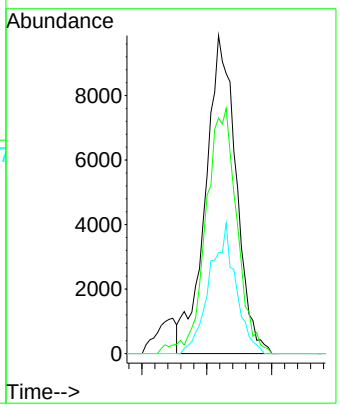
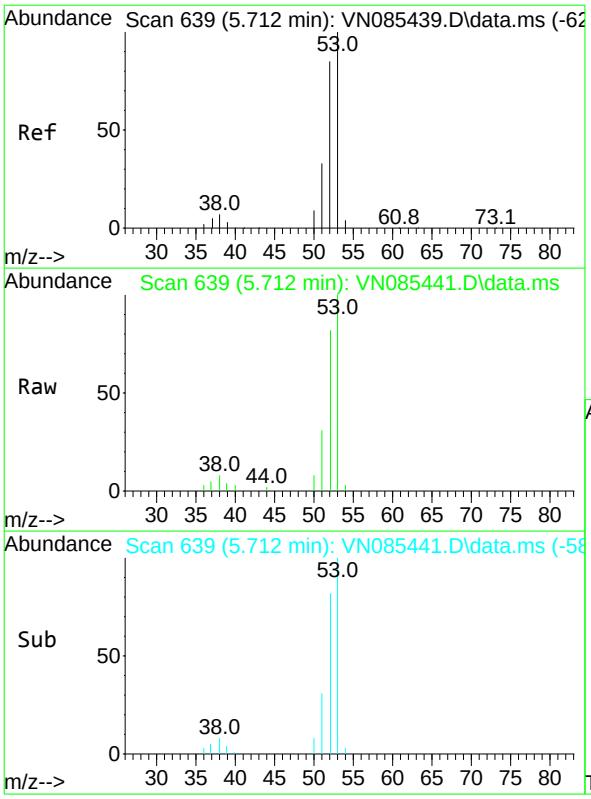


#14
Allyl chloride
Concen: 9.451 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 41 Resp: 32240

Ion	Ratio	Lower	Upper
41	100		
39	78.3	64.4	96.6
76	35.1	30.5	45.7

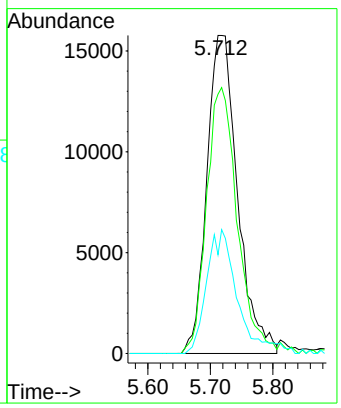




#15
Acrylonitrile
Concen: 46.918 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 53 Resp: 53959

Ion	Ratio	Lower	Upper
53	100		
52	83.3	65.5	98.3
51	38.8	29.8	44.8



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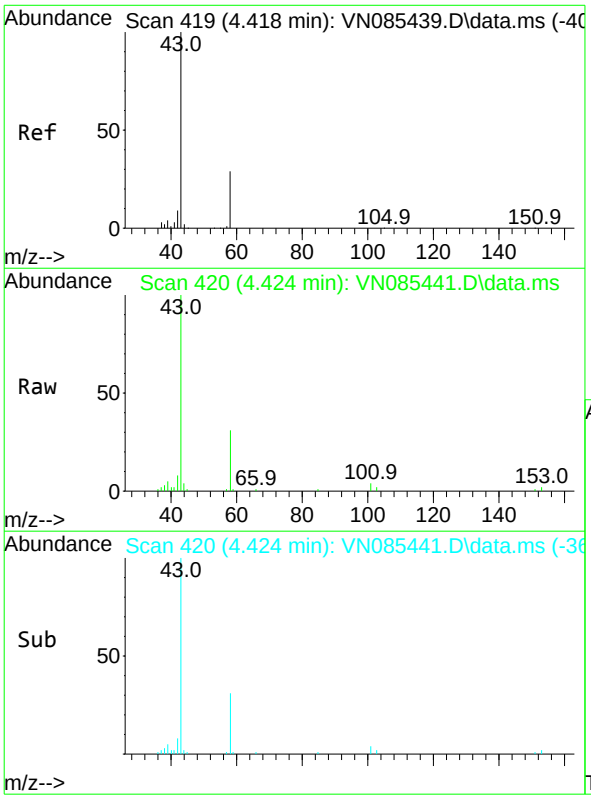
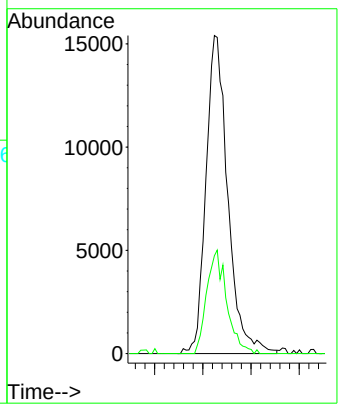
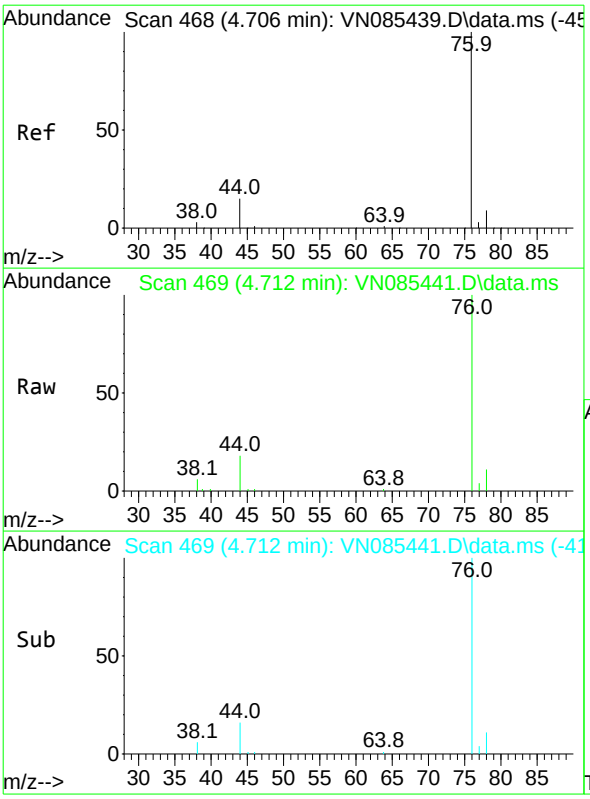


#16
Acetone
Concen: 47.446 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 48475

Ion	Ratio	Lower	Upper
43	100		
58	30.8	23.8	35.6





#17
Carbon Disulfide
Concen: 9.300 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 76 Resp: 60201

Ion	Ratio	Lower	Upper
76	100		
78	10.7	6.9	10.3#

Instrument :
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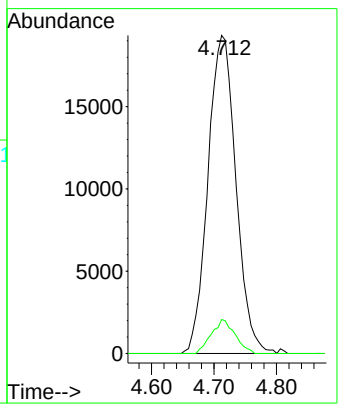
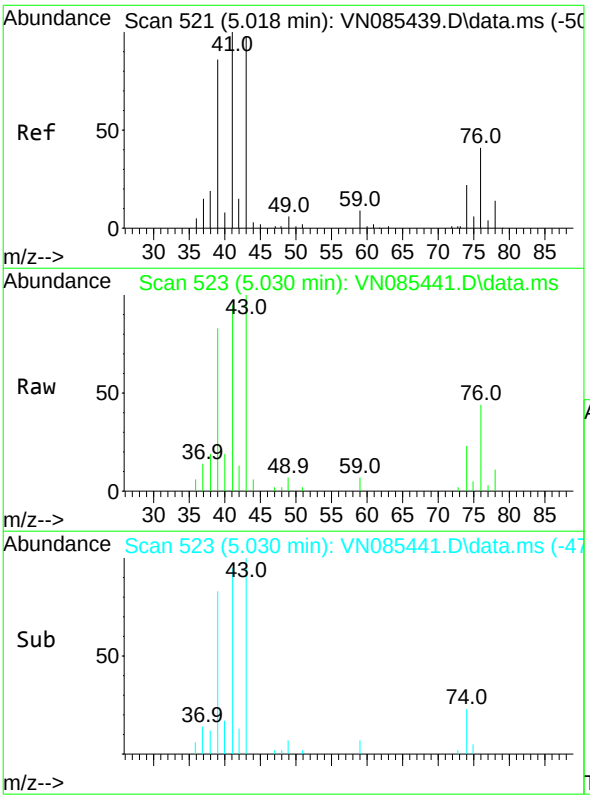
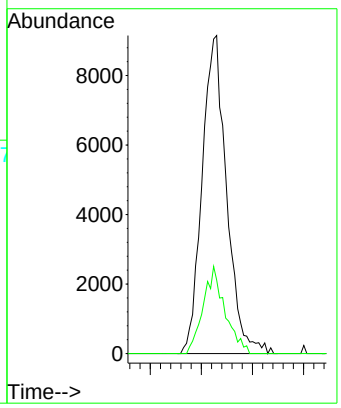


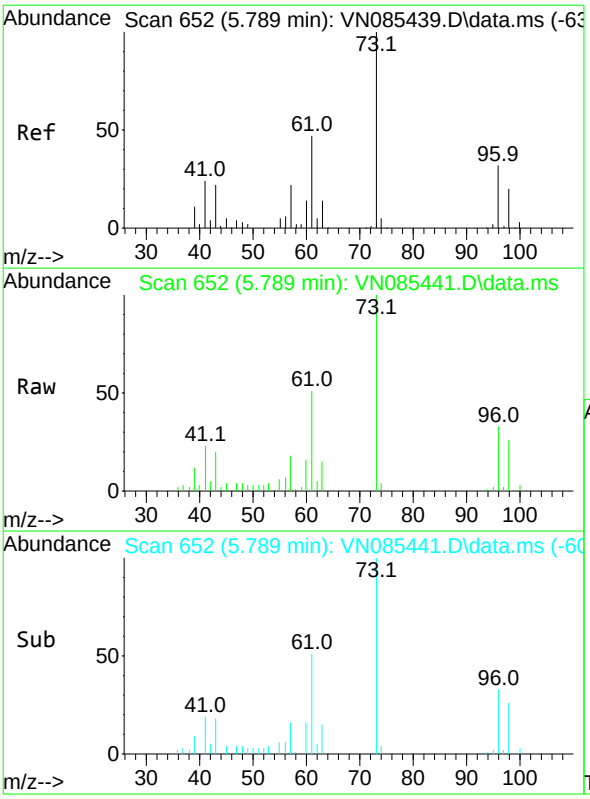


#18
Methyl Acetate
Concen: 9.817 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 30500

Ion	Ratio	Lower	Upper
43	100		
74	24.3	18.6	28.0

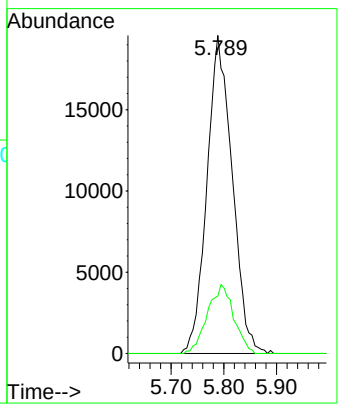




#19
Methyl tert-butyl Ether
Concen: 9.552 ug/l
RT: 5.789 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 73 Resp: 65207

Ion	Ratio	Lower	Upper
73	100		
57	18.1	17.8	26.8



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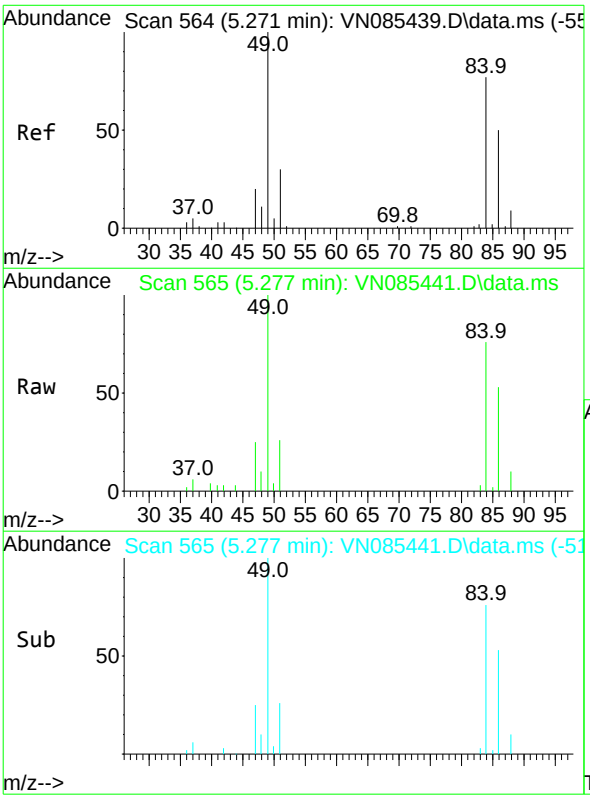
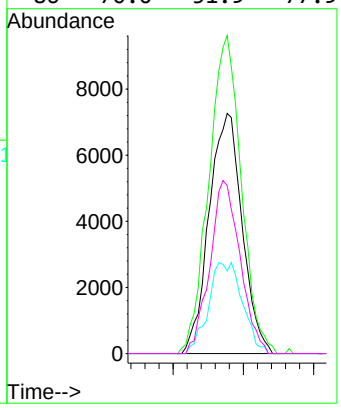
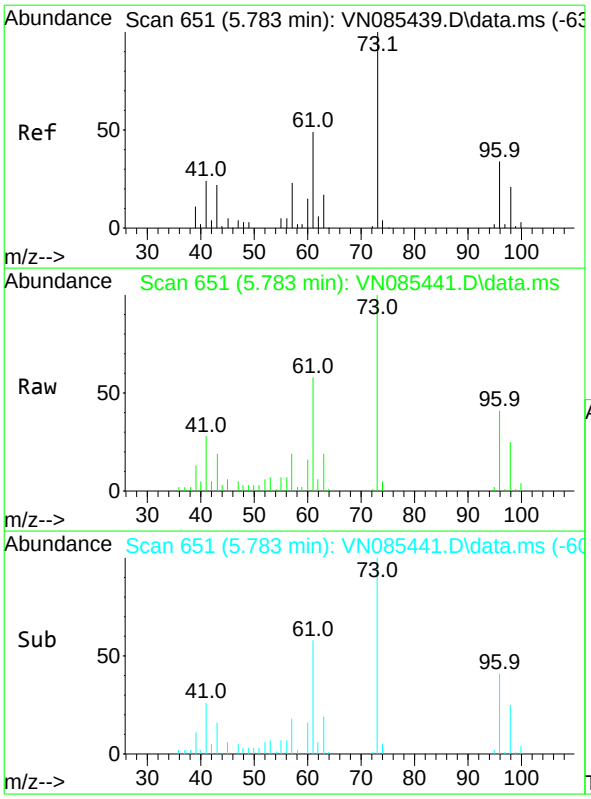


#20
Methylene Chloride
Concen: 9.379 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 84 Resp: 23723

Ion	Ratio	Lower	Upper
84	100		
49	132.4	104.1	156.1
51	34.4	31.0	46.4
86	70.0	51.9	77.9

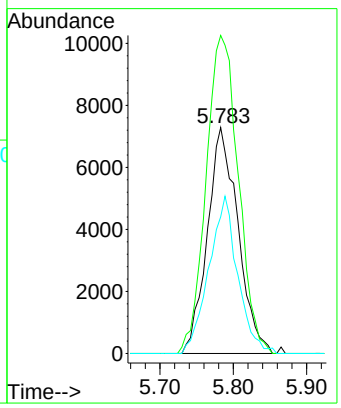




#21
trans-1,2-Dichloroethene
Concen: 9.403 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 96 Resp: 21127

Ion	Ratio	Lower	Upper
96	100		
61	140.8	115.7	173.5
98	60.5	49.8	74.8



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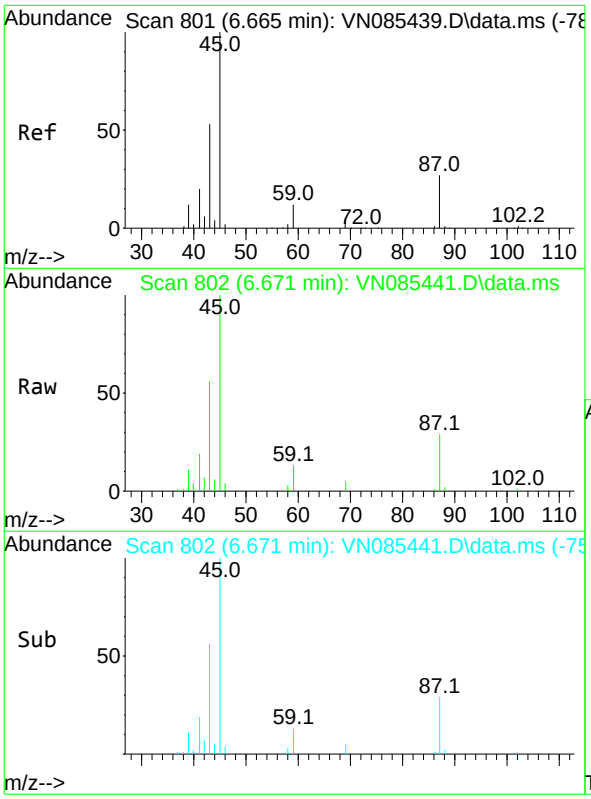
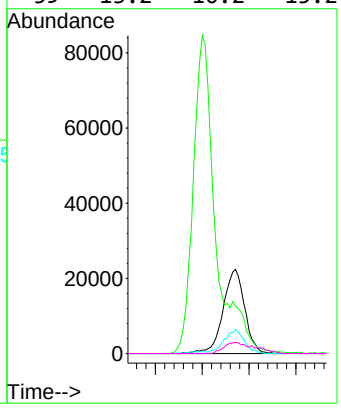
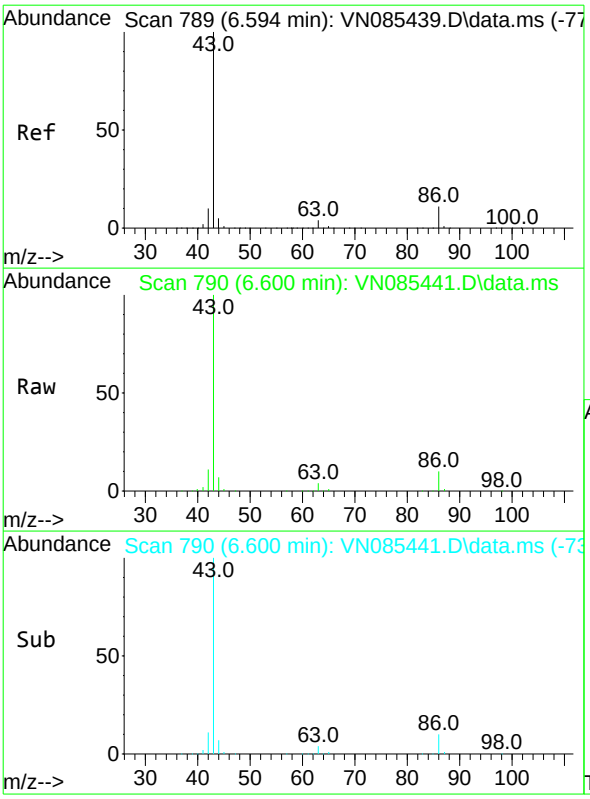


#22
Diisopropyl ether
Concen: 9.490 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 45 Resp: 71857

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

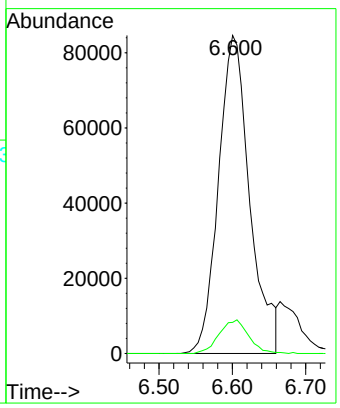




#23
Vinyl Acetate
Concen: 47.125 ug/l
RT: 6.600 min Scan# 79
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 250575

Ion	Ratio	Lower	Upper
43	100		
86	9.8	8.4	12.6



Instrument :
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ClientSampleId :
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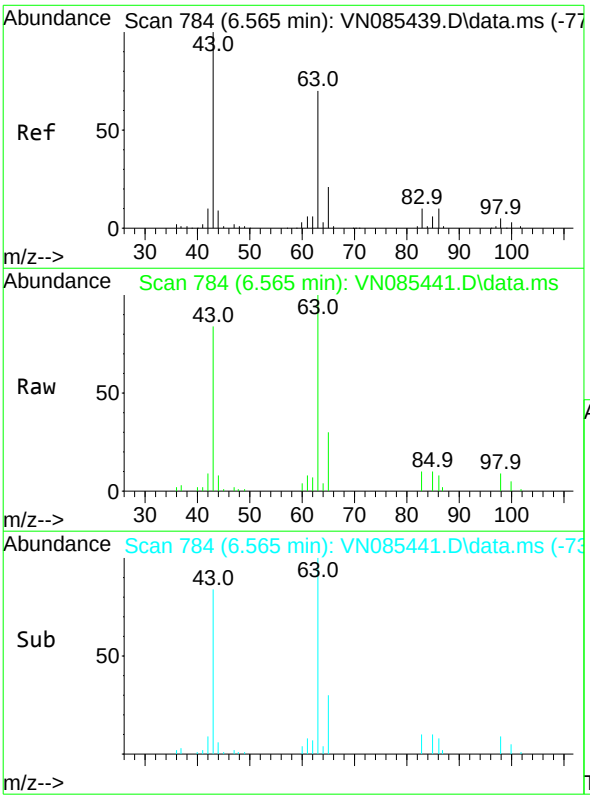
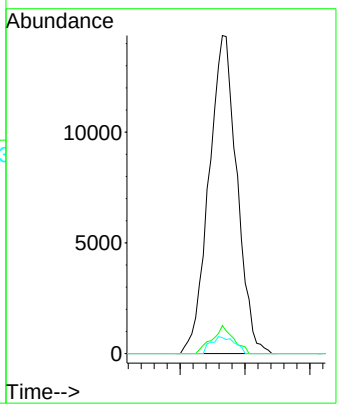
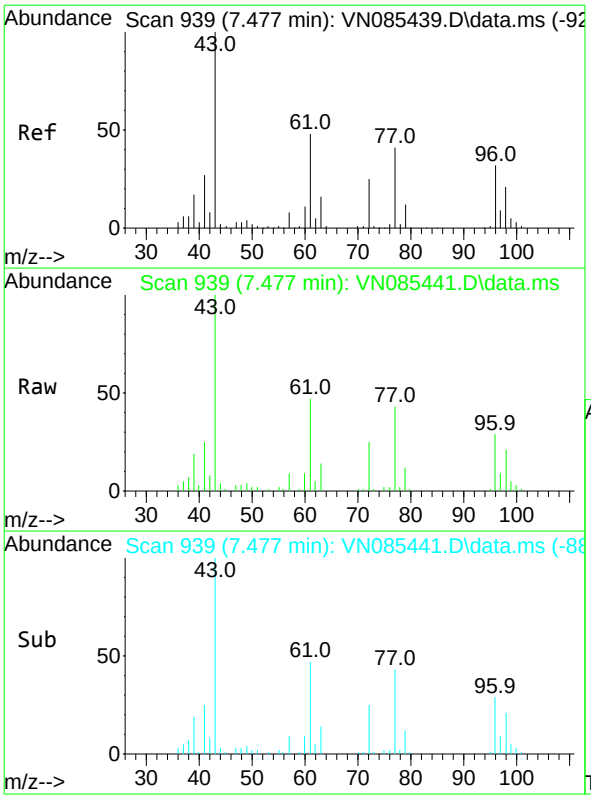


#24
1,1-Dichloroethane
Concen: 9.335 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 63 Resp: 43099

Ion	Ratio	Lower	Upper
63	100		
98	8.8	3.3	9.8
100	5.0	2.0	6.0

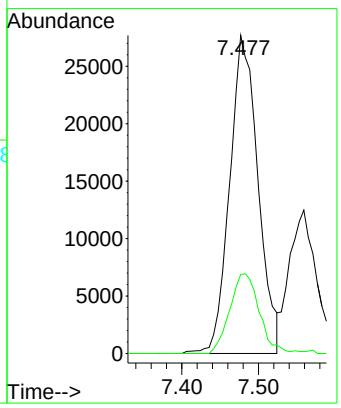




#25
2-Butanone
Concen: 47.350 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 71191

Ion	Ratio	Lower	Upper
43	100		
72	24.8	20.2	30.4



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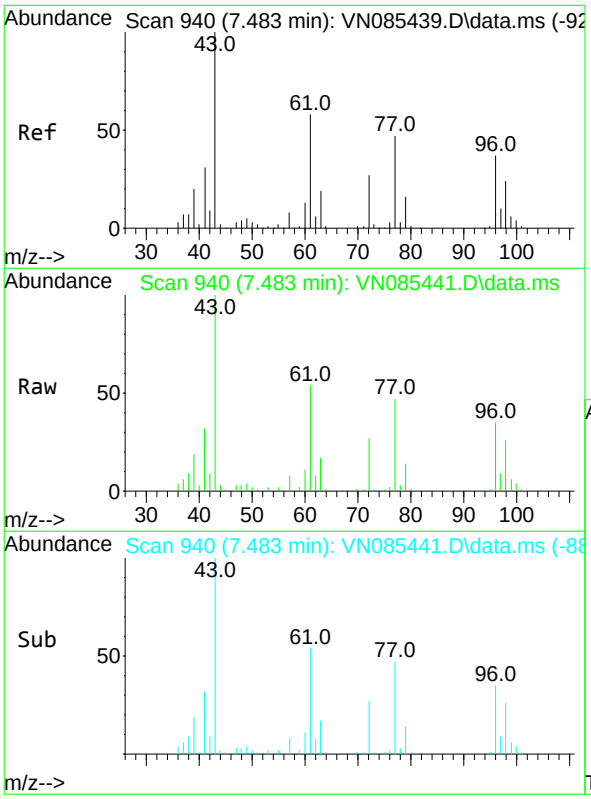
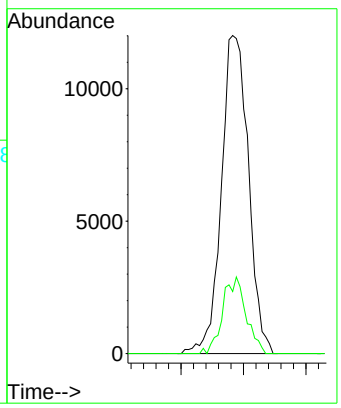
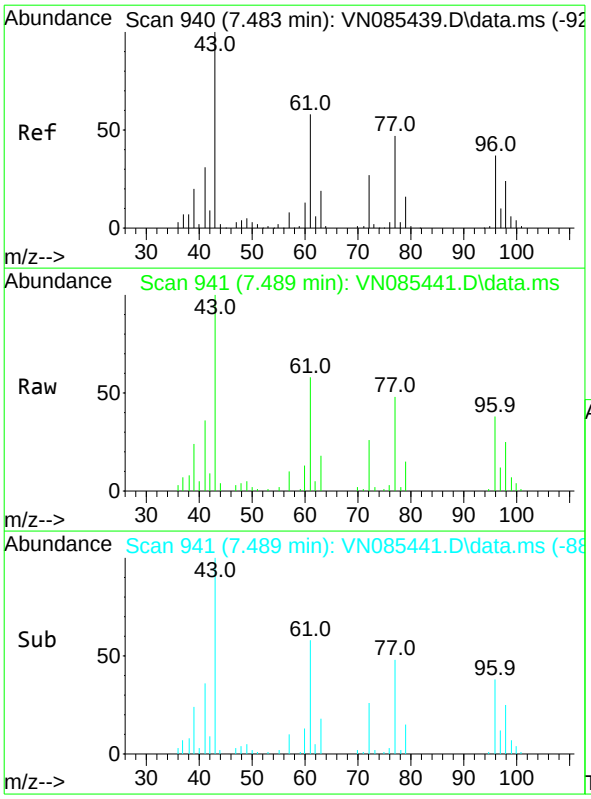


#26
2,2-Dichloropropane
Concen: 9.672 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 77 Resp: 36105

Ion	Ratio	Lower	Upper
77	100		
97	20.8	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 9.466 ug/l
RT: 7.489 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 96 Resp: 25049

Ion	Ratio	Lower	Upper
96	100		
61	151.8	0.0	311.8
98	64.7	0.0	126.0

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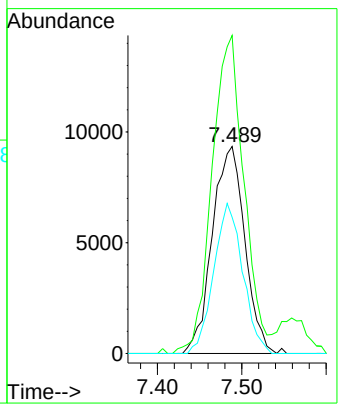
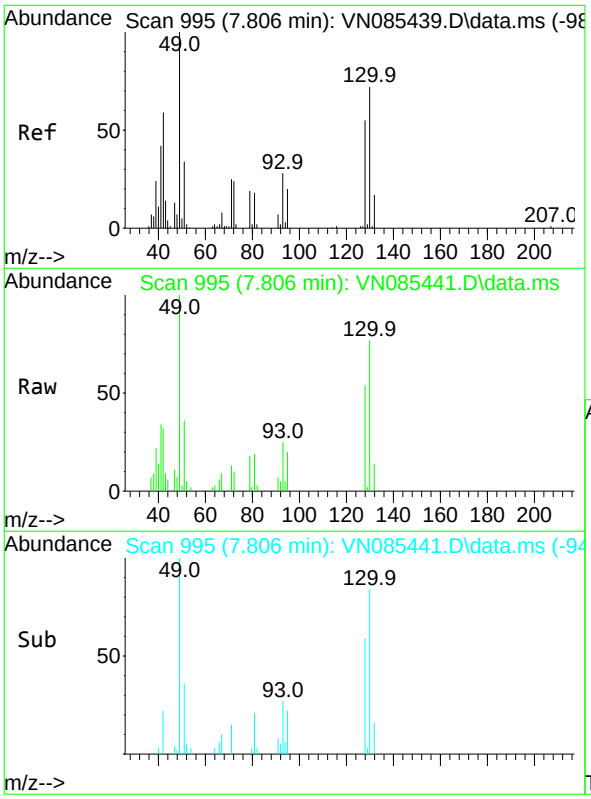
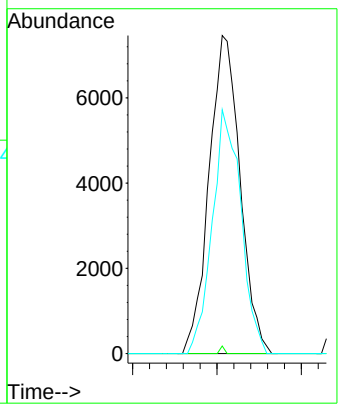


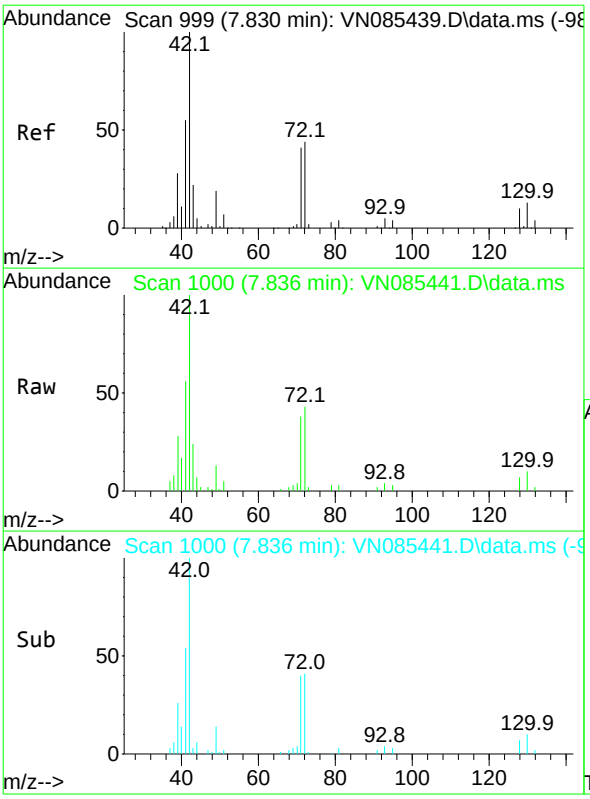


#28
Bromochloromethane
Concen: 8.863 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 49 Resp: 19037

Ion	Ratio	Lower	Upper
49	100		
129	0.3	0.0	4.4
130	70.8	55.0	82.4

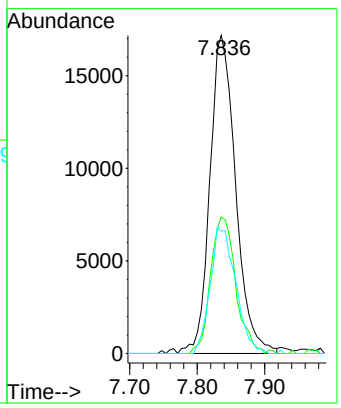




#29
Tetrahydrofuran
Concen: 47.881 ug/l
RT: 7.836 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 42 Resp: 45641

Ion	Ratio	Lower	Upper
42	100		
72	41.6	34.2	51.2
71	39.2	32.5	48.7



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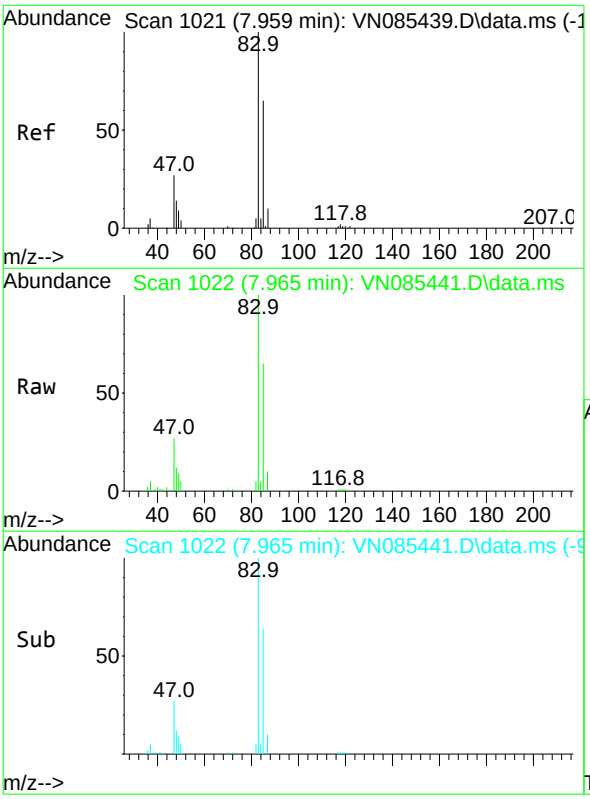
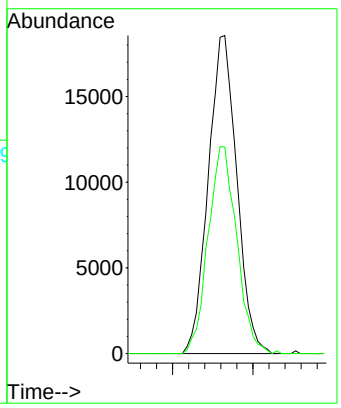
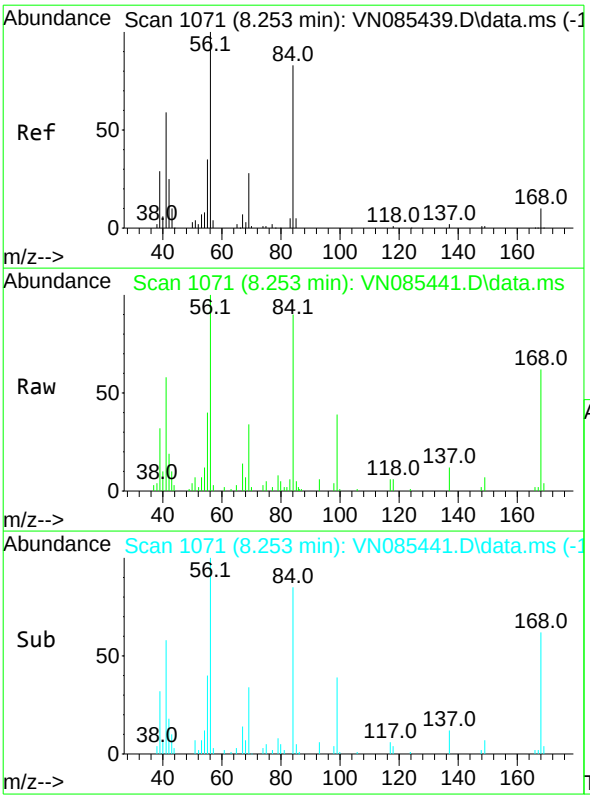


#30
Chloroform
Concen: 9.596 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 45792

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.8	77.6

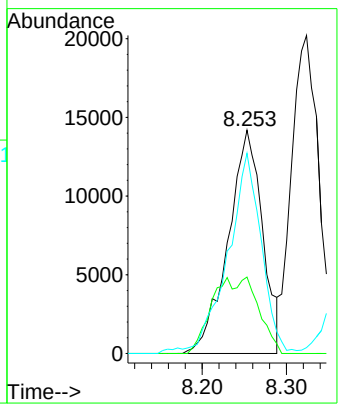




#31
Cyclohexane
Concen: 10.020 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 56 Resp: 40211

Ion	Ratio	Lower	Upper
56	100		
69	34.2	22.2	33.4#
84	87.2	66.4	99.6



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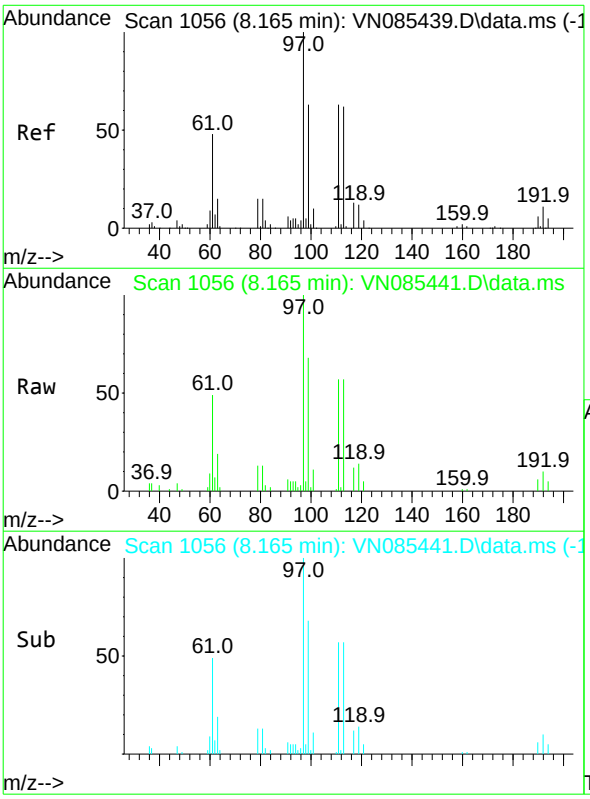
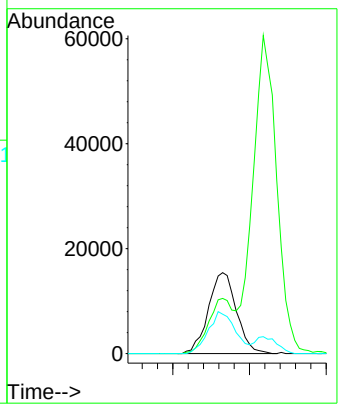
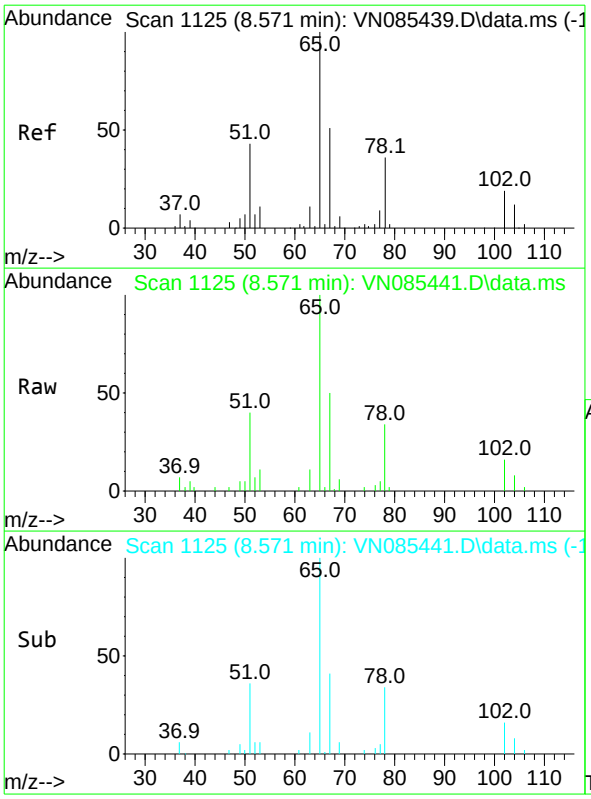


#32
1,1,1-Trichloroethane
Concen: 9.358 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 97 Resp: 39170

Ion	Ratio	Lower	Upper
97	100		
99	62.6	49.8	74.6
61	50.2	41.4	62.2





#33
1,2-Dichloroethane-d4
Concen: 9.442 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 65 Resp: 29856

Ion	Ratio	Lower	Upper
65	100		
67	49.5	0.0	101.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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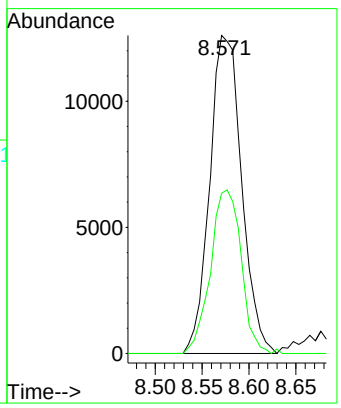
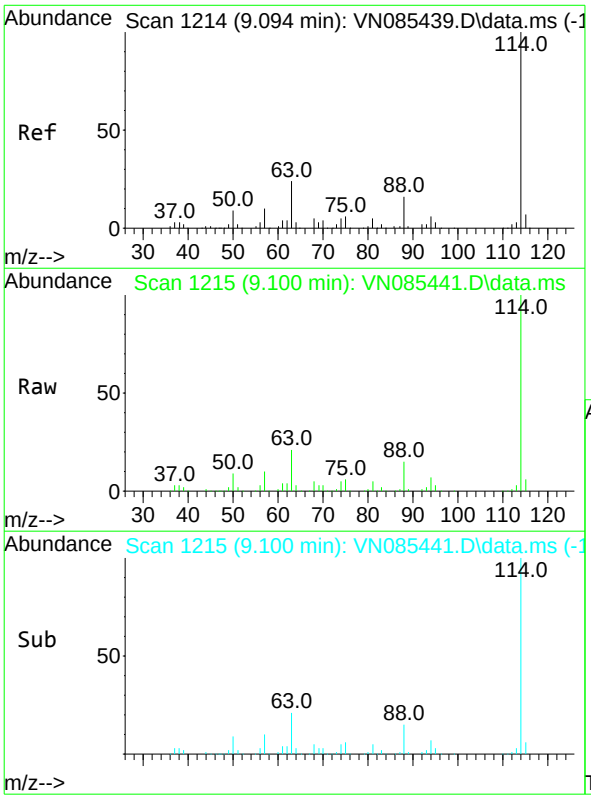
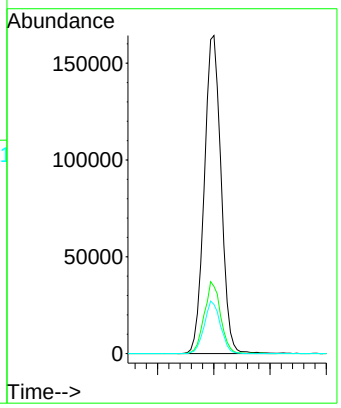


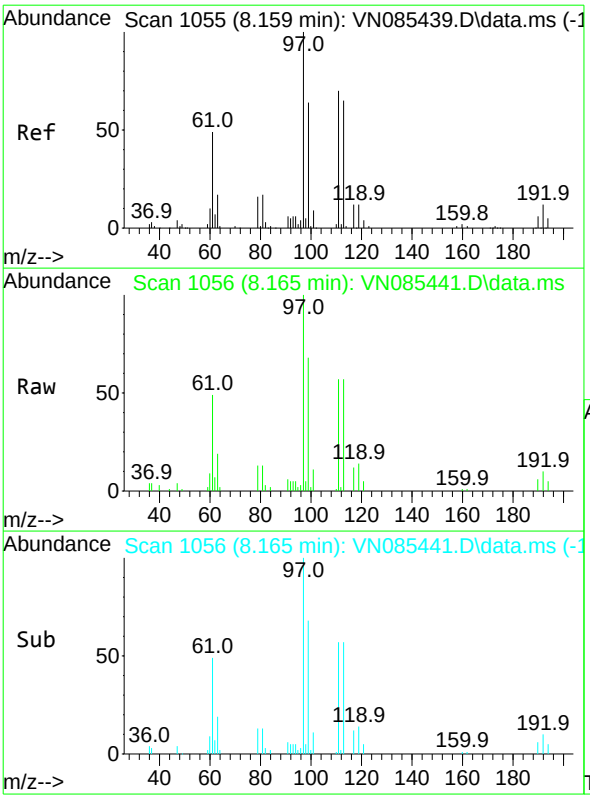


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:114 Resp: 340403

Ion	Ratio	Lower	Upper
114	100		
63	21.1	0.0	47.6
88	15.5	0.0	32.6

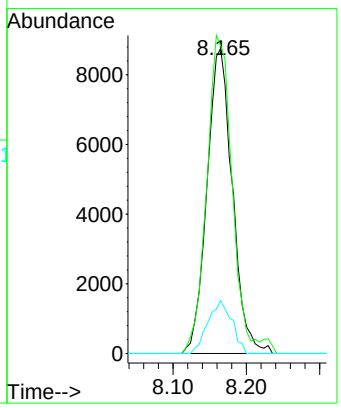




#35
Dibromofluoromethane
Concen: 8.939 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:113 Resp: 21110

Ion	Ratio	Lower	Upper
113	100		
111	103.4	82.7	124.1
192	16.4	14.3	21.5



Instrument :
MSVOA_N
ClientSampleId :
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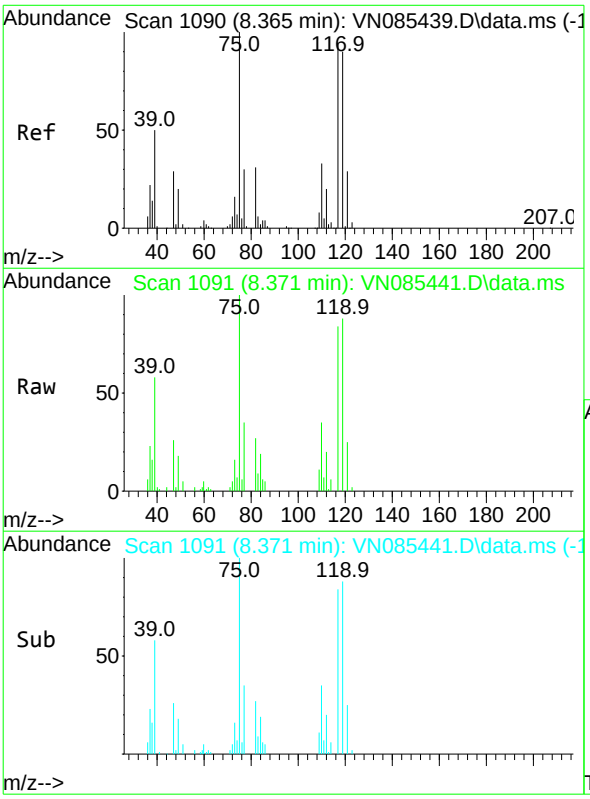
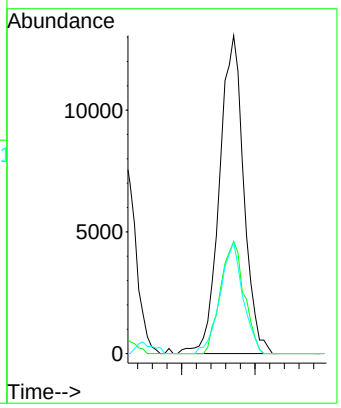
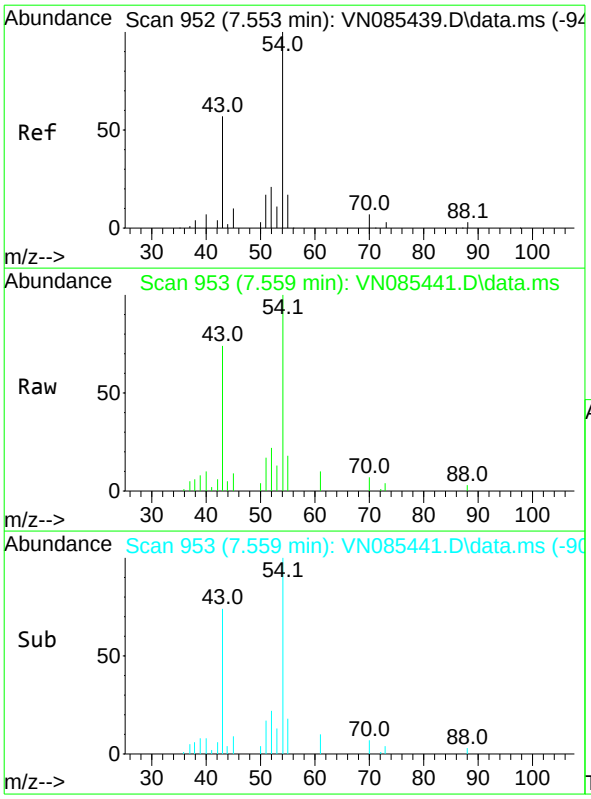


#36
1,1-Dichloropropene
Concen: 9.056 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 30015

Ion	Ratio	Lower	Upper
75	100		
110	34.3	16.5	49.5
77	32.9	24.4	36.6





#37
Ethyl Acetate
Concen: 9.195 ug/l
RT: 7.559 min Scan# 95
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 30760

Ion	Ratio	Lower	Upper
43	100		
61	12.2	10.9	16.3
70	8.4	7.5	11.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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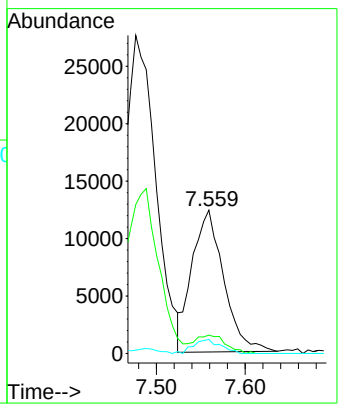
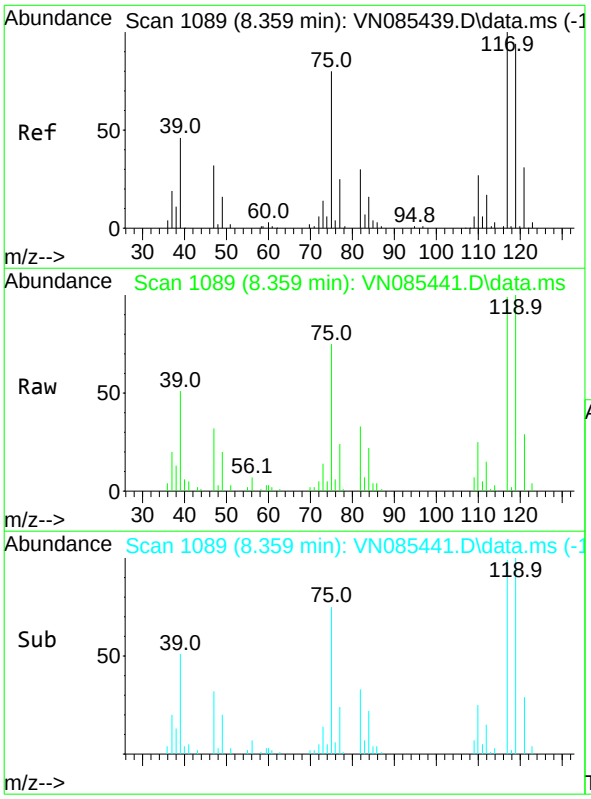
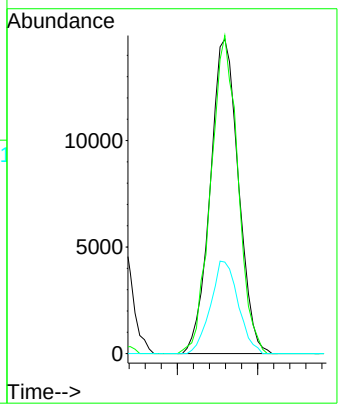


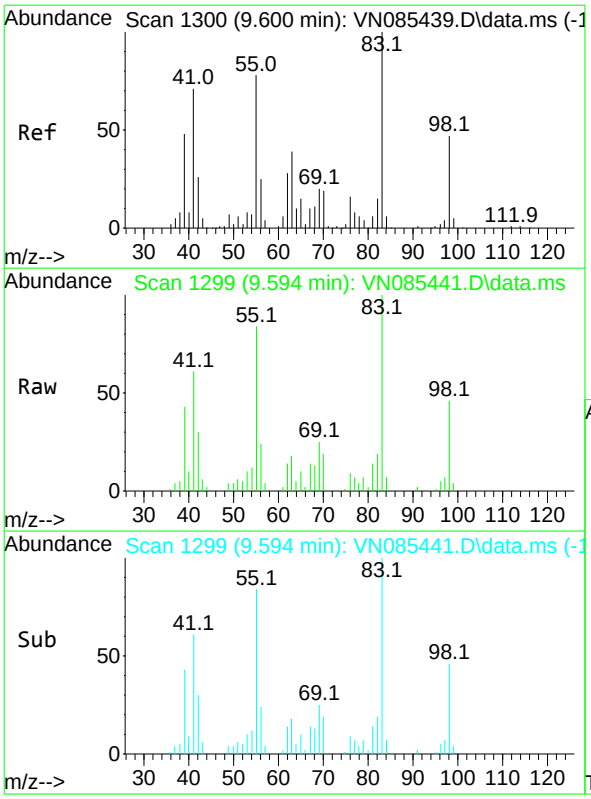


#38
Carbon Tetrachloride
Concen: 9.492 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:117 Resp: 36015

Ion	Ratio	Lower	Upper
117	100		
119	101.2	75.4	113.2
121	29.1	24.6	37.0

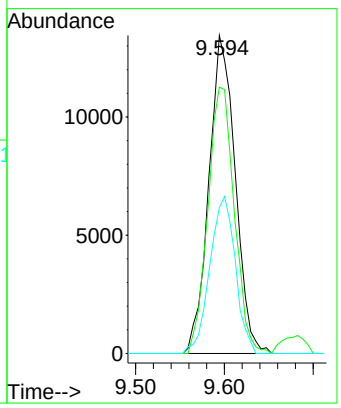




#39
Methylcyclohexane
Concen: 8.900 ug/l
RT: 9.594 min Scan# 12
Delta R.T. -0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 27721

Ion	Ratio	Lower	Upper
83	100		
55	83.8	62.6	94.0
98	45.8	37.7	56.5



Instrument :
MSVOA_N
ClientSampleId :
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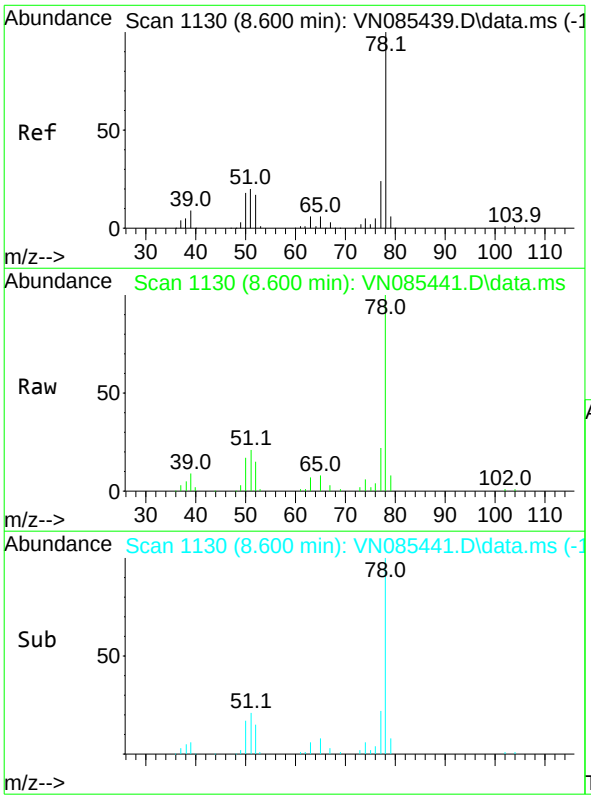
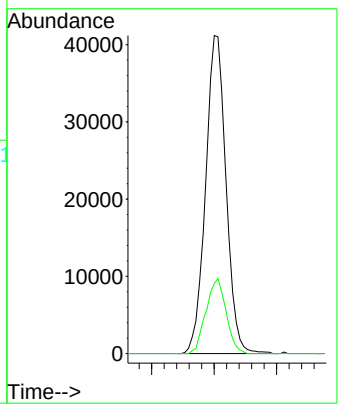
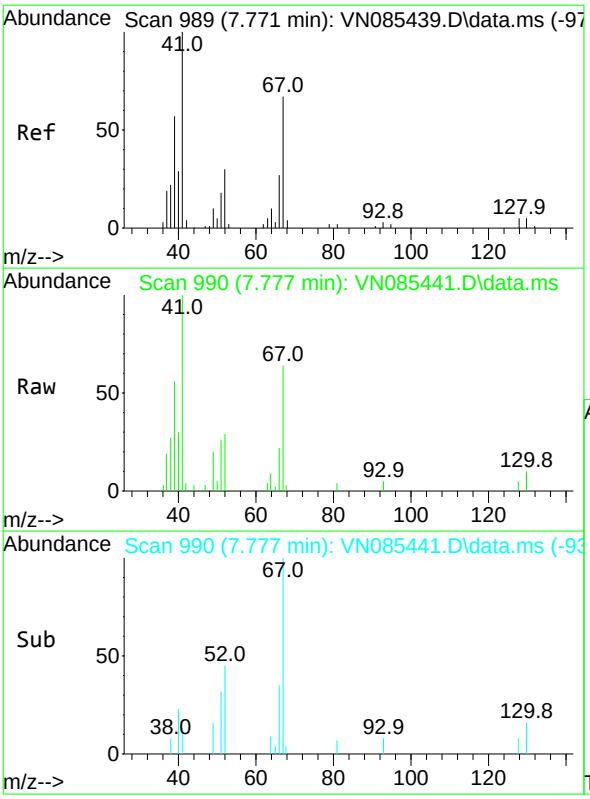


#40
Benzene
Concen: 9.407 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 78 Resp: 93680

Ion	Ratio	Lower	Upper
78	100		
77	22.0	19.0	28.6

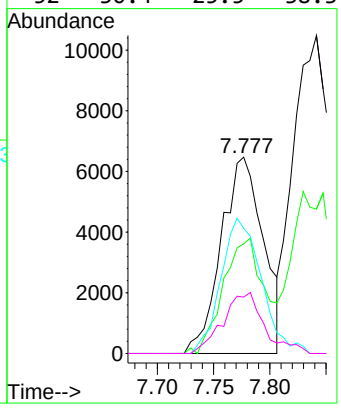




#41
Methacrylonitrile
Concen: 9.686 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 41 Resp: 16859

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



Instrument :
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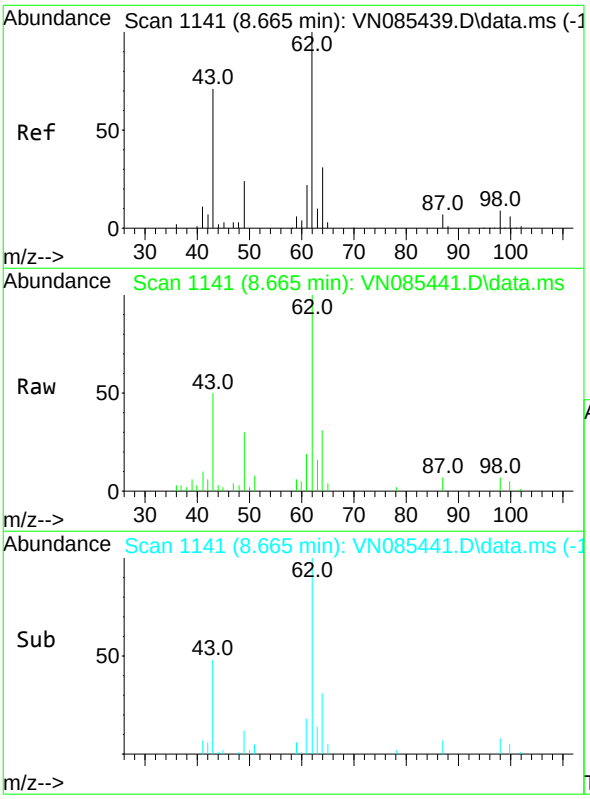
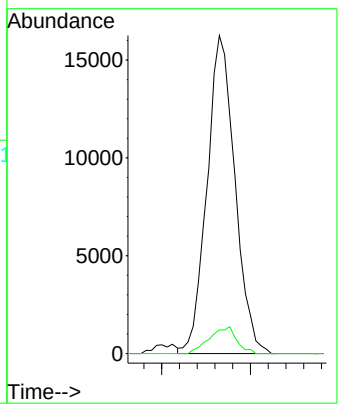
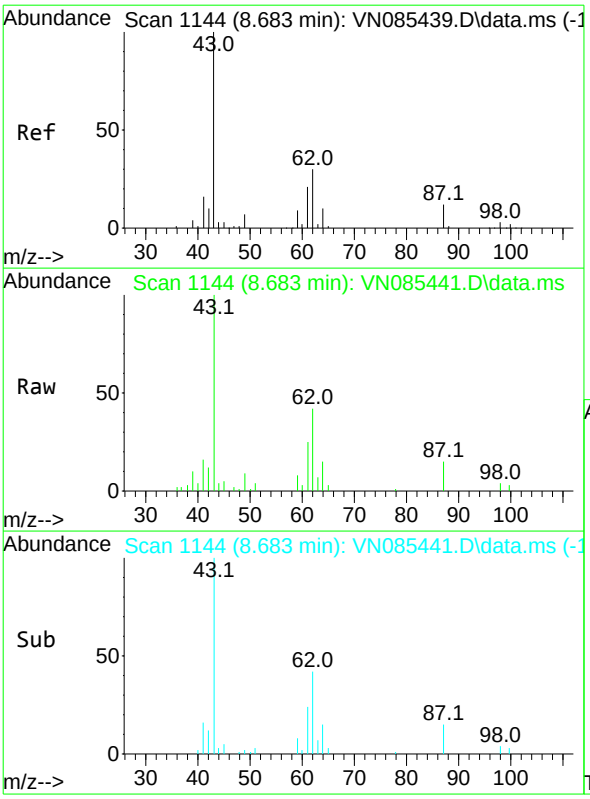


#42
1,2-Dichloroethane
Concen: 9.483 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 62 Resp: 35569

Ion	Ratio	Lower	Upper
62	100		
98	8.2	0.0	17.0

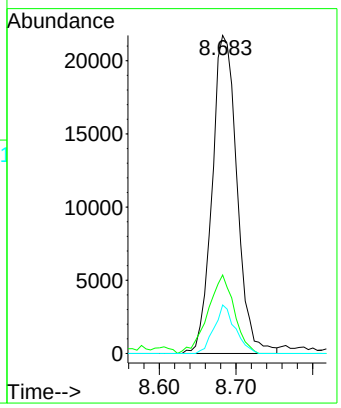




#43
Isopropyl Acetate
Concen: 9.127 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 48926

Ion	Ratio	Lower	Upper
43	100		
61	26.2	20.7	31.1
87	12.8	9.8	14.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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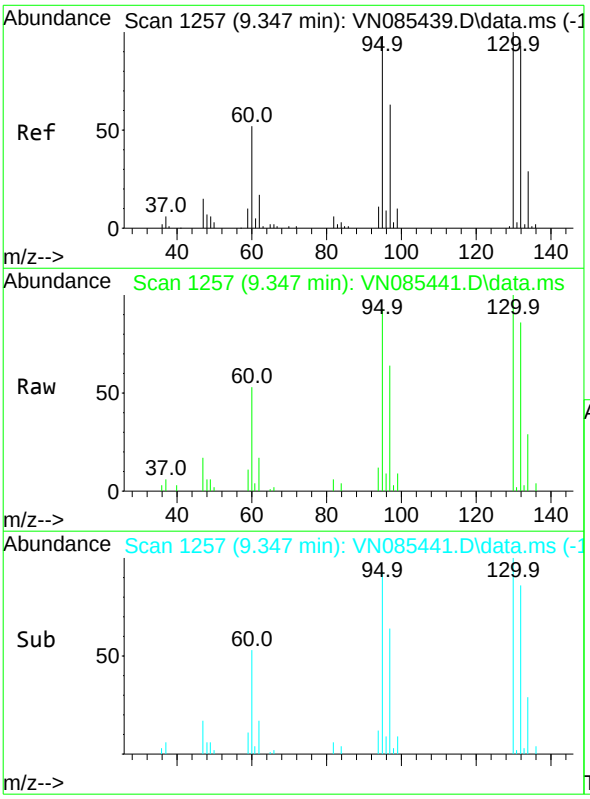
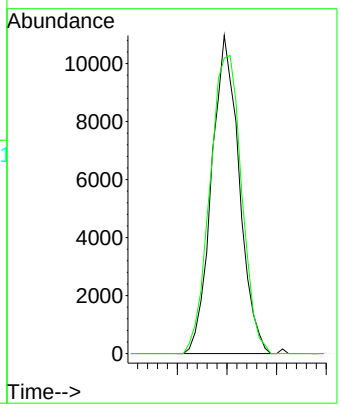
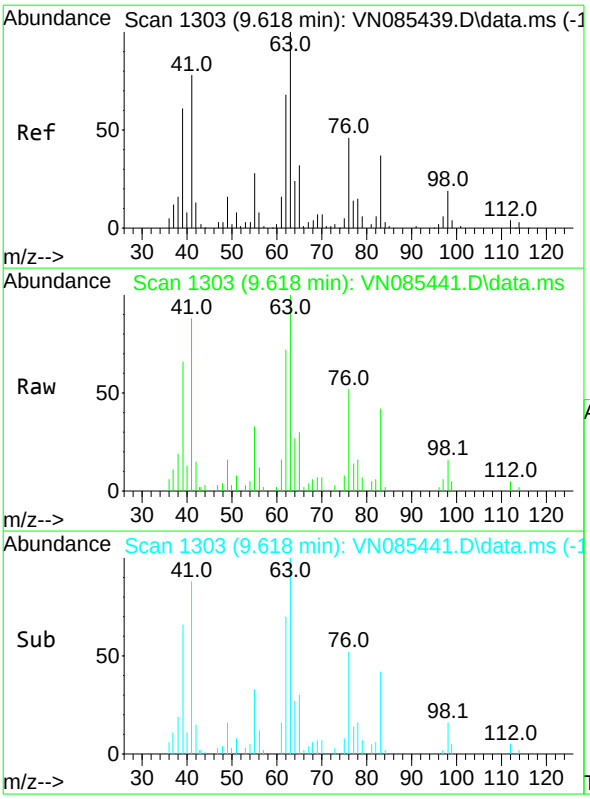


#44
Trichloroethene
Concen: 9.108 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:130 Resp: 21113

Ion	Ratio	Lower	Upper
130	100		
95	92.9	0.0	195.8

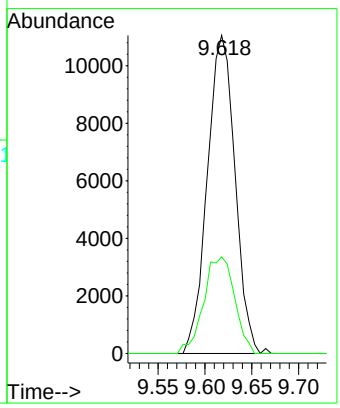




#45
1,2-Dichloropropane
Concen: 8.942 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 63 Resp: 22747

Ion	Ratio	Lower	Upper
63	100		
65	30.4	25.6	38.4



Instrument :
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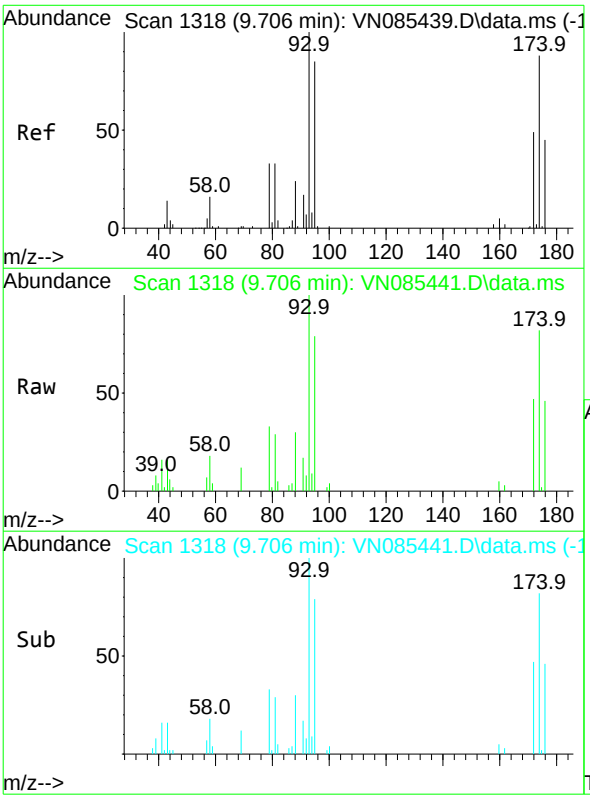
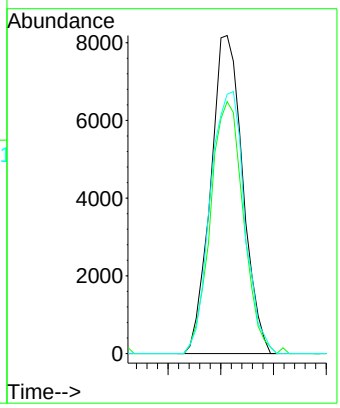
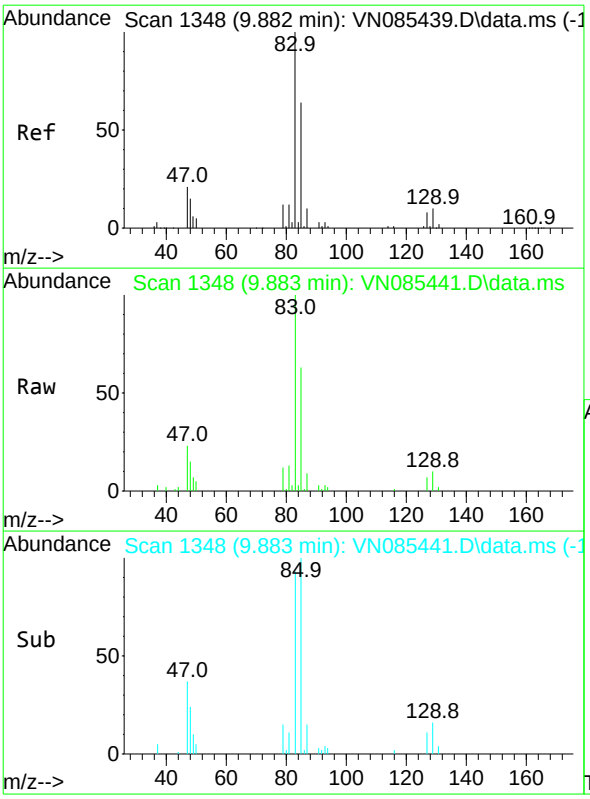


#46
Dibromomethane
Concen: 9.404 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 93 Resp: 17260

Ion	Ratio	Lower	Upper
93	100		
95	81.5	64.7	97.1
174	87.8	69.0	103.4

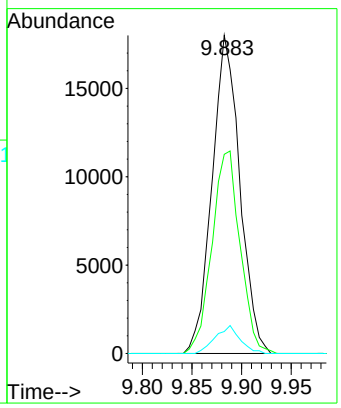




#47
Bromodichloromethane
Concen: 9.365 ug/l
RT: 9.883 min Scan# 13
Delta R.T. 0.001 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 35020

Ion	Ratio	Lower	Upper
83	100		
85	62.6	51.2	76.8
127	6.9	6.5	9.7



Instrument :
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ClientSampleId :
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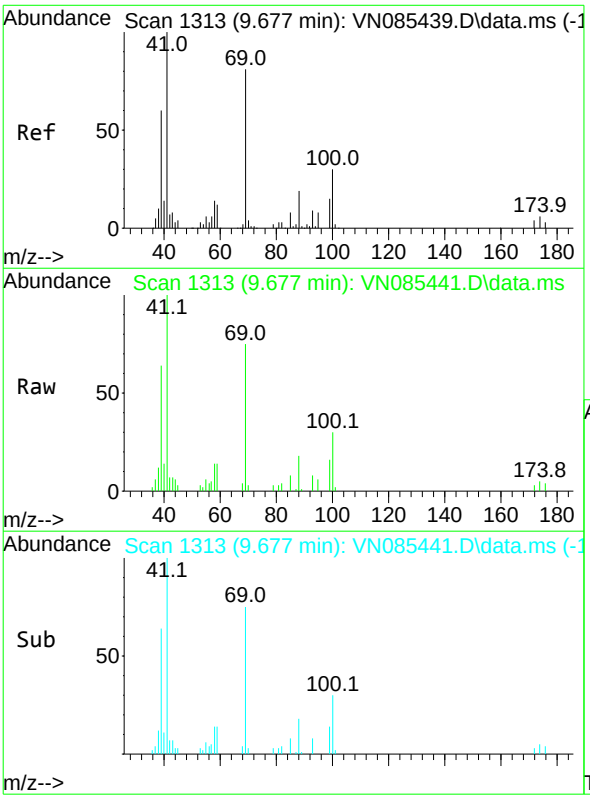
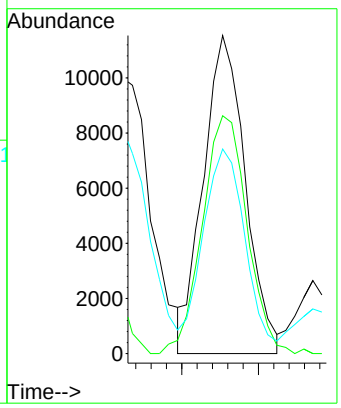
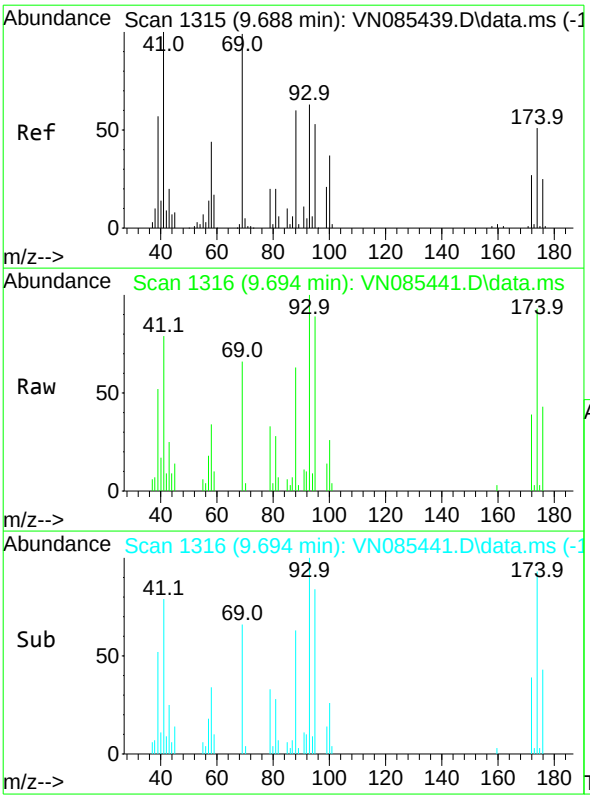


#48
Methyl methacrylate
Concen: 9.067 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 41 Resp: 21873

Ion	Ratio	Lower	Upper
41	100		
69	80.0	64.7	97.1
39	65.2	49.0	73.6





#49
1,4-Dioxane
Concen: 190.382 ug/l
RT: 9.694 min Scan# 13
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 88 Resp: 7734

Ion	Ratio	Lower	Upper
88	100		
43	35.2	26.6	39.8
58	73.3	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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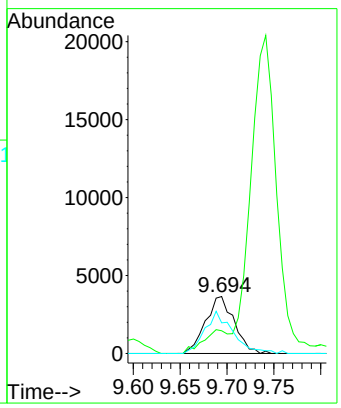
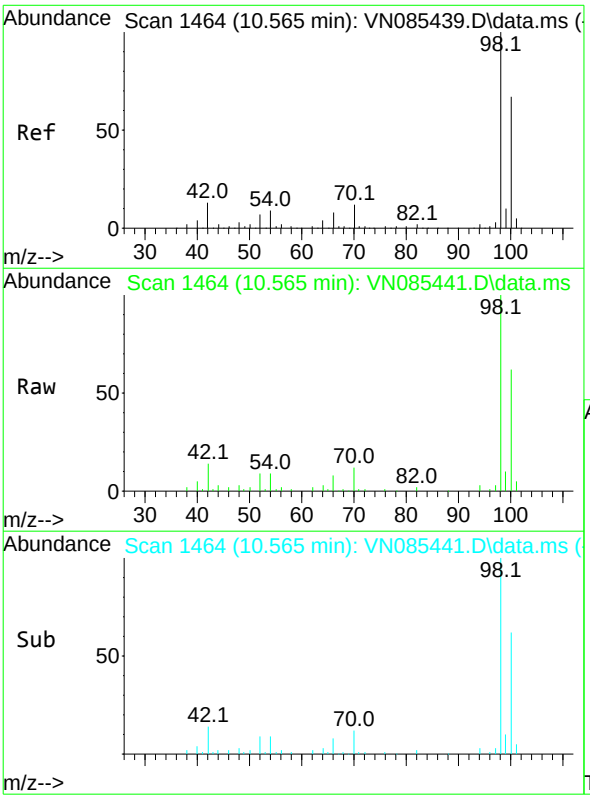
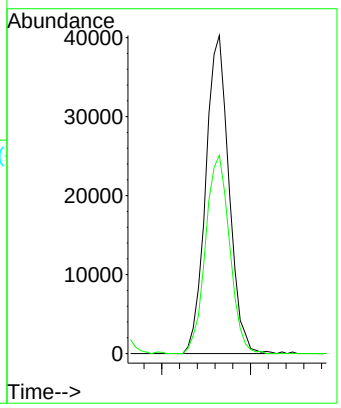


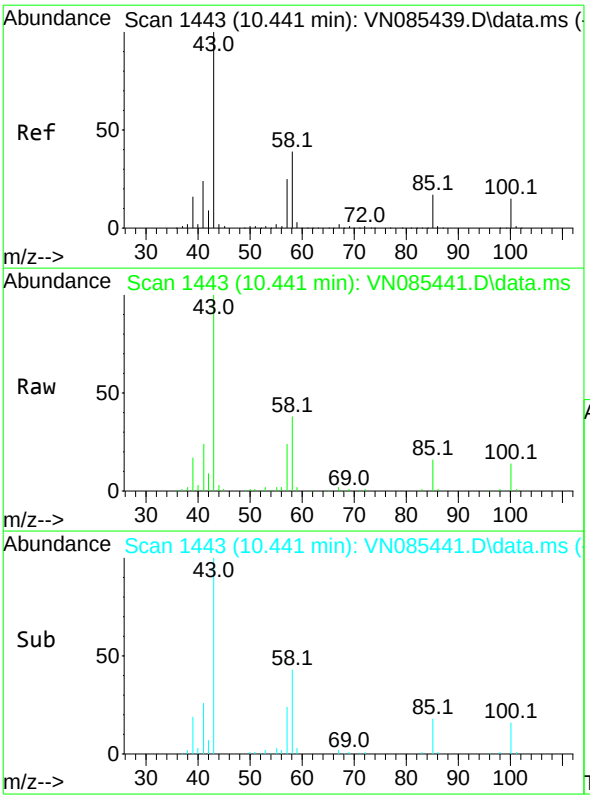


#50
Toluene-d8
Concen: 8.727 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 98 Resp: 73223

Ion	Ratio	Lower	Upper
98	100		
100	64.5	52.2	78.4

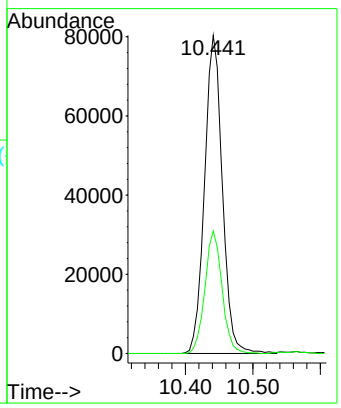




#51
4-Methyl-2-Pentanone
Concen: 47.254 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 146990

Ion	Ratio	Lower	Upper
43	100		
58	37.1	30.5	45.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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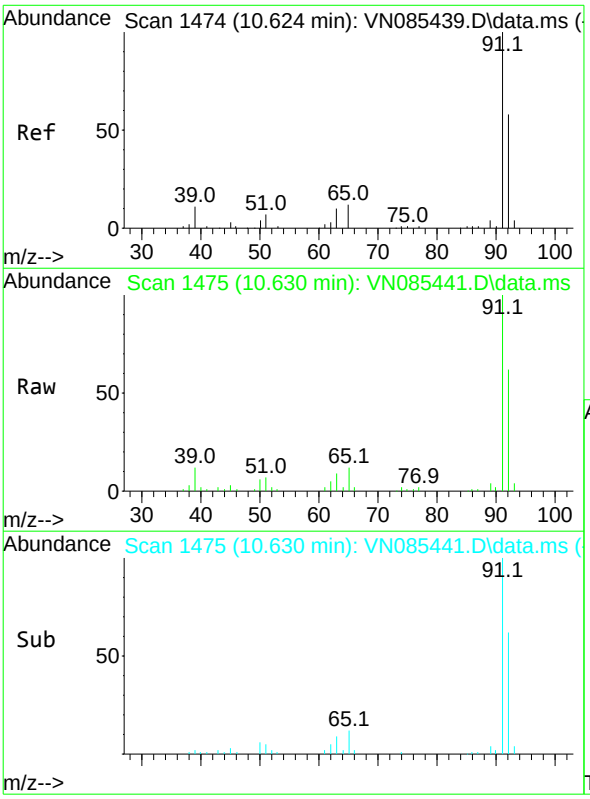
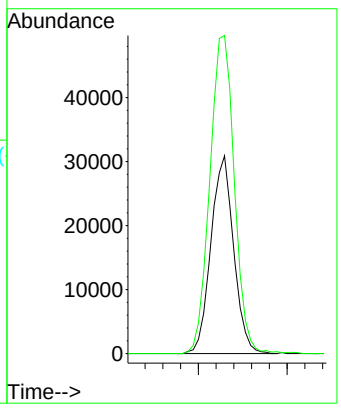
Supervised By :Mahesh Dadoda 01/15/2025

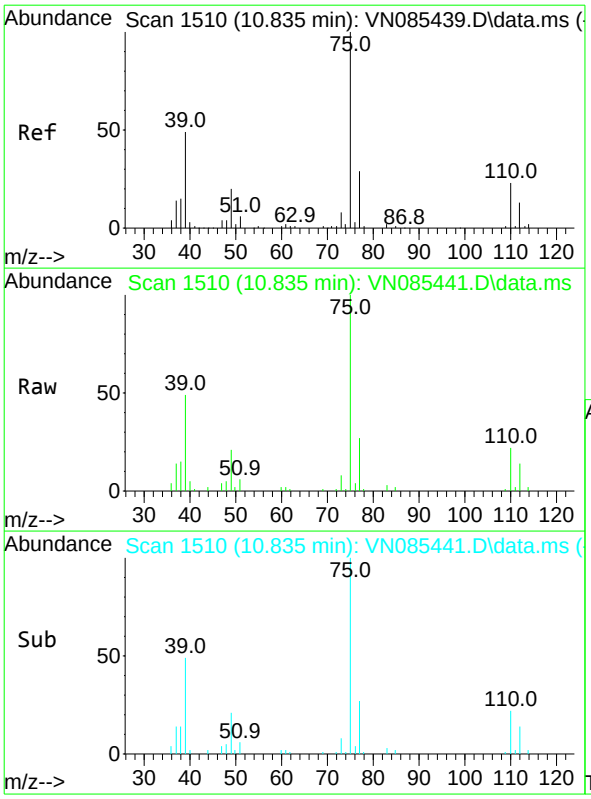


#52
Toluene
Concen: 9.527 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 92 Resp: 54976

Ion	Ratio	Lower	Upper
92	100		
91	173.7	139.2	208.8

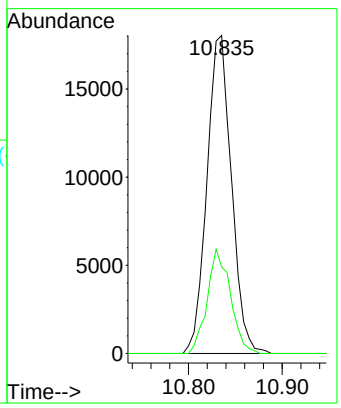




#53
t-1,3-Dichloropropene
Concen: 9.276 ug/l
RT: 10.835 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 32780

Ion	Ratio	Lower	Upper
75	100		
77	27.2	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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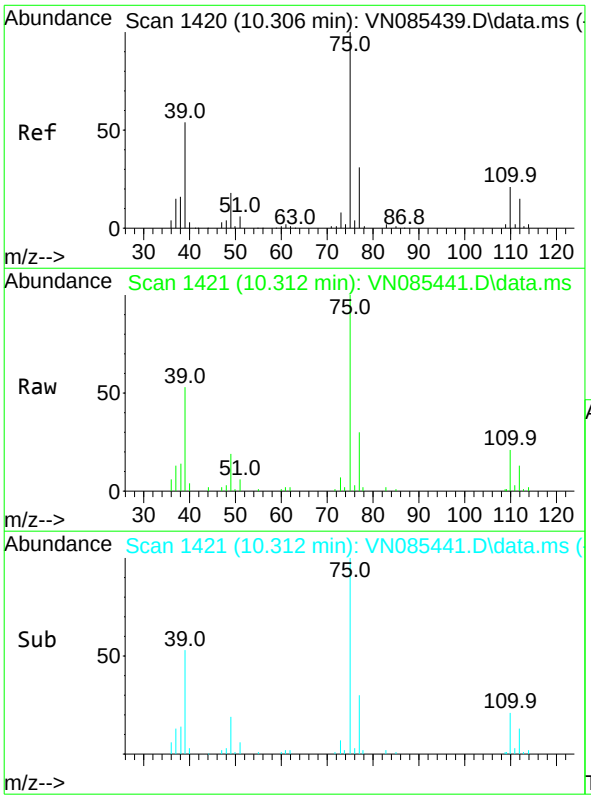
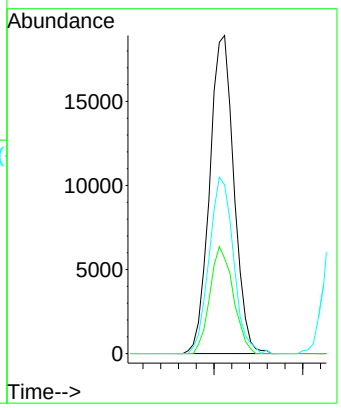
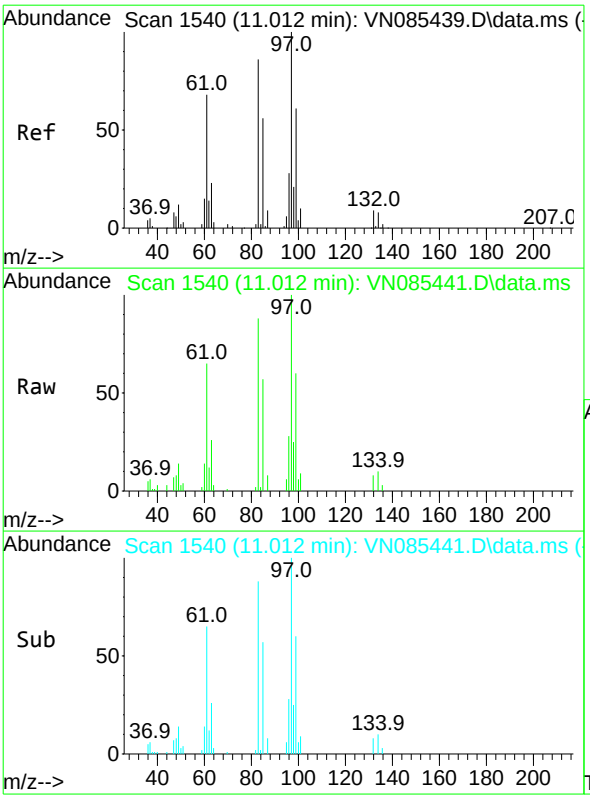


#54
cis-1,3-Dichloropropene
Concen: 9.512 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 35904

Ion	Ratio	Lower	Upper
75	100		
77	30.0	25.0	37.4
39	53.1	43.1	64.7

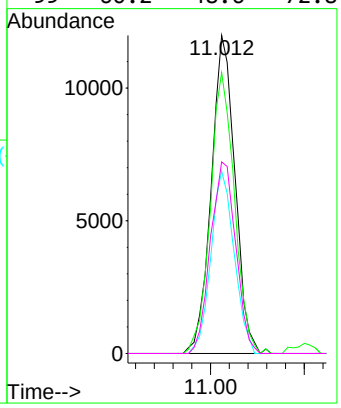




#55
1,1,2-Trichloroethane
Concen: 9.222 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 97 Resp: 21060

Ion	Ratio	Lower	Upper
97	100		
83	88.3	69.0	103.6
85	57.3	44.6	66.8
99	60.2	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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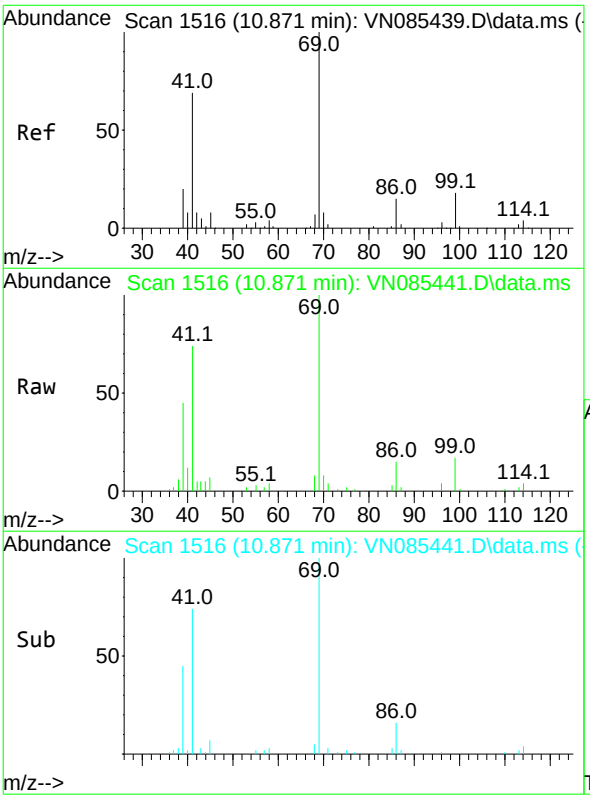
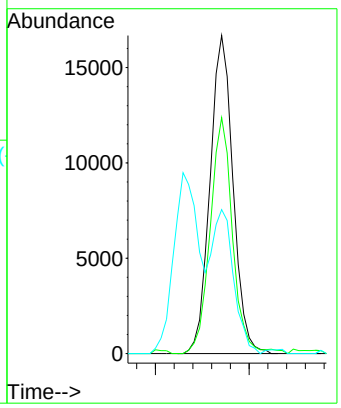
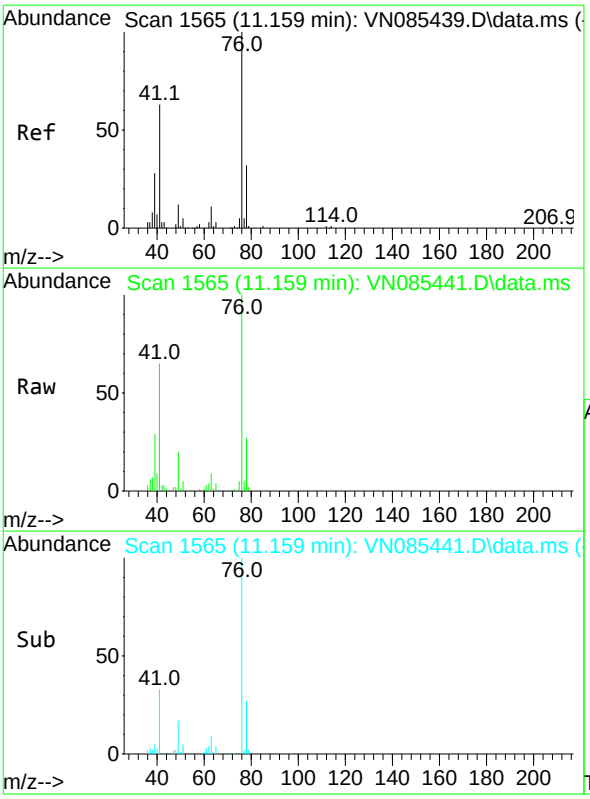


#56
Ethyl methacrylate
Concen: 9.042 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 69 Resp: 28454

Ion	Ratio	Lower	Upper
69	100		
41	72.1	54.6	82.0
39	43.4	32.4	48.6

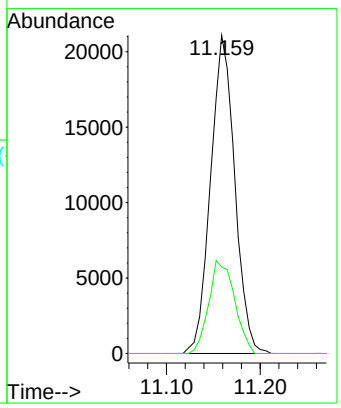




#57
1,3-Dichloropropane
Concen: 9.512 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 76 Resp: 37768

Ion	Ratio	Lower	Upper
76	100		
78	31.1	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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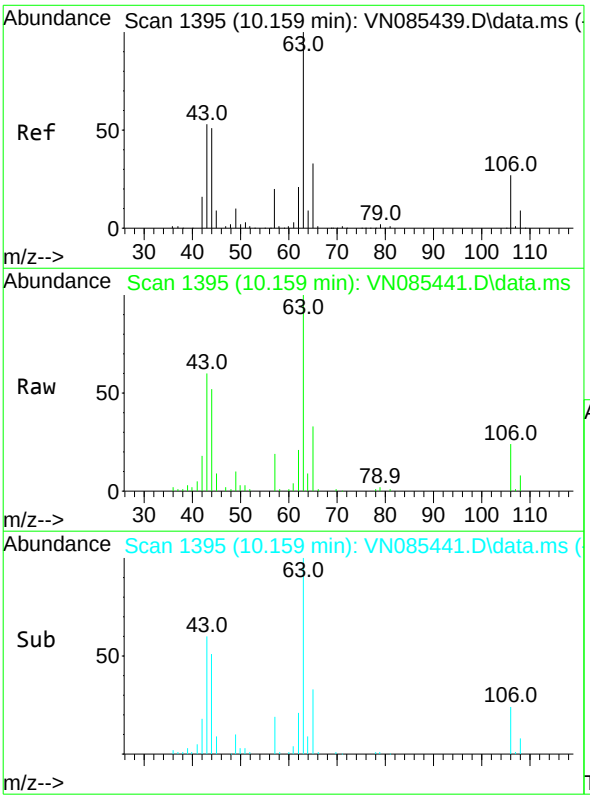
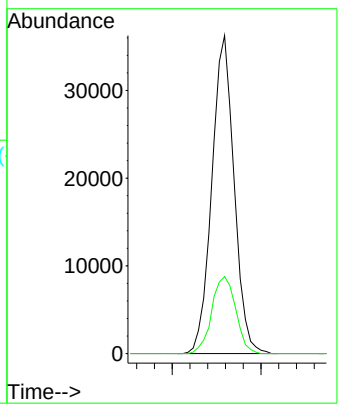
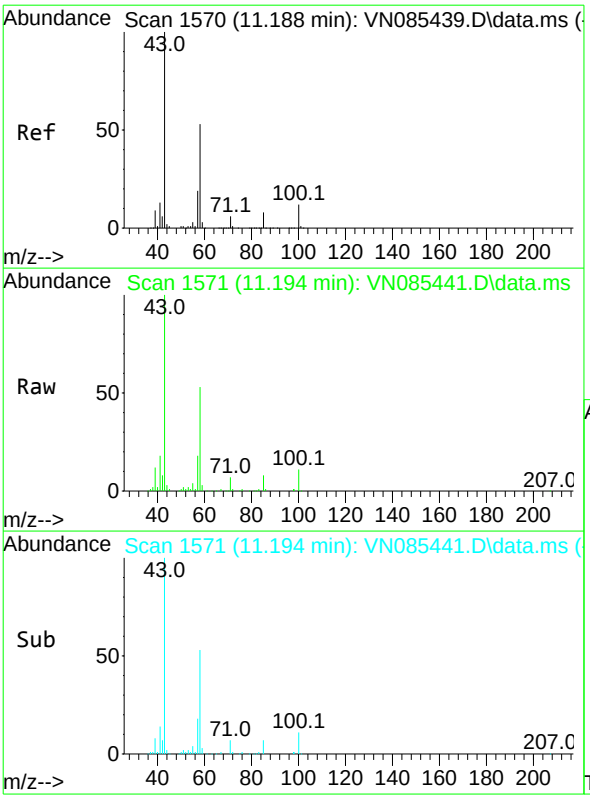


#58
2-Chloroethyl Vinyl ether
Concen: 43.550 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 63 Resp: 63110

Ion	Ratio	Lower	Upper
63	100		
106	26.1	21.6	32.4





#59
2-Hexanone
Concen: 46.291 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 101318

Ion	Ratio	Lower	Upper
43	100		
58	50.9	26.2	78.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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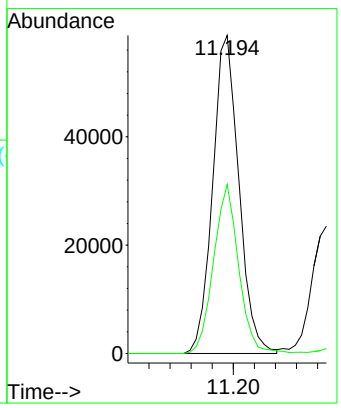
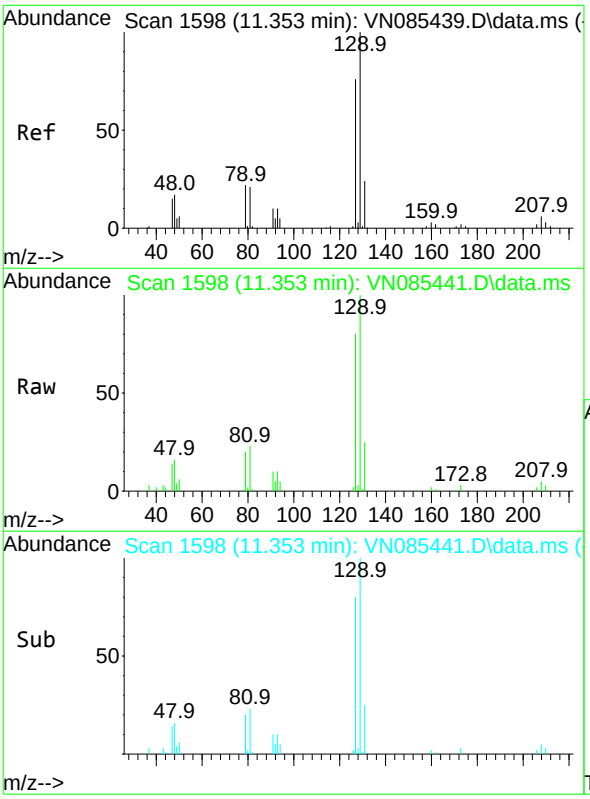
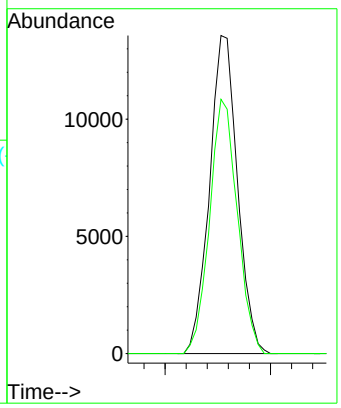


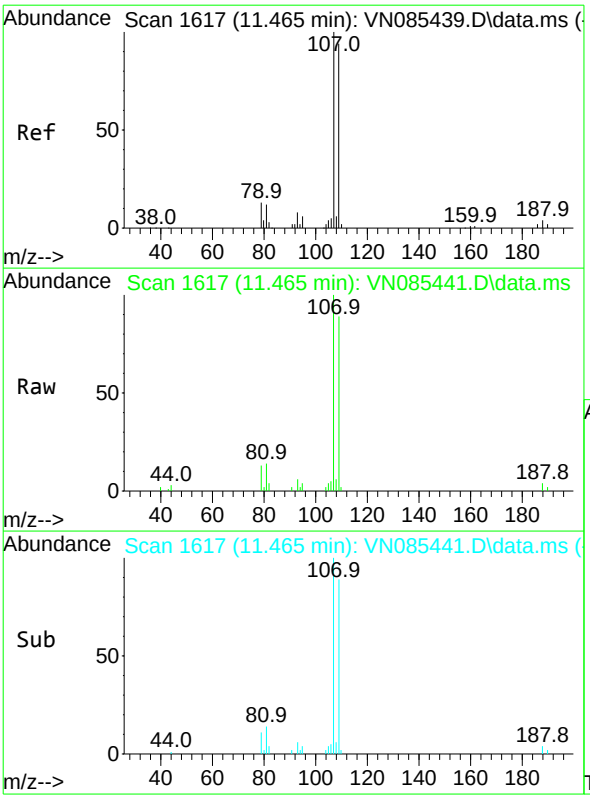


#60
Dibromochloromethane
Concen: 9.079 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:129 Resp: 25029

Ion	Ratio	Lower	Upper
129	100		
127	79.1	38.6	115.8

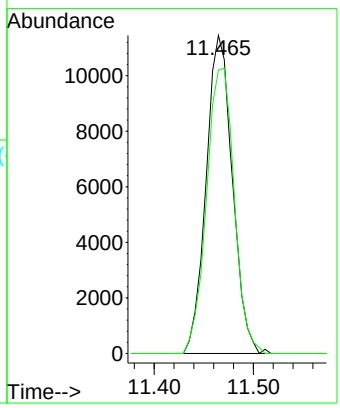




#61
1,2-Dibromoethane
Concen: 9.263 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:107 Resp: 21055

Ion	Ratio	Lower	Upper
107	100		
109	94.6	75.9	113.9



Instrument :
MSVOA_N
ClientSampleId :
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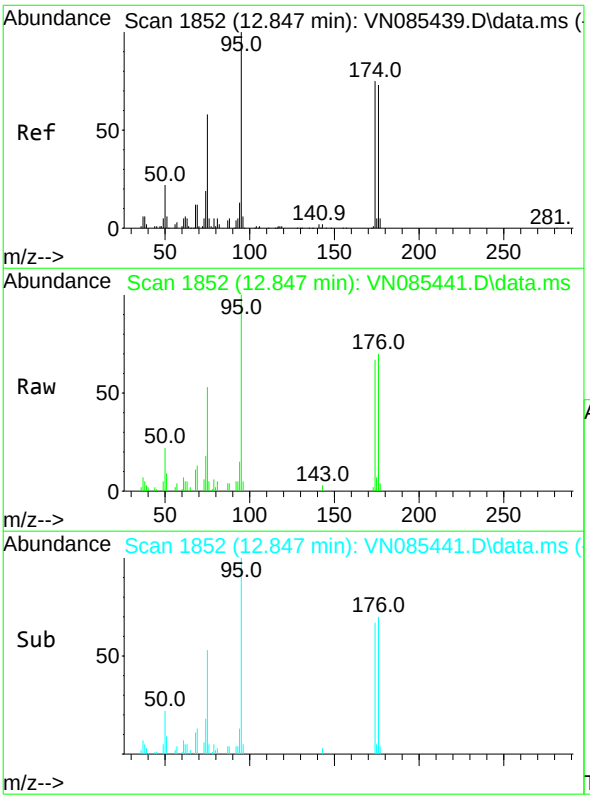
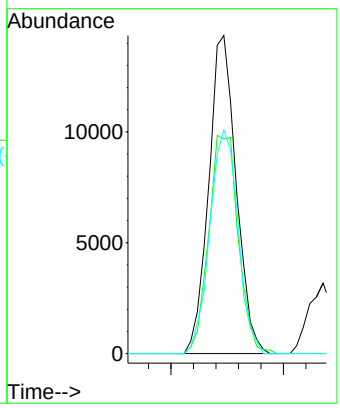
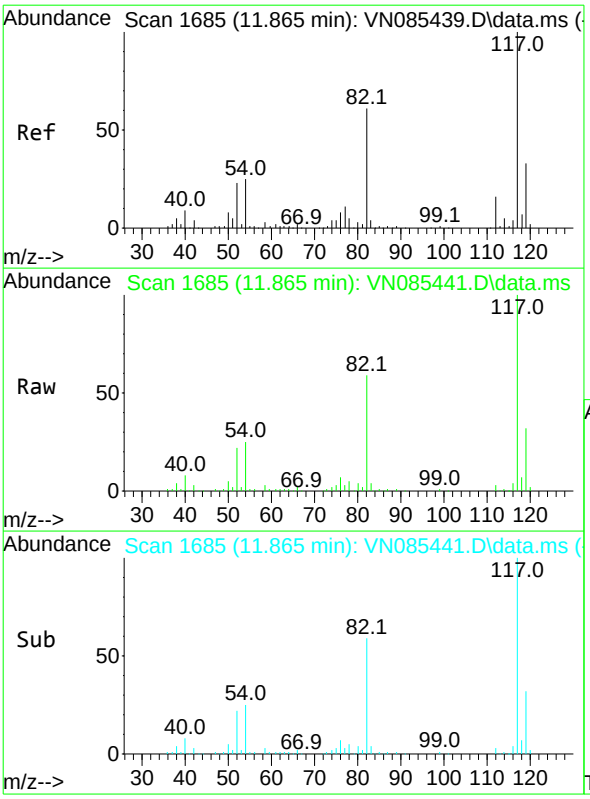


#62
4-Bromofluorobenzene
Concen: 8.476 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 95 Resp: 24327

Ion	Ratio	Lower	Upper
95	100		
174	73.9	0.0	145.0
176	72.1	0.0	142.4





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion:117 Resp: 294508

Ion	Ratio	Lower	Upper
117	100		
82	58.7	48.6	72.8
119	32.2	26.6	39.8

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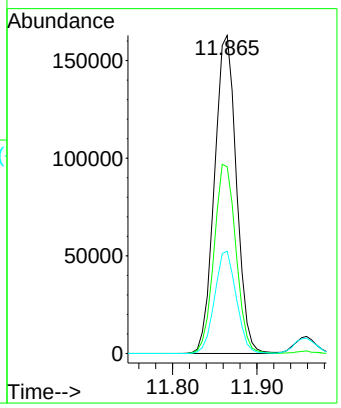
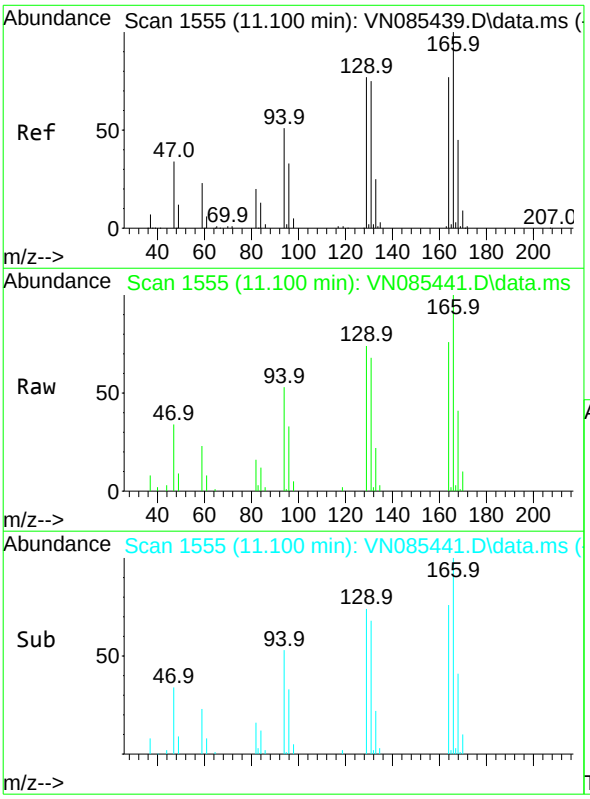
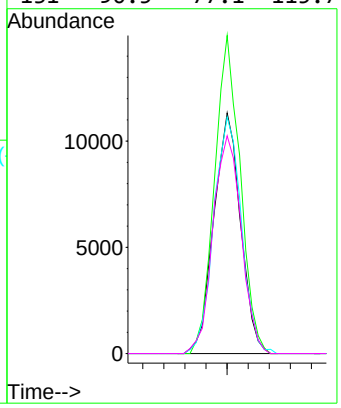


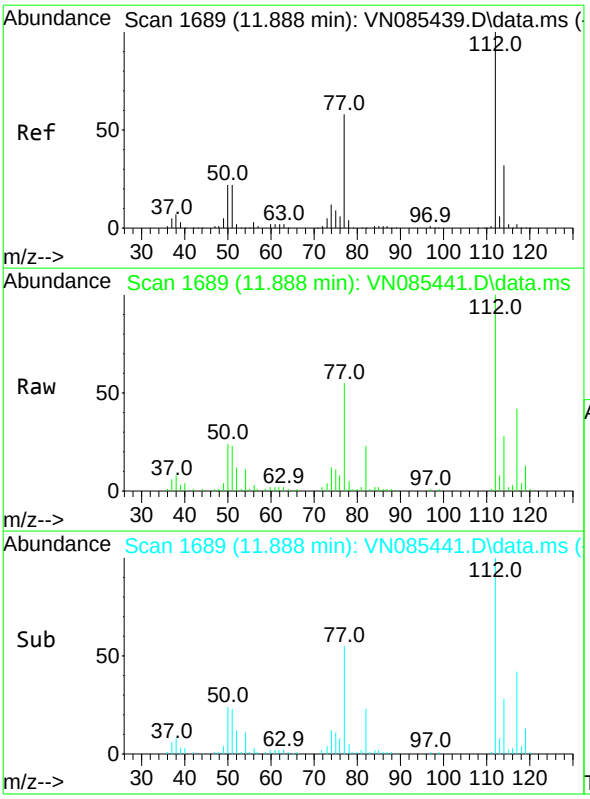


#64
Tetrachloroethene
Concen: 9.928 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:164 Resp: 19934

Ion	Ratio	Lower	Upper
164	100		
166	132.2	103.4	155.2
129	98.3	79.2	118.8
131	90.5	77.1	115.7

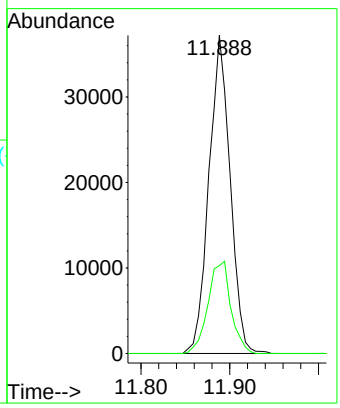




#65
Chlorobenzene
Concen: 9.560 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:112 Resp: 61680

Ion	Ratio	Lower	Upper
112	100		
114	27.6	25.3	37.9



Instrument :
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ClientSampleId :
VSTDICC010

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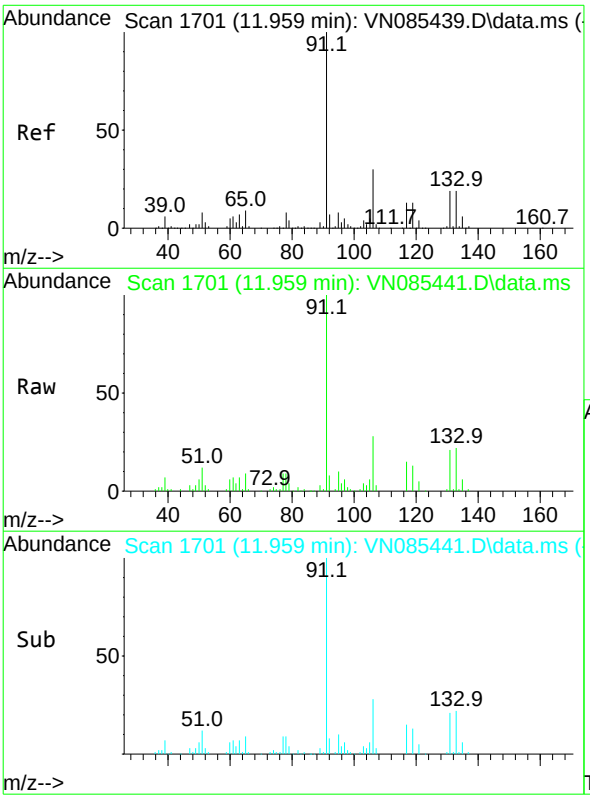
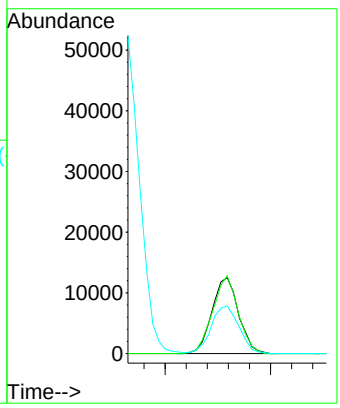
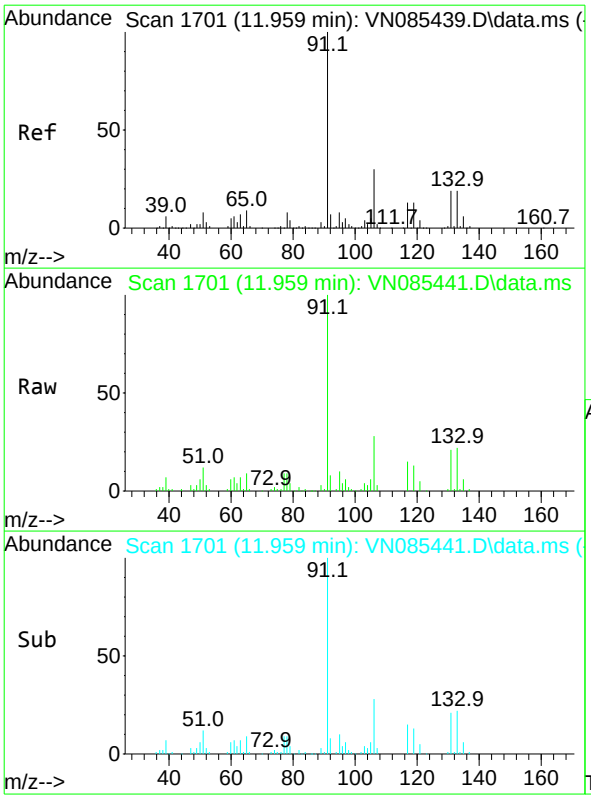


#66
1,1,1,2-Tetrachloroethane
Concen: 9.229 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:131 Resp: 21853

Ion	Ratio	Lower	Upper
131	100		
133	98.5	47.4	142.3
119	66.0	33.1	99.5

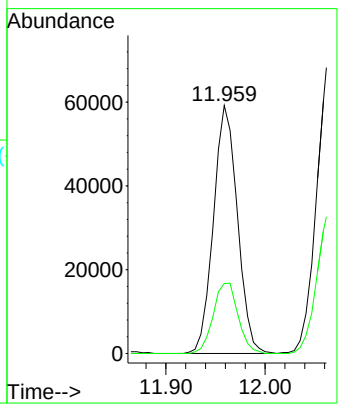




#67
Ethyl Benzene
Concen: 9.445 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 99248

Ion	Ratio	Lower	Upper
91	100		
106	28.2	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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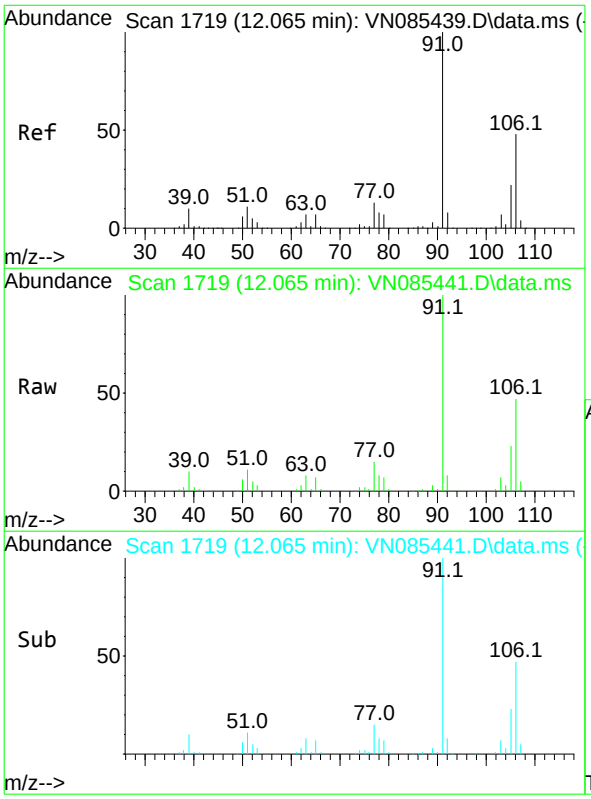
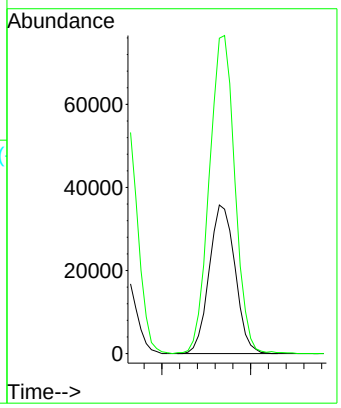
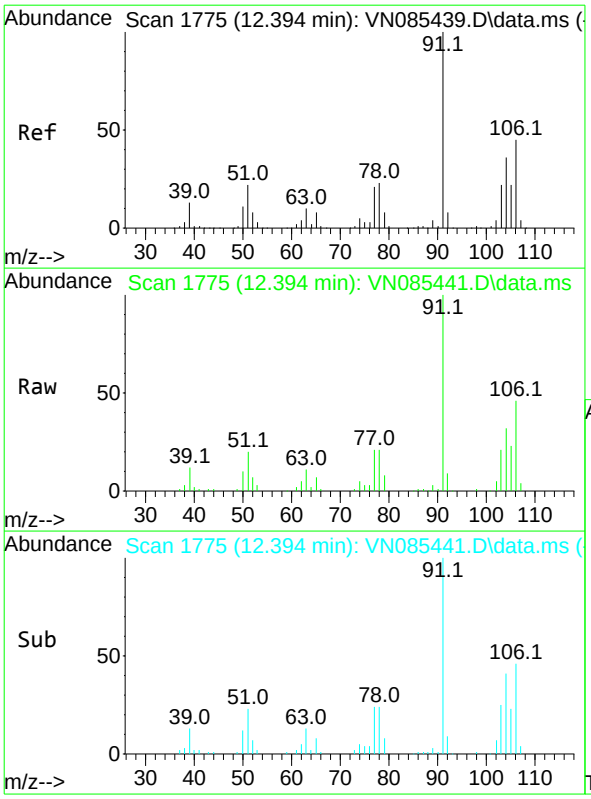


#68
m/p-Xylenes
Concen: 18.650 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:106 Resp: 72431

Ion	Ratio	Lower	Upper
106	100		
91	211.7	167.7	251.5

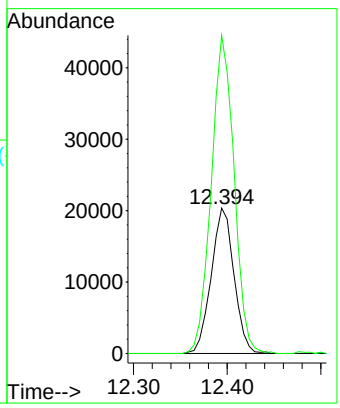




#69
o-Xylene
Concen: 9.264 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:106 Resp: 34382

Ion	Ratio	Lower	Upper
106	100		
91	219.5	110.4	331.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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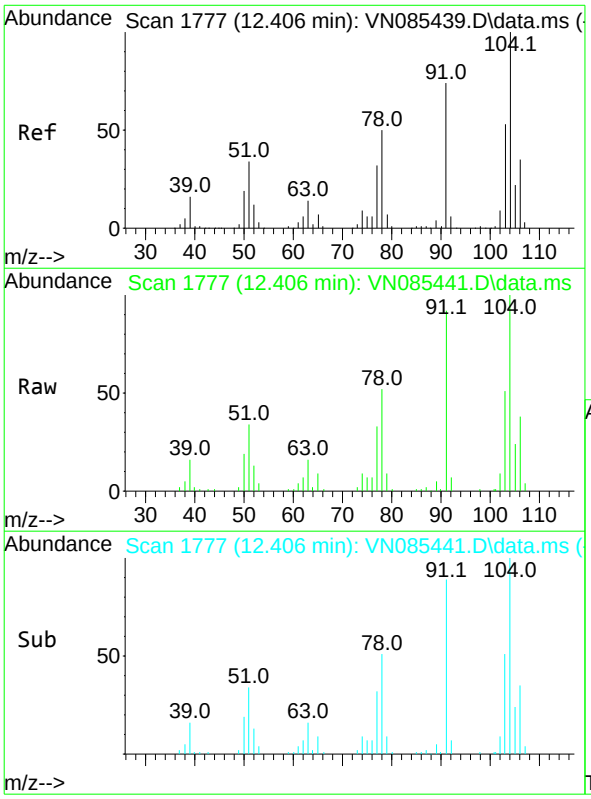
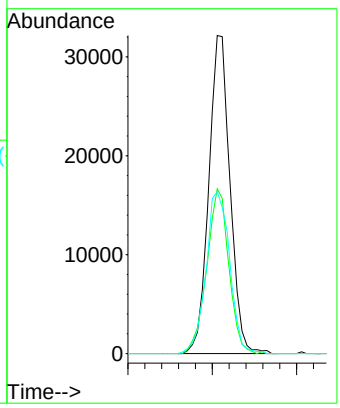
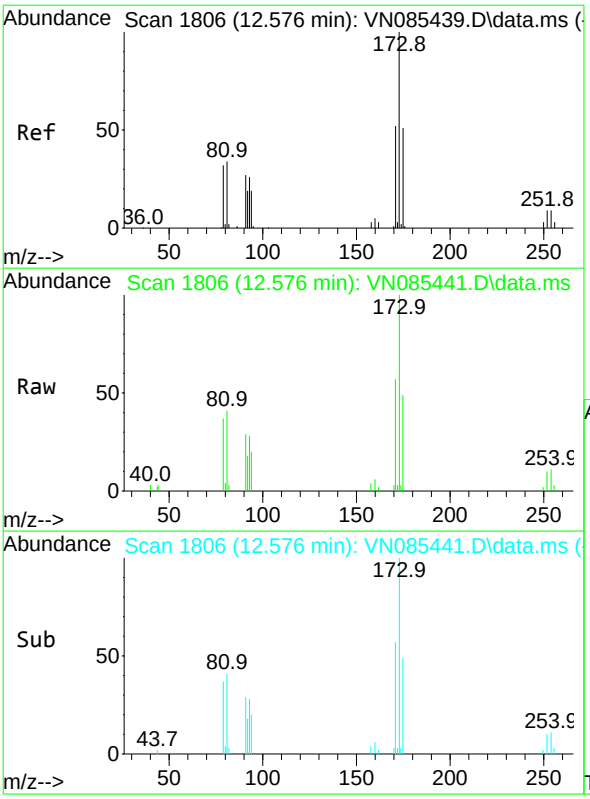


#70
Styrene
Concen: 9.163 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:104 Resp: 56285

Ion	Ratio	Lower	Upper
104	100		
78	53.8	42.5	63.7
103	56.8	43.8	65.8

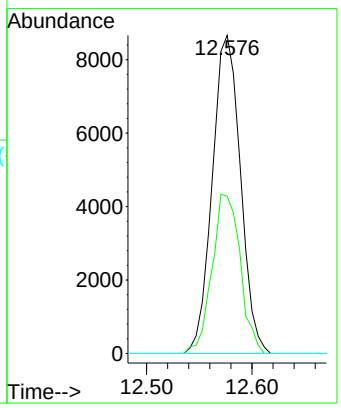




#71
Bromoform
Concen: 9.485 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:173 Resp: 16071

Ion	Ratio	Lower	Upper
173	100		
175	50.0	24.4	73.2
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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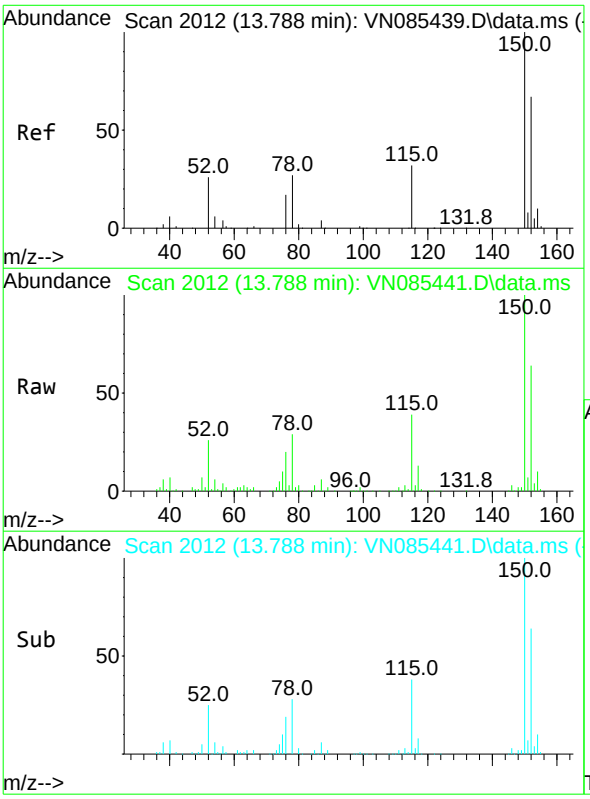
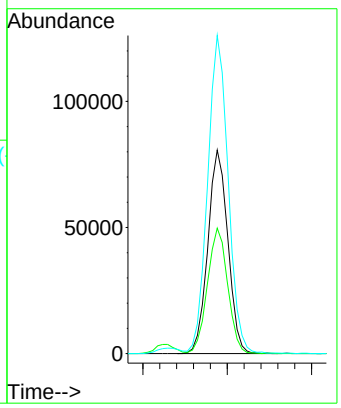
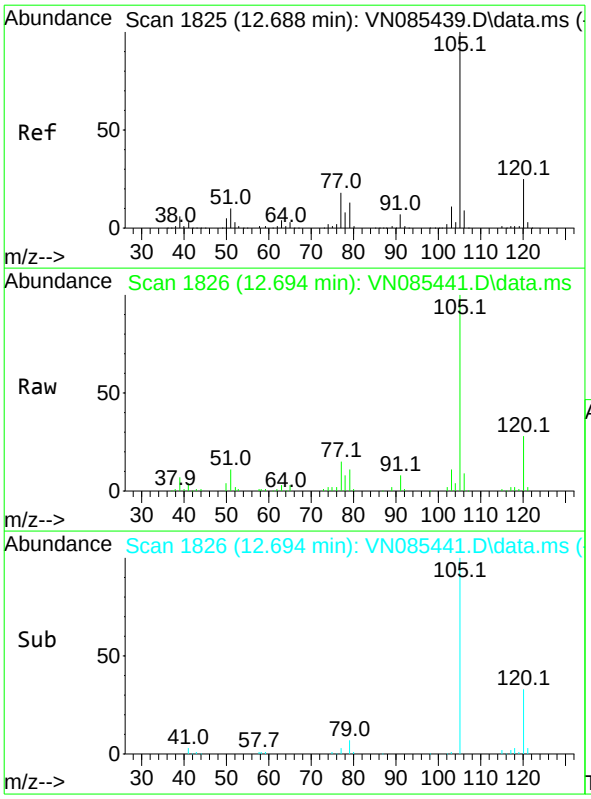


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:152 Resp: 132934

Ion	Ratio	Lower	Upper
152	100		
115	62.3	31.1	93.3
150	159.8	0.0	343.6

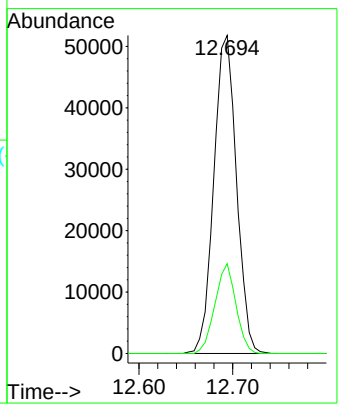




#73
Isopropylbenzene
Concen: 9.697 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 87003

Ion	Ratio	Lower	Upper
105	100		
120	26.1	12.8	38.3



Instrument :
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ClientSampleId :
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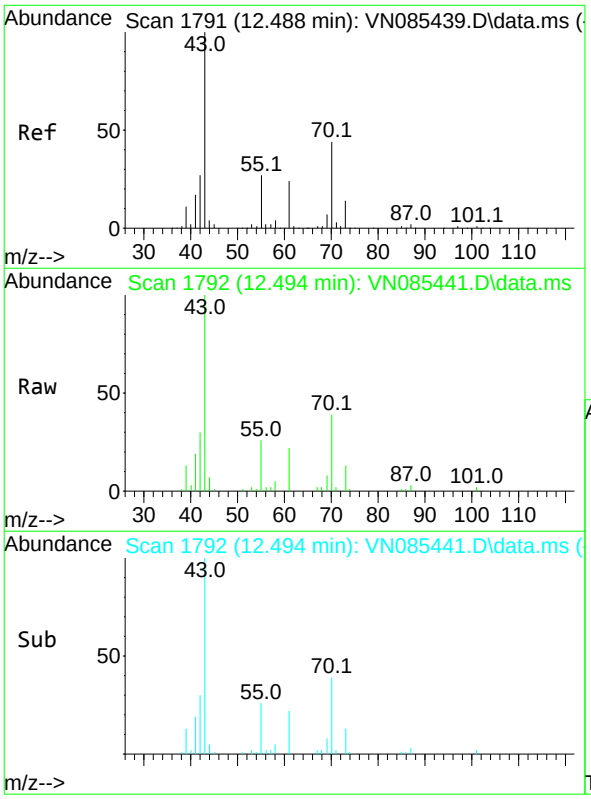
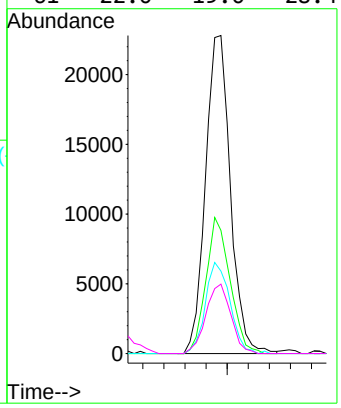
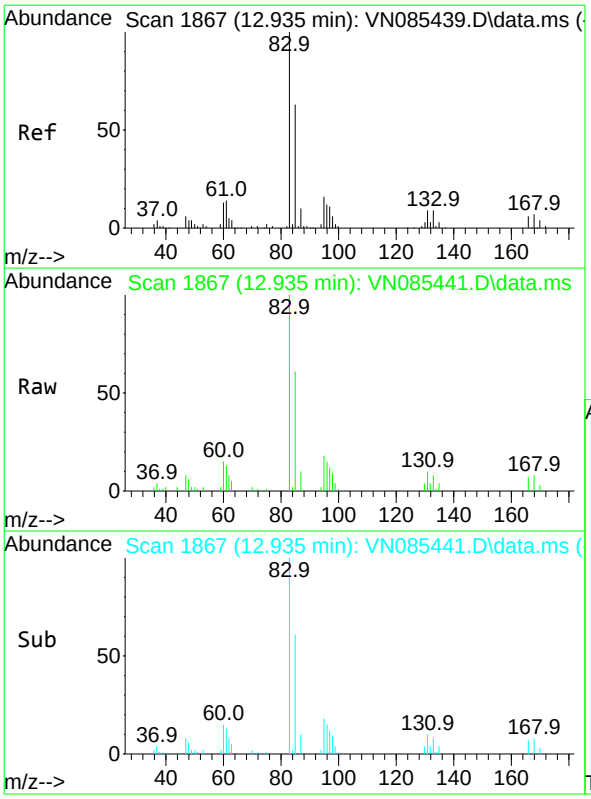


#74
N-amyl acetate
Concen: 9.260 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 37343

Ion	Ratio	Lower	Upper
43	100		
70	41.4	34.0	51.0
55	28.5	21.4	32.2
61	22.0	19.0	28.4

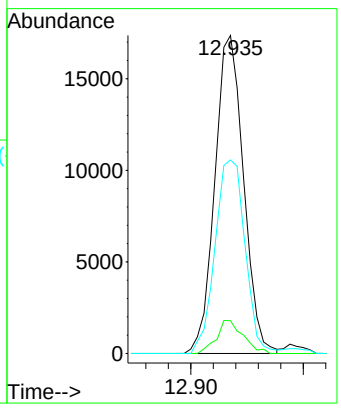




#75
1,1,2,2-Tetrachloroethane
Concen: 9.709 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 83 Resp: 30770

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	63.6	32.2	96.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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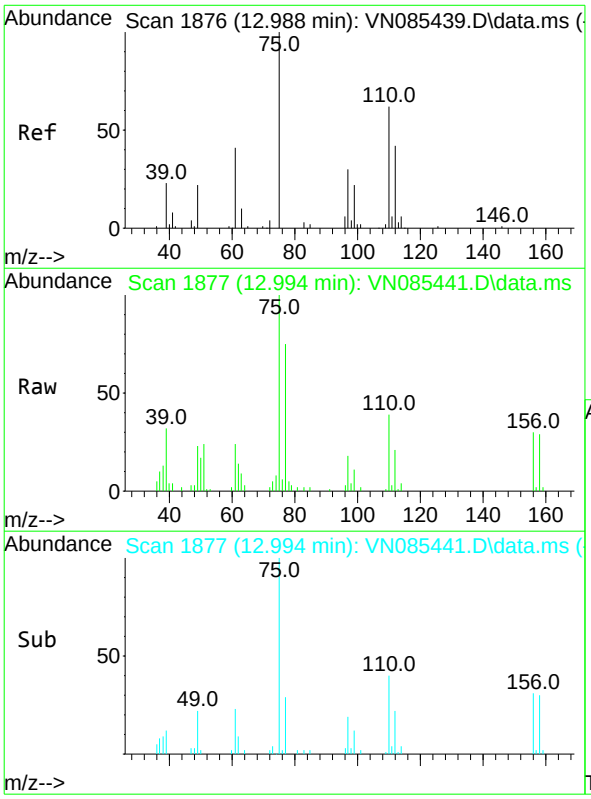
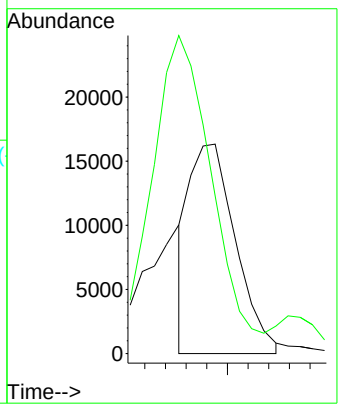
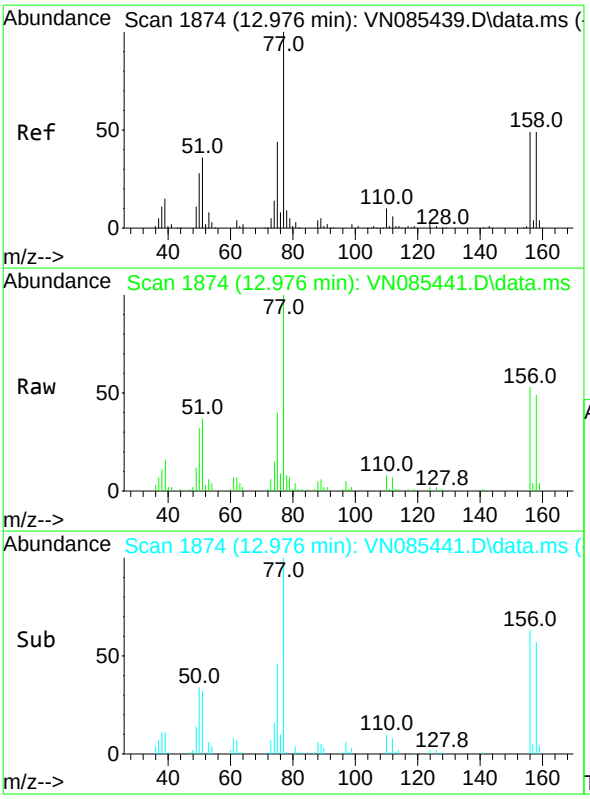


#76
1,2,3-Trichloropropane
Concen: 9.432 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 25443

Ion	Ratio	Lower	Upper
75	100		
77	198.5	109.7	329.2





#77
Bromobenzene
Concen: 9.720 ug/l
RT: 12.976 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion:156 Resp: 22784

Ion	Ratio	Lower	Upper
156	100		
77	221.6	114.1	342.4
158	98.7	48.9	146.8

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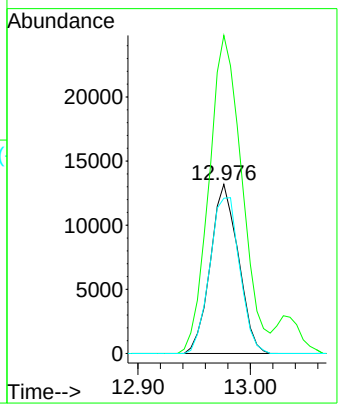
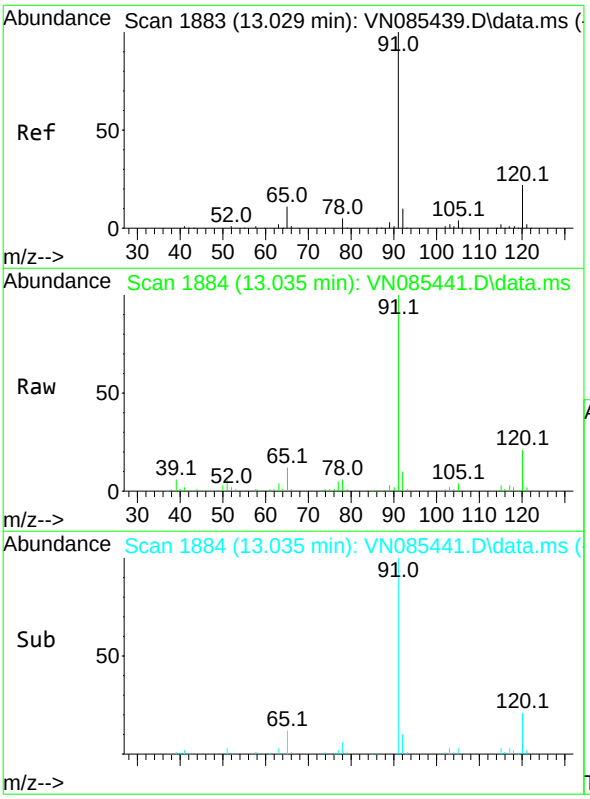
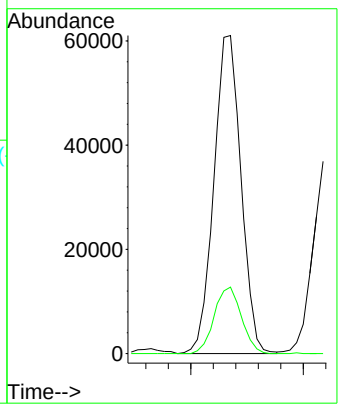


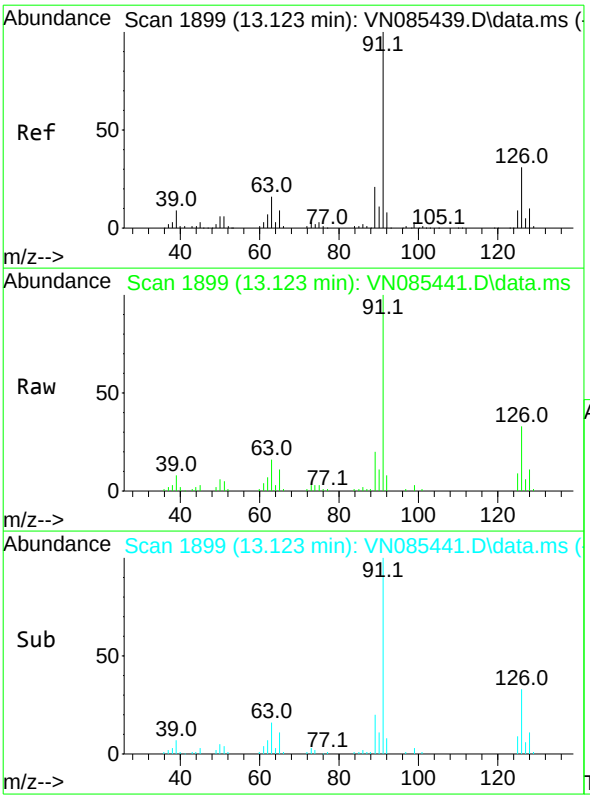


#78
n-propylbenzene
Concen: 9.628 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 102262

Ion	Ratio	Lower	Upper
91	100		
120	20.9	10.9	32.6

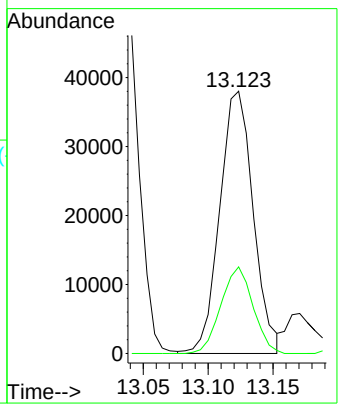




#79
2-Chlorotoluene
Concen: 9.943 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 68346

Ion	Ratio	Lower	Upper
91	100		
126	31.5	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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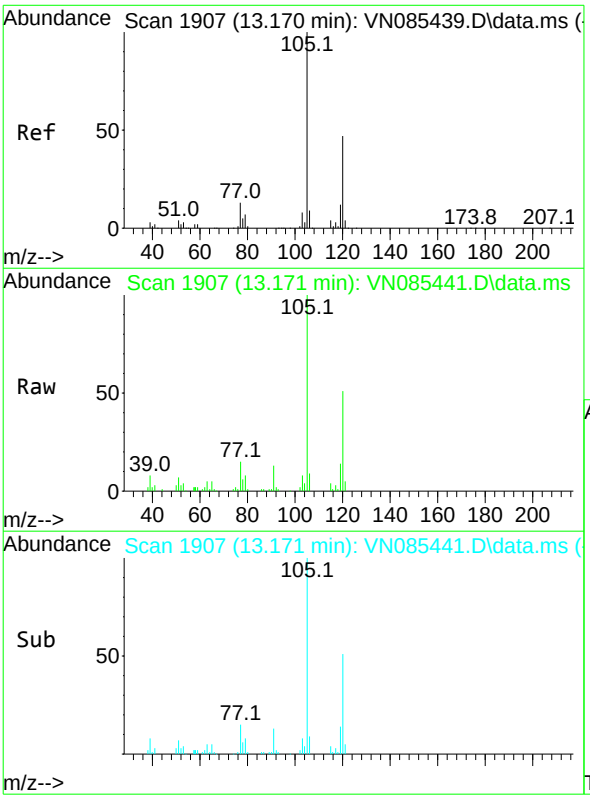
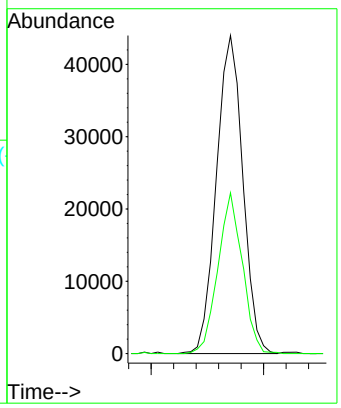
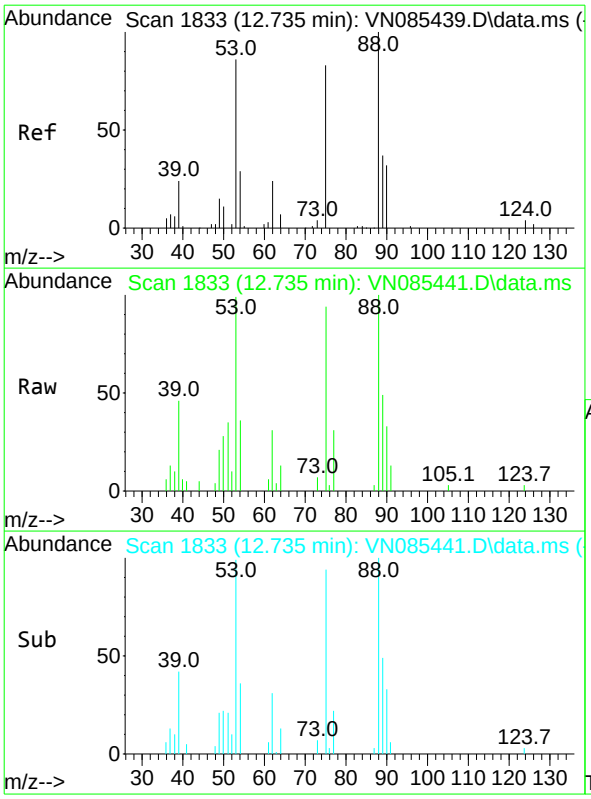


#80
1,3,5-Trimethylbenzene
Concen: 9.669 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 71656

Ion	Ratio	Lower	Upper
105	100		
120	46.8	23.9	71.7

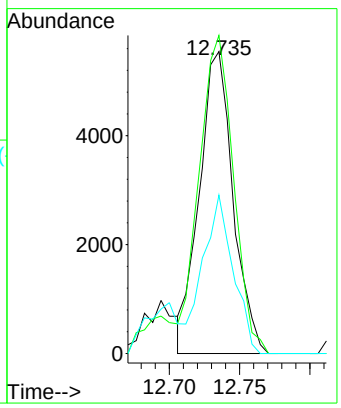




#81
trans-1,4-Dichloro-2-butene
Concen: 9.248 ug/l
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 9236

Ion	Ratio	Lower	Upper
75	100		
53	119.6	95.6	143.4
89	46.6	37.0	55.6



Instrument :
MSVOA_N
ClientSampleId :
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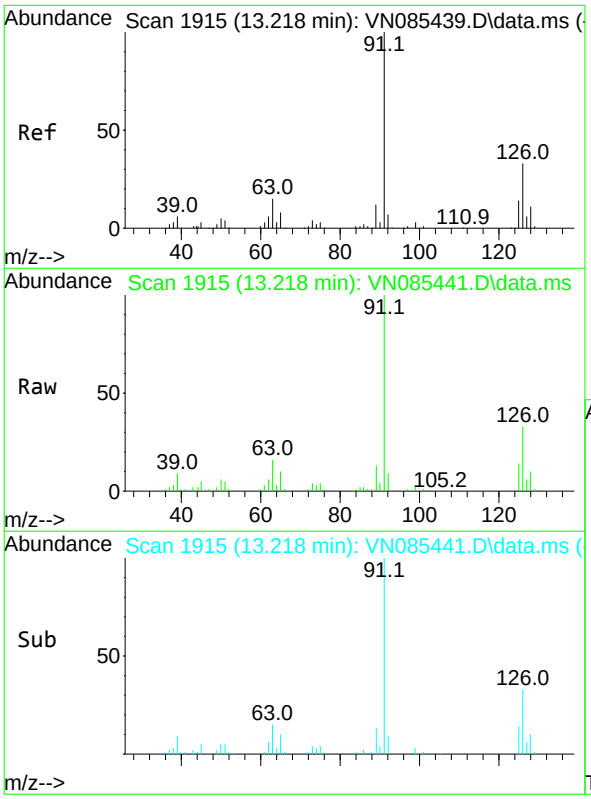
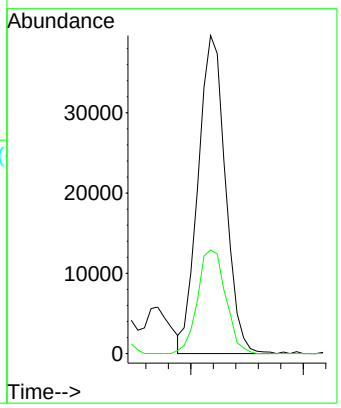
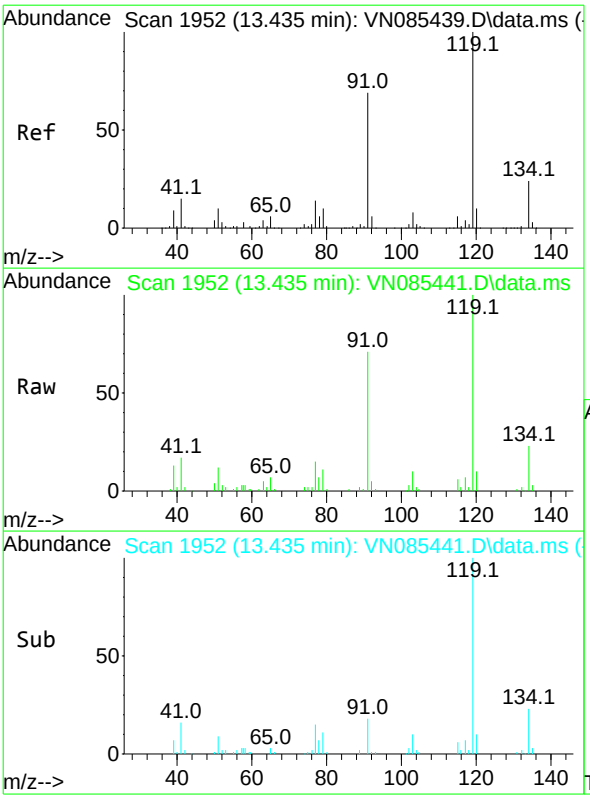


#82
4-Chlorotoluene
Concen: 9.756 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 66773

Ion	Ratio	Lower	Upper
91	100		
126	33.6	15.9	47.7

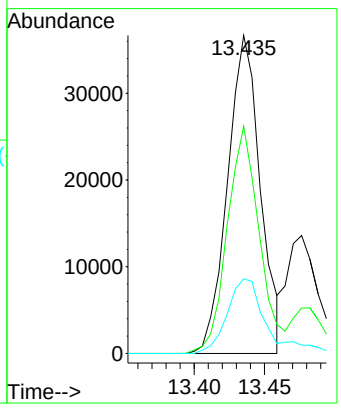




#83
tert-Butylbenzene
Concen: 9.553 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:119 Resp: 59455

Ion	Ratio	Lower	Upper
119	100		
91	70.0	35.1	105.3
134	27.8	12.0	36.1



Instrument :
MSVOA_N
ClientSampleId :
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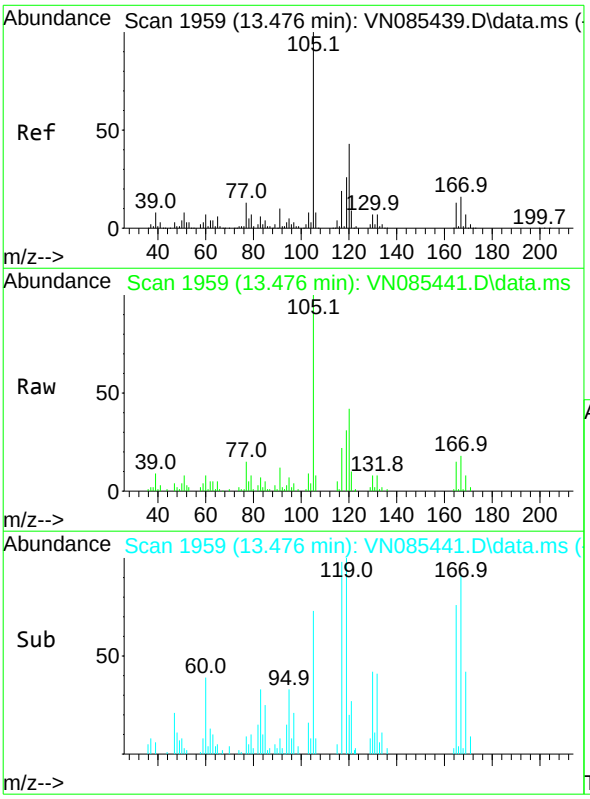
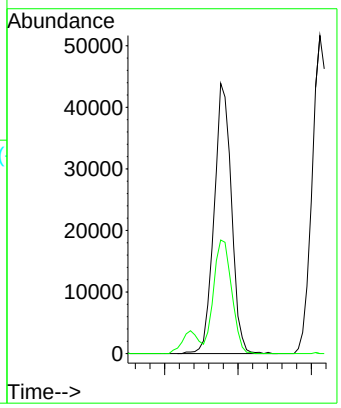
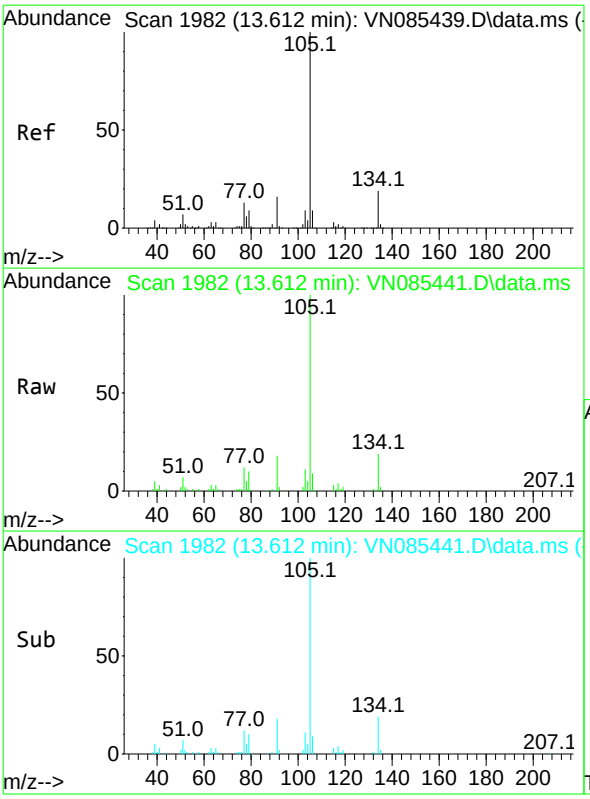


#84
1,2,4-Trimethylbenzene
Concen: 9.754 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 72046

Ion	Ratio	Lower	Upper
105	100		
120	43.8	21.6	65.0

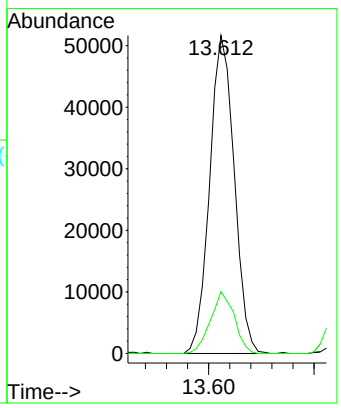




#85
sec-Butylbenzene
Concen: 9.699 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:105 Resp: 83662

Ion	Ratio	Lower	Upper
105	100		
134	18.9	9.7	28.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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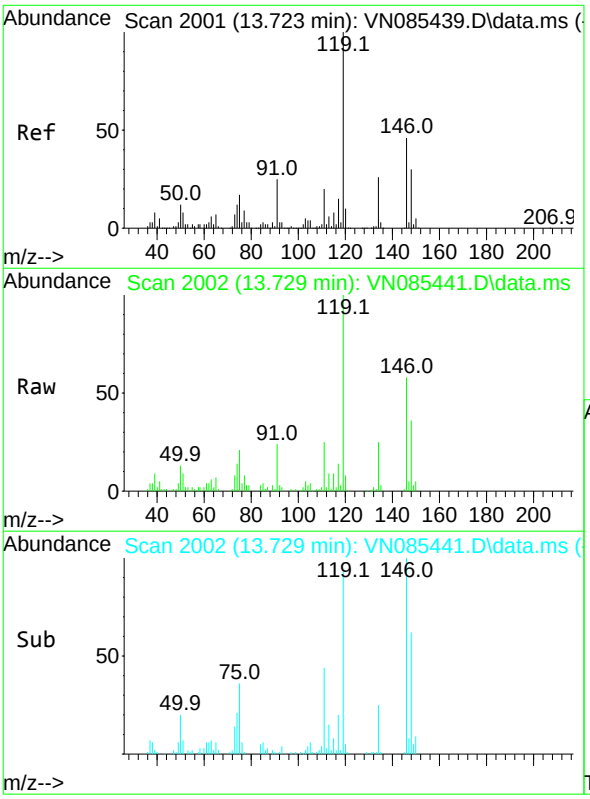
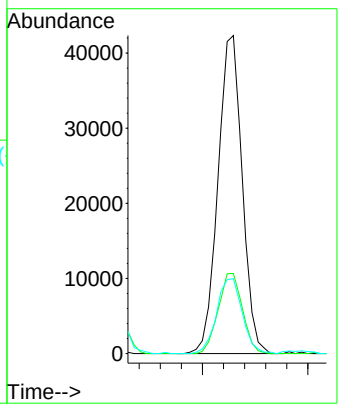
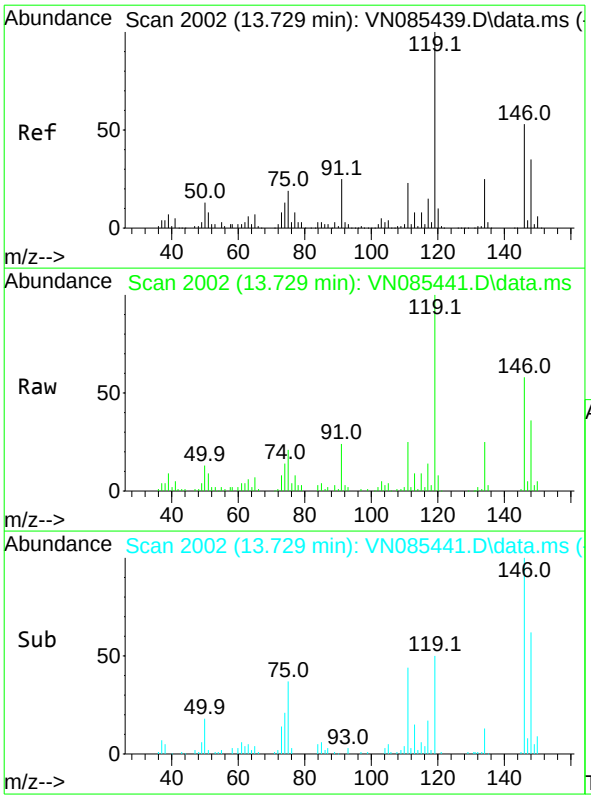


#86
p-Isopropyltoluene
Concen: 9.674 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:119 Resp: 67556

Ion	Ratio	Lower	Upper
119	100		
134	25.2	12.7	38.0
91	25.0	12.7	38.1





#87
1,3-Dichlorobenzene
Concen: 9.693 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:146 Resp: 41843

Ion	Ratio	Lower	Upper
146	100		
111	43.1	21.4	64.3
148	63.0	32.3	96.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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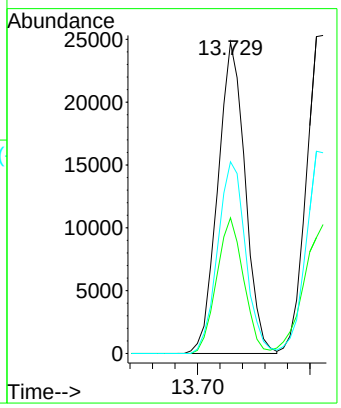
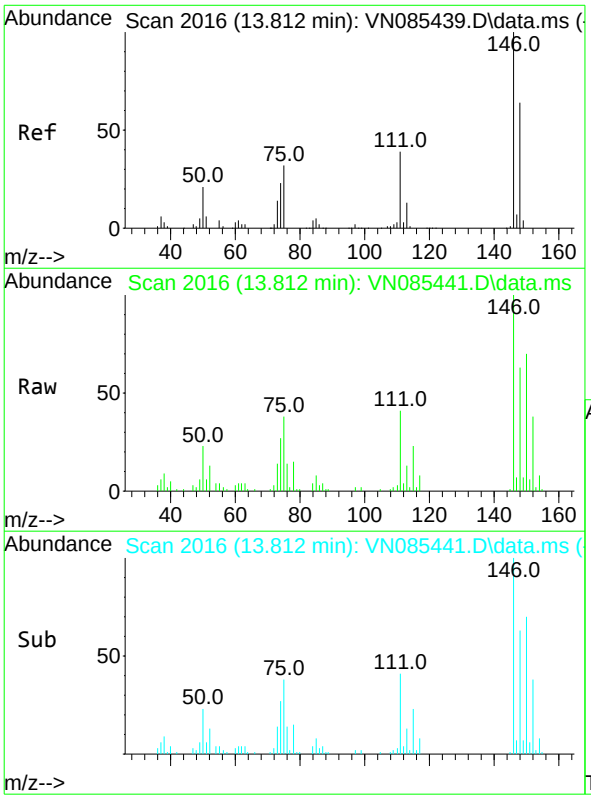
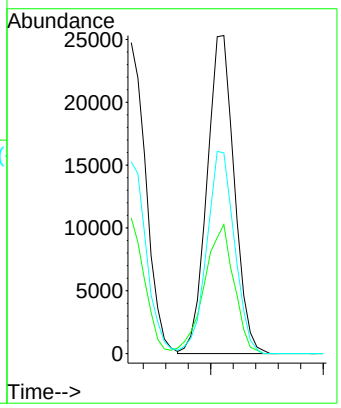


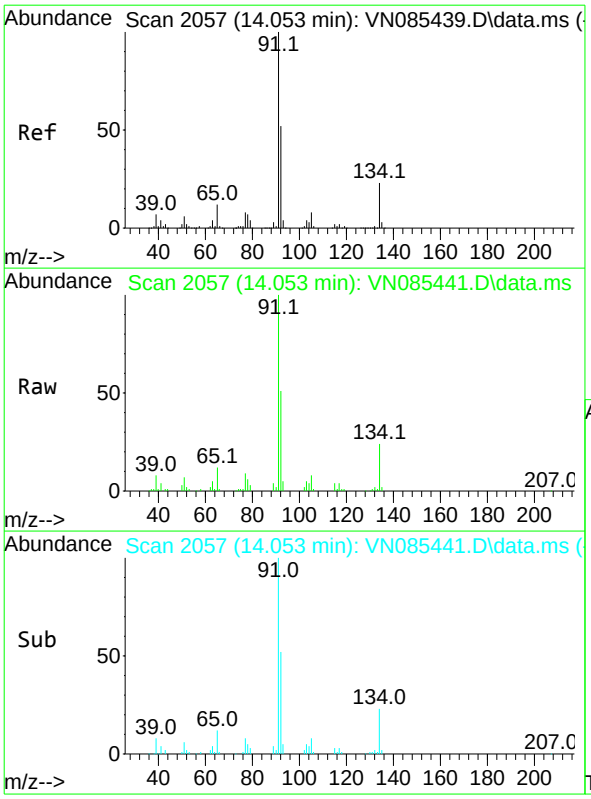


#88
1,4-Dichlorobenzene
Concen: 9.549 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:146 Resp: 42728

Ion	Ratio	Lower	Upper
146	100		
111	44.0	21.3	63.7
148	64.6	32.4	97.0

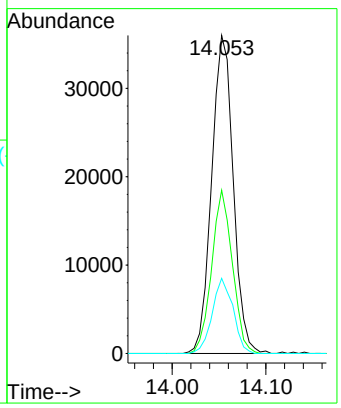




#89
n-Butylbenzene
Concen: 9.314 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 91 Resp: 57632

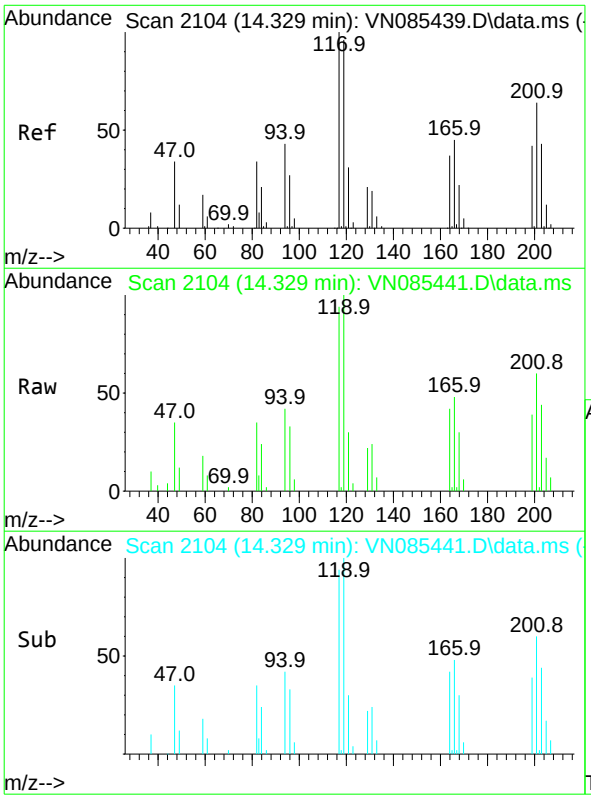
Ion	Ratio	Lower	Upper
91	100		
92	49.2	25.8	77.3
134	22.8	11.7	35.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

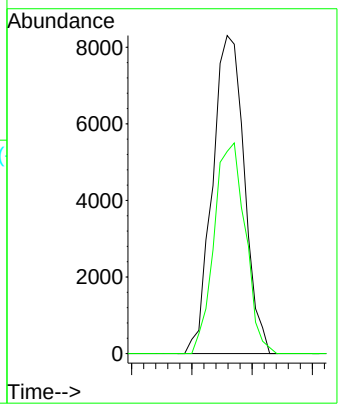
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

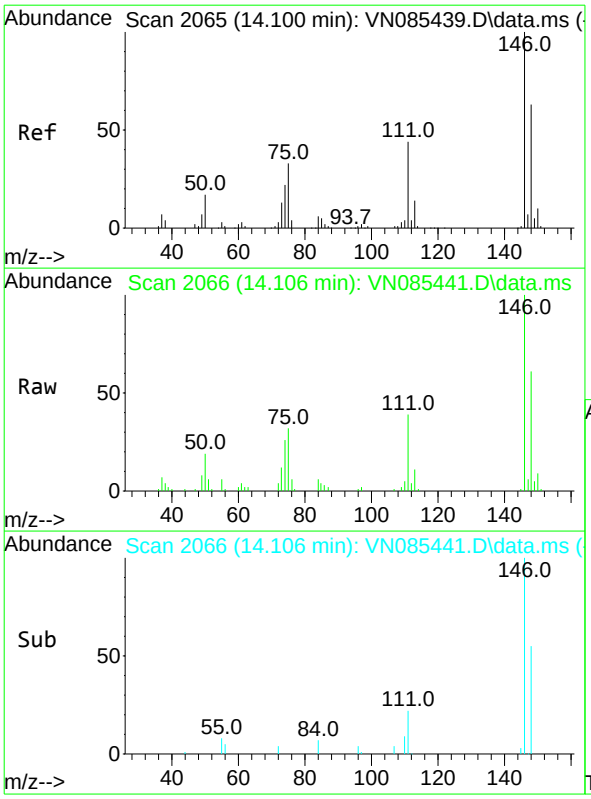


#90
Hexachloroethane
Concen: 9.294 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:117 Resp: 15261

Ion	Ratio	Lower	Upper
117	100		
201	65.0	33.7	101.0

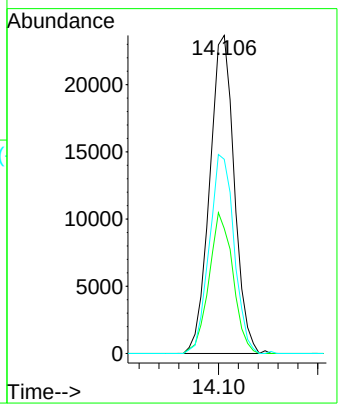




#91
1,2-Dichlorobenzene
Concen: 9.458 ug/l
RT: 14.106 min Scan# 20
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:146 Resp: 40726

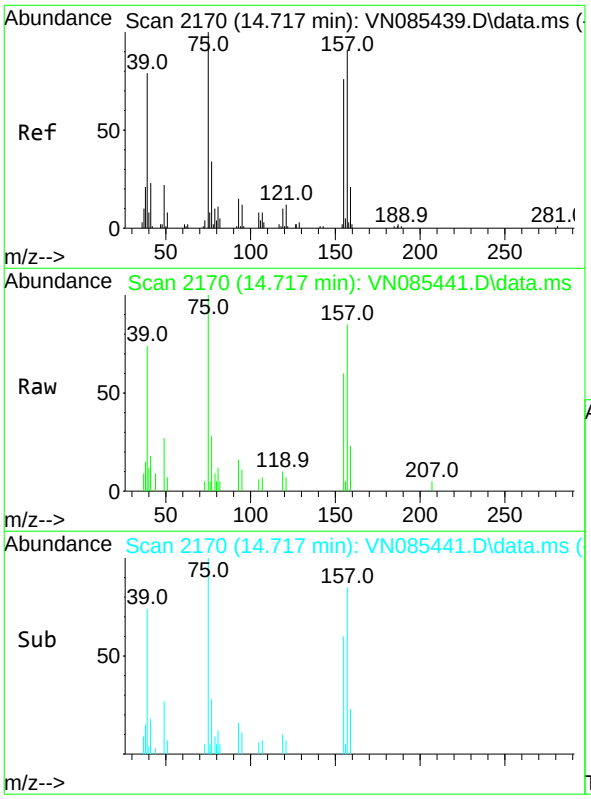
Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.7	65.1
148	62.9	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

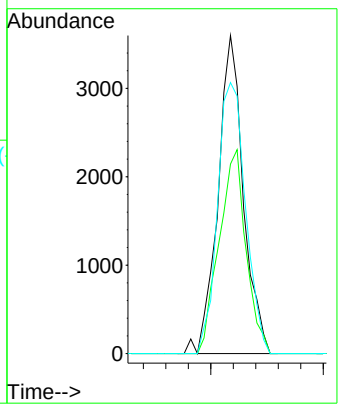
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

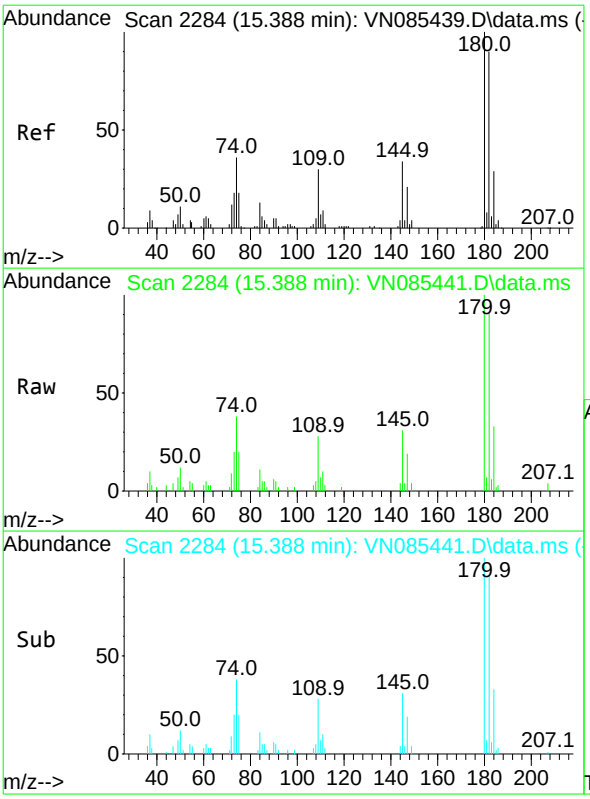


#92
1,2-Dibromo-3-Chloropropane
Concen: 9.744 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 75 Resp: 5639

Ion	Ratio	Lower	Upper
75	100		
155	67.9	36.4	109.2
157	94.1	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 9.354 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

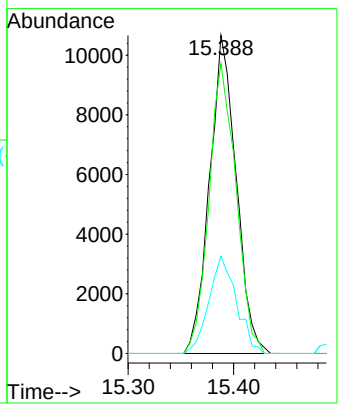
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

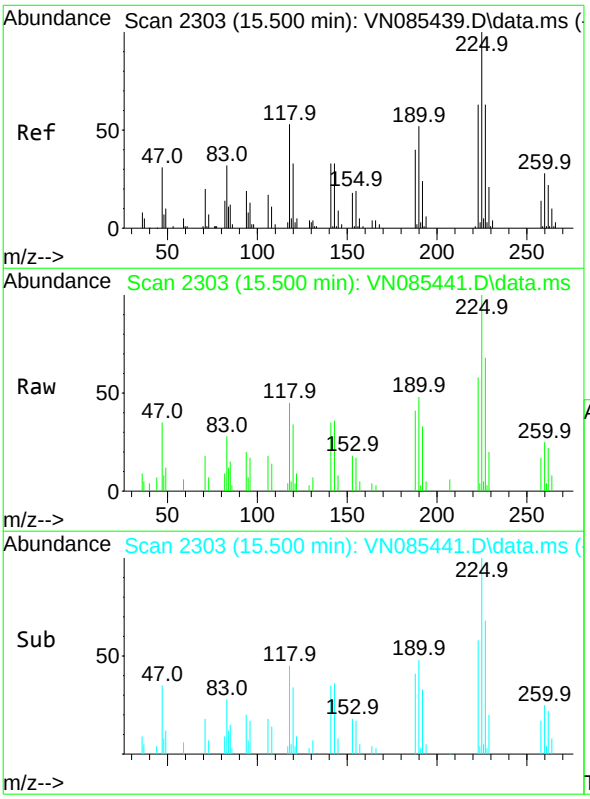
Tgt Ion:180 Resp: 18720

Ion	Ratio	Lower	Upper
180	100		
182	92.4	46.8	140.3
145	31.7	16.0	48.0

Manual Integrations
APPROVED

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

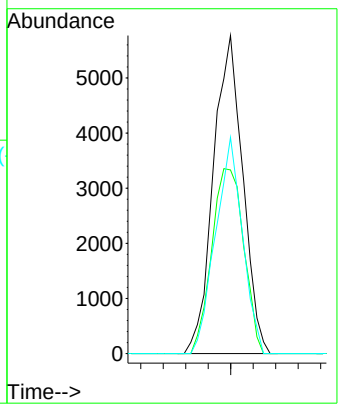


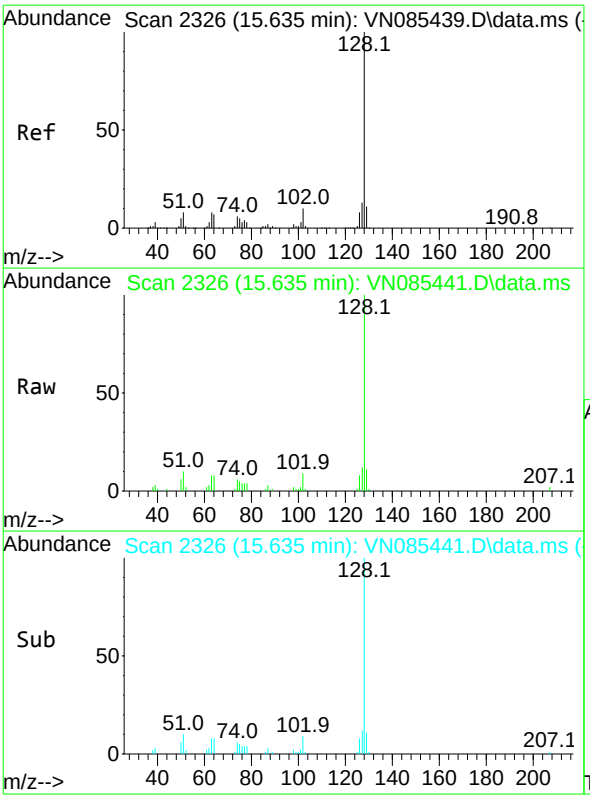


#94
Hexachlorobutadiene
Concen: 9.874 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:225 Resp: 10491

Ion	Ratio	Lower	Upper
225	100		
223	63.3	30.7	92.1
227	62.1	30.9	92.5





#95
Naphthalene
Concen: 8.717 ug/l
RT: 15.635 min Scan# 23
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

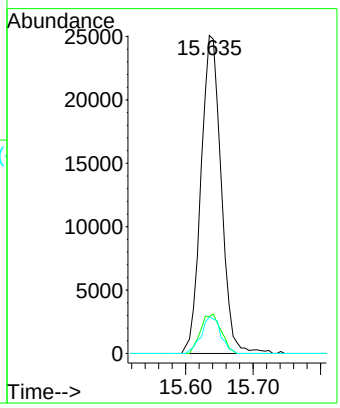
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

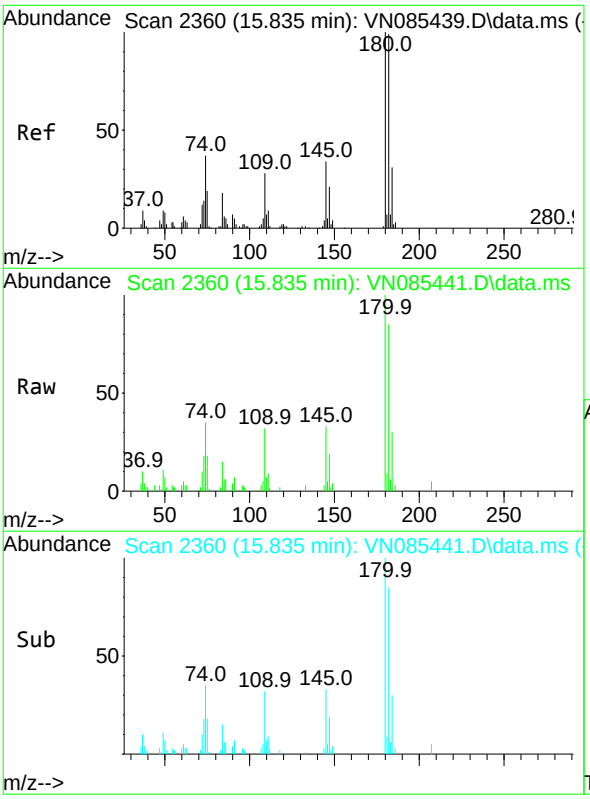
Tgt Ion:128 Resp: 52054

Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.6	16.0
129	11.2	8.8	13.2

Manual Integrations
APPROVED

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

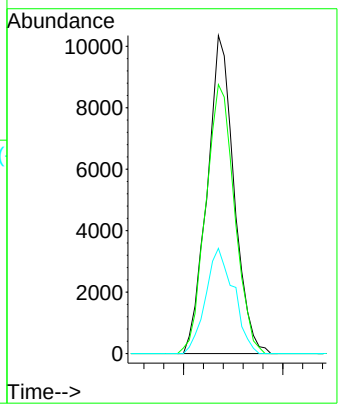




#96
1,2,3-Trichlorobenzene
Concen: 9.605 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:180 Resp: 19450

Ion	Ratio	Lower	Upper
180	100		
182	90.3	47.4	142.2
145	34.7	16.9	50.7



Quantitation Report (QT Reviewed)

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

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

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.218	168	186556	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	9.100	114	324413	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.865	117	282203	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	126086	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.577	65	17046	5.660	ug/l		0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 11.320%#				
35) Dibromofluoromethane	8.165	113	12102	5.377	ug/l		0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 10.760%#				
50) Toluene-d8	10.565	98	41328	5.168	ug/l		0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 10.340%#				
62) 4-Bromofluorobenzene	12.847	95	13520	4.943	ug/l		0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 9.880%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.124	85	13199	5.225	ug/l		97
3) Chloromethane	2.359	50	14526	5.311	ug/l		96
4) Vinyl Chloride	2.512	62	14564	5.298	ug/l		98
5) Bromomethane	2.953	94	9788	5.895	ug/l		98
6) Chloroethane	3.124	64	9430	5.411	ug/l		99
7) Trichlorofluoromethane	3.501	101	20098	5.039	ug/l		92
8) Diethyl Ether	3.959	74	6652	4.828	ug/l		100
9) 1,1,2-Trichlorotrifluo...	4.365	101	11917	5.305	ug/l		97
10) Methyl Iodide	4.583	142	12331	4.793	ug/l		99
11) Tert butyl alcohol	5.518	59	9075	26.318	ug/l	#	94
12) 1,1-Dichloroethene	4.342	96	10429	5.209	ug/l		96
13) Acrolein	4.171	56	9430	20.033	ug/l		97
14) Allyl chloride	5.030	41	16741	5.153	ug/l		97
15) Acrylonitrile	5.718	53	27869	25.445	ug/l		97
16) Acetone	4.430	43	25122	25.819	ug/l		97
17) Carbon Disulfide	4.706	76	32068	5.202	ug/l		96
18) Methyl Acetate	5.024	43	15106	5.106	ug/l		97
19) Methyl tert-butyl Ether	5.800	73	31439	4.836	ug/l		94
20) Methylene Chloride	5.271	84	12981	5.389	ug/l	#	83
21) trans-1,2-Dichloroethene	5.783	96	10614	4.960	ug/l	#	78
22) Diisopropyl ether	6.665	45	35785	4.962	ug/l	#	96
23) Vinyl Acetate	6.600	43	118439m	23.389	ug/l		
24) 1,1-Dichloroethane	6.565	63	22865	5.200	ug/l		99
25) 2-Butanone	7.483	43	36127	25.231	ug/l		99
26) 2,2-Dichloropropane	7.488	77	18398	5.175	ug/l		100
27) cis-1,2-Dichloroethene	7.488	96	12477	4.951	ug/l		99
28) Bromochloromethane	7.806	49	11096	5.424	ug/l		99
29) Tetrahydrofuran	7.841	42	21983	24.215	ug/l		99
30) Chloroform	7.959	83	23384	5.146	ug/l		98
31) Cyclohexane	8.247	56	22343	5.846	ug/l	#	92
32) 1,1,1-Trichloroethane	8.159	97	21416	5.372	ug/l		91
36) 1,1-Dichloropropene	8.371	75	15886	5.029	ug/l		96
37) Ethyl Acetate	7.553	43	16879m	5.294	ug/l		
38) Carbon Tetrachloride	8.359	117	18317	5.065	ug/l		96
39) Methylcyclohexane	9.600	83	14175	4.776	ug/l		98
40) Benzene	8.600	78	47833	5.040	ug/l		99

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

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

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

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

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

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

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

ICAL Form

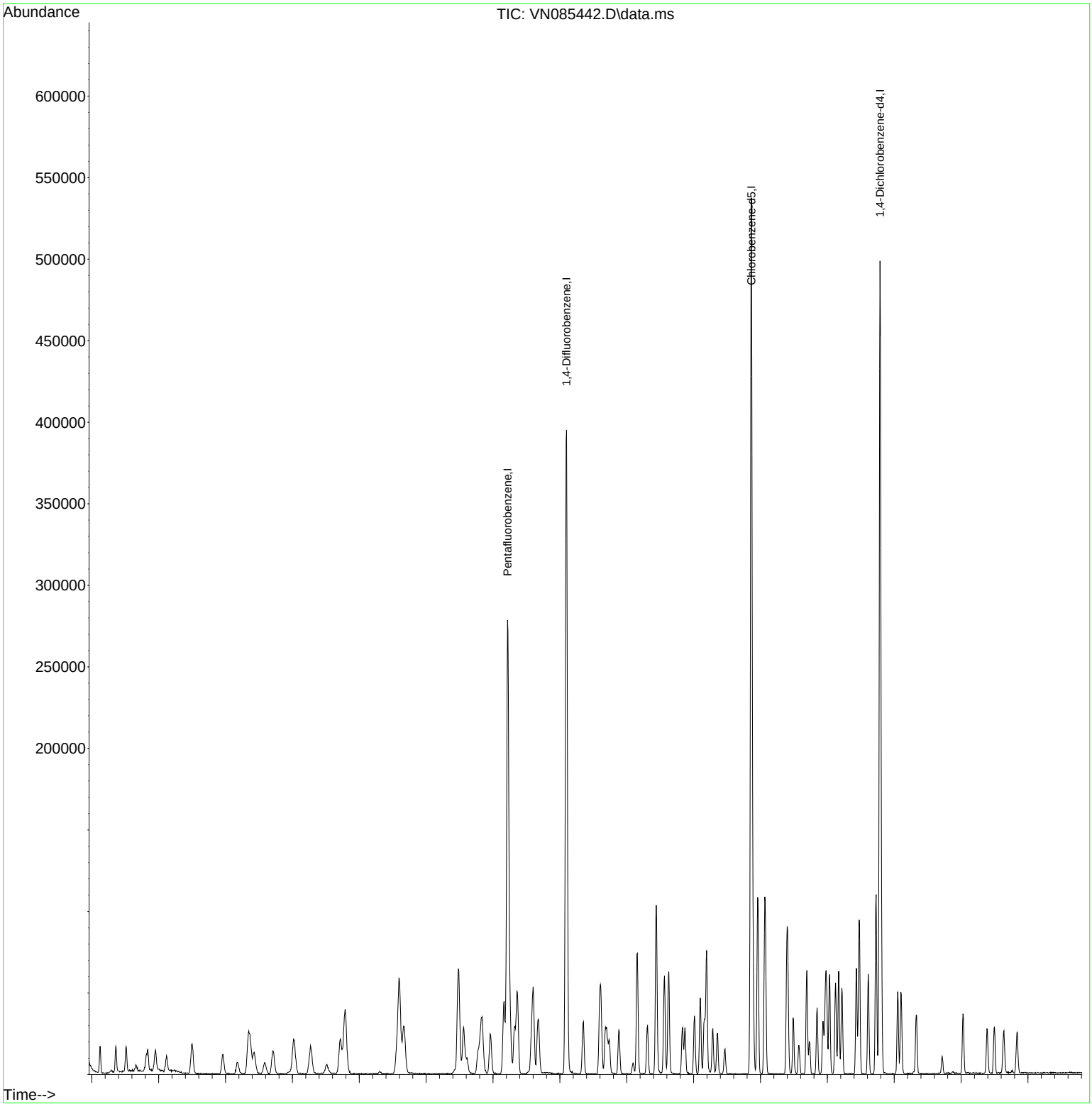
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085442.D
Acq On : 14 Jan 2025 16:31
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

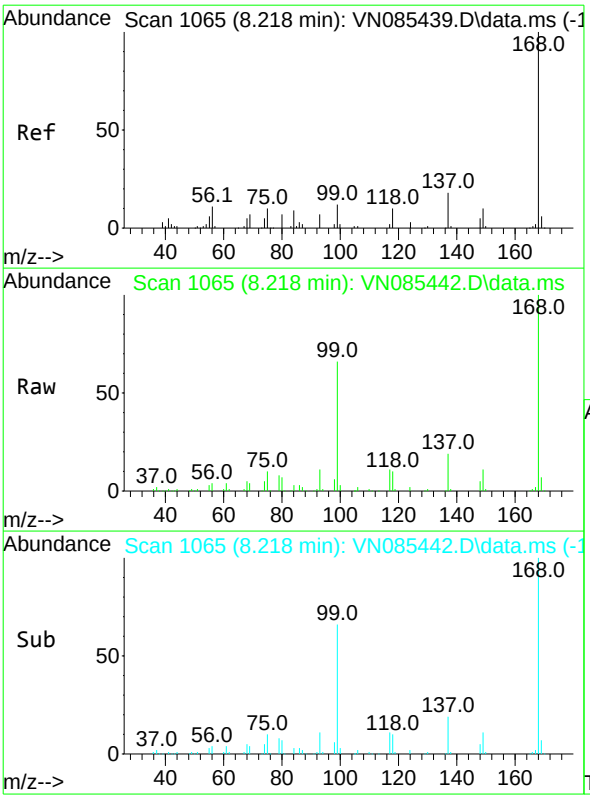
Quant Time: Jan 15 01:45:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

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





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:168 Resp: 186556

Ion	Ratio	Lower	Upper
168	100		
99	65.9	53.6	80.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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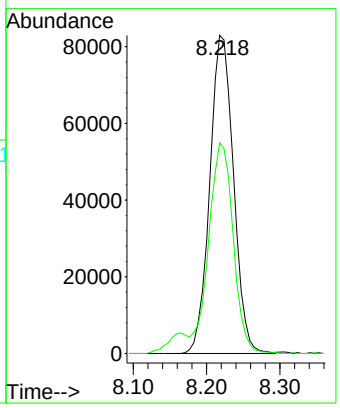
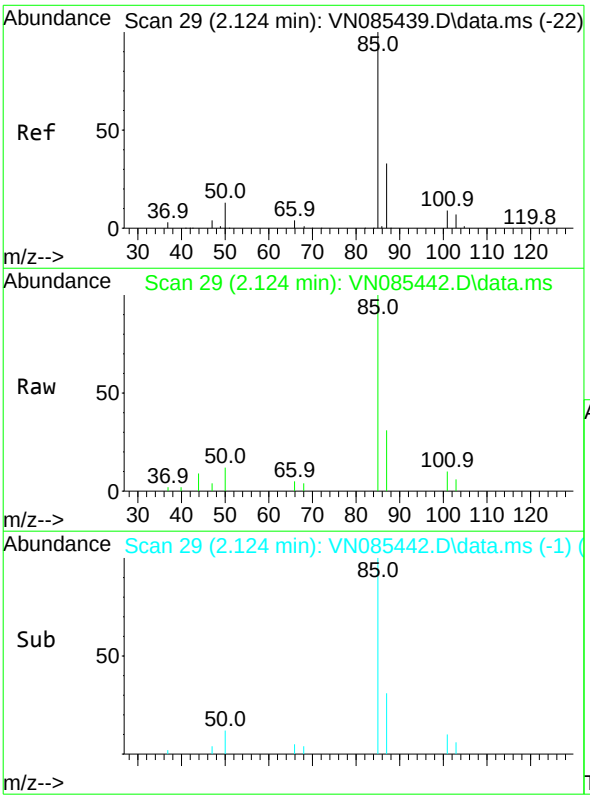
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

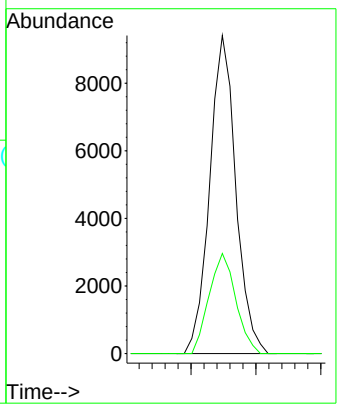


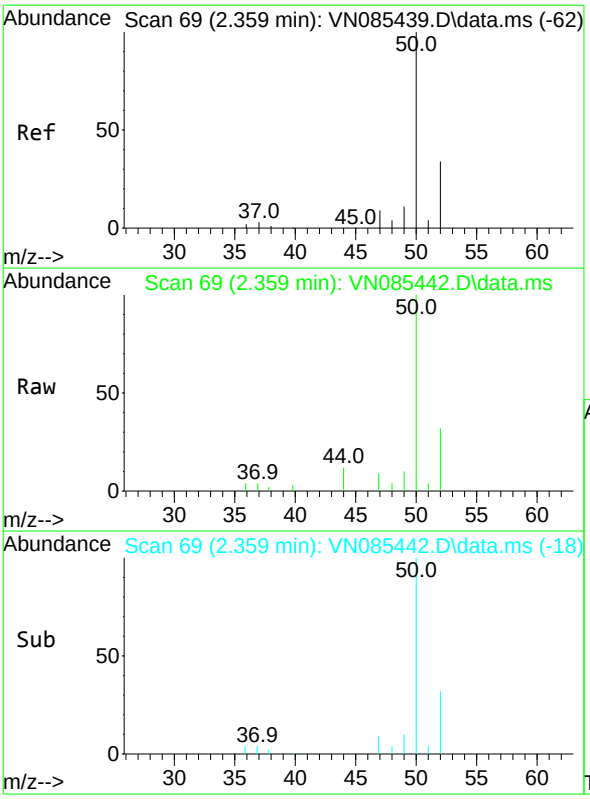


#2
Dichlorodifluoromethane
Concen: 5.225 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 85 Resp: 13199

Ion	Ratio	Lower	Upper
85	100		
87	31.5	16.7	50.1

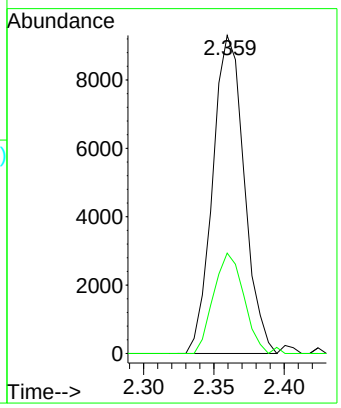




#3
Chloromethane
Concen: 5.311 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 50 Resp: 14526

Ion	Ratio	Lower	Upper
50	100		
52	31.6	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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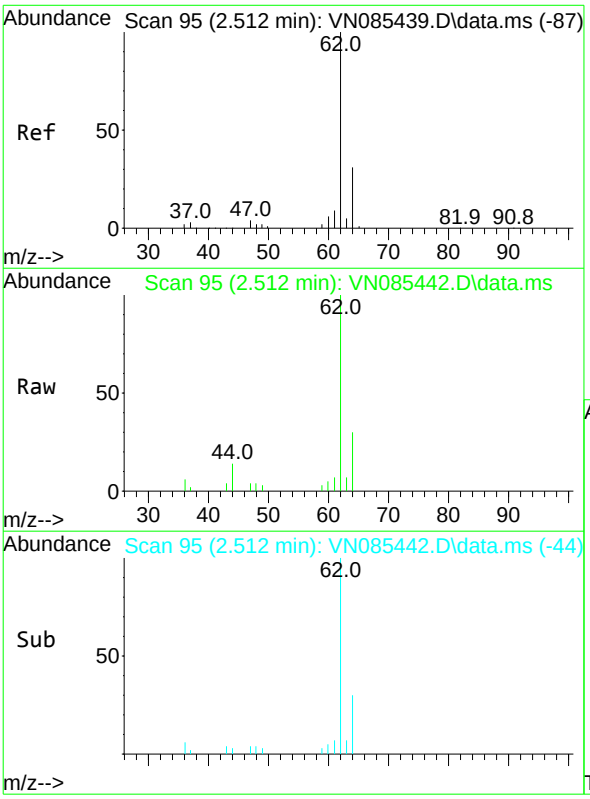
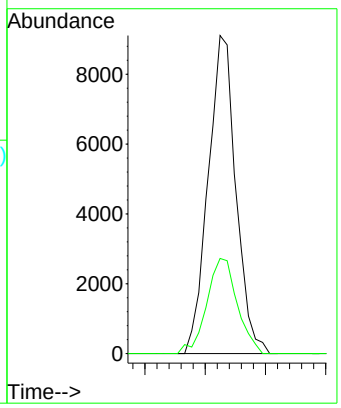
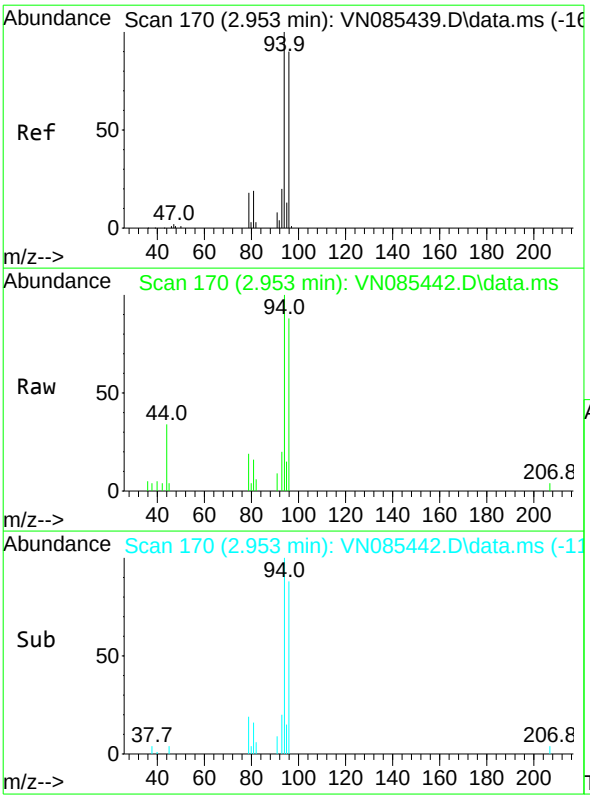


#4
Vinyl Chloride
Concen: 5.298 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 62 Resp: 14564

Ion	Ratio	Lower	Upper
62	100		
64	29.9	24.8	37.2

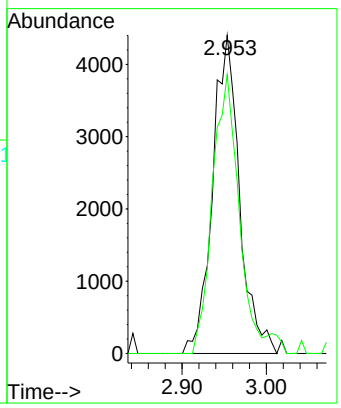




#5
Bromomethane
Concen: 5.895 ug/l
RT: 2.953 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 94 Resp: 9788

Ion	Ratio	Lower	Upper
94	100		
96	87.7	71.8	107.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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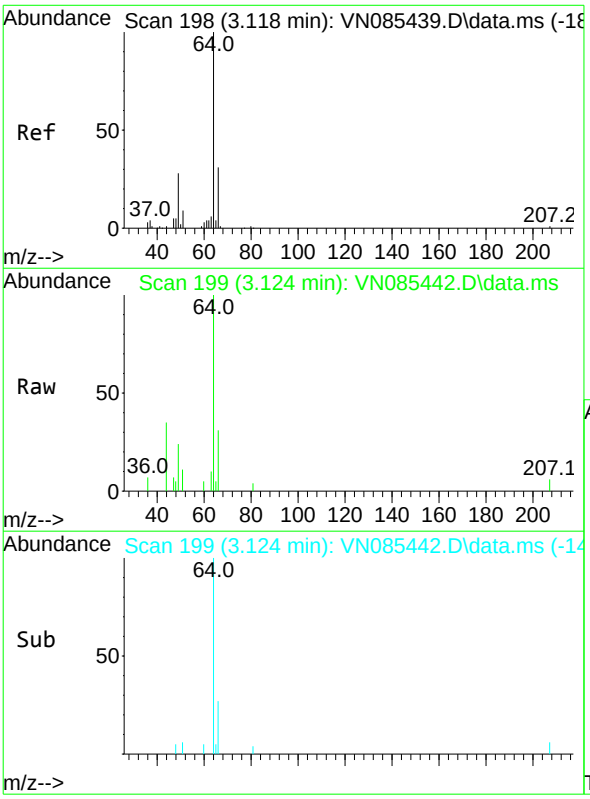
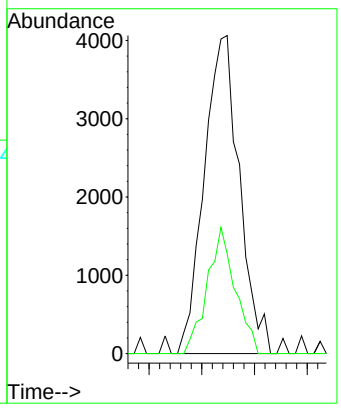
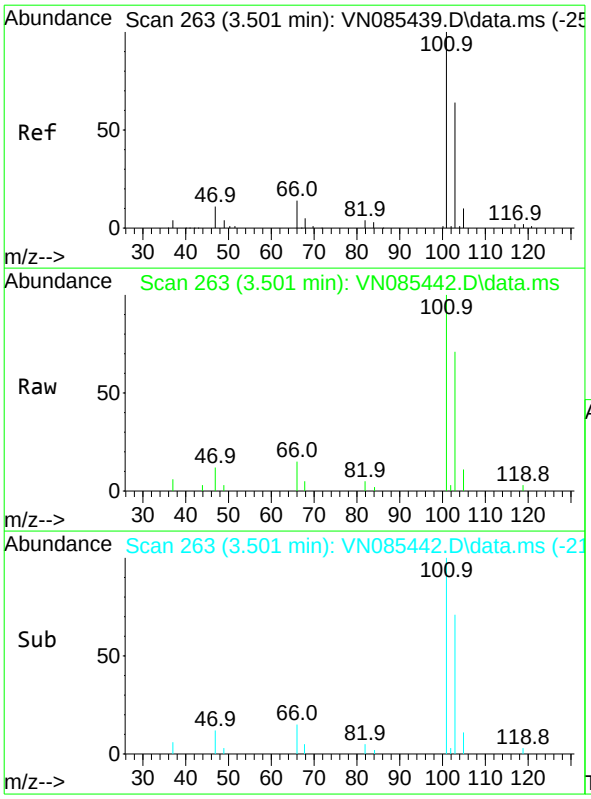


#6
Chloroethane
Concen: 5.411 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 64 Resp: 9430

Ion	Ratio	Lower	Upper
64	100		
66	31.4	24.6	36.8

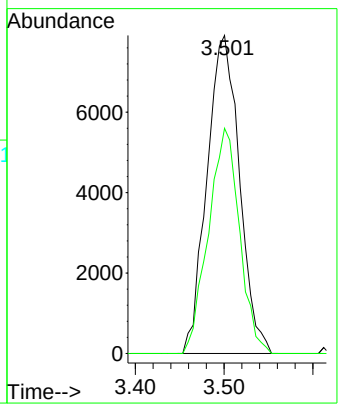




#7
Trichlorofluoromethane
Concen: 5.039 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:101 Resp: 20098

Ion	Ratio	Lower	Upper
101	100		
103	70.8	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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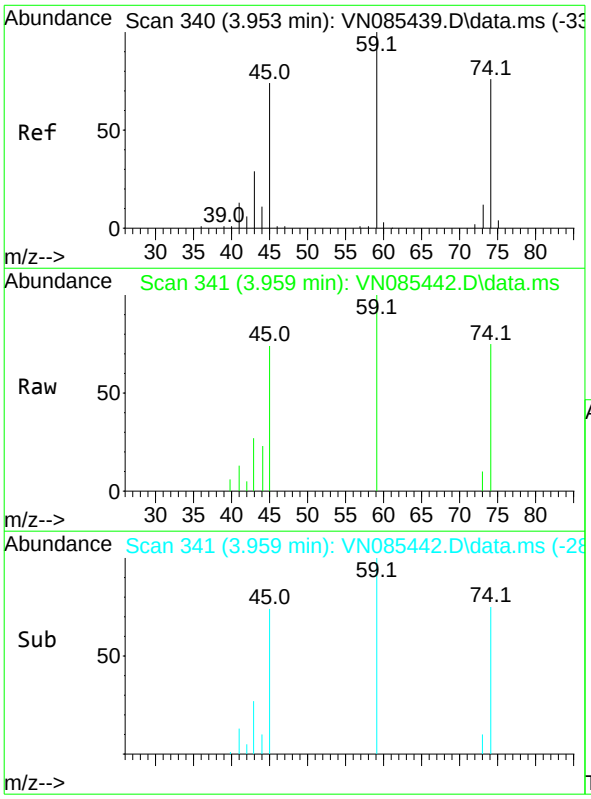
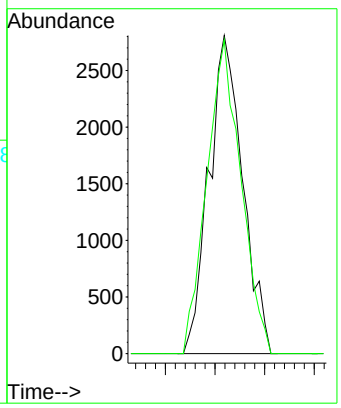
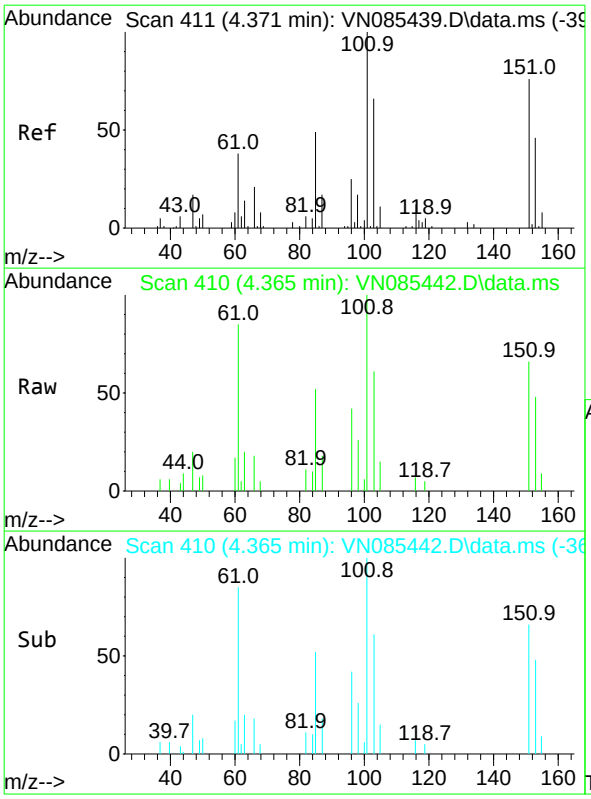


#8
Diethyl Ether
Concen: 4.828 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 74 Resp: 6652

Ion	Ratio	Lower	Upper
74	100		
45	99.5	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.305 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion:101 Resp: 11917

Ion	Ratio	Lower	Upper
101	100		
85	46.5	37.8	56.8
151	76.7	58.8	88.2

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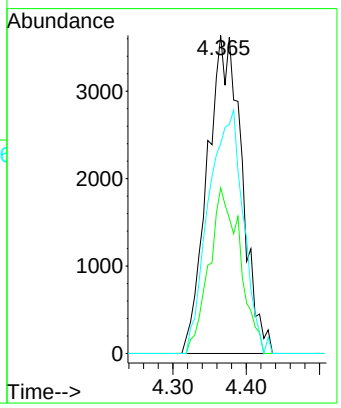
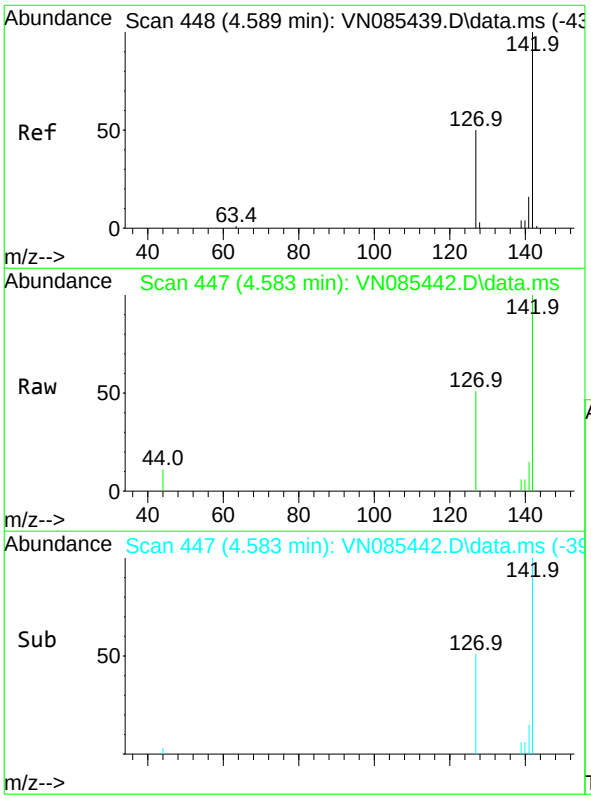
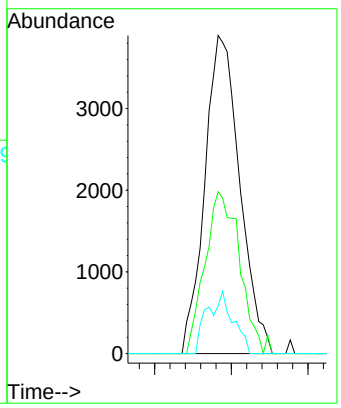


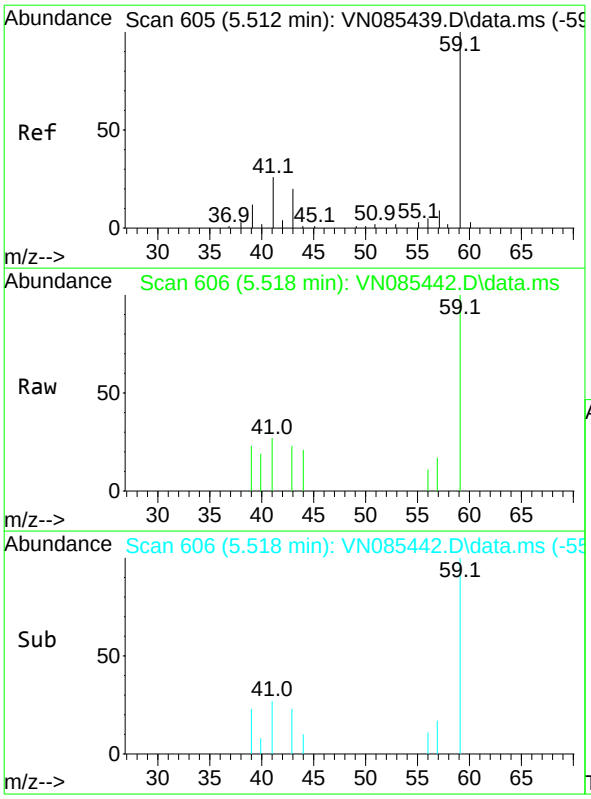


#10
Methyl Iodide
Concen: 4.793 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:142 Resp: 12331

Ion	Ratio	Lower	Upper
142	100		
127	50.9	40.3	60.5
141	15.0	12.8	19.2

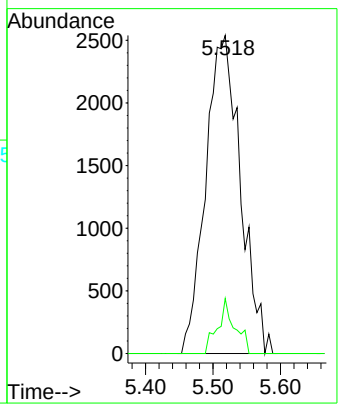




#11
Tert butyl alcohol
Concen: 26.318 ug/l
RT: 5.518 min Scan# 60
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 59 Resp: 9075

Ion	Ratio	Lower	Upper
59	100		
57	8.5	8.6	13.0#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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Reviewed By :John Carlone 01/15/2025
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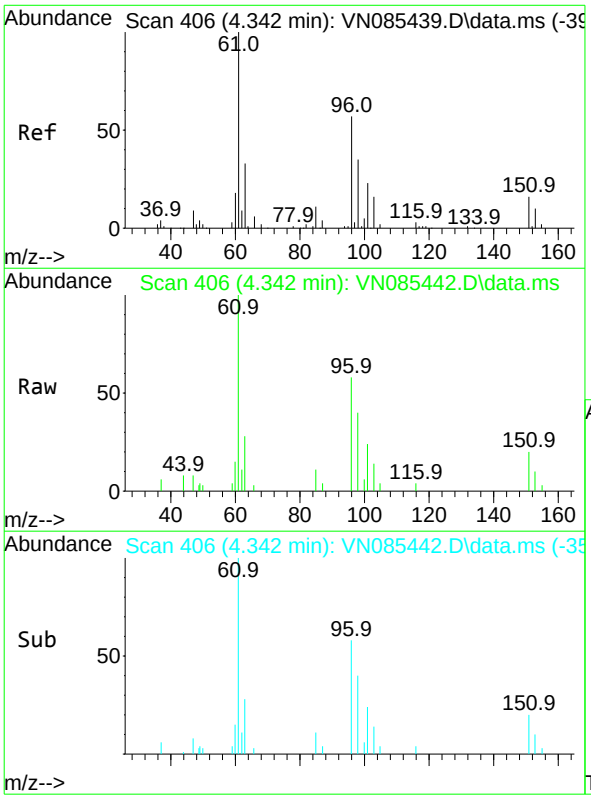
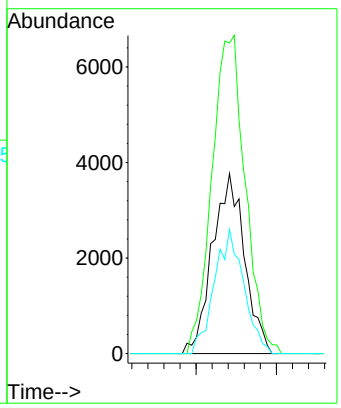
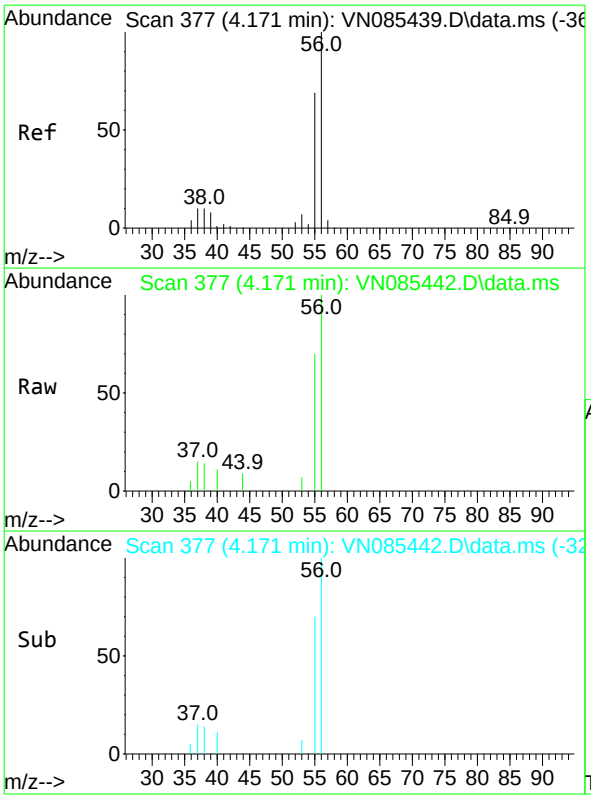


#12
1,1-Dichloroethene
Concen: 5.209 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 96 Resp: 10429

Ion	Ratio	Lower	Upper
96	100		
61	172.7	141.0	211.4
98	69.0	49.0	73.6

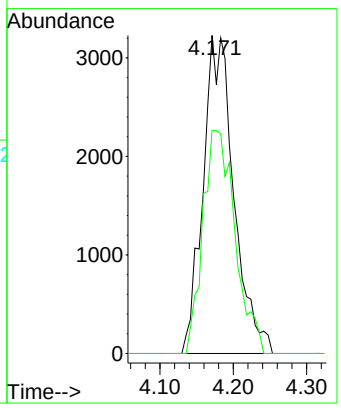




#13
Acrolein
Concen: 20.033 ug/l
RT: 4.171 min Scan# 37
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 56 Resp: 9430

Ion	Ratio	Lower	Upper
56	100		
55	73.2	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
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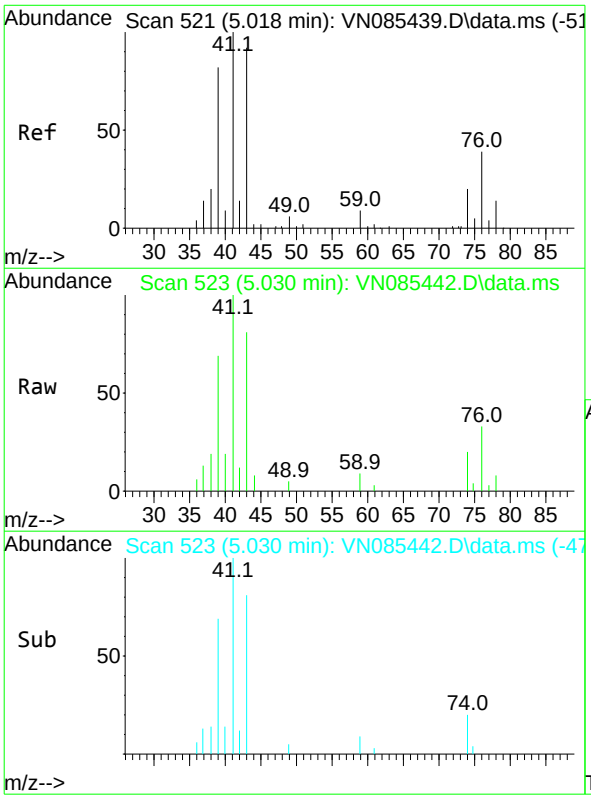
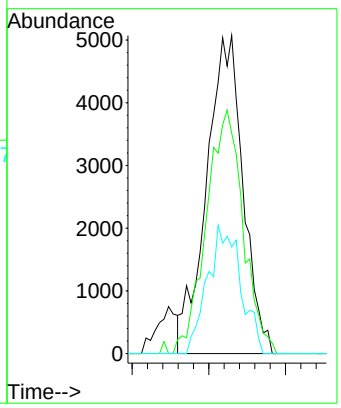
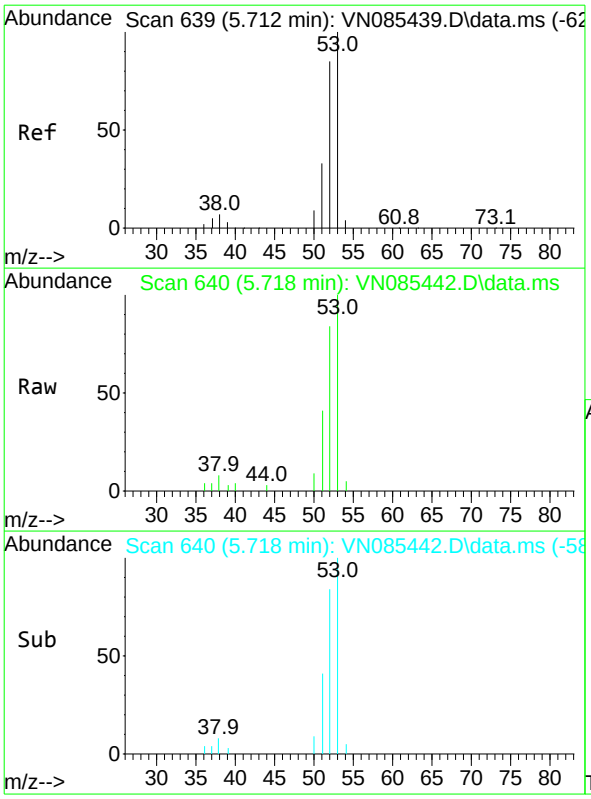


#14
Allyl chloride
Concen: 5.153 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 41 Resp: 16741

Ion	Ratio	Lower	Upper
41	100		
39	77.4	64.4	96.6
76	36.6	30.5	45.7

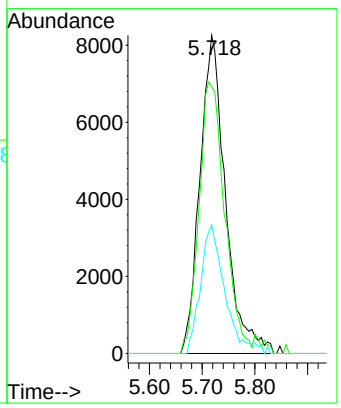




#15
Acrylonitrile
Concen: 25.445 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 53 Resp: 27869

Ion	Ratio	Lower	Upper
53	100		
52	85.5	65.5	98.3
51	38.5	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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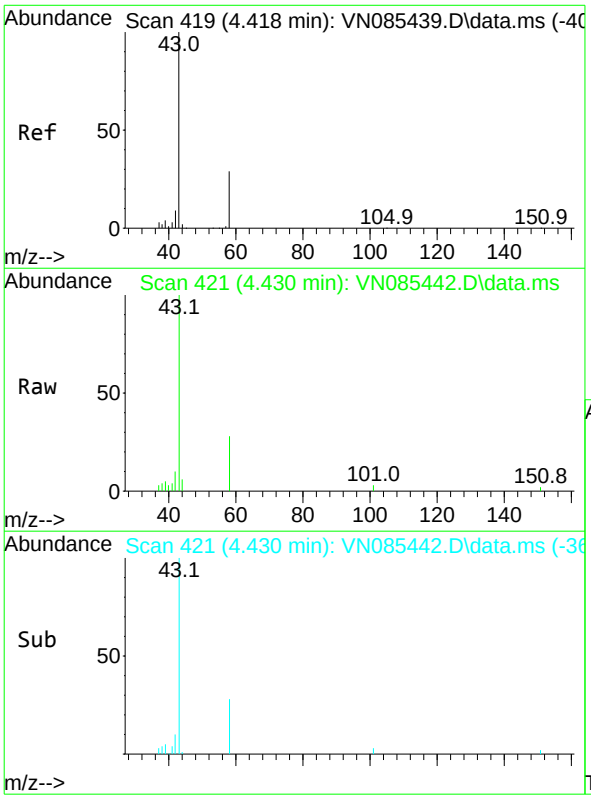
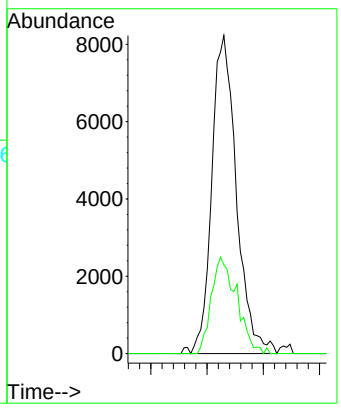
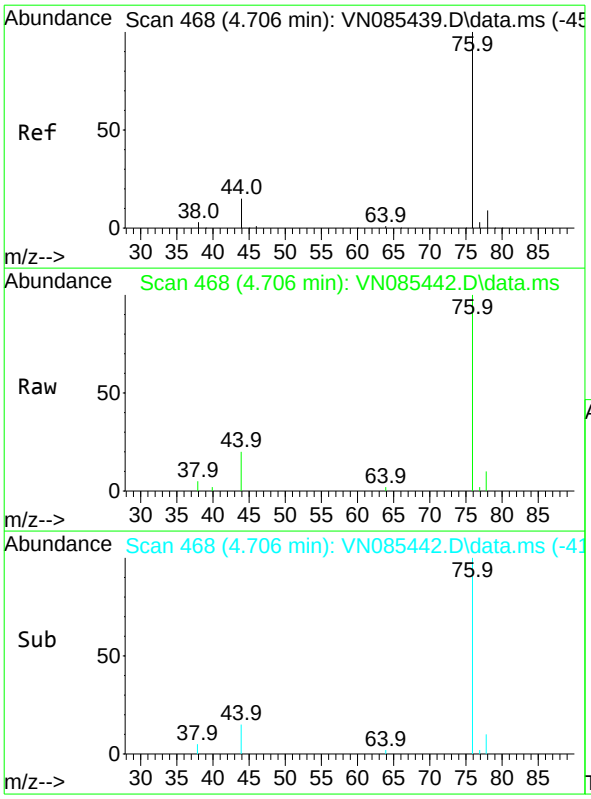


#16
Acetone
Concen: 25.819 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 25122

Ion	Ratio	Lower	Upper
43	100		
58	27.9	23.8	35.6

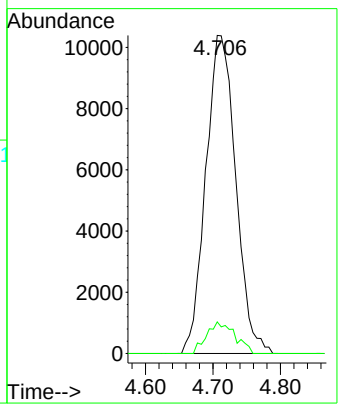




#17
Carbon Disulfide
Concen: 5.202 ug/l
RT: 4.706 min Scan# 46
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 76 Resp: 32068

Ion	Ratio	Lower	Upper
76	100		
78	9.9	6.9	10.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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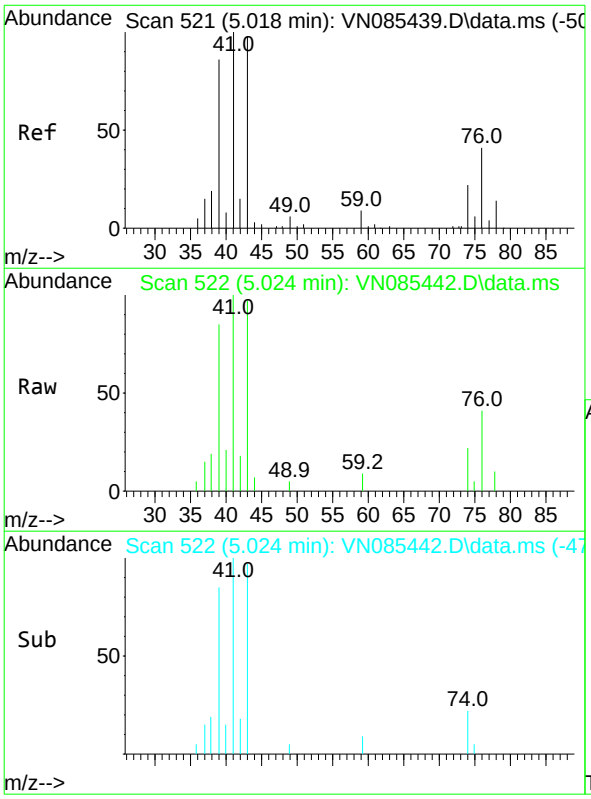
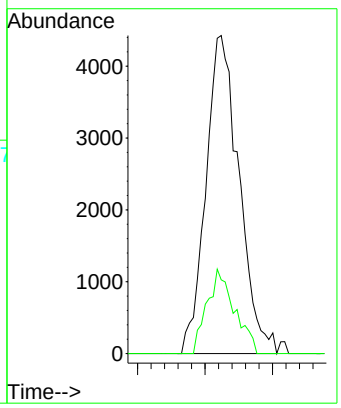
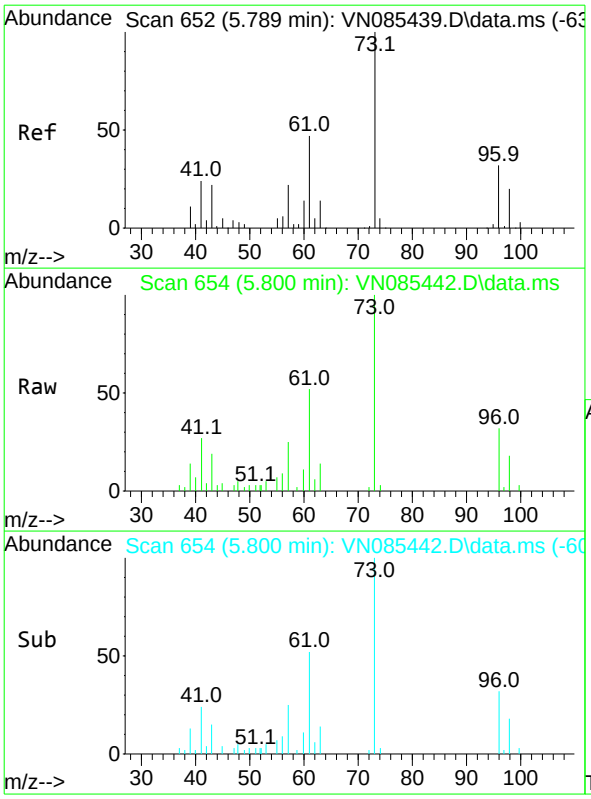


#18
Methyl Acetate
Concen: 5.106 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 15106

Ion	Ratio	Lower	Upper
43	100		
74	22.0	18.6	28.0

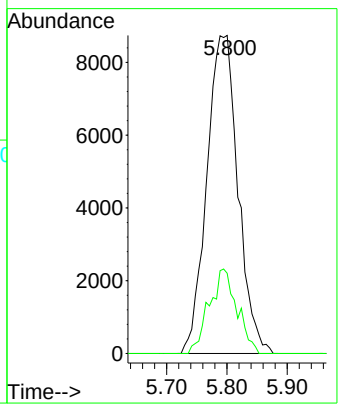




#19
Methyl tert-butyl Ether
Concen: 4.836 ug/l
RT: 5.800 min Scan# 65
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 73 Resp: 31439

Ion	Ratio	Lower	Upper
73	100		
57	25.2	17.8	26.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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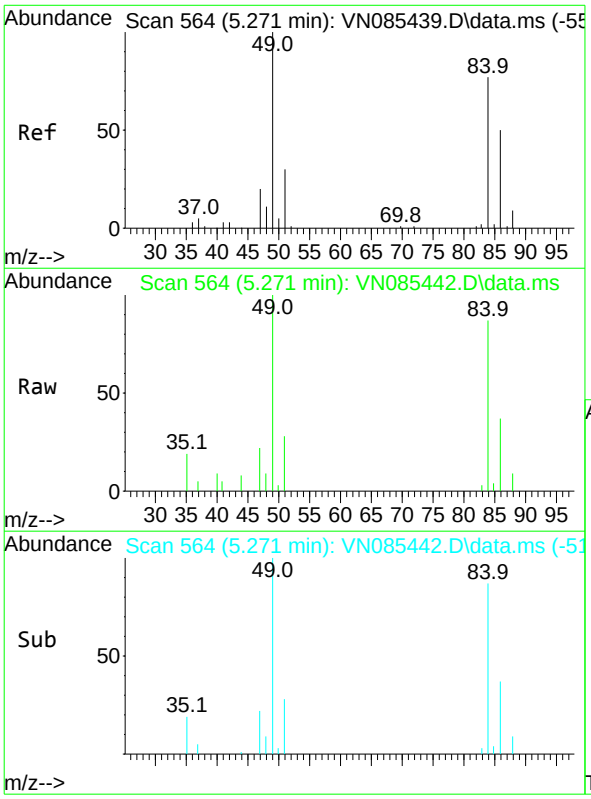
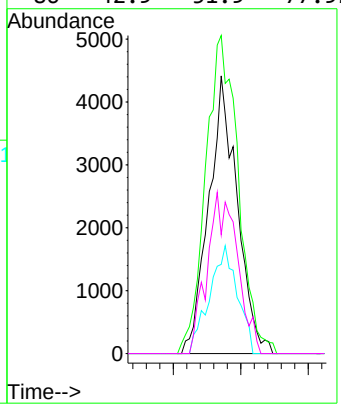
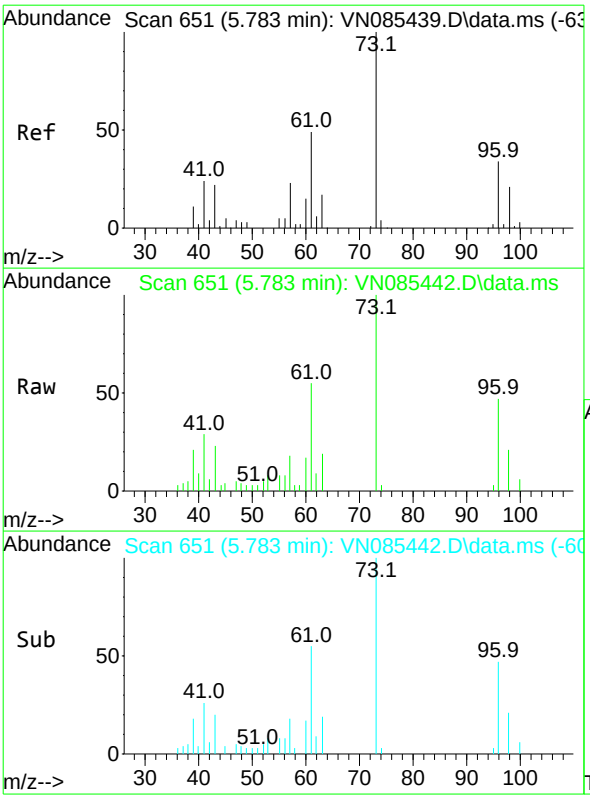


#20
Methylene Chloride
Concen: 5.389 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 84 Resp: 12981

Ion	Ratio	Lower	Upper
84	100		
49	114.5	104.1	156.1
51	32.1	31.0	46.4
86	42.9	51.9	77.9#

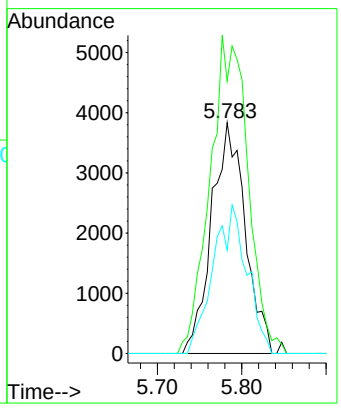




#21
trans-1,2-Dichloroethene
Concen: 4.960 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 96 Resp: 10614

Ion	Ratio	Lower	Upper
96	100		
61	118.1	115.7	173.5
98	44.7	49.8	74.8#



Instrument :
MSVOA_N
ClientSampleId :
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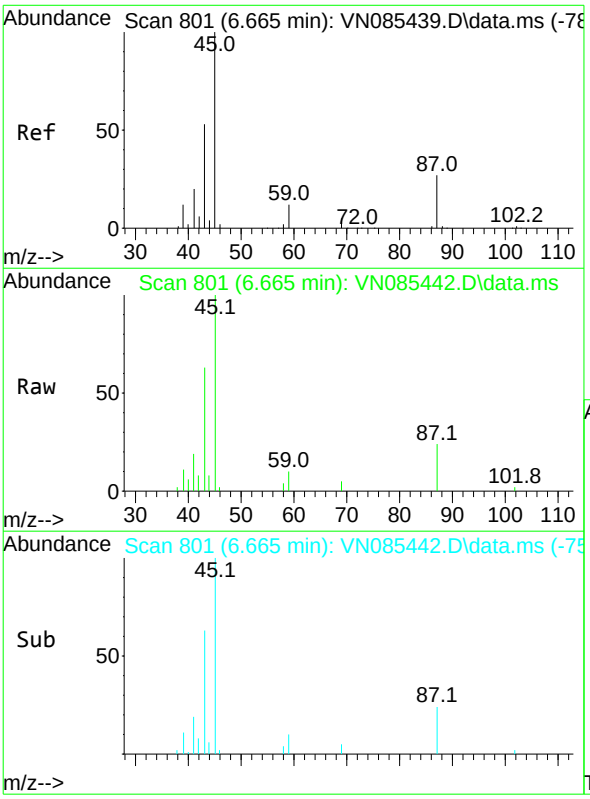
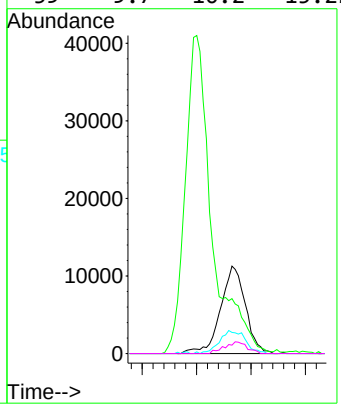
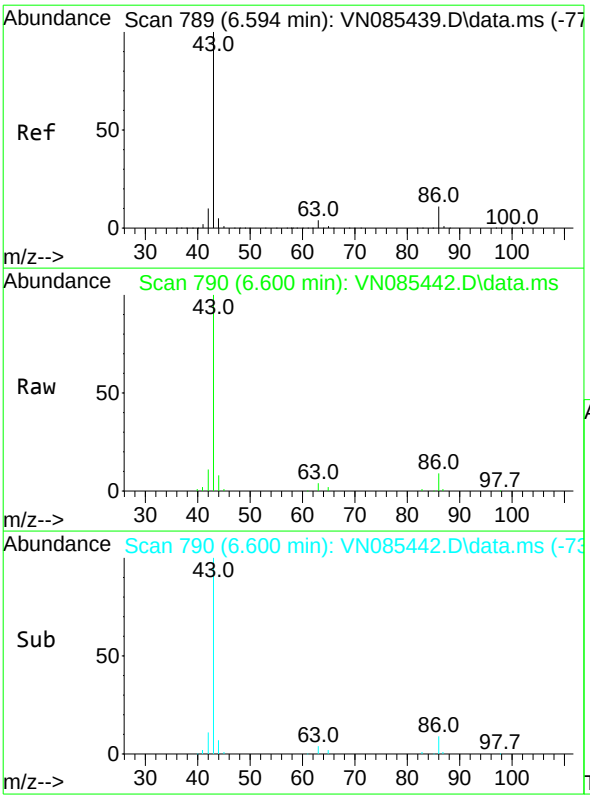


#22
Diisopropyl ether
Concen: 4.962 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 45 Resp: 35785

Ion	Ratio	Lower	Upper
45	100		
43	58.3	45.0	67.6
87	24.2	21.8	32.8
59	9.7	10.2	15.2#

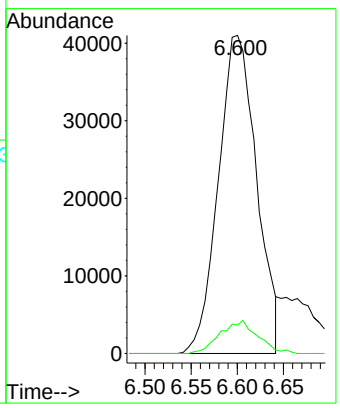




#23
Vinyl Acetate
Concen: 23.389 ug/l m
RT: 6.600 min Scan# 79
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 118439

Ion	Ratio	Lower	Upper
43	100		
86	9.0	8.4	12.6



Instrument :
MSVOA_N
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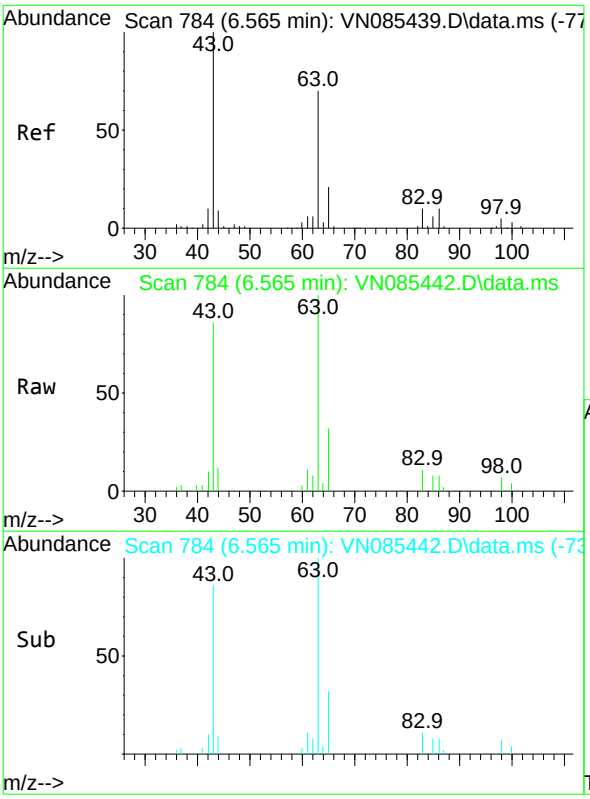
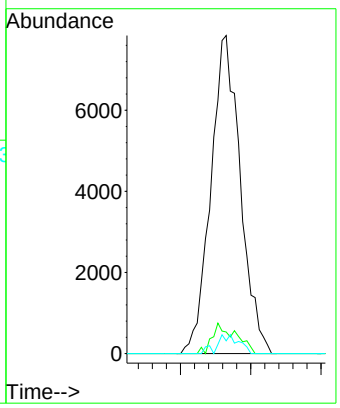
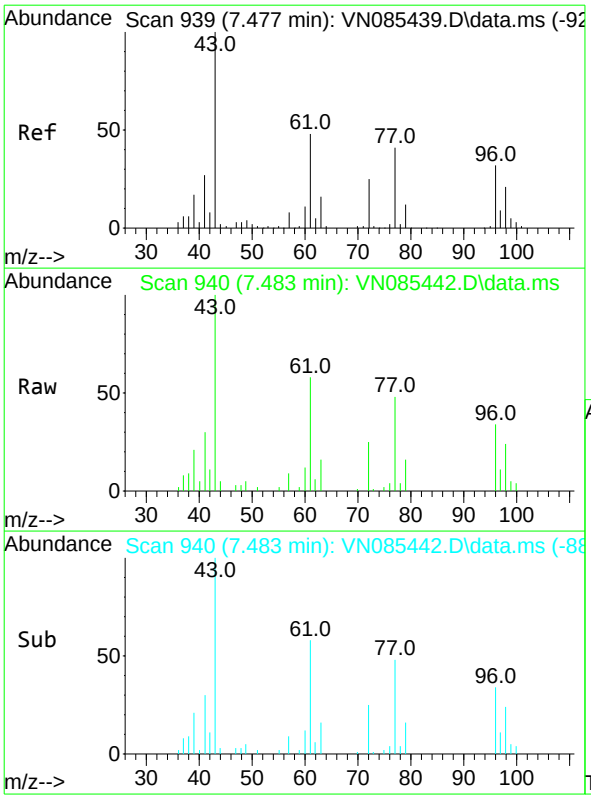


#24
1,1-Dichloroethane
Concen: 5.200 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 63 Resp: 22865

Ion	Ratio	Lower	Upper
63	100		
98	6.8	3.3	9.8
100	4.0	2.0	6.0

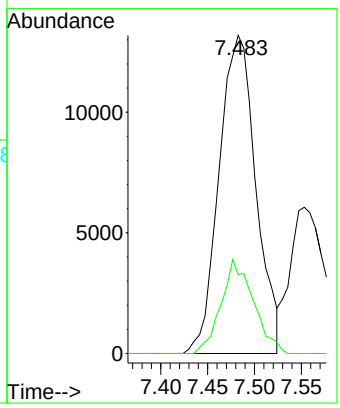




#25
2-Butanone
Concen: 25.231 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 36127

Ion	Ratio	Lower	Upper
43	100		
72	24.9	20.2	30.4



Instrument :
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ClientSampleId :
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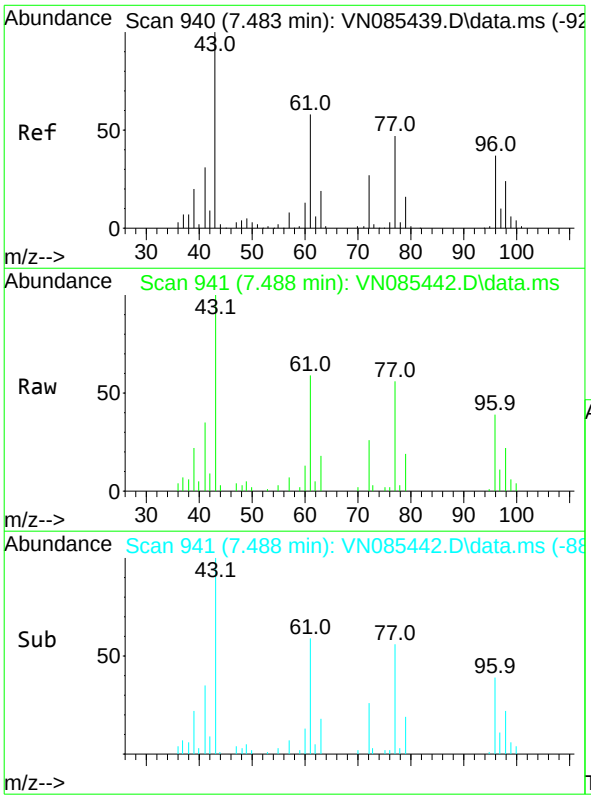
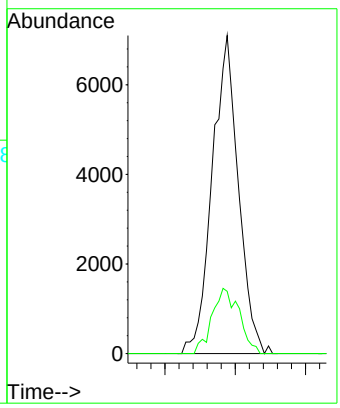
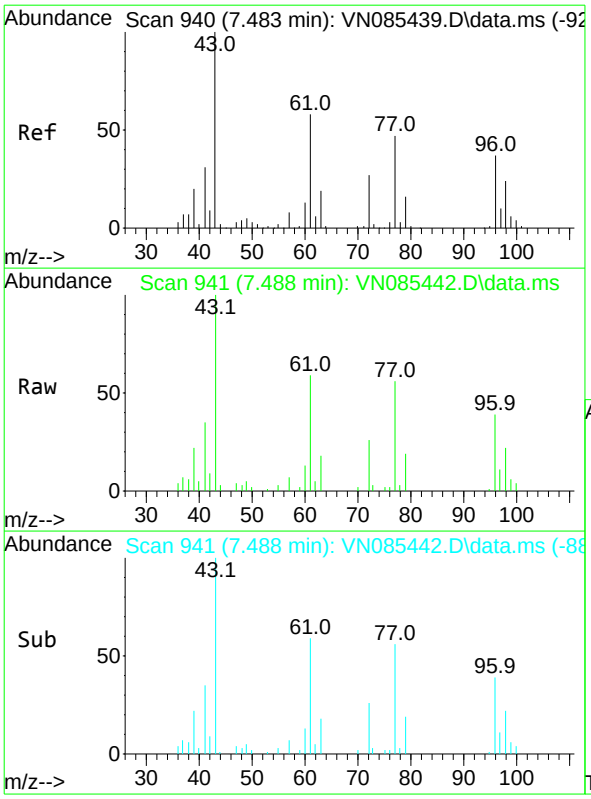


#26
2,2-Dichloropropane
Concen: 5.175 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 77 Resp: 18398

Ion	Ratio	Lower	Upper
77	100		
97	21.2	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 4.951 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 96 Resp: 12477

Ion	Ratio	Lower	Upper
96	100		
61	154.5	0.0	311.8
98	62.8	0.0	126.0

Instrument :
MSVOA_N
ClientSampleId :
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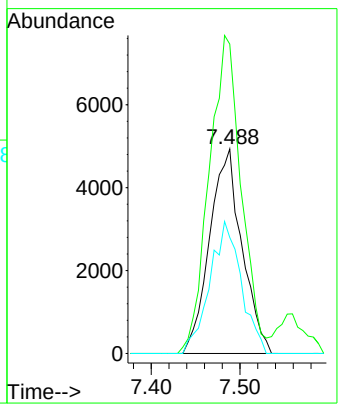
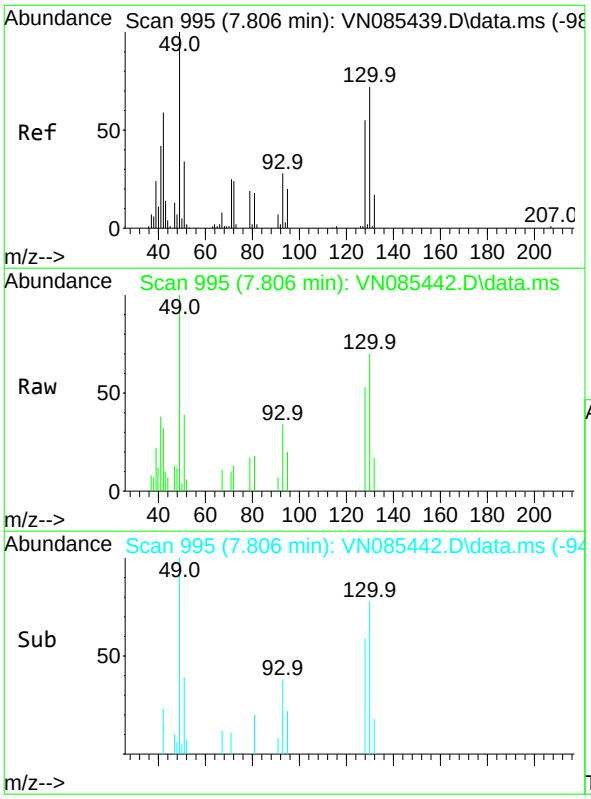
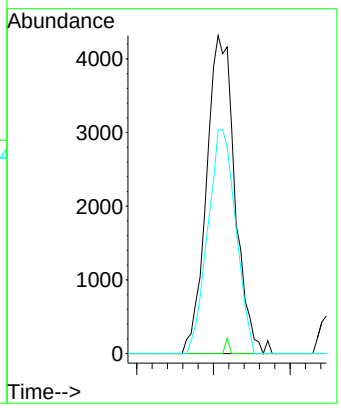


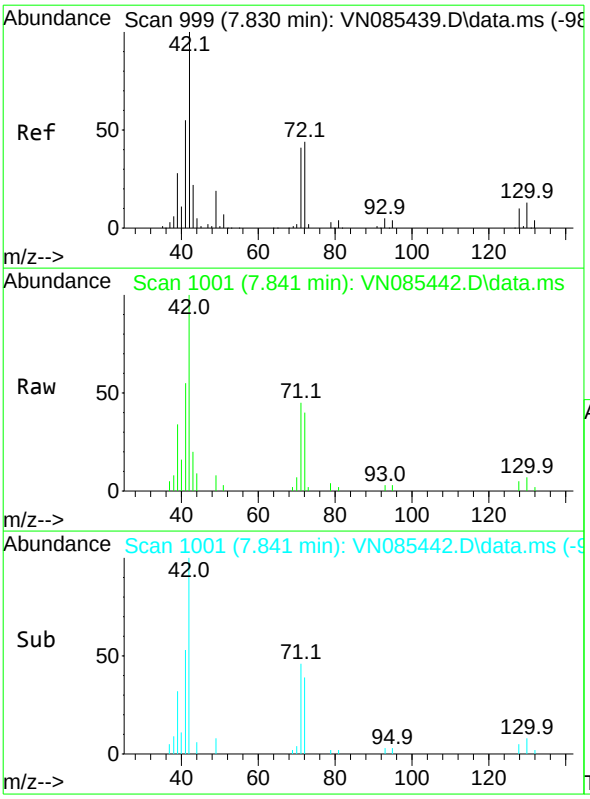


#28
Bromochloromethane
Concen: 5.424 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 49 Resp: 11096

Ion	Ratio	Lower	Upper
49	100		
129	0.7	0.0	4.4
130	69.5	55.0	82.4

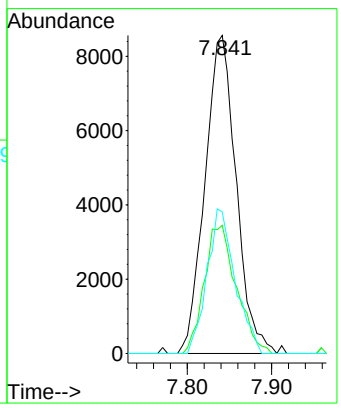




#29
Tetrahydrofuran
Concen: 24.215 ug/l
RT: 7.841 min Scan# 10
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 42 Resp: 21983

Ion	Ratio	Lower	Upper
42	100		
72	41.5	34.2	51.2
71	41.0	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
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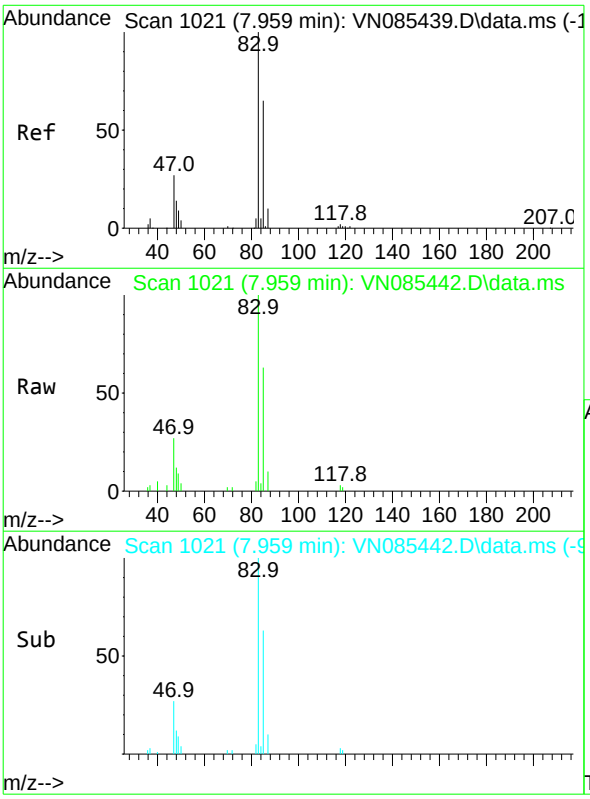
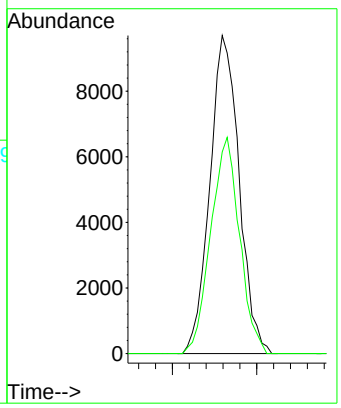
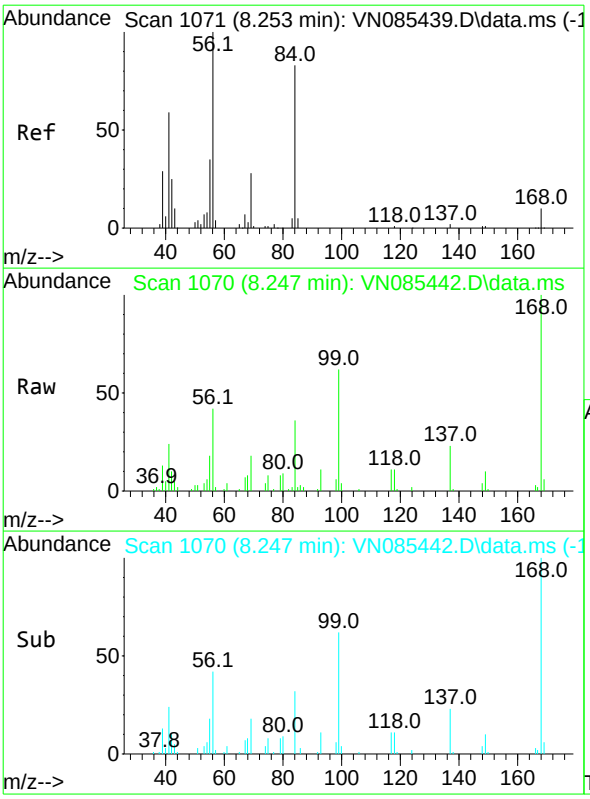


#30
Chloroform
Concen: 5.146 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 23384

Ion	Ratio	Lower	Upper
83	100		
85	63.4	51.8	77.6

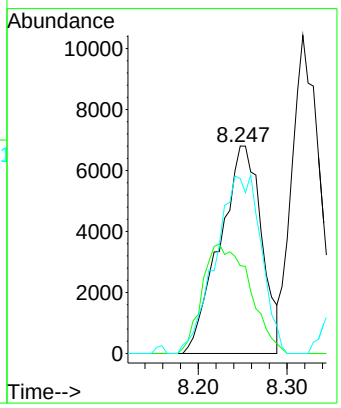




#31
Cyclohexane
Concen: 5.846 ug/l
RT: 8.247 min Scan# 10
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 56 Resp: 22343

Ion	Ratio	Lower	Upper
56	100		
69	42.3	22.2	33.4#
84	84.3	66.4	99.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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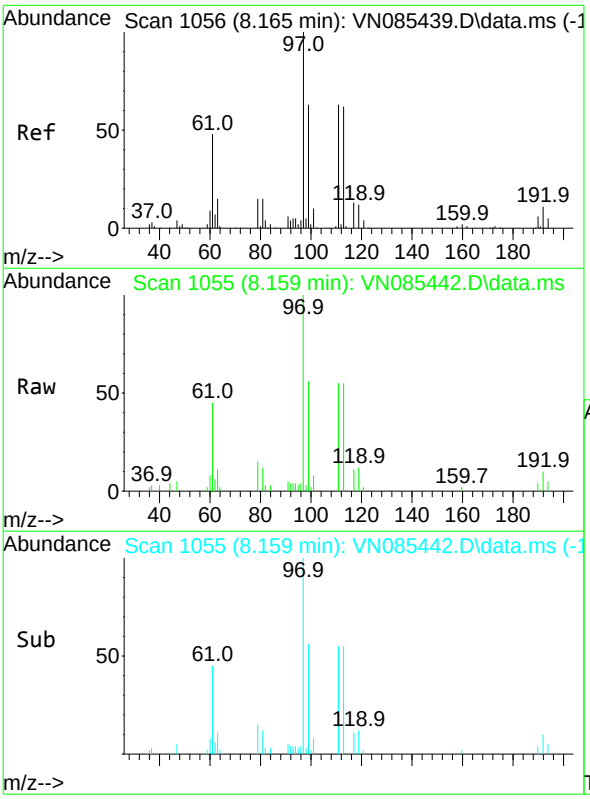
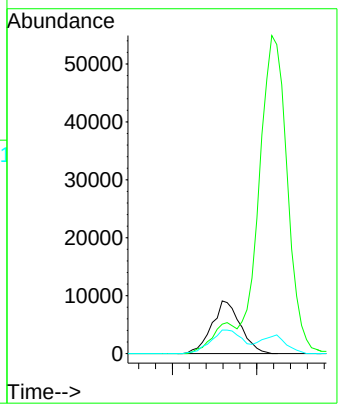
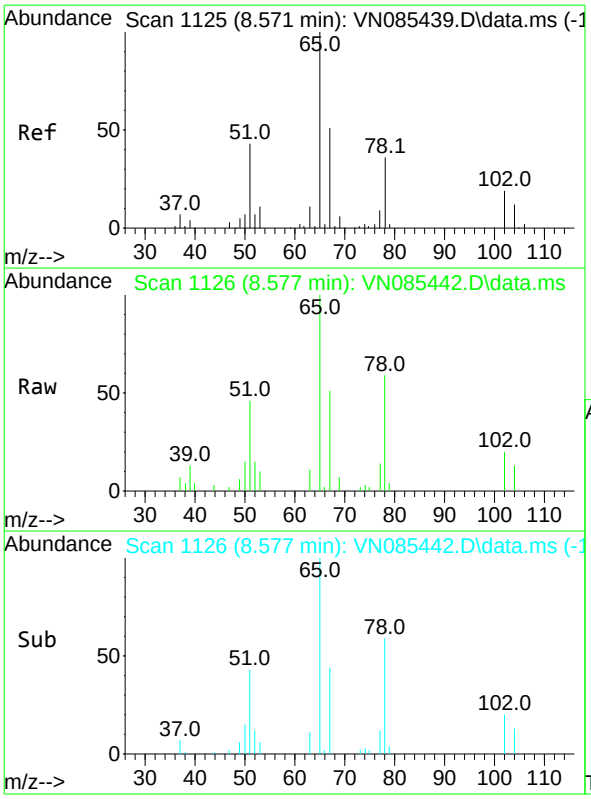


#32
1,1,1-Trichloroethane
Concen: 5.372 ug/l
RT: 8.159 min Scan# 1055
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 97 Resp: 21416

Ion	Ratio	Lower	Upper
97	100		
99	50.5	49.8	74.6
61	50.1	41.4	62.2

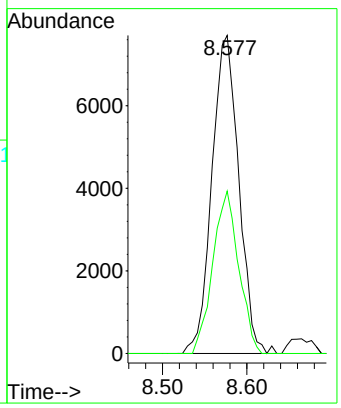




#33
1,2-Dichloroethane-d4
Concen: 5.660 ug/l
RT: 8.577 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 65 Resp: 17046

Ion	Ratio	Lower	Upper
65	100		
67	49.2	0.0	101.6



Instrument :
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ClientSampleId :
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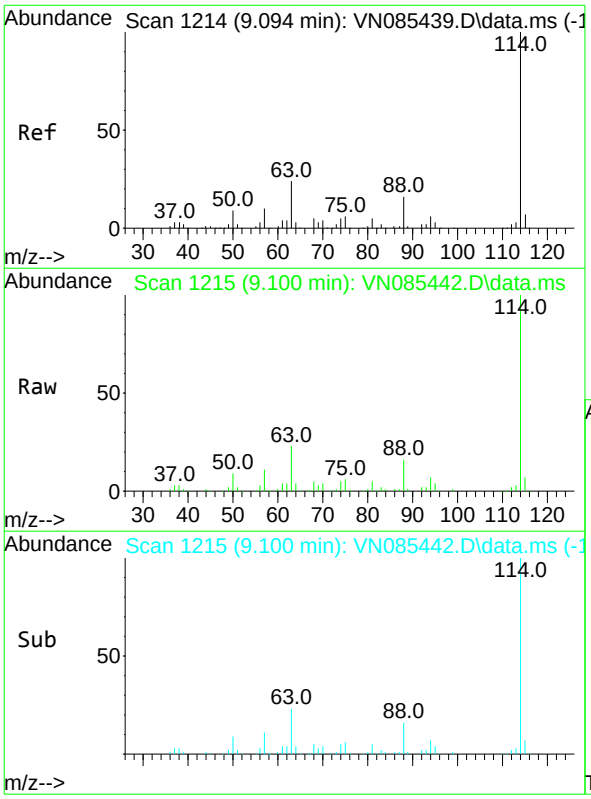
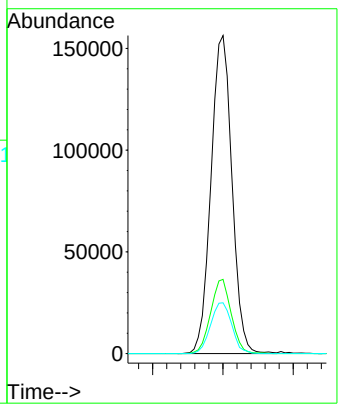
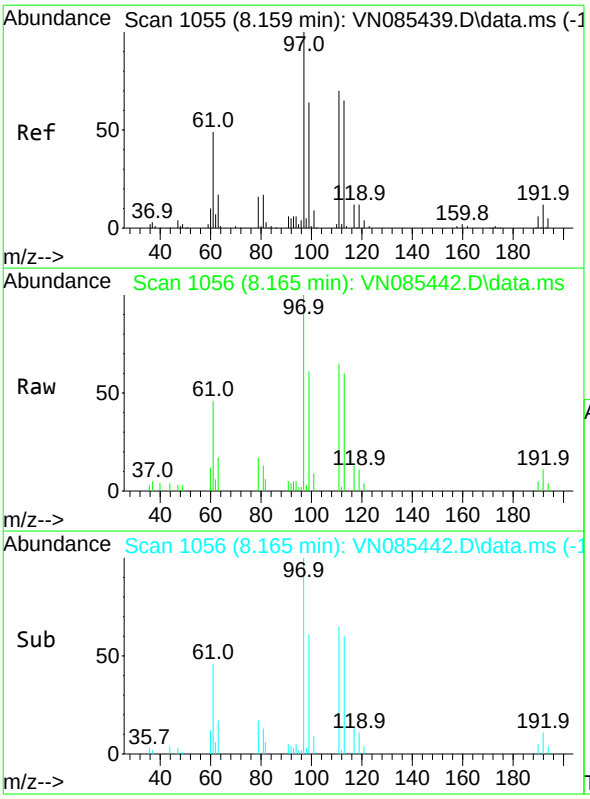


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:114 Resp: 324413

Ion	Ratio	Lower	Upper
114	100		
63	23.3	0.0	47.6
88	16.0	0.0	32.6

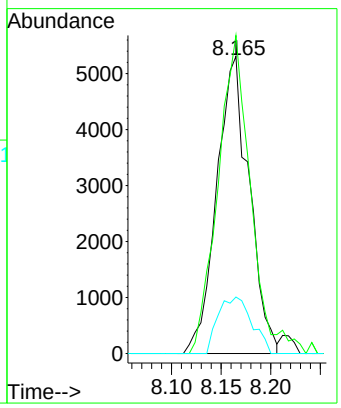




#35
Dibromofluoromethane
Concen: 5.377 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:113 Resp: 12102

Ion	Ratio	Lower	Upper
113	100		
111	107.4	82.7	124.1
192	19.7	14.3	21.5



Instrument :
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ClientSampleId :
VSTDICC005

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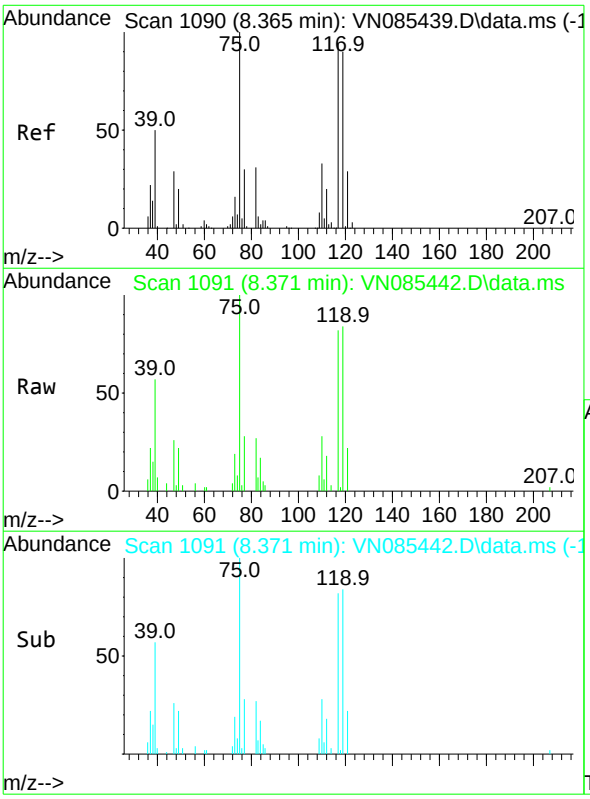
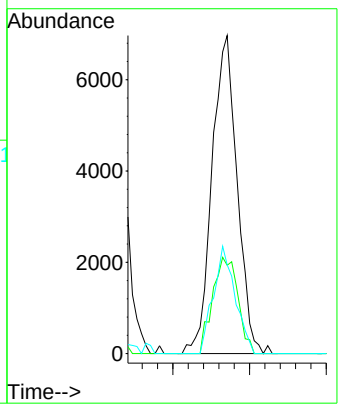
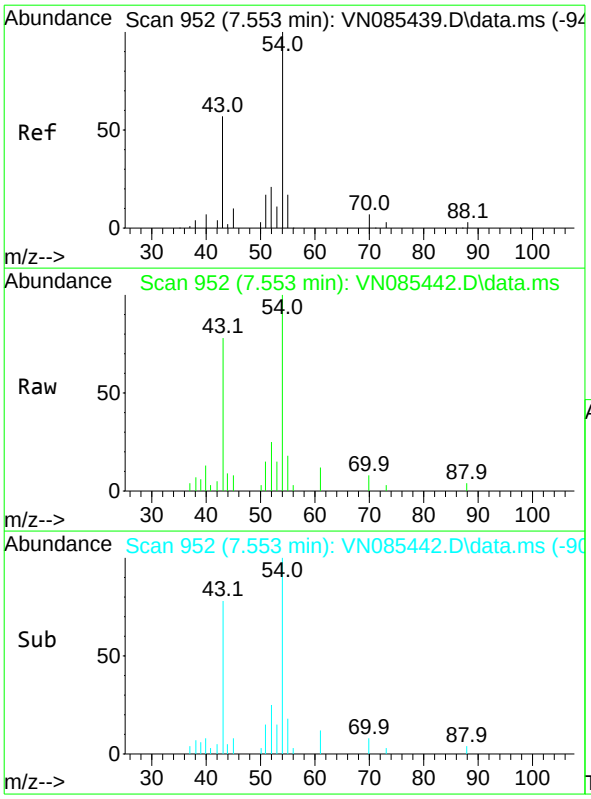


#36
1,1-Dichloropropene
Concen: 5.029 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 15886

Ion	Ratio	Lower	Upper
75	100		
110	30.3	16.5	49.5
77	29.2	24.4	36.6

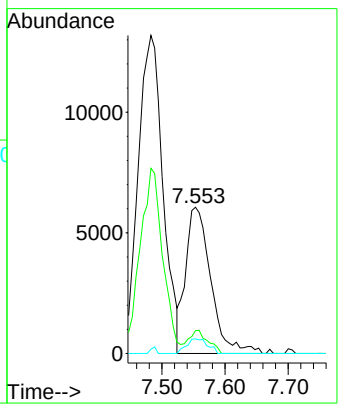




#37
Ethyl Acetate
Concen: 5.294 ug/l m
RT: 7.553 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 16879

Ion	Ratio	Lower	Upper
43	100		
61	12.3	10.9	16.3
70	8.4	7.5	11.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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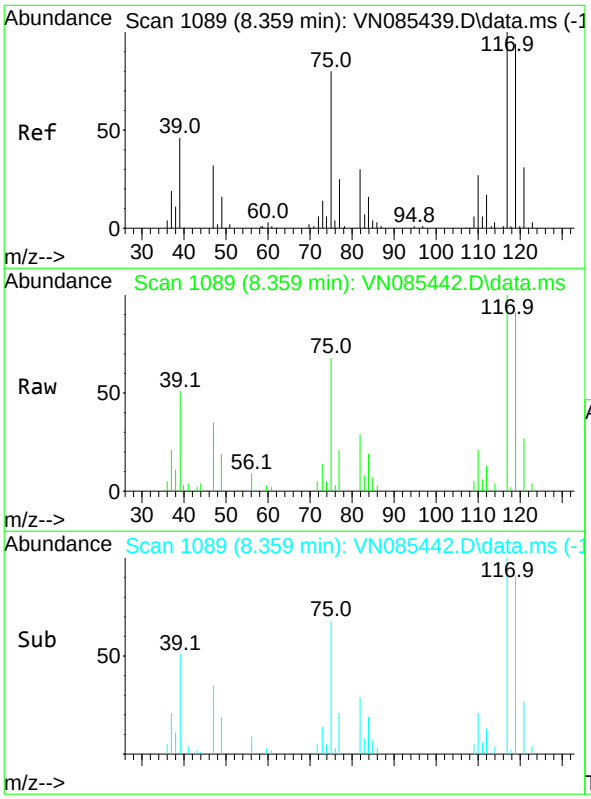
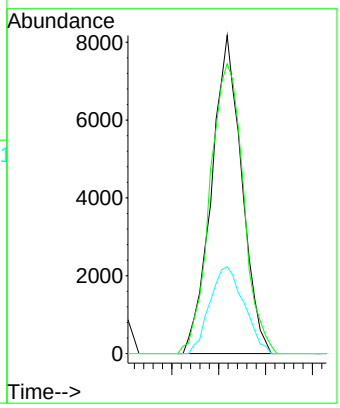
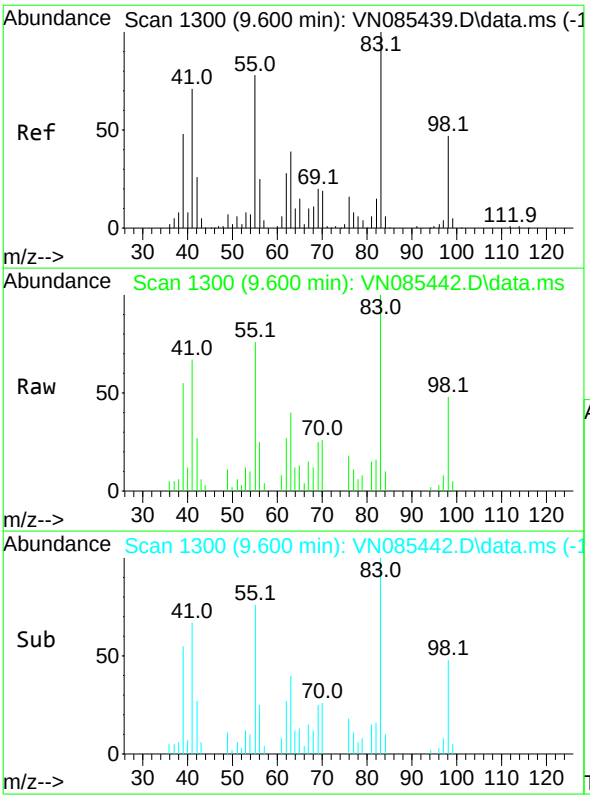


#38
Carbon Tetrachloride
Concen: 5.065 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:117 Resp: 18317

Ion	Ratio	Lower	Upper
117	100		
119	91.1	75.4	113.2
121	27.3	24.6	37.0





#39
Methylcyclohexane
Concen: 4.776 ug/l
RT: 9.600 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

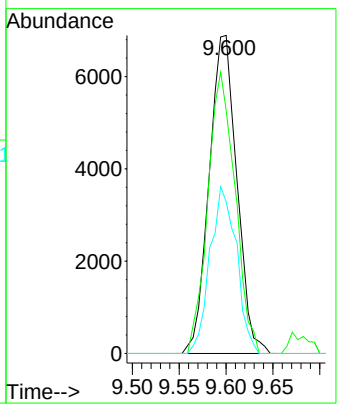
Tgt Ion: 83 Resp: 14175

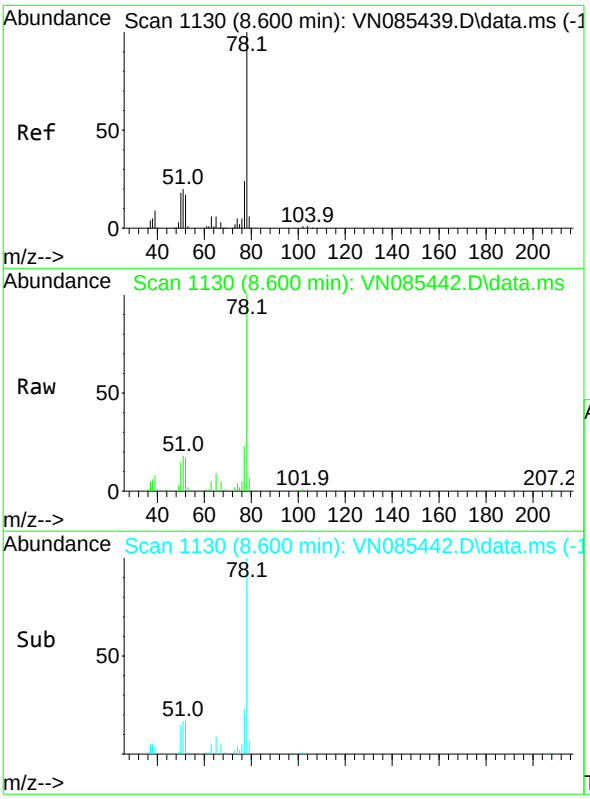
Ion	Ratio	Lower	Upper
83	100		
55	76.5	62.6	94.0
98	47.7	37.7	56.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

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

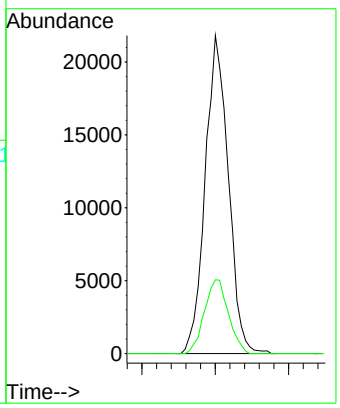


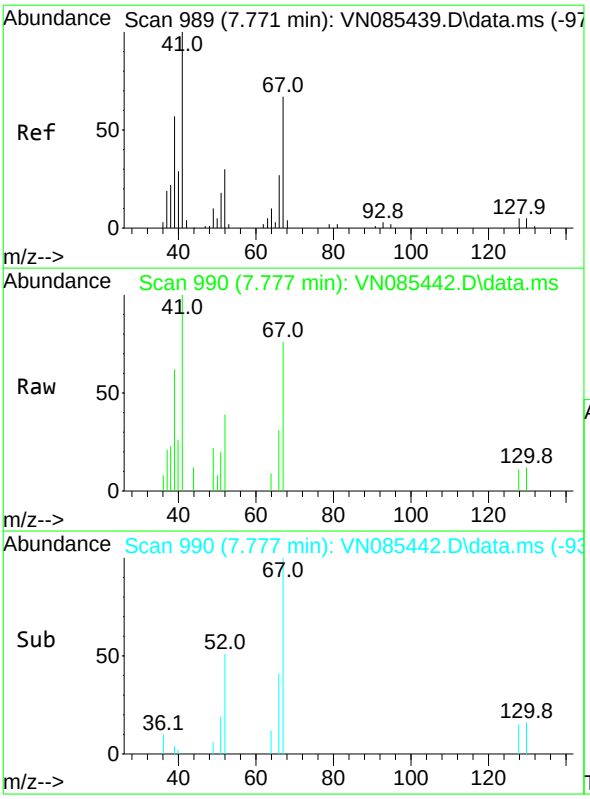


#40
Benzene
Concen: 5.040 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 78 Resp: 47833

Ion	Ratio	Lower	Upper
78	100		
77	23.2	19.0	28.6

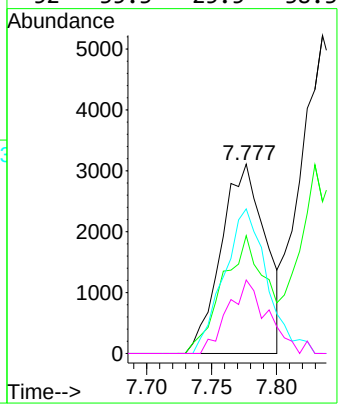




#41
Methacrylonitrile
Concen: 4.449 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 41 Resp: 7380

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



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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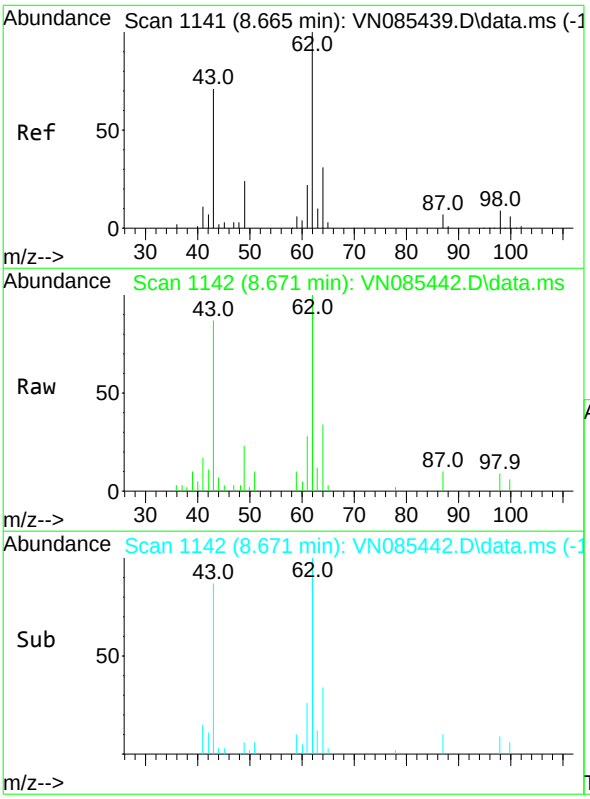
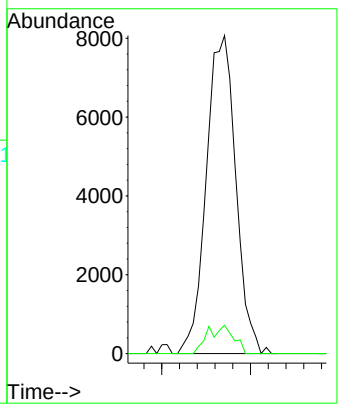
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

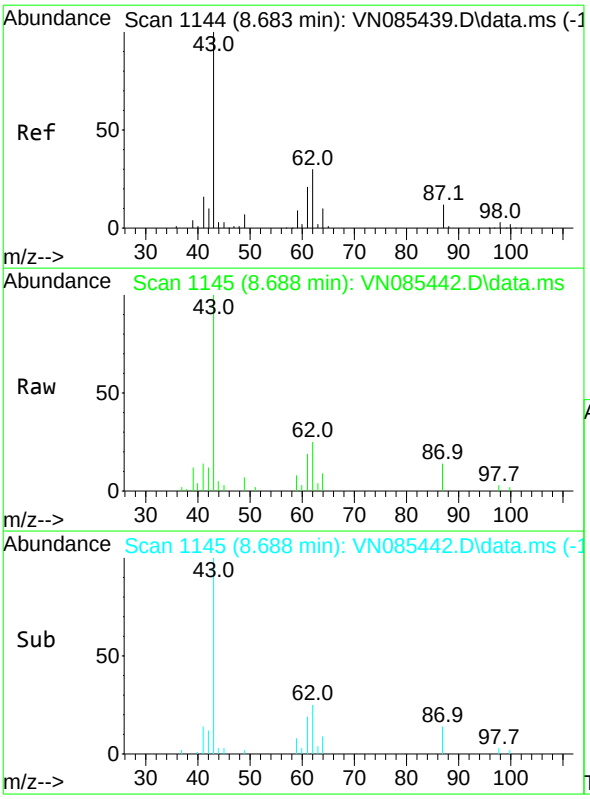


#42
1,2-Dichloroethane
Concen: 5.211 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 62 Resp: 18628

Ion	Ratio	Lower	Upper
62	100		
98	7.8	0.0	17.0

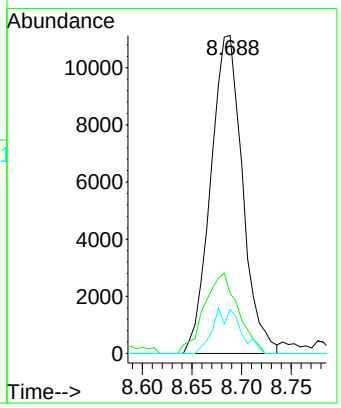




#43
Isopropyl Acetate
Concen: 4.853 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 24792

Ion	Ratio	Lower	Upper
43	100		
61	27.0	20.7	31.1
87	12.3	9.8	14.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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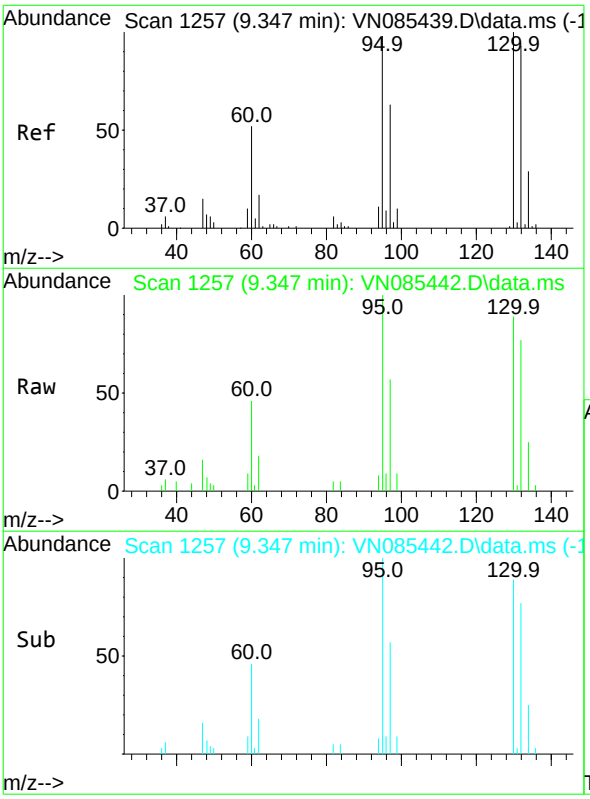
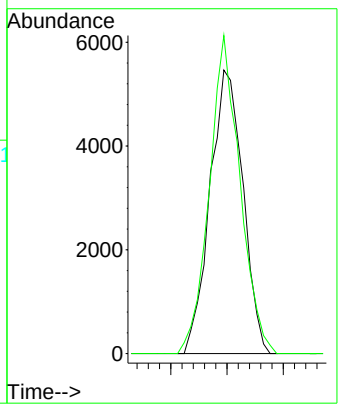
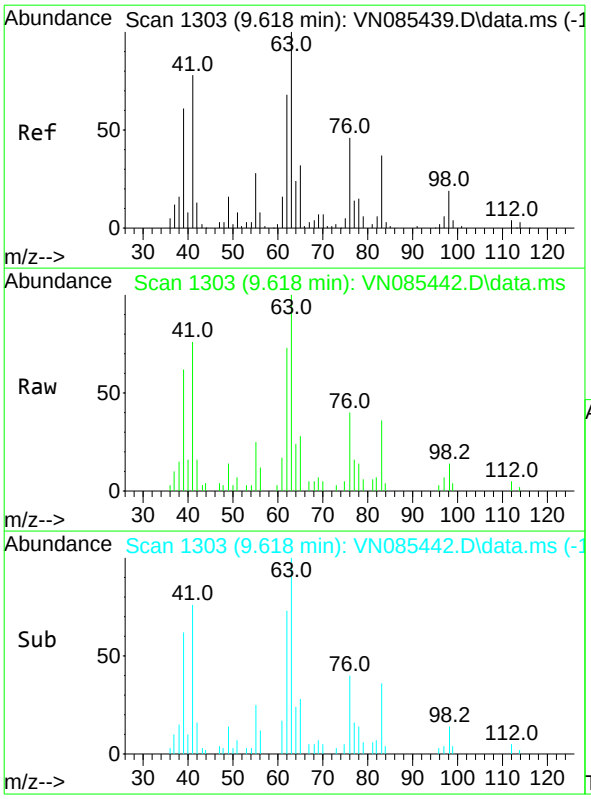


#44
Trichloroethene
Concen: 5.039 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:130 Resp: 11133

Ion	Ratio	Lower	Upper
130	100		
95	112.2	0.0	195.8

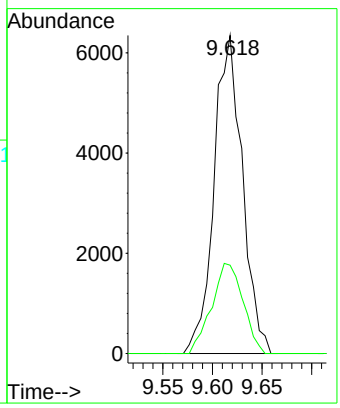




#45
1,2-Dichloropropane
Concen: 5.194 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 63 Resp: 12591

Ion	Ratio	Lower	Upper
63	100		
65	27.8	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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Reviewed By :John Carlone 01/15/2025
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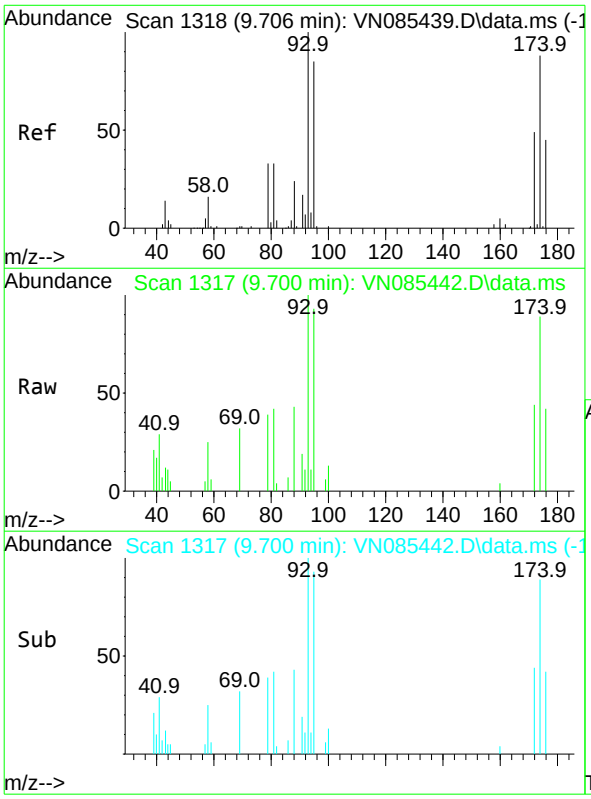
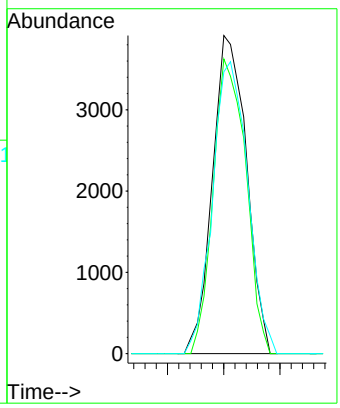
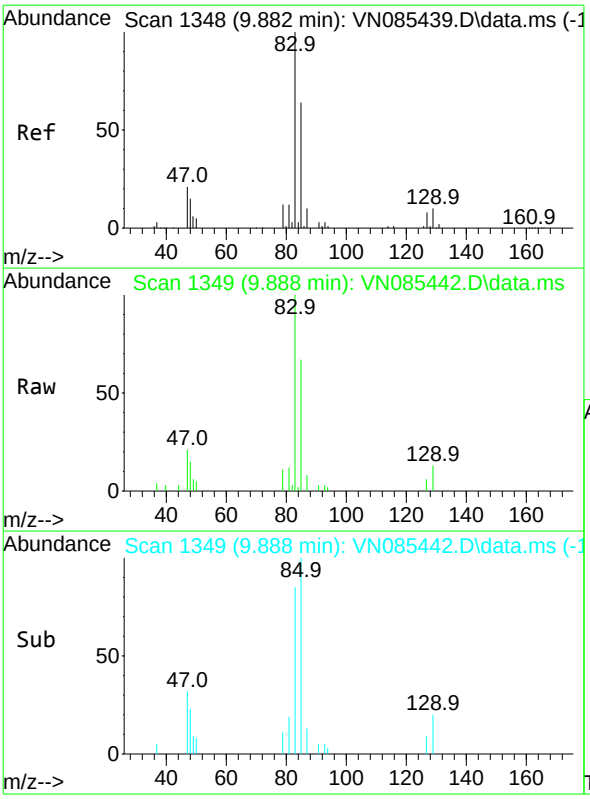


#46
Dibromomethane
Concen: 4.705 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 93 Resp: 8230

Ion	Ratio	Lower	Upper
93	100		
95	88.7	64.7	97.1
174	95.0	69.0	103.4

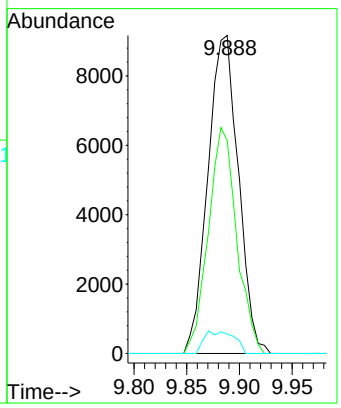




#47
Bromodichloromethane
Concen: 5.179 ug/l
RT: 9.888 min Scan# 13
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 18456

Ion	Ratio	Lower	Upper
83	100		
85	67.0	51.2	76.8
127	6.1	6.5	9.7#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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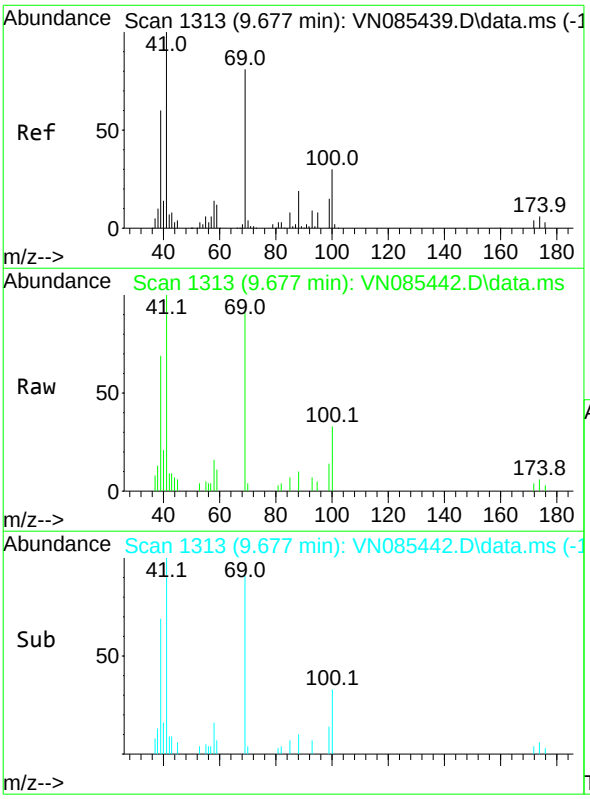
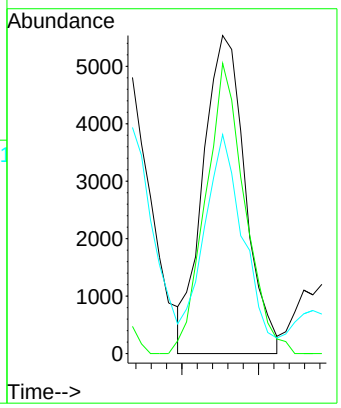
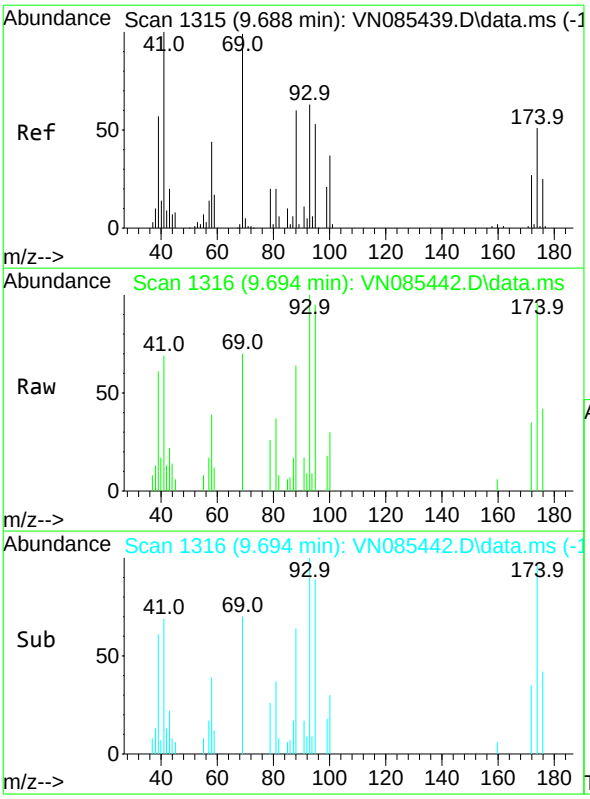


#48
Methyl methacrylate
Concen: 4.599 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 41 Resp: 10574

Ion	Ratio	Lower	Upper
41	100		
69	84.9	64.7	97.1
39	65.3	49.0	73.6





#49
1,4-Dioxane
Concen: 93.477 ug/l
RT: 9.694 min Scan# 13
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 88 Resp: 3619

Ion	Ratio	Lower	Upper
88	100		
43	32.3	26.6	39.8
58	77.9	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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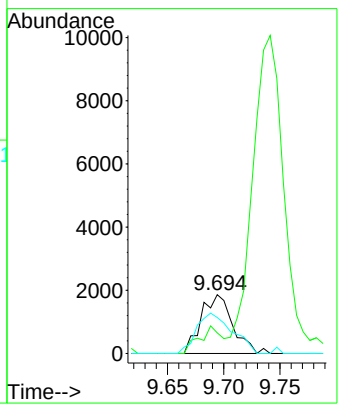
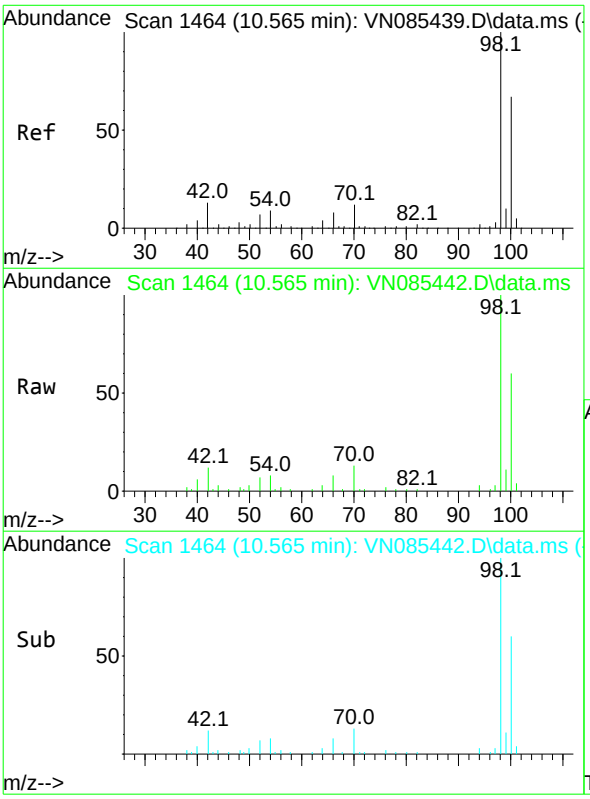
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

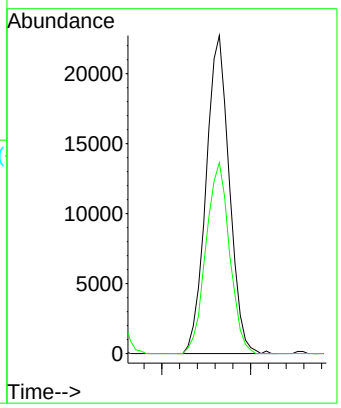


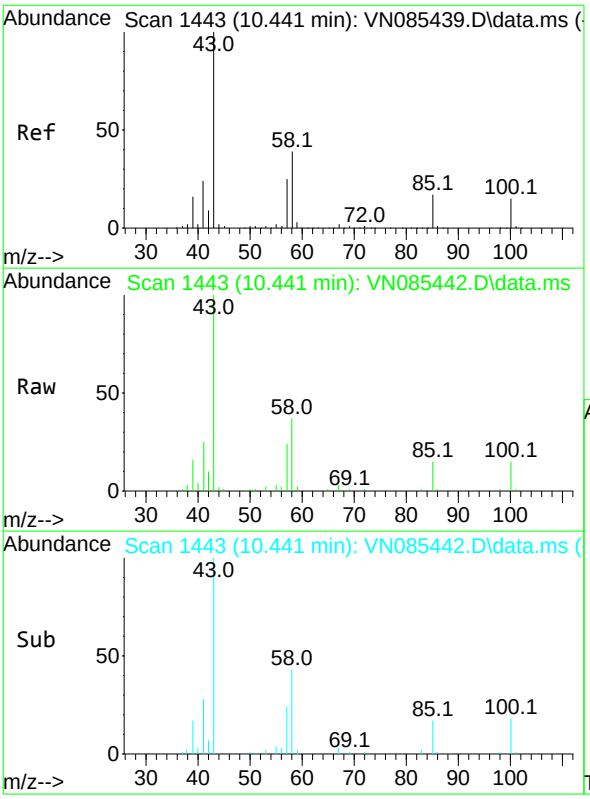


#50
Toluene-d8
Concen: 5.168 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 98 Resp: 41328

Ion	Ratio	Lower	Upper
98	100		
100	60.9	52.2	78.4





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

Tgt Ion: 43 Resp: 71889

Ion	Ratio	Lower	Upper
43	100		
58	36.9	30.5	45.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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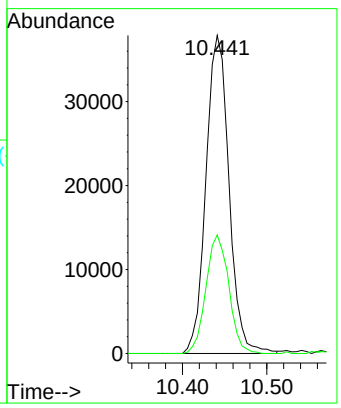
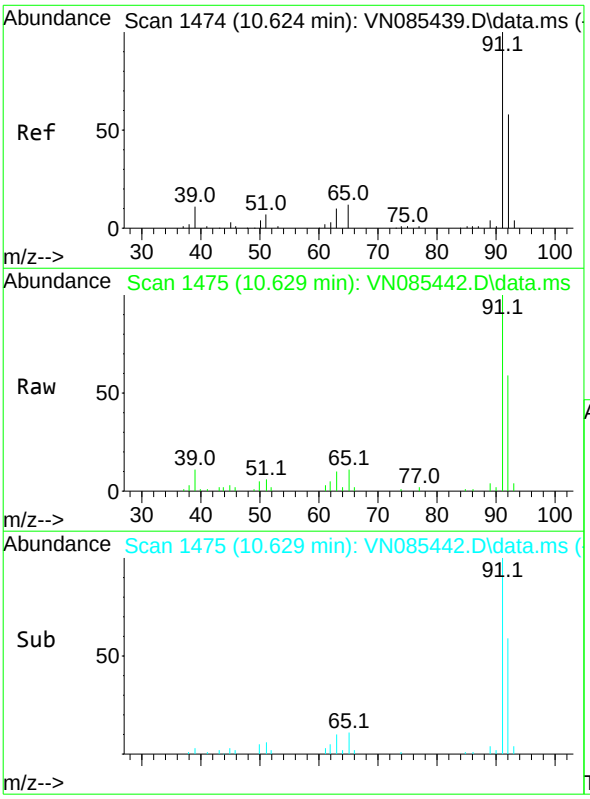
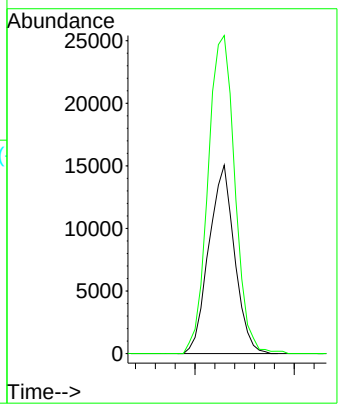


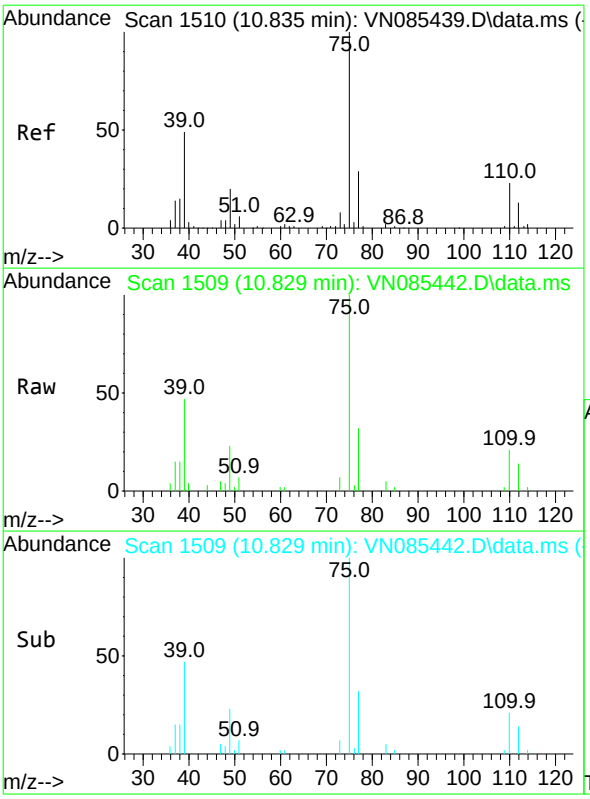


#52
Toluene
Concen: 4.928 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 92 Resp: 27098

Ion	Ratio	Lower	Upper
92	100		
91	176.4	139.2	208.8

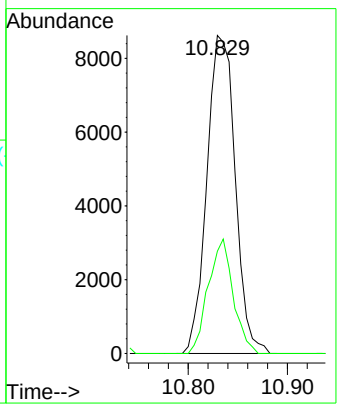




#53
t-1,3-Dichloropropene
Concen: 5.077 ug/l
RT: 10.829 min Scan# 15
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 17099

Ion	Ratio	Lower	Upper
75	100		
77	32.2	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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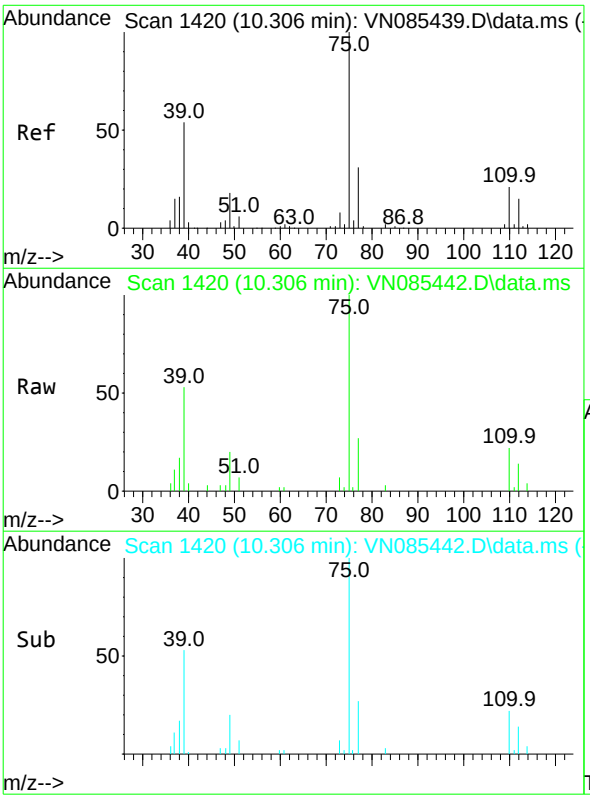
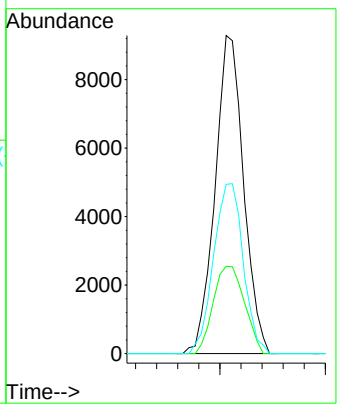
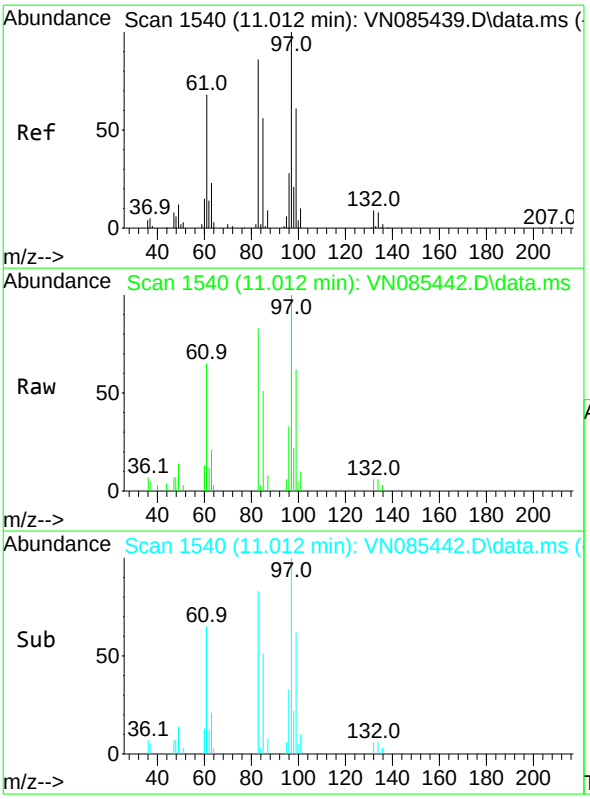


#54
cis-1,3-Dichloropropene
Concen: 4.848 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 17440

Ion	Ratio	Lower	Upper
75	100		
77	27.5	25.0	37.4
39	53.2	43.1	64.7

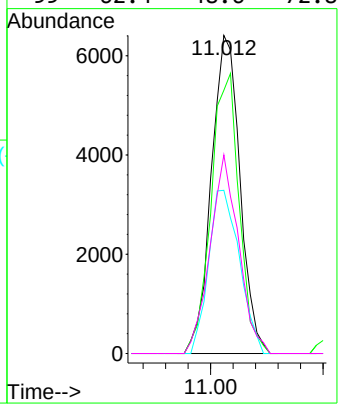




#55
1,1,2-Trichloroethane
Concen: 5.197 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 97 Resp: 11311

Ion	Ratio	Lower	Upper
97	100		
83	82.7	69.0	103.6
85	51.3	44.6	66.8
99	62.4	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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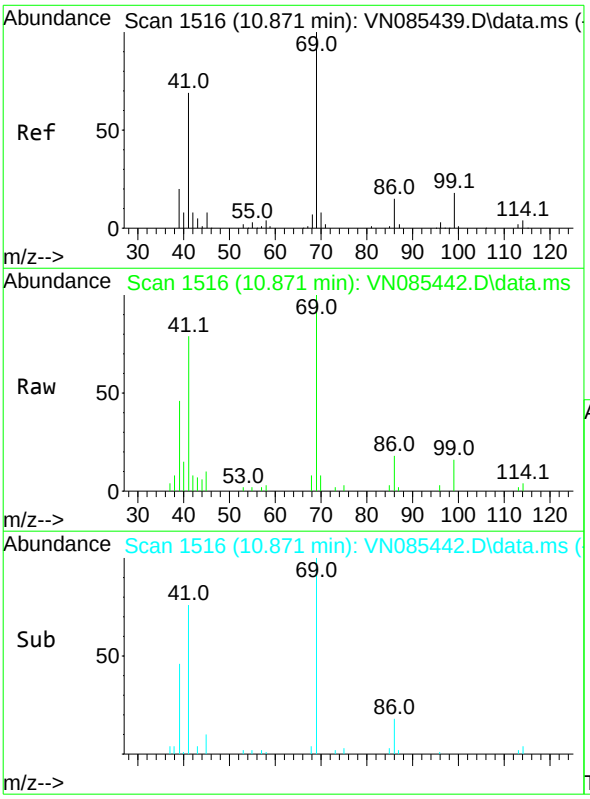
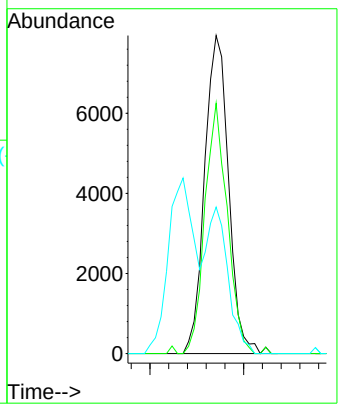
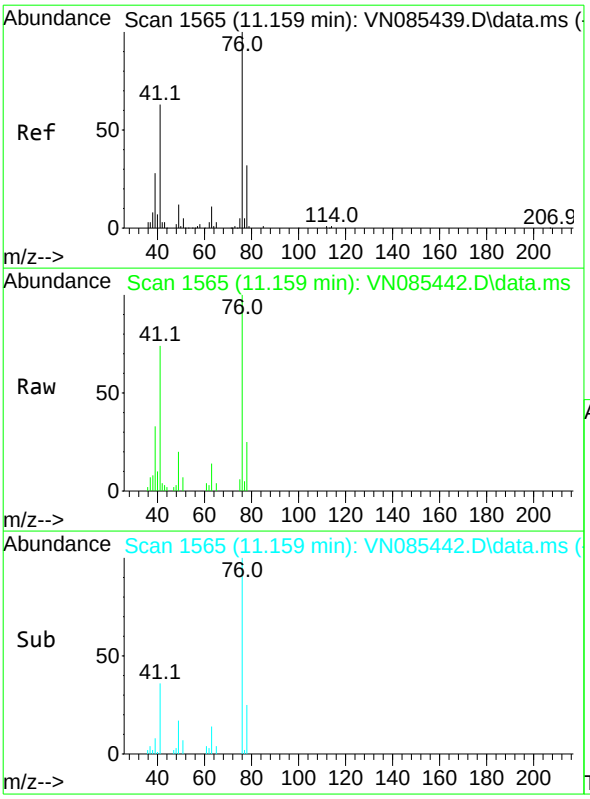


#56
Ethyl methacrylate
Concen: 5.627 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 69 Resp: 14094

Ion	Ratio	Lower	Upper
69	100		
41	73.8	54.6	82.0
39	42.6	32.4	48.6





#57
1,3-Dichloropropane
Concen: 5.006 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 76 Resp: 18945

Ion	Ratio	Lower	Upper
76	100		
78	32.2	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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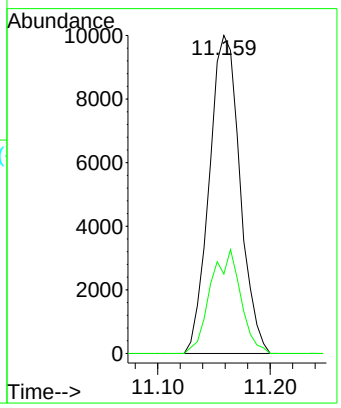
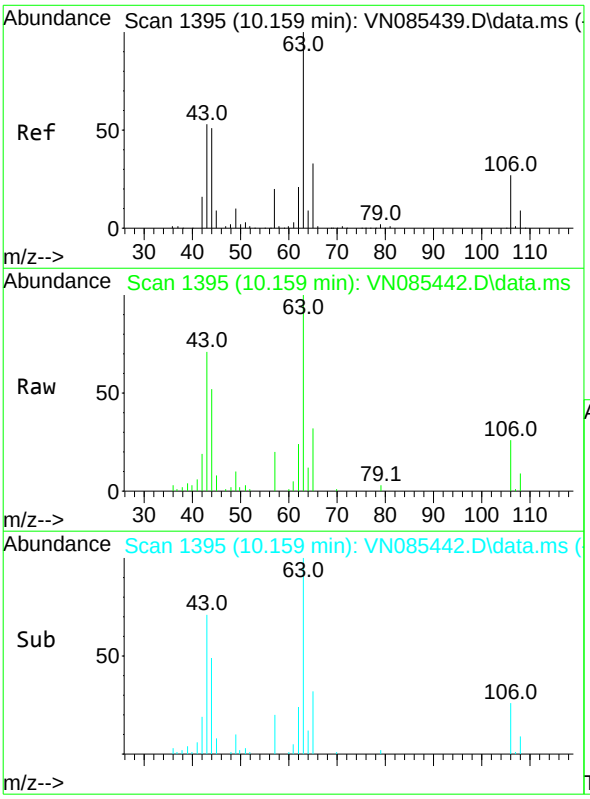
Supervised By :Mahesh Dadoda 01/15/2025

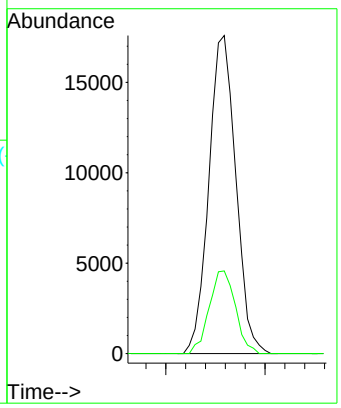


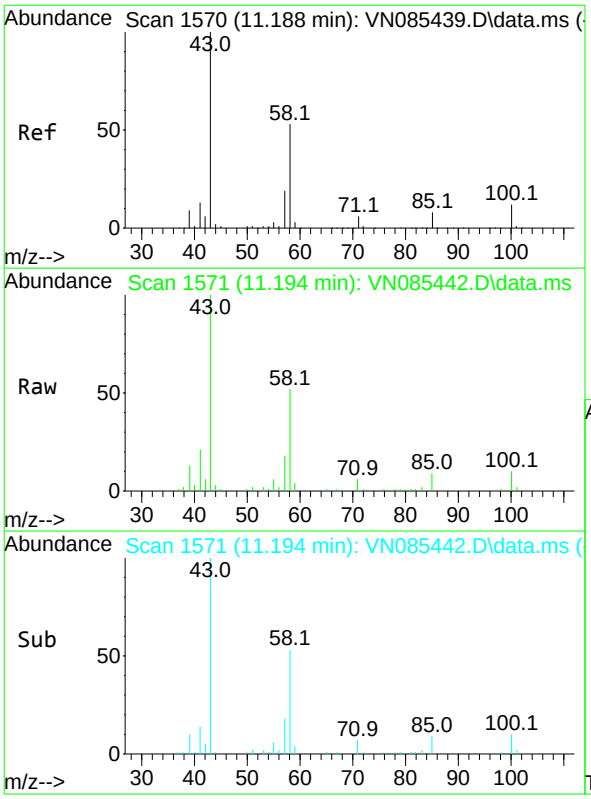


#58
2-Chloroethyl Vinyl ether
Concen: 24.047 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 63 Resp: 33210

Ion	Ratio	Lower	Upper
63	100		
106	25.2	21.6	32.4





#59
2-Hexanone
Concen: 23.501 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 49021

Ion	Ratio	Lower	Upper
43	100		
58	48.3	26.2	78.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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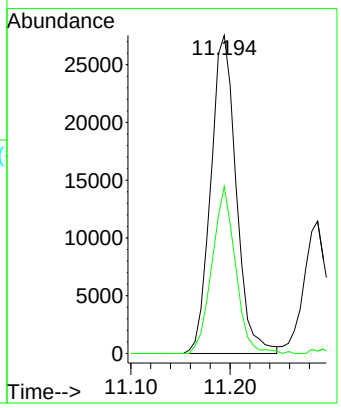
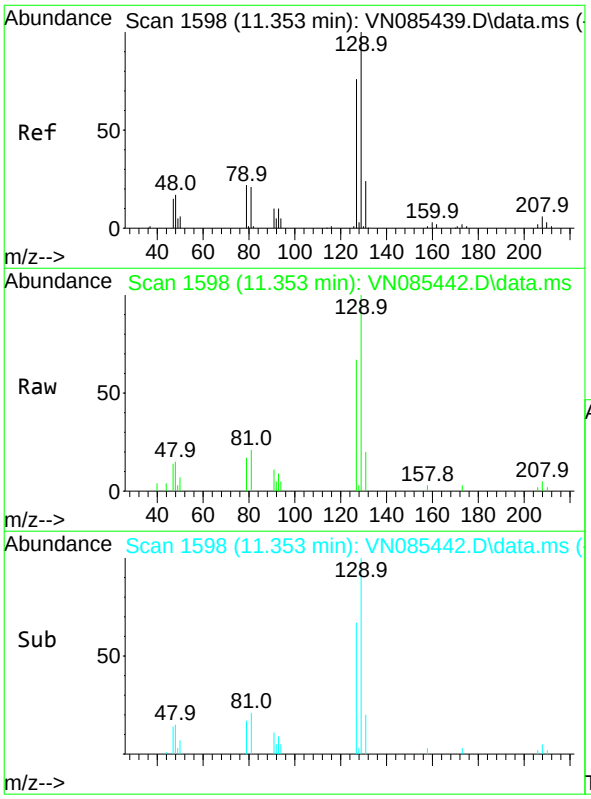
Supervised By :Mahesh Dadoda 01/15/2025

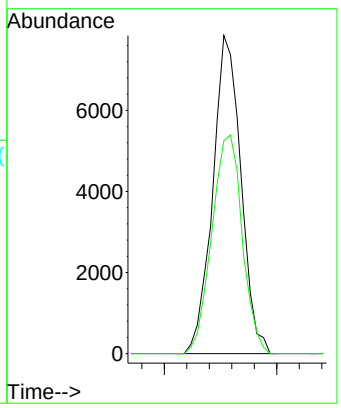


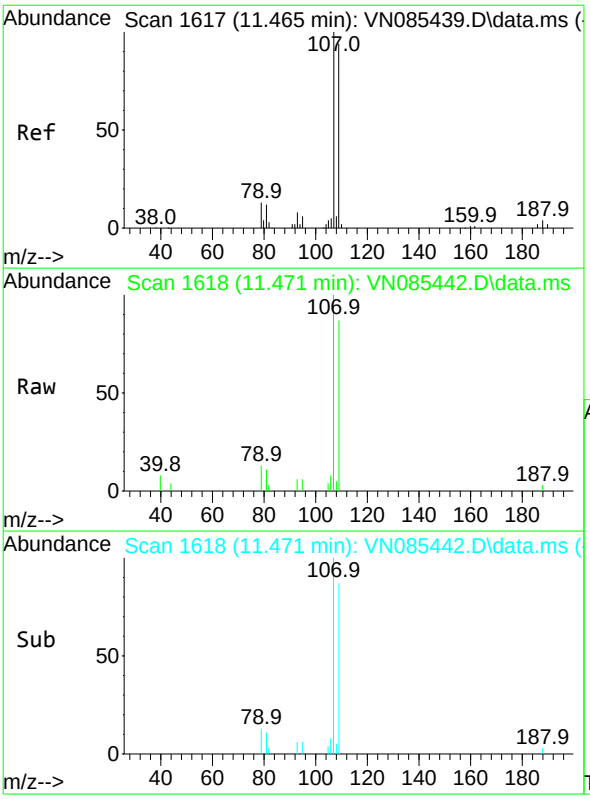


#60
Dibromochloromethane
Concen: 5.190 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:129 Resp: 13635

Ion	Ratio	Lower	Upper
129	100		
127	73.9	38.6	115.8





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

Tgt Ion:107 Resp: 10419

Ion	Ratio	Lower	Upper
107	100		
109	96.8	75.9	113.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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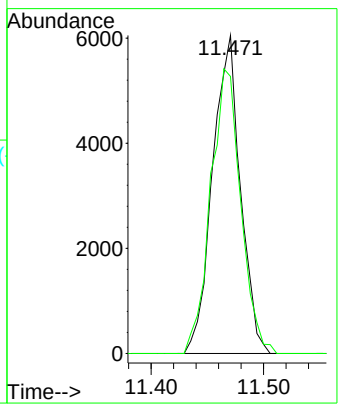
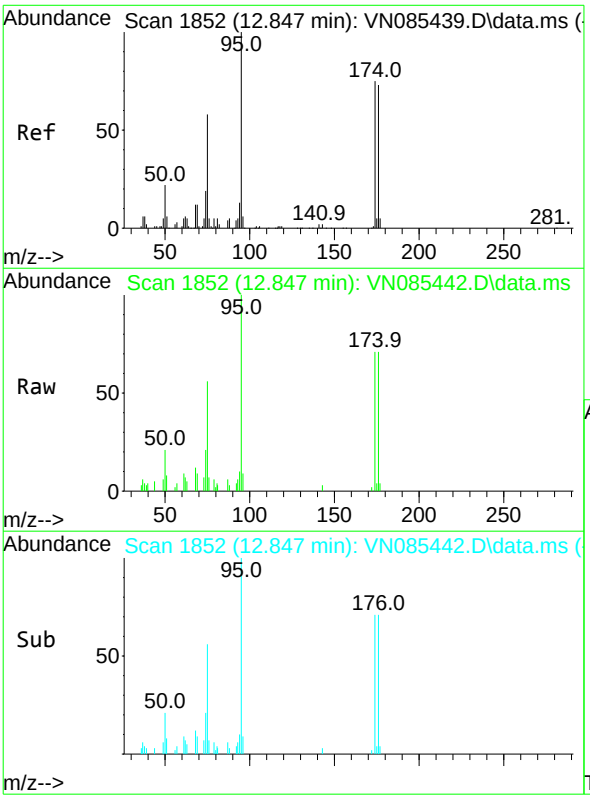
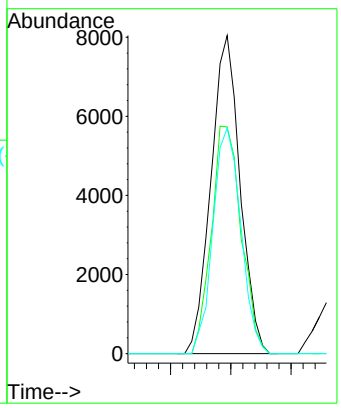


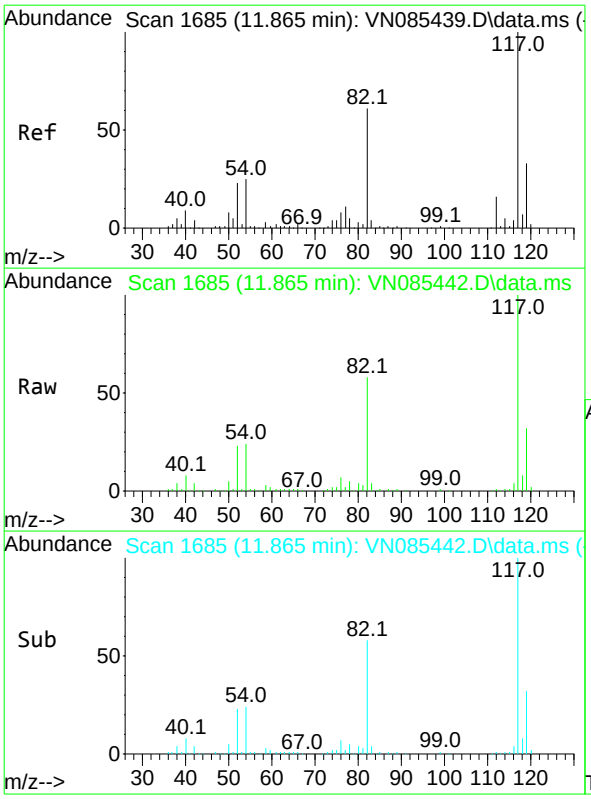


#62
4-Bromofluorobenzene
Concen: 4.943 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 95 Resp: 13520

Ion	Ratio	Lower	Upper
95	100		
174	73.2	0.0	145.0
176	68.0	0.0	142.4





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion:117 Resp: 282203

Ion	Ratio	Lower	Upper
117	100		
82	58.3	48.6	72.8
119	32.1	26.6	39.8

Manual Integrations
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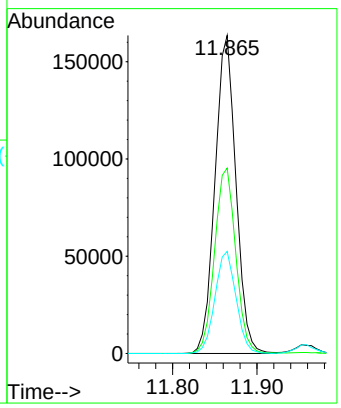
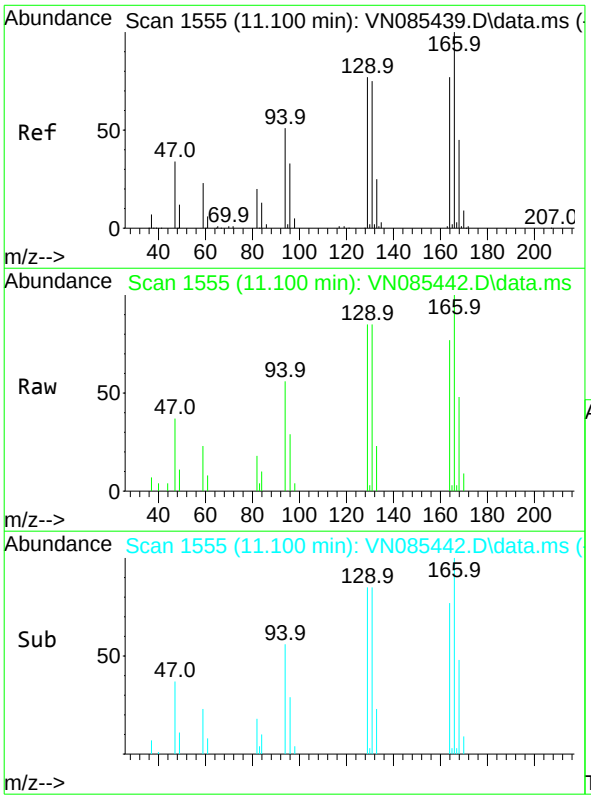
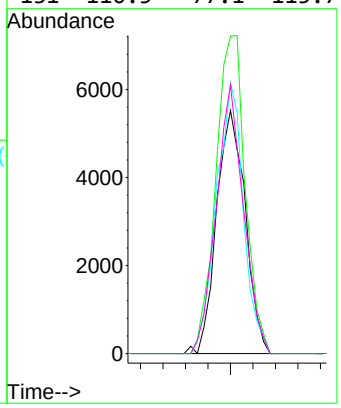


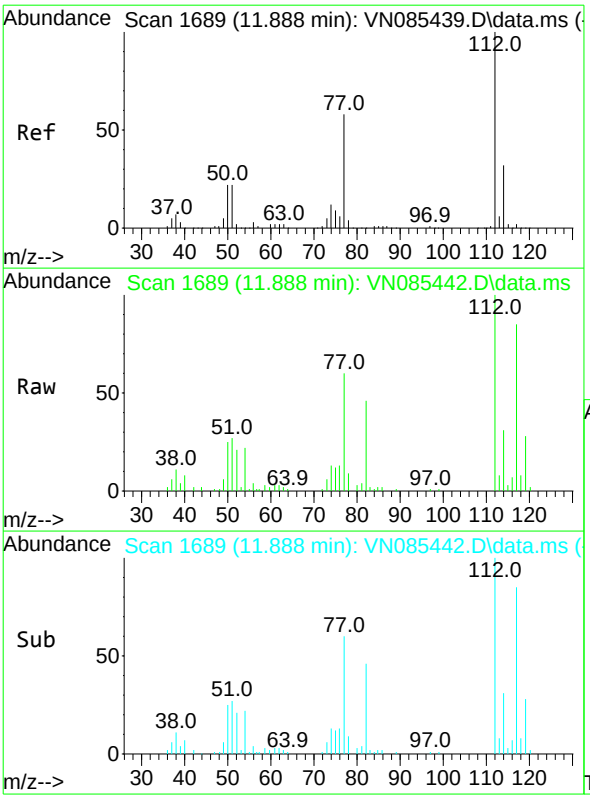


#64
Tetrachloroethene
Concen: 5.071 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:164 Resp: 9756

Ion	Ratio	Lower	Upper
164	100		
166	130.6	103.4	155.2
129	111.5	79.2	118.8
131	110.5	77.1	115.7

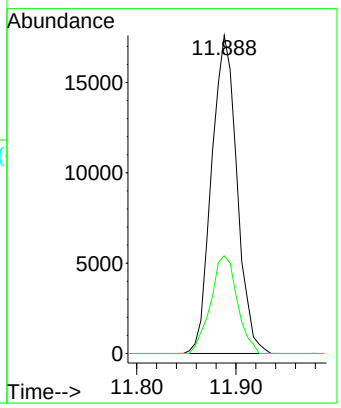




#65
Chlorobenzene
Concen: 5.065 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:112 Resp: 31312

Ion	Ratio	Lower	Upper
112	100		
114	30.7	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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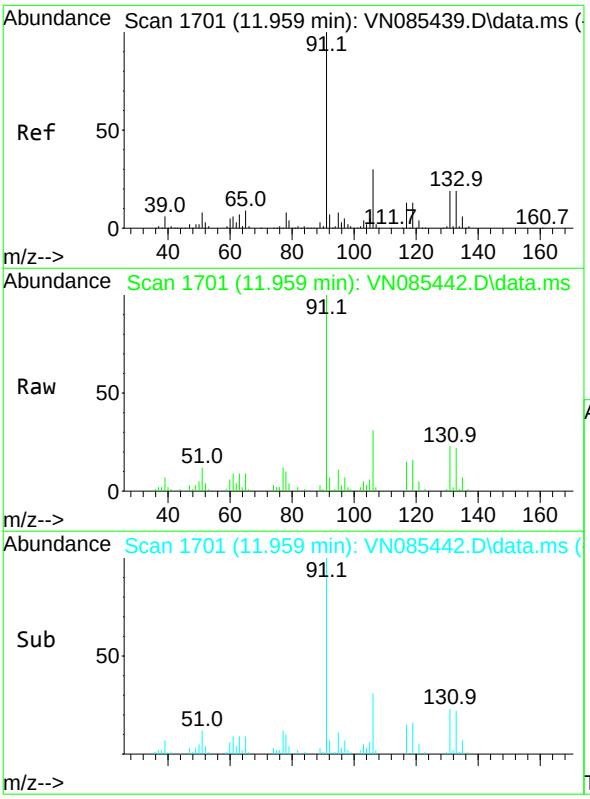
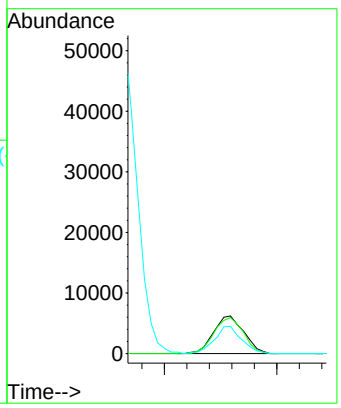
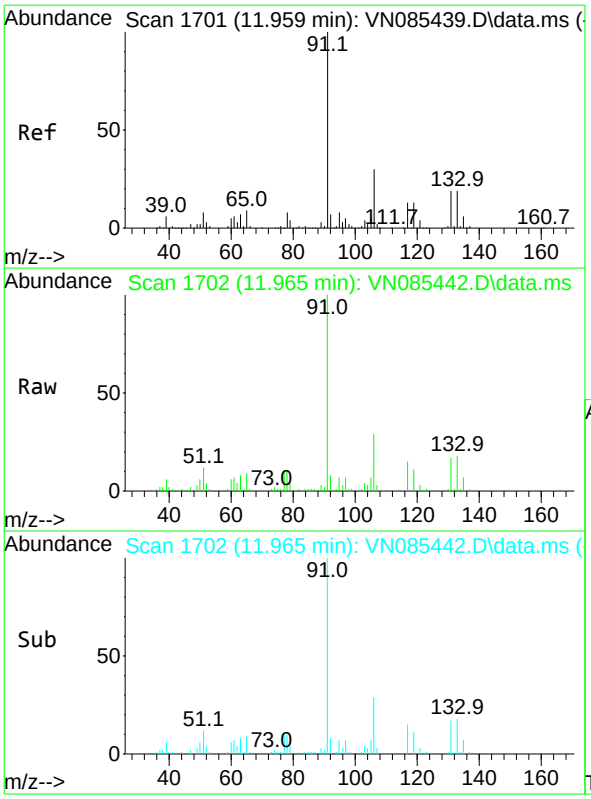


#66
1,1,1,2-Tetrachloroethane
Concen: 5.121 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:131 Resp: 11620

Ion	Ratio	Lower	Upper
131	100		
133	92.7	47.4	142.3
119	65.0	33.1	99.5

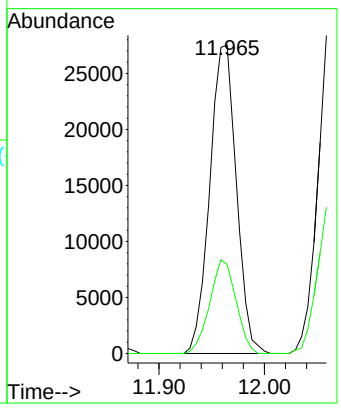




#67
Ethyl Benzene
Concen: 4.789 ug/l
RT: 11.965 min Scan# 17
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 48216

Ion	Ratio	Lower	Upper
91	100		
106	28.9	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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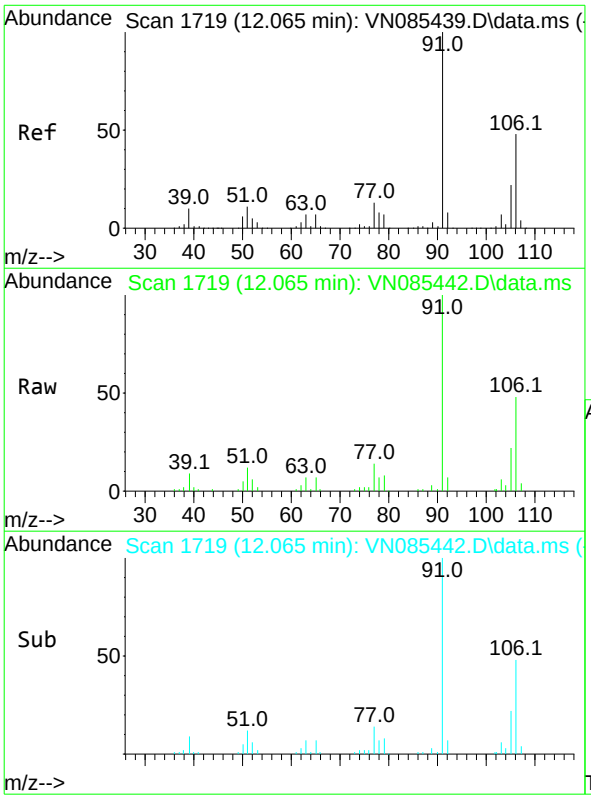
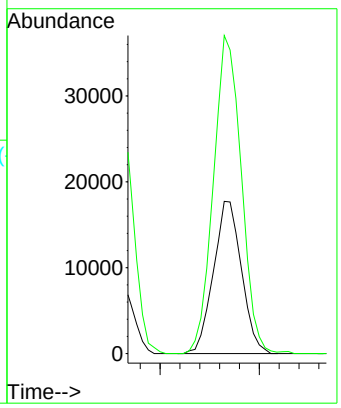
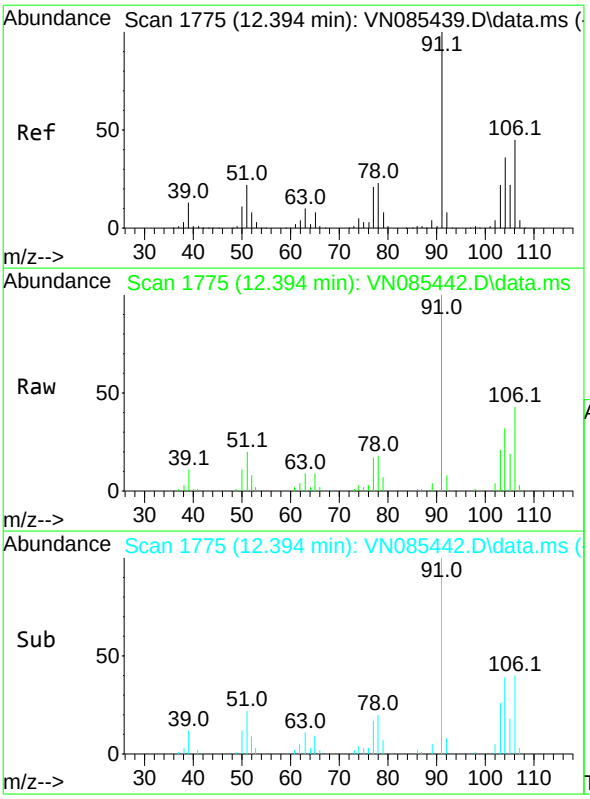


#68
m/p-Xylenes
Concen: 9.344 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:106 Resp: 34771

Ion	Ratio	Lower	Upper
106	100		
91	207.9	167.7	251.5

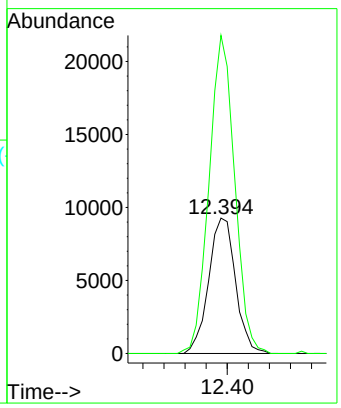




#69
o-Xylene
Concen: 4.617 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:106 Resp: 16419

Ion	Ratio	Lower	Upper
106	100		
91	224.0	110.4	331.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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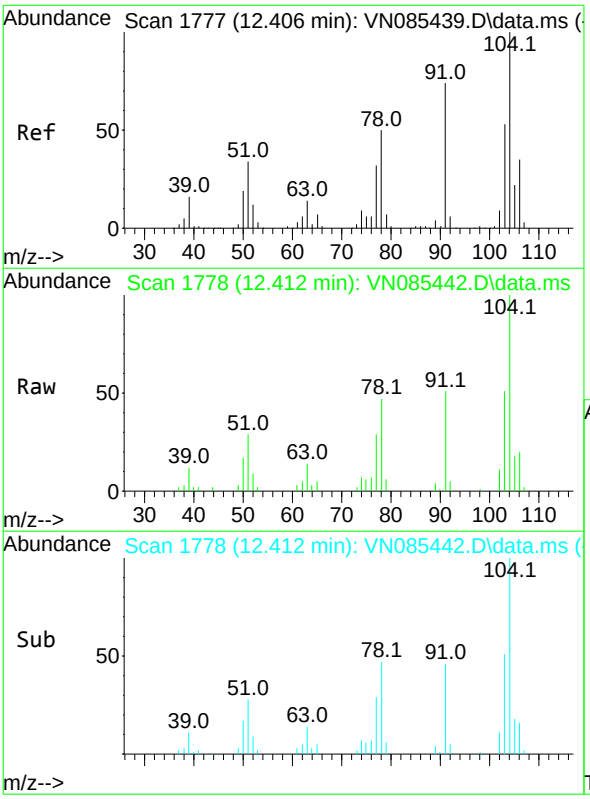
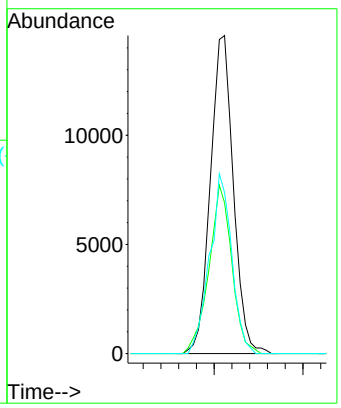
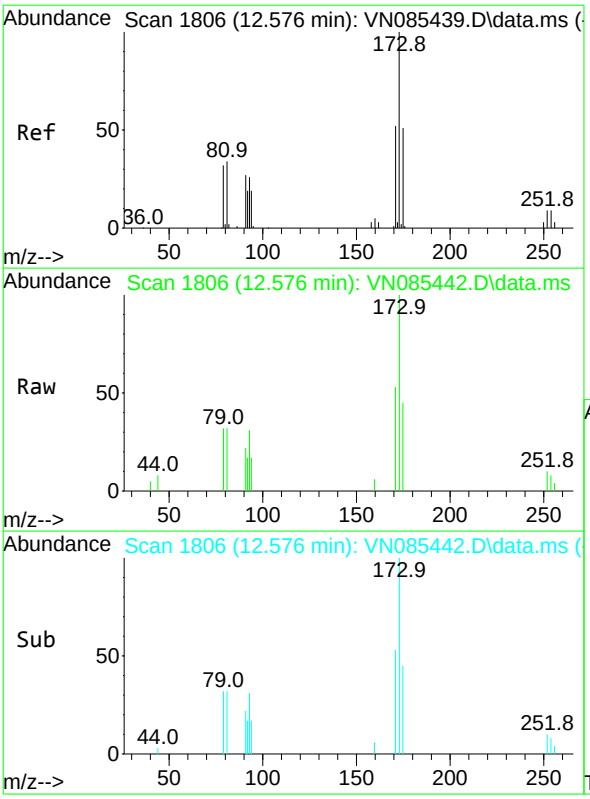


#70
Styrene
Concen: 4.454 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:104 Resp: 26218

Ion	Ratio	Lower	Upper
104	100		
78	52.6	42.5	63.7
103	54.2	43.8	65.8

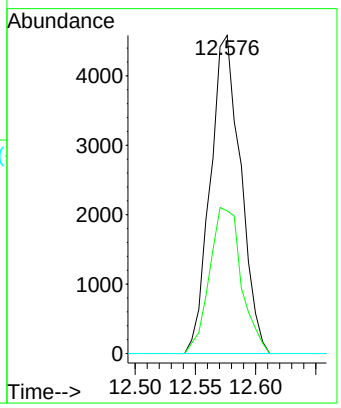




#71
Bromoform
Concen: 4.938 ug/l
RT: 12.576 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:173 Resp: 8017

Ion	Ratio	Lower	Upper
173	100		
175	48.3	24.4	73.2
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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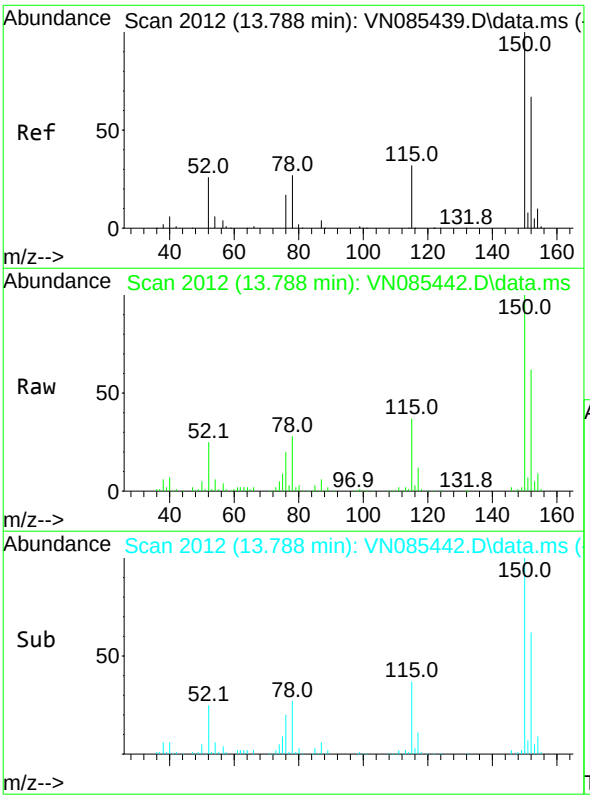
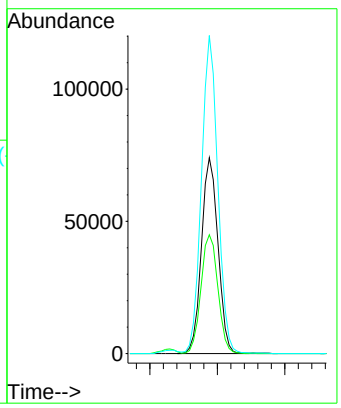
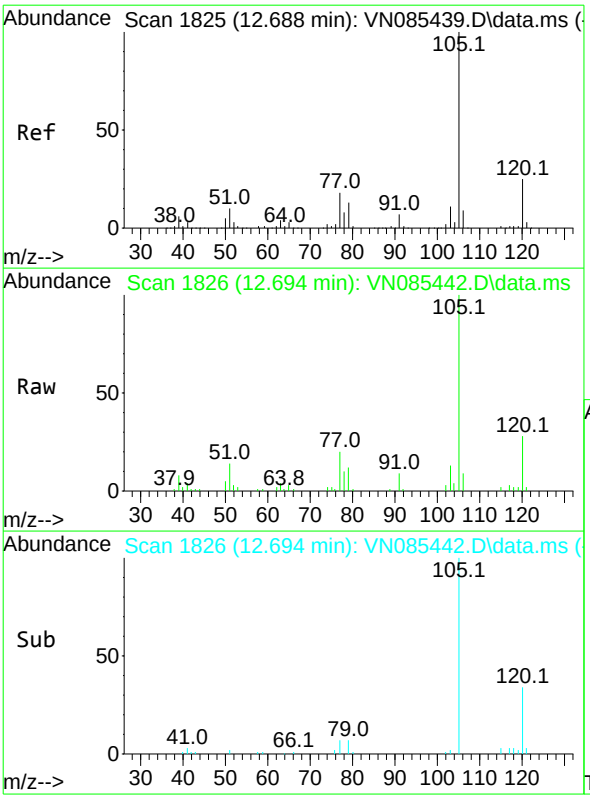


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:152 Resp: 126086

Ion	Ratio	Lower	Upper
152	100		
115	62.0	31.1	93.3
150	160.7	0.0	343.6

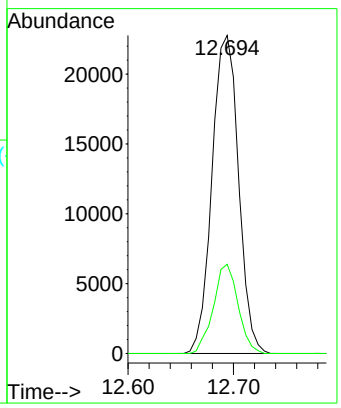




#73
Isopropylbenzene
Concen: 4.678 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 39811

Ion	Ratio	Lower	Upper
105	100		
120	26.1	12.8	38.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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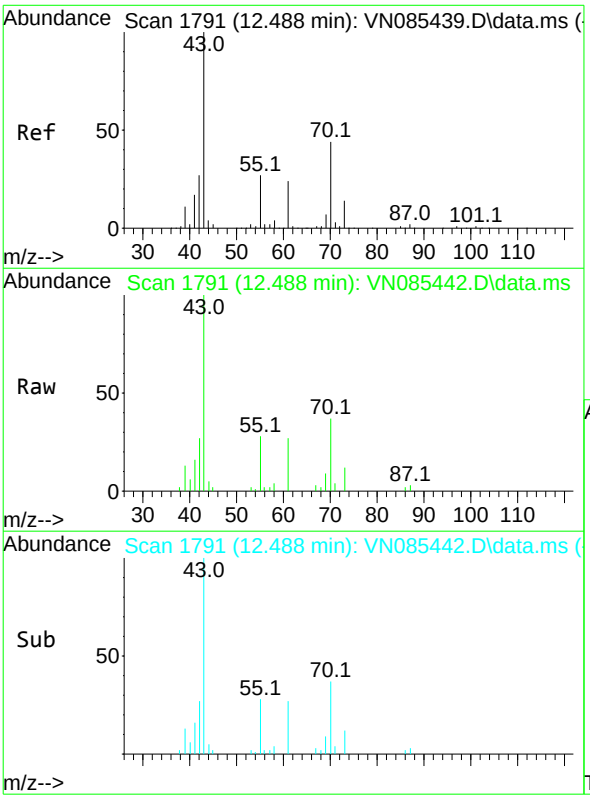
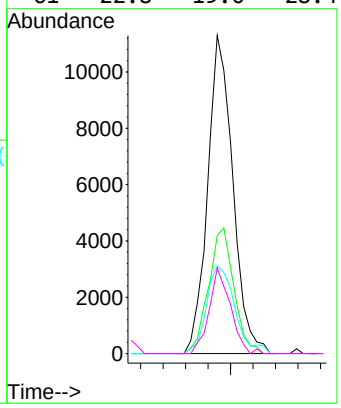
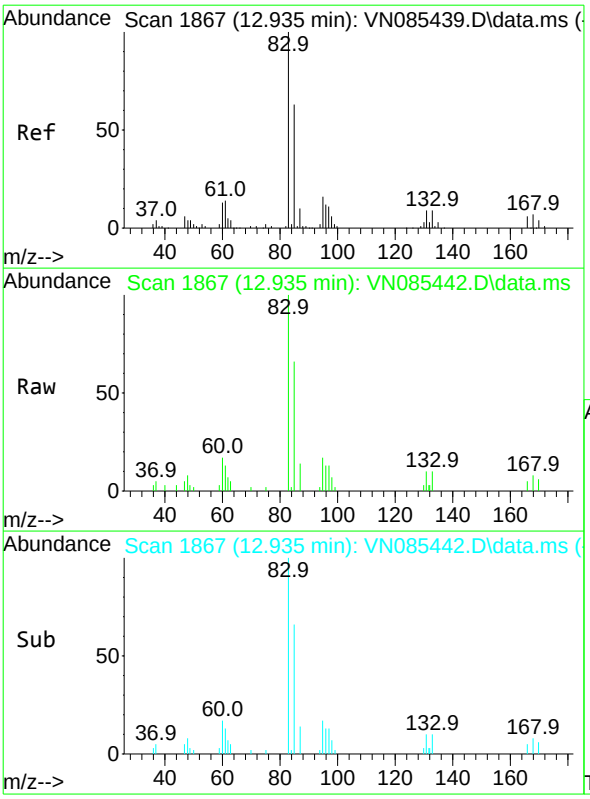


#74
N-amyl acetate
Concen: 4.595 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 17577

Ion	Ratio	Lower	Upper
43	100		
70	39.5	34.0	51.0
55	30.8	21.4	32.2
61	22.8	19.0	28.4

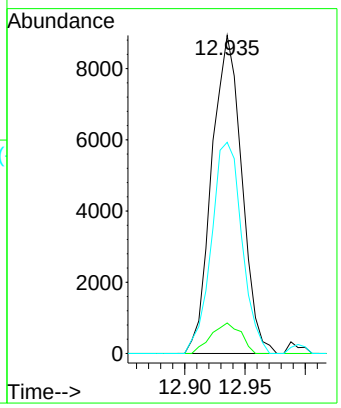




#75
1,1,2,2-Tetrachloroethane
Concen: 5.151 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 83 Resp: 15483

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	67.5	32.2	96.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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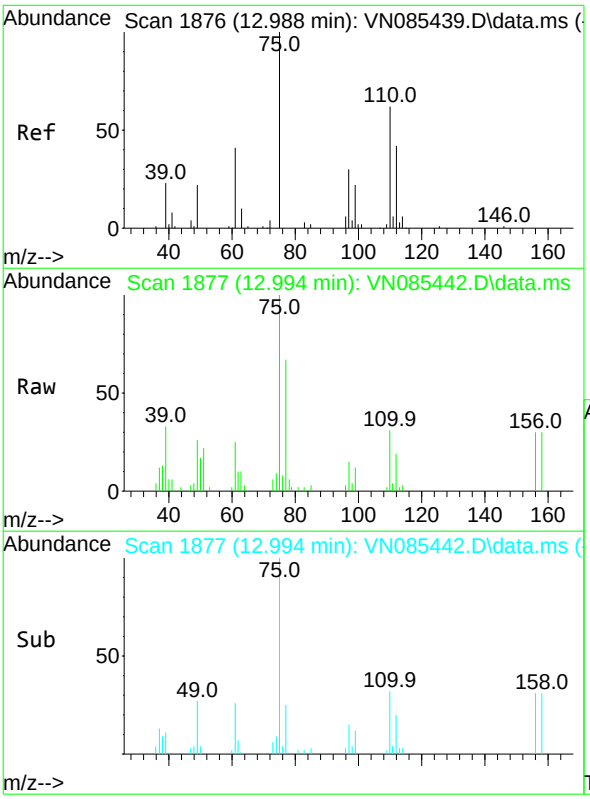
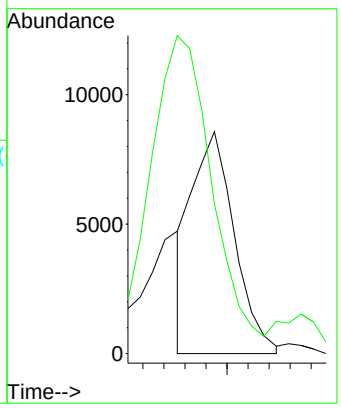
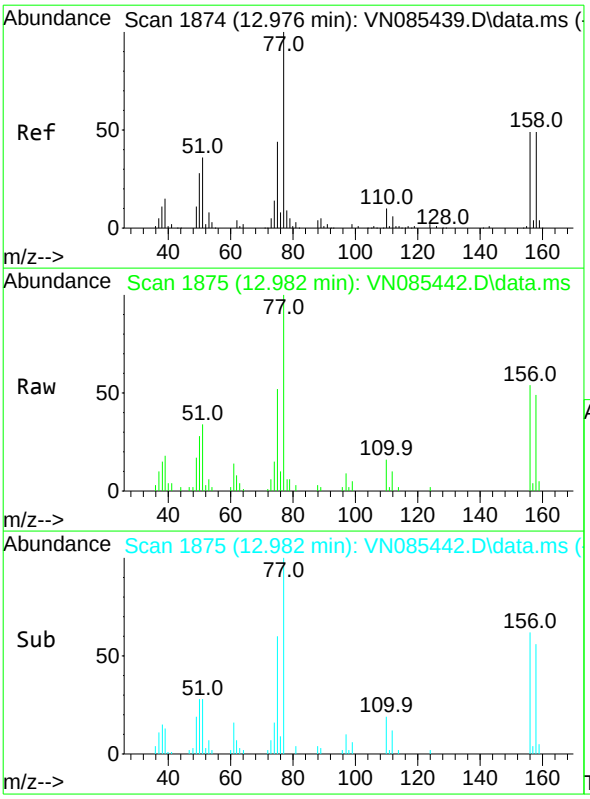


#76
1,2,3-Trichloropropane
Concen: 4.758 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 12173

Ion	Ratio	Lower	Upper
75	100		
77	209.1	109.7	329.2

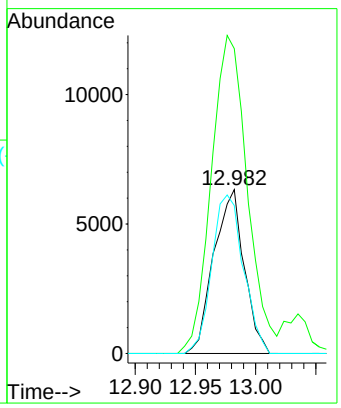




#77
Bromobenzene
Concen: 4.989 ug/l
RT: 12.982 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:156 Resp: 11091

Ion	Ratio	Lower	Upper
156	100		
77	229.5	114.1	342.4
158	100.8	48.9	146.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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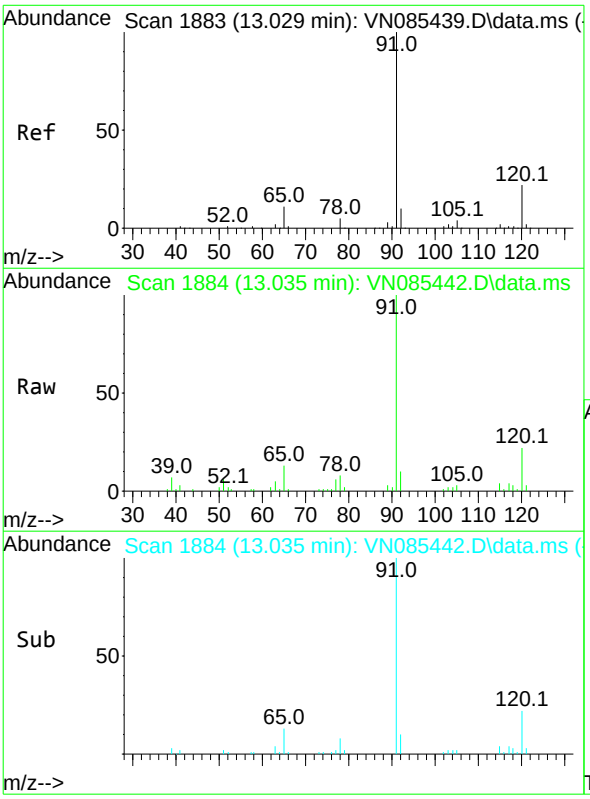
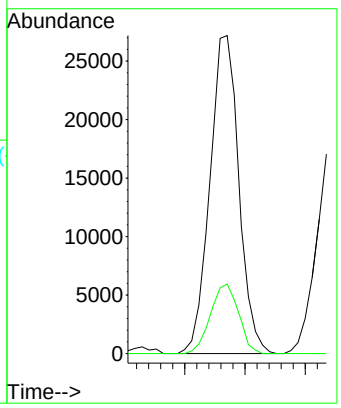
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

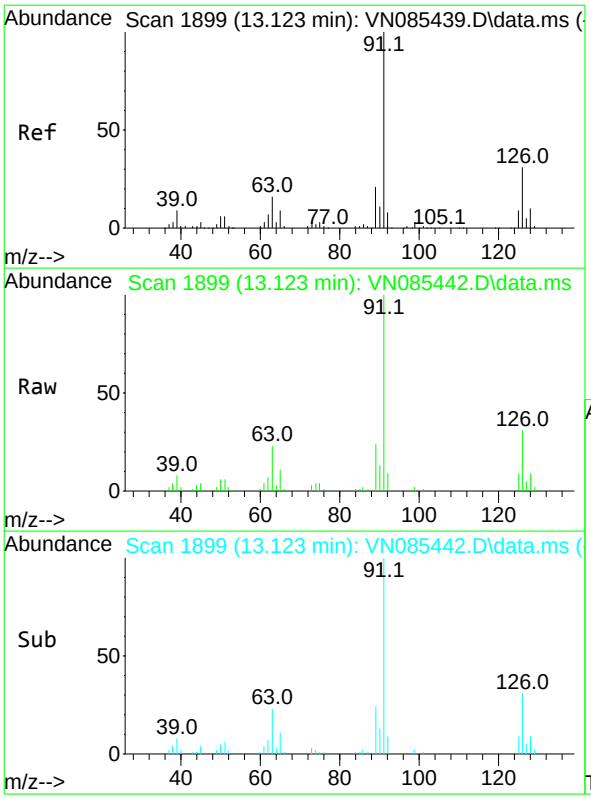


#78
n-propylbenzene
Concen: 4.512 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 45450

Ion	Ratio	Lower	Upper
91	100		
120	21.1	10.9	32.6

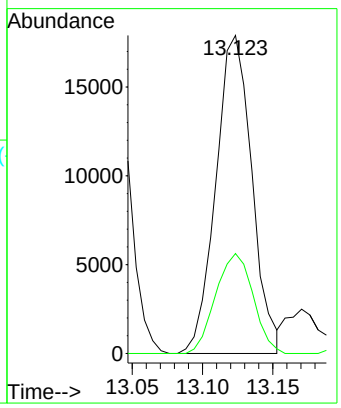




#79
2-Chlorotoluene
Concen: 4.898 ug/l
RT: 13.123 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 31932

Ion	Ratio	Lower	Upper
91	100		
126	32.6	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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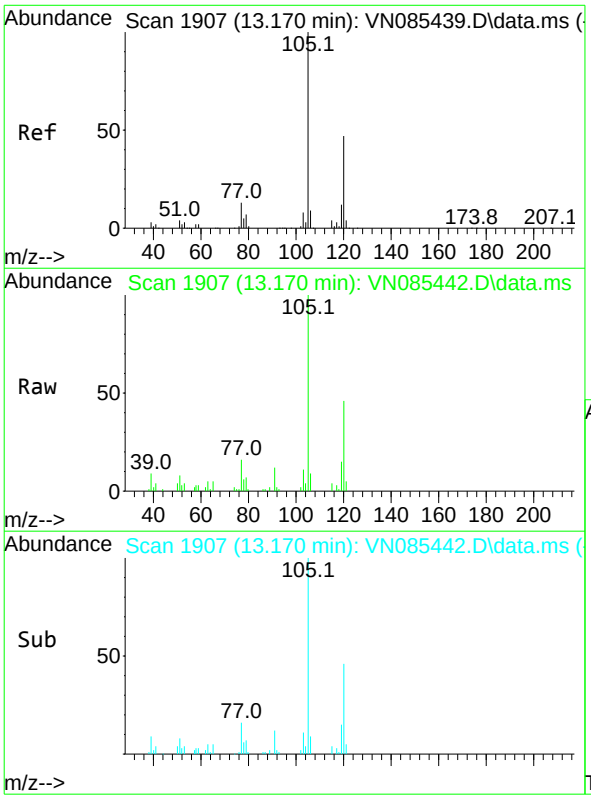
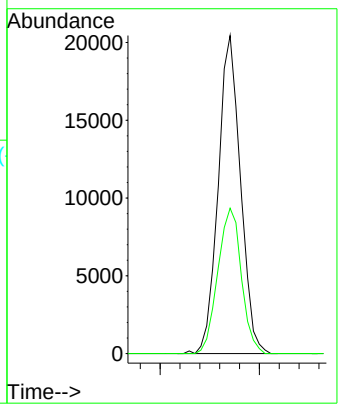
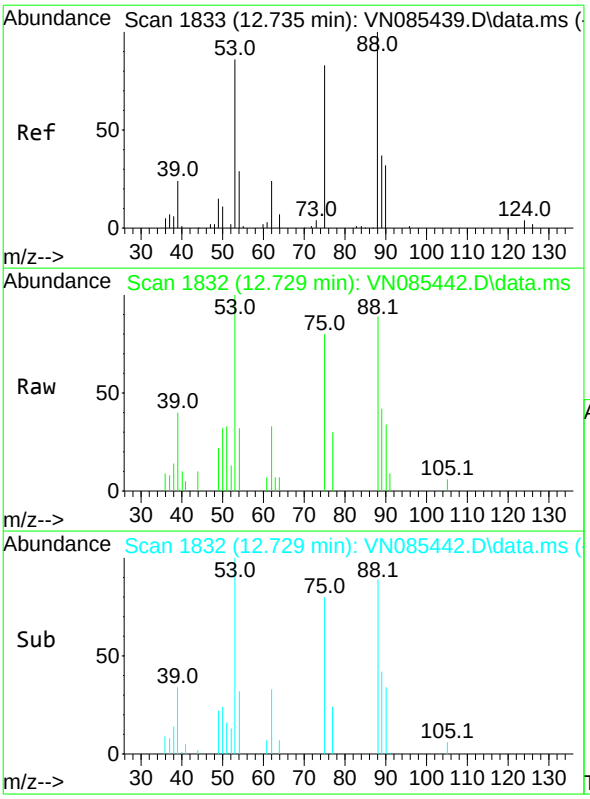


#80
1,3,5-Trimethylbenzene
Concen: 4.537 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 31891

Ion	Ratio	Lower	Upper
105	100		
120	48.1	23.9	71.7





#81
trans-1,4-Dichloro-2-butene
Concen: 4.465 ug/l
RT: 12.729 min Scan# 18
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 4229

Ion	Ratio	Lower	Upper
75	100		
53	132.6	95.6	143.4
89	49.7	37.0	55.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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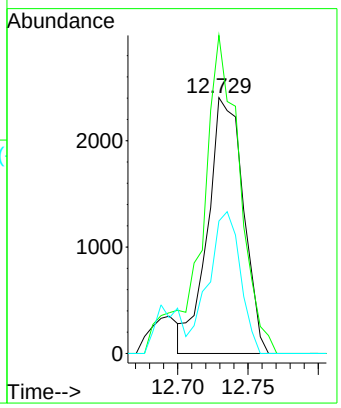
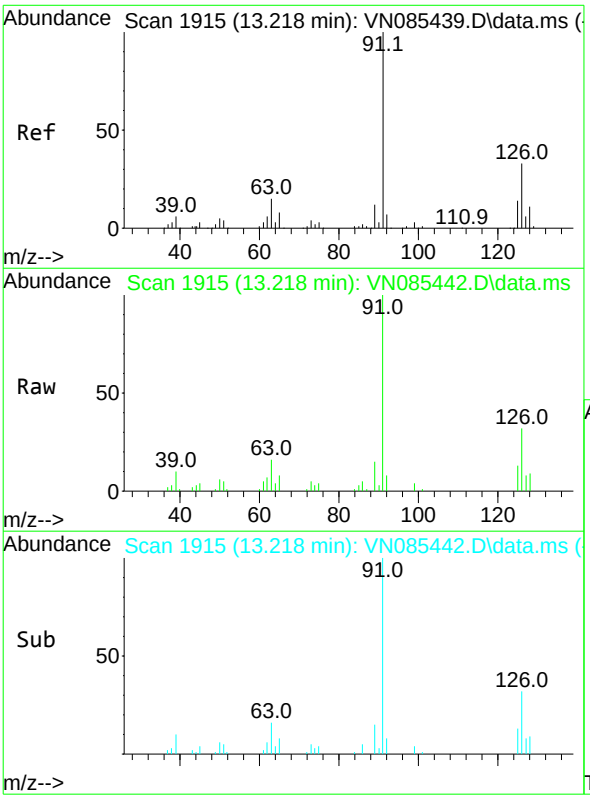
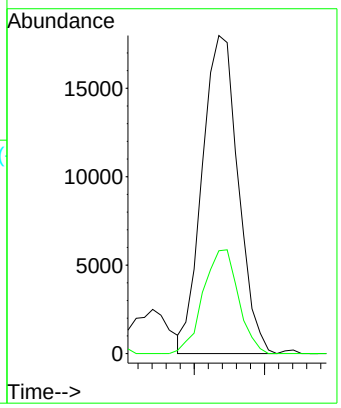


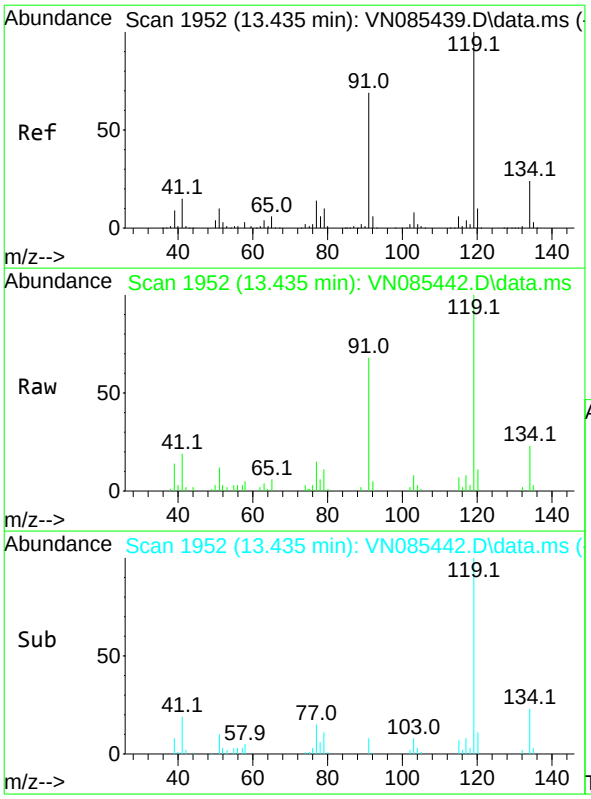


#82
4-Chlorotoluene
Concen: 4.926 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 31976

Ion	Ratio	Lower	Upper
91	100		
126	31.9	15.9	47.7

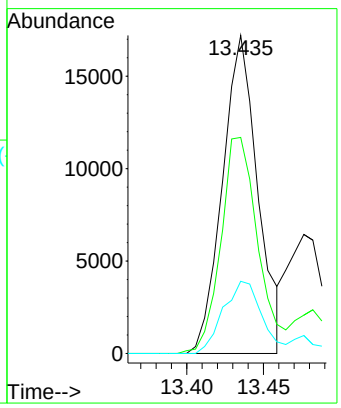




#83
tert-Butylbenzene
Concen: 4.675 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:119 Resp: 27597

Ion	Ratio	Lower	Upper
119	100		
91	71.1	35.1	105.3
134	24.8	12.0	36.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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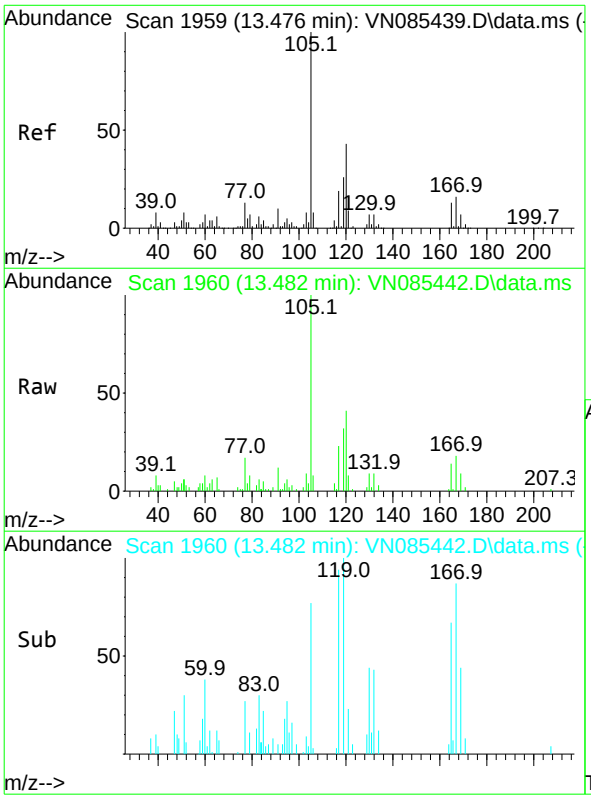
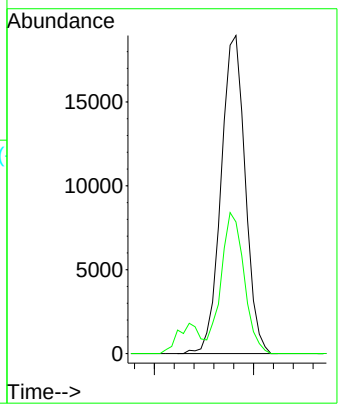
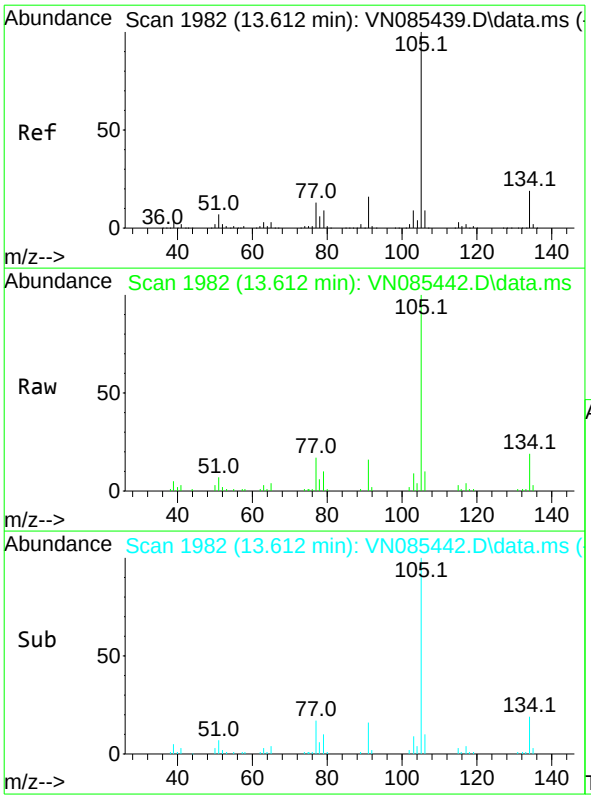


#84
1,2,4-Trimethylbenzene
Concen: 4.575 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 32054

Ion	Ratio	Lower	Upper
105	100		
120	42.0	21.6	65.0





#85
sec-Butylbenzene
Concen: 4.663 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:105 Resp: 38148

Ion	Ratio	Lower	Upper
105	100		
134	20.1	9.7	28.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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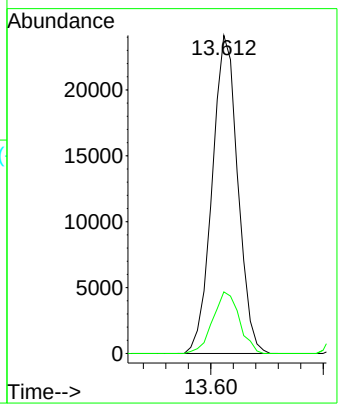
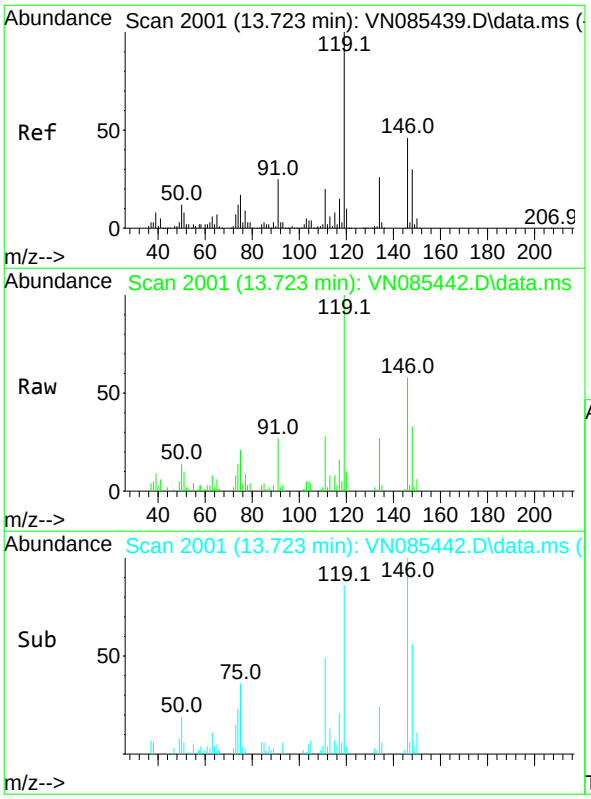
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

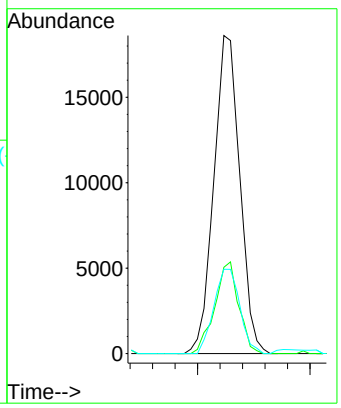


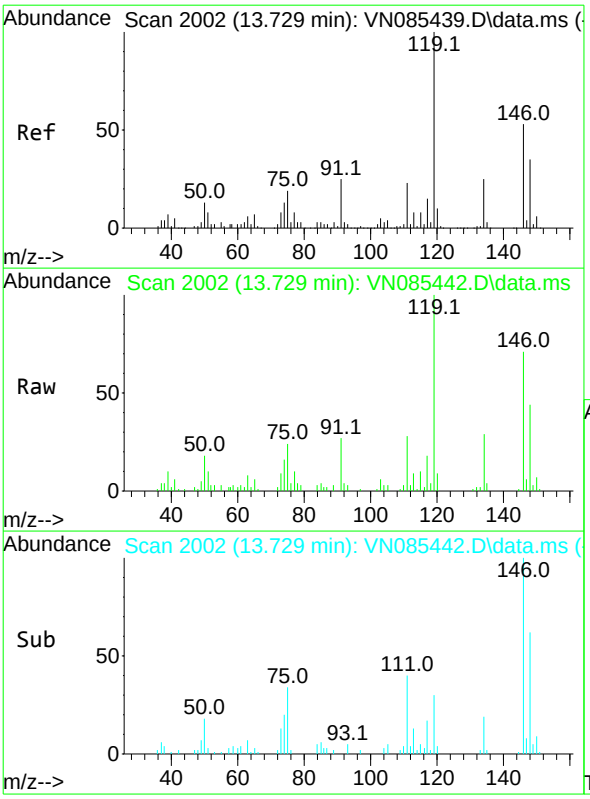


#86
p-Isopropyltoluene
Concen: 4.584 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:119 Resp: 29856

Ion	Ratio	Lower	Upper
119	100		
134	26.5	12.7	38.0
91	26.5	12.7	38.1

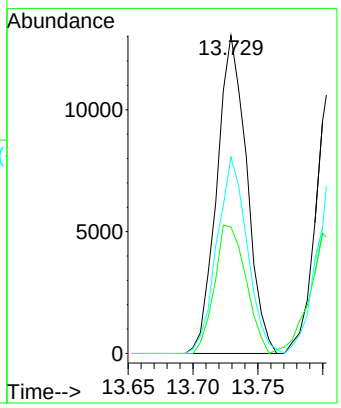




#87
1,3-Dichlorobenzene
Concen: 5.099 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:146 Resp: 20876

Ion	Ratio	Lower	Upper
146	100		
111	42.3	21.4	64.3
148	62.7	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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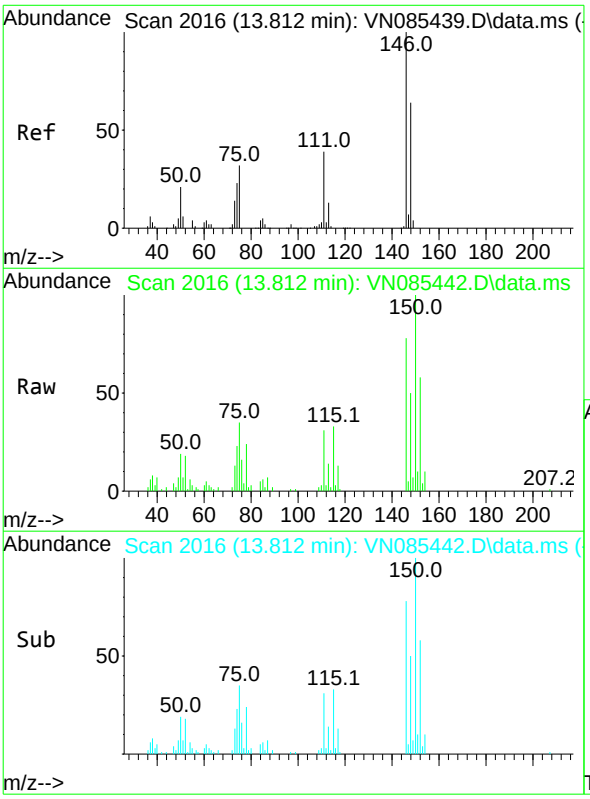
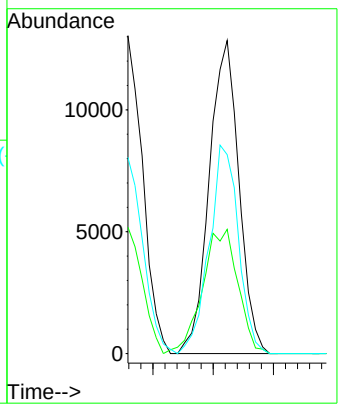
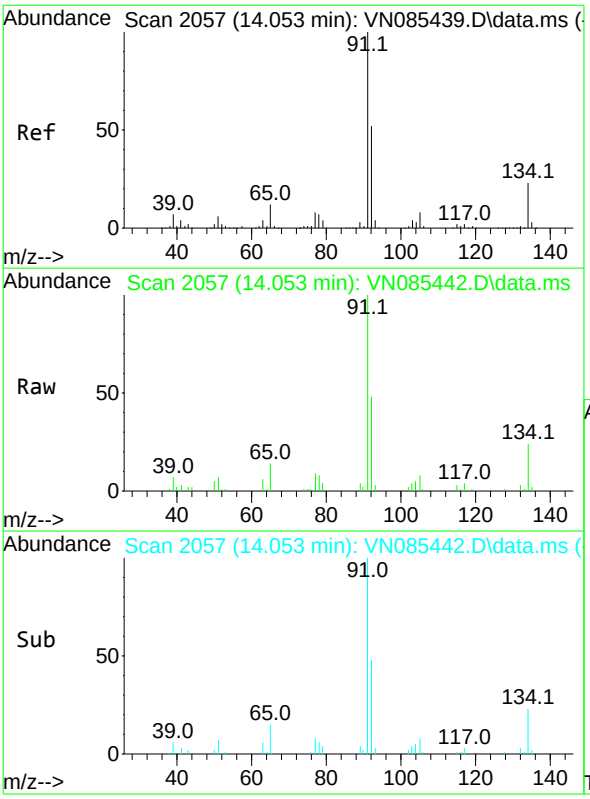


#88
1,4-Dichlorobenzene
Concen: 5.179 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:146 Resp: 21982

Ion	Ratio	Lower	Upper
146	100		
111	47.1	21.3	63.7
148	65.5	32.4	97.0

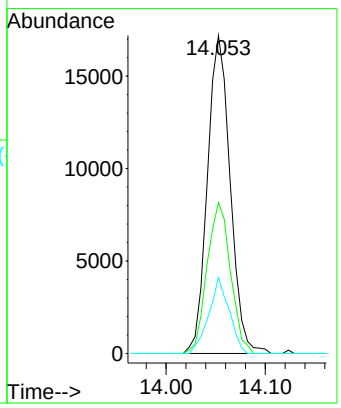




#89
n-Butylbenzene
Concen: 4.675 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 91 Resp: 27437

Ion	Ratio	Lower	Upper
91	100		
92	48.7	25.8	77.3
134	21.4	11.7	35.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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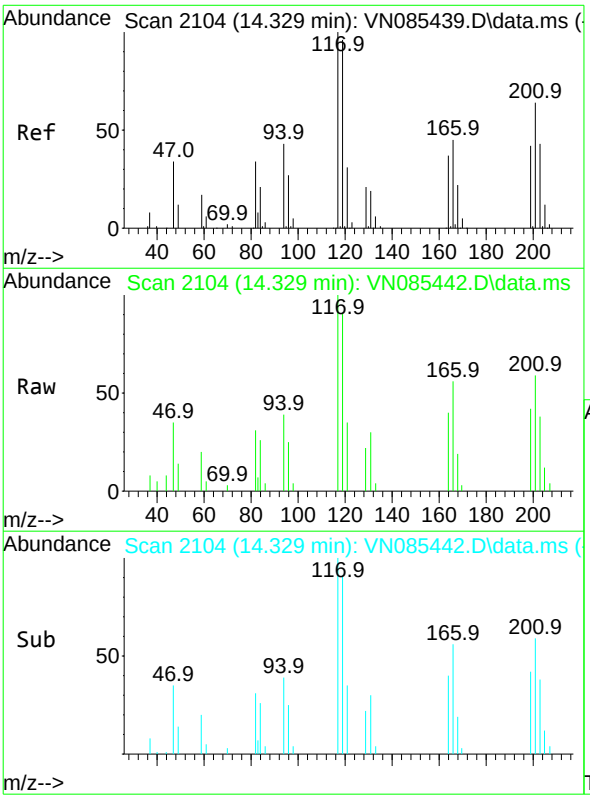
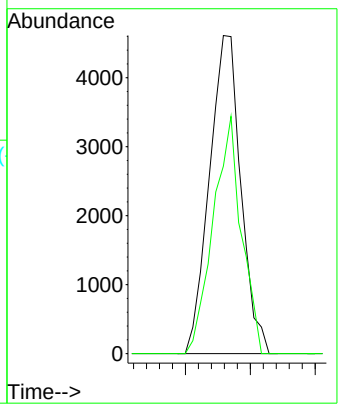
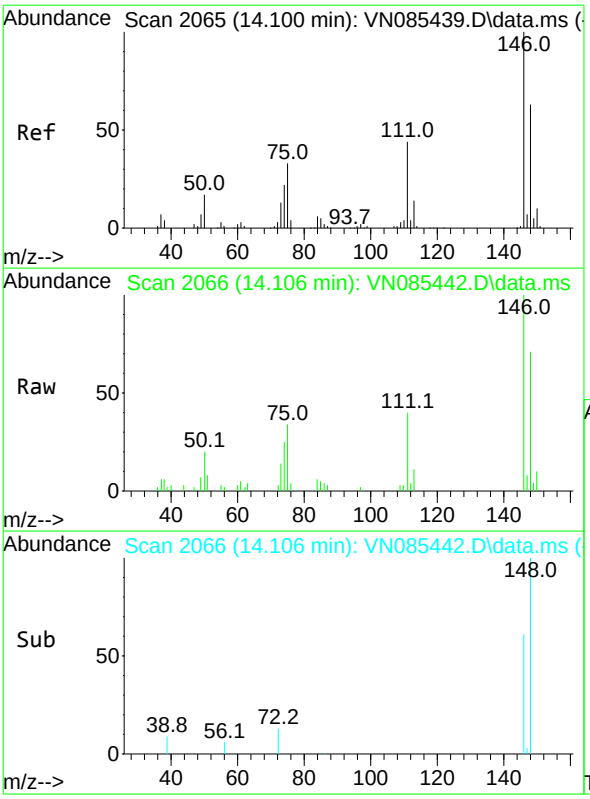


#90
Hexachloroethane
Concen: 4.987 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:117 Resp: 7767

Ion	Ratio	Lower	Upper
117	100		
201	66.9	33.7	101.0

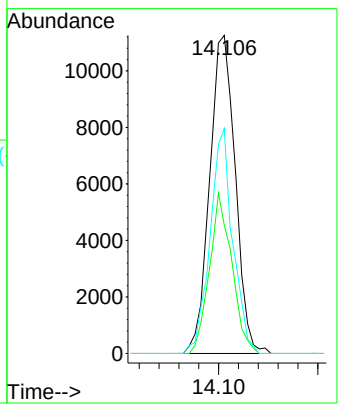




#91
1,2-Dichlorobenzene
Concen: 4.940 ug/l
RT: 14.106 min Scan# 20
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:146 Resp: 20177

Ion	Ratio	Lower	Upper
146	100		
111	44.0	21.7	65.1
148	62.8	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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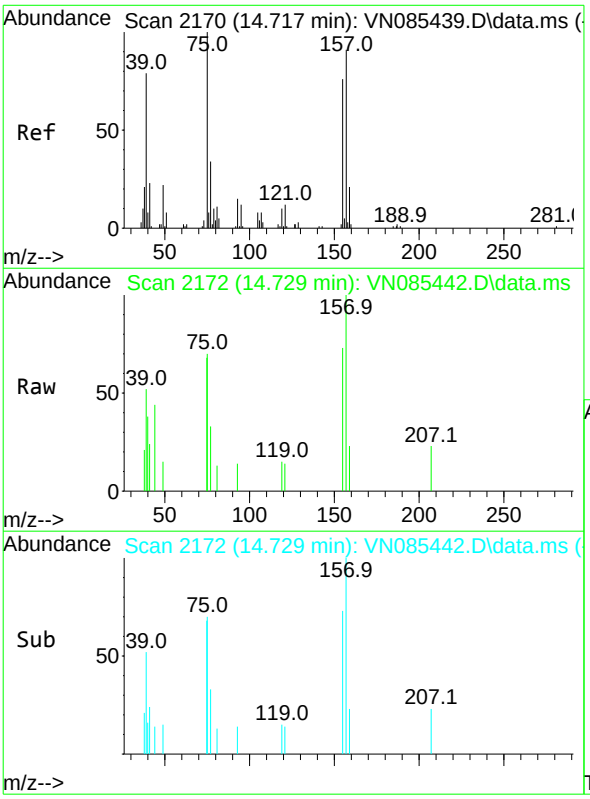
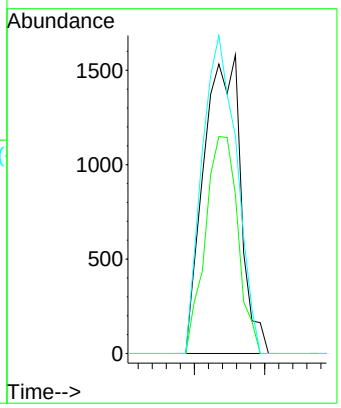
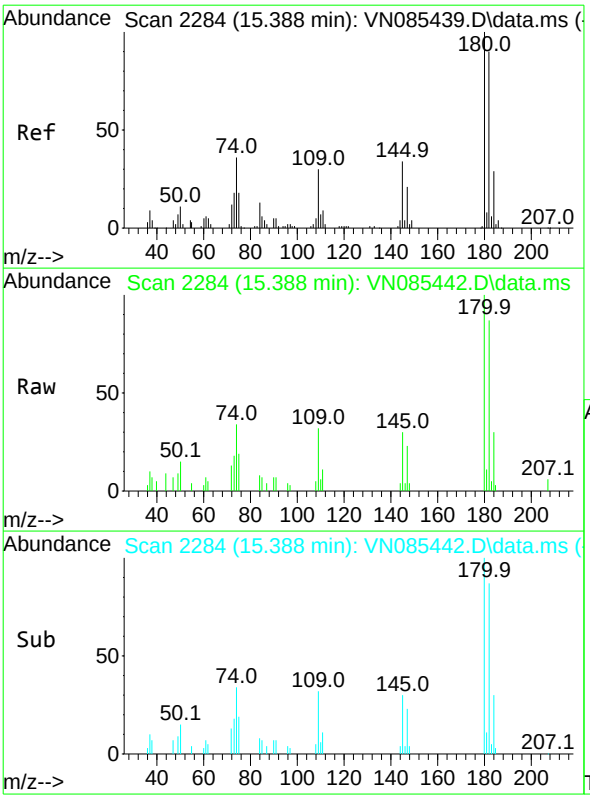


#92
1,2-Dibromo-3-Chloropropane
Concen: 5.232 ug/l
RT: 14.729 min Scan# 2172
Delta R.T. 0.012 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 75 Resp: 2872

Ion	Ratio	Lower	Upper
75	100		
155	64.2	36.4	109.2
157	99.8	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 4.761 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion:180 Resp: 9037

Ion	Ratio	Lower	Upper
180	100		
182	100.5	46.8	140.3
145	33.0	16.0	48.0

Manual Integrations
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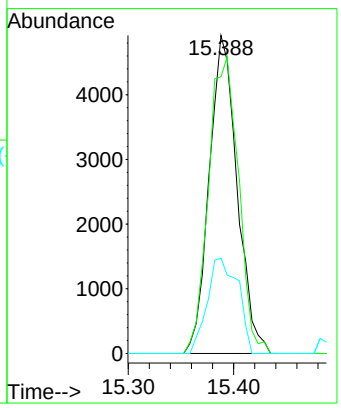
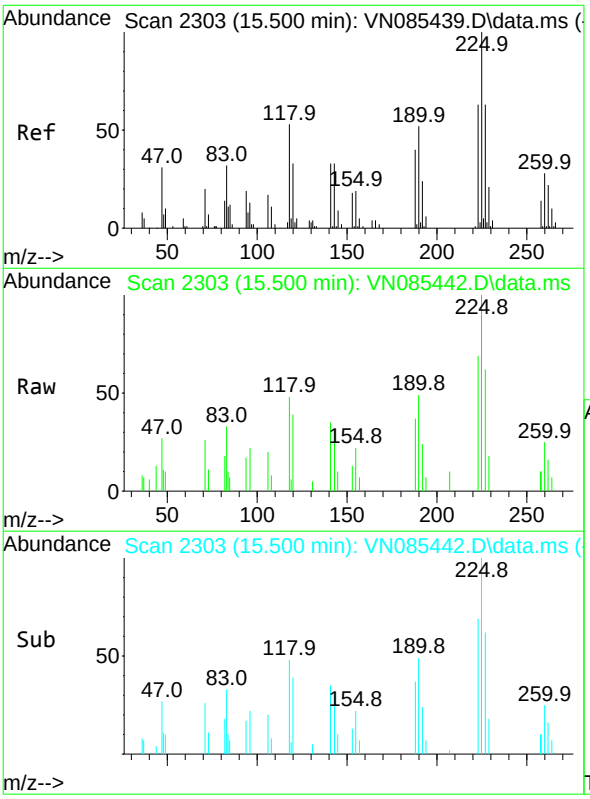
Supervised By :Mahesh Dadoda 01/15/2025

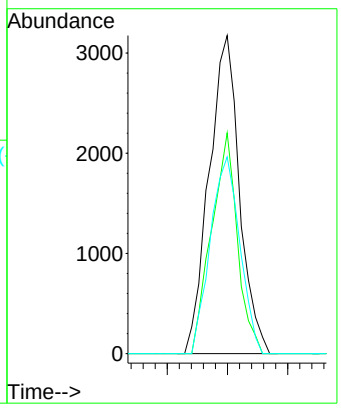


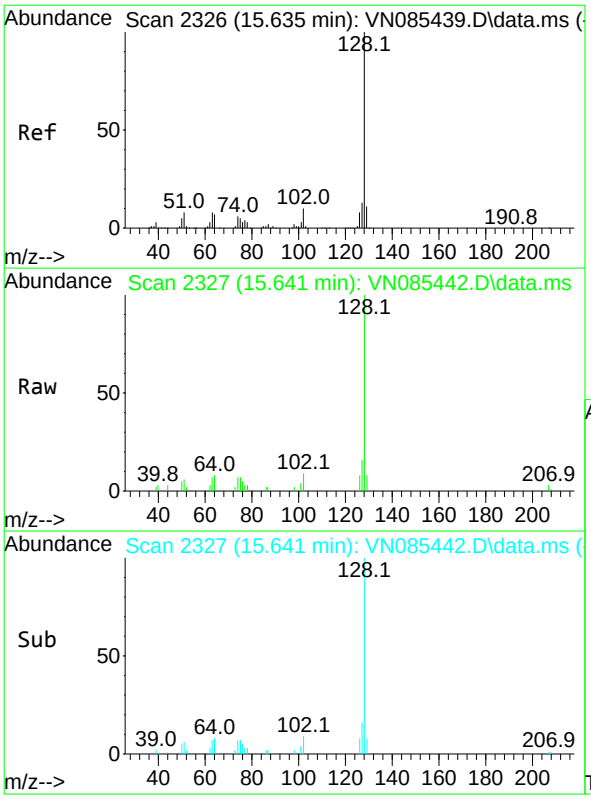


#94
Hexachlorobutadiene
Concen: 5.520 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:225 Resp: 5563

Ion	Ratio	Lower	Upper
225	100		
223	59.2	30.7	92.1
227	60.1	30.9	92.5





#95
Naphthalene
Concen: 4.422 ug/l
RT: 15.641 min Scan# 23
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

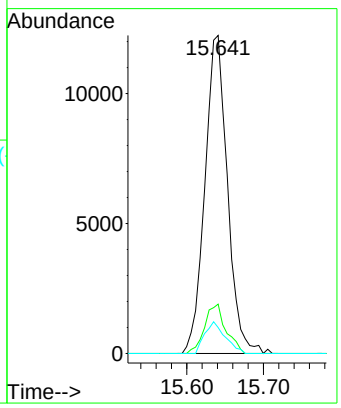
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

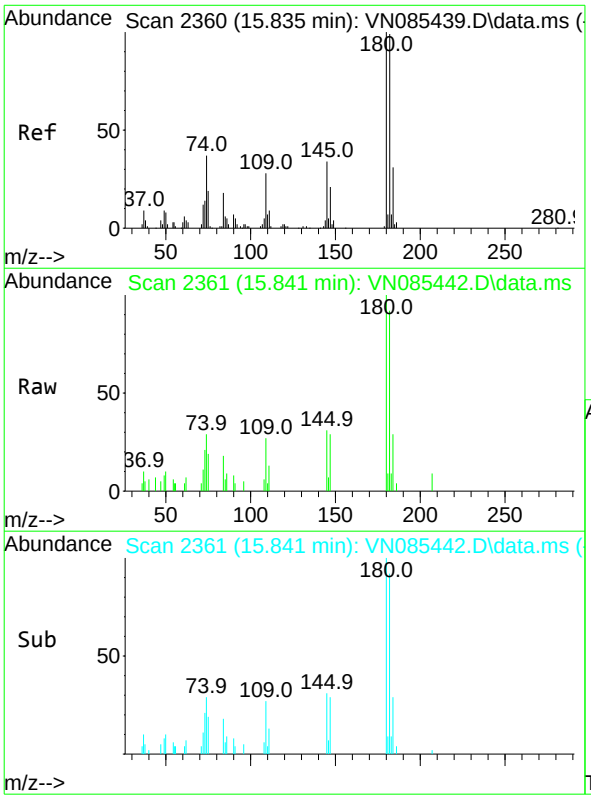
Tgt Ion:128 Resp: 25047

Ion	Ratio	Lower	Upper
128	100		
127	14.7	10.6	16.0
129	9.1	8.8	13.2

Manual Integrations
APPROVED

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

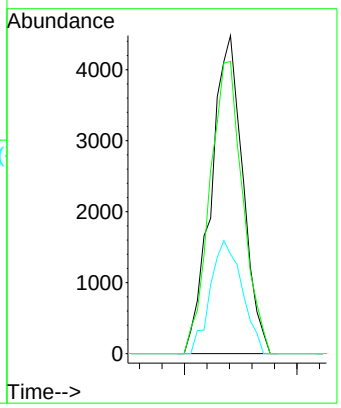




#96
1,2,3-Trichlorobenzene
Concen: 4.549 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:180 Resp: 8737

Ion	Ratio	Lower	Upper
180	100		
182	95.6	47.4	142.2
145	35.5	16.9	50.7



Quantitation Report (QT Reviewed)

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

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

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.224	168	166880	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	9.100	114	302938	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.865	117	256851	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	99539	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l		
Spiked Amount 50.000	Range 74 - 125		Recovery =	0.000%#			
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l		
Spiked Amount 50.000	Range 75 - 124		Recovery =	0.000%#			
50) Toluene-d8	0.000	98	0d	0.000	ug/l		
Spiked Amount 50.000	Range 86 - 113		Recovery =	0.000%#			
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l		
Spiked Amount 50.000	Range 77 - 121		Recovery =	0.000%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.124	85	2382	1.054	ug/l		91
3) Chloromethane	2.359	50	2801	1.145	ug/l		93
4) Vinyl Chloride	2.512	62	2732	1.111	ug/l	#	81
6) Chloroethane	3.124	64	1809	1.160	ug/l		94
7) Trichlorofluoromethane	3.512	101	3860	1.082	ug/l		88
8) Diethyl Ether	3.953	74	1526	1.238	ug/l		81
9) 1,1,2-Trichlorotrifluo...	4.359	101	2156m	1.073	ug/l		
12) 1,1-Dichloroethene	4.330	96	1660	0.927	ug/l	#	67
14) Allyl chloride	5.024	41	3179	1.094	ug/l	#	85
15) Acrylonitrile	5.718	53	4967	5.070	ug/l	#	70
16) Acetone	4.436	43	5102	5.862	ug/l		92
17) Carbon Disulfide	4.706	76	6601	1.197	ug/l	#	87
18) Methyl Acetate	5.030	43	2908	1.099	ug/l	#	80
19) Methyl tert-butyl Ether	5.789	73	5156	0.887	ug/l	#	87
20) Methylene Chloride	5.265	84	2190	1.016	ug/l	#	87
21) trans-1,2-Dichloroethene	5.794	96	2110	1.102	ug/l	#	66
22) Diisopropyl ether	6.677	45	5691	0.882	ug/l	#	88
23) Vinyl Acetate	6.606	43	18526m	4.090	ug/l		
24) 1,1-Dichloroethane	6.583	63	4020m	1.022	ug/l		
25) 2-Butanone	7.483	43	6448m	5.034	ug/l		
26) 2,2-Dichloropropane	7.488	77	3104	0.976	ug/l		92
27) cis-1,2-Dichloroethene	7.477	96	2185	0.969	ug/l		92
28) Bromochloromethane	7.812	49	2082	1.138	ug/l	#	89
29) Tetrahydrofuran	7.835	42	3693	4.548	ug/l		98
30) Chloroform	7.965	83	4250	1.045	ug/l	#	80
32) 1,1,1-Trichloroethane	8.165	97	3678	1.031	ug/l	#	56
36) 1,1-Dichloropropene	8.371	75	3084	1.046	ug/l	#	84
37) Ethyl Acetate	7.577	43	3056m	1.026	ug/l		
38) Carbon Tetrachloride	8.359	117	3436	1.018	ug/l		90
39) Methylcyclohexane	9.600	83	2403	0.867	ug/l	#	87
40) Benzene	8.606	78	8480	0.957	ug/l		91
41) Methacrylonitrile	7.771	41	1458	0.941	ug/l	#	76
42) 1,2-Dichloroethane	8.665	62	3131	0.938	ug/l		91
43) Isopropyl Acetate	8.682	43	4803	1.007	ug/l	#	87
44) Trichloroethene	9.347	130	2133	1.034	ug/l		71
45) 1,2-Dichloropropane	9.618	63	2246	0.992	ug/l		99

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

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

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

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

ICAL Form

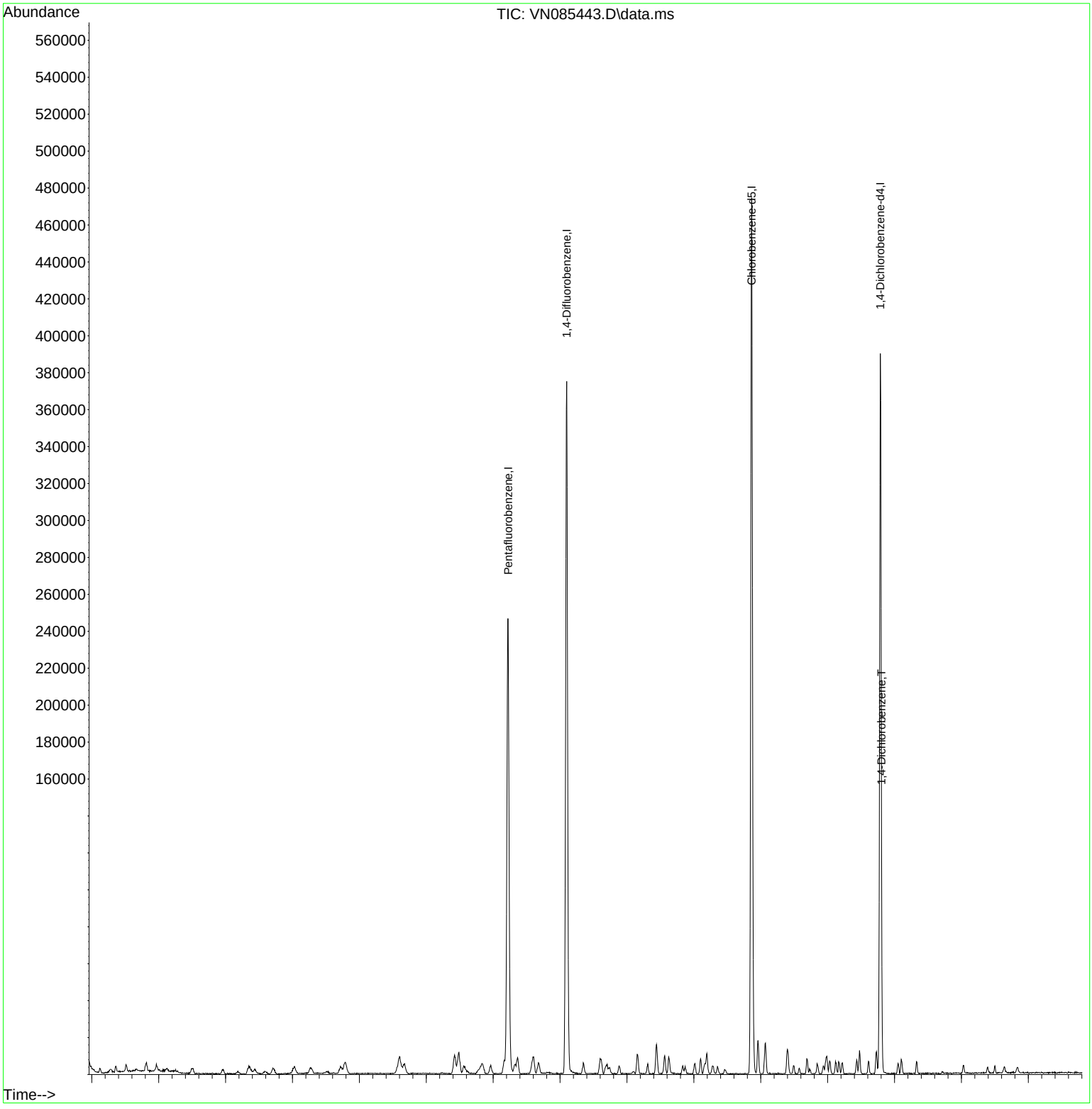
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085443.D
Acq On : 14 Jan 2025 17:19
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

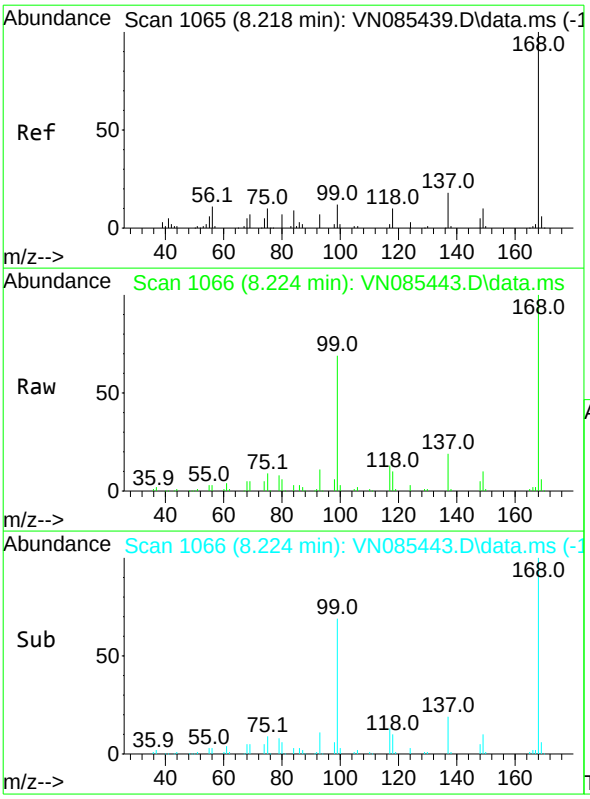
Quant Time: Jan 15 01:46:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

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

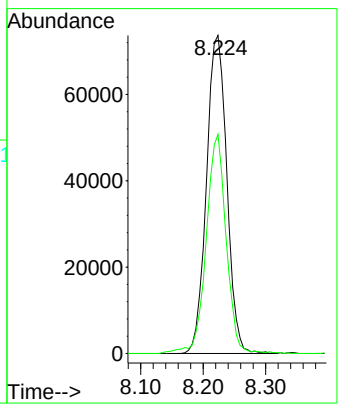




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:168 Resp: 166880

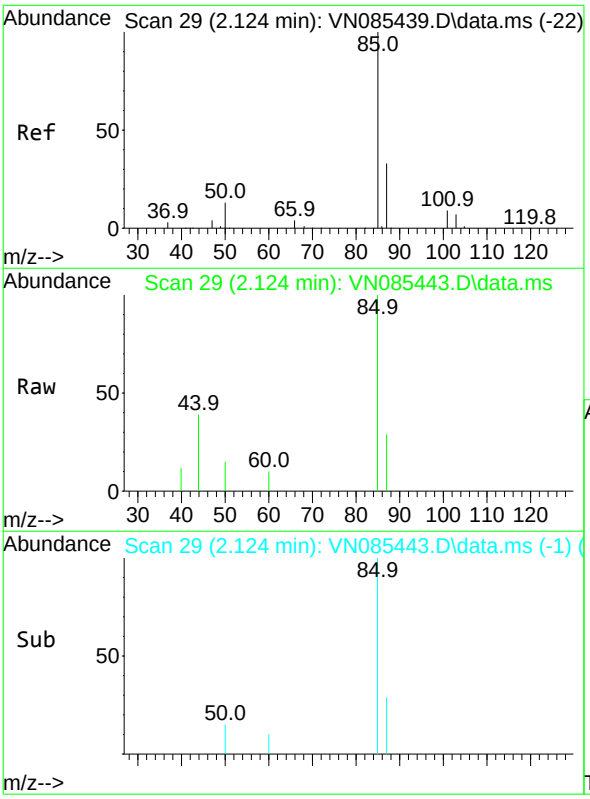
Ion	Ratio	Lower	Upper
168	100		
99	68.6	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

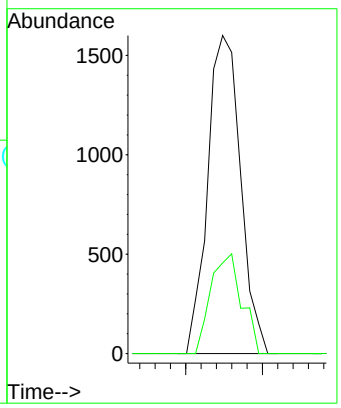
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

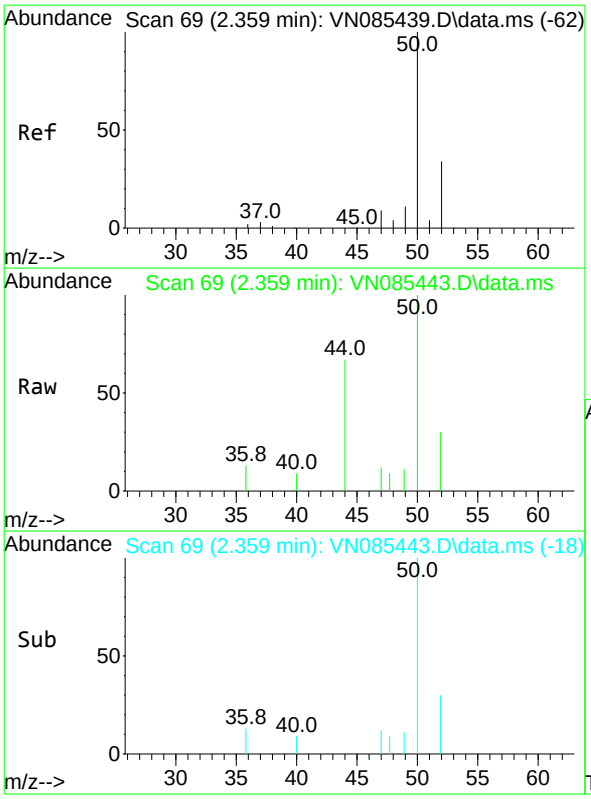


#2
Dichlorodifluoromethane
Concen: 1.054 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 85 Resp: 2382

Ion	Ratio	Lower	Upper
85	100		
87	28.5	16.7	50.1

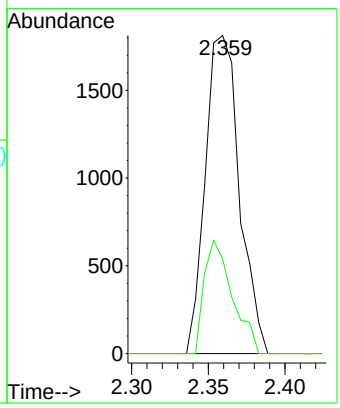




#3
Chloromethane
Concen: 1.145 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 50 Resp: 2801

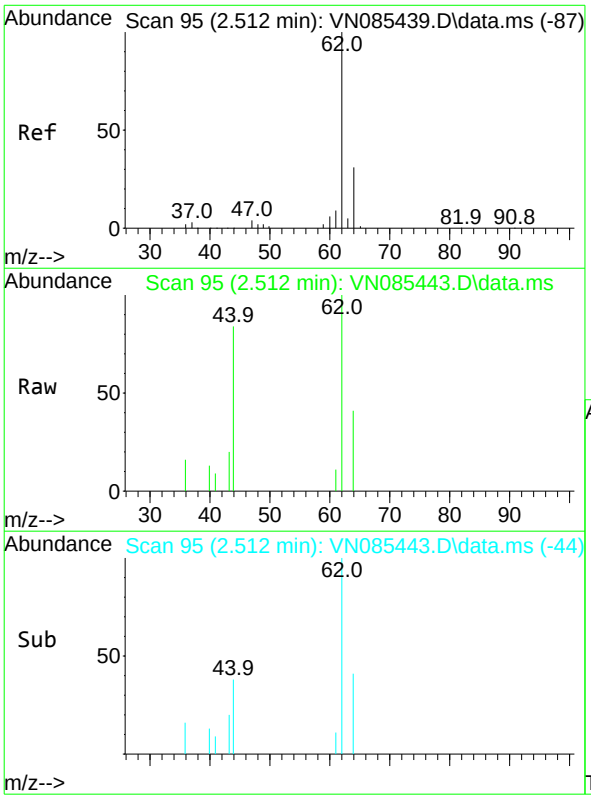
Ion	Ratio	Lower	Upper
50	100		
52	29.7	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

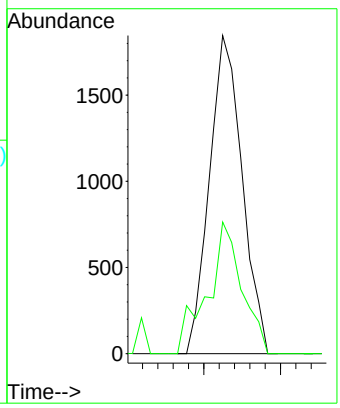
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

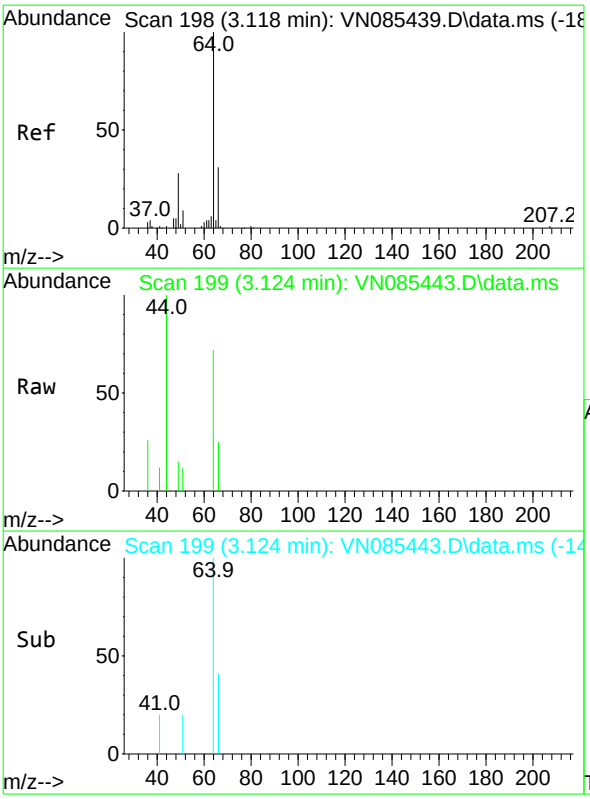


#4
Vinyl Chloride
Concen: 1.111 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 62 Resp: 2732

Ion	Ratio	Lower	Upper
62	100		
64	41.4	24.8	37.2#

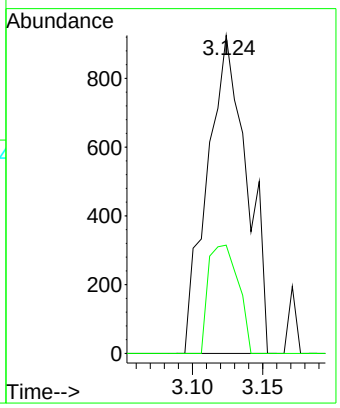




#6
Chloroethane
Concen: 1.160 ug/l
RT: 3.124 min Scan# 19
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 64 Resp: 1809

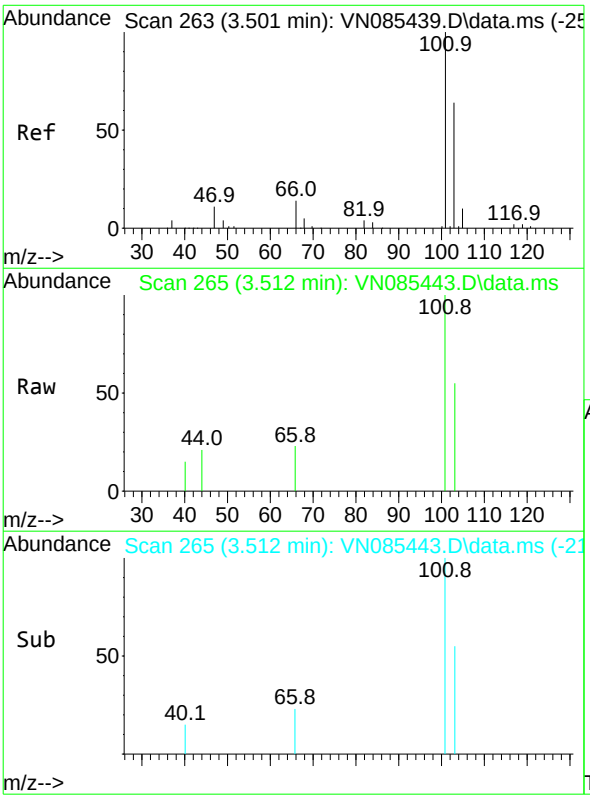
Ion	Ratio	Lower	Upper
64	100		
66	34.1	24.6	36.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

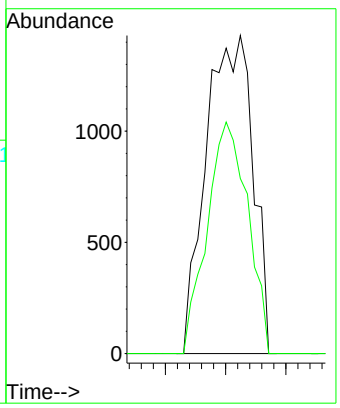
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

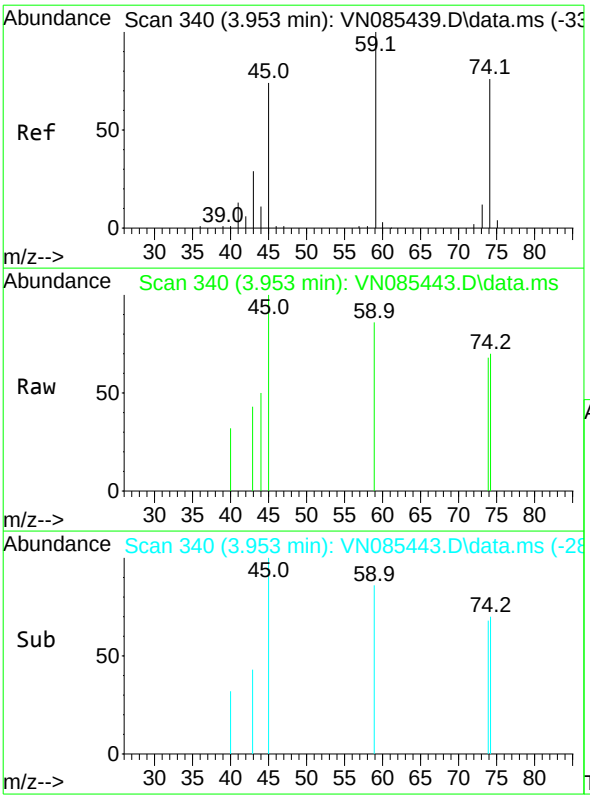


#7
Trichlorofluoromethane
Concen: 1.082 ug/l
RT: 3.512 min Scan# 265
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:101 Resp: 3860

Ion	Ratio	Lower	Upper
101	100		
103	55.0	51.4	77.2





#8
Diethyl Ether
Concen: 1.238 ug/l
RT: 3.953 min Scan# 34
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

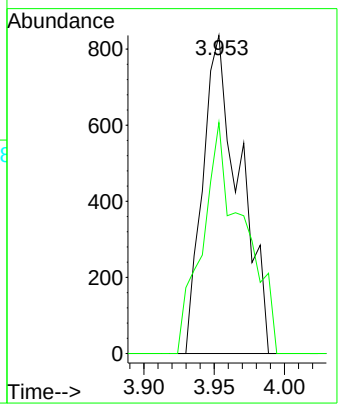
Tgt Ion: 74 Resp: 1526

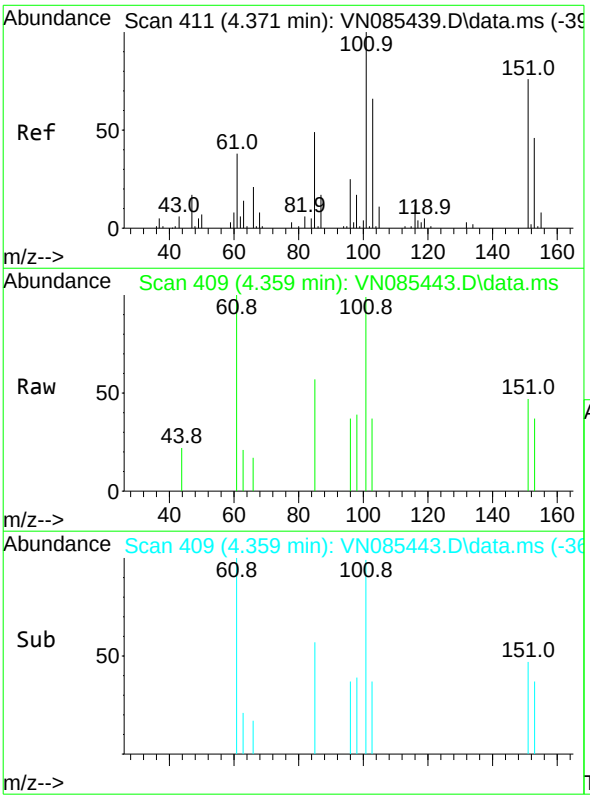
Ion	Ratio	Lower	Upper
74	100		
45	80.9	49.7	149.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

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

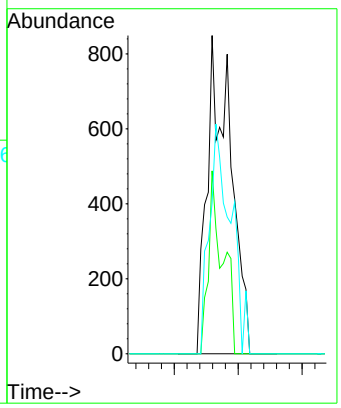


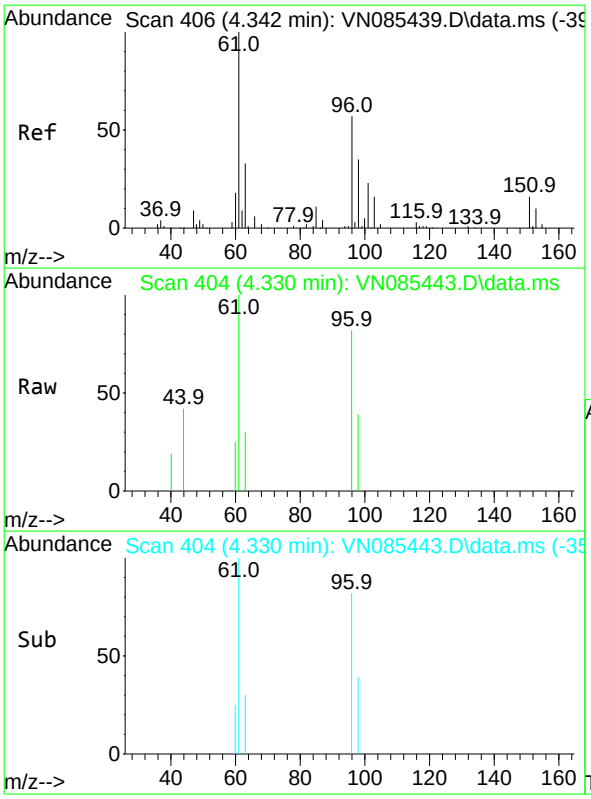


#9
1,1,2-Trichlorotrifluoroethane
Concen: 1.073 ug/l m
RT: 4.359 min Scan# 409
Delta R.T. -0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:101 Resp: 2156

Ion	Ratio	Lower	Upper
101	100		
85	35.3	37.8	56.8#
151	66.4	58.8	88.2

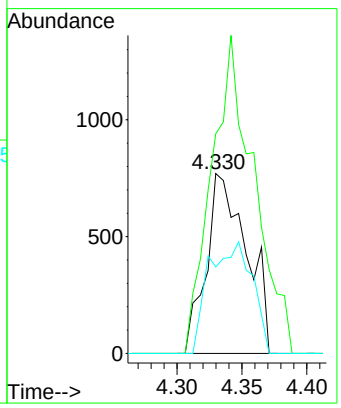




#12
1,1-Dichloroethene
Concen: 0.927 ug/l
RT: 4.330 min Scan# 40
Delta R.T. -0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 96 Resp: 1660

Ion	Ratio	Lower	Upper
96	100		
61	122.1	141.0	211.4#
98	48.1	49.0	73.6#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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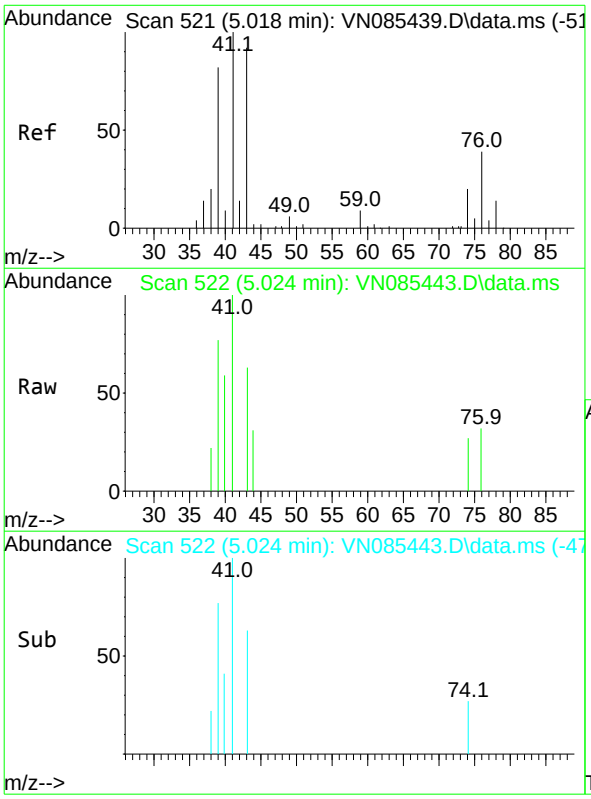
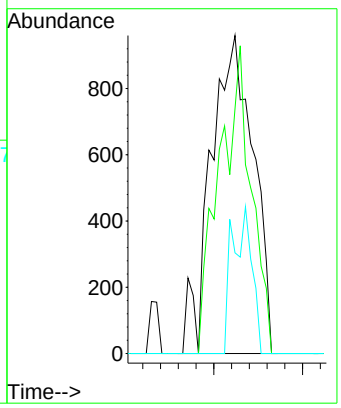
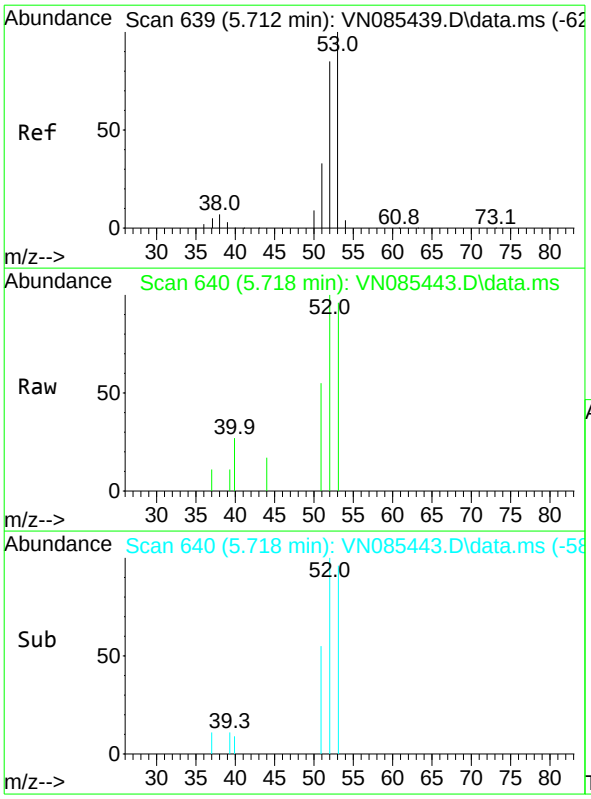


#14
Allyl chloride
Concen: 1.094 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 3179

Ion	Ratio	Lower	Upper
41	100		
39	73.1	64.4	96.6
76	21.4	30.5	45.7#

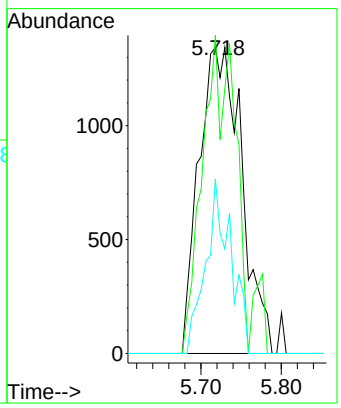




#15
Acrylonitrile
Concen: 5.070 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 53 Resp: 4967

Ion	Ratio	Lower	Upper
53	100		
52	45.1	65.5	98.3#
51	33.3	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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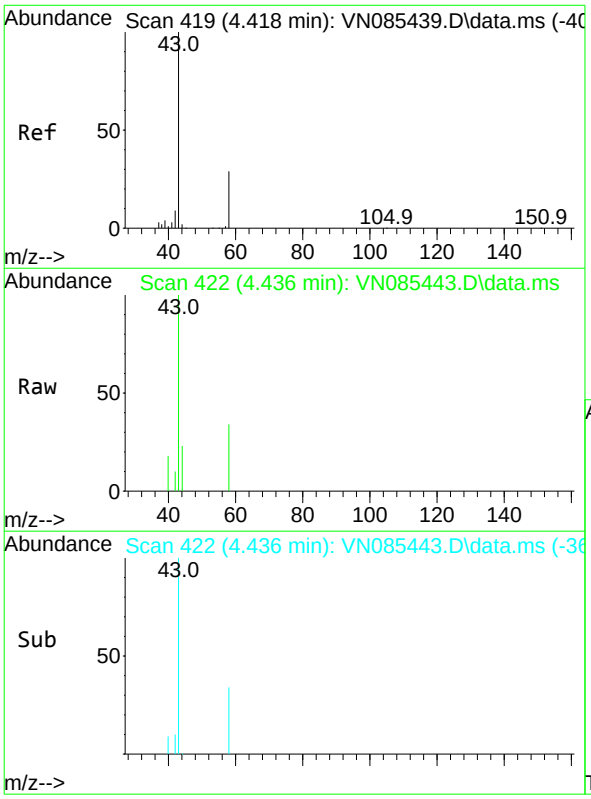
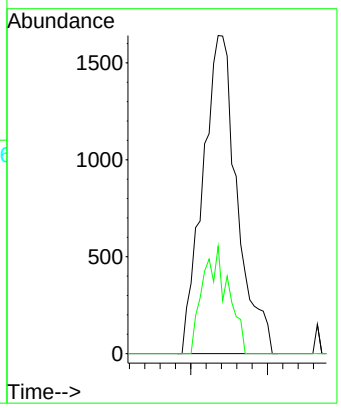
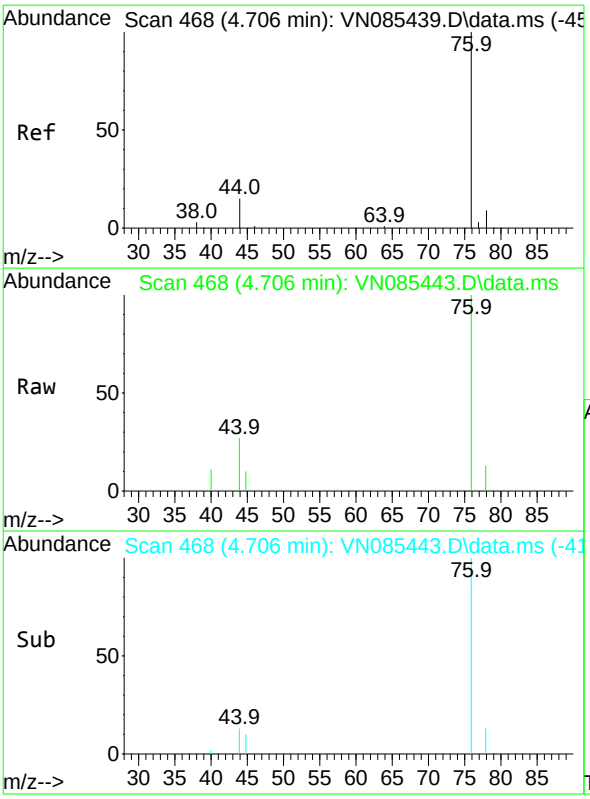


#16
Acetone
Concen: 5.862 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.018 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 5102

Ion	Ratio	Lower	Upper
43	100		
58	33.8	23.8	35.6

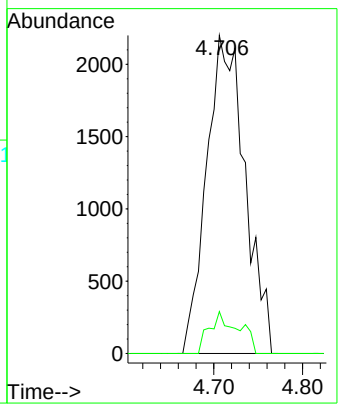




#17
Carbon Disulfide
Concen: 1.197 ug/l
RT: 4.706 min Scan# 46
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 76 Resp: 6601

Ion	Ratio	Lower	Upper
76	100		
78	13.2	6.9	10.3#



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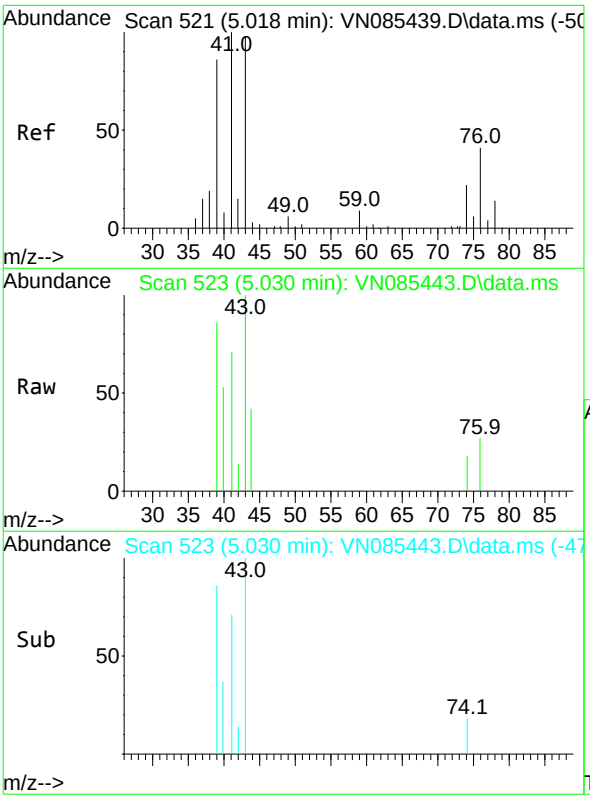
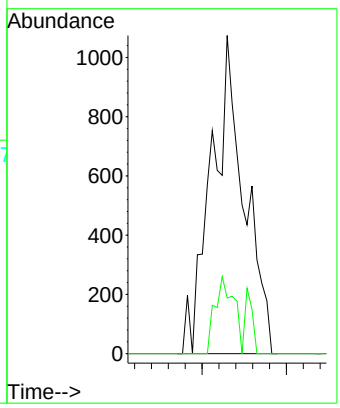
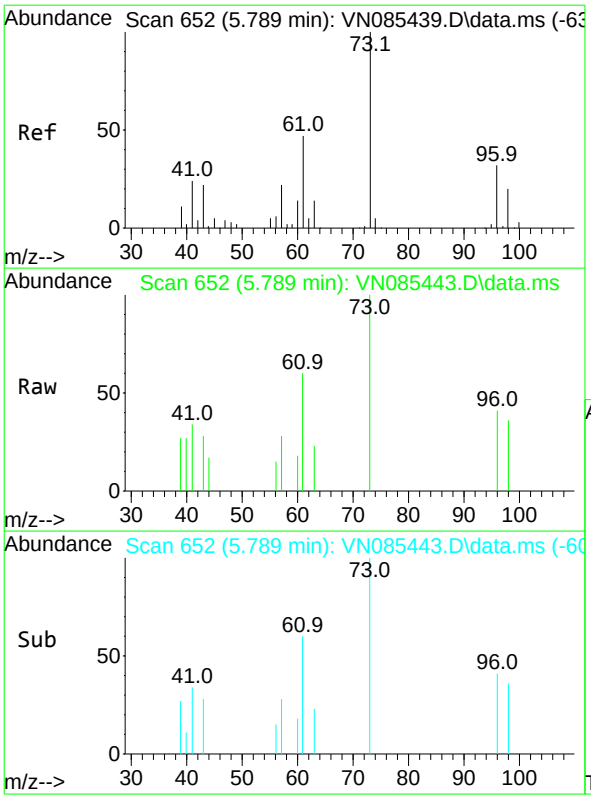


#18
Methyl Acetate
Concen: 1.099 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 2908

Ion	Ratio	Lower	Upper
43	100		
74	13.8	18.6	28.0#

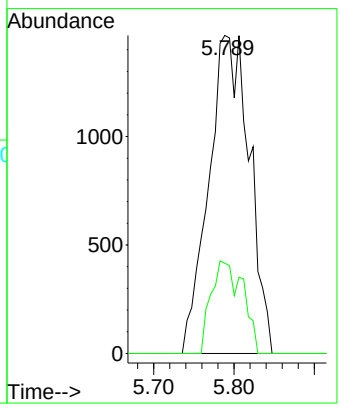




#19
Methyl tert-butyl Ether
Concen: 0.887 ug/l
RT: 5.789 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 73 Resp: 5156

Ion	Ratio	Lower	Upper
73	100		
57	28.4	17.8	26.8#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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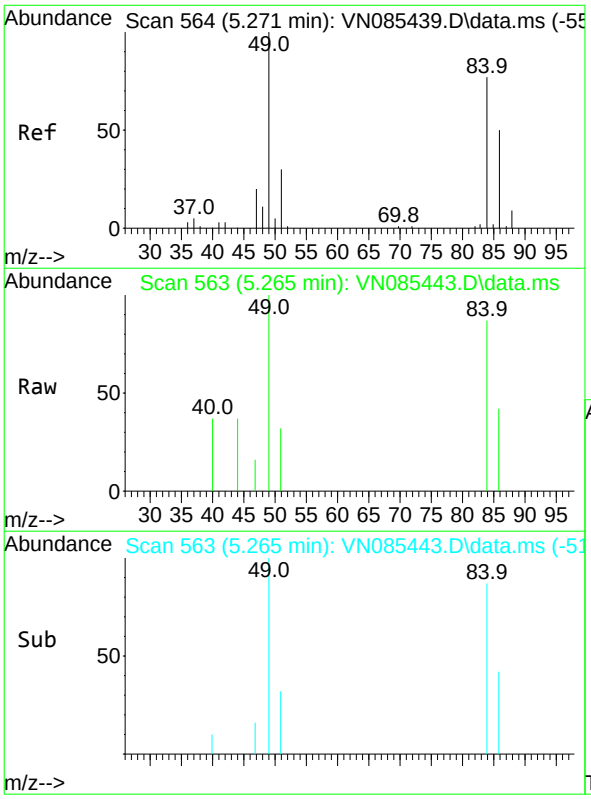
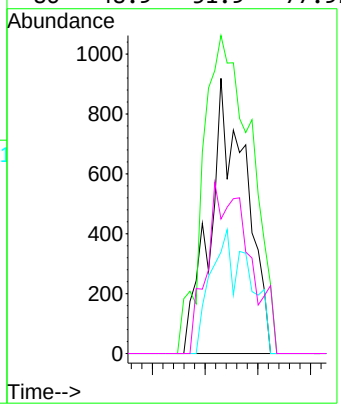
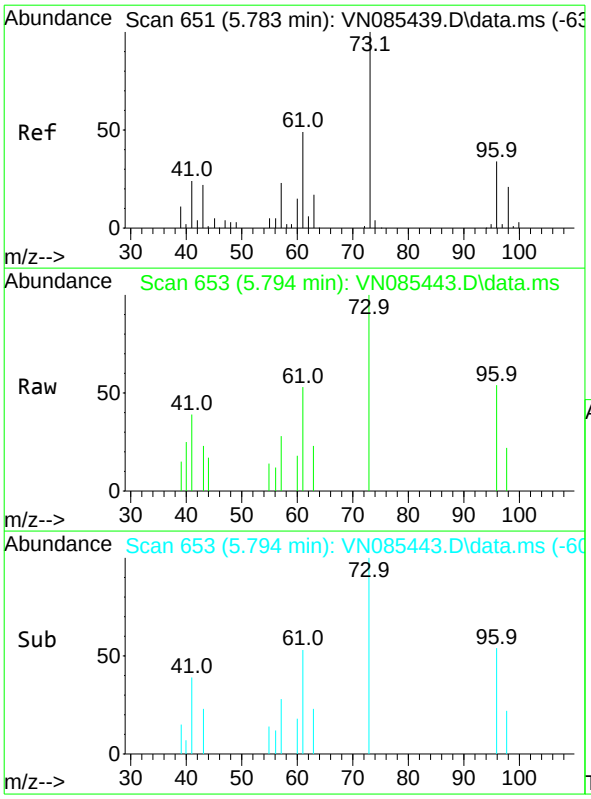


#20
Methylene Chloride
Concen: 1.016 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 84 Resp: 2190

Ion	Ratio	Lower	Upper
84	100		
49	115.6	104.1	156.1
51	36.9	31.0	46.4
86	48.9	51.9	77.9#





#21
trans-1,2-Dichloroethene
Concen: 1.102 ug/l
RT: 5.794 min Scan# 65
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 96 Resp: 2110

Ion	Ratio	Lower	Upper
96	100		
61	98.7	115.7	173.5#
98	41.8	49.8	74.8#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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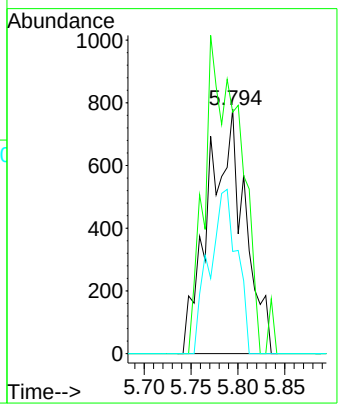
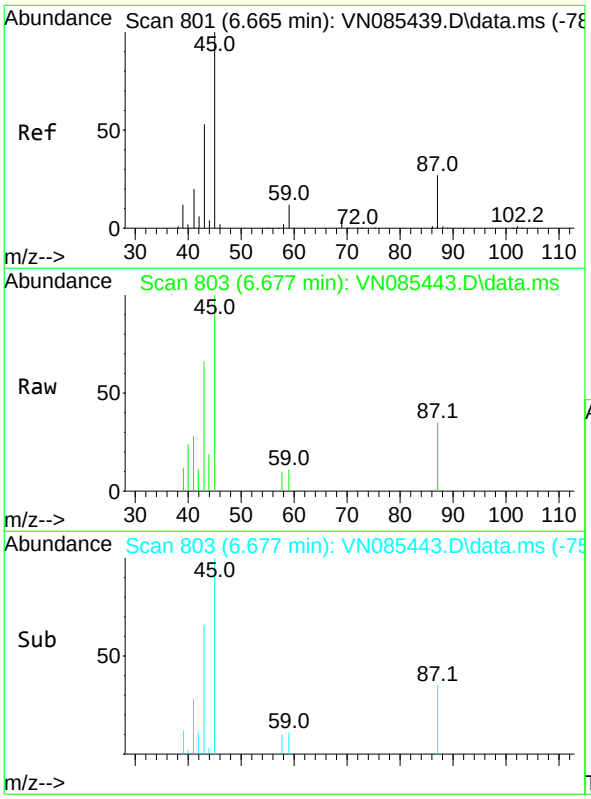
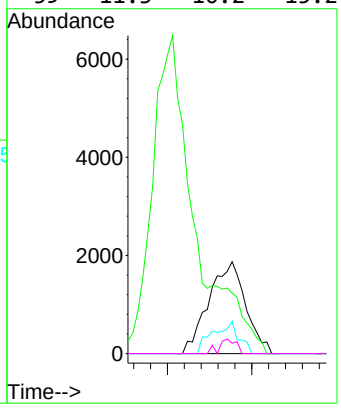


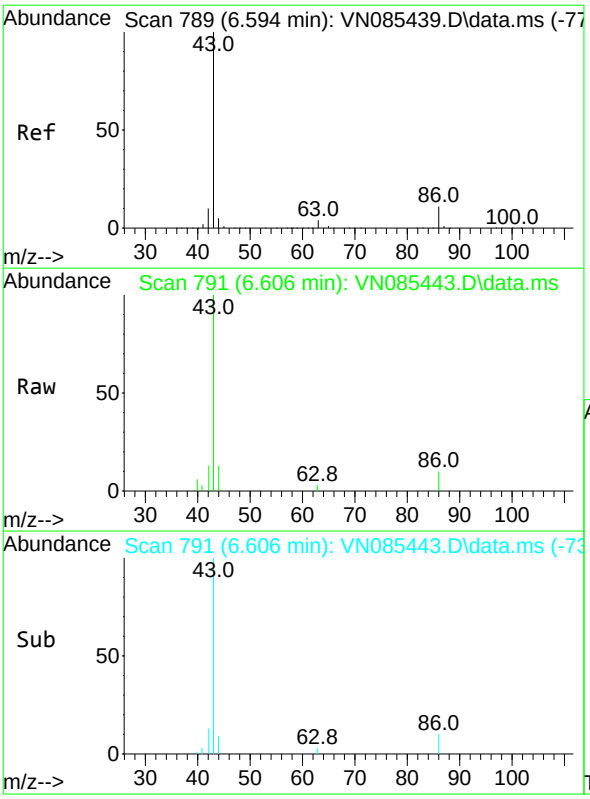


#22
Diisopropyl ether
Concen: 0.882 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 45 Resp: 5691

Ion	Ratio	Lower	Upper
45	100		
43	65.9	45.0	67.6
87	35.0	21.8	32.8#
59	11.3	10.2	15.2

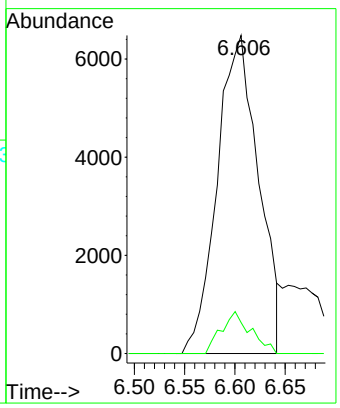




#23
Vinyl Acetate
Concen: 4.090 ug/l m
RT: 6.606 min Scan# 79
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 18526

Ion	Ratio	Lower	Upper
43	100		
86	9.8	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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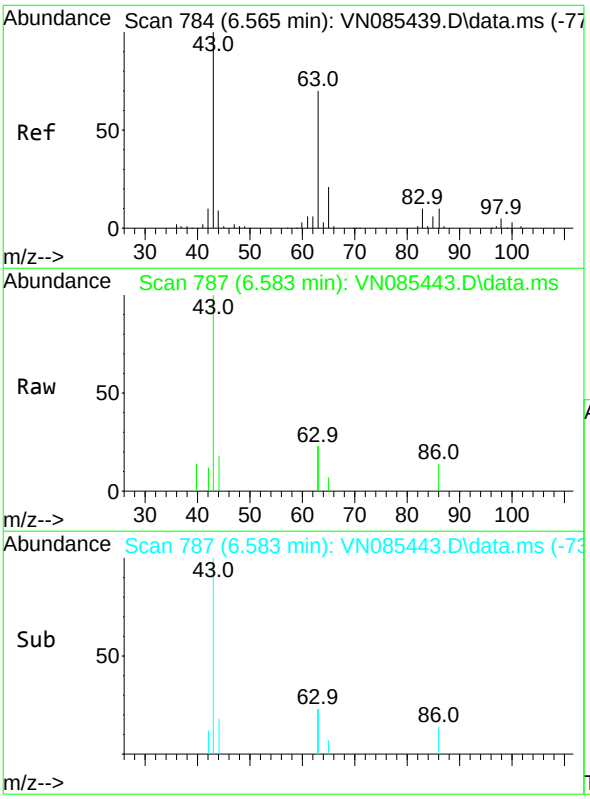
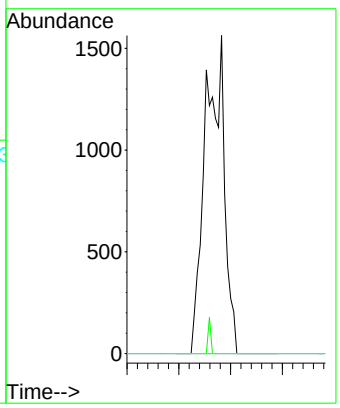
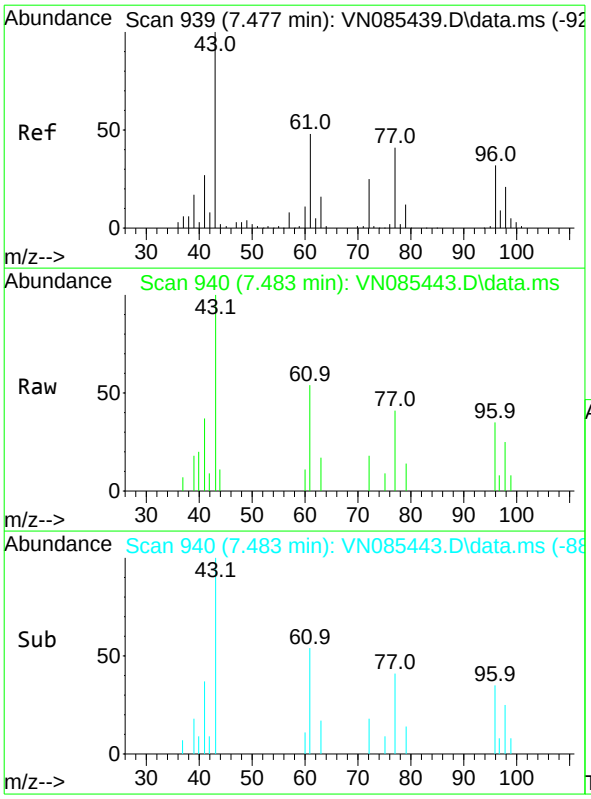


#24
1,1-Dichloroethane
Concen: 1.022 ug/l m
RT: 6.583 min Scan# 787
Delta R.T. 0.018 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 63 Resp: 4020

Ion	Ratio	Lower	Upper
63	100		
98	0.0	3.3	9.8#
100	0.0	2.0	6.0#

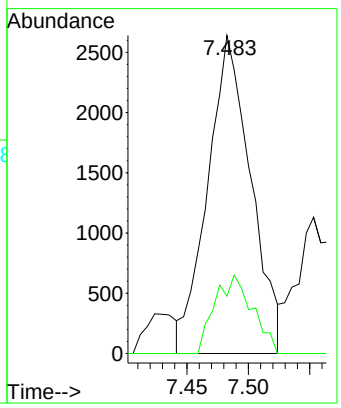




#25
2-Butanone
Concen: 5.034 ug/l m
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 6448

Ion	Ratio	Lower	Upper
43	100		
72	18.0	20.2	30.4#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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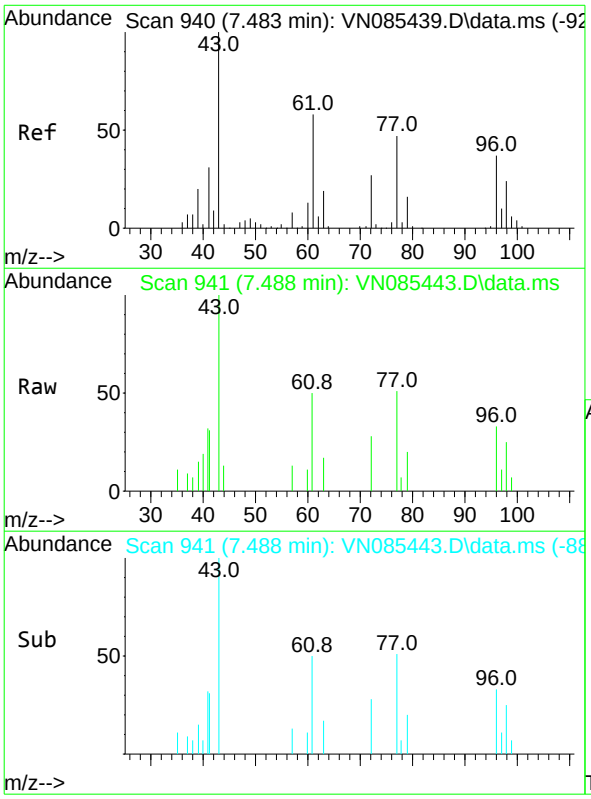
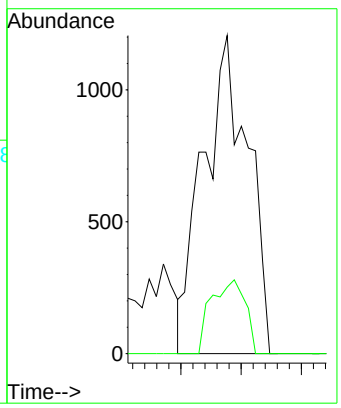
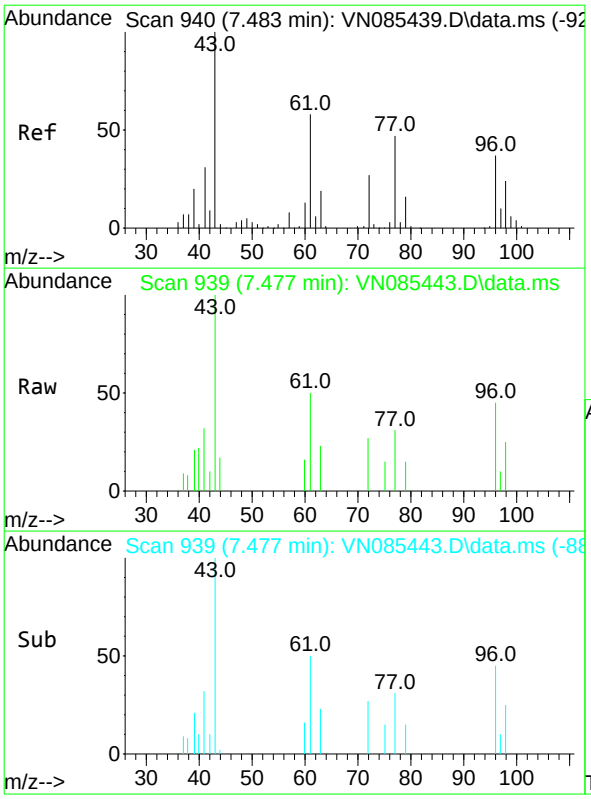


#26
2,2-Dichloropropane
Concen: 0.976 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 77 Resp: 3104

Ion	Ratio	Lower	Upper
77	100		
97	17.7	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 0.969 ug/l
RT: 7.477 min Scan# 93
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 96 Resp: 2185

Ion	Ratio	Lower	Upper
96	100		
61	166.1	0.0	311.8
98	68.7	0.0	126.0

Instrument :
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VSTDICC001

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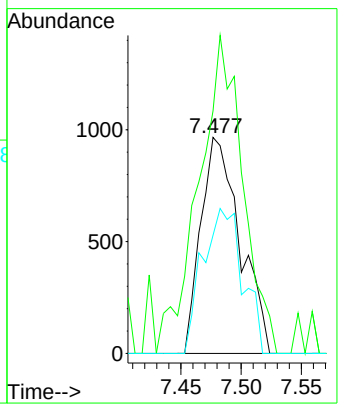
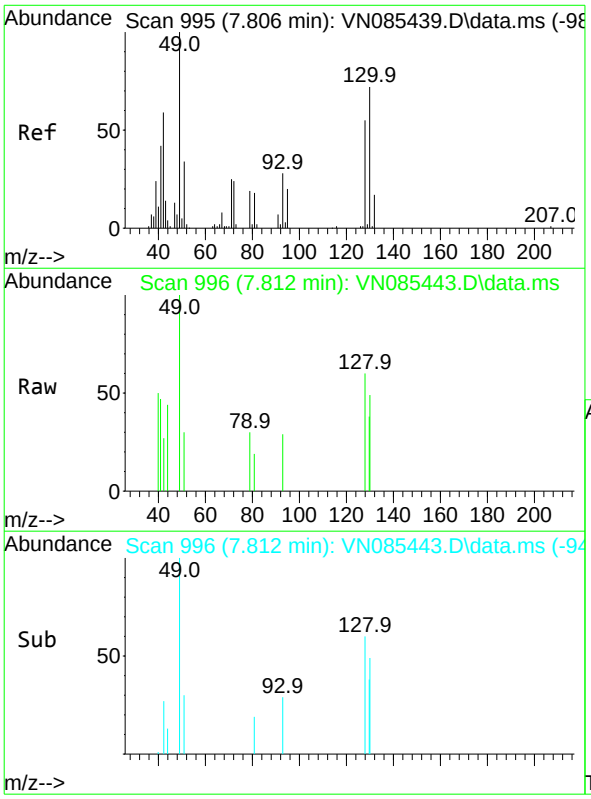
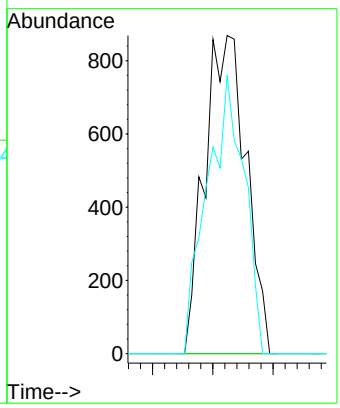


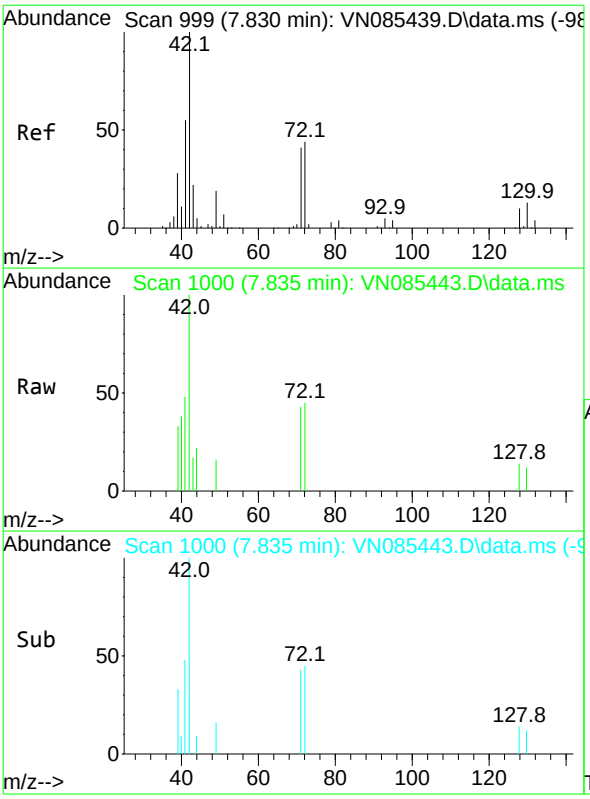


#28
Bromochloromethane
Concen: 1.138 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 49 Resp: 2082

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.4
130	78.0	55.0	82.4





#29
Tetrahydrofuran
Concen: 4.548 ug/l
RT: 7.835 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 42 Resp: 3693

Ion	Ratio	Lower	Upper
42	100		
72	43.1	34.2	51.2
71	37.9	32.5	48.7

Instrument :
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VSTDICC001

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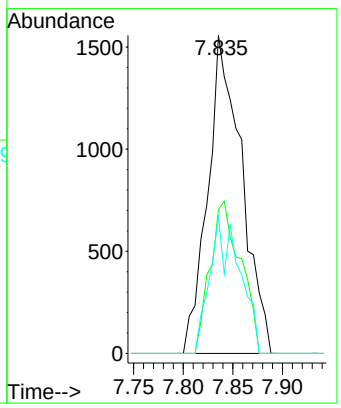
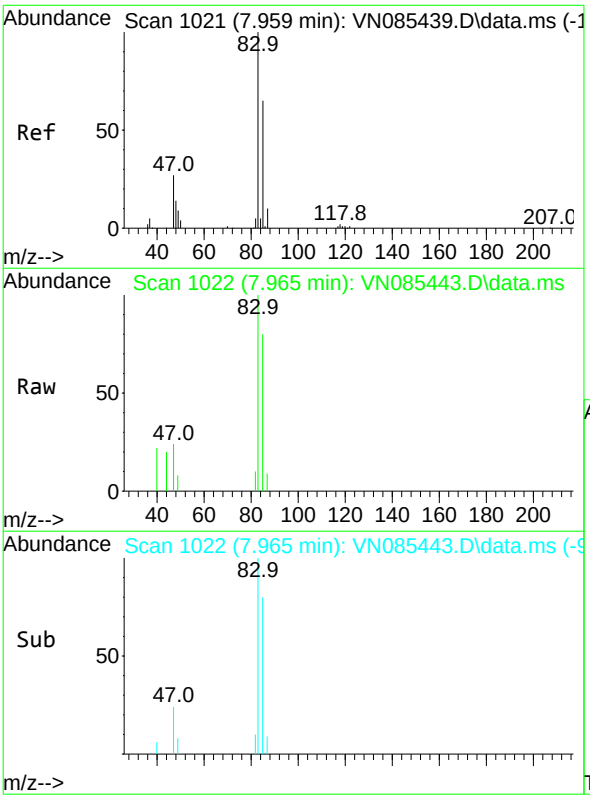
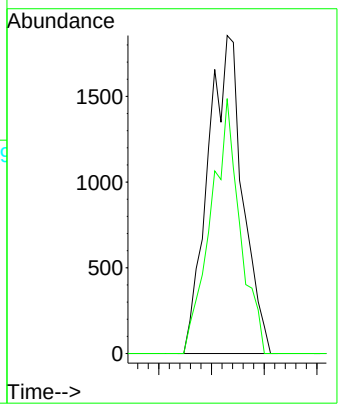


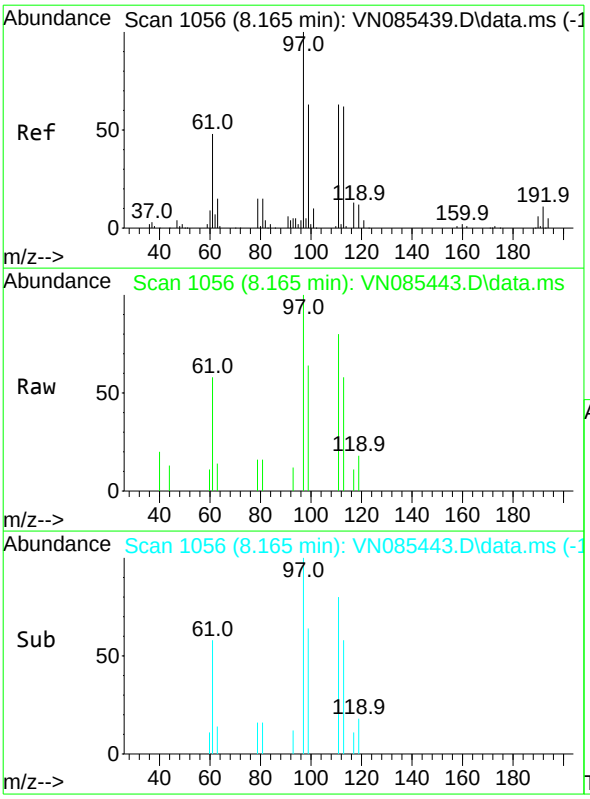


#30
Chloroform
Concen: 1.045 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 4250

Ion	Ratio	Lower	Upper
83	100		
85	80.2	51.8	77.6#

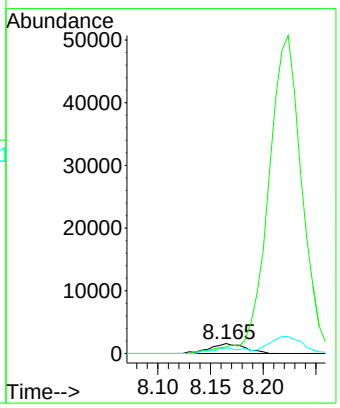




#32
1,1,1-Trichloroethane
Concen: 1.031 ug/l
RT: 8.165 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 3678

Ion	Ratio	Lower	Upper
97	100		
99	0.0	49.8	74.6#
61	52.2	41.4	62.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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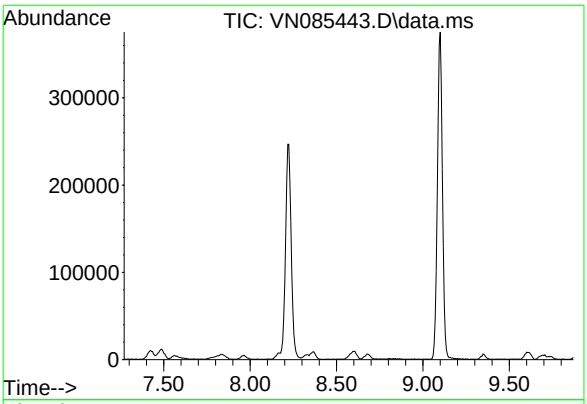
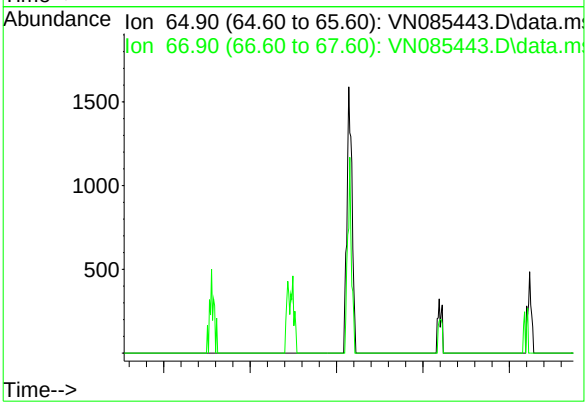


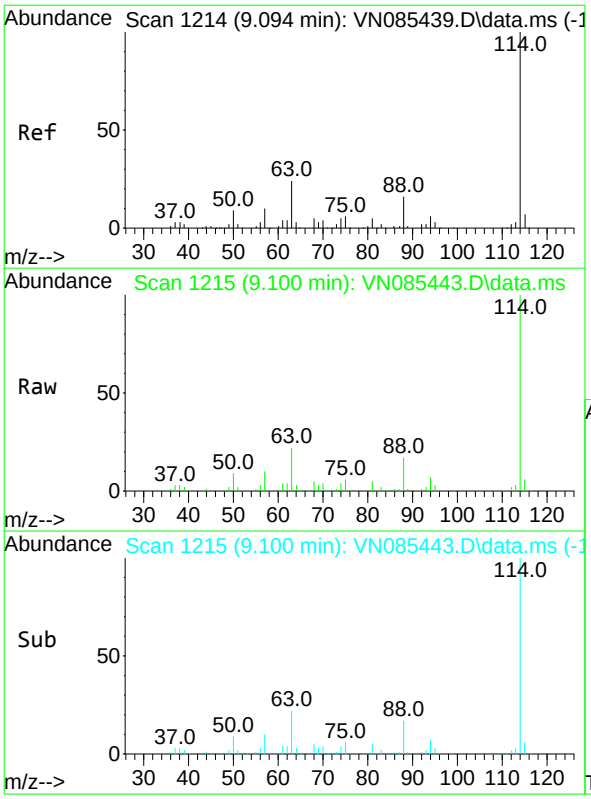
#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 8.57 min

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

Tgt Ion: 65

Sig	Exp Ratio
65	100
67	50.8





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 12
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:114 Resp: 302938

Ion	Ratio	Lower	Upper
114	100		
63	22.3	0.0	47.6
88	16.8	0.0	32.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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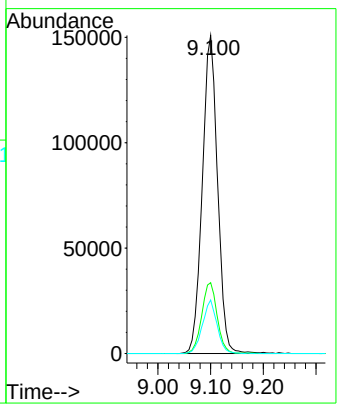
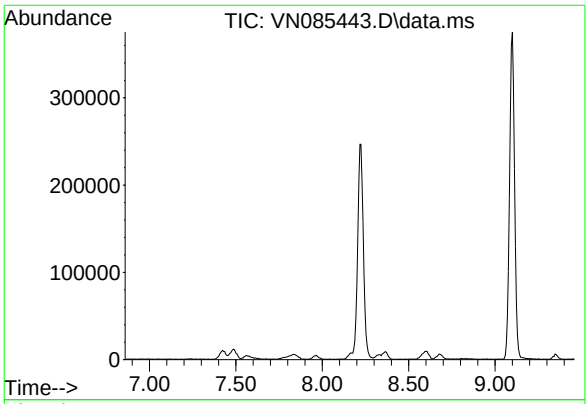
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



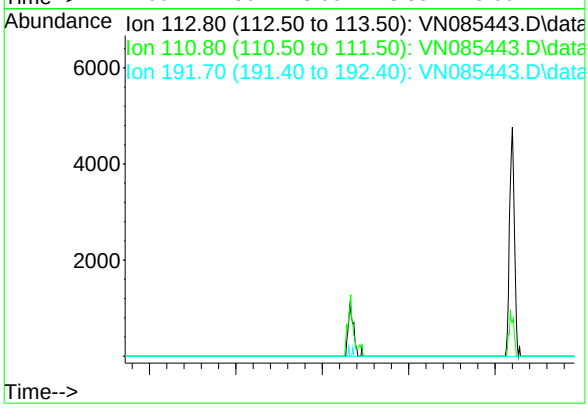


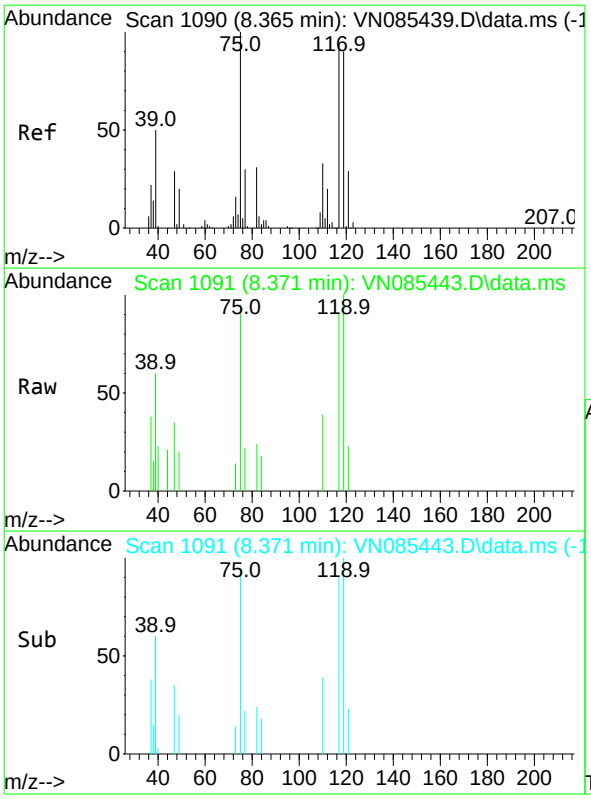
#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 8.16 min

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

Tgt Ion: 113

Sig	Exp Ratio
113	100
111	103.4
192	17.9

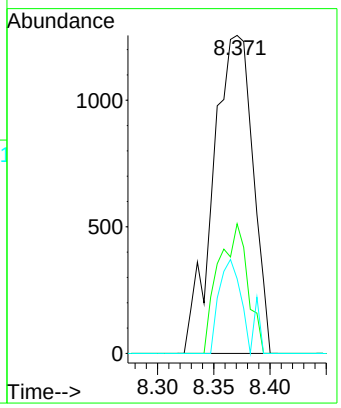




#36
1,1-Dichloropropene
Concen: 1.046 ug/l
RT: 8.371 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 3084

Ion	Ratio	Lower	Upper
75	100		
110	30.1	16.5	49.5
77	15.9	24.4	36.6#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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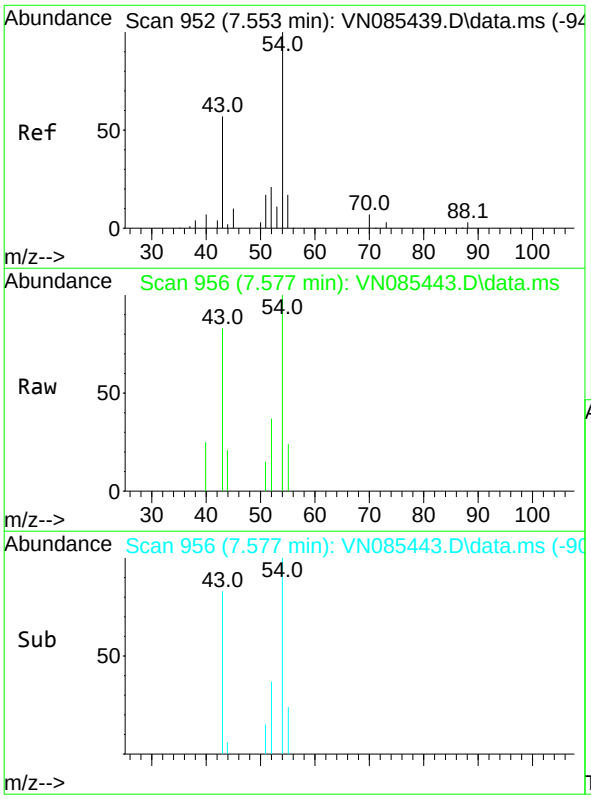
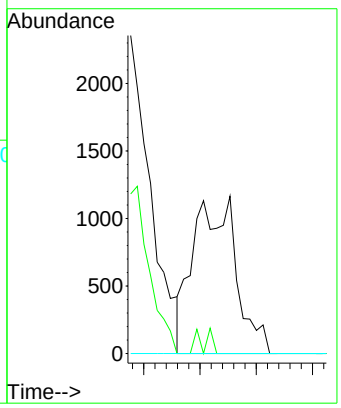
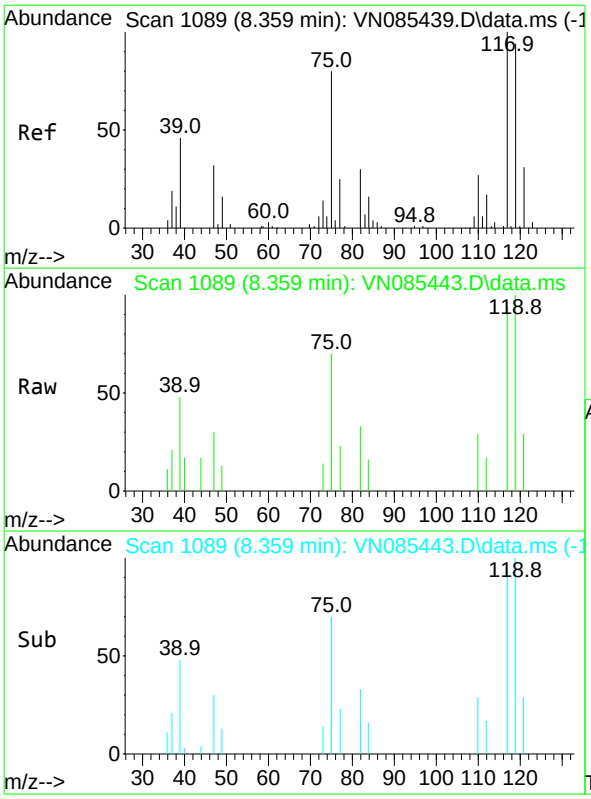


#37
Ethyl Acetate
Concen: 1.026 ug/l m
RT: 7.577 min Scan# 956
Delta R.T. 0.023 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 3056

Ion	Ratio	Lower	Upper
43	100		
61	4.3	10.9	16.3#
70	0.0	7.5	11.3#

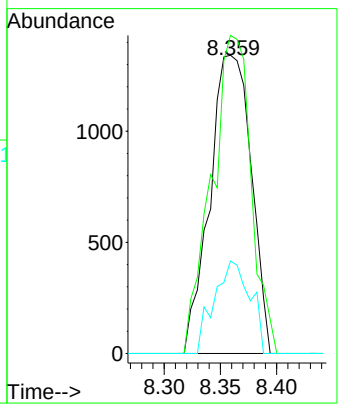




#38
Carbon Tetrachloride
Concen: 1.018 ug/l
RT: 8.359 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:117 Resp: 3436

Ion	Ratio	Lower	Upper
117	100		
119	106.6	75.4	113.2
121	31.0	24.6	37.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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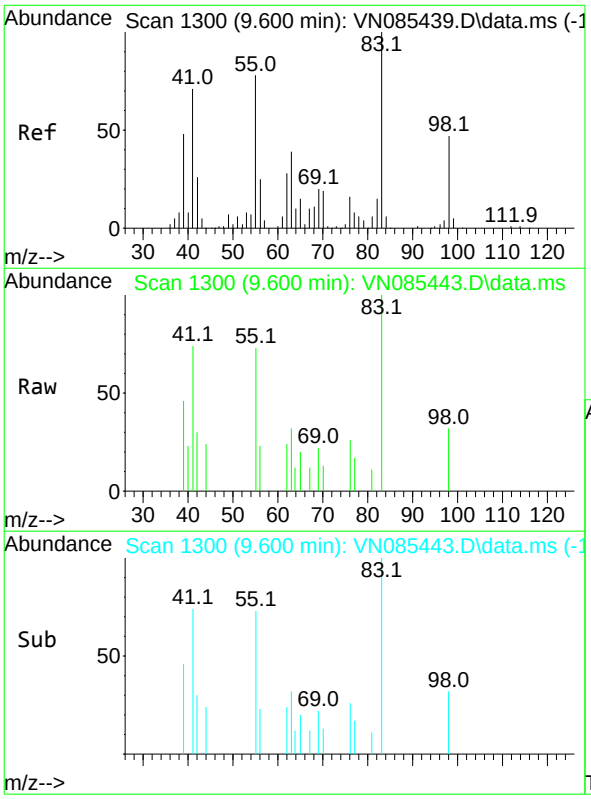
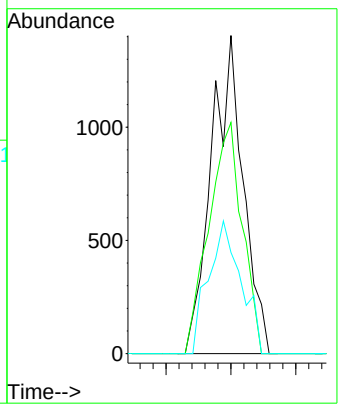
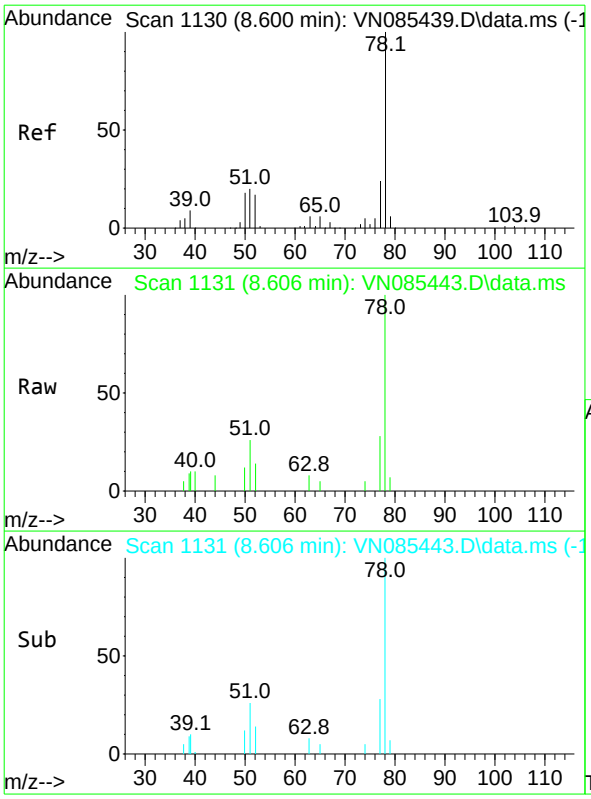


#39
Methylcyclohexane
Concen: 0.867 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 2403

Ion	Ratio	Lower	Upper
83	100		
55	72.7	62.6	94.0
98	31.8	37.7	56.5#

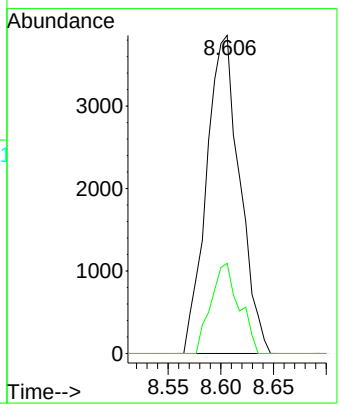




#40
Benzene
Concen: 0.957 ug/l
RT: 8.606 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 78 Resp: 8480

Ion	Ratio	Lower	Upper
78	100		
77	28.3	19.0	28.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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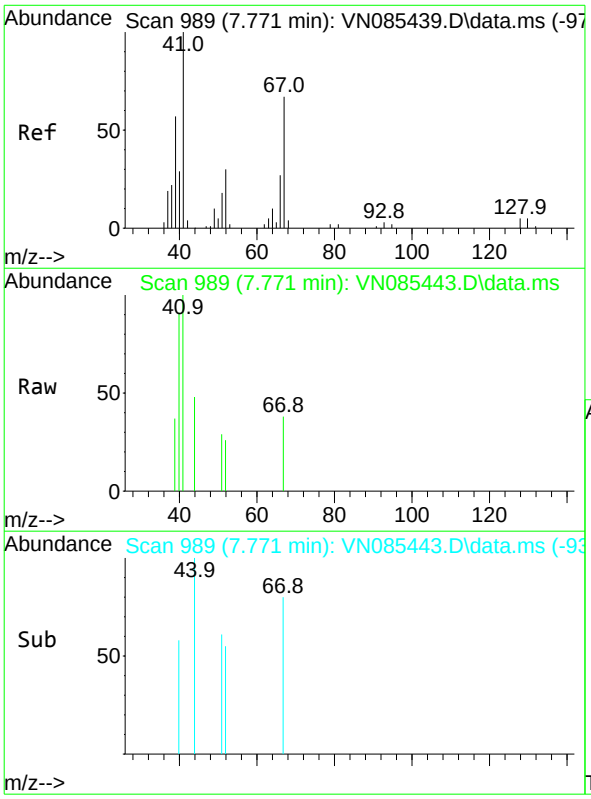
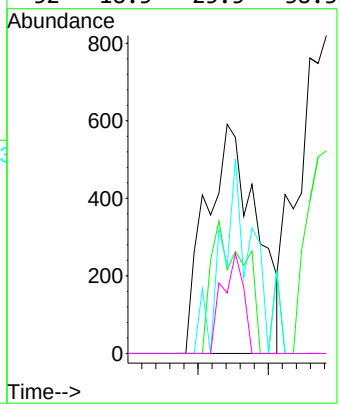
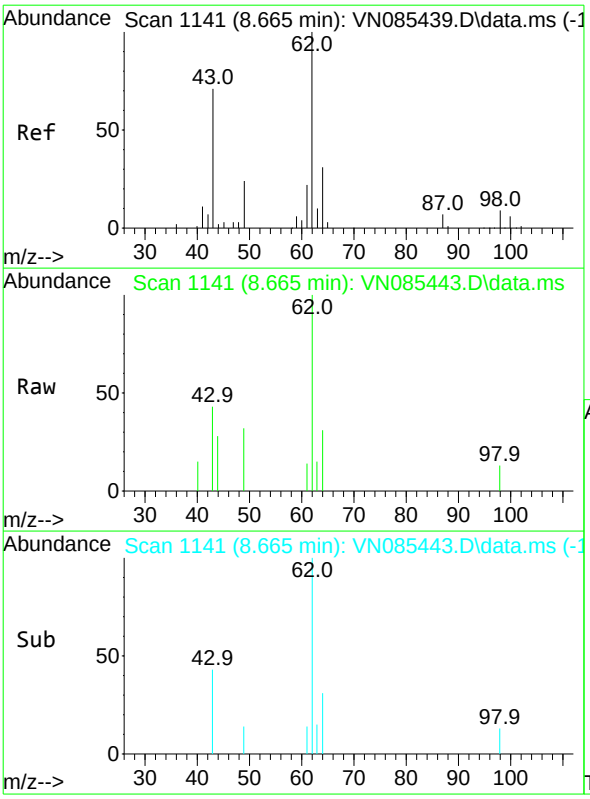


#41
Methacrylonitrile
Concen: 0.941 ug/l
RT: 7.771 min Scan# 989
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 1458

Ion	Ratio	Lower	Upper
41	100		
39	37.6	46.0	69.0#
67	53.8	57.4	86.2#
52	18.5	25.5	38.3#

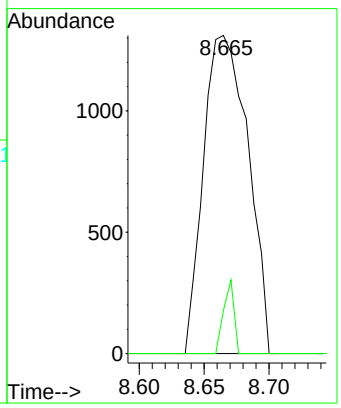




#42
1,2-Dichloroethane
Concen: 0.938 ug/l
RT: 8.665 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 62 Resp: 3131

Ion	Ratio	Lower	Upper
62	100		
98	5.4	0.0	17.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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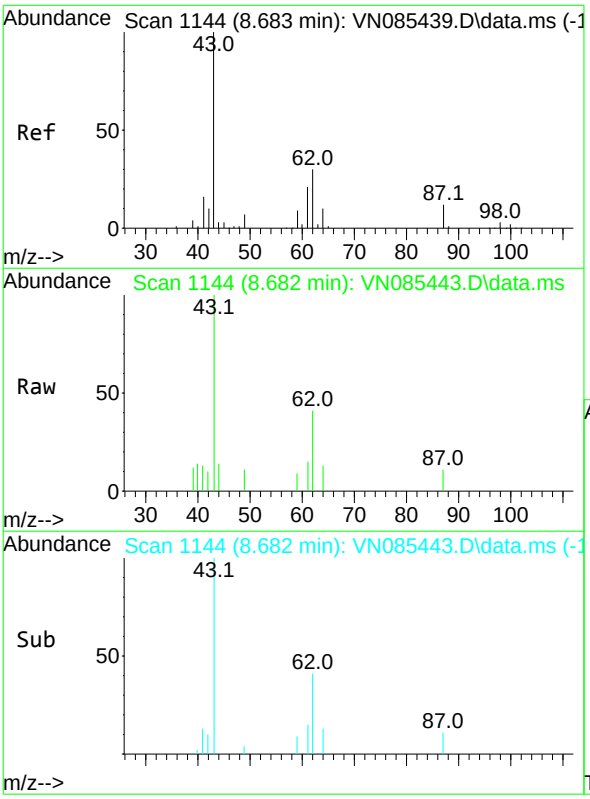
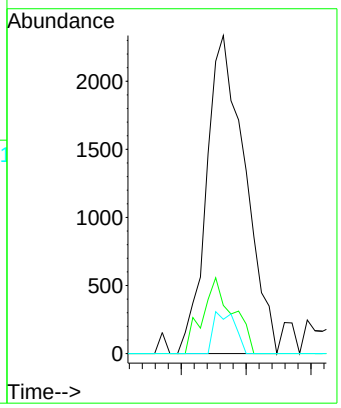
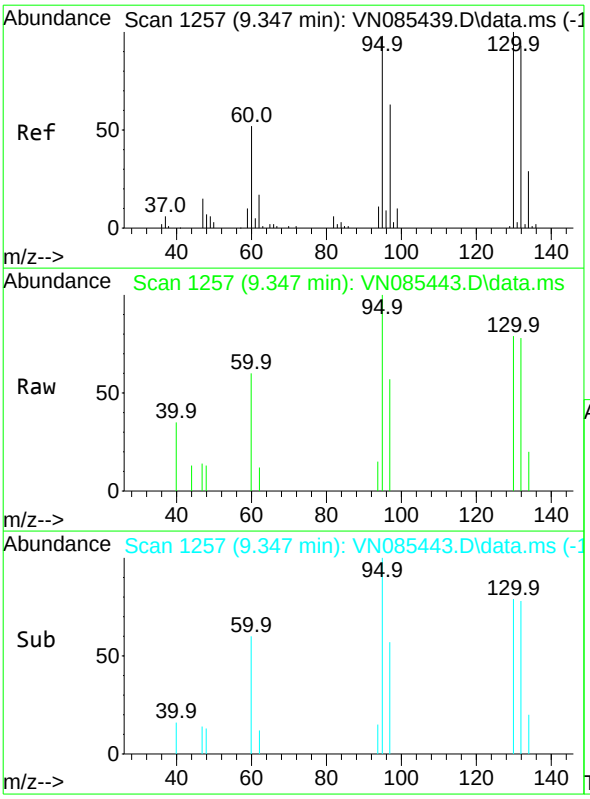


#43
Isopropyl Acetate
Concen: 1.007 ug/l
RT: 8.682 min Scan# 1144
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 4803

Ion	Ratio	Lower	Upper
43	100		
61	18.9	20.7	31.1#
87	7.3	9.8	14.8#

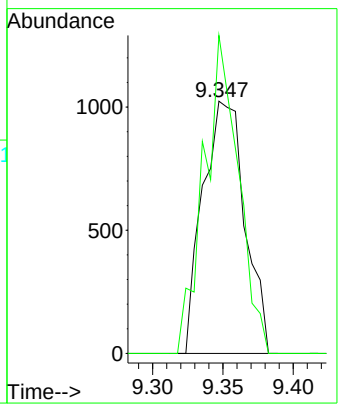




#44
Trichloroethene
Concen: 1.034 ug/l
RT: 9.347 min Scan# 12
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:130 Resp: 2133

Ion	Ratio	Lower	Upper
130	100		
95	126.1	0.0	195.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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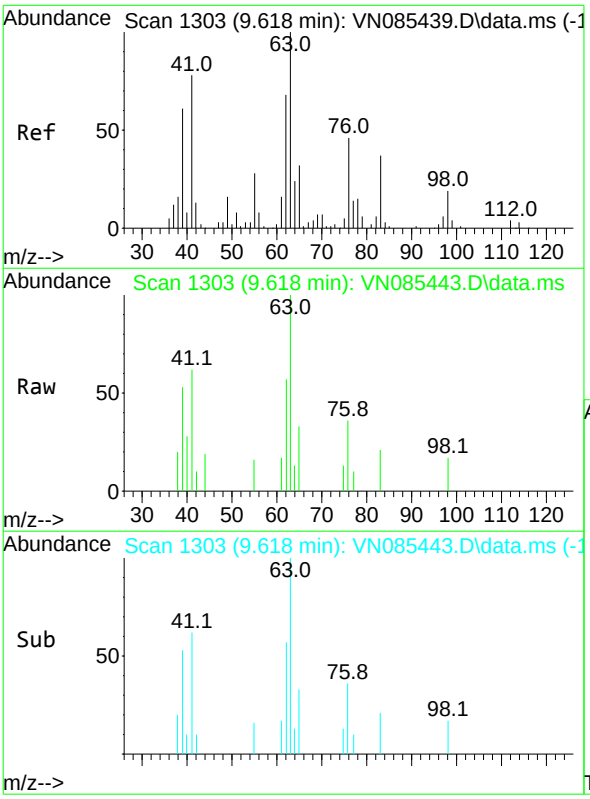
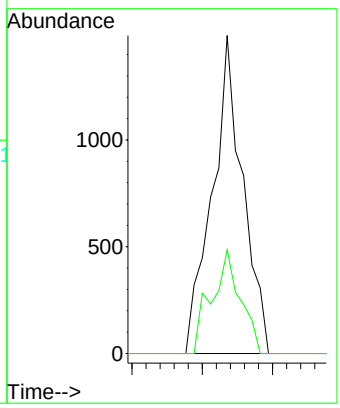
Supervised By :Mahesh Dadoda 01/15/2025

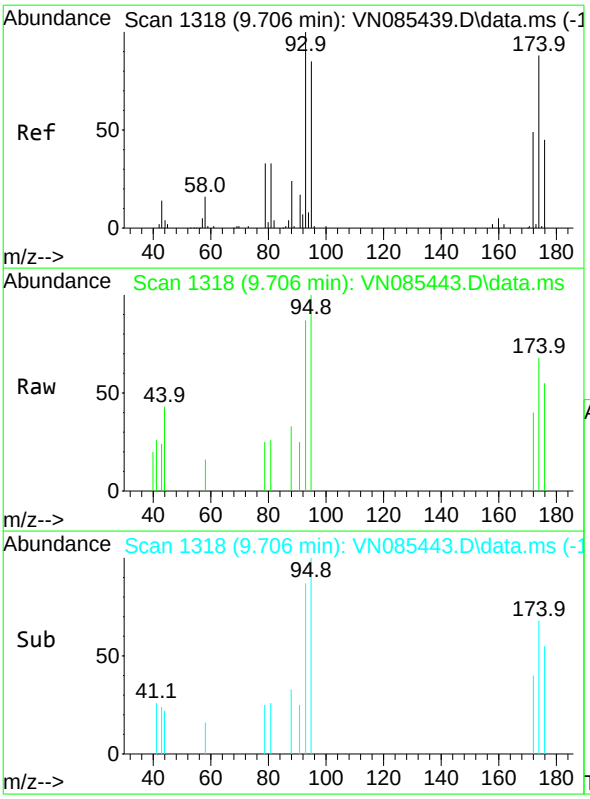


#45
1,2-Dichloropropane
Concen: 0.992 ug/l
RT: 9.618 min Scan# 1303
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 63 Resp: 2246

Ion	Ratio	Lower	Upper
63	100		
65	32.6	25.6	38.4

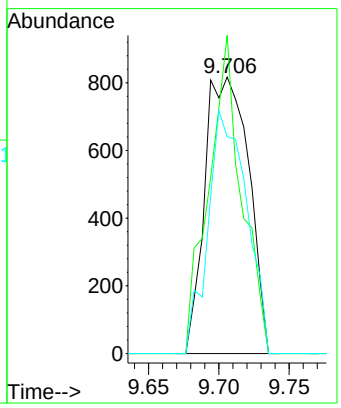




#46
Dibromomethane
Concen: 1.083 ug/l
RT: 9.706 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 93 Resp: 1769

Ion	Ratio	Lower	Upper
93	100		
95	86.5	64.7	97.1
174	77.4	69.0	103.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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Reviewed By :John Carlone 01/15/2025
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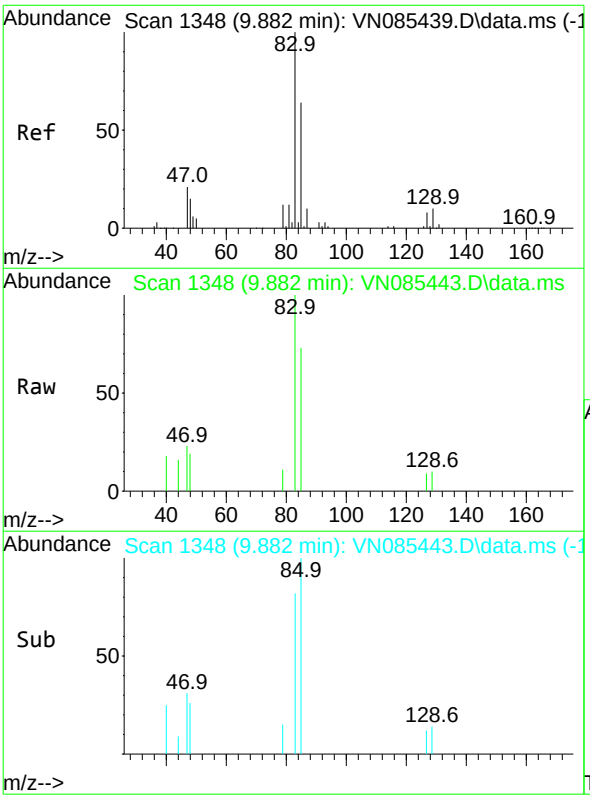
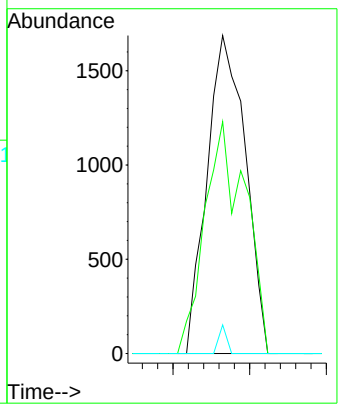
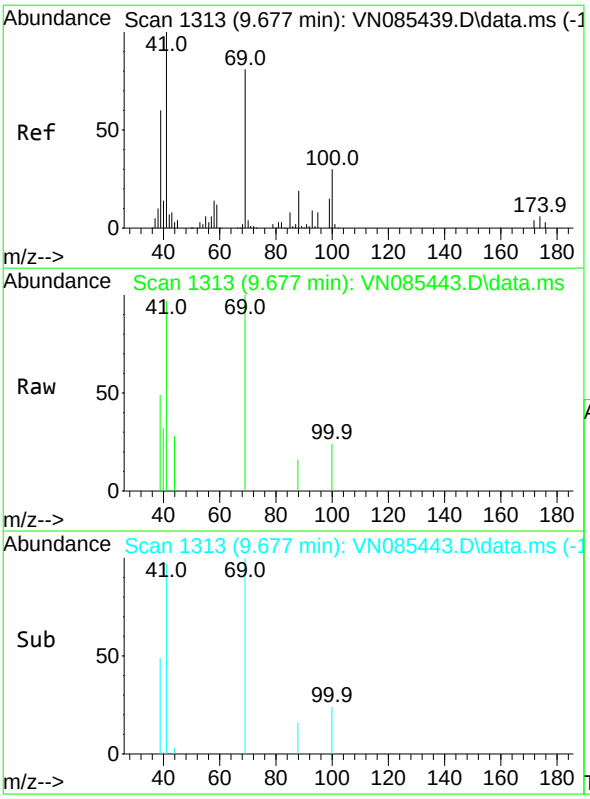


#47
Bromodichloromethane
Concen: 0.882 ug/l
RT: 9.882 min Scan# 1348
Delta R.T. 0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 2935

Ion	Ratio	Lower	Upper
83	100		
85	72.9	51.2	76.8
127	9.0	6.5	9.7





#48
Methyl methacrylate
Concen: 0.878 ug/l
RT: 9.677 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 1886

Ion	Ratio	Lower	Upper
41	100		
69	76.2	64.7	97.1
39	62.8	49.0	73.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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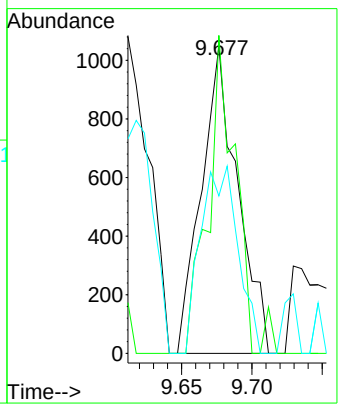
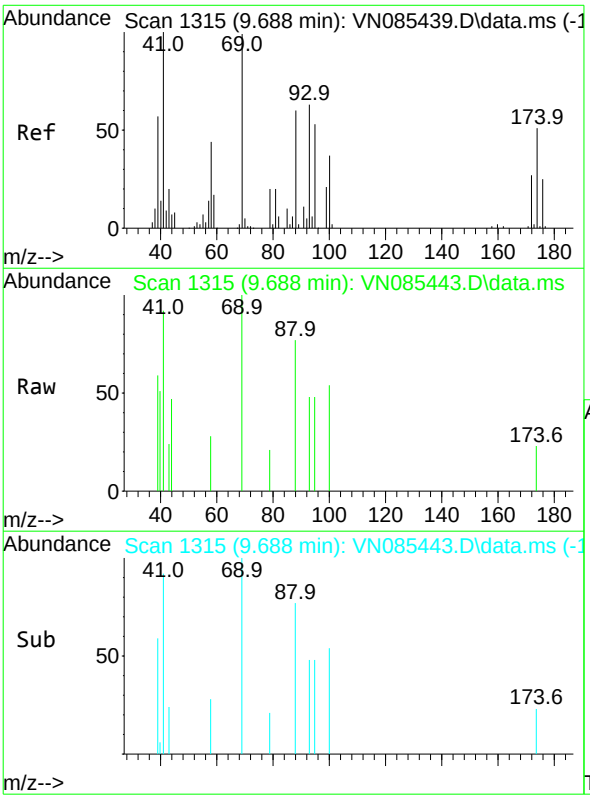
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

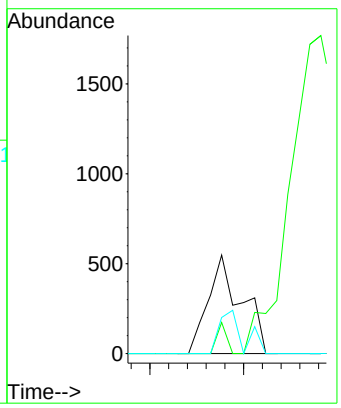


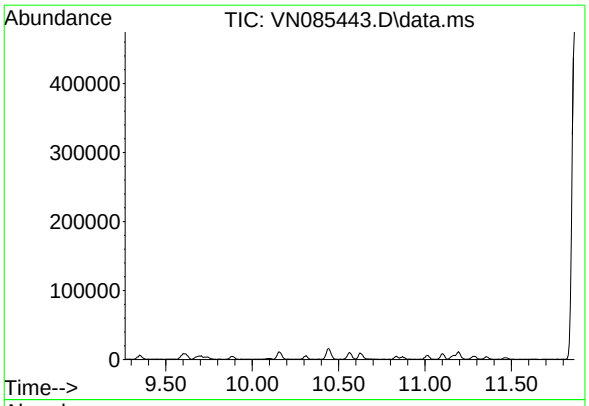


#49
1,4-Dioxane
Concen: 18.616 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 88 Resp: 673

Ion	Ratio	Lower	Upper
88	100		
43	0.0	26.6	39.8#
58	31.1	59.5	89.3#





#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.56 min

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

Tgt Ion: 98

Sig	Exp Ratio
98	100
100	65.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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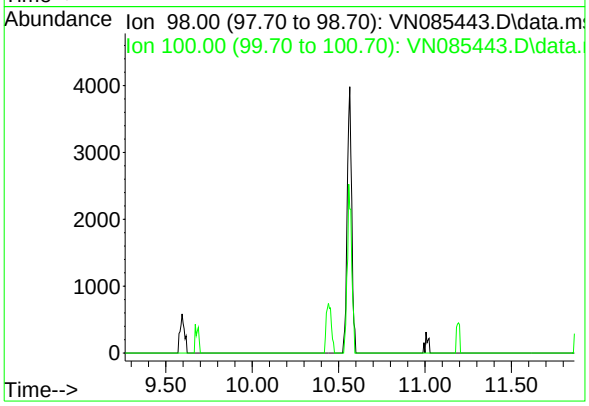
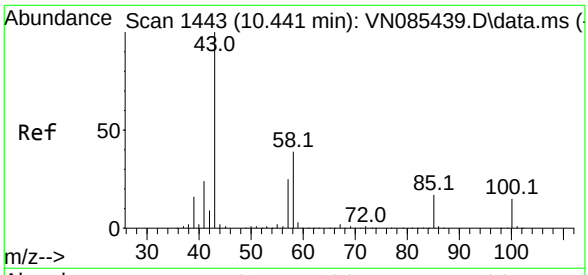
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

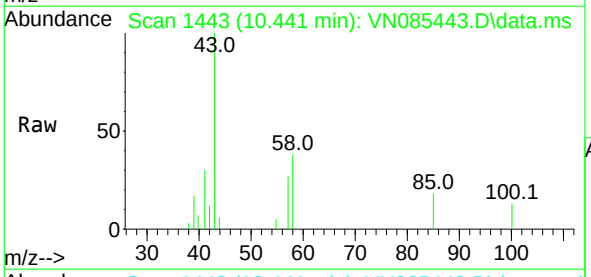


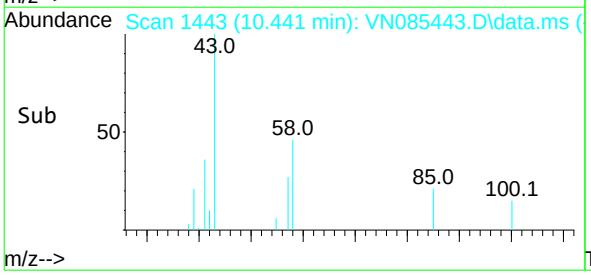


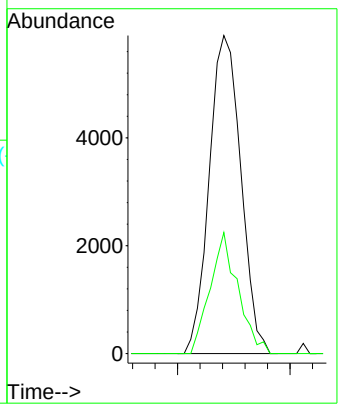
#51
4-Methyl-2-Pentanone
Concen: 4.163 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

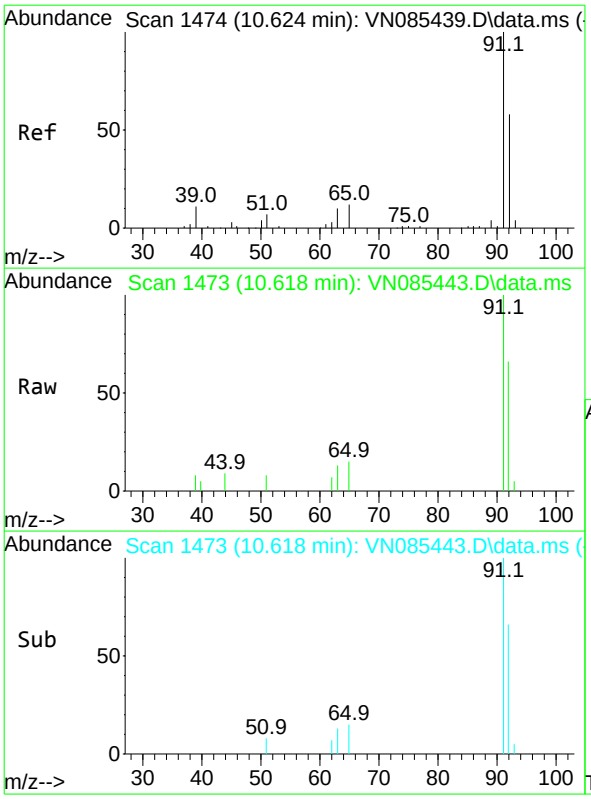
Tgt Ion: 43 Resp: 11523

Ion	Ratio	Lower	Upper
43	100		
58	33.6	30.5	45.7





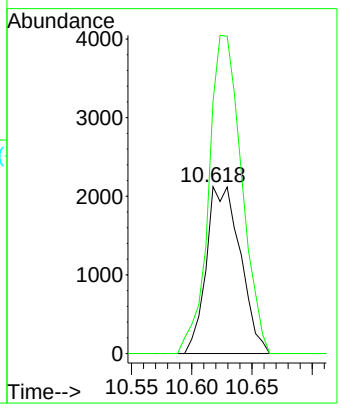




#52
Toluene
Concen: 0.814 ug/l
RT: 10.618 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 92 Resp: 4180

Ion	Ratio	Lower	Upper
92	100		
91	183.9	139.2	208.8



Instrument :
MSVOA_N
ClientSampleId :
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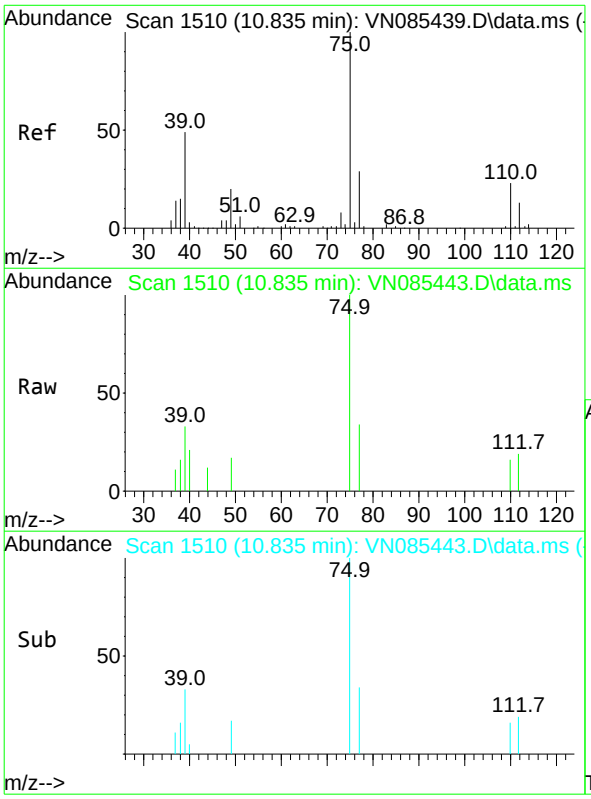
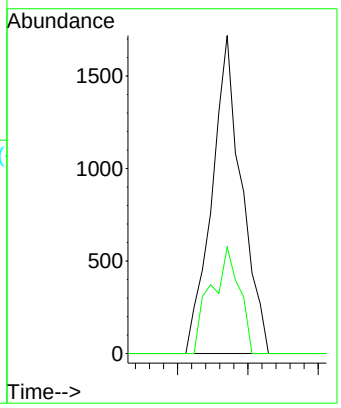
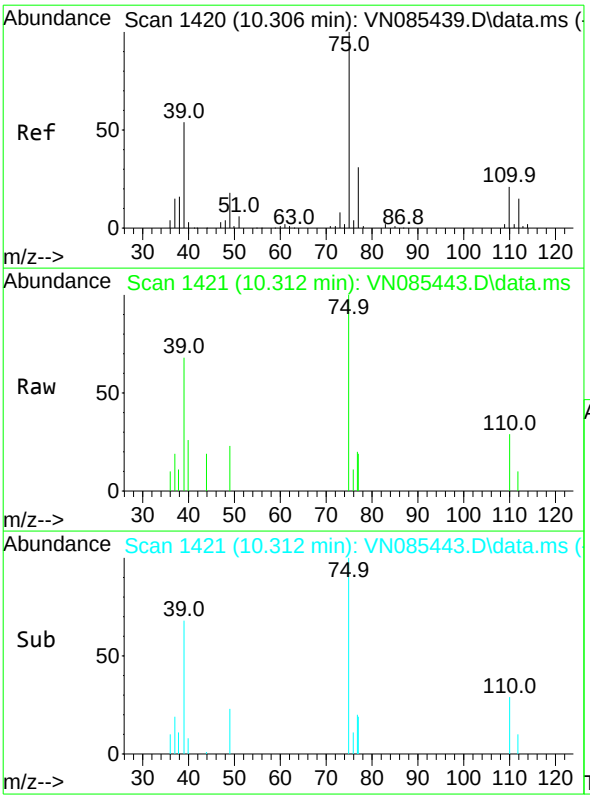


#53
t-1,3-Dichloropropene
Concen: 0.802 ug/l
RT: 10.835 min Scan# 1510
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2522

Ion	Ratio	Lower	Upper
75	100		
77	33.5	23.5	35.3

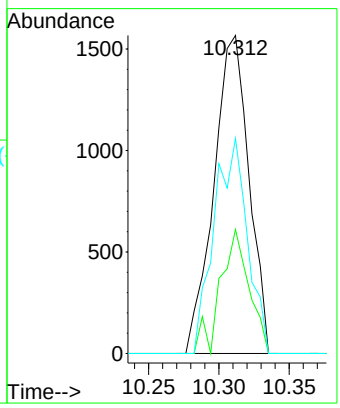




#54
cis-1,3-Dichloropropene
Concen: 0.811 ug/l
RT: 10.312 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2725

Ion	Ratio	Lower	Upper
75	100		
77	39.0	25.0	37.4#
39	67.6	43.1	64.7#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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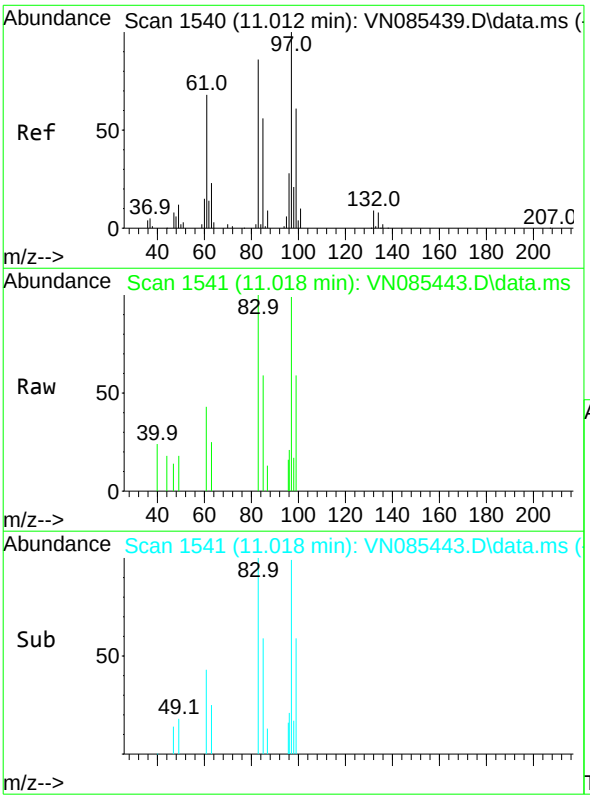
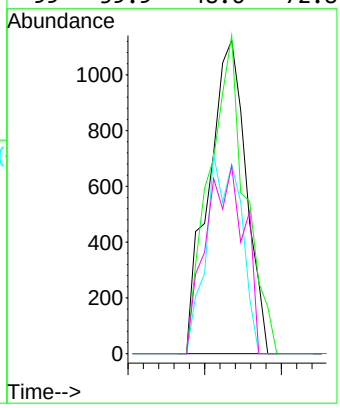
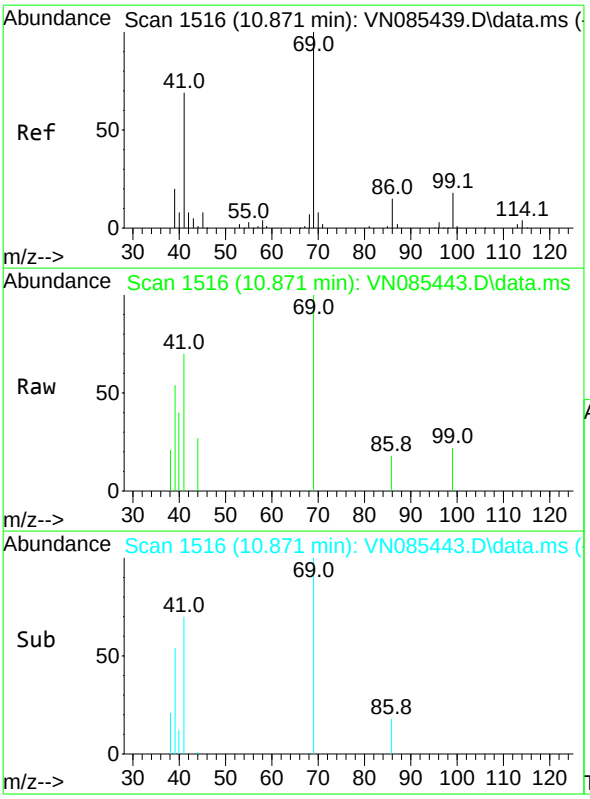


#55
1,1,2-Trichloroethane
Concen: 0.935 ug/l
RT: 11.018 min Scan# 1541
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 1901

Ion	Ratio	Lower	Upper
97	100		
83	101.5	69.0	103.6
85	60.3	44.6	66.8
99	59.9	48.6	72.8





#56
Ethyl methacrylate
Concen: 2.471 ug/l
RT: 10.871 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 69 Resp: 1923

Ion	Ratio	Lower	Upper
69	100		
41	74.4	54.6	82.0
39	52.4	32.4	48.6#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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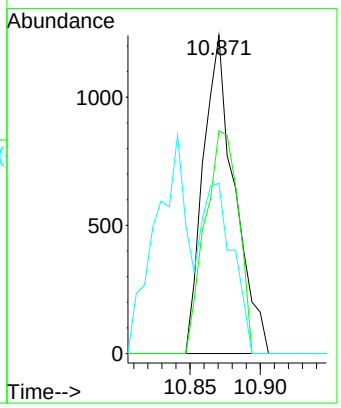
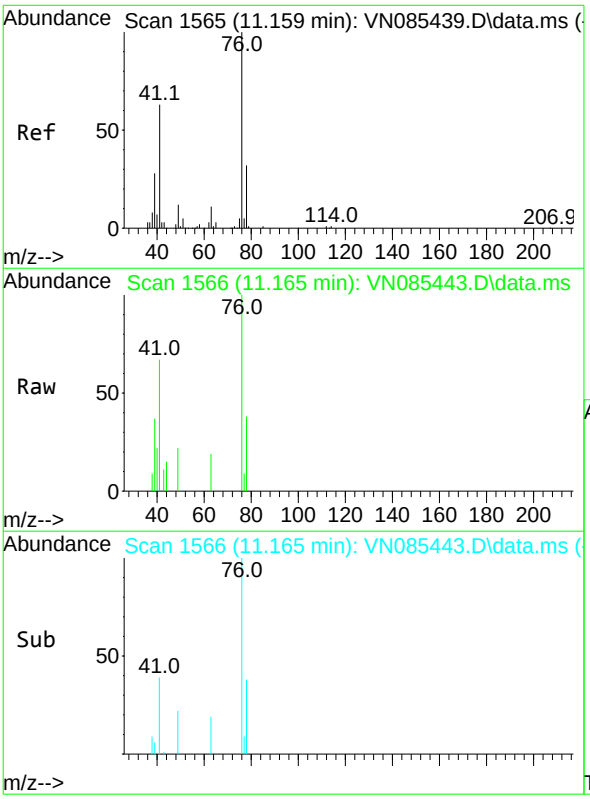
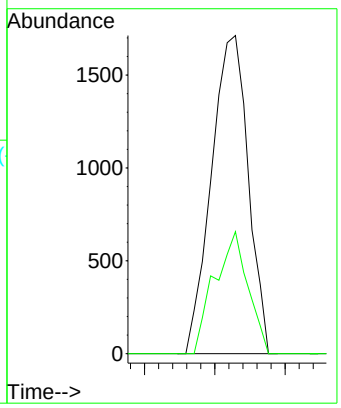


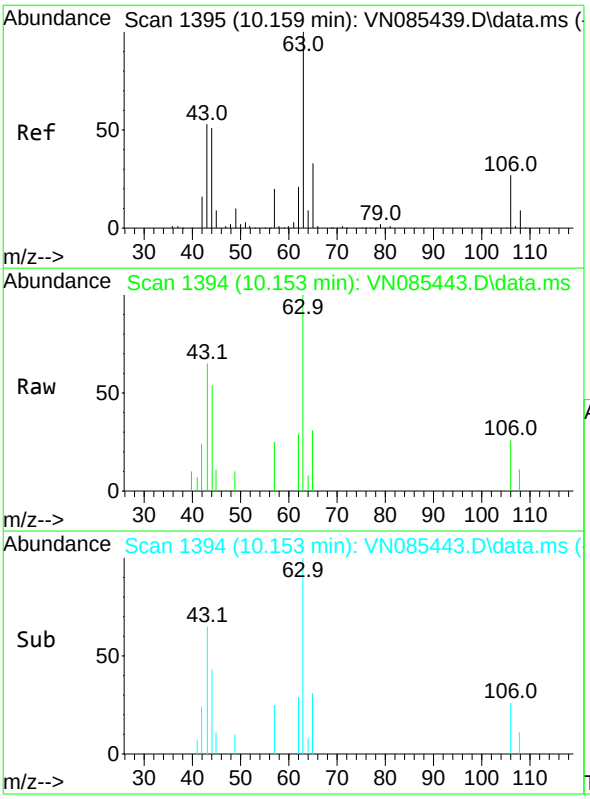


#57
1,3-Dichloropropane
Concen: 0.881 ug/l
RT: 11.165 min Scan# 1566
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 76 Resp: 3113

Ion	Ratio	Lower	Upper
76	100		
78	34.9	25.6	38.4

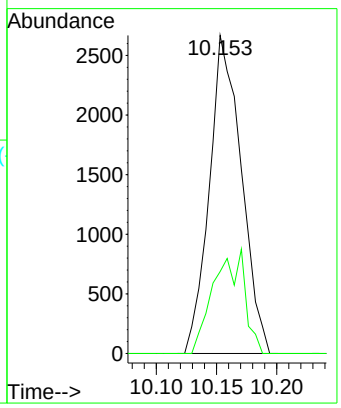




#58
2-Chloroethyl Vinyl ether
Concen: 3.822 ug/l
RT: 10.153 min Scan# 13
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 63 Resp: 4929

Ion	Ratio	Lower	Upper
63	100		
106	31.7	21.6	32.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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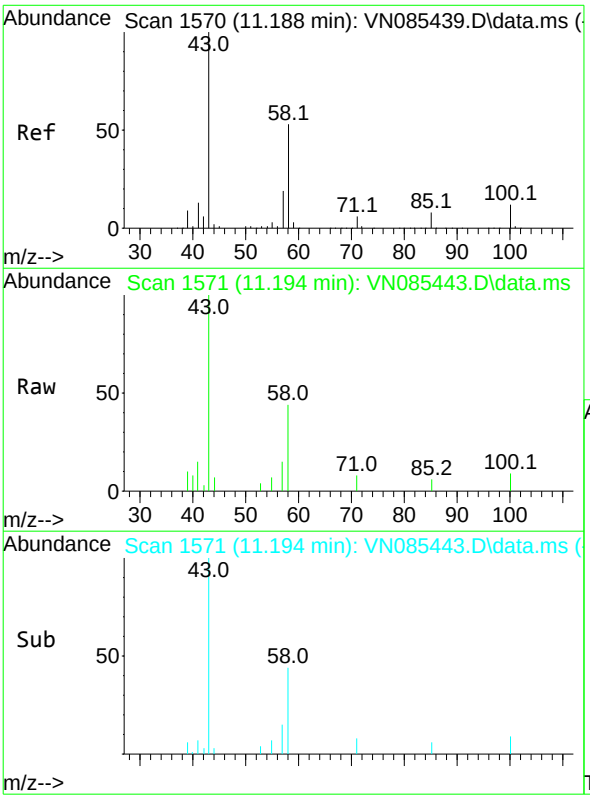
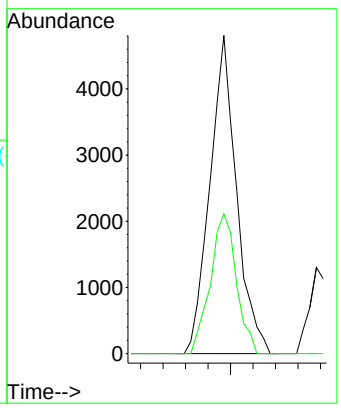
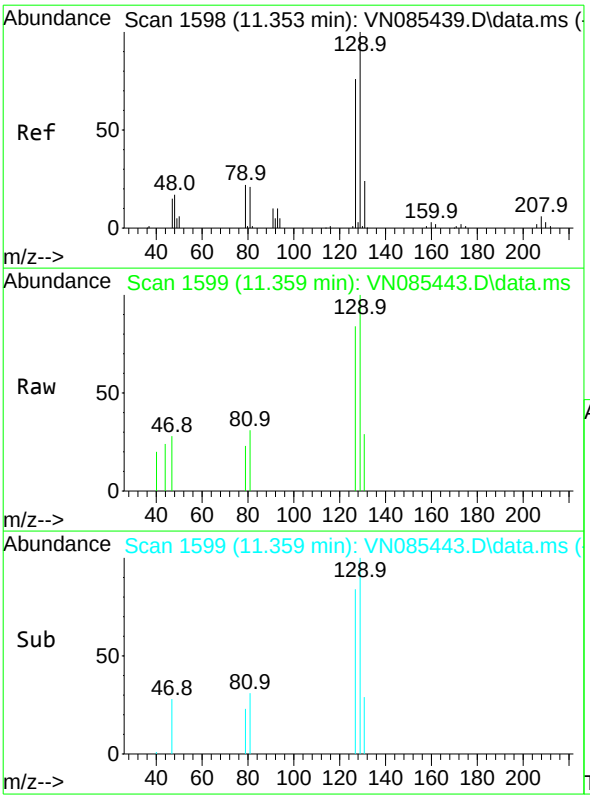


#59
2-Hexanone
Concen: 4.058 ug/l
RT: 11.194 min Scan# 1571
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 7905

Ion	Ratio	Lower	Upper
43	100		
58	42.9	26.2	78.6

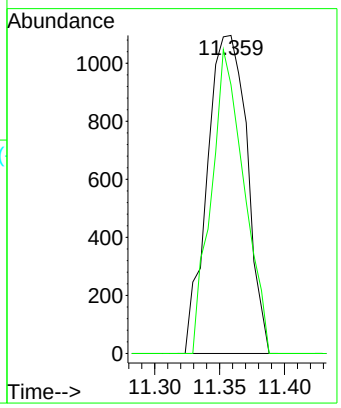




#60
Dibromochloromethane
Concen: 0.953 ug/l
RT: 11.359 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:129 Resp: 2339

Ion	Ratio	Lower	Upper
129	100		
127	78.9	38.6	115.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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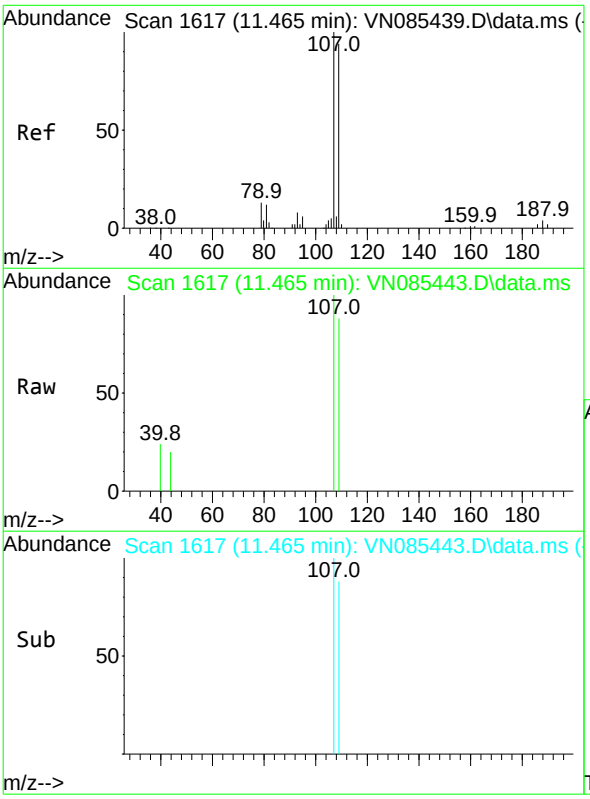
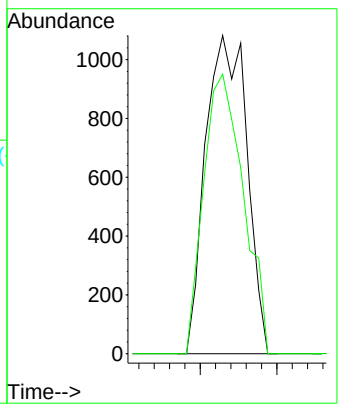
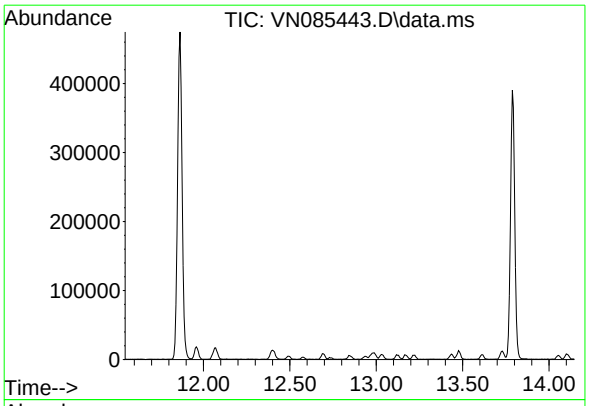


#61
1,2-Dibromoethane
Concen: 1.000 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:107 Resp: 2022

Ion	Ratio	Lower	Upper
107	100		
109	84.8	75.9	113.9





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

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

Tgt Ion: 95

Sig	Exp Ratio
95	100
174	72.5
176	71.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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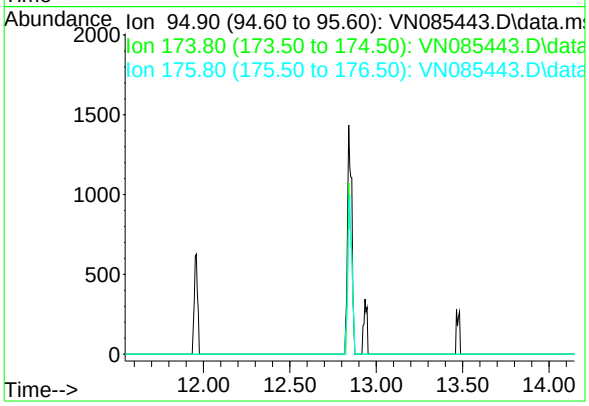
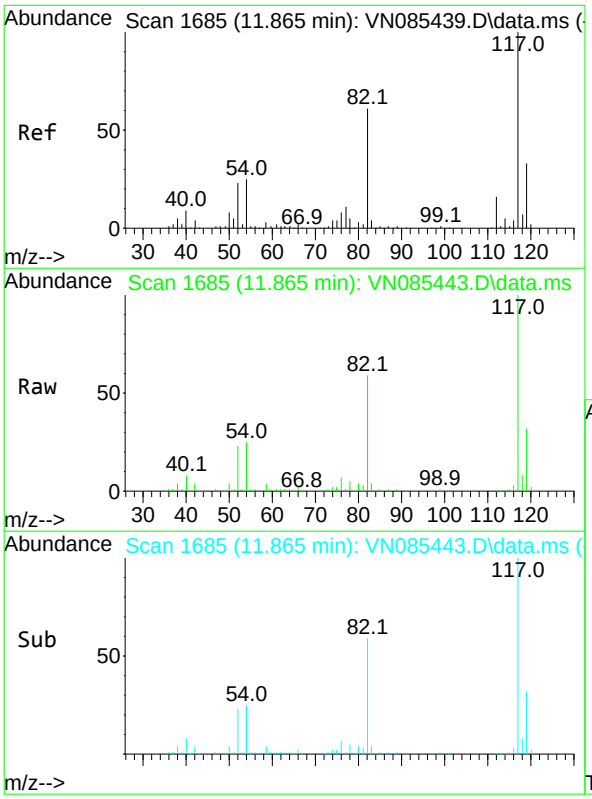
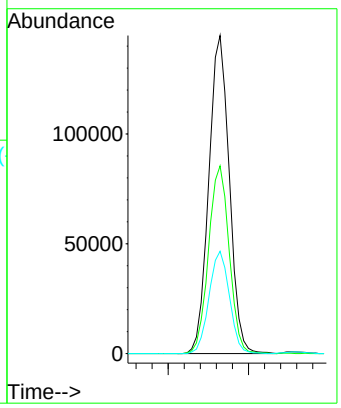


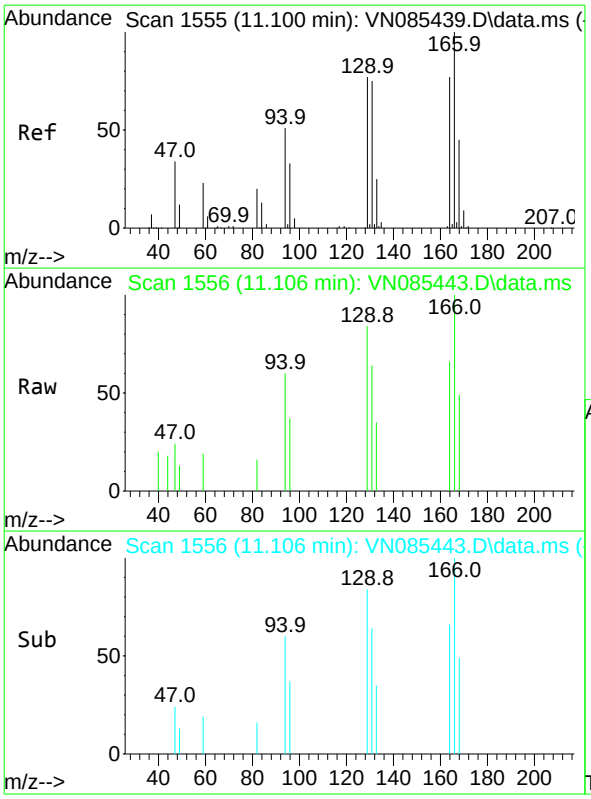


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:117 Resp: 256851

Ion	Ratio	Lower	Upper
117	100		
82	59.0	48.6	72.8
119	32.2	26.6	39.8

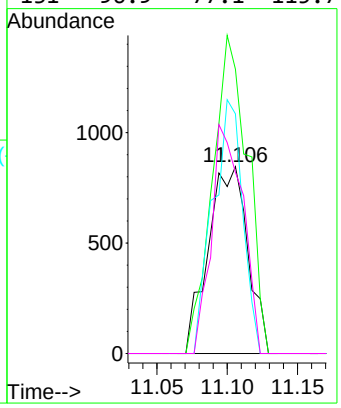




#64
Tetrachloroethene
Concen: 0.947 ug/l
RT: 11.106 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:164 Resp: 1658

Ion	Ratio	Lower	Upper
164	100		
166	152.1	103.4	155.2
129	128.3	79.2	118.8#
131	96.9	77.1	115.7



Instrument :
MSVOA_N
ClientSampleId :
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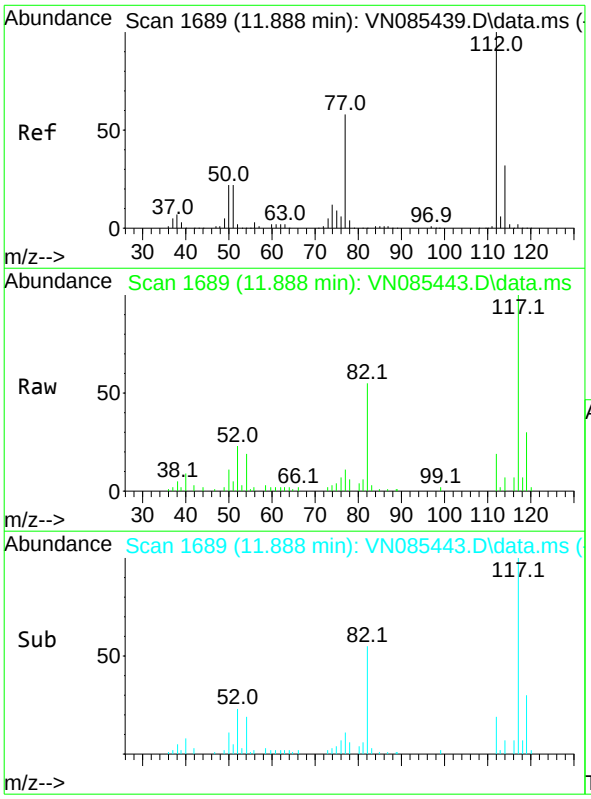
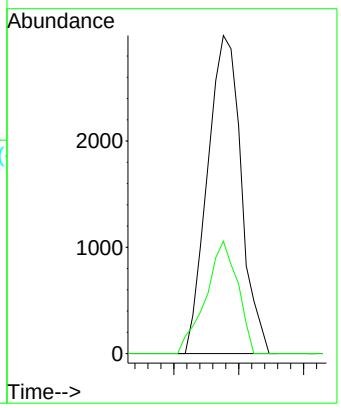
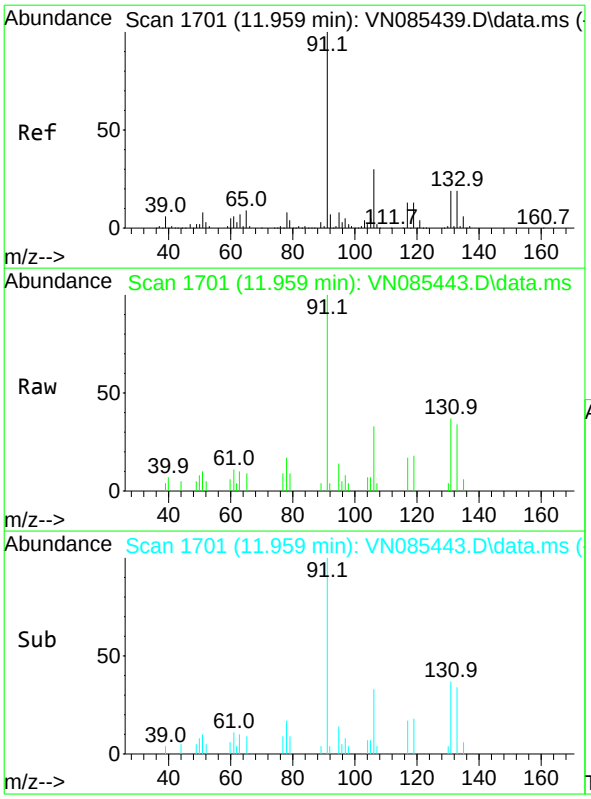


#65
Chlorobenzene
Concen: 0.960 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:112 Resp: 5401

Ion	Ratio	Lower	Upper
112	100		
114	35.3	25.3	37.9

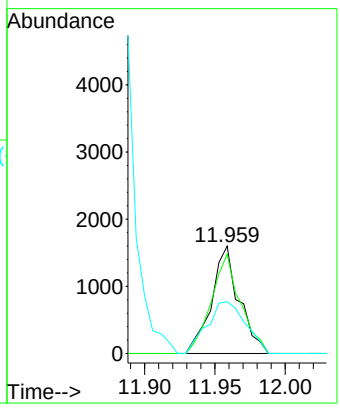




#66
1,1,1,2-Tetrachloroethane
Concen: 1.058 ug/l
RT: 11.959 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:131 Resp: 2185

Ion	Ratio	Lower	Upper
131	100		
133	97.7	47.4	142.3
119	0.0	33.1	99.5#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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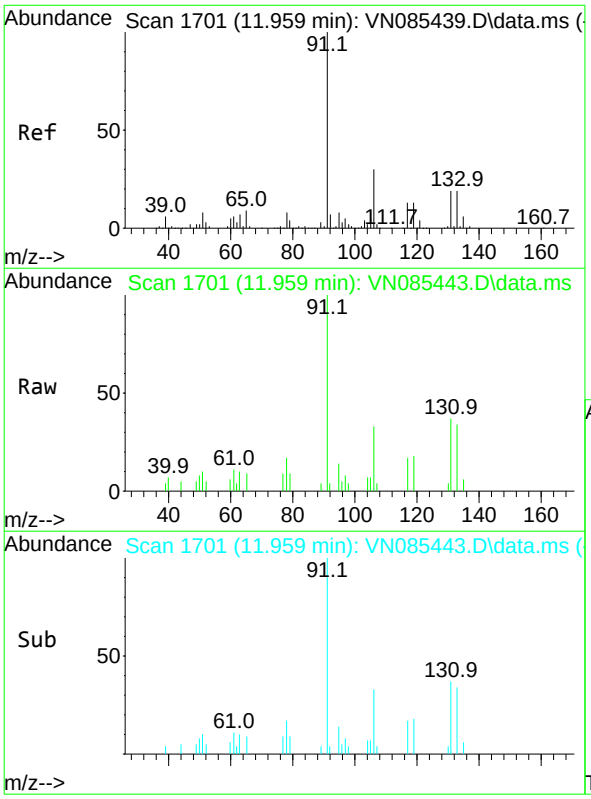
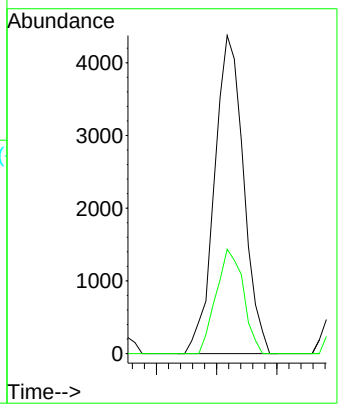
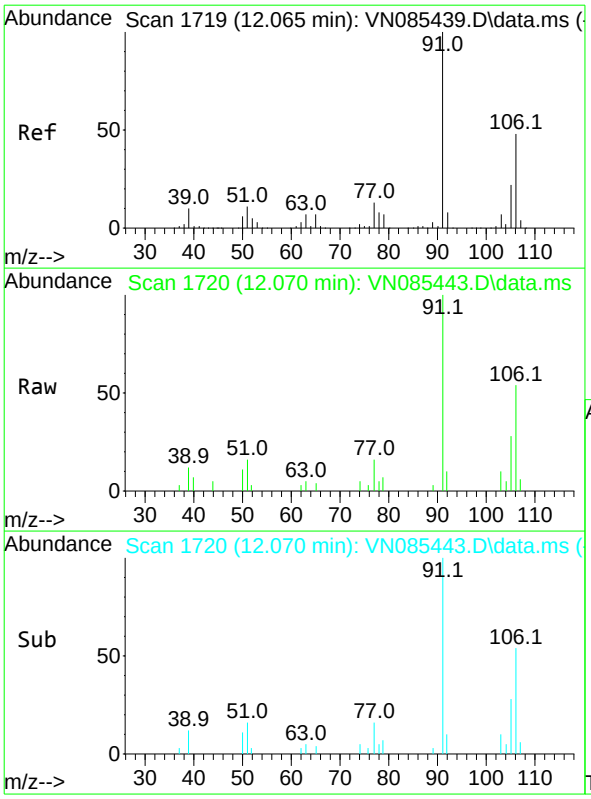


#67
Ethyl Benzene
Concen: 0.802 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 7347

Ion	Ratio	Lower	Upper
91	100		
106	32.8	23.8	35.8

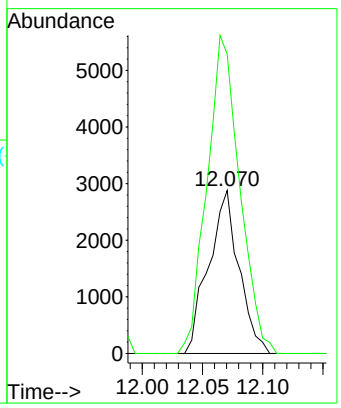




#68
m/p-Xylenes
Concen: 1.494 ug/l
RT: 12.070 min Scan# 17
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:106 Resp: 5059

Ion	Ratio	Lower	Upper
106	100		
91	209.3	167.7	251.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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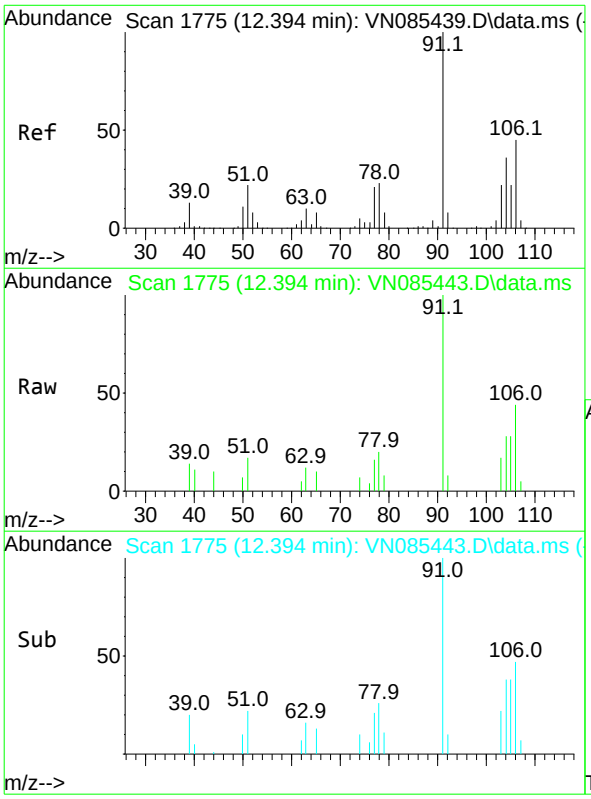
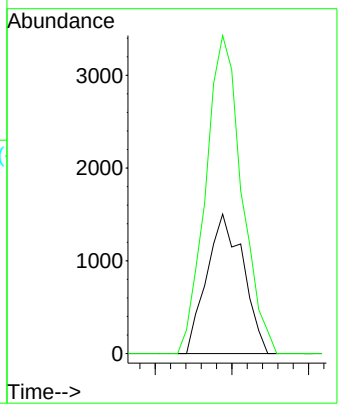
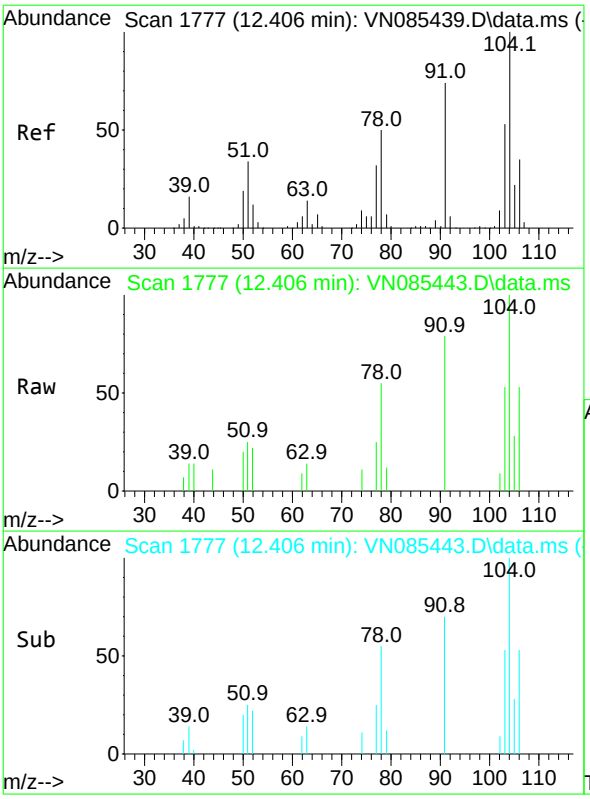


#69
o-Xylene
Concen: 0.766 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:106 Resp: 2478

Ion	Ratio	Lower	Upper
106	100		
91	225.4	110.4	331.2

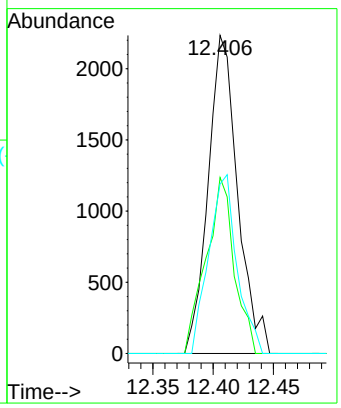




#70
Styrene
Concen: 0.712 ug/l
RT: 12.406 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:104 Resp: 3812

Ion	Ratio	Lower	Upper
104	100		
78	52.9	42.5	63.7
103	53.7	43.8	65.8



Instrument :
MSVOA_N
ClientSampleId :
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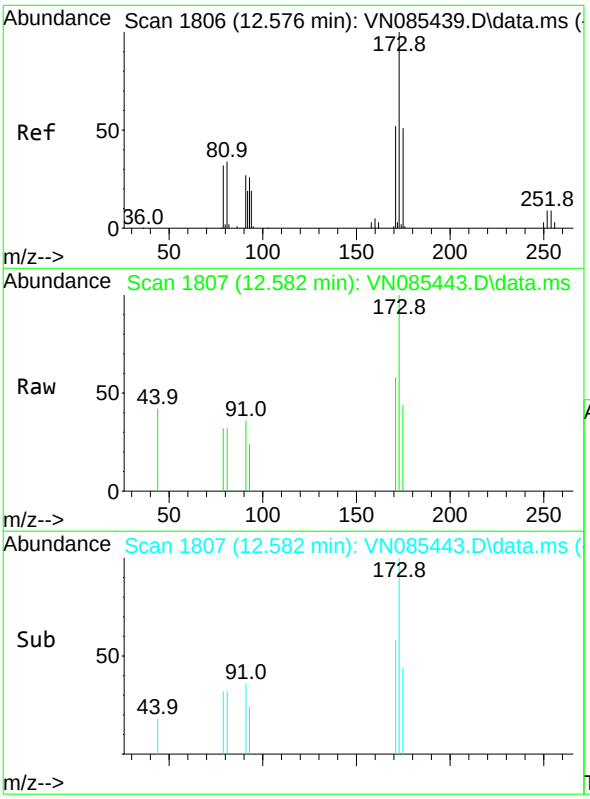
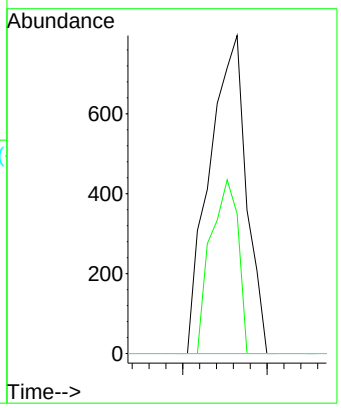
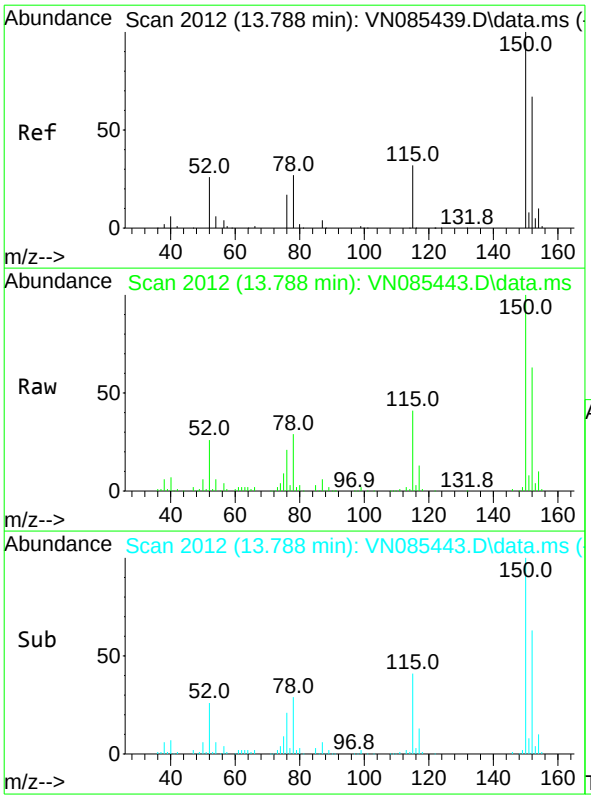


#71
Bromoform
Concen: 0.818 ug/l
RT: 12.582 min Scan# 1807
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:173 Resp: 1208

Ion	Ratio	Lower	Upper
173	100		
175	40.7	24.4	73.2
254	0.0	0.0	0.0





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:152 Resp: 99539

Ion	Ratio	Lower	Upper
152	100		
115	63.8	31.1	93.3
150	158.5	0.0	343.6

Instrument :
MSVOA_N
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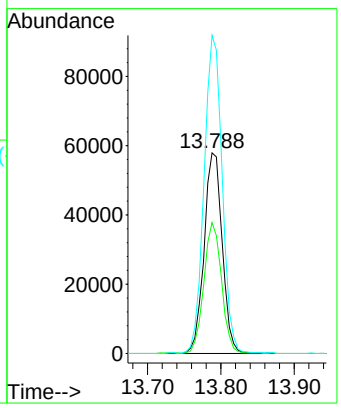
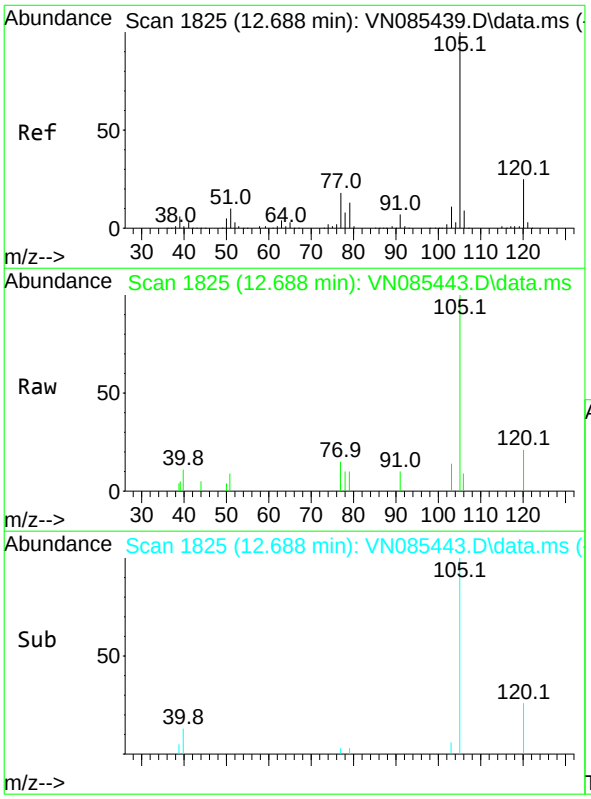
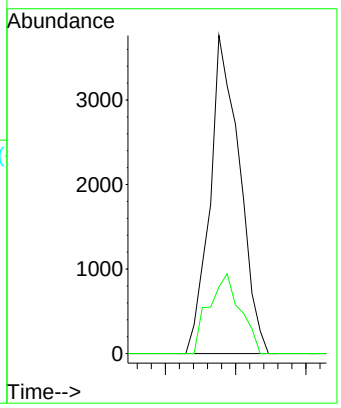


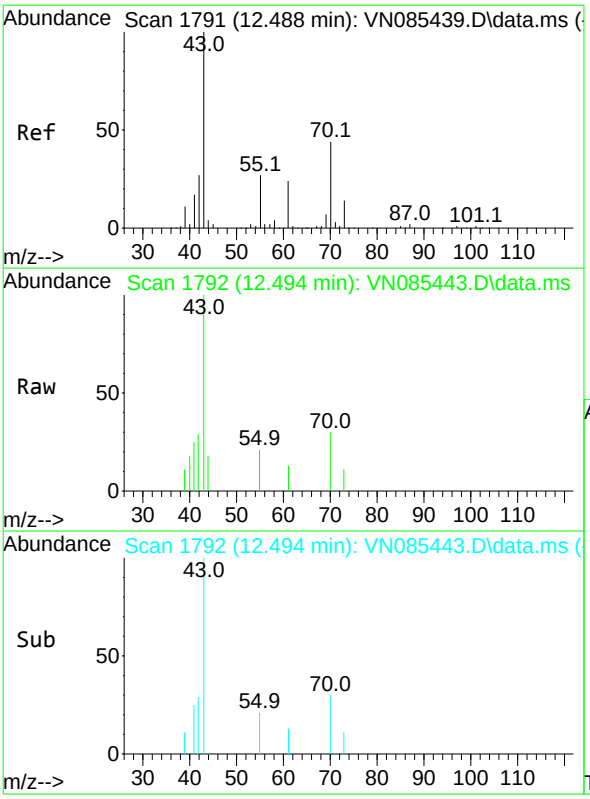


#73
Isopropylbenzene
Concen: 0.820 ug/l
RT: 12.688 min Scan# 1825
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 5506

Ion	Ratio	Lower	Upper
105	100		
120	26.7	12.8	38.3

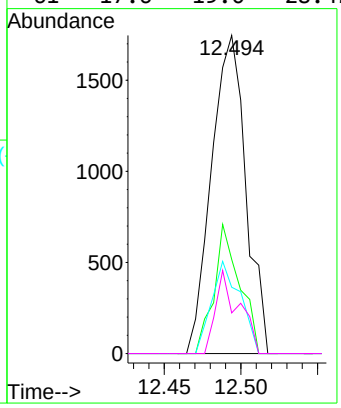




#74
N-amyl acetate
Concen: 0.899 ug/l
RT: 12.494 min Scan# 17
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 2716

Ion	Ratio	Lower	Upper
43	100		
70	30.4	34.0	51.0#
55	24.2	21.4	32.2
61	17.6	19.0	28.4#



Instrument :
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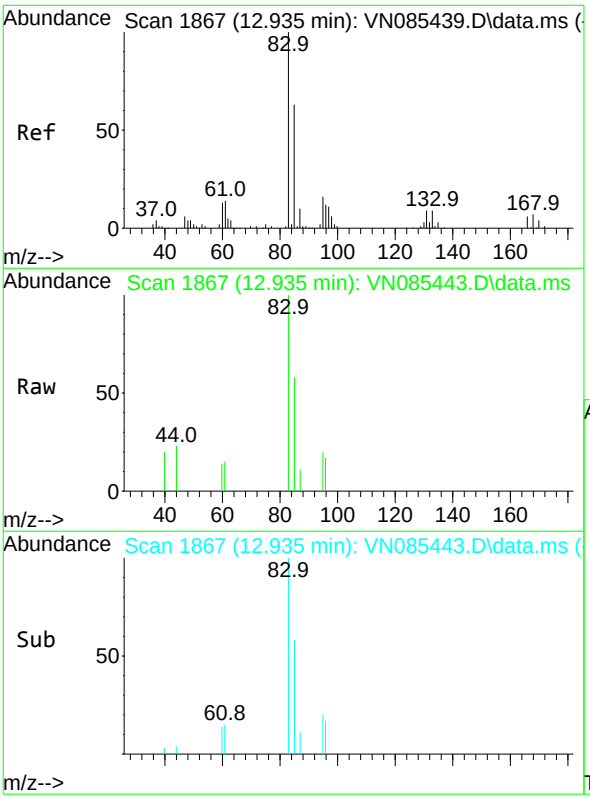
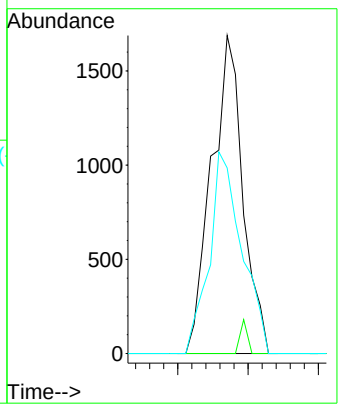
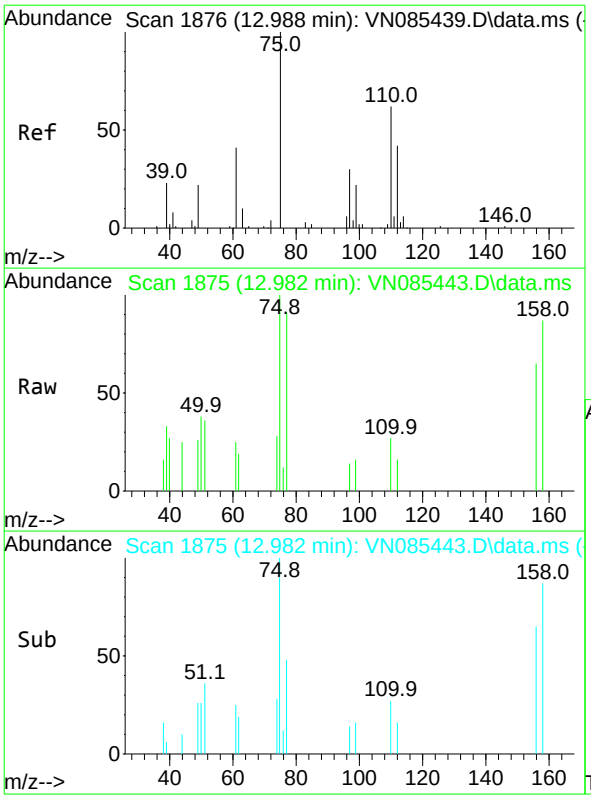


#75
1,1,2,2-Tetrachloroethane
Concen: 1.102 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 83 Resp: 2616

Ion	Ratio	Lower	Upper
83	100		
131	2.4	4.8	14.4#
85	65.7	32.2	96.6

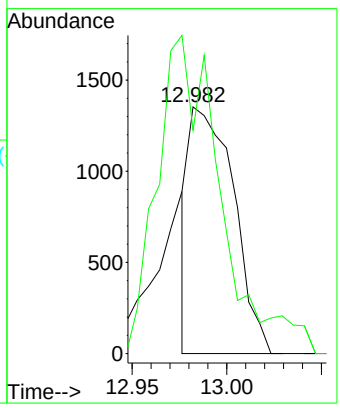




#76
1,2,3-Trichloropropane
Concen: 1.088 ug/l m
RT: 12.982 min Scan# 18
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 2198

Ion	Ratio	Lower	Upper
75	100		
77	184.2	109.7	329.2



Instrument :
MSVOA_N
ClientSampleId :
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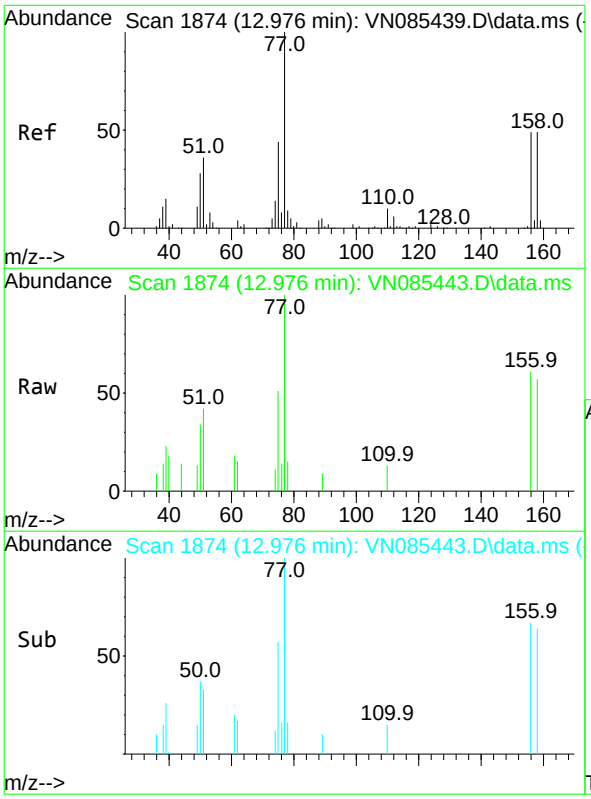
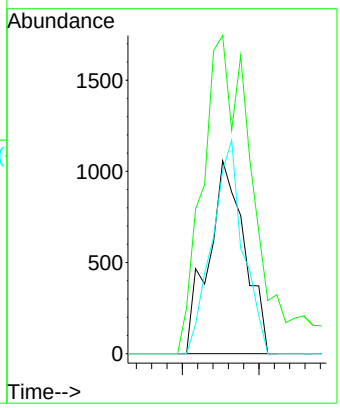
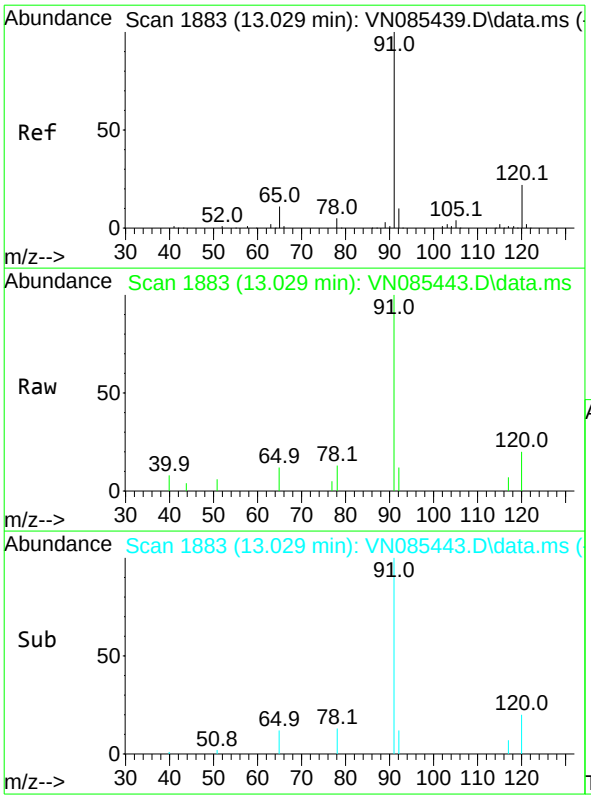


#77
Bromobenzene
Concen: 0.987 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:156 Resp: 1733

Ion	Ratio	Lower	Upper
156	100		
77	233.6	114.1	342.4
158	94.9	48.9	146.8





#78
n-propylbenzene
Concen: 0.808 ug/l
RT: 13.029 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 6424

Ion	Ratio	Lower	Upper
91	100		
120	18.2	10.9	32.6

Instrument :
MSVOA_N
ClientSampleId :
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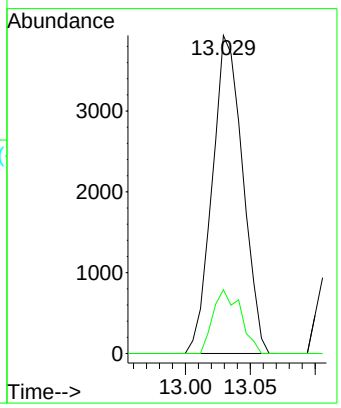
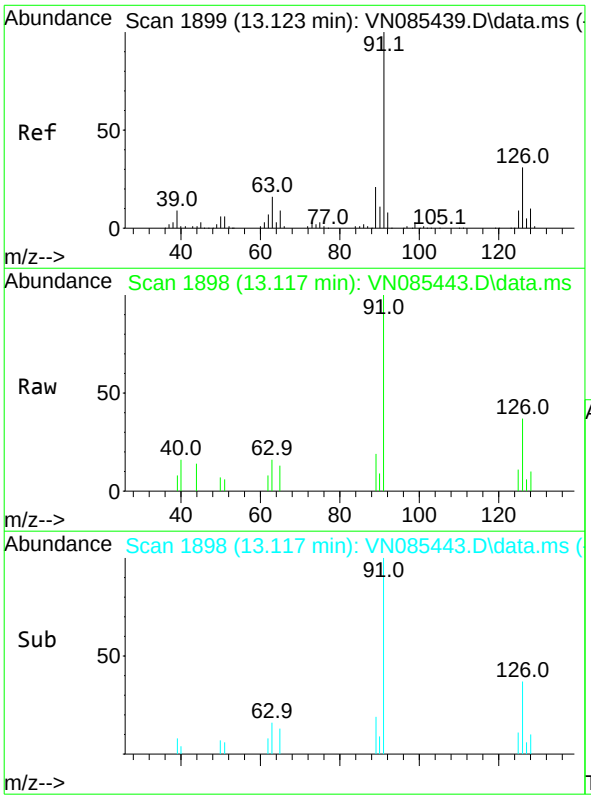
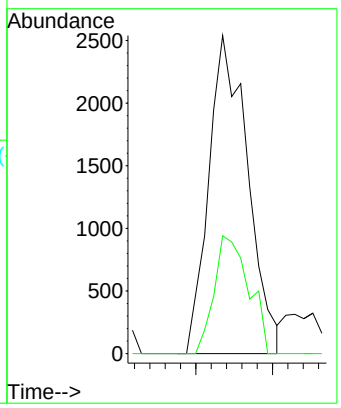


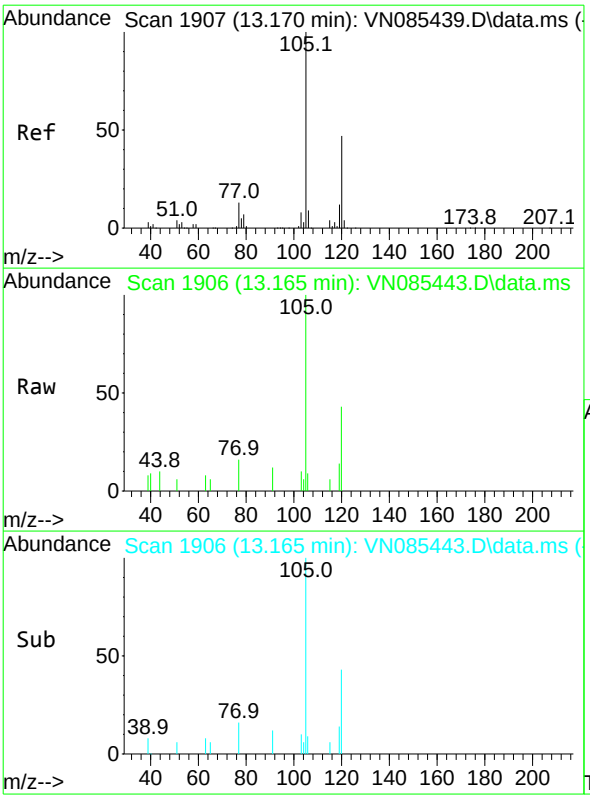


#79
2-Chlorotoluene
Concen: 0.871 ug/l
RT: 13.117 min Scan# 1898
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 4483

Ion	Ratio	Lower	Upper
91	100		
126	32.9	15.7	47.1

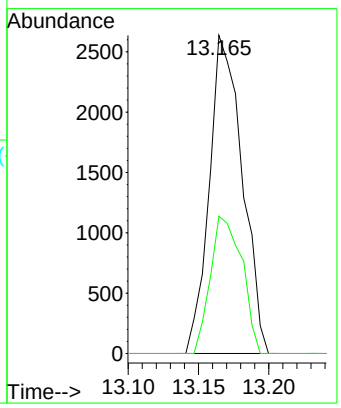




#80
1,3,5-Trimethylbenzene
Concen: 0.775 ug/l
RT: 13.165 min Scan# 19
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 4301

Ion	Ratio	Lower	Upper
105	100		
120	41.2	23.9	71.7



Instrument :
MSVOA_N
ClientSampleId :
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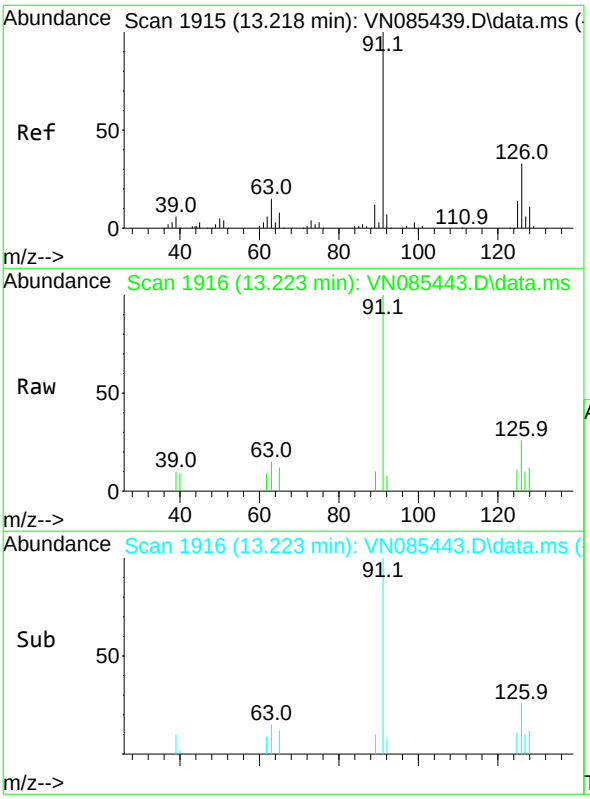
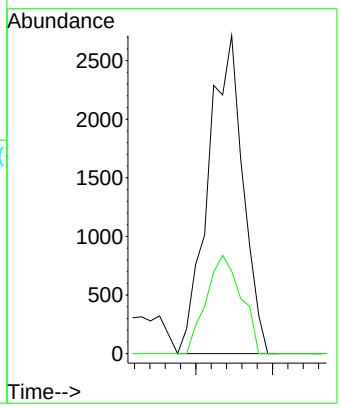
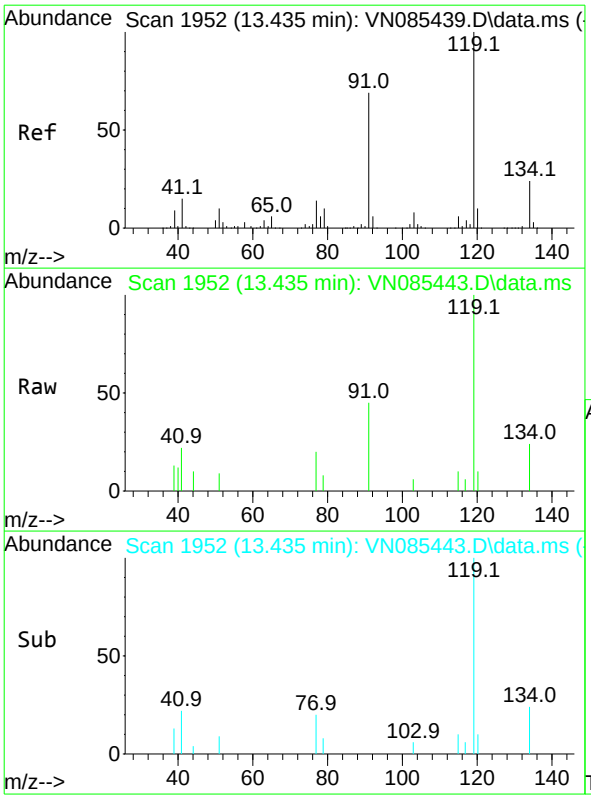


#82
4-Chlorotoluene
Concen: 0.833 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 4268

Ion	Ratio	Lower	Upper
91	100		
126	31.0	15.9	47.7

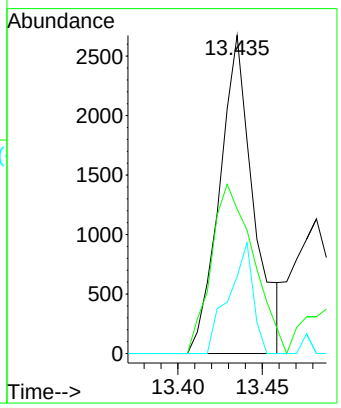




#83
tert-Butylbenzene
Concen: 0.805 ug/l
RT: 13.435 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:119 Resp: 3753

Ion	Ratio	Lower	Upper
119	100		
91	65.9	35.1	105.3
134	24.9	12.0	36.1



Instrument :
MSVOA_N
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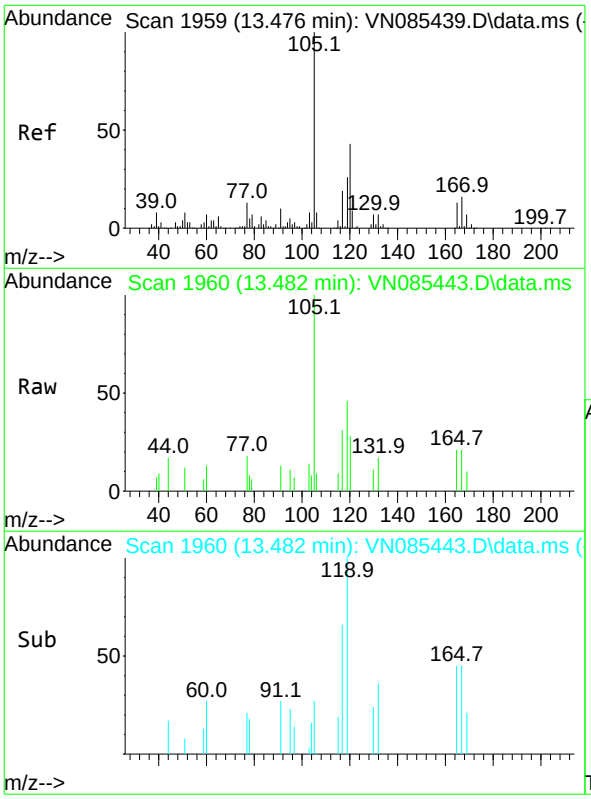
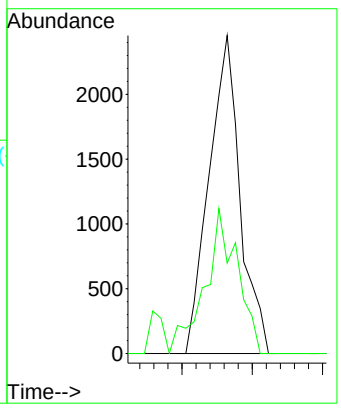
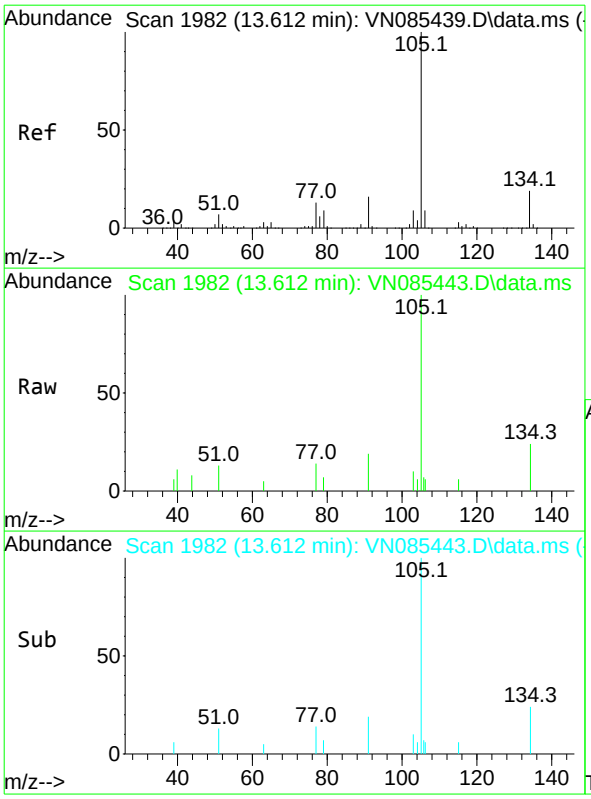


#84
1,2,4-Trimethylbenzene
Concen: 0.679 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 3758

Ion	Ratio	Lower	Upper
105	100		
120	47.7	21.6	65.0

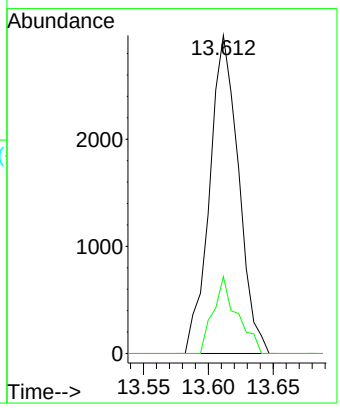




#85
sec-Butylbenzene
Concen: 0.714 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:105 Resp: 4614

Ion	Ratio	Lower	Upper
105	100		
134	19.9	9.7	28.9



Instrument :
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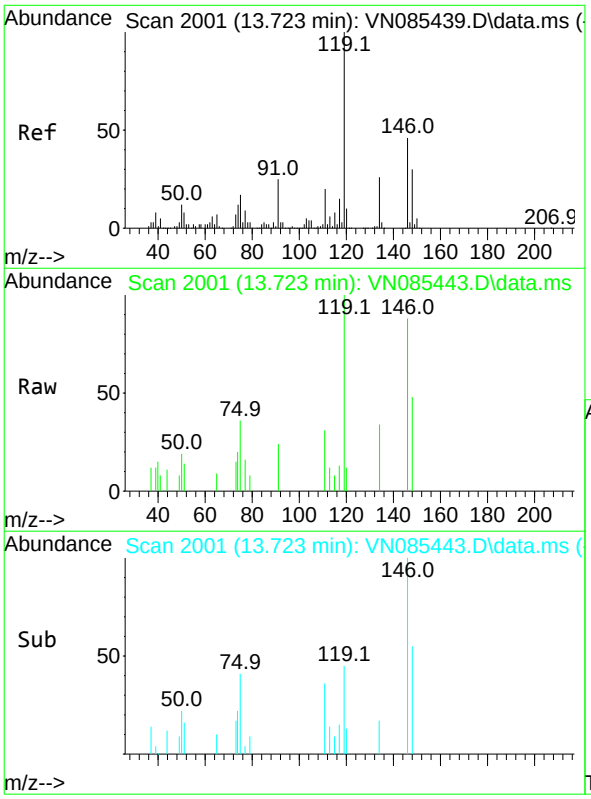
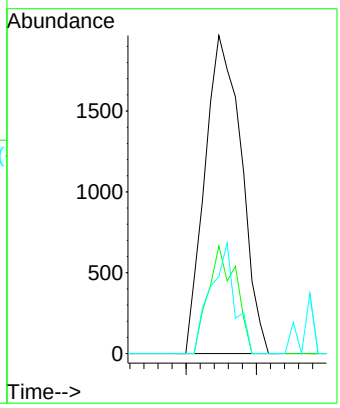
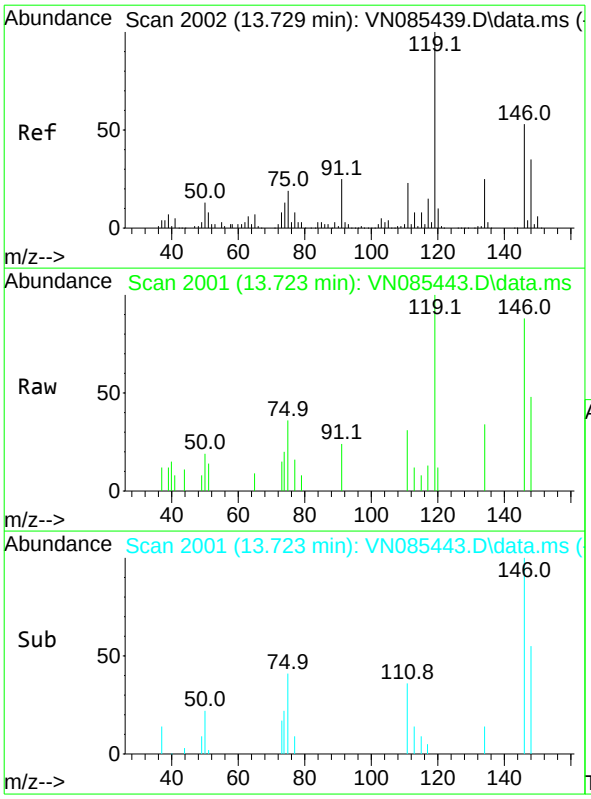


#86
p-Isopropyltoluene
Concen: 0.716 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:119 Resp: 3538

Ion	Ratio	Lower	Upper
119	100		
134	25.6	12.7	38.0
91	23.2	12.7	38.1

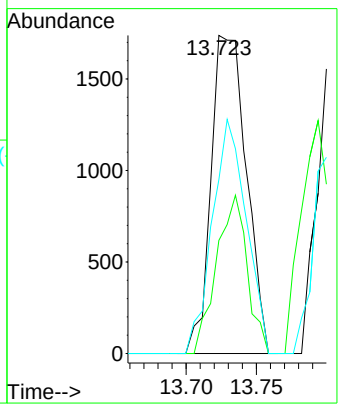




#87
1,3-Dichlorobenzene
Concen: 0.940 ug/l
RT: 13.723 min Scan# 20
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:146 Resp: 3038

Ion	Ratio	Lower	Upper
146	100		
111	43.0	21.4	64.3
148	70.9	32.3	96.9



Instrument :
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ClientSampleId :
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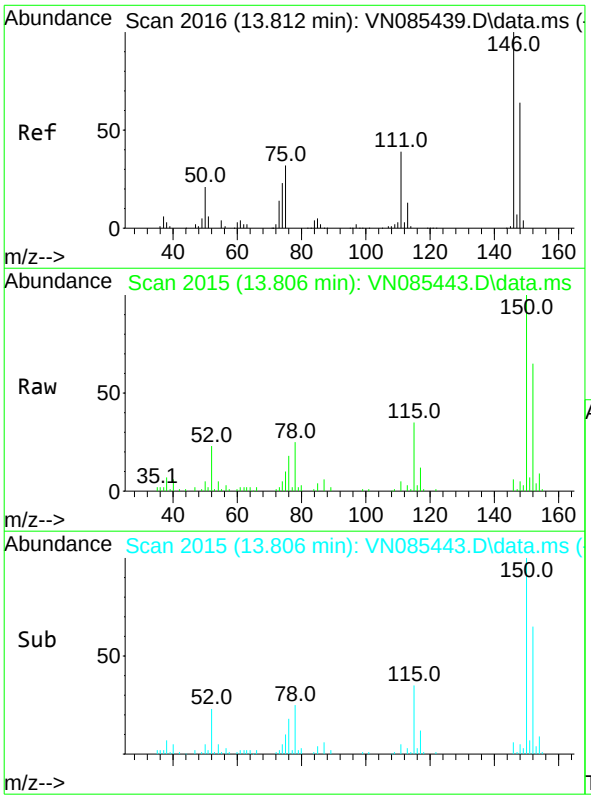
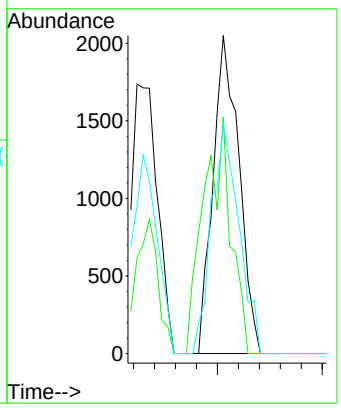
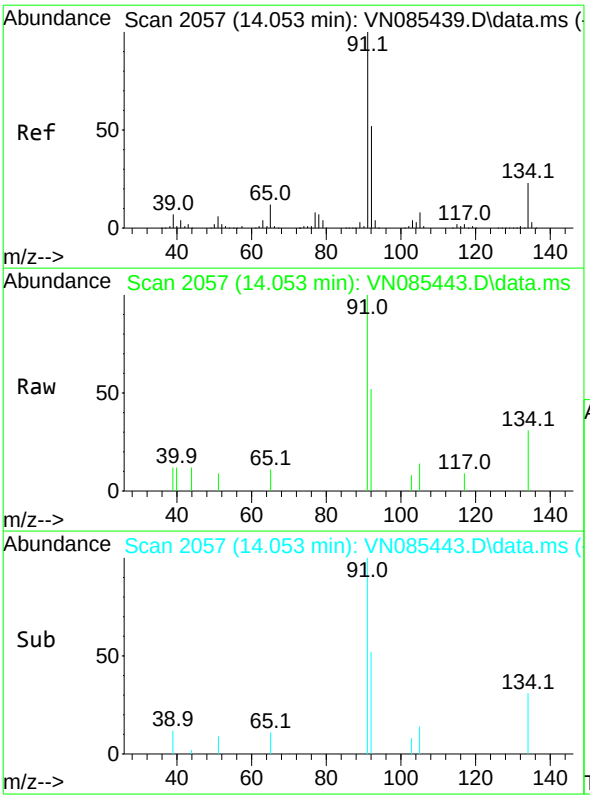


#88
1,4-Dichlorobenzene
Concen: 1.050 ug/l m
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:146 Resp: 3517

Ion	Ratio	Lower	Upper
146	100		
111	37.2	21.3	63.7
148	61.2	32.4	97.0





#89
n-Butylbenzene
Concen: 0.761 ug/l
RT: 14.053 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 91 Resp: 3527

Ion	Ratio	Lower	Upper
91	100		
92	57.2	25.8	77.3
134	25.5	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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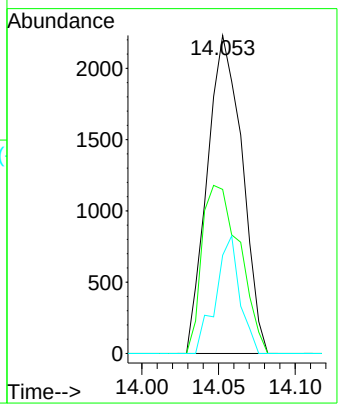
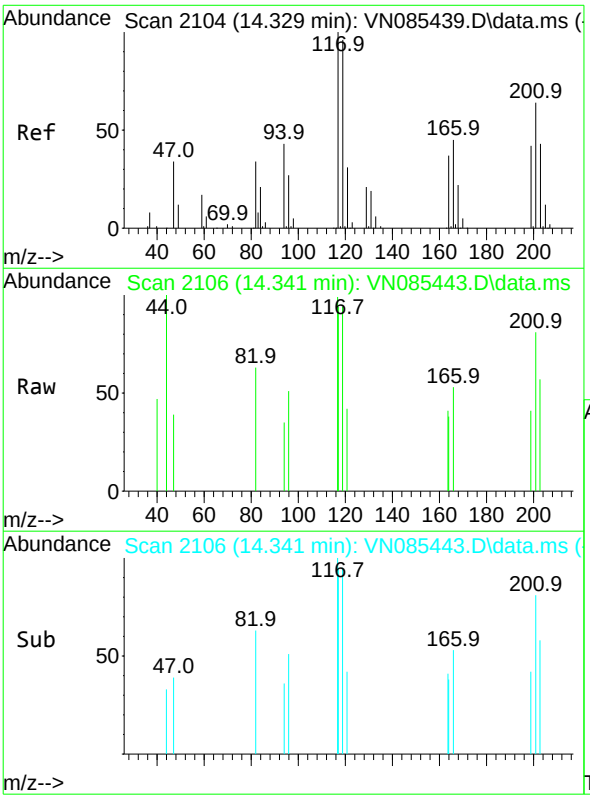
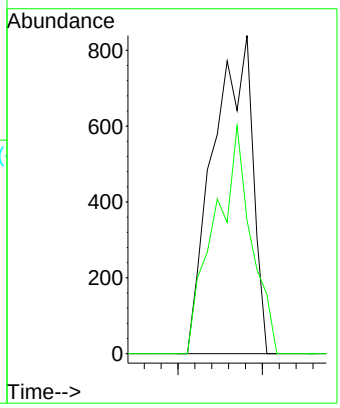


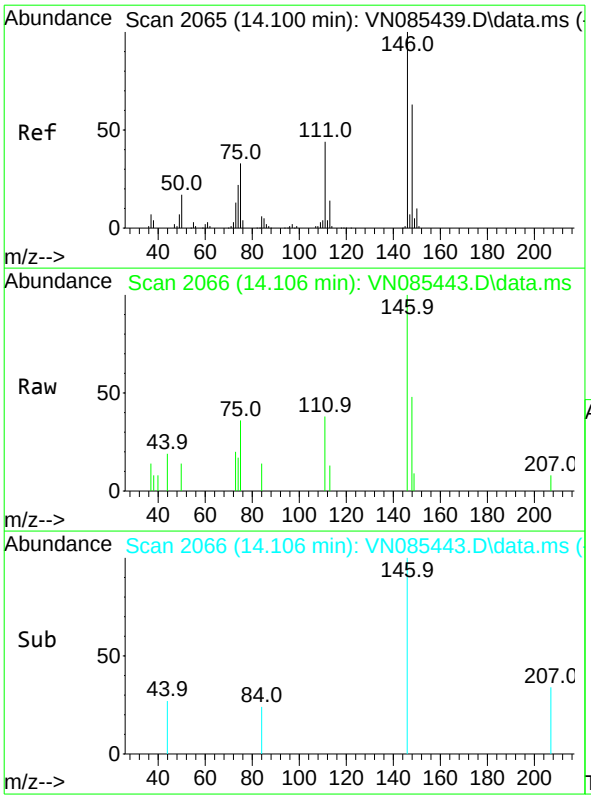


#90
Hexachloroethane
Concen: 1.102 ug/l
RT: 14.341 min Scan# 2106
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:117 Resp: 1355

Ion	Ratio	Lower	Upper
117	100		
201	66.5	33.7	101.0

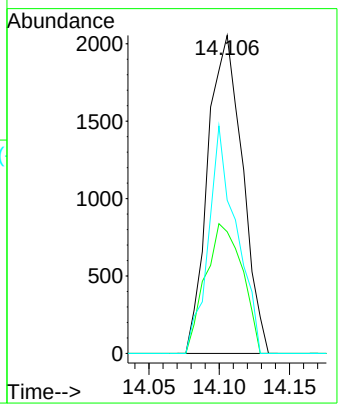




#91
1,2-Dichlorobenzene
Concen: 1.090 ug/l
RT: 14.106 min Scan# 20
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:146 Resp: 3515

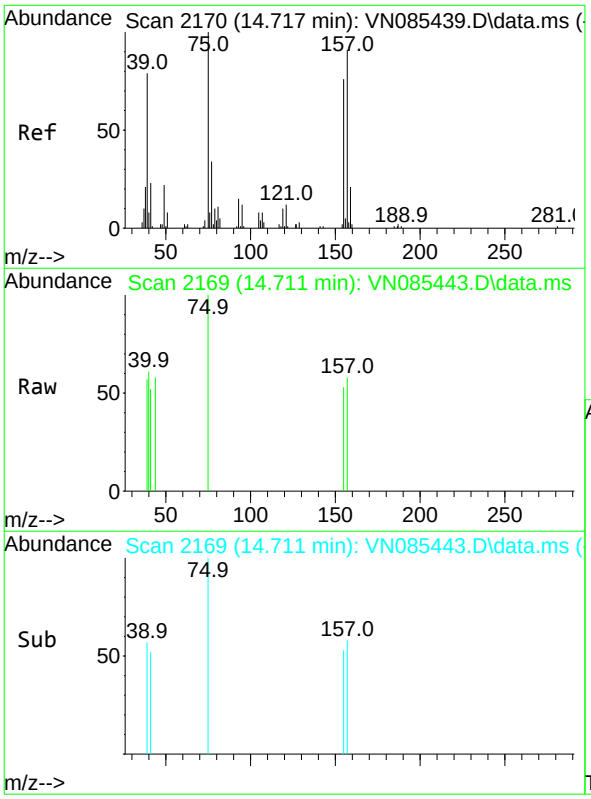
Ion	Ratio	Lower	Upper
146	100		
111	43.4	21.7	65.1
148	57.8	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

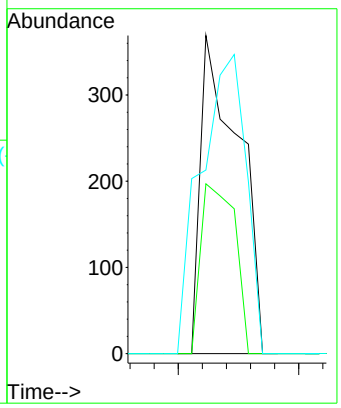
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

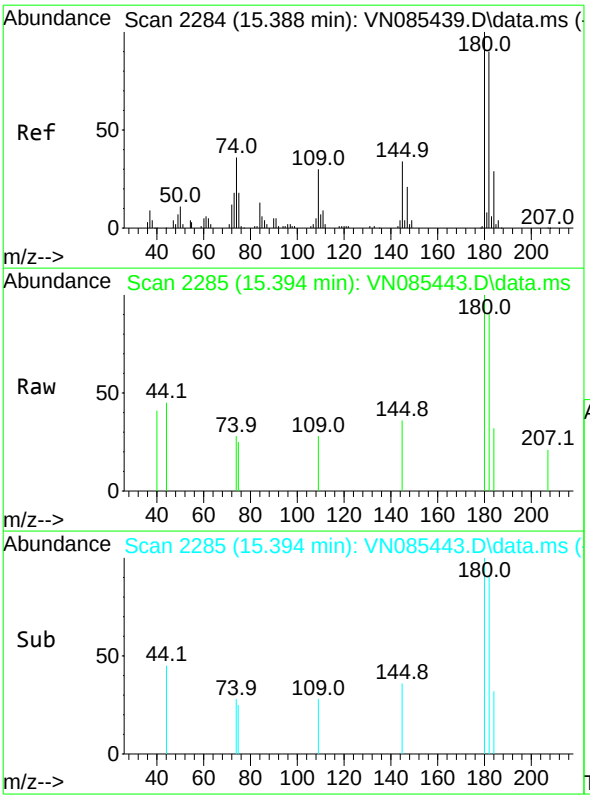


#92
1,2-Dibromo-3-Chloropropane
Concen: 0.928 ug/l
RT: 14.711 min Scan# 2169
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 75 Resp: 402

Ion	Ratio	Lower	Upper
75	100		
155	48.0	36.4	109.2
157	112.7	45.4	136.1

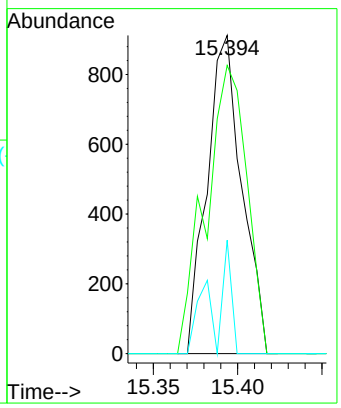




#93
1,2,4-Trichlorobenzene
Concen: 0.874 ug/l
RT: 15.394 min Scan# 22
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:180 Resp: 1310

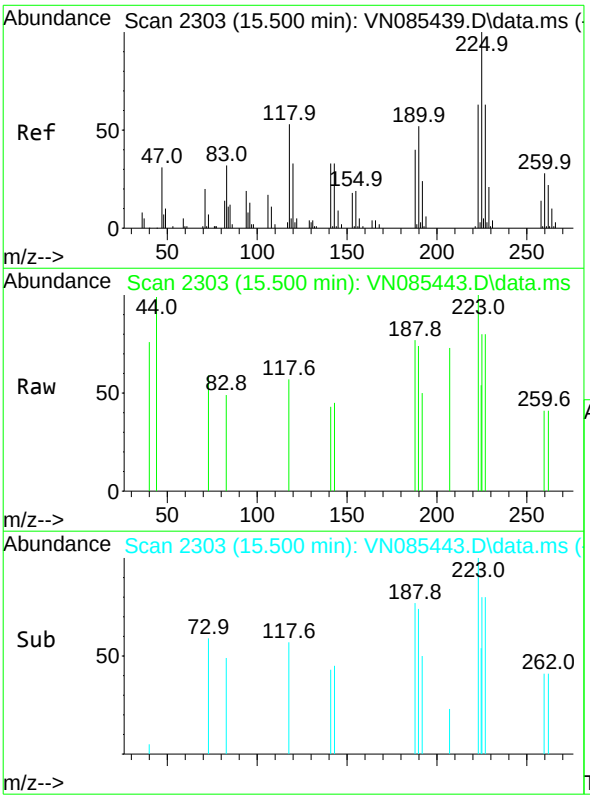
Ion	Ratio	Lower	Upper
180	100		
182	106.3	46.8	140.3
145	9.7	16.0	48.0#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

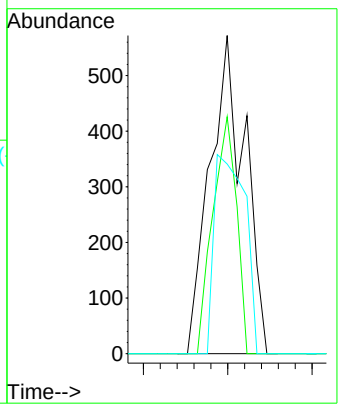
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

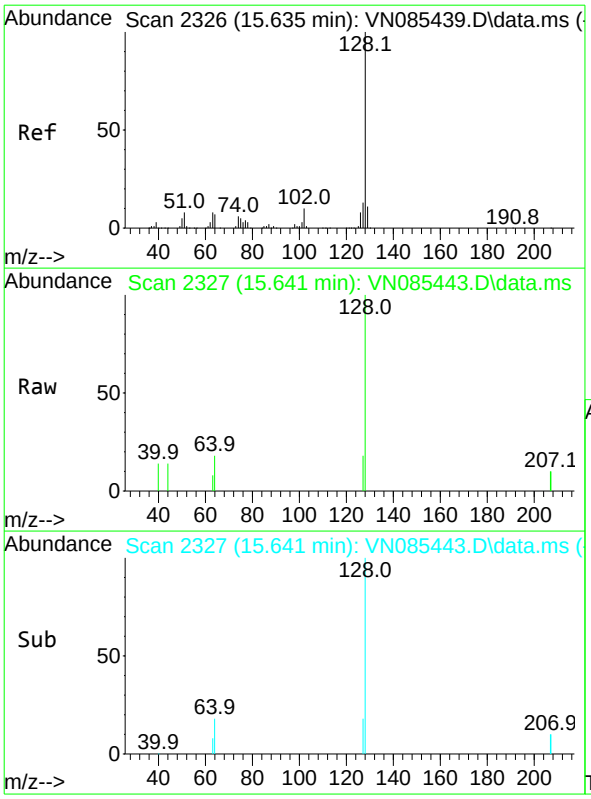


#94
Hexachlorobutadiene
Concen: 1.033 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:225 Resp: 822

Ion	Ratio	Lower	Upper
225	100		
223	50.7	30.7	92.1
227	55.7	30.9	92.5





#95
Naphthalene
Concen: 0.941 ug/l
RT: 15.641 min Scan# 23
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

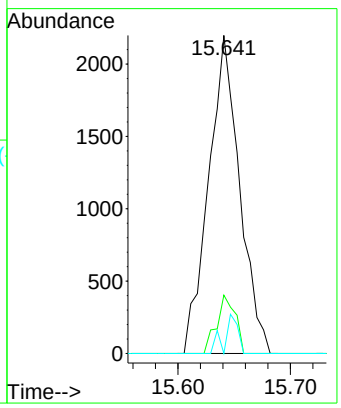
Tgt Ion:128 Resp: 4210

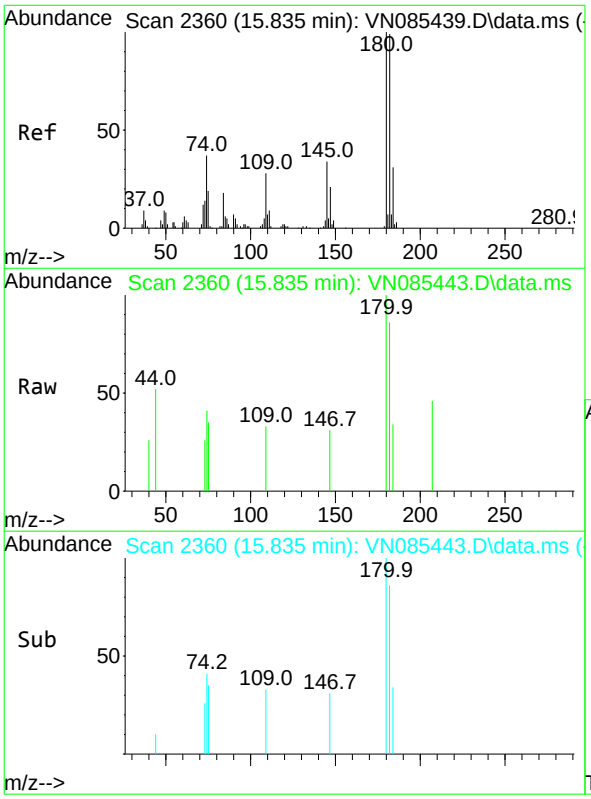
Ion	Ratio	Lower	Upper
128	100		
127	11.1	10.6	16.0
129	5.3	8.8	13.2#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

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

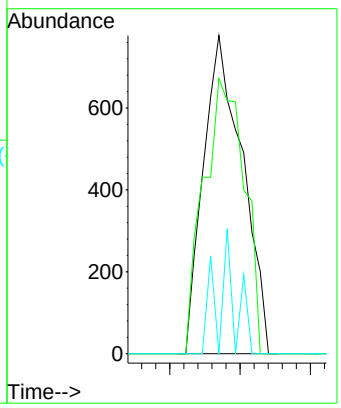




#96
1,2,3-Trichlorobenzene
Concen: 0.985 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:180 Resp: 1494

Ion	Ratio	Lower	Upper
180	100		
182	90.2	47.4	142.2
145	11.8	16.9	50.7#



Quantitation Report (QT Reviewed)

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Manual Integrations APPROVED

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	219757	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	370487	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	320948	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	158525	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	176594	49.782	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 99.560%			
35) Dibromofluoromethane	8.165	113	130487	50.768	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.540%			
50) Toluene-d8	10.565	98	477630	52.302	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 104.600%			
62) 4-Bromofluorobenzene	12.847	95	165249	52.899	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	130242	43.772	ug/l	100
3) Chloromethane	2.360	50	138152	42.883	ug/l	99
4) Vinyl Chloride	2.513	62	138316	42.715	ug/l	99
5) Bromomethane	2.954	94	80019	40.910	ug/l	91
6) Chloroethane	3.124	64	86837	42.299	ug/l	99
7) Trichlorofluoromethane	3.501	101	206526	43.956	ug/l	99
8) Diethyl Ether	3.959	74	69545	42.846	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	118310	44.706	ug/l	98
10) Methyl Iodide	4.595	142	140190	46.259	ug/l	98
11) Tert butyl alcohol	5.518	59	83933	206.633	ug/l	99
12) 1,1-Dichloroethene	4.342	96	106880	45.317	ug/l	98
13) Acrolein	4.177	56	135720	244.765	ug/l	99
14) Allyl chloride	5.024	41	170308	44.501	ug/l	99
15) Acrylonitrile	5.712	53	294062	227.920	ug/l	99
16) Acetone	4.418	43	245248	213.971	ug/l	98
17) Carbon Disulfide	4.712	76	300215	41.342	ug/l	100
18) Methyl Acetate	5.018	43	156938	45.028	ug/l	100
19) Methyl tert-butyl Ether	5.795	73	365819	47.768	ug/l	100
20) Methylene Chloride	5.271	84	122059	43.017	ug/l	98
21) trans-1,2-Dichloroethene	5.783	96	112597	44.672	ug/l	93
22) Diisopropyl ether	6.665	45	399206	46.996	ug/l	99
23) Vinyl Acetate	6.601	43	1471068	247.459	ug/l	100
24) 1,1-Dichloroethane	6.571	63	228489	44.114	ug/l	98
25) 2-Butanone	7.477	43	386125	228.924	ug/l	100
26) 2,2-Dichloropropane	7.489	77	199303	47.593	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	134920	45.446	ug/l	98
28) Bromochloromethane	7.812	49	106323	44.122	ug/l	100
29) Tetrahydrofuran	7.836	42	255650	239.065	ug/l	99
30) Chloroform	7.965	83	235923	44.071	ug/l	98
31) Cyclohexane	8.253	56	193034	42.878	ug/l	93
32) 1,1,1-Trichloroethane	8.165	97	208172	44.332	ug/l	99
36) 1,1-Dichloropropene	8.365	75	161834	44.863	ug/l	98
37) Ethyl Acetate	7.559	43	160656	44.123	ug/l	97
38) Carbon Tetrachloride	8.359	117	183592	44.456	ug/l	99
39) Methylcyclohexane	9.600	83	168431	49.687	ug/l	98
40) Benzene	8.600	78	494871	45.657	ug/l	99

ICAL Form

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

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Manual Integrations APPROVED

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Manual Integrations APPROVED

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

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

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

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

ICAL Form

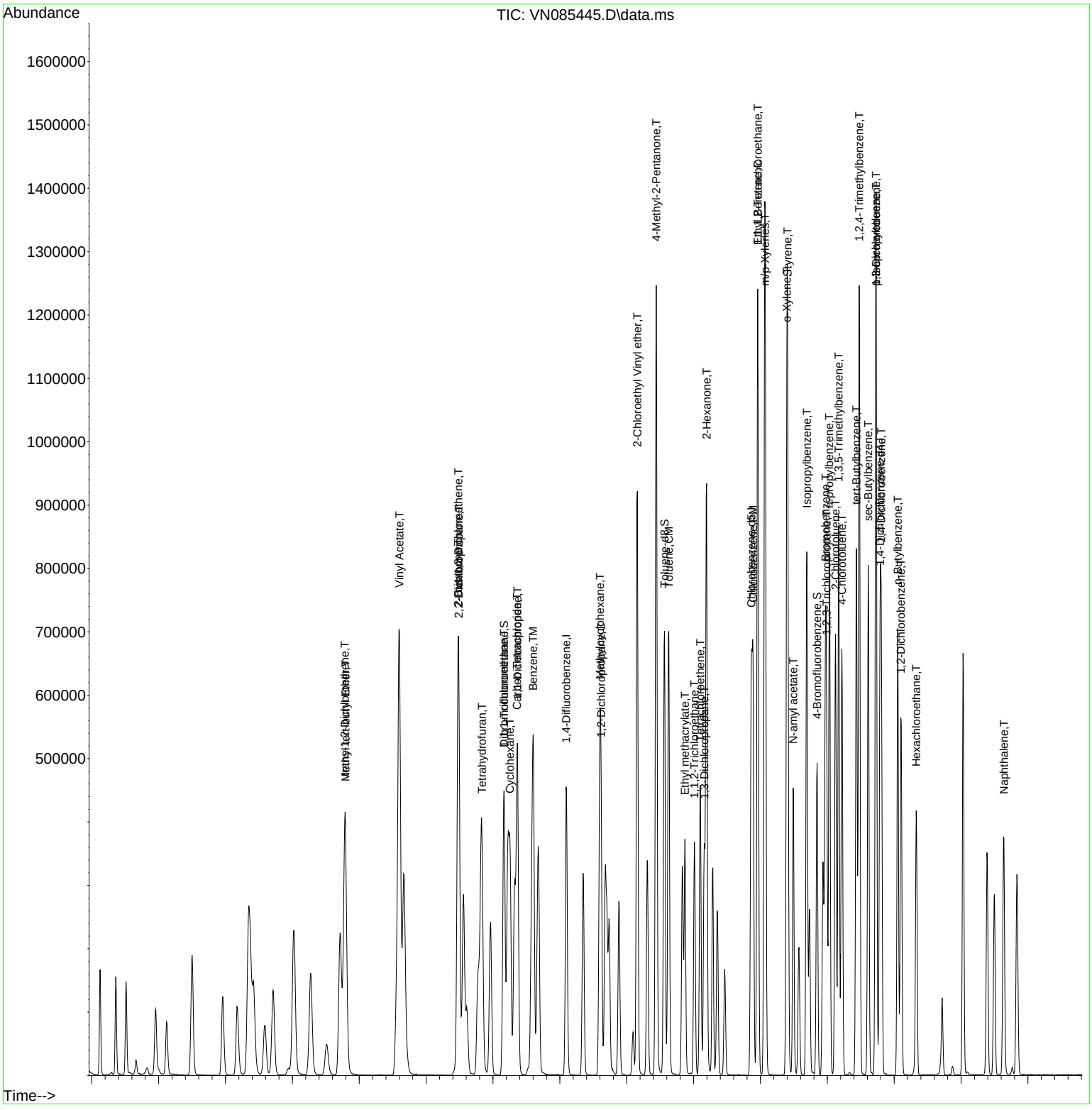
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

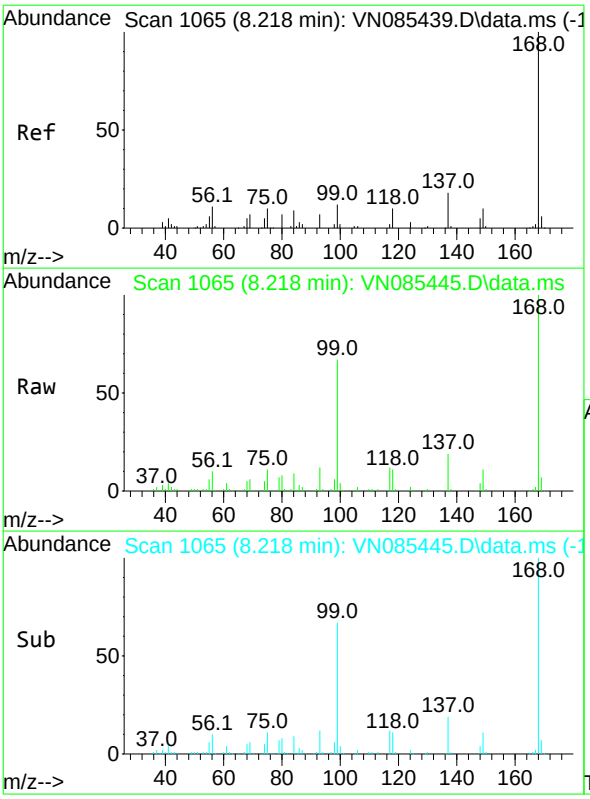
Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Manual Integrations APPROVED

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

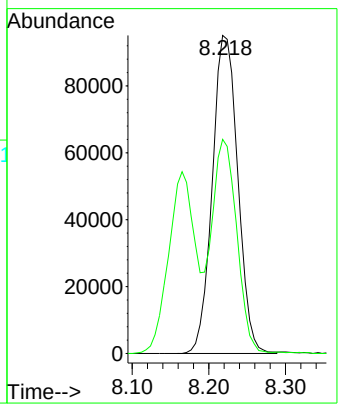




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:168 Resp: 219757

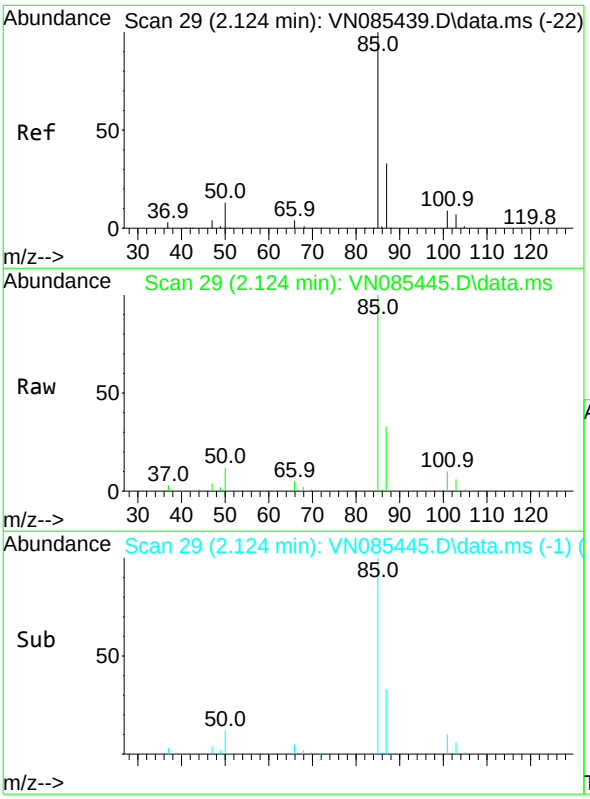
Ion	Ratio	Lower	Upper
168	100		
99	66.9	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Manual Integrations
APPROVED

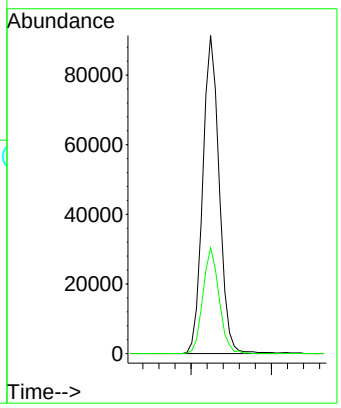
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

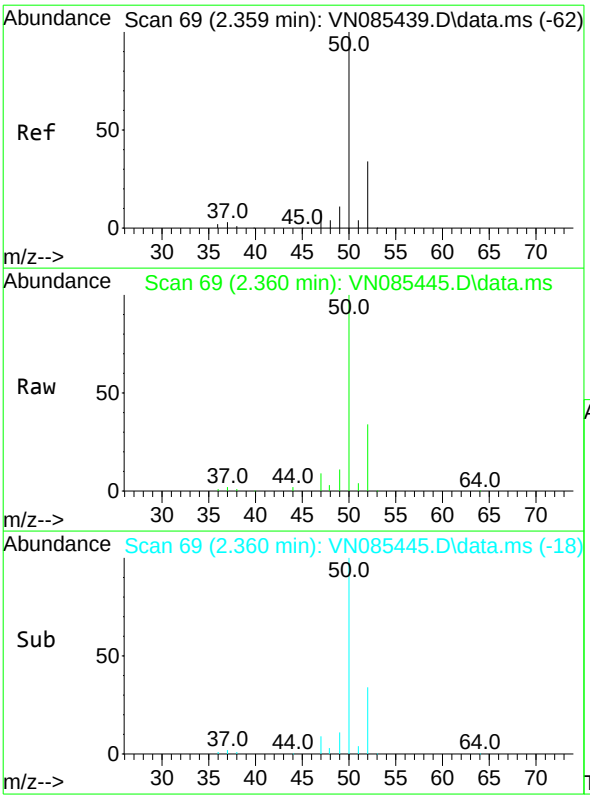


#2
Dichlorodifluoromethane
Concen: 43.772 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 85 Resp: 130242

Ion	Ratio	Lower	Upper
85	100		
87	33.2	16.7	50.1

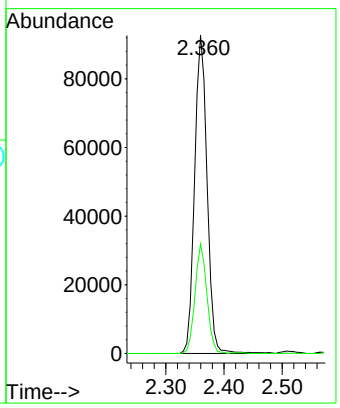




#3
Chloromethane
Concen: 42.883 ug/l
RT: 2.360 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 50 Resp: 138152

Ion	Ratio	Lower	Upper
50	100		
52	34.4	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
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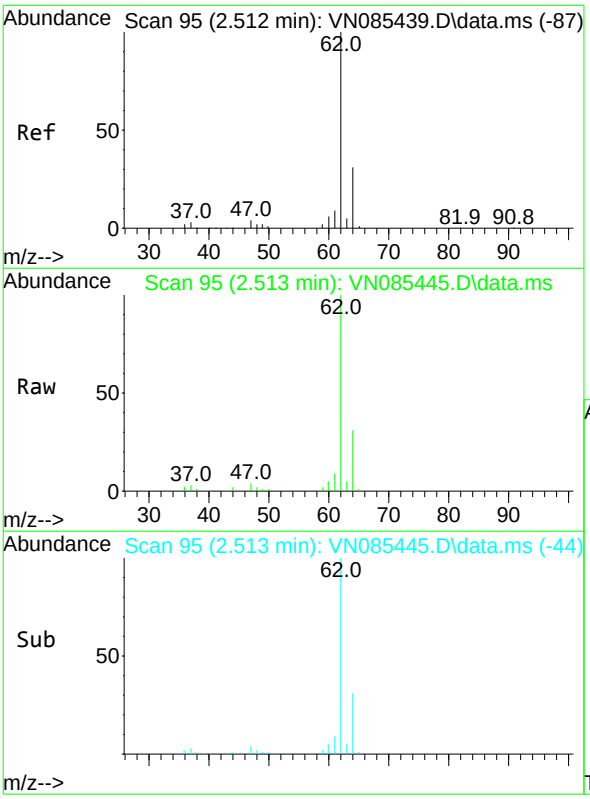
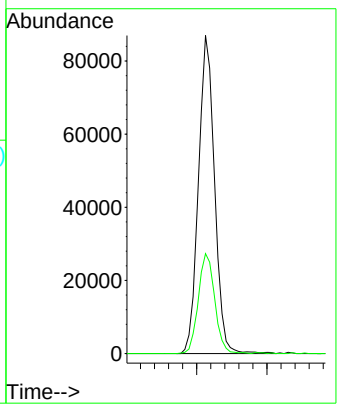
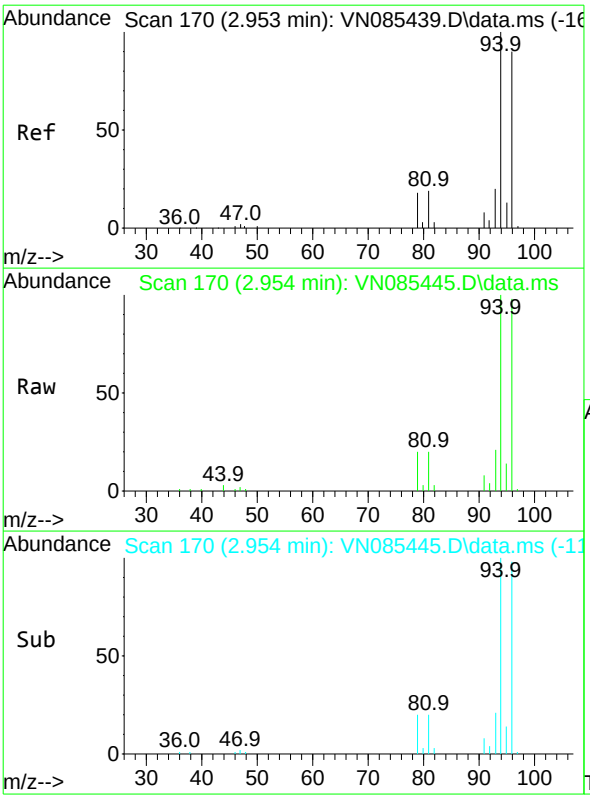


#4
Vinyl Chloride
Concen: 42.715 ug/l
RT: 2.513 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 62 Resp: 138316

Ion	Ratio	Lower	Upper
62	100		
64	31.4	24.8	37.2

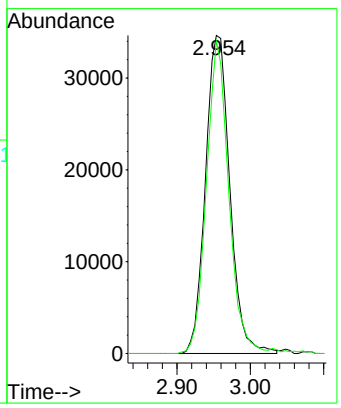




#5
Bromomethane
Concen: 40.910 ug/l
RT: 2.954 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 94 Resp: 80019

Ion	Ratio	Lower	Upper
94	100		
96	98.2	71.8	107.6



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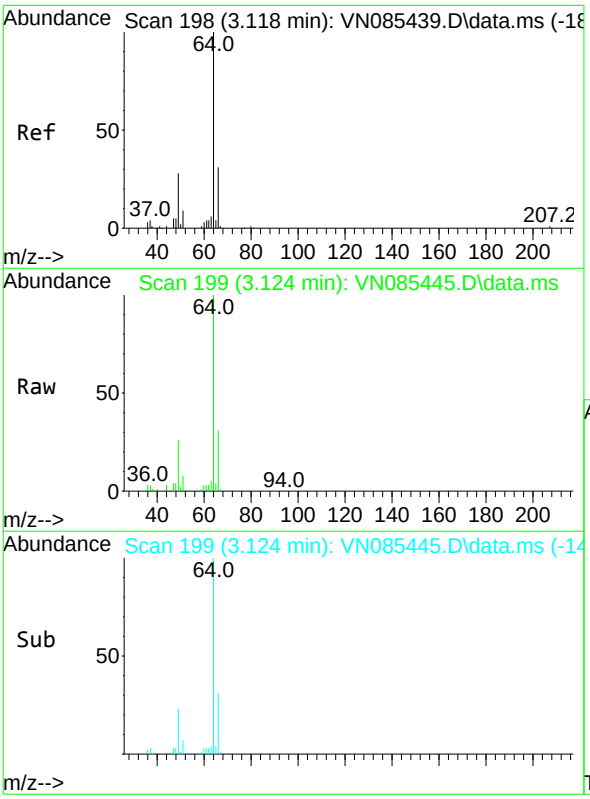
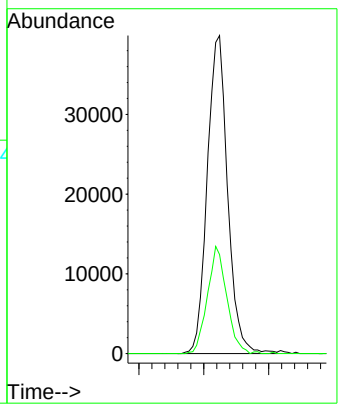
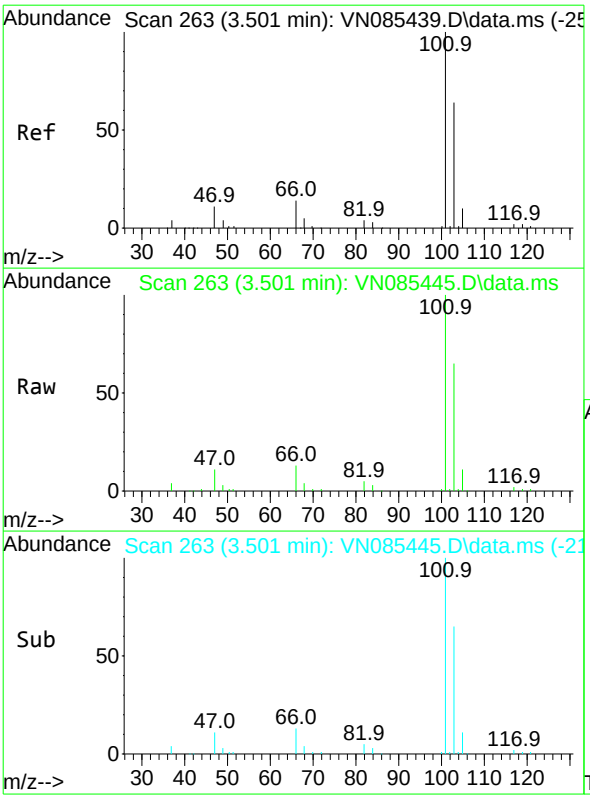


#6
Chloroethane
Concen: 42.299 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 64 Resp: 86837

Ion	Ratio	Lower	Upper
64	100		
66	31.1	24.6	36.8

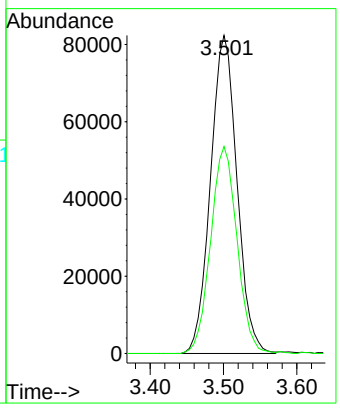




#7
Trichlorofluoromethane
Concen: 43.956 ug/l
RT: 3.501 min Scan# 26
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:101 Resp: 206526

Ion	Ratio	Lower	Upper
101	100		
103	65.1	51.4	77.2



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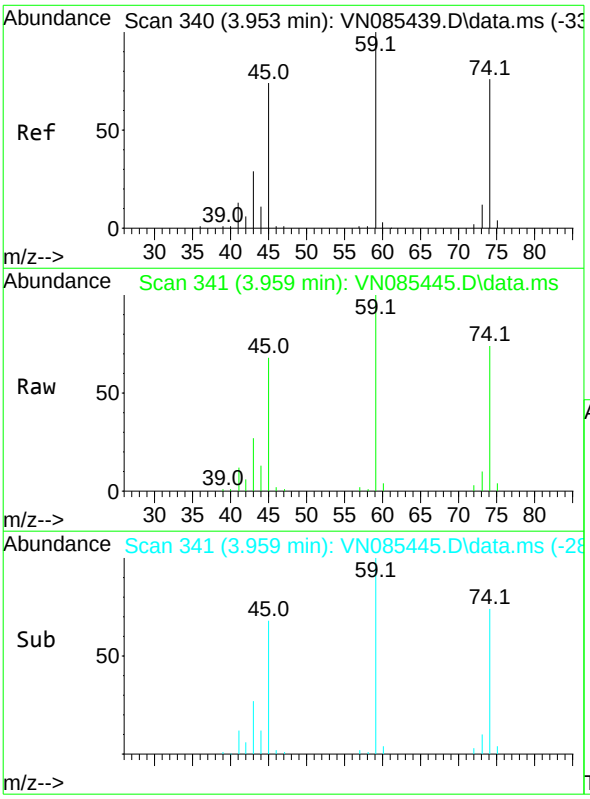
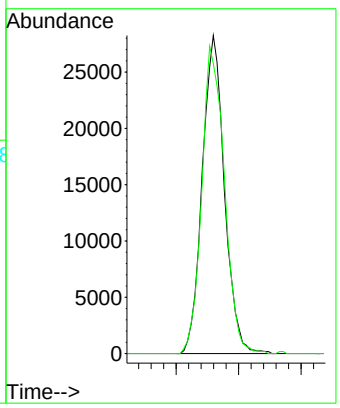
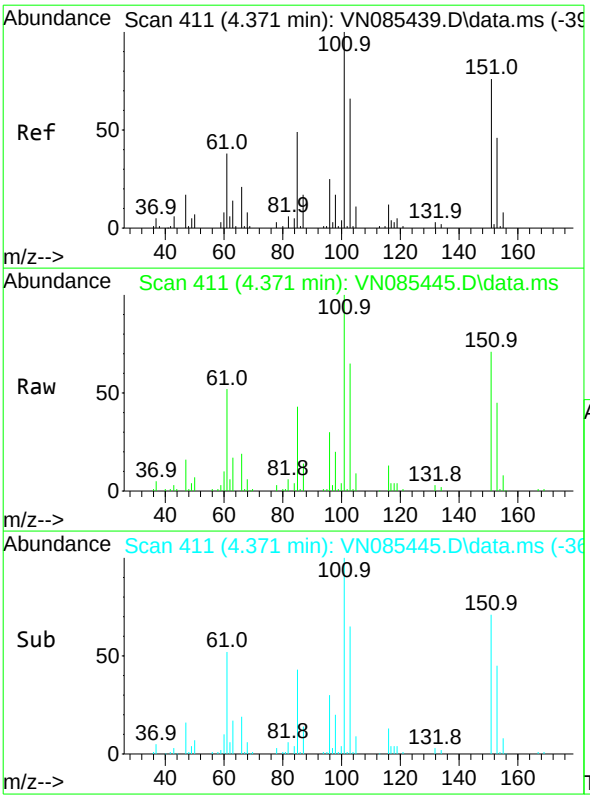


#8
Diethyl Ether
Concen: 42.846 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 74 Resp: 69545

Ion	Ratio	Lower	Upper
74	100		
45	99.0	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 44.706 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:101 Resp: 118310

Ion	Ratio	Lower	Upper
101	100		
85	45.9	37.8	56.8
151	71.5	58.8	88.2

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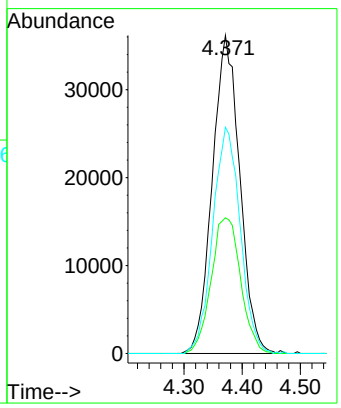
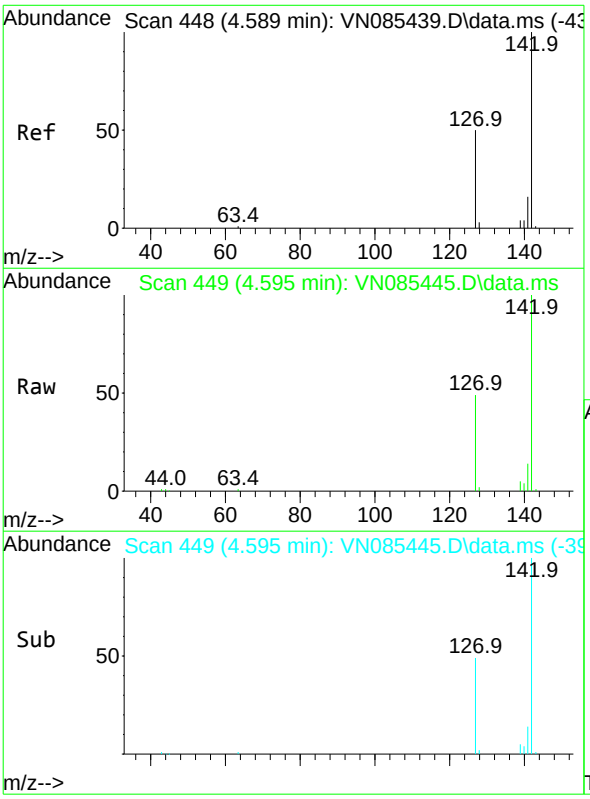
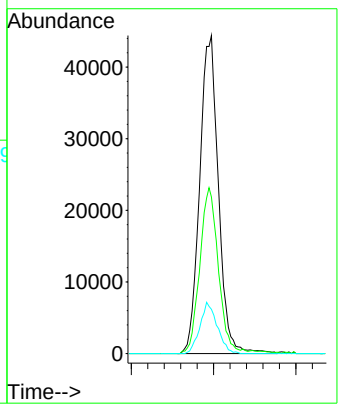


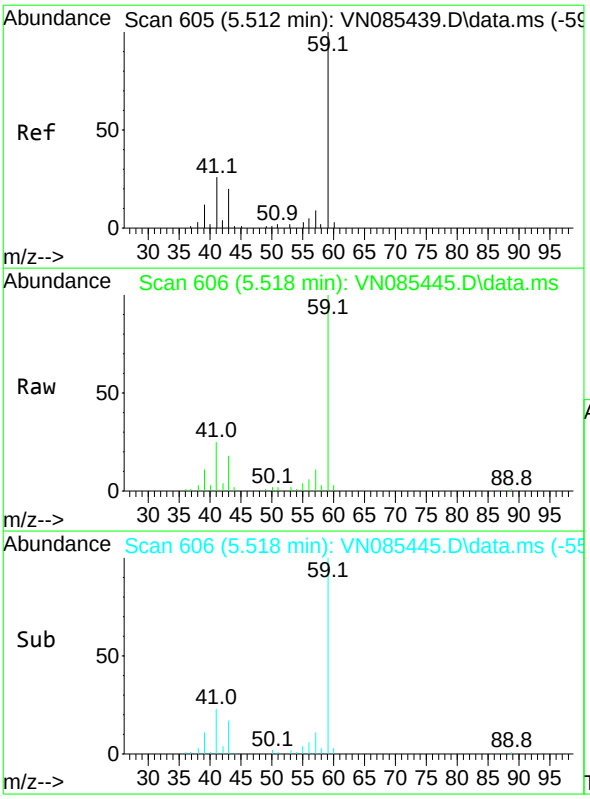


#10
Methyl Iodide
Concen: 46.259 ug/l
RT: 4.595 min Scan# 449
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:142 Resp: 140190

Ion	Ratio	Lower	Upper
142	100		
127	49.2	40.3	60.5
141	13.9	12.8	19.2

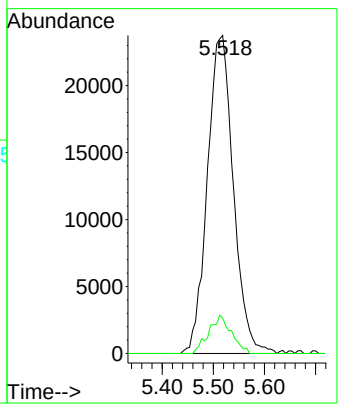




#11
Tert butyl alcohol
Concen: 206.633 ug/l
RT: 5.518 min Scan# 60
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 59 Resp: 83933

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.6	13.0



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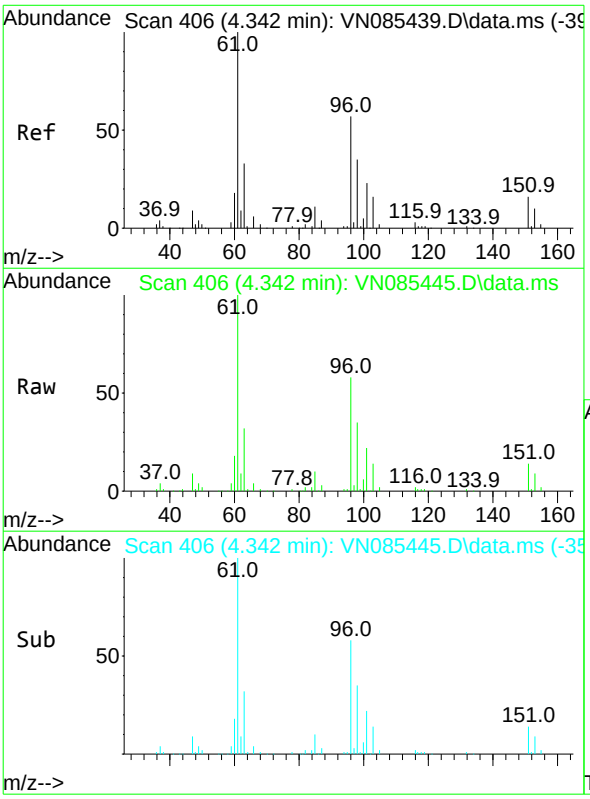
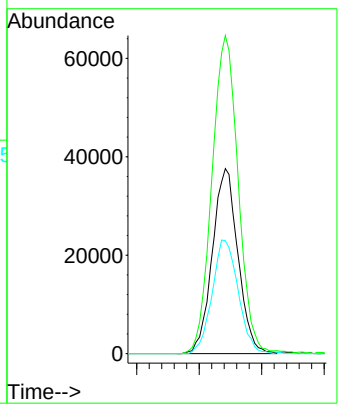
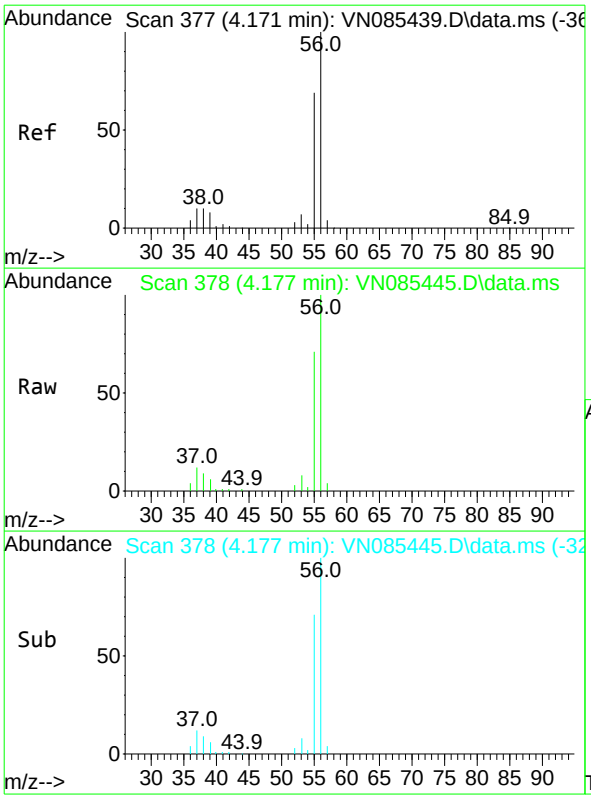


#12
1,1-Dichloroethene
Concen: 45.317 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 96 Resp: 106880

Ion	Ratio	Lower	Upper
96	100		
61	171.9	141.0	211.4
98	61.0	49.0	73.6

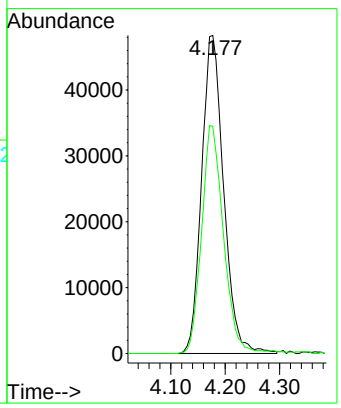




#13
Acrolein
Concen: 244.765 ug/l
RT: 4.177 min Scan# 37
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 56 Resp: 135720

Ion	Ratio	Lower	Upper
56	100		
55	70.9	56.3	84.5



Instrument :
MSVOA_N
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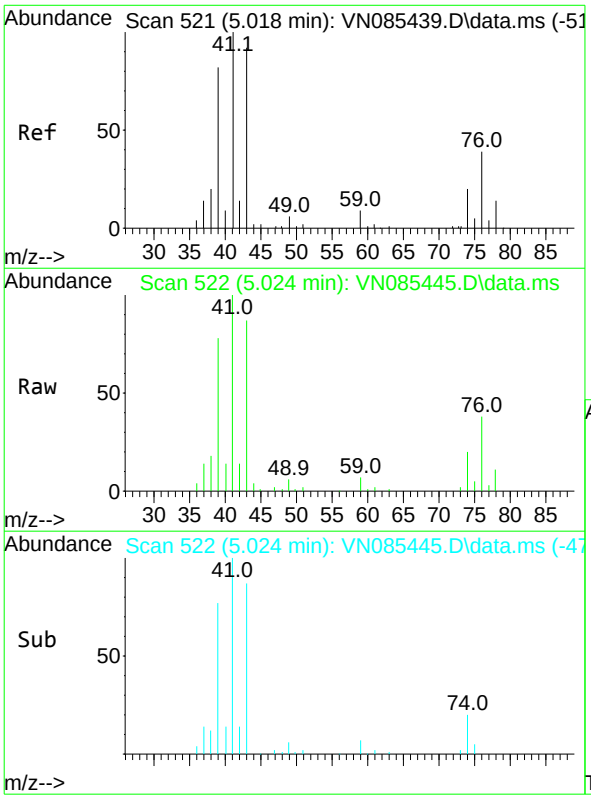
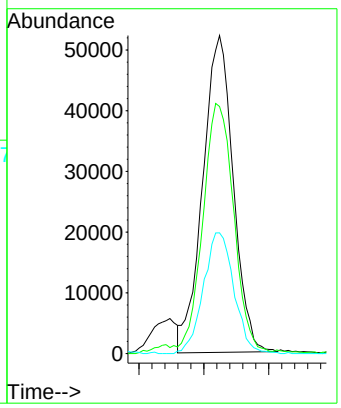
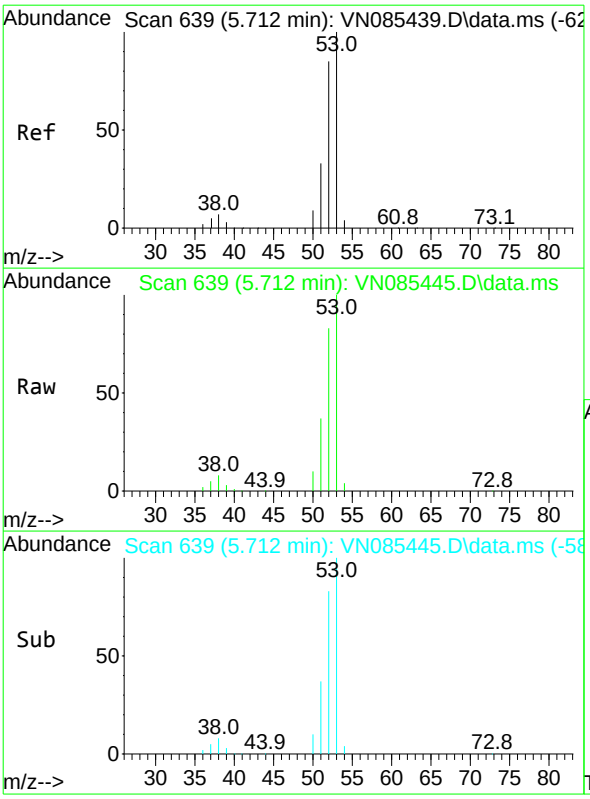


#14
Allyl chloride
Concen: 44.501 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 170308

Ion	Ratio	Lower	Upper
41	100		
39	78.9	64.4	96.6
76	38.2	30.5	45.7

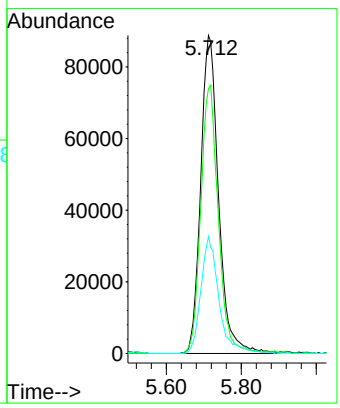




#15
Acrylonitrile
Concen: 227.920 ug/l
RT: 5.712 min Scan# 63
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 53 Resp: 294062

Ion	Ratio	Lower	Upper
53	100		
52	82.7	65.5	98.3
51	36.8	29.8	44.8



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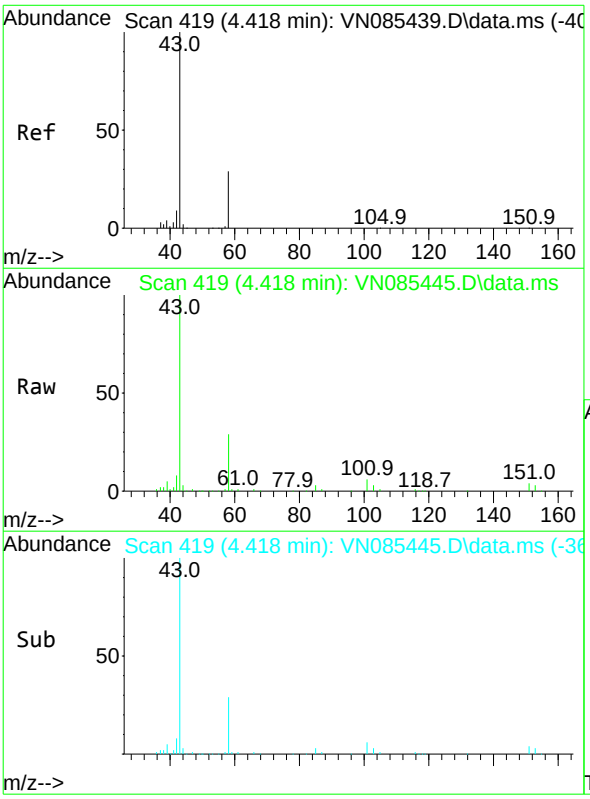
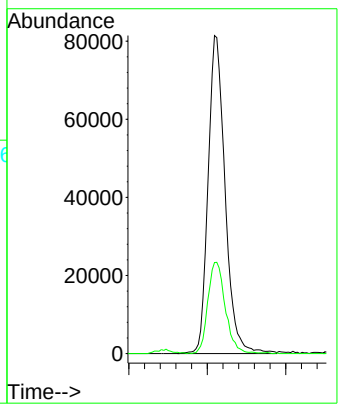
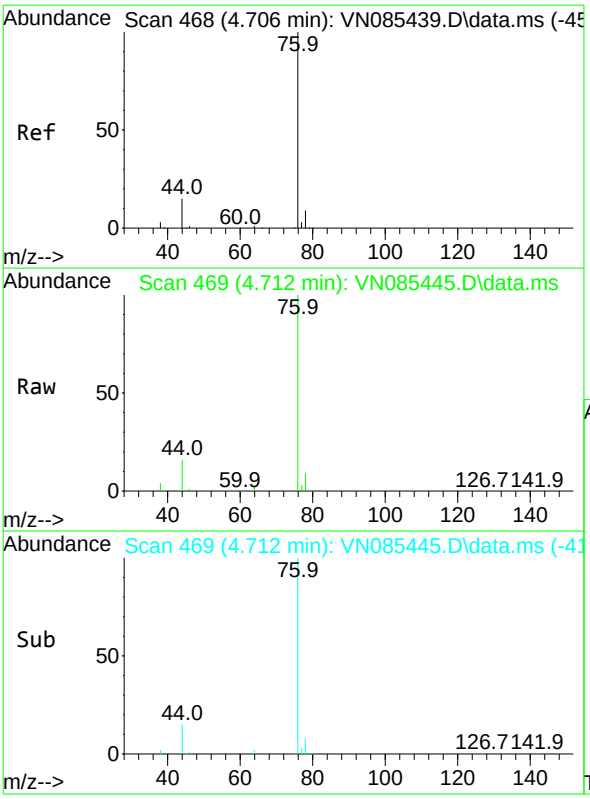


#16
Acetone
Concen: 213.971 ug/l
RT: 4.418 min Scan# 419
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 245248

Ion	Ratio	Lower	Upper
43	100		
58	28.4	23.8	35.6

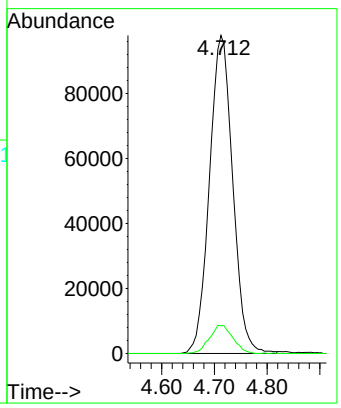




#17
Carbon Disulfide
Concen: 41.342 ug/l
RT: 4.712 min Scan# 46
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 76 Resp: 300215

Ion	Ratio	Lower	Upper
76	100		
78	8.7	6.9	10.3



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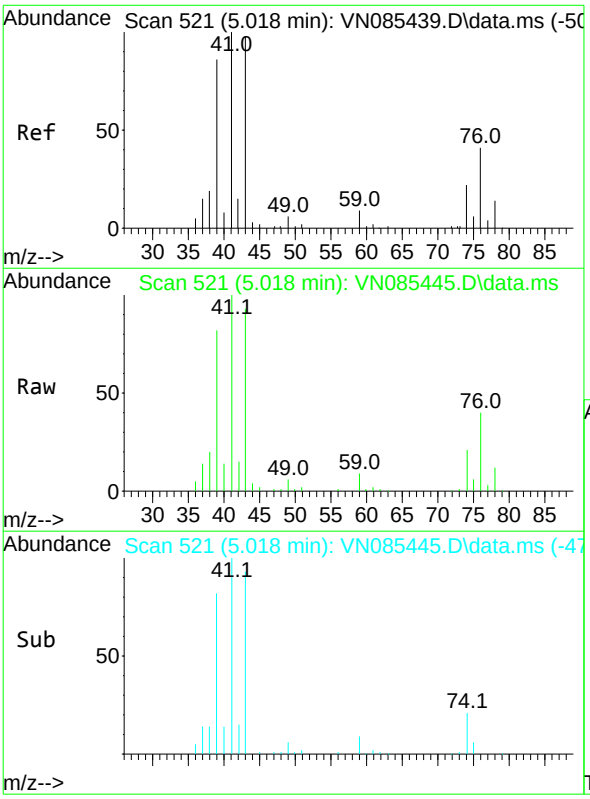
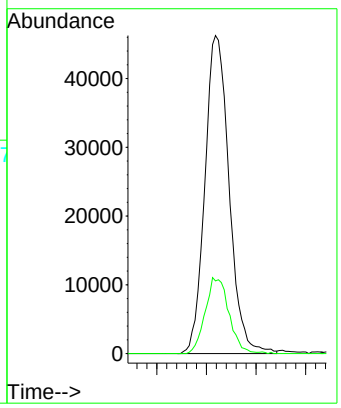
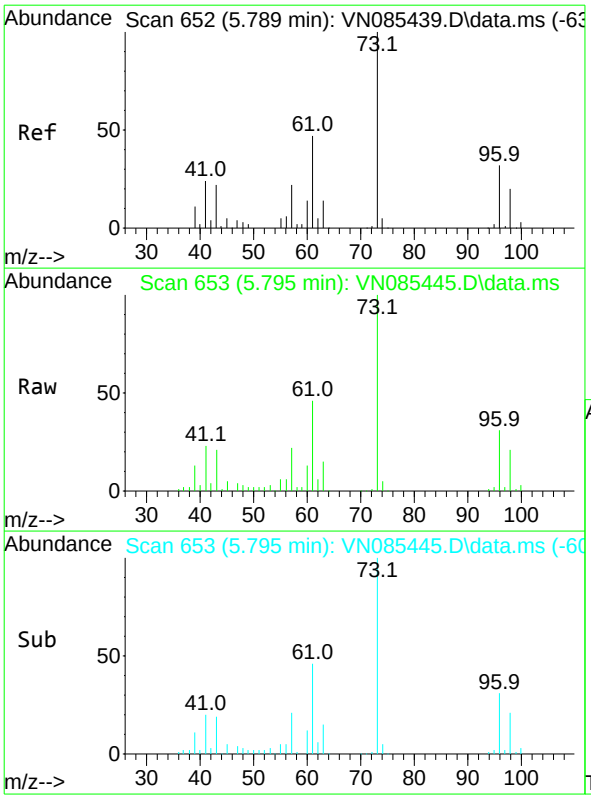


#18
Methyl Acetate
Concen: 45.028 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 156938

Ion	Ratio	Lower	Upper
43	100		
74	23.4	18.6	28.0

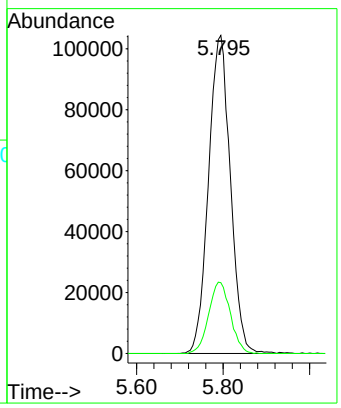




#19
Methyl tert-butyl Ether
Concen: 47.768 ug/l
RT: 5.795 min Scan# 65
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 73 Resp: 365819

Ion	Ratio	Lower	Upper
73	100		
57	22.3	17.8	26.8



Instrument :
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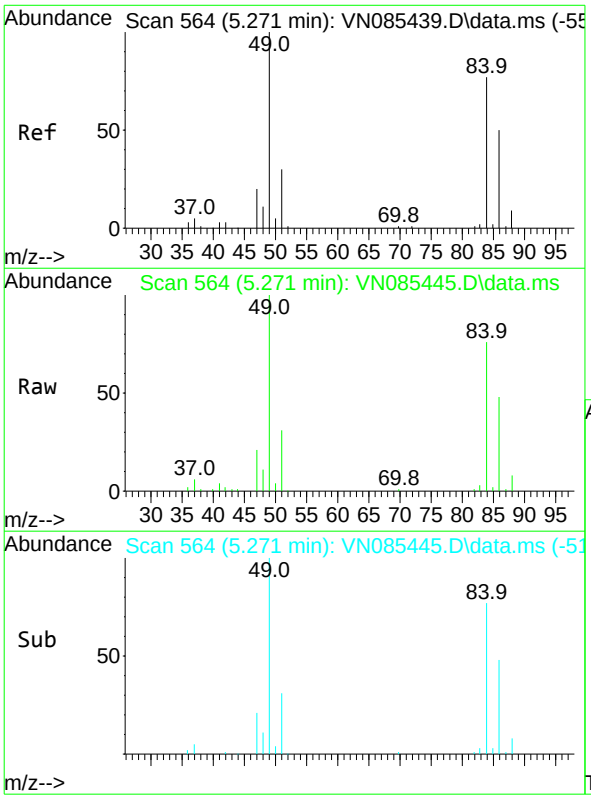
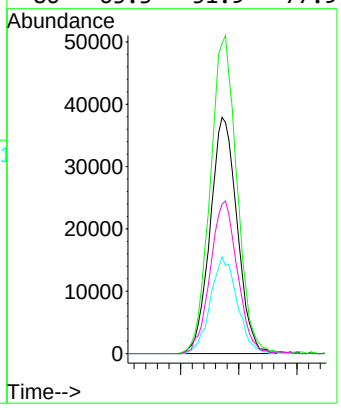
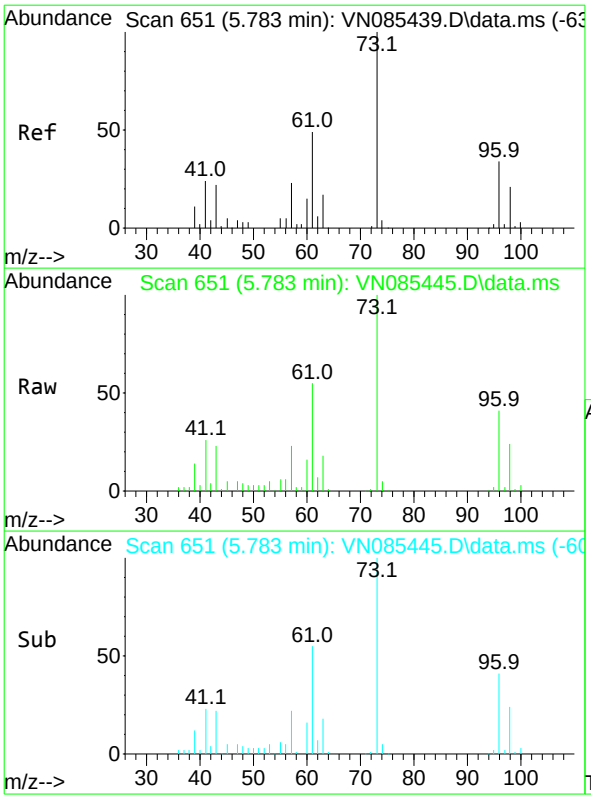


#20
Methylene Chloride
Concen: 43.017 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 84 Resp: 122059

Ion	Ratio	Lower	Upper
84	100		
49	131.3	104.1	156.1
51	41.0	31.0	46.4
86	63.3	51.9	77.9

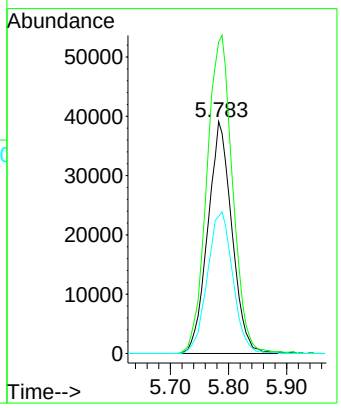




#21
trans-1,2-Dichloroethene
Concen: 44.672 ug/l
RT: 5.783 min Scan# 65
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 96 Resp: 112597

Ion	Ratio	Lower	Upper
96	100		
61	134.3	115.7	173.5
98	59.1	49.8	74.8



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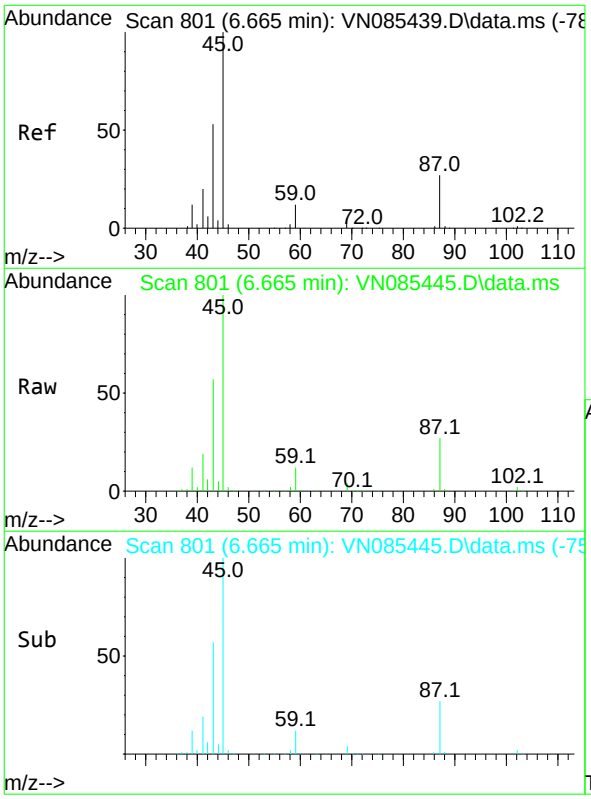
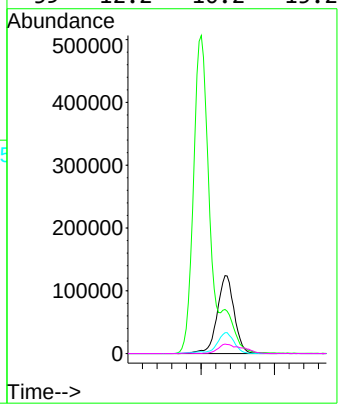
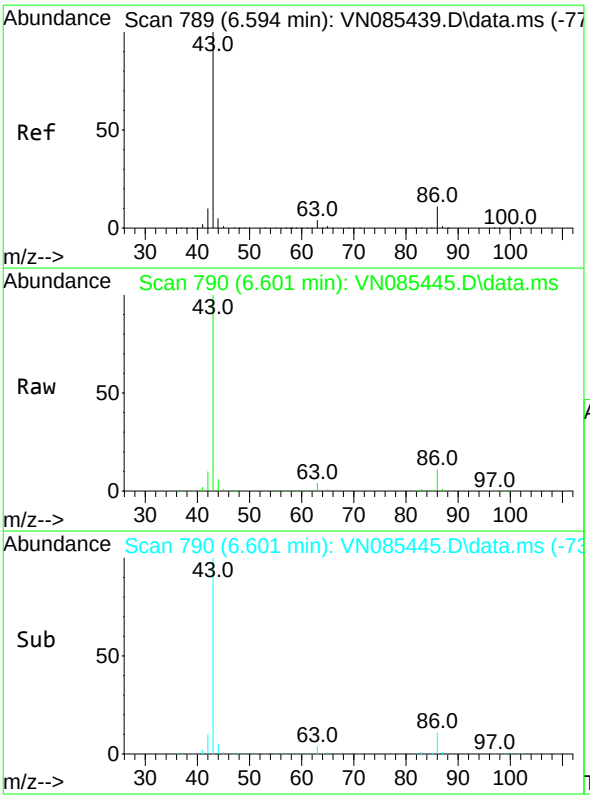


#22
Diisopropyl ether
Concen: 46.996 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 45 Resp: 399206

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

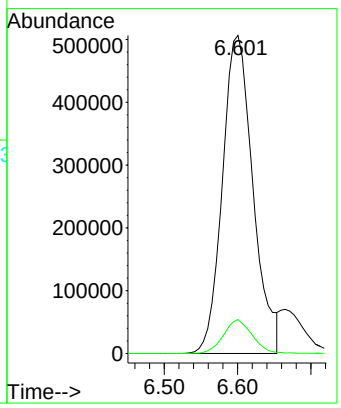




#23
Vinyl Acetate
Concen: 247.459 ug/l
RT: 6.601 min Scan# 79
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 1471068

Ion	Ratio	Lower	Upper
43	100		
86	10.7	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
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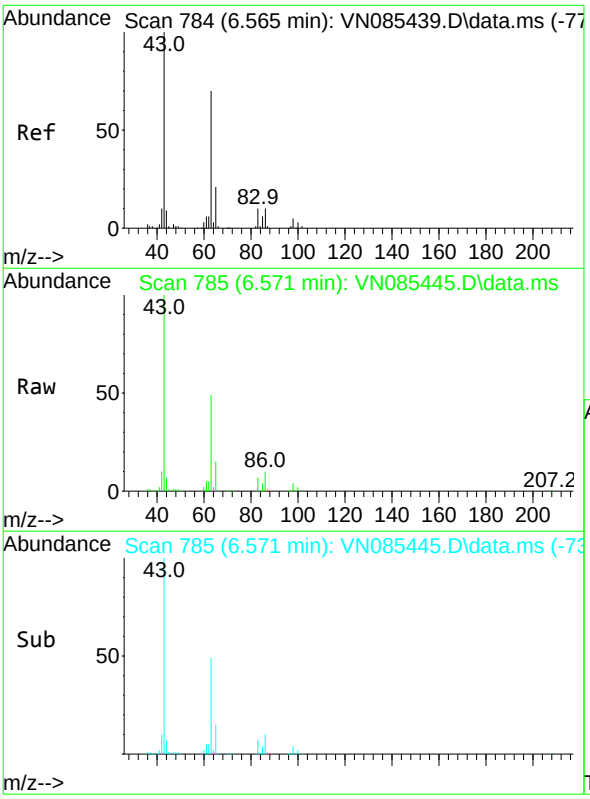
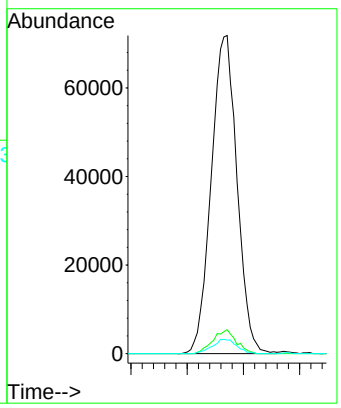
Supervised By :Mahesh Dadoda 01/15/2025

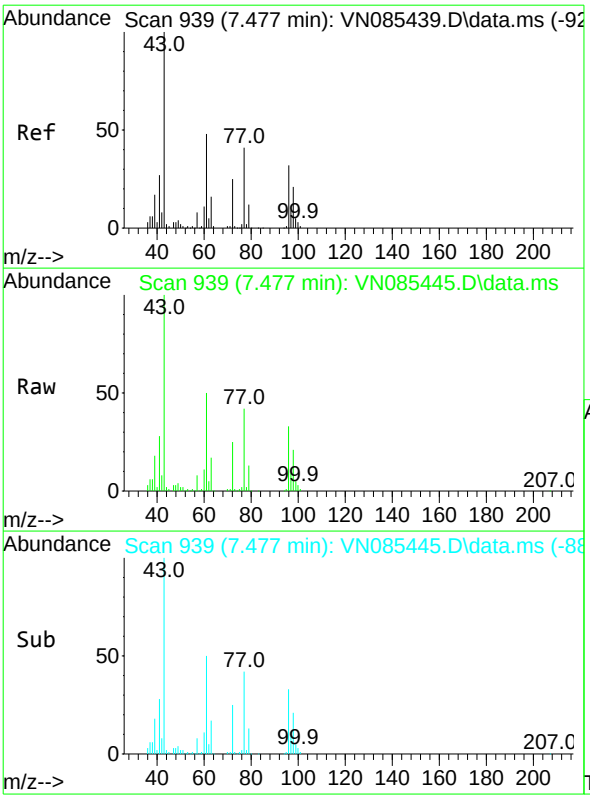


#24
1,1-Dichloroethane
Concen: 44.114 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 228489

Ion	Ratio	Lower	Upper
63	100		
98	7.5	3.3	9.8
100	4.2	2.0	6.0

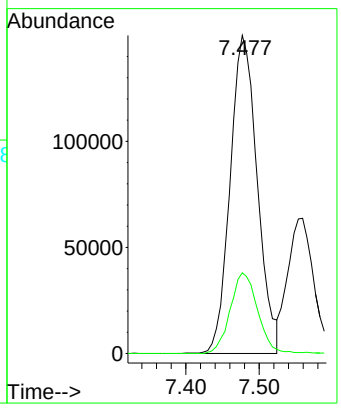




#25
2-Butanone
Concen: 228.924 ug/l
RT: 7.477 min Scan# 93
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 386125

Ion	Ratio	Lower	Upper
43	100		
72	25.4	20.2	30.4



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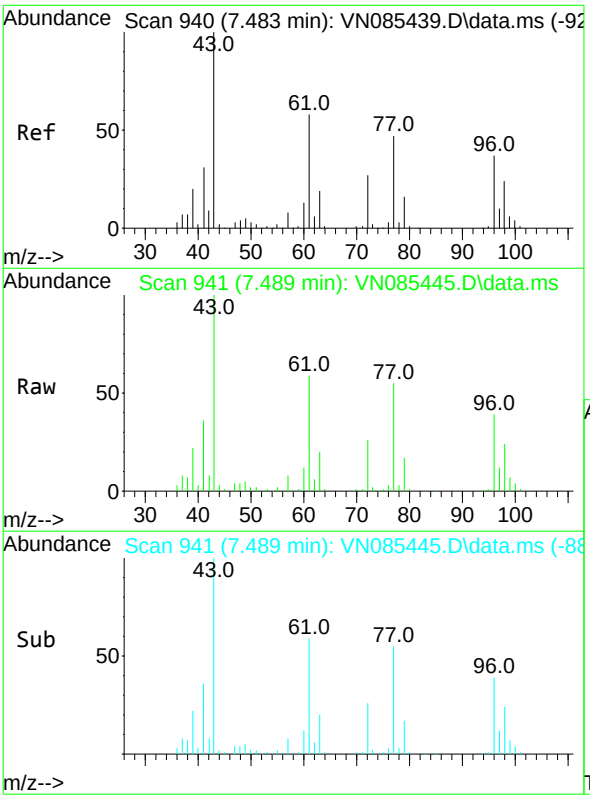
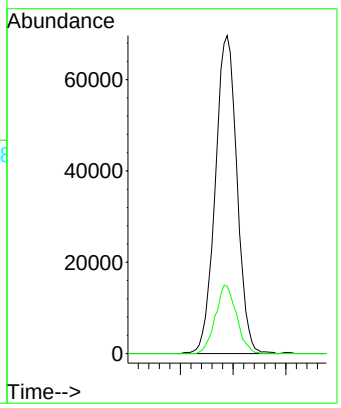
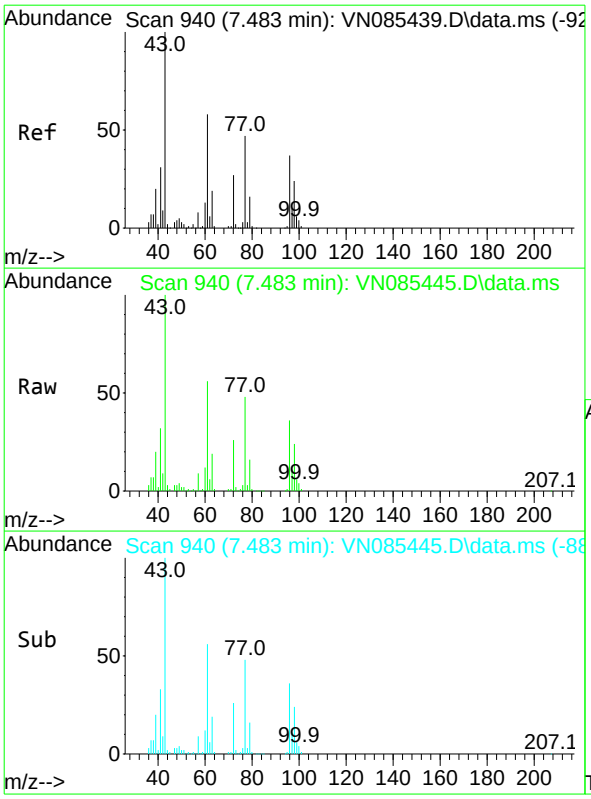


#26
2,2-Dichloropropane
Concen: 47.593 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 77 Resp: 199303

Ion	Ratio	Lower	Upper
77	100		
97	20.9	10.7	32.1

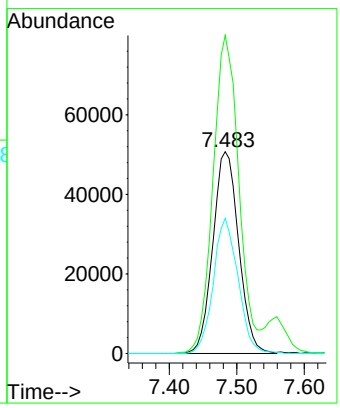




#27
cis-1,2-Dichloroethene
Concen: 45.446 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 96 Resp: 134920

Ion	Ratio	Lower	Upper
96	100		
61	158.0	0.0	311.8
98	64.1	0.0	126.0



Instrument :
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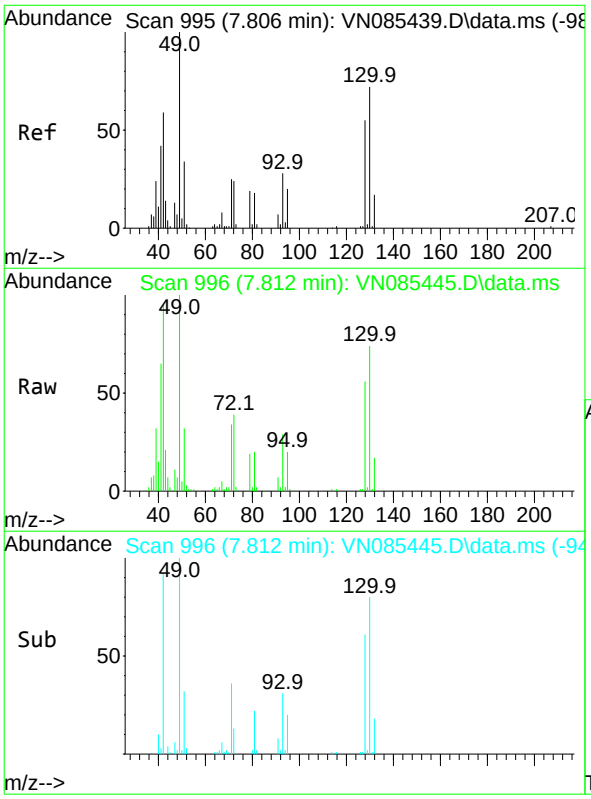
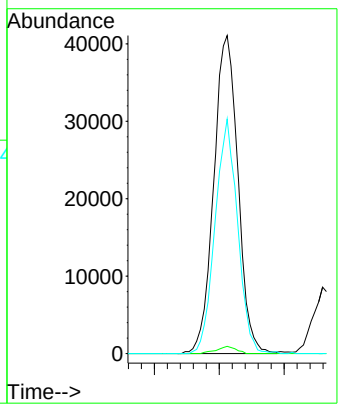
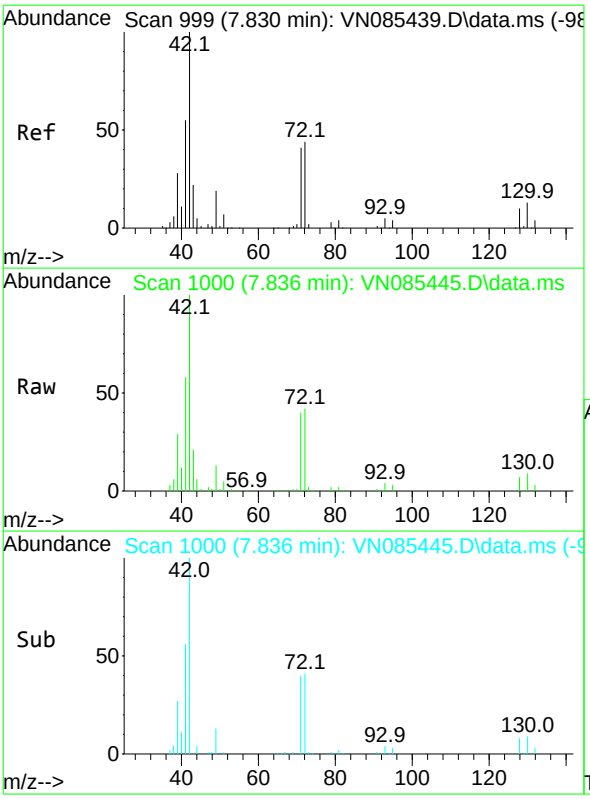


#28
Bromochloromethane
Concen: 44.122 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 49 Resp: 106323

Ion	Ratio	Lower	Upper
49	100		
129	1.8	0.0	4.4
130	68.6	55.0	82.4

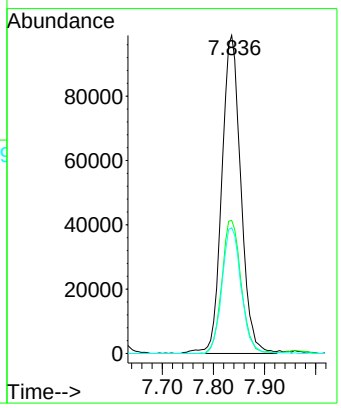




#29
Tetrahydrofuran
Concen: 239.065 ug/l
RT: 7.836 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 42 Resp: 255650

Ion	Ratio	Lower	Upper
42	100		
72	42.5	34.2	51.2
71	39.9	32.5	48.7



Instrument :
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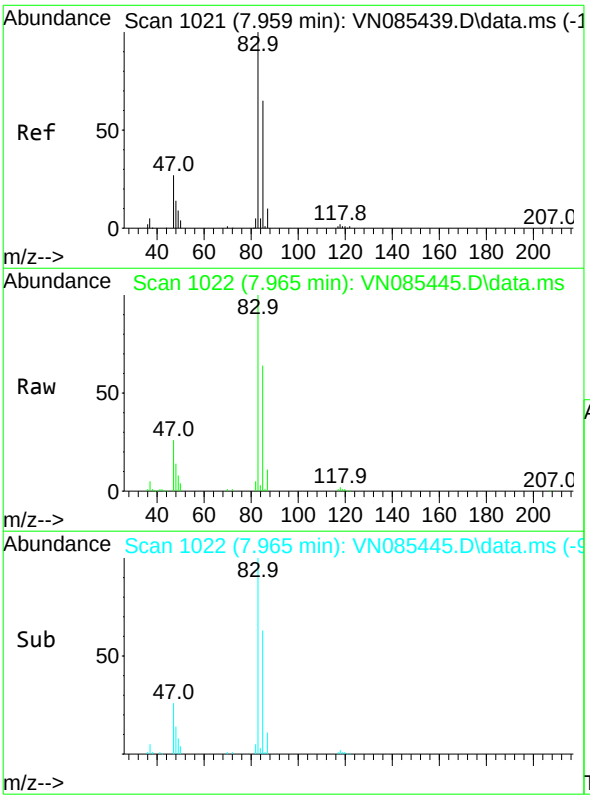
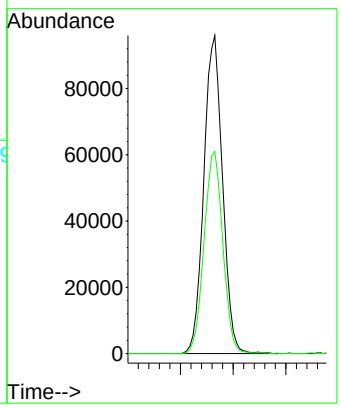
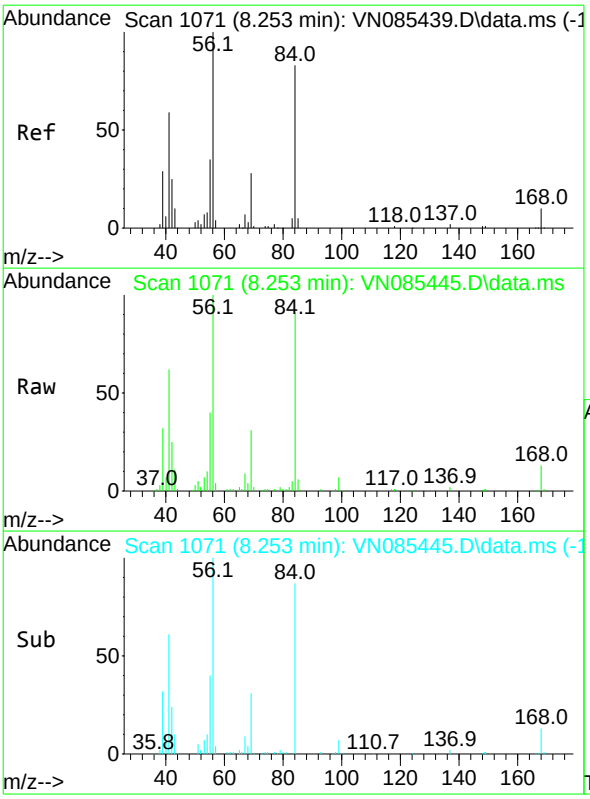


#30
Chloroform
Concen: 44.071 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 235923

Ion	Ratio	Lower	Upper
83	100		
85	63.5	51.8	77.6

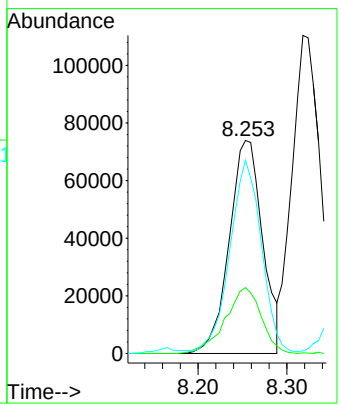




#31
Cyclohexane
Concen: 42.878 ug/l
RT: 8.253 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 56 Resp: 193034

Ion	Ratio	Lower	Upper
56	100		
69	30.5	22.2	33.4
84	89.4	66.4	99.6



Instrument :
MSVOA_N
ClientSampleId :
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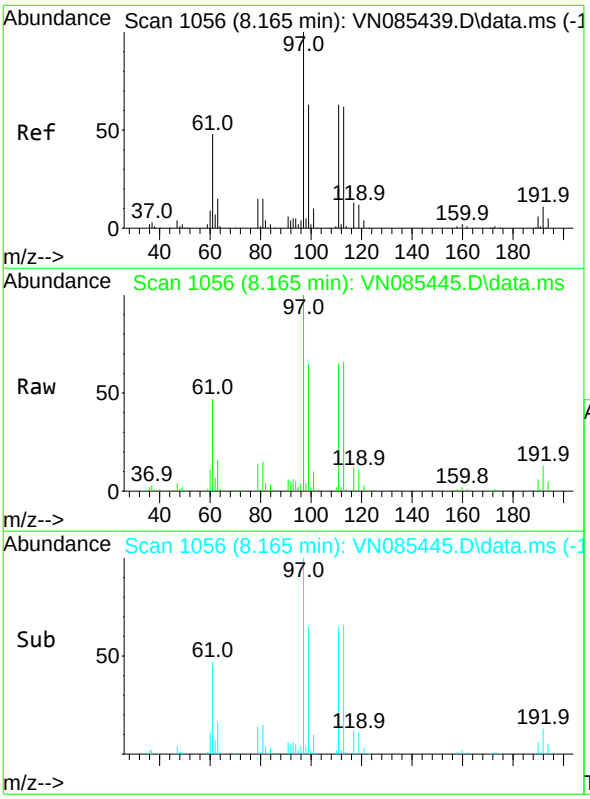
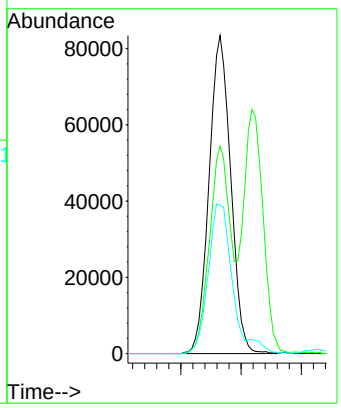
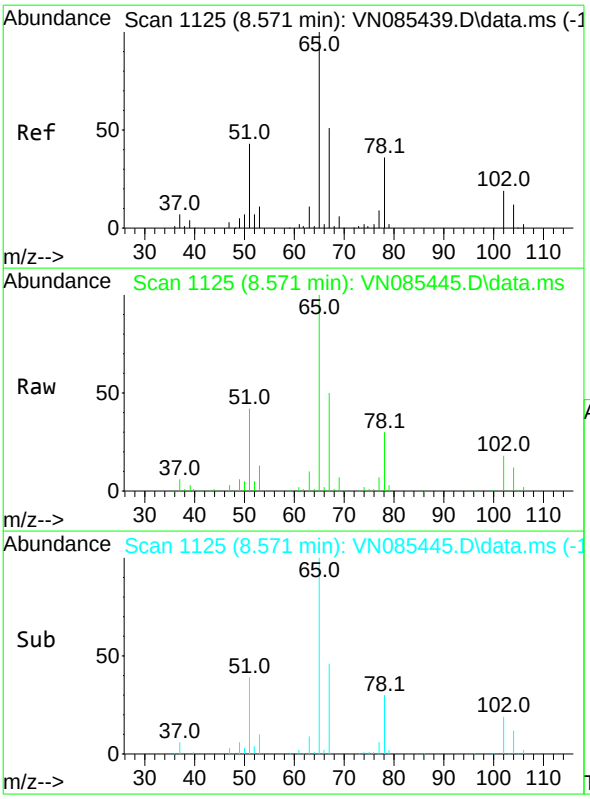


#32
1,1,1-Trichloroethane
Concen: 44.332 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 97 Resp: 208172

Ion	Ratio	Lower	Upper
97	100		
99	61.8	49.8	74.6
61	52.8	41.4	62.2





#33
1,2-Dichloroethane-d4
Concen: 49.782 ug/l
RT: 8.571 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 65 Resp: 176594

Ion	Ratio	Lower	Upper
65	100		
67	50.9	0.0	101.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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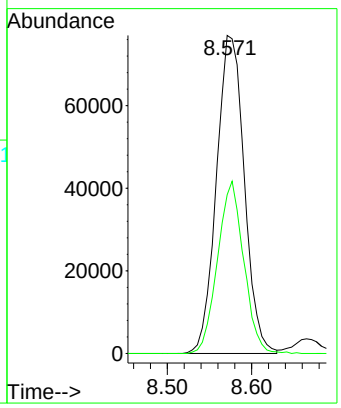
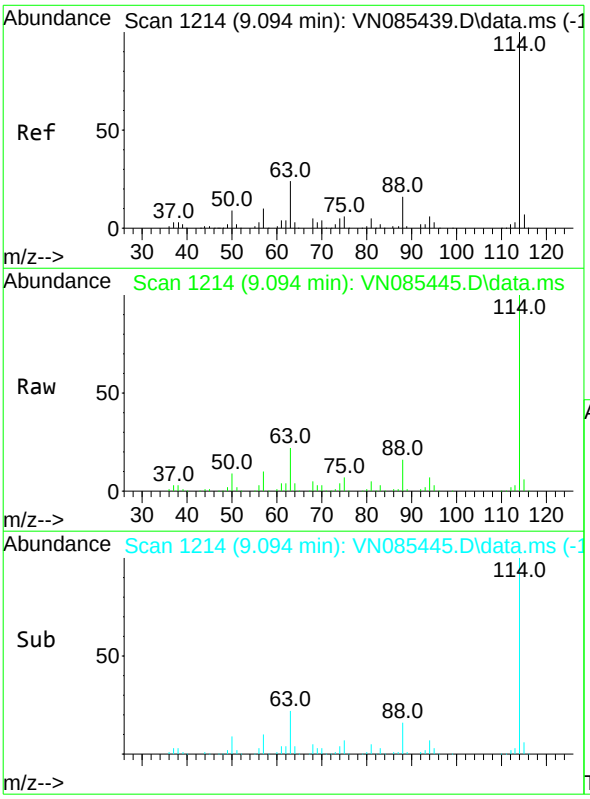
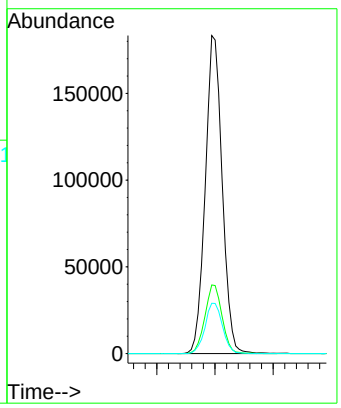


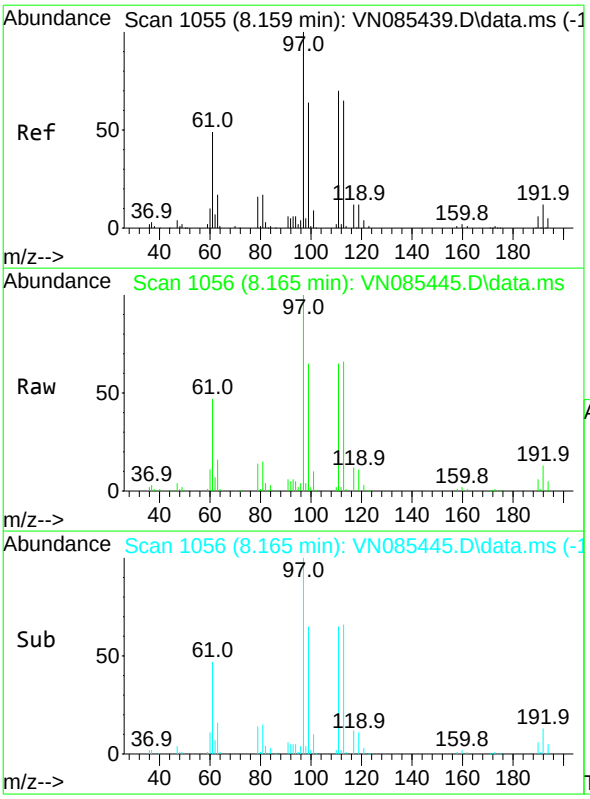


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:114 Resp: 370487

Ion	Ratio	Lower	Upper
114	100		
63	21.6	0.0	47.6
88	15.8	0.0	32.6

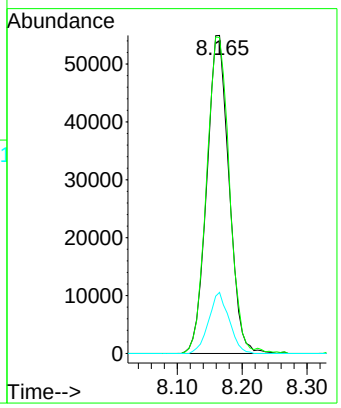




#35
Dibromofluoromethane
Concen: 50.768 ug/l
RT: 8.165 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:113 Resp: 130487

Ion	Ratio	Lower	Upper
113	100		
111	102.5	82.7	124.1
192	17.7	14.3	21.5



Instrument :
MSVOA_N
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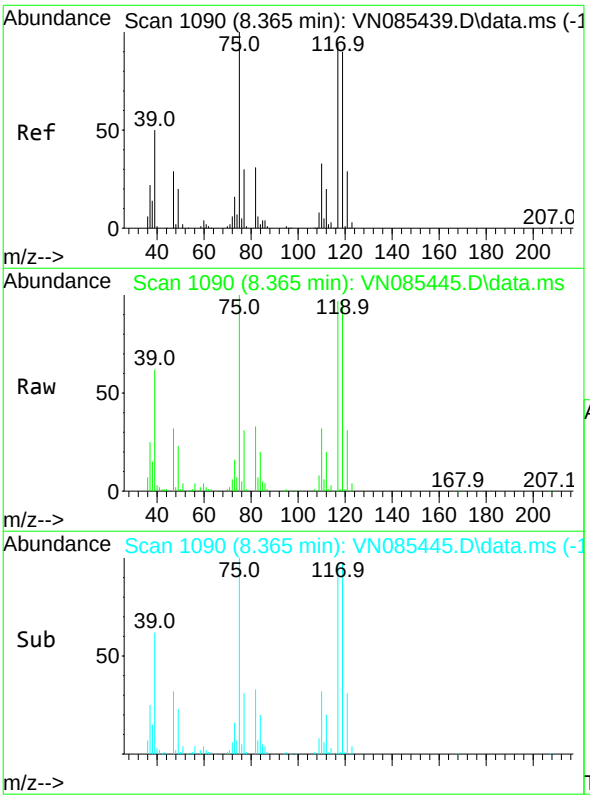
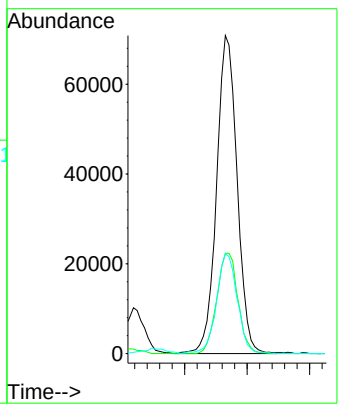
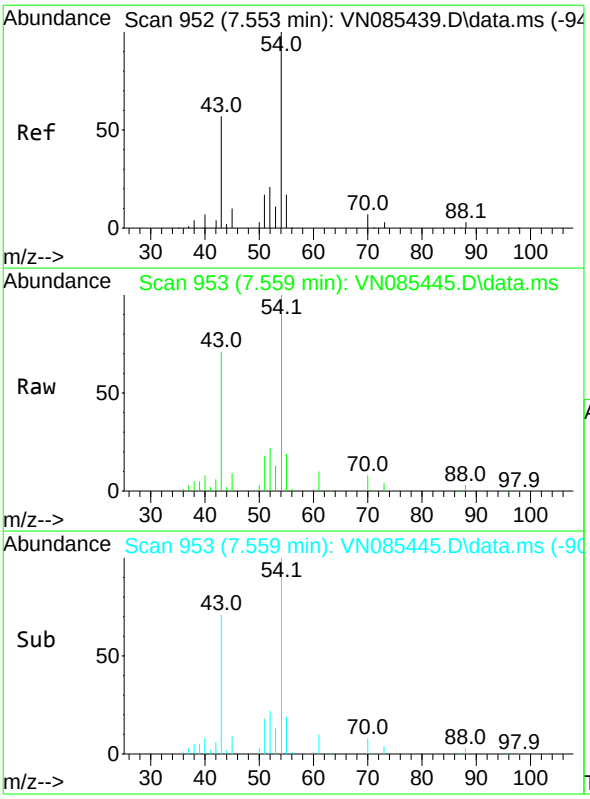


#36
1,1-Dichloropropene
Concen: 44.863 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 161834

Ion	Ratio	Lower	Upper
75	100		
110	32.4	16.5	49.5
77	31.8	24.4	36.6

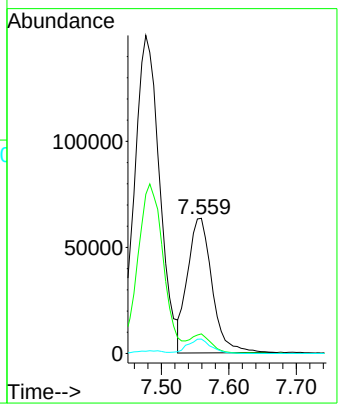




#37
Ethyl Acetate
Concen: 44.123 ug/l
RT: 7.559 min Scan# 95
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 160656

Ion	Ratio	Lower	Upper
43	100		
61	11.9	10.9	16.3
70	10.2	7.5	11.3



Instrument :
MSVOA_N
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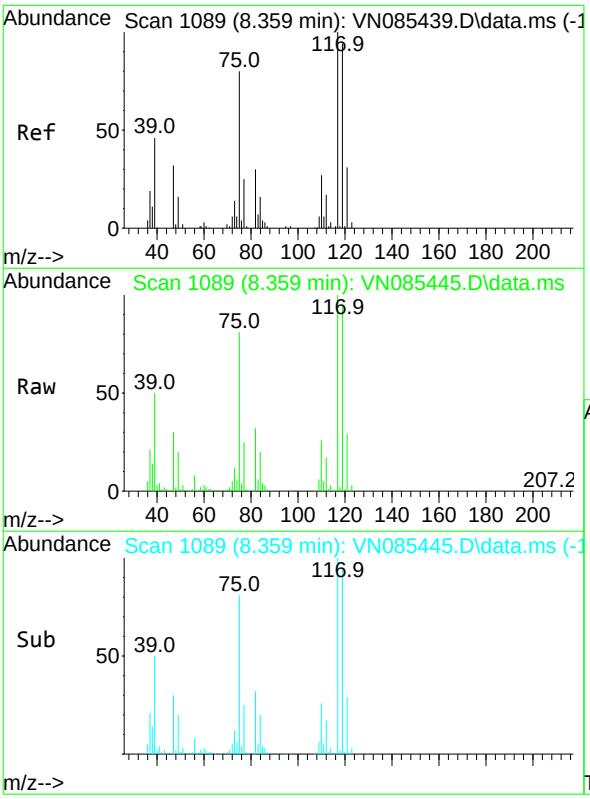
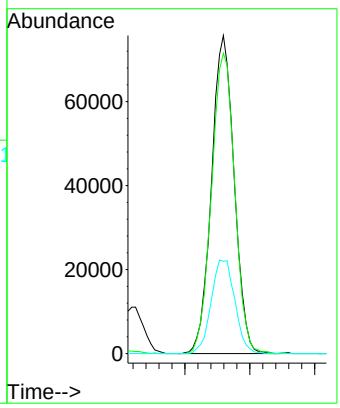
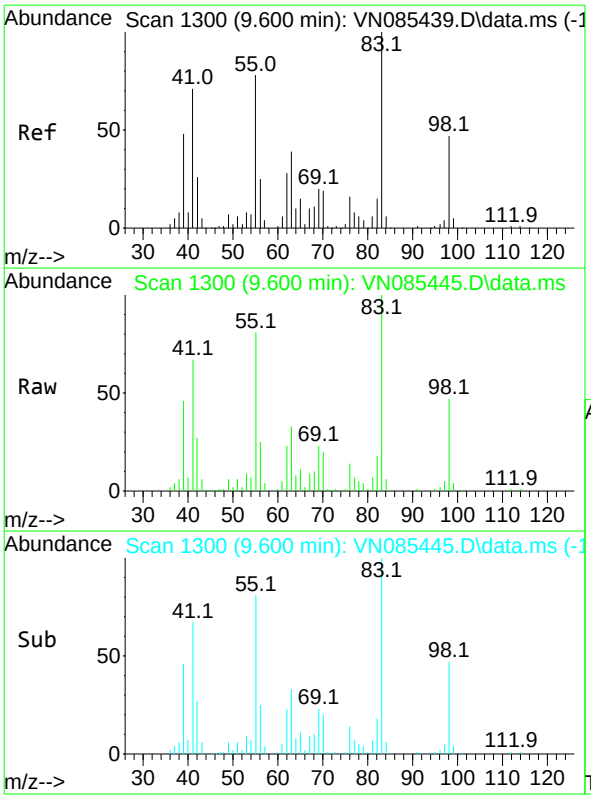


#38
Carbon Tetrachloride
Concen: 44.456 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:117 Resp: 183592

Ion	Ratio	Lower	Upper
117	100		
119	94.4	75.4	113.2
121	29.0	24.6	37.0

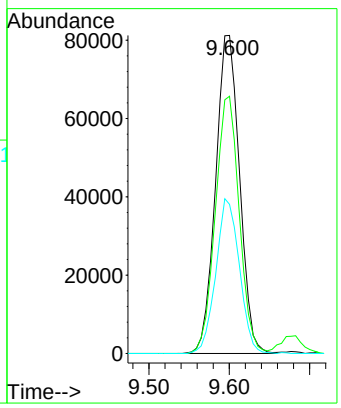




#39
Methylcyclohexane
Concen: 49.687 ug/l
RT: 9.600 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 168431

Ion	Ratio	Lower	Upper
83	100		
55	80.9	62.6	94.0
98	46.9	37.7	56.5



Instrument :
MSVOA_N
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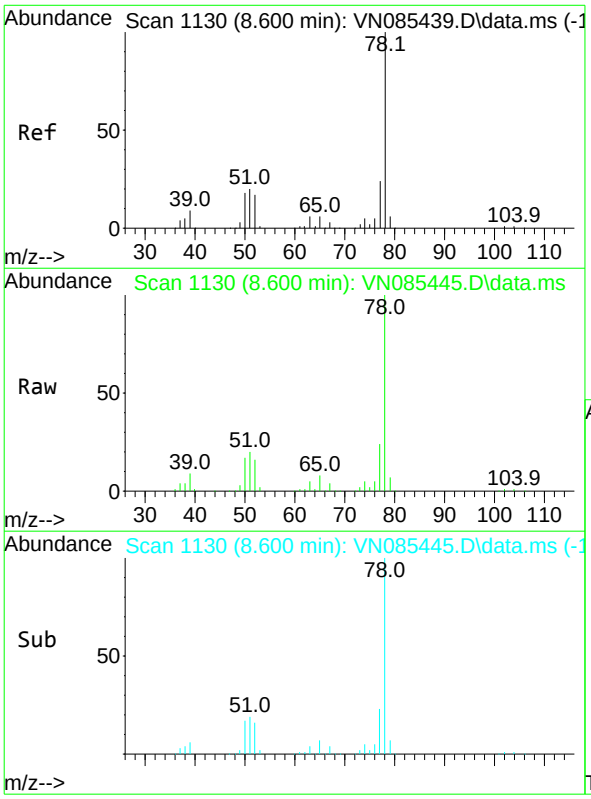
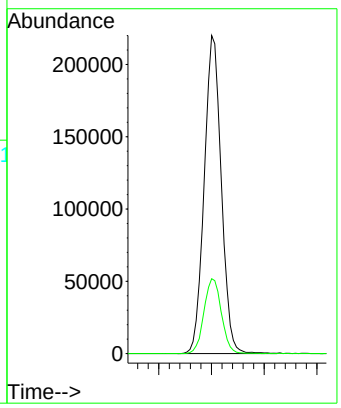
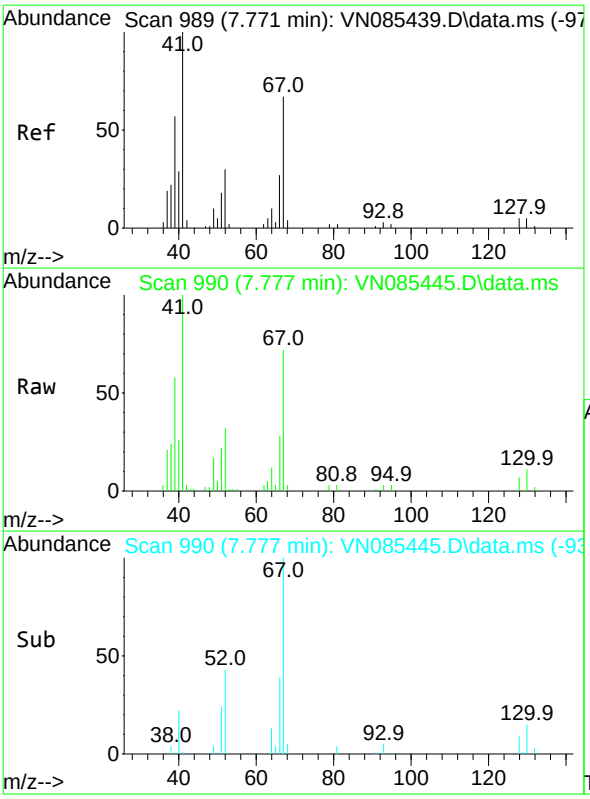


#40
Benzene
Concen: 45.657 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 78 Resp: 494871

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.0	28.6

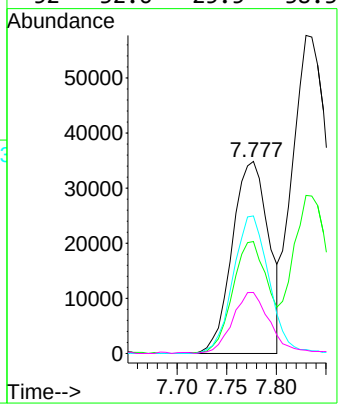




#41
Methacrylonitrile
Concen: 47.155 ug/l
RT: 7.777 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 89326

Ion	Ratio	Lower	Upper
41	100		
39	56.6	46.0	69.0
67	70.9	57.4	86.2
52	32.6	25.5	38.3



Instrument :
MSVOA_N
ClientSampleId :
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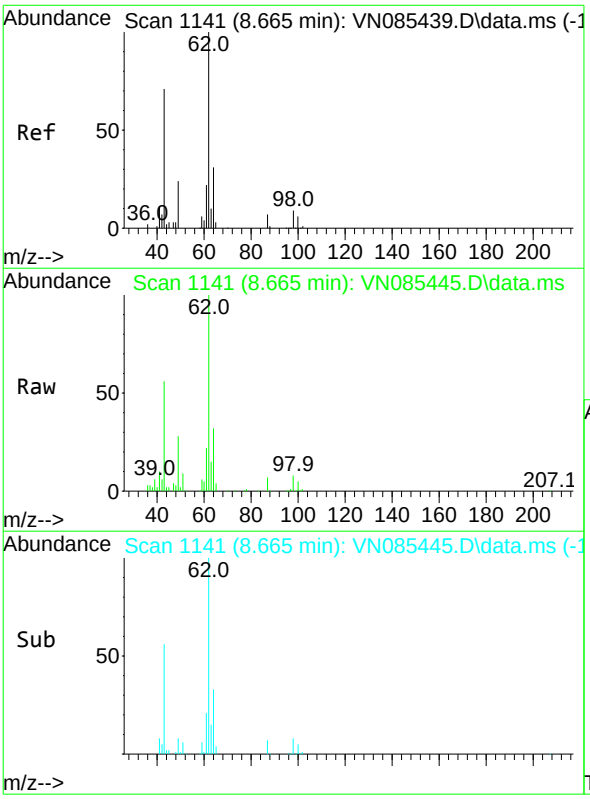
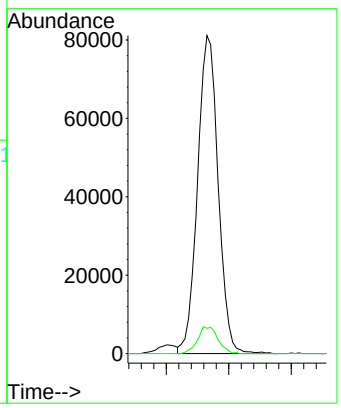
Supervised By :Mahesh Dadoda 01/15/2025

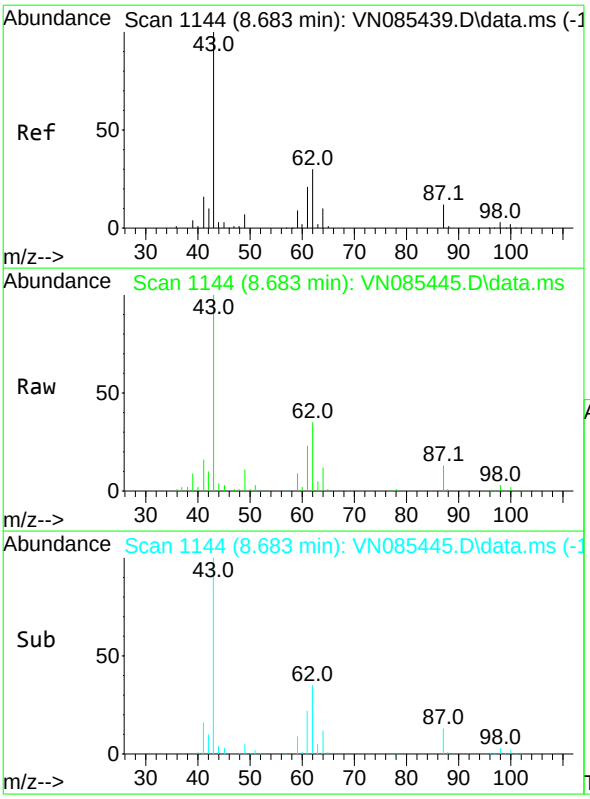


#42
1,2-Dichloroethane
Concen: 45.481 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 62 Resp: 185663

Ion	Ratio	Lower	Upper
62	100		
98	8.3	0.0	17.0





#43
Isopropyl Acetate
Concen: 45.440 ug/l
RT: 8.683 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 265107

Ion	Ratio	Lower	Upper
43	100		
61	26.7	20.7	31.1
87	12.9	9.8	14.8

Instrument :
MSVOA_N
ClientSampleId :
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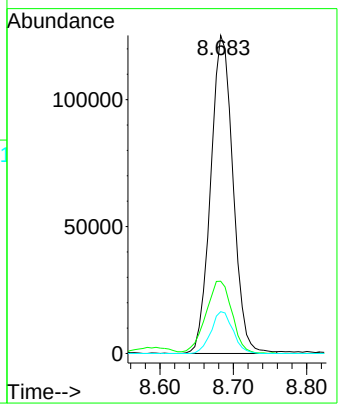
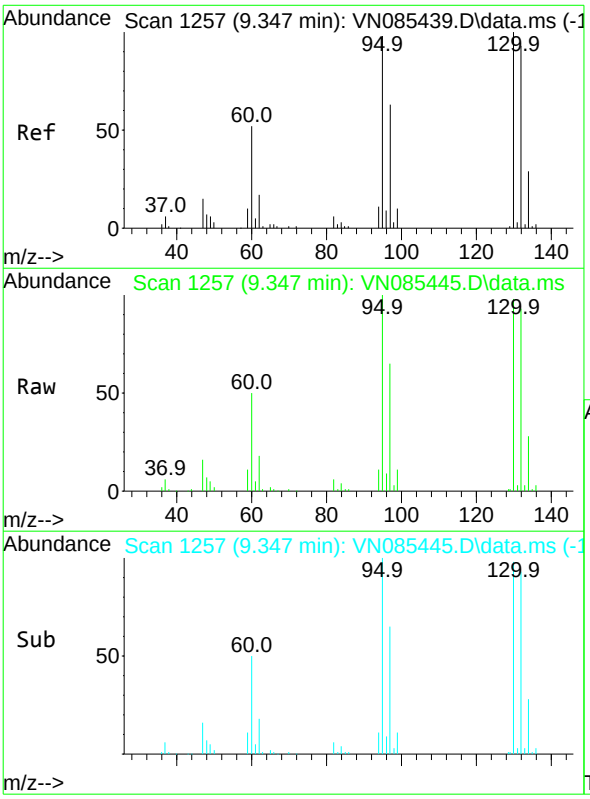
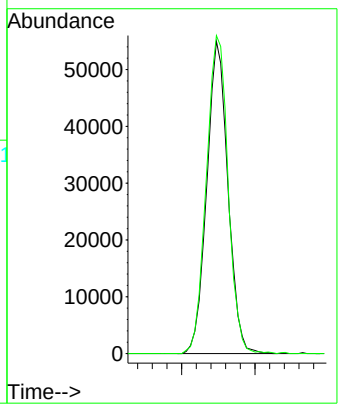


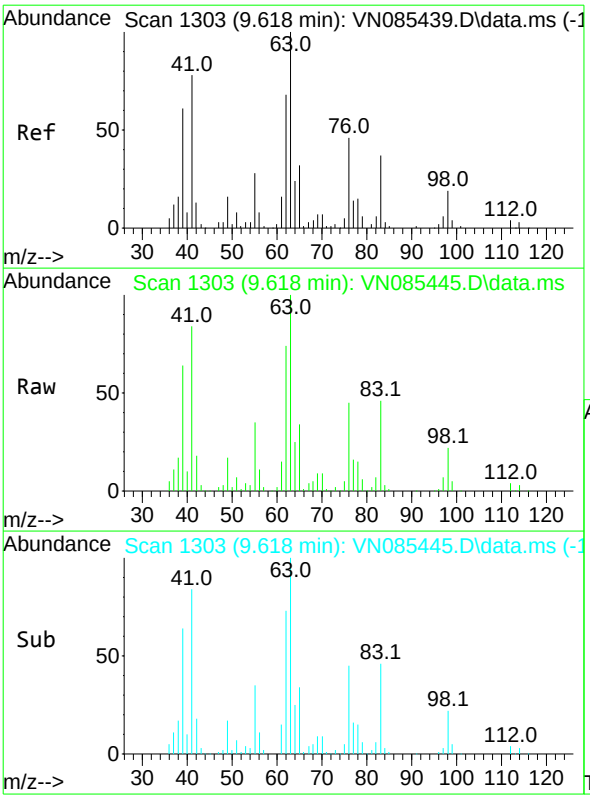


#44
Trichloroethene
Concen: 43.622 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:130 Resp: 110058

Ion	Ratio	Lower	Upper
130	100		
95	101.9	0.0	195.8

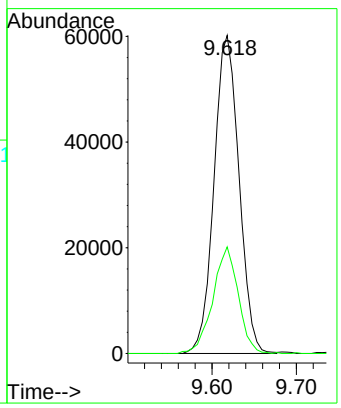




#45
1,2-Dichloropropane
Concen: 44.744 ug/l
RT: 9.618 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 123876

Ion	Ratio	Lower	Upper
63	100		
65	33.5	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
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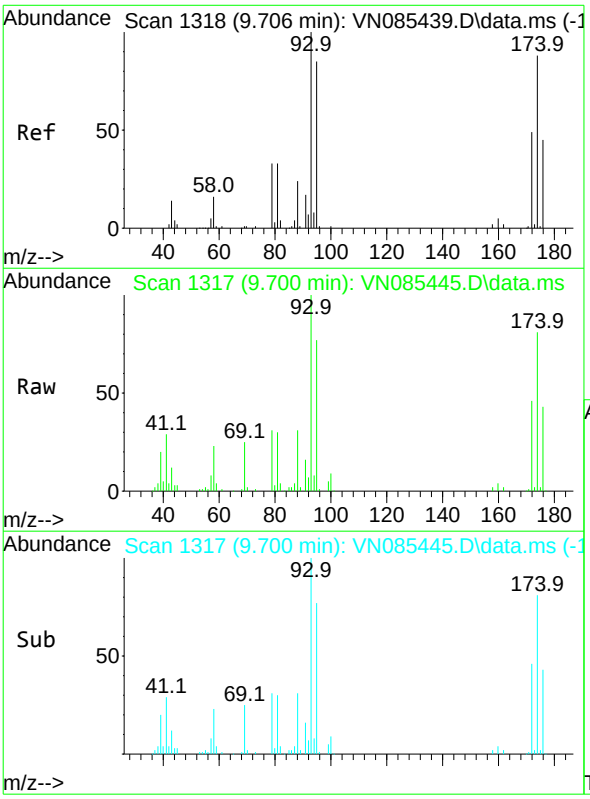
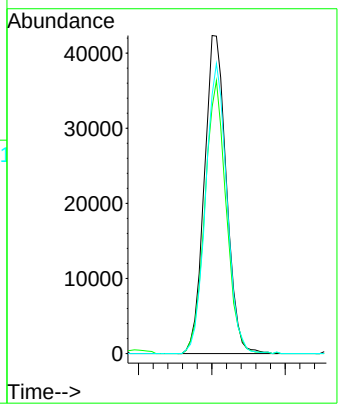
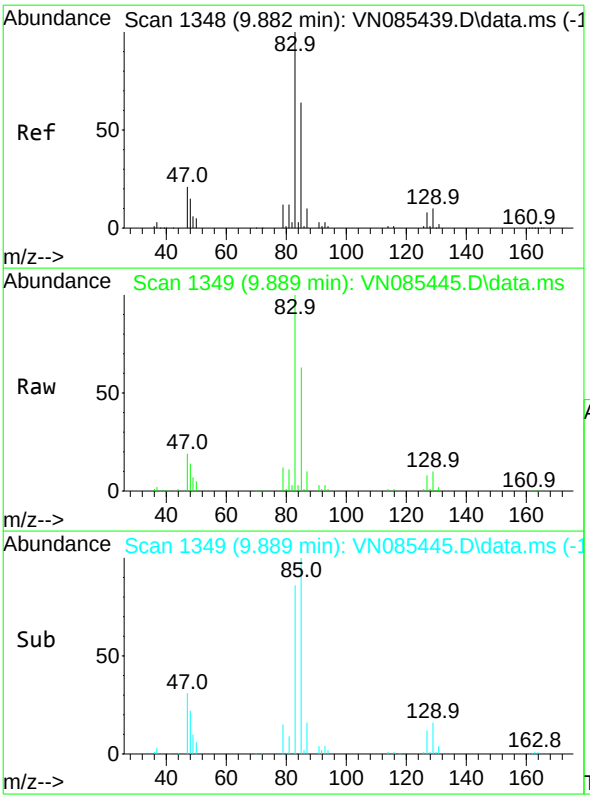


#46
Dibromomethane
Concen: 44.214 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 93 Resp: 88325

Ion	Ratio	Lower	Upper
93	100		
95	82.9	64.7	97.1
174	88.0	69.0	103.4

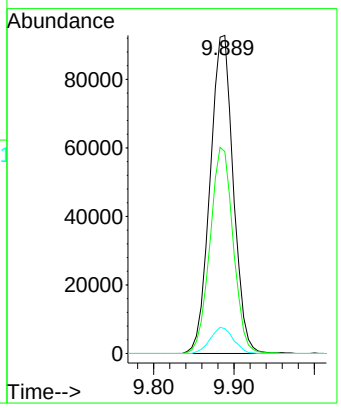




#47
Bromodichloromethane
Concen: 45.655 ug/l
RT: 9.889 min Scan# 13
Delta R.T. 0.007 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 185808

Ion	Ratio	Lower	Upper
83	100		
85	63.5	51.2	76.8
127	7.8	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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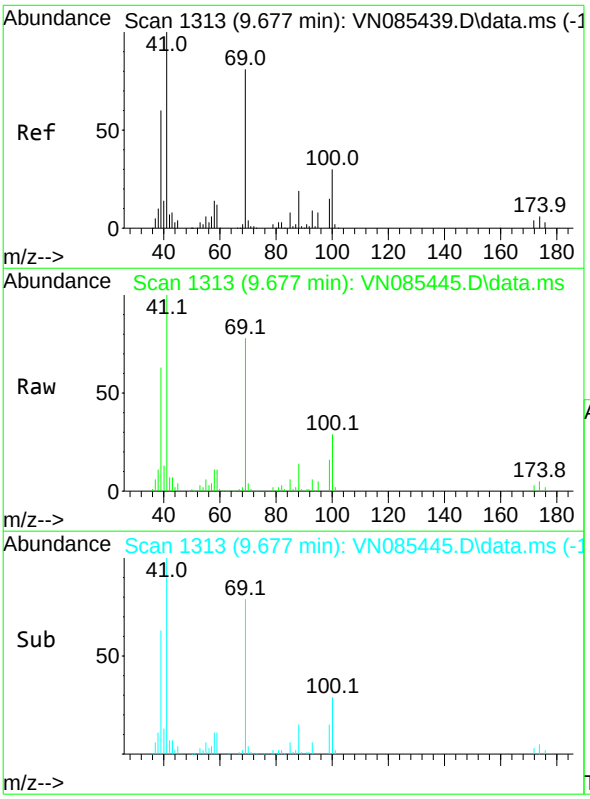
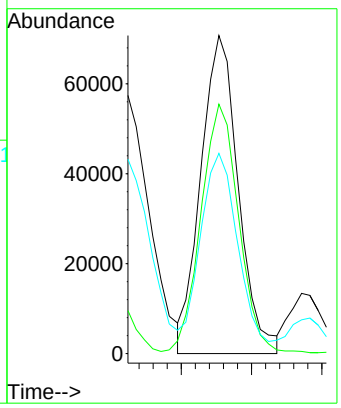
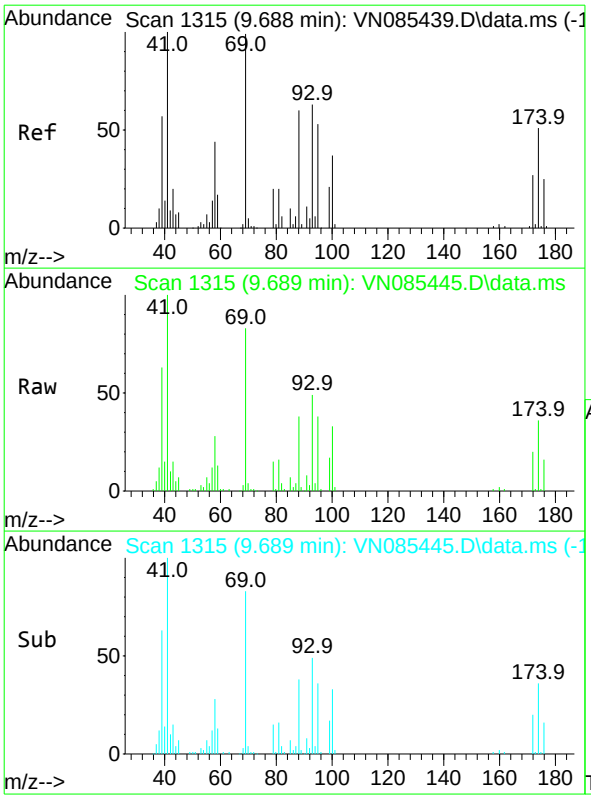


#48
Methyl methacrylate
Concen: 49.948 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 41 Resp: 131142

Ion	Ratio	Lower	Upper
41	100		
69	78.6	64.7	97.1
39	63.3	49.0	73.6





#49
1,4-Dioxane
Concen: 792.760 ug/l
RT: 9.689 min Scan# 13
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 88 Resp: 35051

Ion	Ratio	Lower	Upper
88	100		
43	33.8	26.6	39.8
58	76.1	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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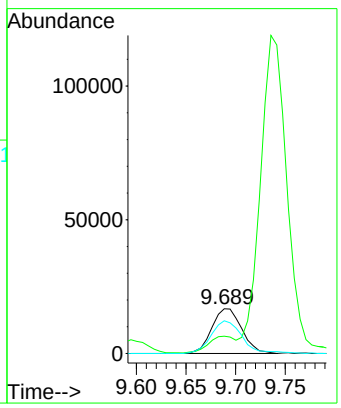
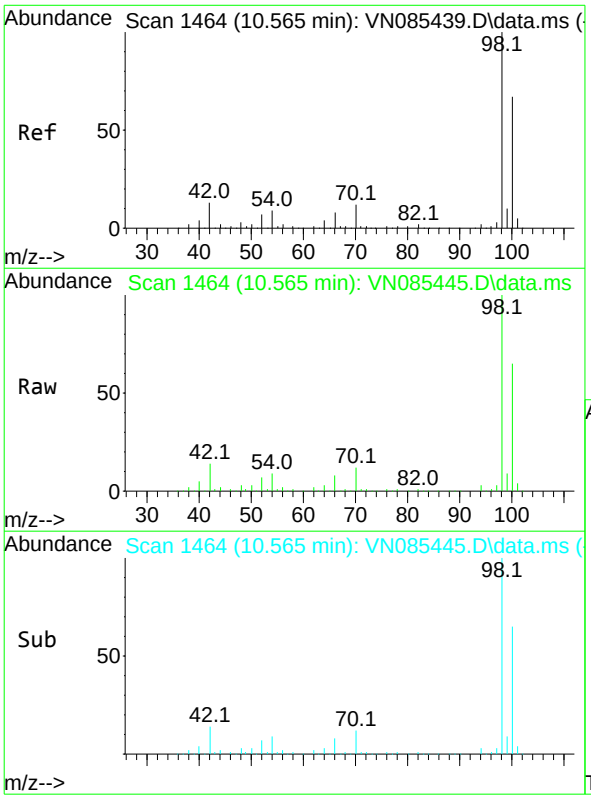
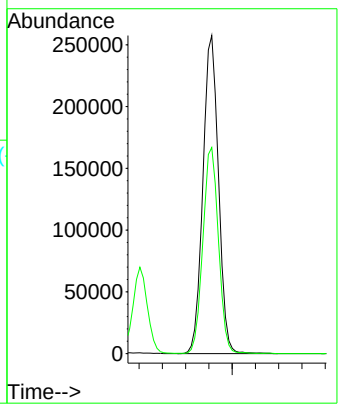


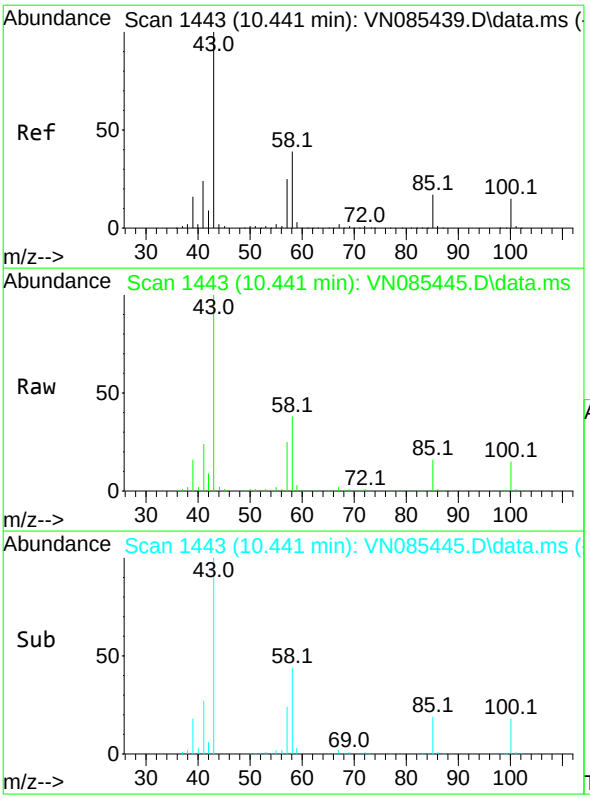


#50
Toluene-d8
Concen: 52.302 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 98 Resp: 477630

Ion	Ratio	Lower	Upper
98	100		
100	64.7	52.2	78.4

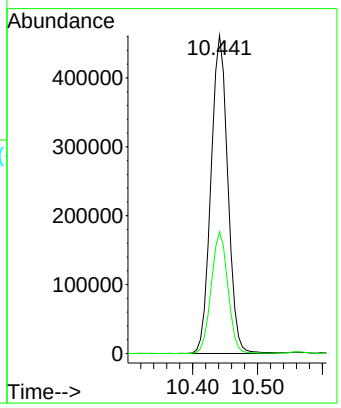




#51
4-Methyl-2-Pentanone
Concen: 245.877 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 832426

Ion	Ratio	Lower	Upper
43	100		
58	37.8	30.5	45.7



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Manual Integrations
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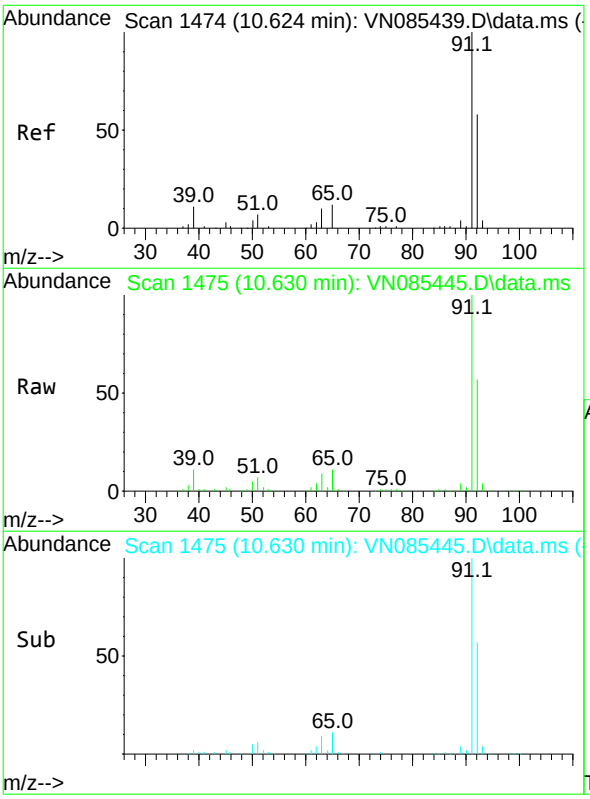
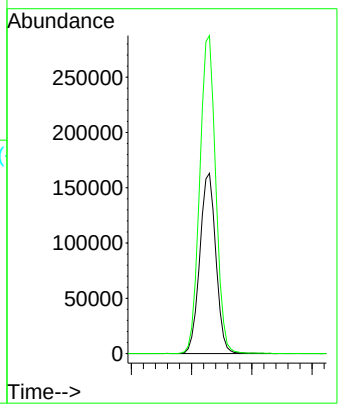
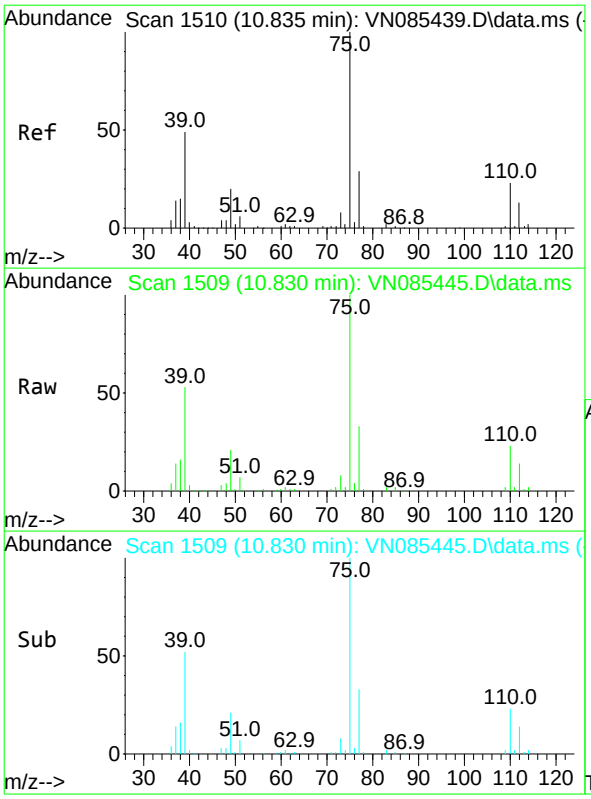


#52
Toluene
Concen: 48.073 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 92 Resp: 301911

Ion	Ratio	Lower	Upper
92	100		
91	175.7	139.2	208.8

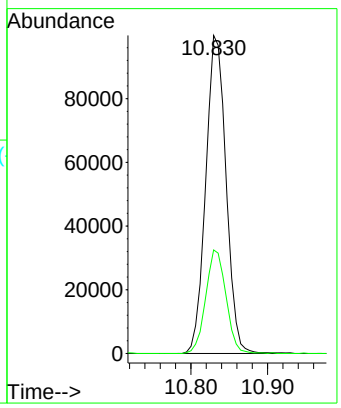




#53
t-1,3-Dichloropropene
Concen: 47.757 ug/l
RT: 10.830 min Scan# 15
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 183680

Ion	Ratio	Lower	Upper
75	100		
77	32.6	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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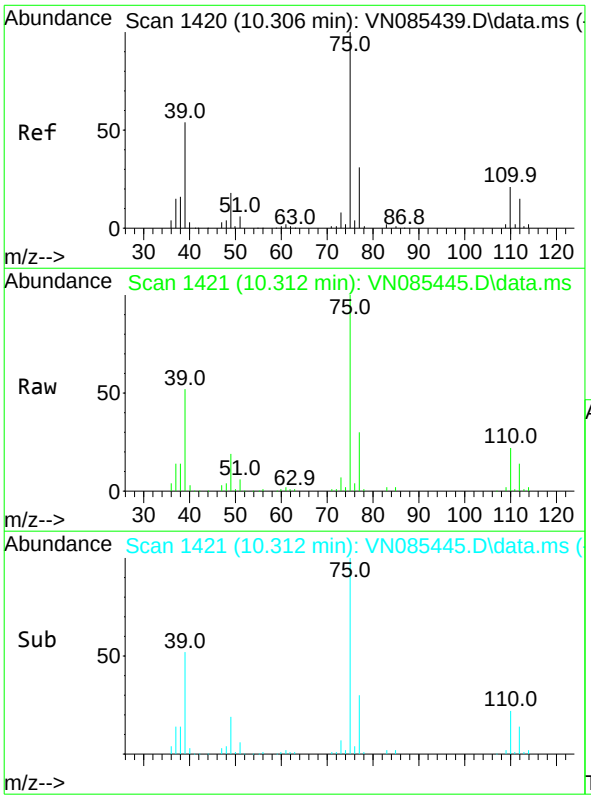
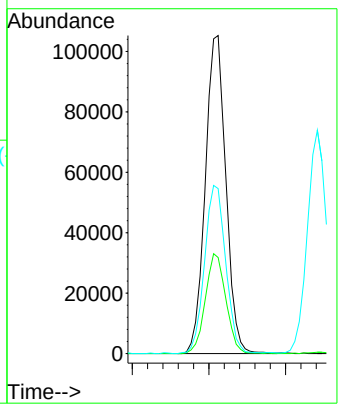
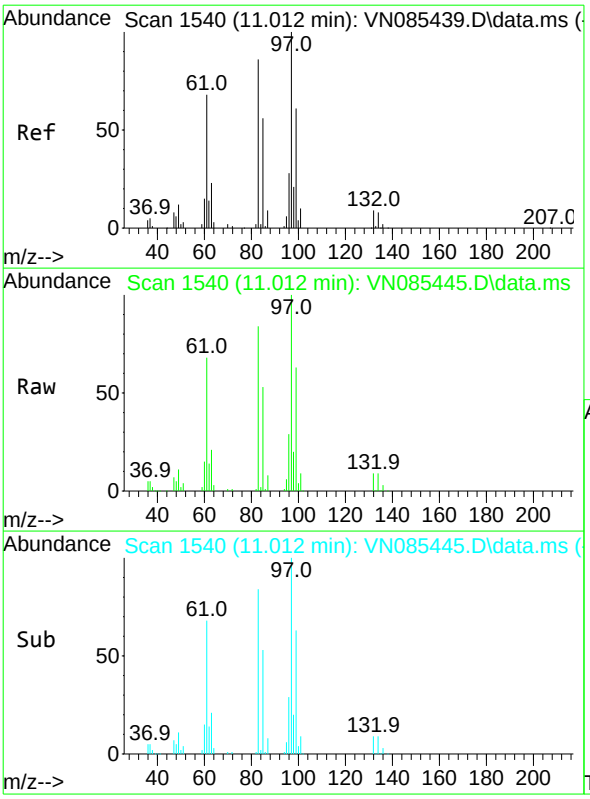


#54
cis-1,3-Dichloropropene
Concen: 47.783 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 196307

Ion	Ratio	Lower	Upper
75	100		
77	30.2	25.0	37.4
39	51.9	43.1	64.7

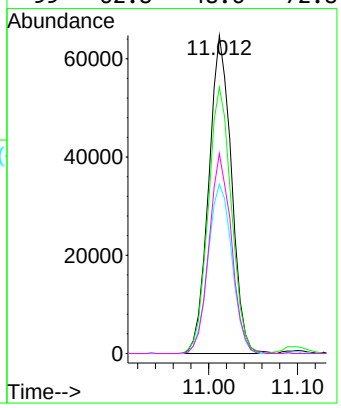




#55
1,1,2-Trichloroethane
Concen: 46.173 ug/l
RT: 11.012 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 97 Resp: 114757

Ion	Ratio	Lower	Upper
97	100		
83	83.7	69.0	103.6
85	53.2	44.6	66.8
99	62.8	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
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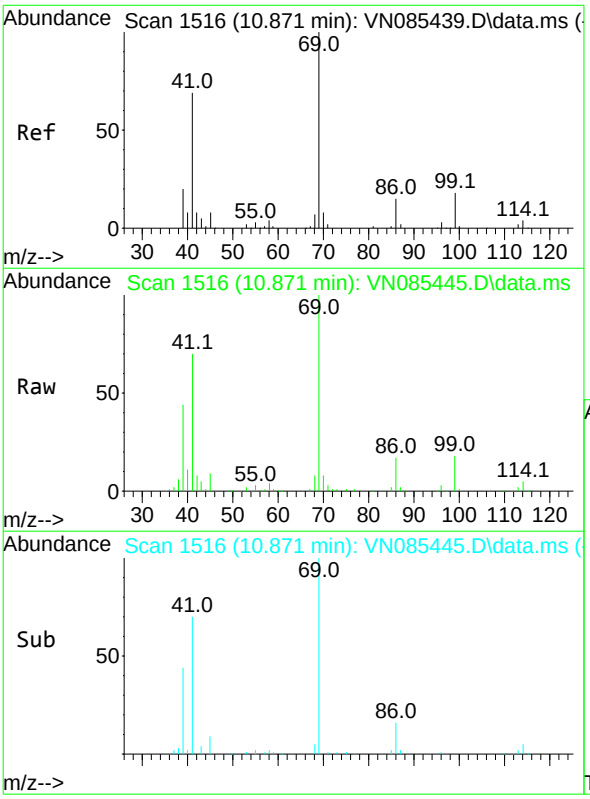
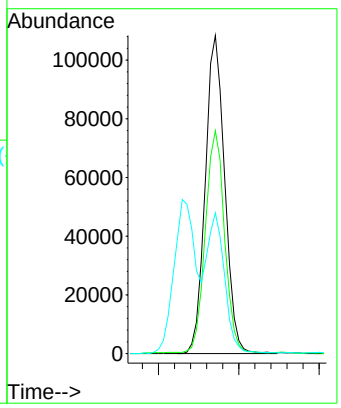
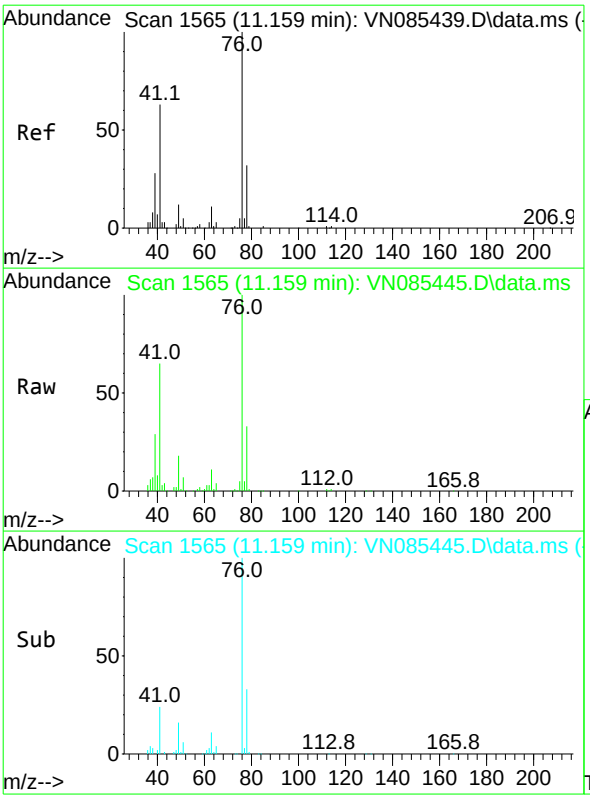


#56
Ethyl methacrylate
Concen: 43.762 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 69 Resp: 182170

Ion	Ratio	Lower	Upper
69	100		
41	70.4	54.6	82.0
39	40.2	32.4	48.6

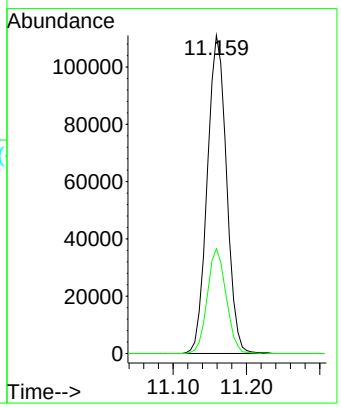




#57
1,3-Dichloropropane
Concen: 46.877 ug/l
RT: 11.159 min Scan# 15
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 76 Resp: 202583

Ion	Ratio	Lower	Upper
76	100		
78	32.1	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
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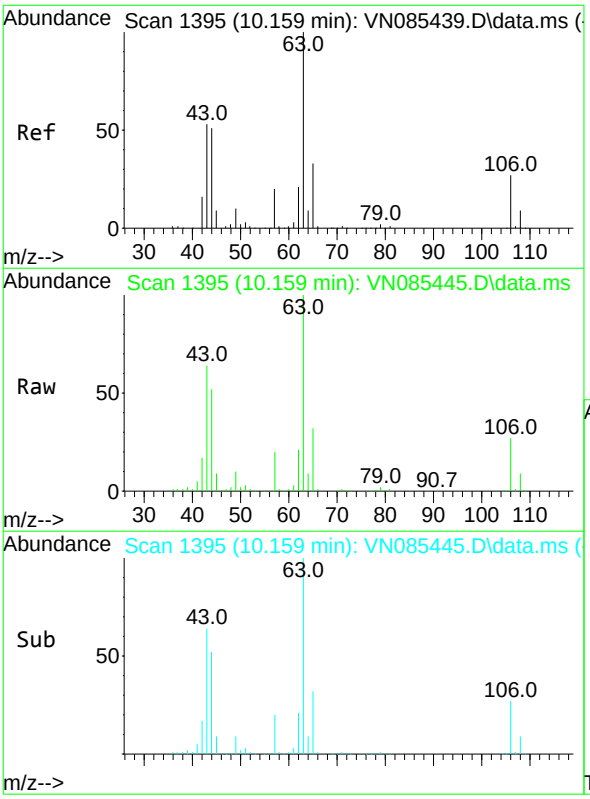
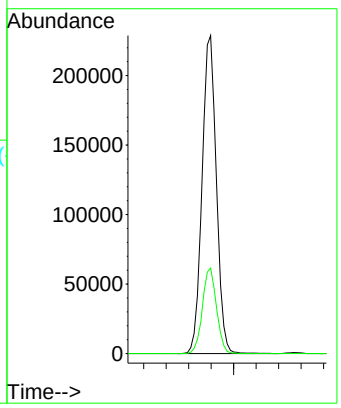
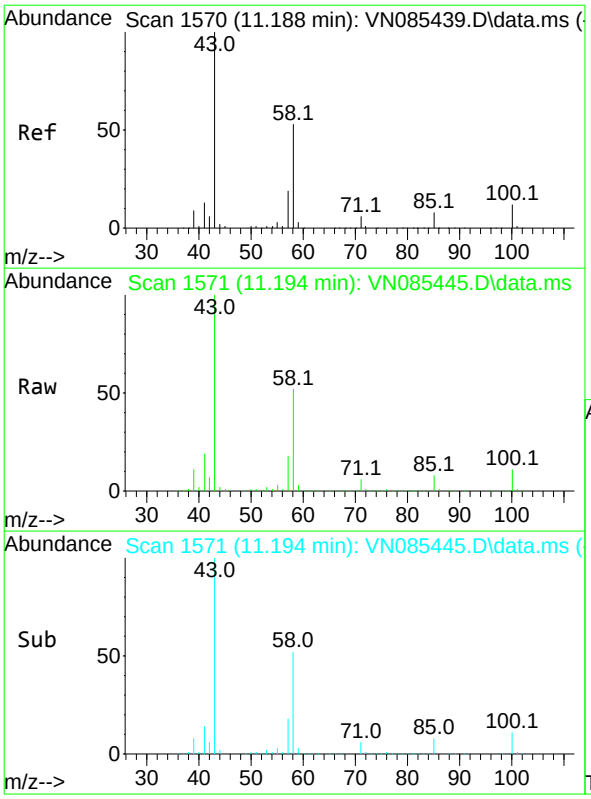


#58
2-Chloroethyl Vinyl ether
Concen: 256.116 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 63 Resp: 403949

Ion	Ratio	Lower	Upper
63	100		
106	26.4	21.6	32.4





#59
2-Hexanone
Concen: 251.213 ug/l
RT: 11.194 min Scan# 15
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 598433

Ion	Ratio	Lower	Upper
43	100		
58	52.1	26.2	78.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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Reviewed By :John Carlone 01/15/2025
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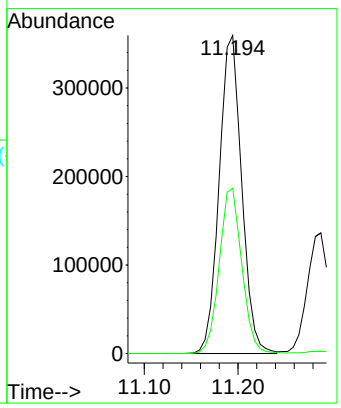
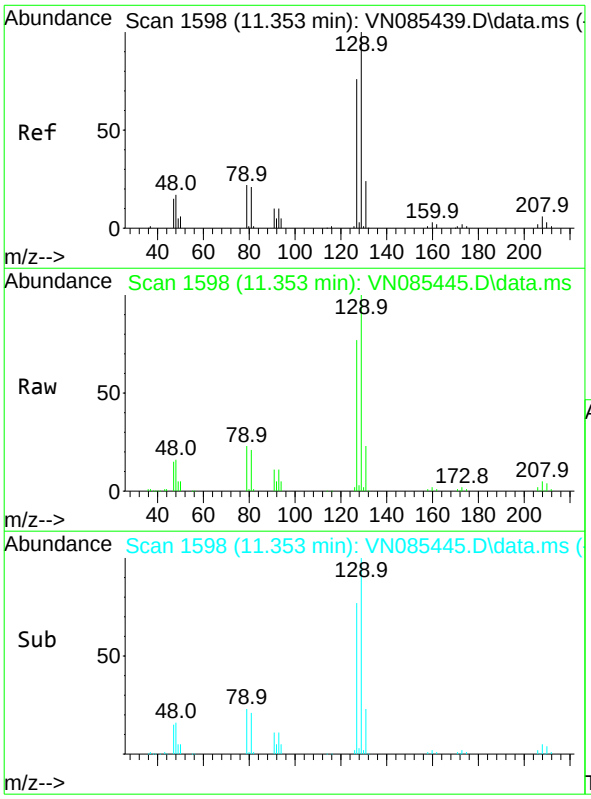
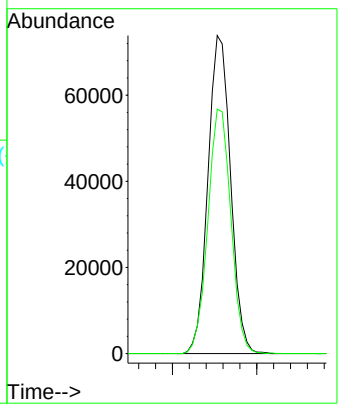


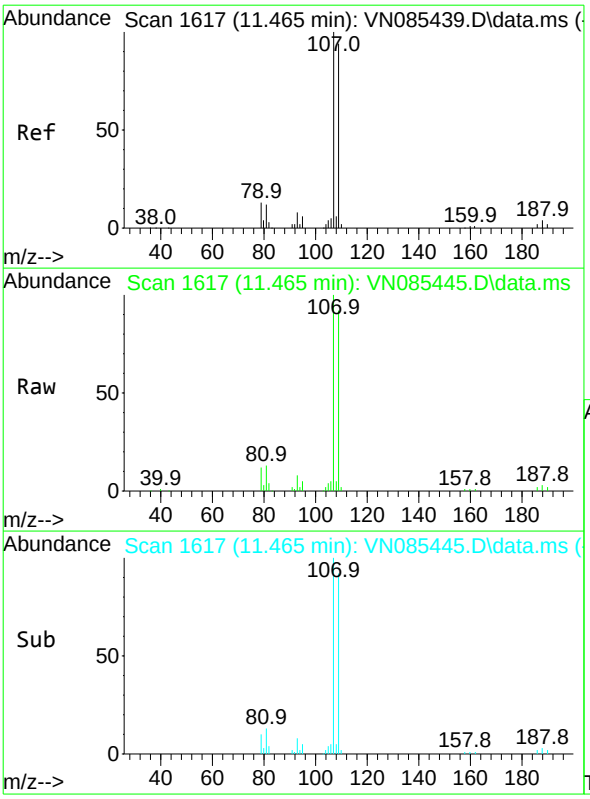


#60
Dibromochloromethane
Concen: 45.935 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:129 Resp: 137831

Ion	Ratio	Lower	Upper
129	100		
127	78.1	38.6	115.8

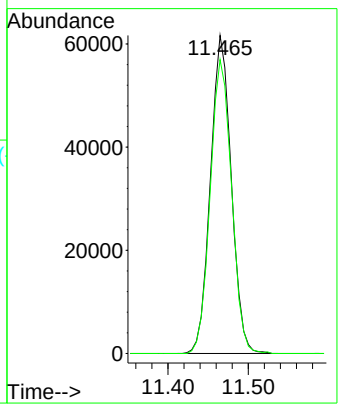




#61
1,2-Dibromoethane
Concen: 44.837 ug/l
RT: 11.465 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:107 Resp: 110926

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.9	113.9



Instrument :
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ClientSampleId :
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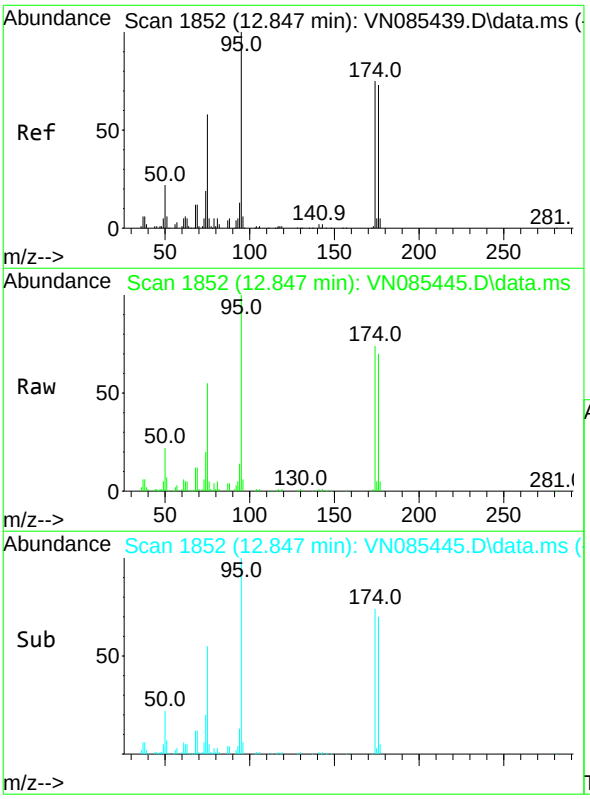
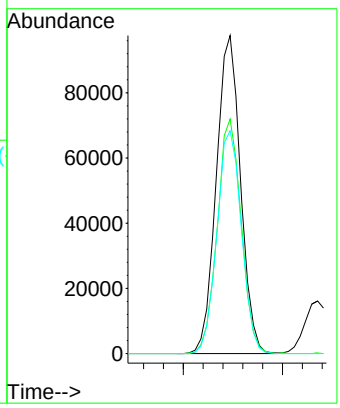
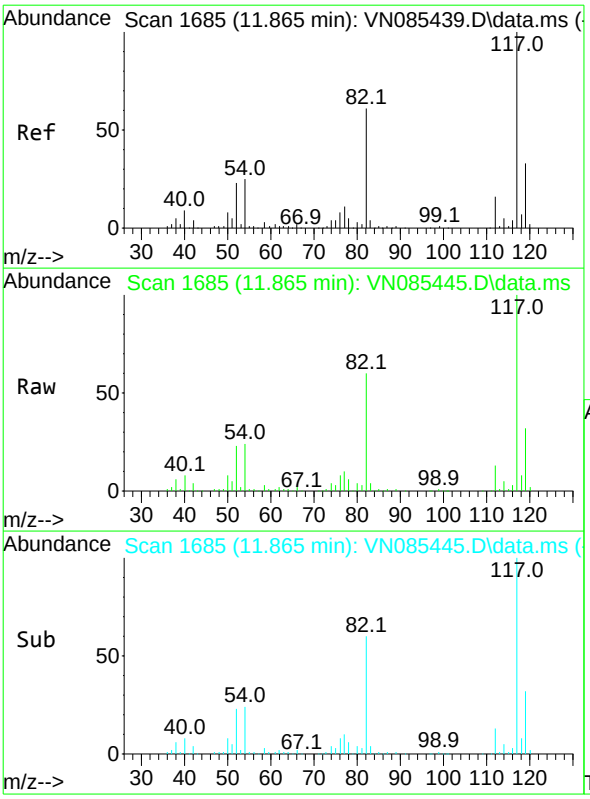


#62
4-Bromofluorobenzene
Concen: 52.899 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 95 Resp: 165249

Ion	Ratio	Lower	Upper
95	100		
174	73.1	0.0	145.0
176	70.8	0.0	142.4





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion:117 Resp: 320948

Ion	Ratio	Lower	Upper
117	100		
82	60.1	48.6	72.8
119	32.4	26.6	39.8

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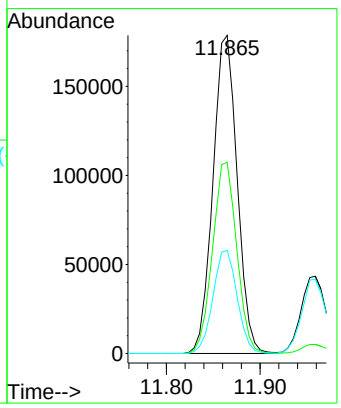
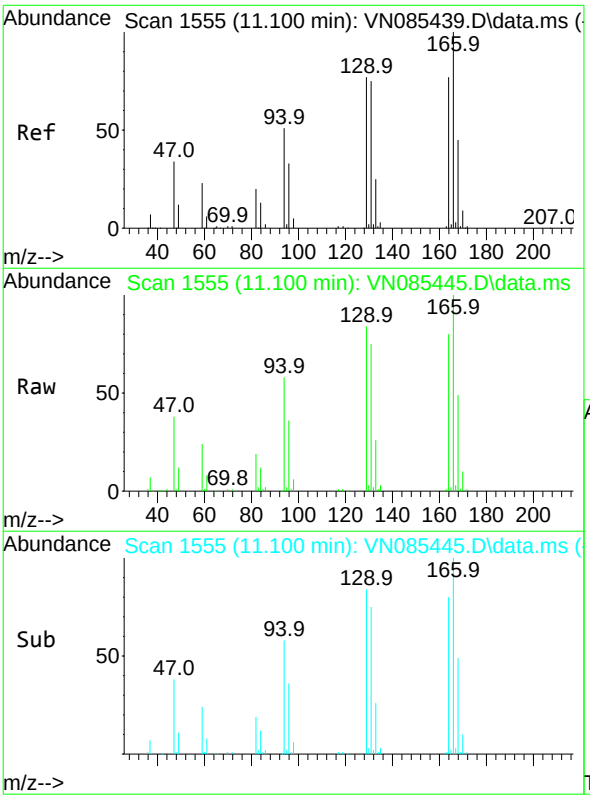
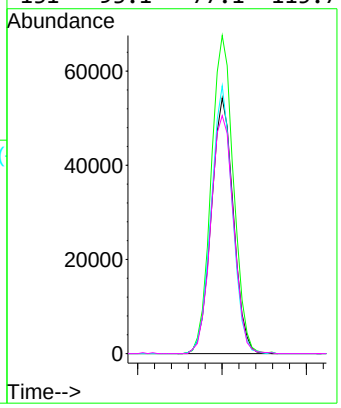


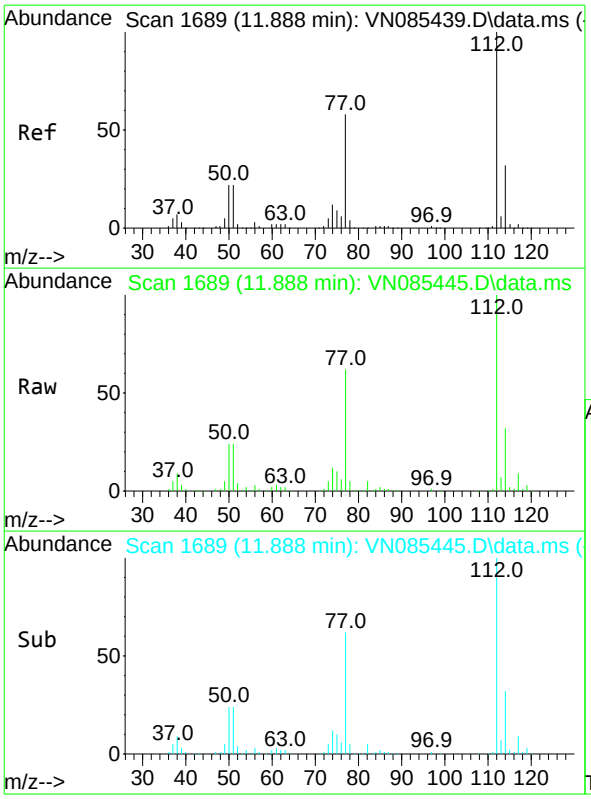


#64
Tetrachloroethene
Concen: 44.886 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:164 Resp: 98211

Ion	Ratio	Lower	Upper
164	100		
166	124.4	103.4	155.2
129	104.8	79.2	118.8
131	93.1	77.1	115.7

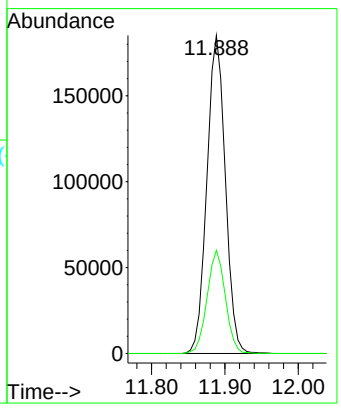




#65
Chlorobenzene
Concen: 45.901 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:112 Resp: 322723

Ion	Ratio	Lower	Upper
112	100		
114	32.4	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
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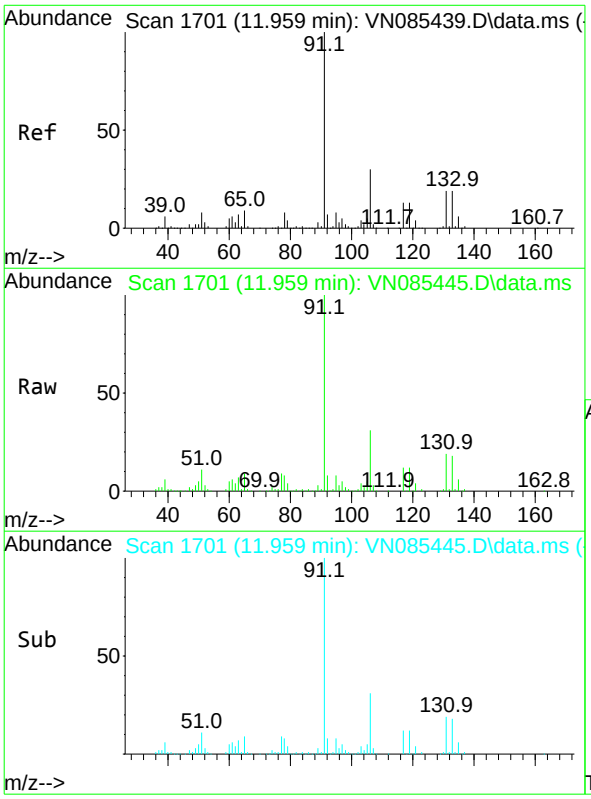
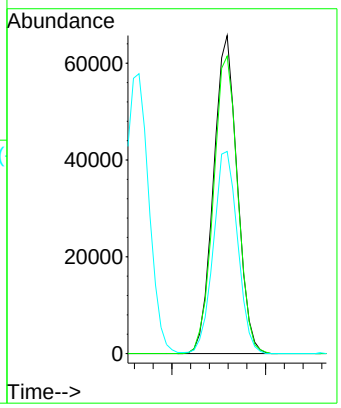
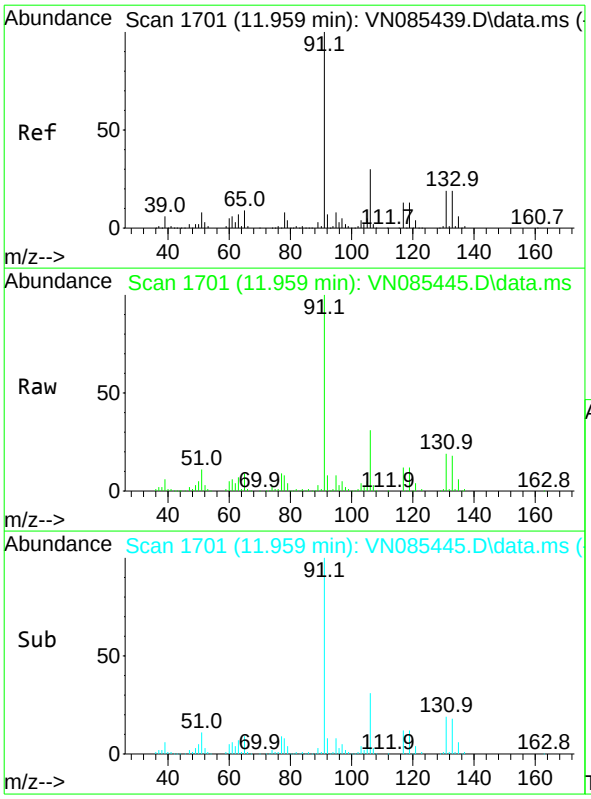


#66
1,1,1,2-Tetrachloroethane
Concen: 44.712 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:131 Resp: 115379

Ion	Ratio	Lower	Upper
131	100		
133	95.8	47.4	142.3
119	65.2	33.1	99.5

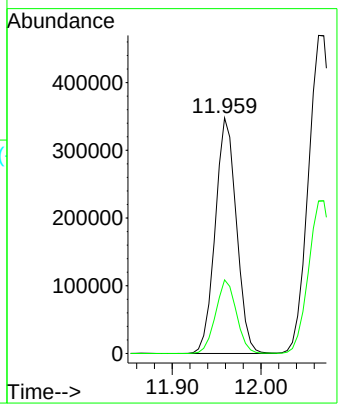




#67
Ethyl Benzene
Concen: 50.391 ug/l
RT: 11.959 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 577059

Ion	Ratio	Lower	Upper
91	100		
106	31.2	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
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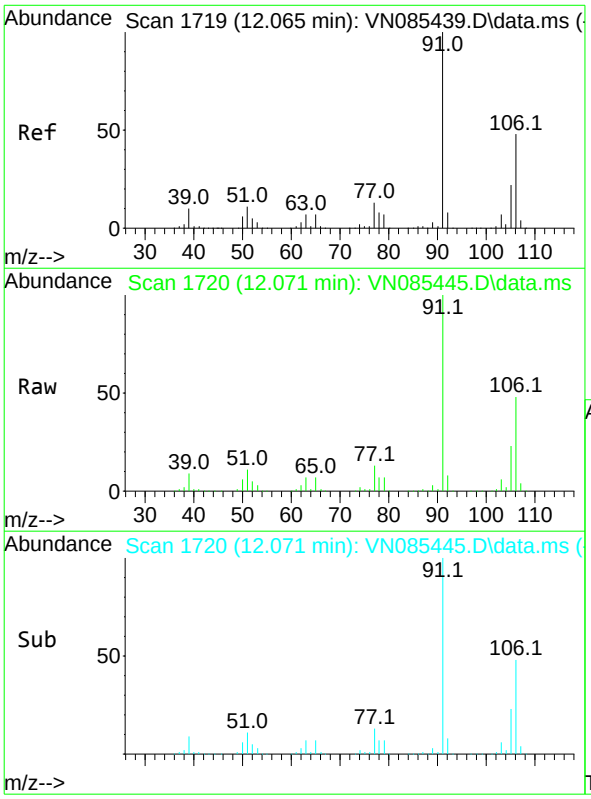
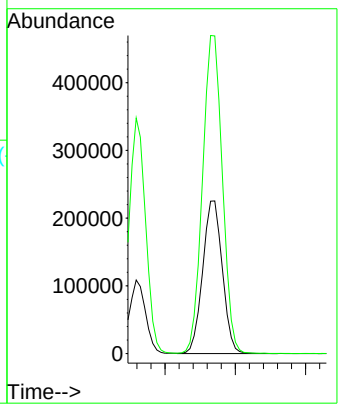
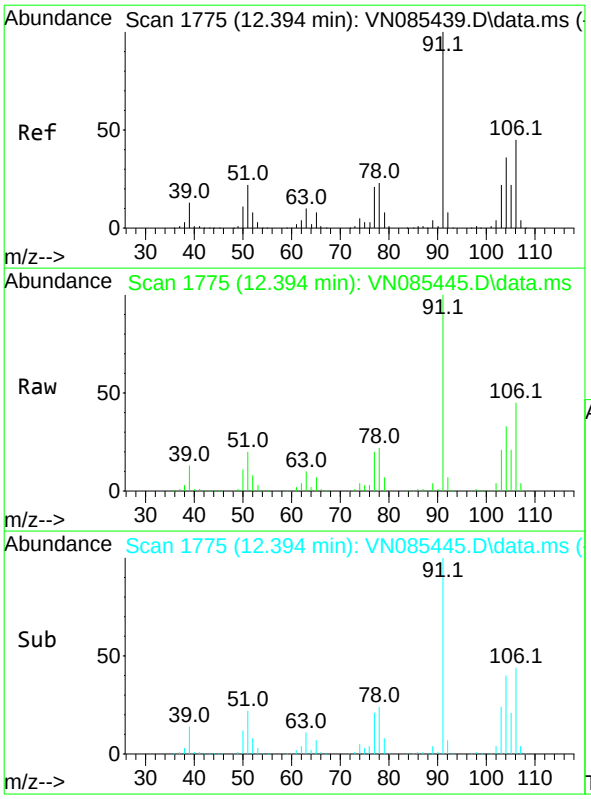


#68
m/p-Xylenes
Concen: 103.341 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:106 Resp: 437367

Ion	Ratio	Lower	Upper
106	100		
91	210.1	167.7	251.5

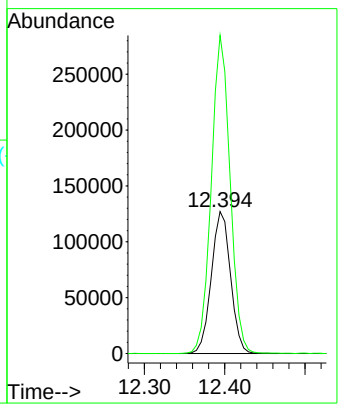




#69
o-Xylene
Concen: 52.093 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:106 Resp: 210698

Ion	Ratio	Lower	Upper
106	100		
91	219.9	110.4	331.2



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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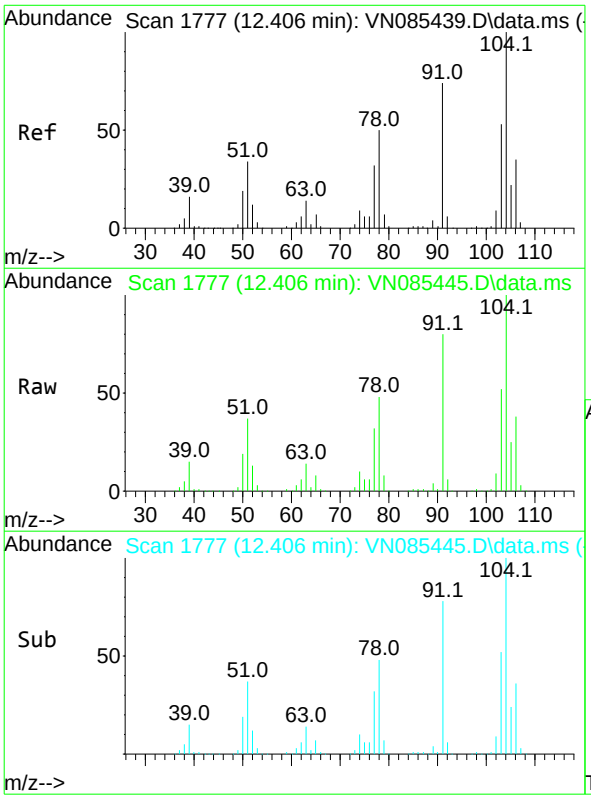
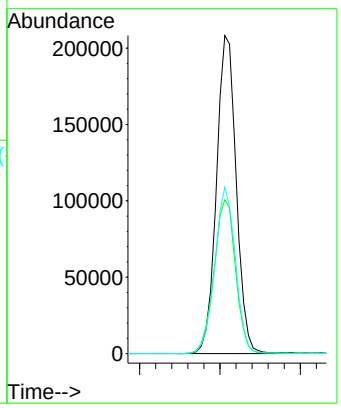
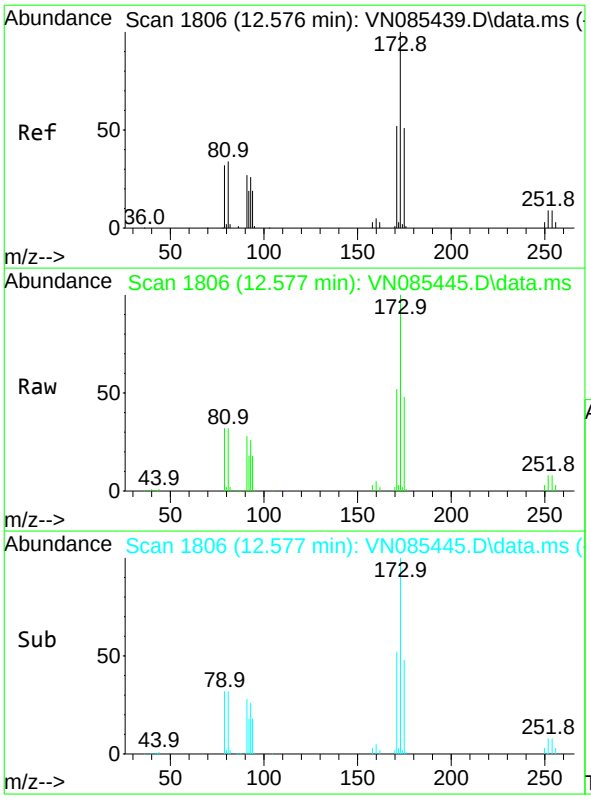


#70
Styrene
Concen: 53.103 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:104 Resp: 355459

Ion	Ratio	Lower	Upper
104	100		
78	52.8	42.5	63.7
103	54.5	43.8	65.8





#71
Bromoform
Concen: 49.119 ug/l
RT: 12.577 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion:173 Resp: 90693

Ion	Ratio	Lower	Upper
173	100		
175	48.7	24.4	73.2
254	0.0	0.0	0.0

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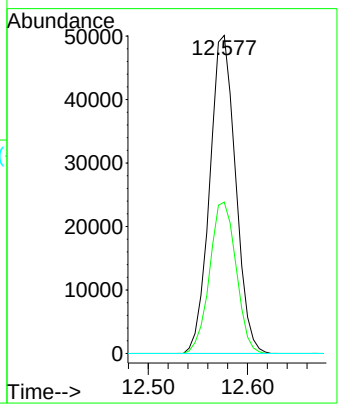
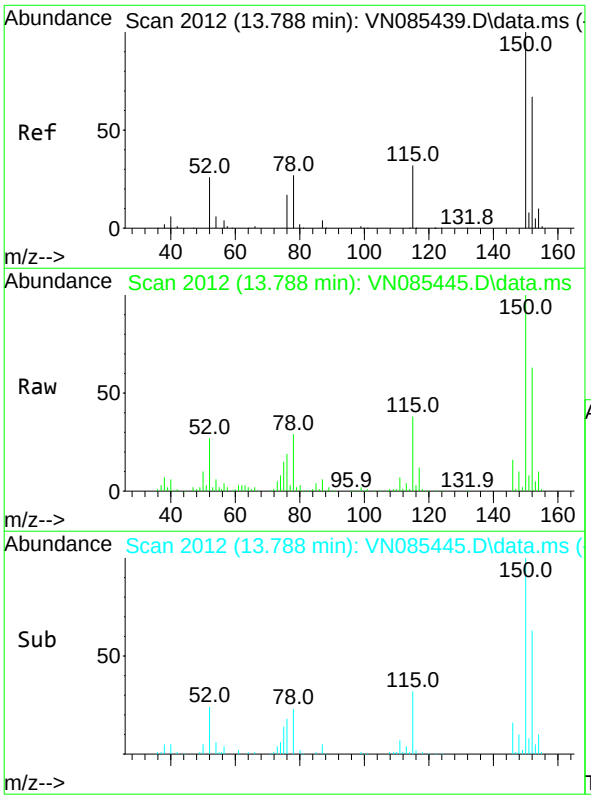
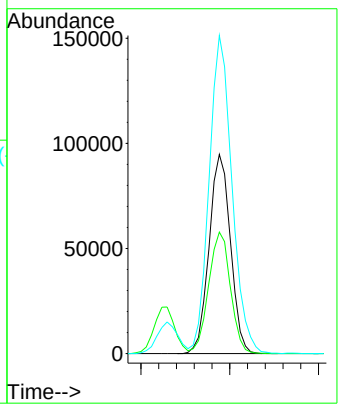


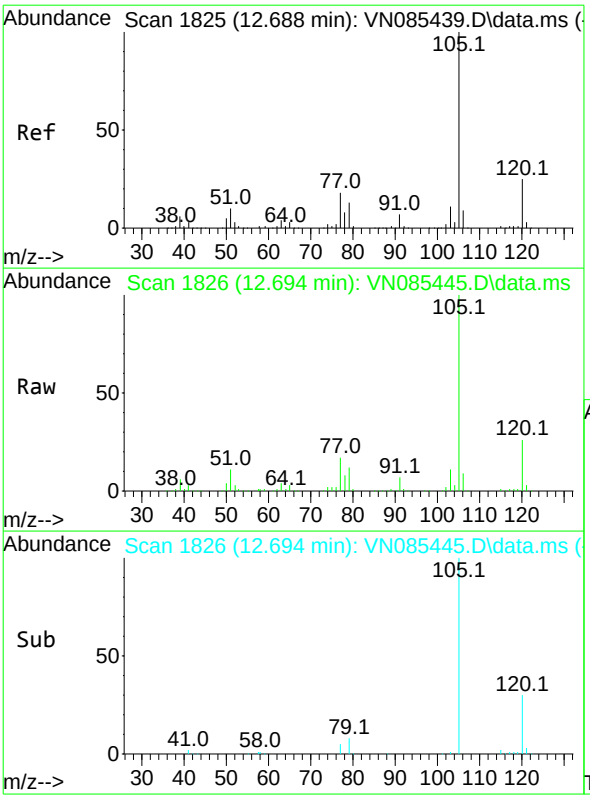


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:152 Resp: 158525

Ion	Ratio	Lower	Upper
152	100		
115	62.2	31.1	93.3
150	171.0	0.0	343.6

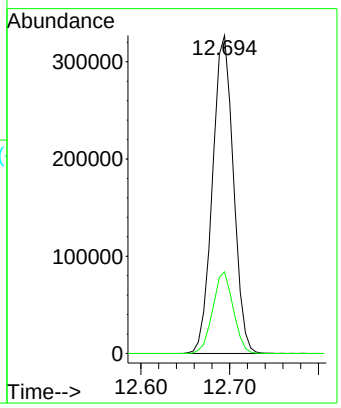




#73
Isopropylbenzene
Concen: 49.951 ug/l
RT: 12.694 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 534428

Ion	Ratio	Lower	Upper
105	100		
120	25.2	12.8	38.3



Instrument :
MSVOA_N
ClientSampleId :
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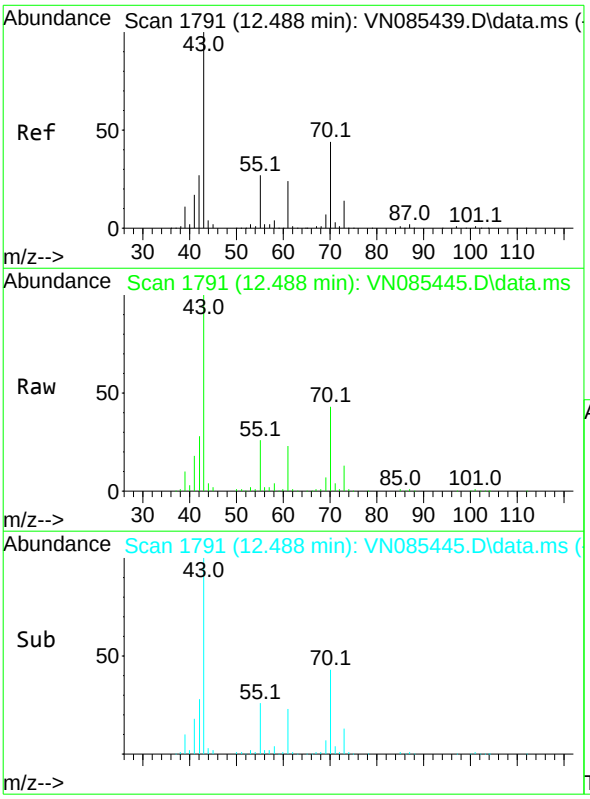
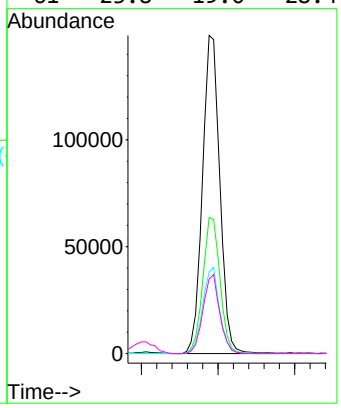
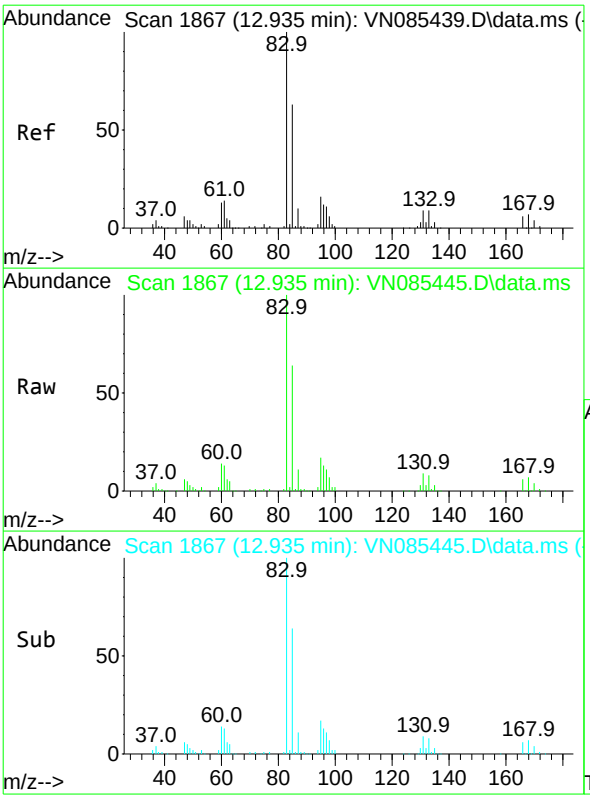


#74
N-amyl acetate
Concen: 48.730 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 234342

Ion	Ratio	Lower	Upper
43	100		
70	42.2	34.0	51.0
55	26.5	21.4	32.2
61	23.8	19.0	28.4

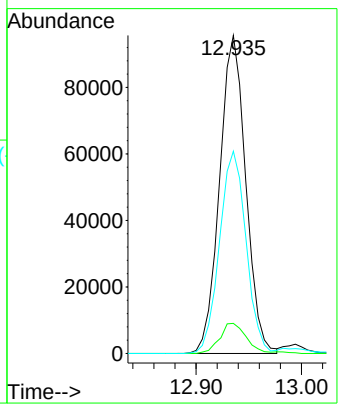




#75
1,1,2,2-Tetrachloroethane
Concen: 43.627 ug/l
RT: 12.935 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 164882

Ion	Ratio	Lower	Upper
83	100		
131	9.9	4.8	14.4
85	64.6	32.2	96.6



Instrument :
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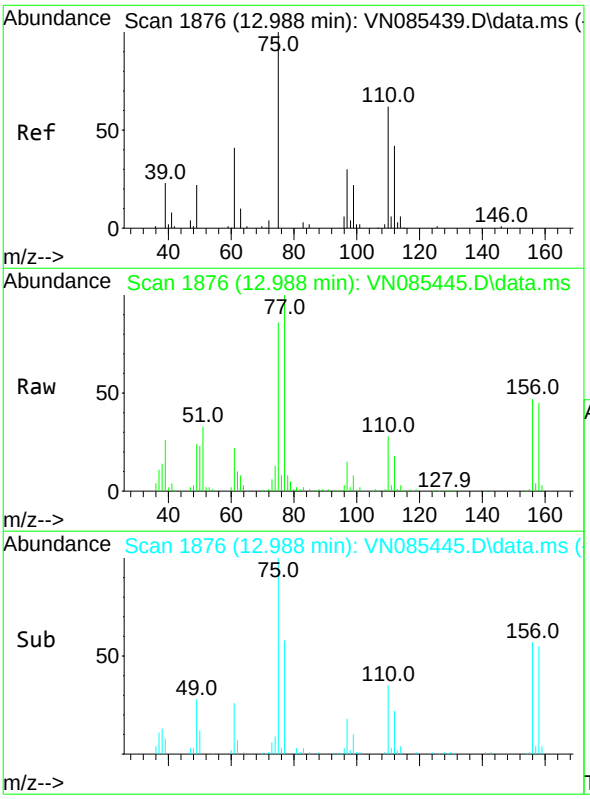
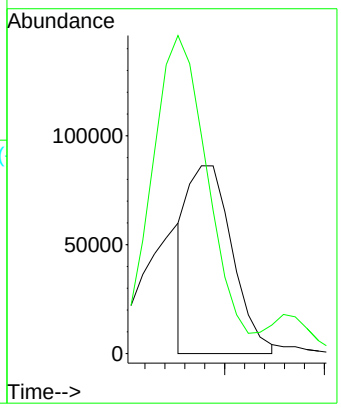
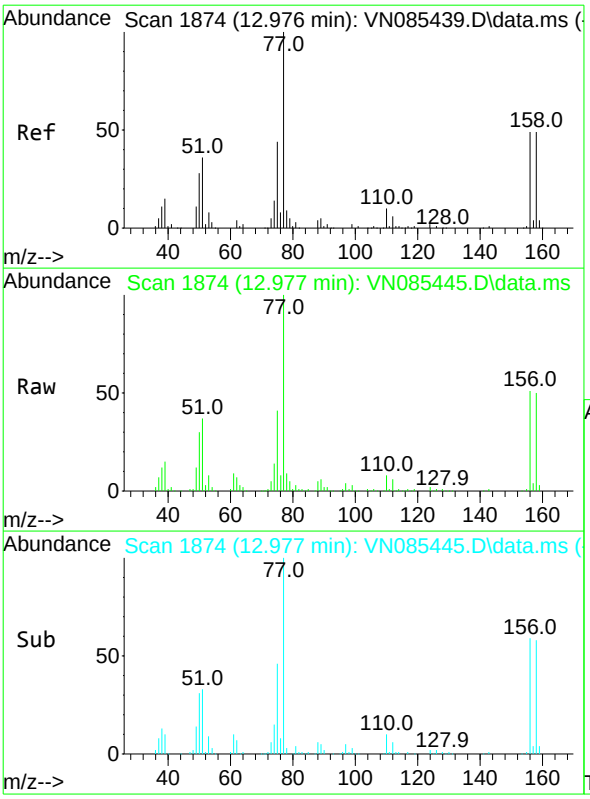


#76
1,2,3-Trichloropropane
Concen: 41.891 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 134976

Ion	Ratio	Lower	Upper
75	100		
77	213.9	109.7	329.2

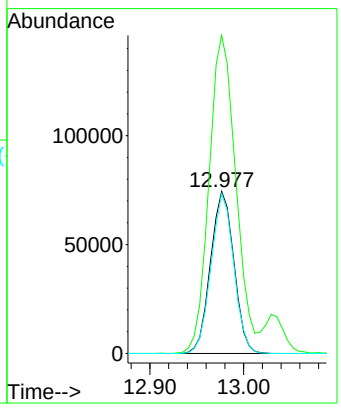




#77
Bromobenzene
Concen: 46.138 ug/l
RT: 12.977 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:156 Resp: 128968

Ion	Ratio	Lower	Upper
156	100		
77	223.8	114.1	342.4
158	95.7	48.9	146.8



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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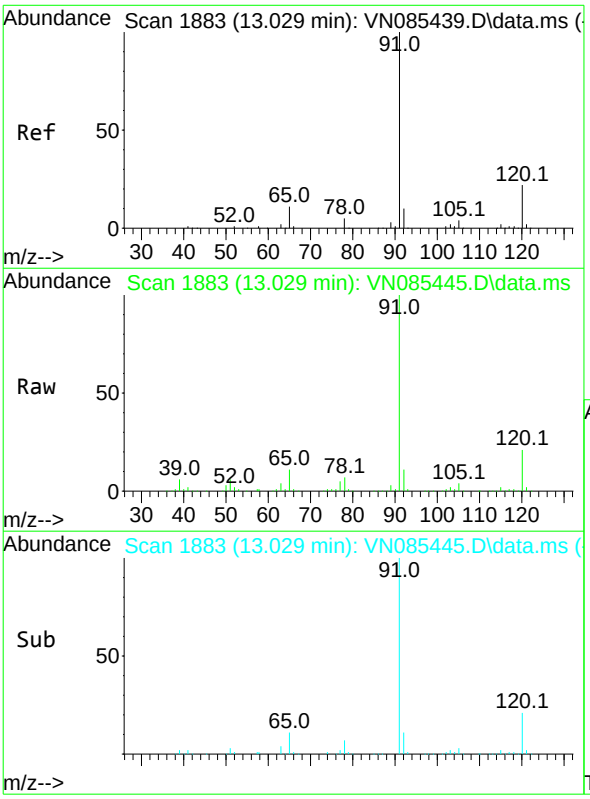
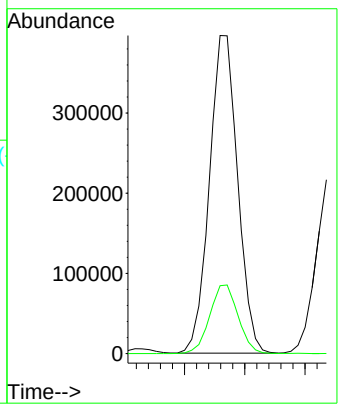
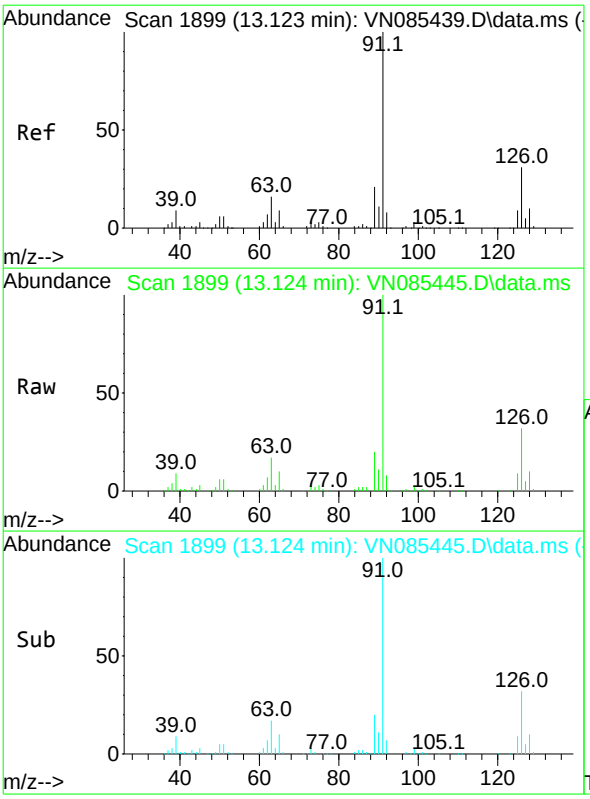


#78
n-propylbenzene
Concen: 51.001 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 645977

Ion	Ratio	Lower	Upper
91	100		
120	21.7	10.9	32.6

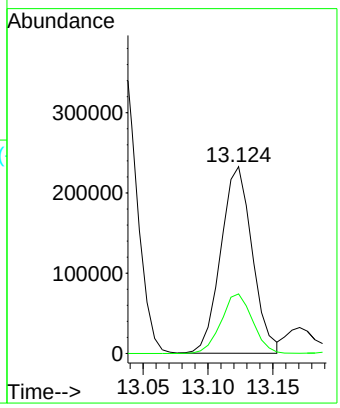




#79
2-Chlorotoluene
Concen: 47.870 ug/l
RT: 13.124 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 392404

Ion	Ratio	Lower	Upper
91	100		
126	31.8	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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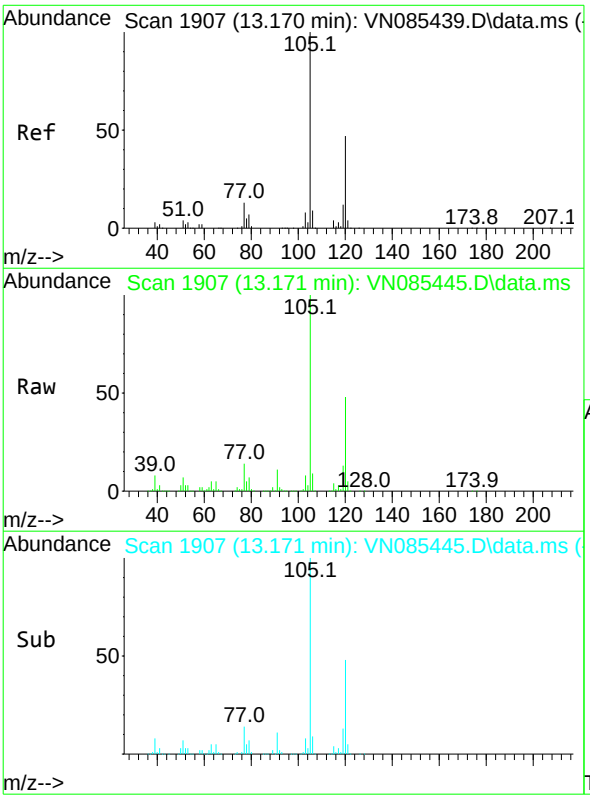
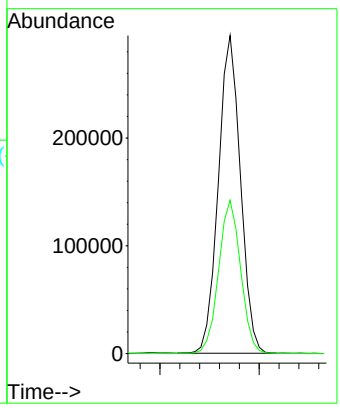
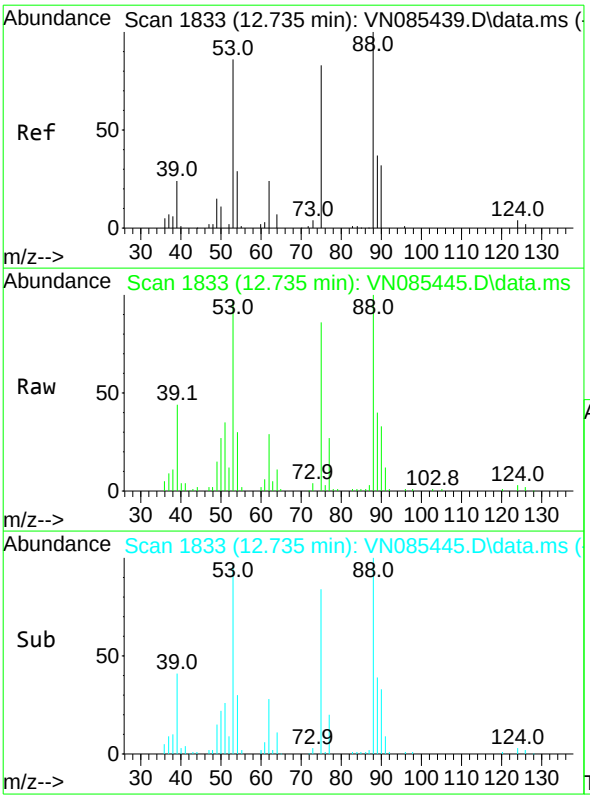


#80
1,3,5-Trimethylbenzene
Concen: 51.604 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 456048

Ion	Ratio	Lower	Upper
105	100		
120	48.1	23.9	71.7

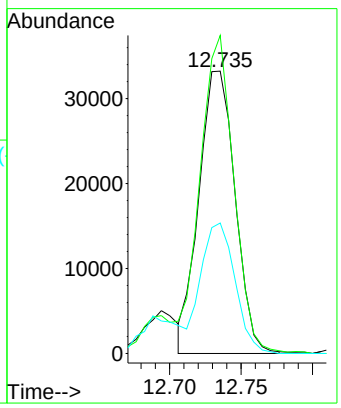




#81
trans-1,4-Dichloro-2-butene
Concen: 49.226 ug/l m
RT: 12.735 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 58623

Ion	Ratio	Lower	Upper
75	100		
53	118.0	95.6	143.4
89	43.3	37.0	55.6



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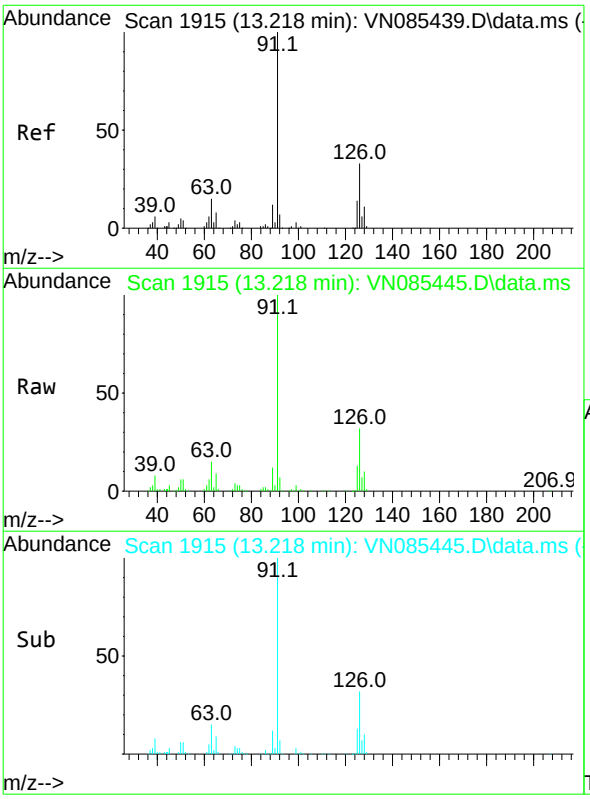
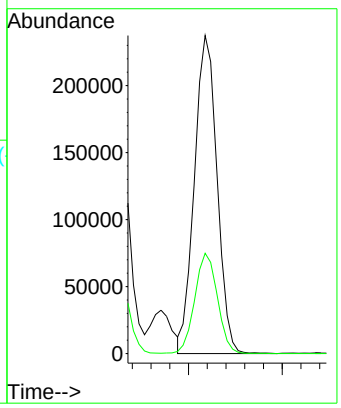
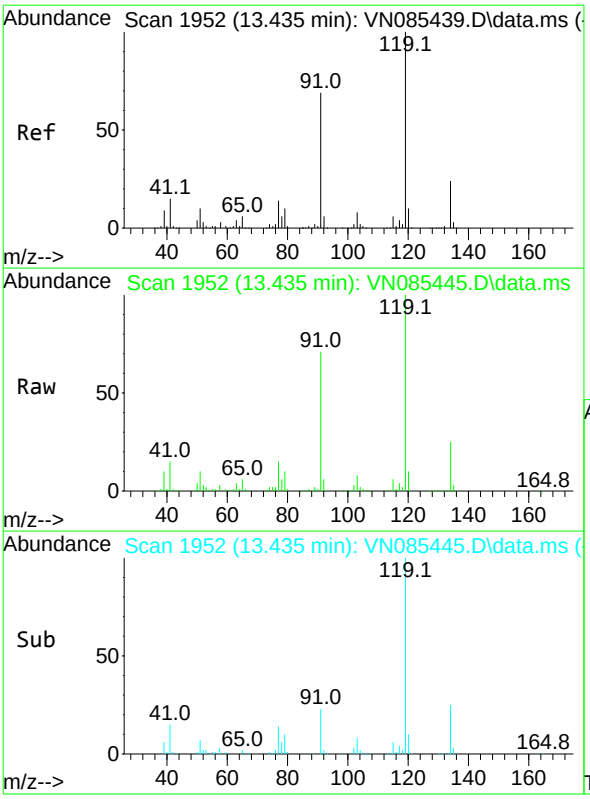


#82
4-Chlorotoluene
Concen: 48.776 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 398110

Ion	Ratio	Lower	Upper
91	100		
126	31.6	15.9	47.7





#83
tert-Butylbenzene
Concen: 50.997 ug/l
RT: 13.435 min Scan# 19
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:119 Resp: 378478

Ion	Ratio	Lower	Upper
119	100		
91	70.6	35.1	105.3
134	26.7	12.0	36.1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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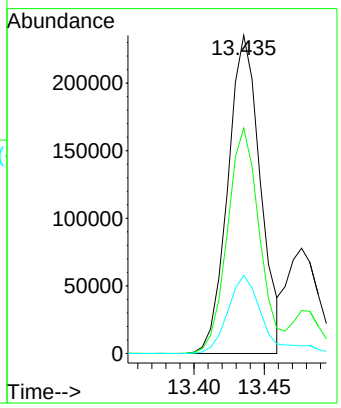
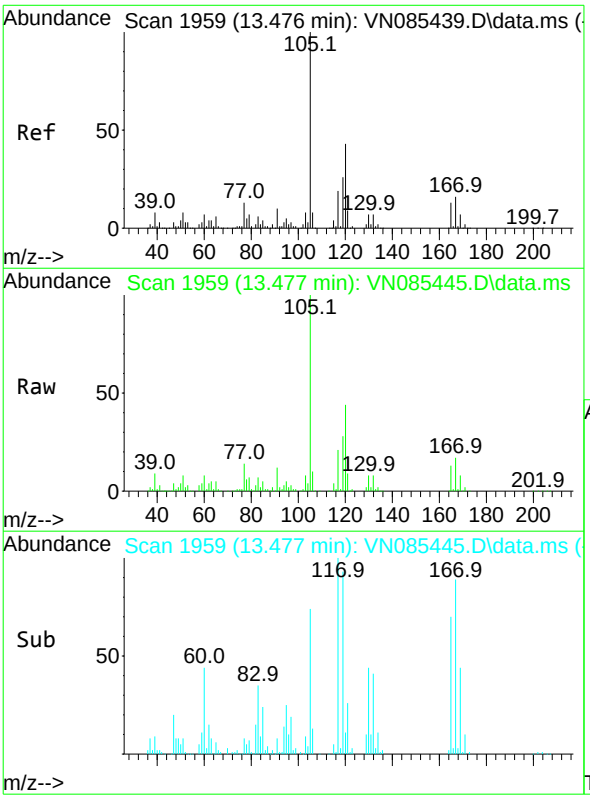
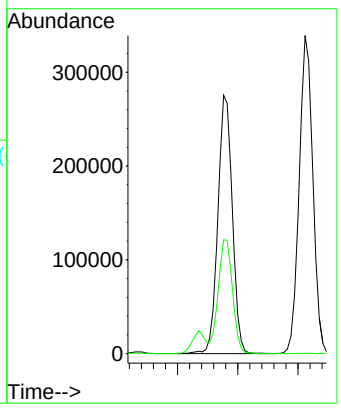


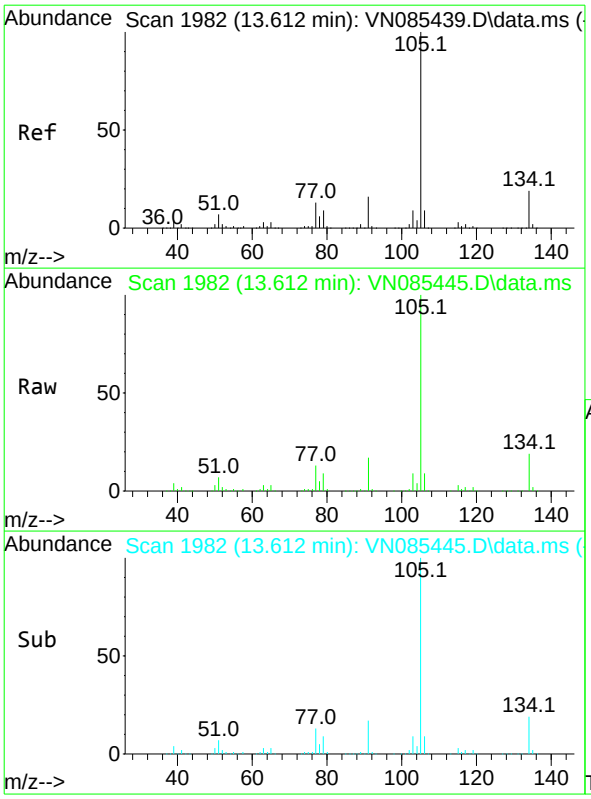


#84
1,2,4-Trimethylbenzene
Concen: 51.922 ug/l
RT: 13.477 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 457340

Ion	Ratio	Lower	Upper
105	100		
120	43.6	21.6	65.0

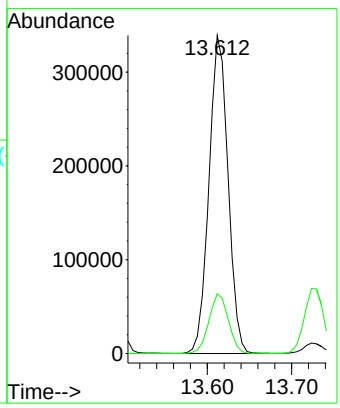




#85
sec-Butylbenzene
Concen: 51.777 ug/l
RT: 13.612 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:105 Resp: 532578

Ion	Ratio	Lower	Upper
105	100		
134	19.2	9.7	28.9



Instrument :
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ClientSampleId :
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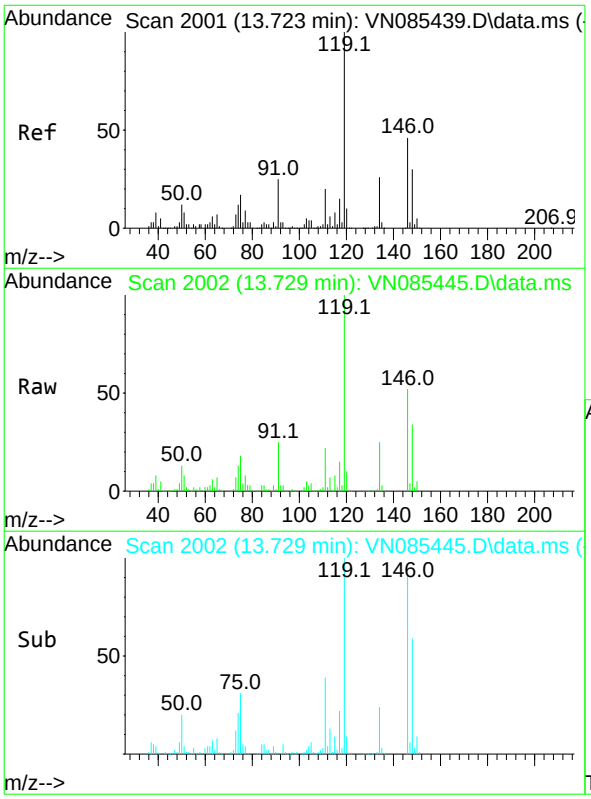
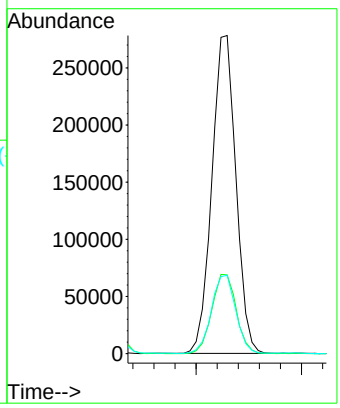
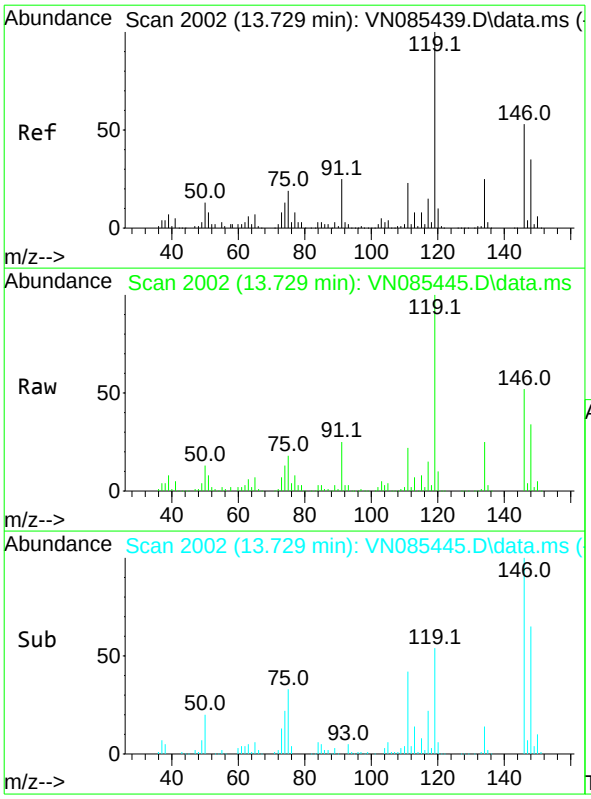


#86
p-Isopropyltoluene
Concen: 47.795 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:119 Resp: 440284

Ion	Ratio	Lower	Upper
119	100		
134	25.3	12.7	38.0
91	25.0	12.7	38.1

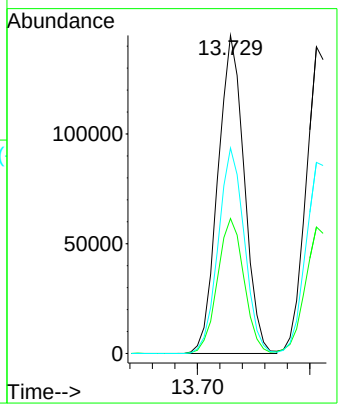




#87
1,3-Dichlorobenzene
Concen: 45.920 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:146 Resp: 236387

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



Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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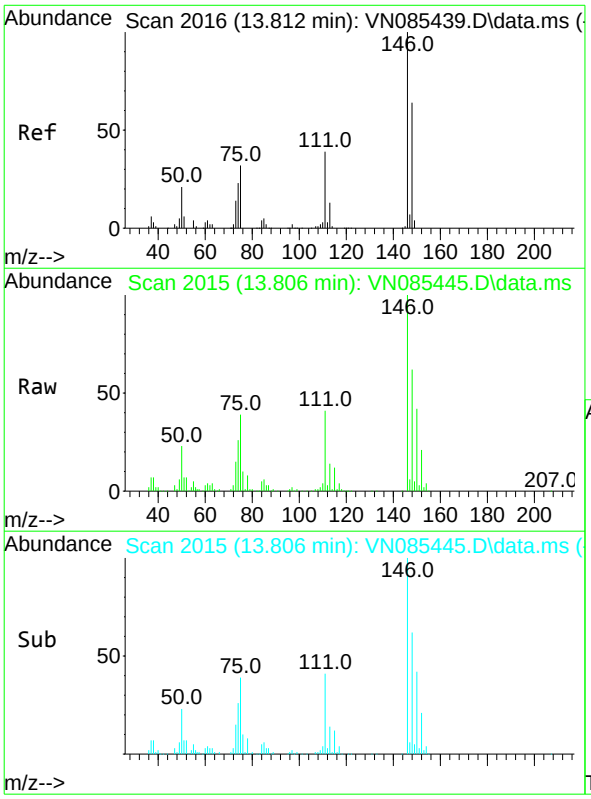
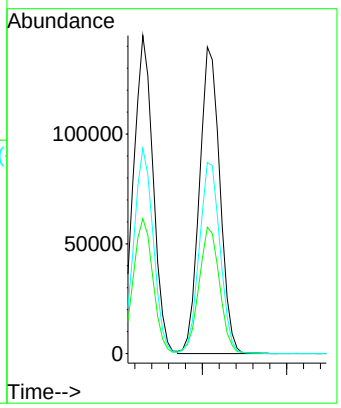
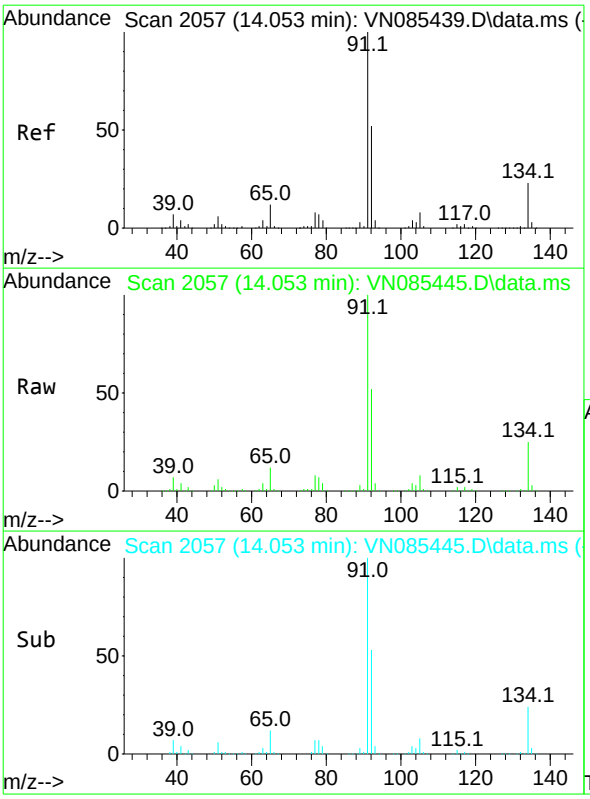


#88
1,4-Dichlorobenzene
Concen: 44.102 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:146 Resp: 235319

Ion	Ratio	Lower	Upper
146	100		
111	41.9	21.3	63.7
148	63.5	32.4	97.0





#89
n-Butylbenzene
Concen: 50.578 ug/l
RT: 14.053 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 91 Resp: 373227

Ion	Ratio	Lower	Upper
91	100		
92	51.9	25.8	77.3
134	23.8	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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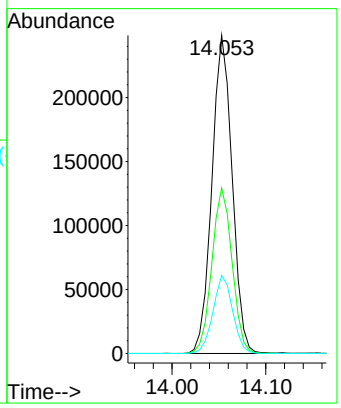
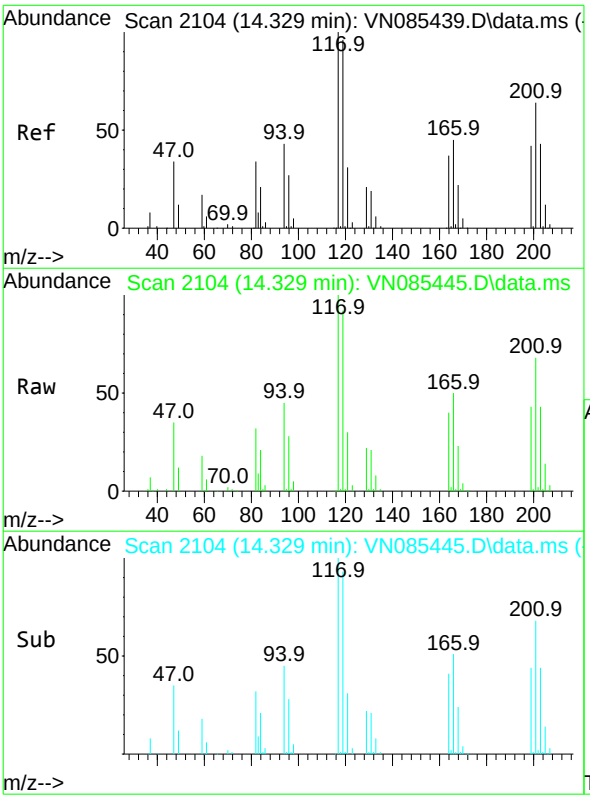
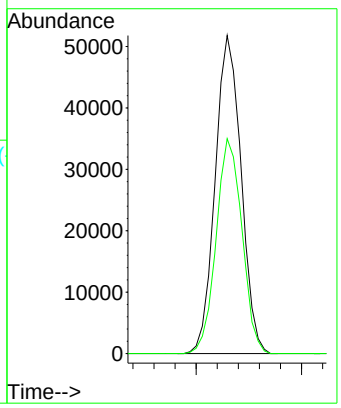


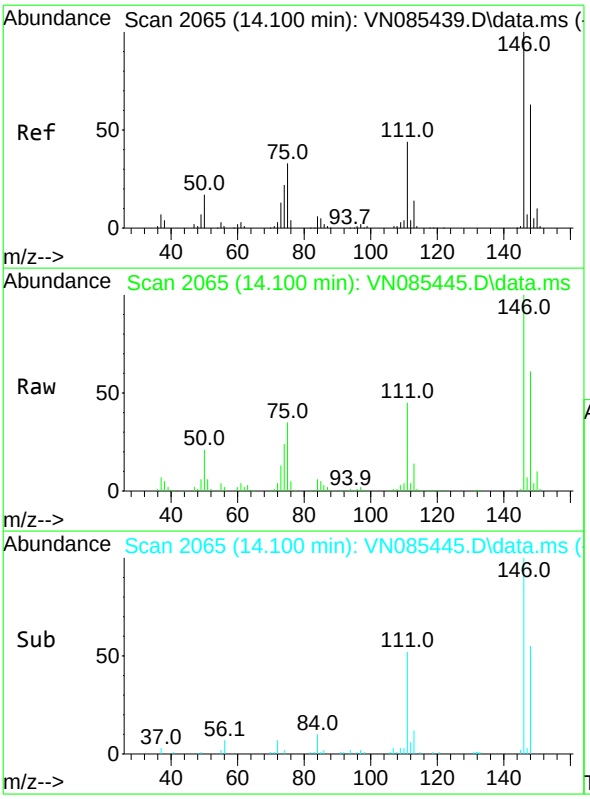


#90
Hexachloroethane
Concen: 45.215 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:117 Resp: 88538

Ion	Ratio	Lower	Upper
117	100		
201	67.2	33.7	101.0

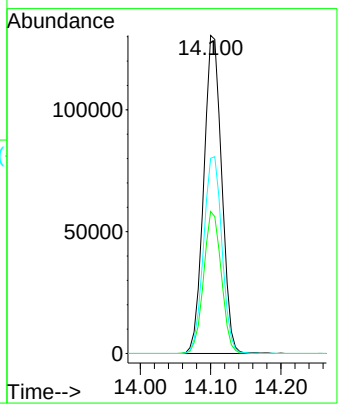




#91
1,2-Dichlorobenzene
Concen: 45.113 ug/l
RT: 14.100 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:146 Resp: 231646

Ion	Ratio	Lower	Upper
146	100		
111	43.9	21.7	65.1
148	63.1	31.4	94.2



Instrument :
MSVOA_N
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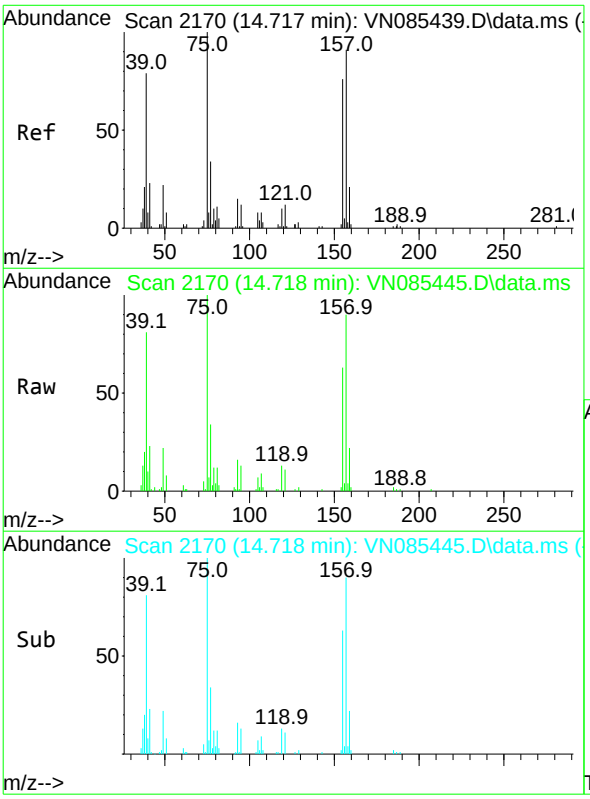
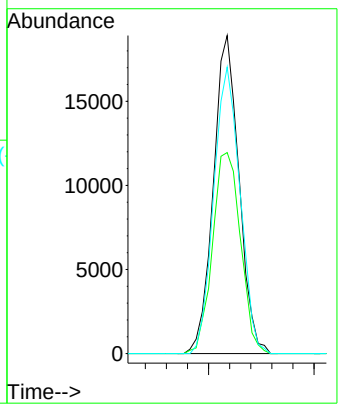
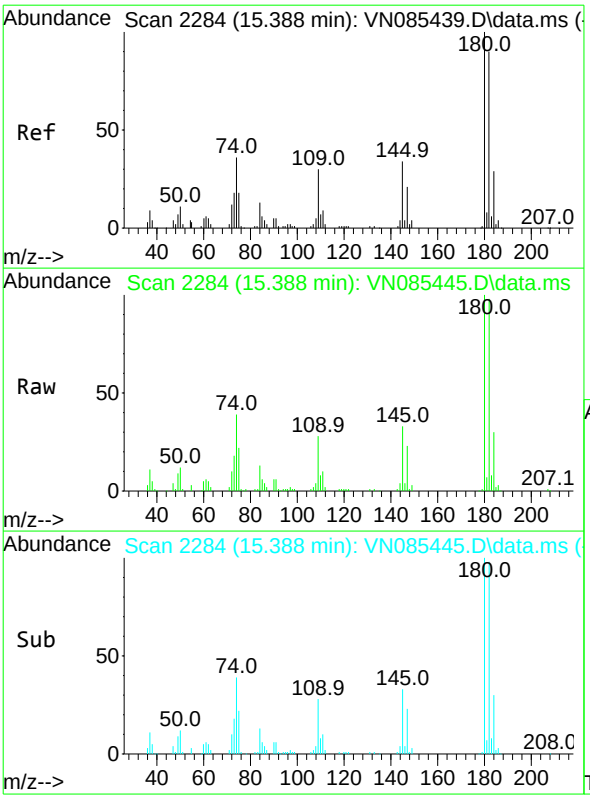


#92
1,2-Dibromo-3-Chloropropane
Concen: 46.221 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 75 Resp: 31899

Ion	Ratio	Lower	Upper
75	100		
155	69.0	36.4	109.2
157	92.3	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 45.739 ug/l
RT: 15.388 min Scan# 22
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion:180 Resp: 109157

Ion	Ratio	Lower	Upper
180	100		
182	96.3	46.8	140.3
145	32.7	16.0	48.0

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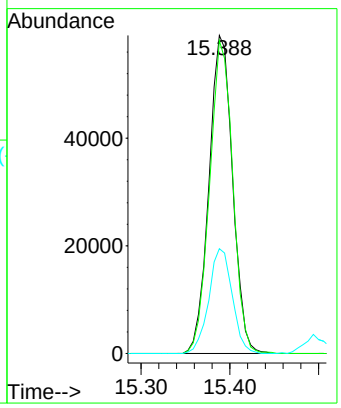
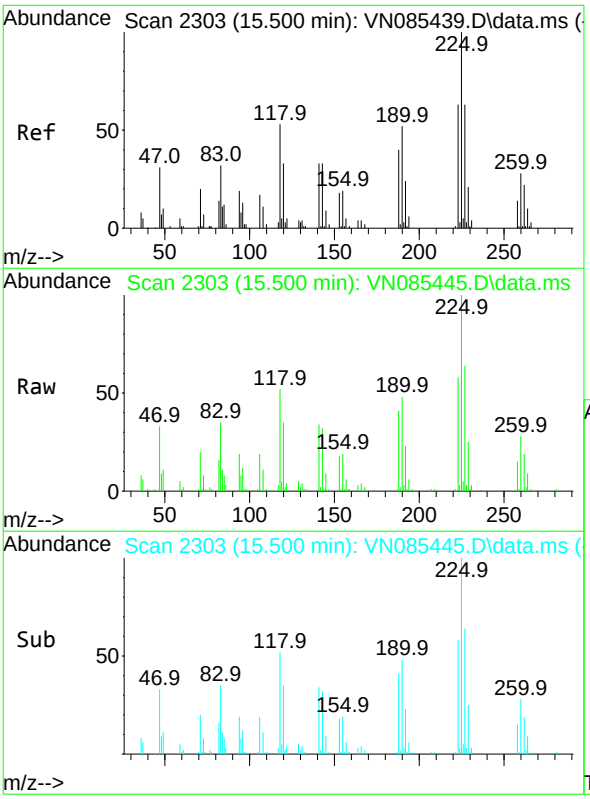
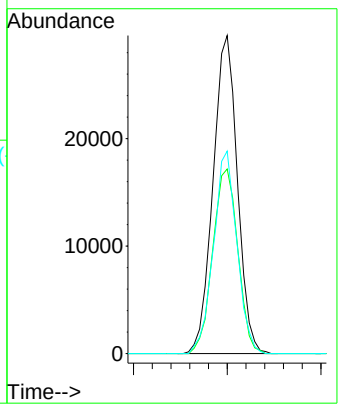


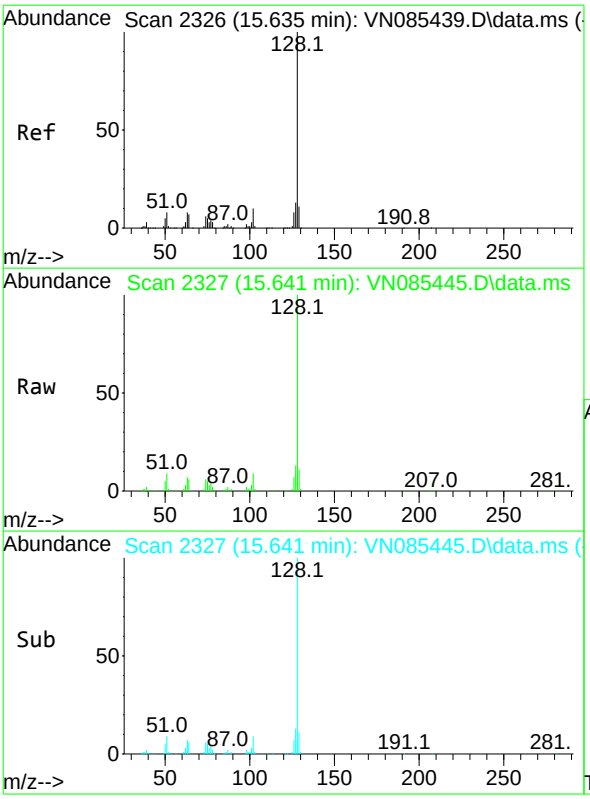


#94
Hexachlorobutadiene
Concen: 42.112 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:225 Resp: 53358

Ion	Ratio	Lower	Upper
225	100		
223	59.8	30.7	92.1
227	61.2	30.9	92.5

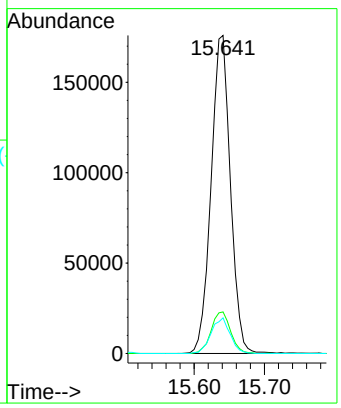




#95
Naphthalene
Concen: 47.116 ug/l
RT: 15.641 min Scan# 23
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:128 Resp: 335535

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	16.0
129	11.1	8.8	13.2



Instrument :
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ClientSampleId :
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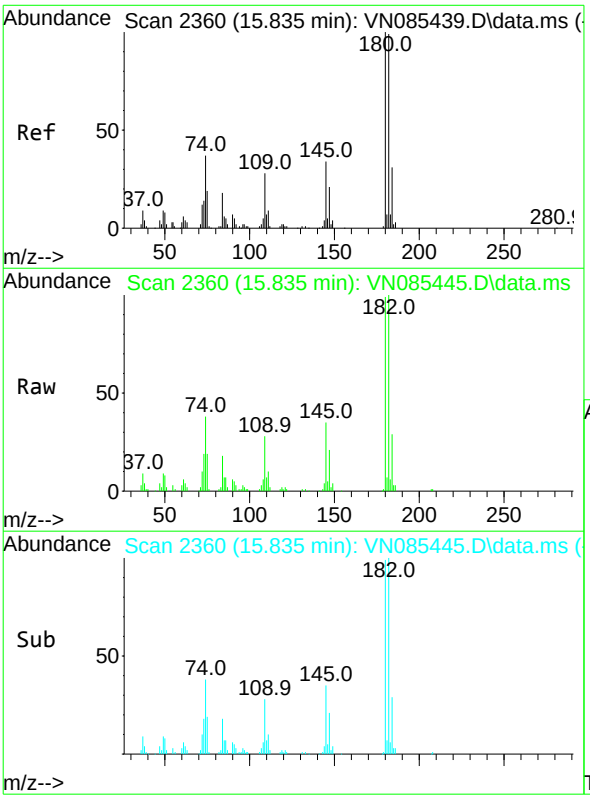
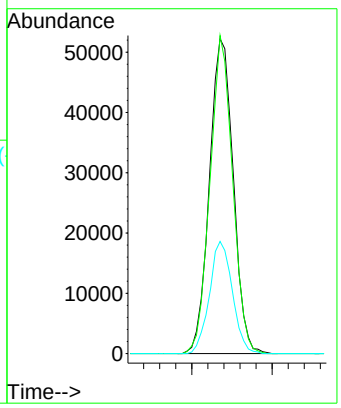


#96
1,2,3-Trichlorobenzene
Concen: 44.551 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:180 Resp: 107583

Ion	Ratio	Lower	Upper
180	100		
182	95.6	47.4	142.2
145	34.3	16.9	50.7



Evaluate Continuing Calibration Report

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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

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

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

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

Evaluate Continuing Calibration Report

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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

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

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

ICAL Form

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

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

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

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

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

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: MSVOA_N Calibration Date/Time: 02/03/2025 12:56

Lab File ID: VN085617.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.737	0.636		-13.7	20
1,1-Dichloroethene	0.537	0.488		-9.13	20
2-Butanone	0.384	0.336		-12.5	20
Carbon Tetrachloride	0.557	0.512		-8.08	20
Chloroform	1.218	1.179		-3.2	20
Benzene	1.463	1.422		-2.8	20
1,2-Dichloroethane	0.551	0.500		-9.26	20
Trichloroethene	0.341	0.329		-3.52	20
Tetrachloroethene	0.341	0.330		-3.23	20
Chlorobenzene	1.095	1.101	0.3	0.55	20
1,2-Dichloroethane-d4	0.807	0.719		-10.9	20
Dibromofluoromethane	0.347	0.346		-0.29	20
Toluene-d8	1.232	1.296		5.2	20
4-Bromofluorobenzene	0.422	0.438		3.79	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	193909	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	331362	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	301323	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	152662	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	139495	44.566	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 89.140%			
35) Dibromofluoromethane	8.159	113	114784	49.931	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.860%			
50) Toluene-d8	10.565	98	429609	52.598	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 105.200%			
62) 4-Bromofluorobenzene	12.847	95	145023	51.906	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 103.820%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	98099	37.364	ug/l	98
3) Chloromethane	2.359	50	97800	34.404	ug/l	99
4) Vinyl Chloride	2.512	62	123341	43.167	ug/l	98
5) Bromomethane	2.948	94	80016	46.361	ug/l	98
6) Chloroethane	3.118	64	89522	49.419	ug/l	97
7) Trichlorofluoromethane	3.495	101	198260	47.821	ug/l	98
8) Diethyl Ether	3.959	74	62830	43.869	ug/l	87
9) 1,1,2-Trichlorotrifluo...	4.365	101	108838	46.609	ug/l	97
10) Methyl Iodide	4.583	142	124678	46.624	ug/l	94
11) Tert butyl alcohol	5.518	59	95405	266.185	ug/l	99
12) 1,1-Dichloroethene	4.342	96	94603	45.458	ug/l	89
13) Acrolein	4.177	56	82470	168.557	ug/l	99
14) Allyl chloride	5.024	41	123509	36.574	ug/l #	94
15) Acrylonitrile	5.712	53	263353	231.327	ug/l	98
16) Acetone	4.418	43	204618	202.320	ug/l	93
17) Carbon Disulfide	4.712	76	223300	34.849	ug/l	100
18) Methyl Acetate	5.018	43	139501	45.361	ug/l	92
19) Methyl tert-butyl Ether	5.794	73	335538	49.654	ug/l	97
20) Methylene Chloride	5.271	84	116799	46.650	ug/l	96
21) trans-1,2-Dichloroethene	5.783	96	102531	46.100	ug/l	91
22) Diisopropyl ether	6.671	45	334765	44.663	ug/l	96
23) Vinyl Acetate	6.594	43	1130671	215.551	ug/l	96
24) 1,1-Dichloroethane	6.565	63	212538	46.504	ug/l	99
25) 2-Butanone	7.477	43	325763	218.881	ug/l	91
26) 2,2-Dichloropropane	7.488	77	174244	47.156	ug/l	97
27) cis-1,2-Dichloroethene	7.483	96	132413	50.547	ug/l	91
28) Bromochloromethane	7.806	49	91622	43.090	ug/l	88
29) Tetrahydrofuran	7.835	42	210490	223.073	ug/l	88
30) Chloroform	7.965	83	228697	48.416	ug/l	99
31) Cyclohexane	8.253	56	152259	38.329	ug/l	90
32) 1,1,1-Trichloroethane	8.165	97	193335	46.661	ug/l	96
36) 1,1-Dichloropropene	8.365	75	146021	45.259	ug/l	98
37) Ethyl Acetate	7.559	43	132656	40.735	ug/l	95
38) Carbon Tetrachloride	8.359	117	169547	45.902	ug/l	99
39) Methylcyclohexane	9.600	83	141262	46.593	ug/l	95
40) Benzene	8.600	78	471269	48.614	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.771	41	72917	43.037	ug/l		92
42) 1,2-Dichloroethane	8.665	62	165668	45.375	ug/l		98
43) Isopropyl Acetate	8.682	43	233249	44.700	ug/l		97
44) Trichloroethene	9.347	130	108885	48.252	ug/l		96
45) 1,2-Dichloropropane	9.618	63	119741	48.357	ug/l		100
46) Dibromomethane	9.706	93	84871	47.501	ug/l		96
47) Bromodichloromethane	9.882	83	183920	50.527	ug/l		99
48) Methyl methacrylate	9.677	41	106379	45.301	ug/l		91
49) 1,4-Dioxane	9.688	88	40950	1035.537	ug/l		92
51) 4-Methyl-2-Pentanone	10.441	43	708536	233.994	ug/l		94
52) Toluene	10.629	92	300704	53.534	ug/l		100
53) t-1,3-Dichloropropene	10.835	75	174396	50.697	ug/l		93
54) cis-1,3-Dichloropropene	10.312	75	187791	51.107	ug/l		92
55) 1,1,2-Trichloroethane	11.012	97	119203	53.625	ug/l		97
56) Ethyl methacrylate	10.871	69	170732	45.764	ug/l		91
57) 1,3-Dichloropropane	11.159	76	201421	52.111	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.159	63	340114	241.104	ug/l		97
59) 2-Hexanone	11.194	43	508614	238.718	ug/l		91
60) Dibromochloromethane	11.353	129	141685	52.795	ug/l		100
61) 1,2-Dibromoethane	11.465	107	112834	50.994	ug/l		100
64) Tetrachloroethene	11.100	164	99530	48.451	ug/l		97
65) Chlorobenzene	11.888	112	331849	50.273	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.959	131	119985	49.526	ug/l		99
67) Ethyl Benzene	11.959	91	567591	52.793	ug/l		99
68) m/p-Xylenes	12.071	106	446120	112.274	ug/l		94
69) o-Xylene	12.394	106	213152	56.132	ug/l		93
70) Styrene	12.406	104	372069	59.204	ug/l		96
71) Bromoform	12.576	173	89849	51.832	ug/l	#	99
73) Isopropylbenzene	12.694	105	533437	51.773	ug/l		98
74) N-amyl acetate	12.488	43	196603	42.452	ug/l		93
75) 1,1,2,2-Tetrachloroethane	12.935	83	173703	47.726	ug/l		99
76) 1,2,3-Trichloropropane	12.988	75	150787m	48.596	ug/l		
77) Bromobenzene	12.976	156	131464	48.837	ug/l		95
78) n-propylbenzene	13.035	91	646489	53.002	ug/l		99
79) 2-Chlorotoluene	13.123	91	385400	48.821	ug/l		96
80) 1,3,5-Trimethylbenzene	13.170	105	452745	53.197	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	64630	56.354	ug/l	#	73
82) 4-Chlorotoluene	13.217	91	391197	49.770	ug/l		97
83) tert-Butylbenzene	13.435	119	377386	52.803	ug/l		95
84) 1,2,4-Trimethylbenzene	13.476	105	457878	53.980	ug/l		98
85) sec-Butylbenzene	13.612	105	540740	54.590	ug/l		99
86) p-Isopropyltoluene	13.723	119	448653	50.266	ug/l		98
87) 1,3-Dichlorobenzene	13.729	146	248411	50.109	ug/l		99
88) 1,4-Dichlorobenzene	13.812	146	247225	48.112	ug/l		97
89) n-Butylbenzene	14.053	91	375157	52.792	ug/l		99
90) Hexachloroethane	14.329	117	91155	48.339	ug/l		97
91) 1,2-Dichlorobenzene	14.100	146	240267	48.589	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	29819	44.867	ug/l		91
93) 1,2,4-Trichlorobenzene	15.388	180	112114	48.782	ug/l		98
94) Hexachlorobutadiene	15.500	225	54586	44.736	ug/l		99
95) Naphthalene	15.641	128	343491	50.085	ug/l		100
96) 1,2,3-Trichlorobenzene	15.841	180	112671	48.450	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
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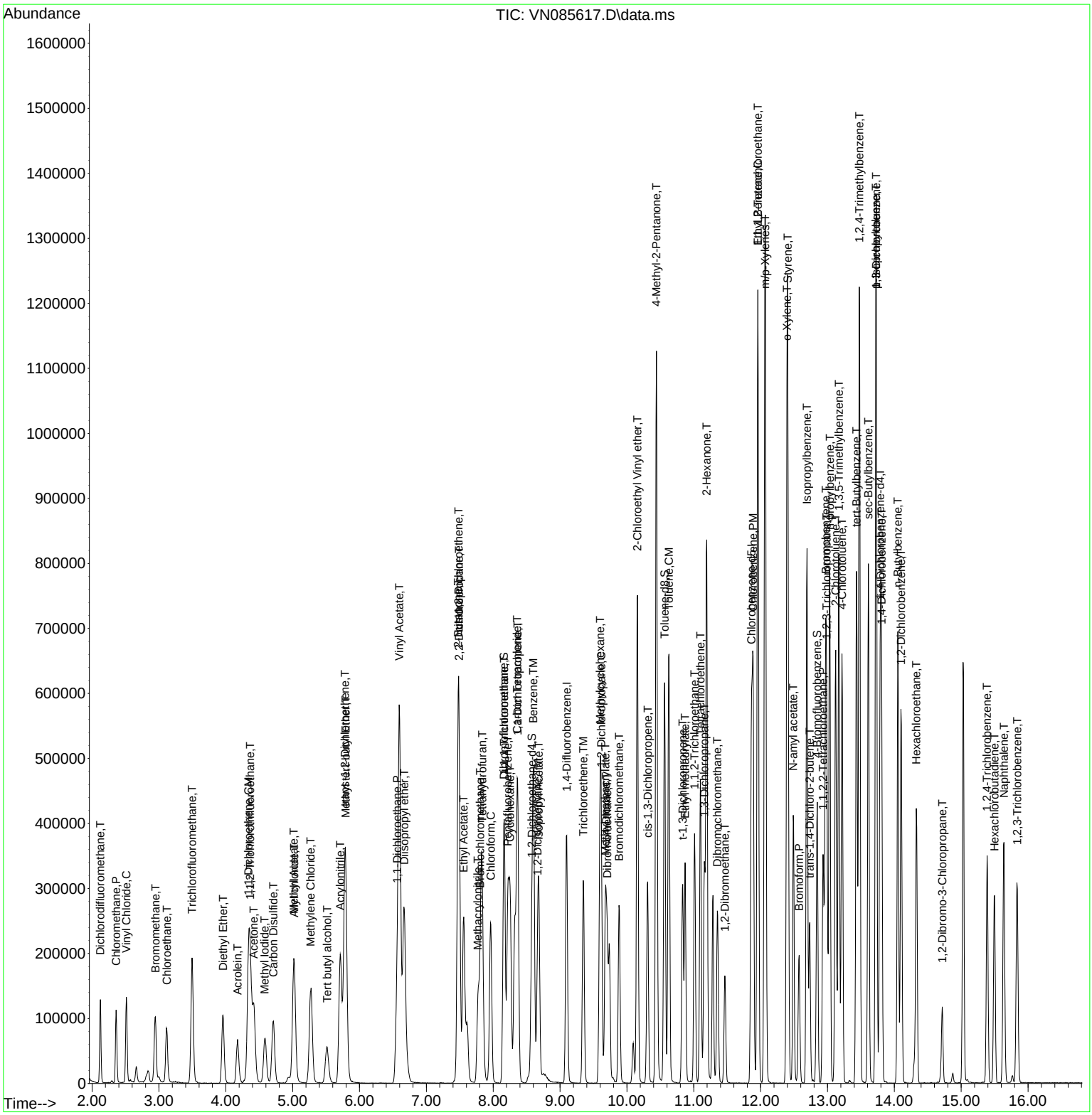
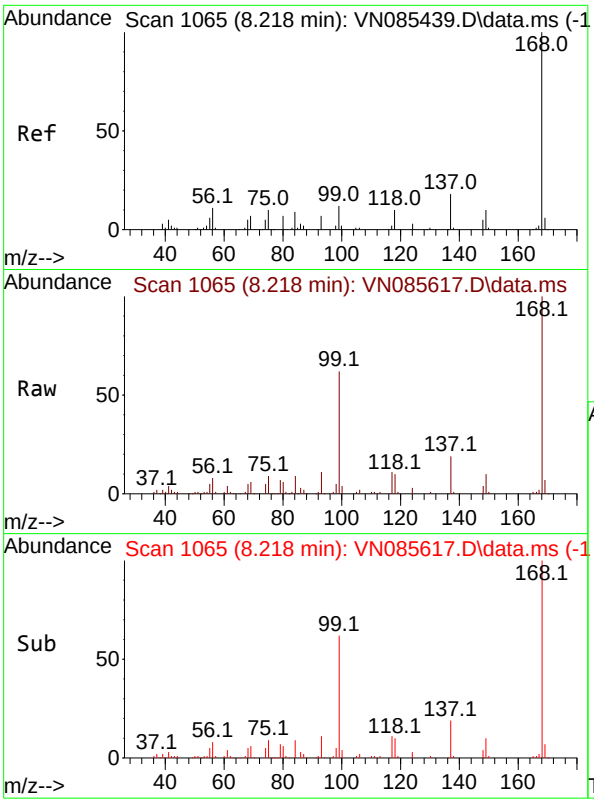
Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

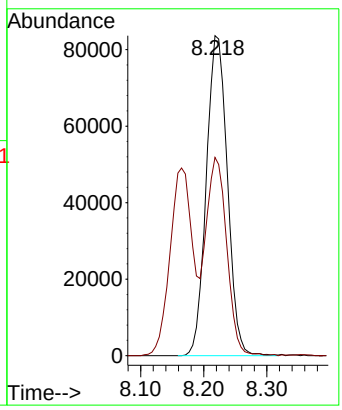




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:168 Resp: 193909

Ion	Ratio	Lower	Upper
168	100		
99	62.0	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

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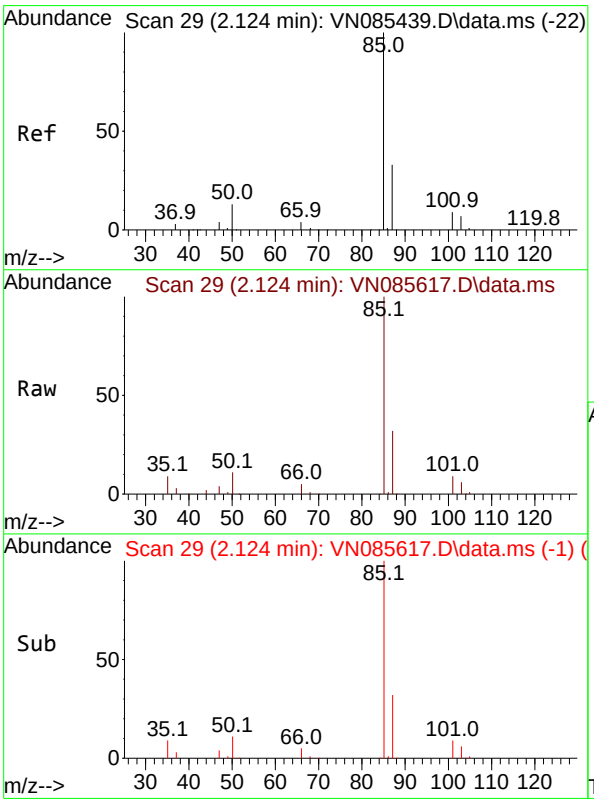
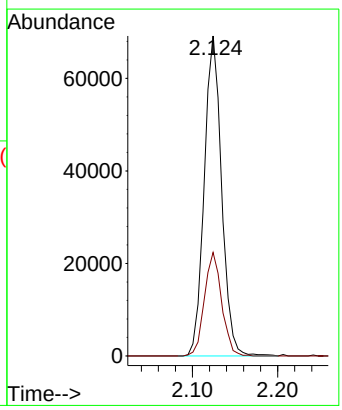
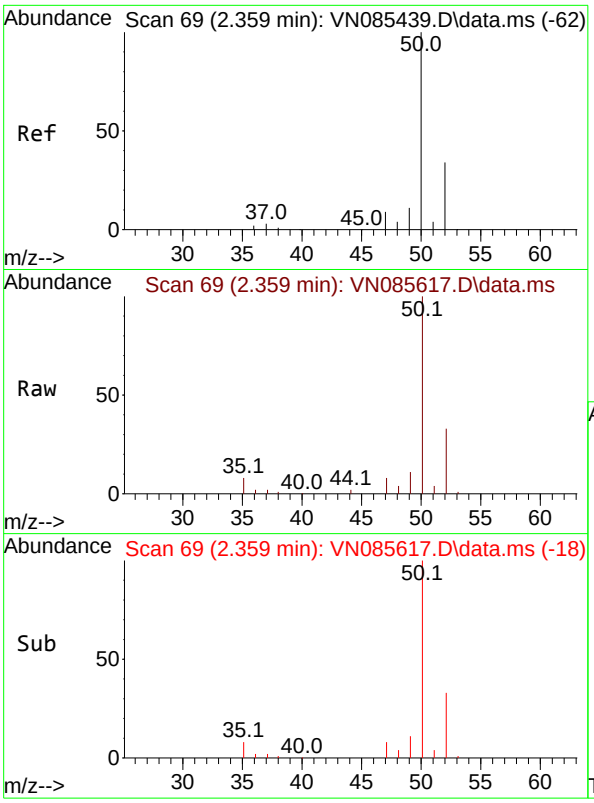


#2
Dichlorodifluoromethane
Concen: 37.364 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 85 Resp: 98099

Ion	Ratio	Lower	Upper
85	100		
87	32.4	16.7	50.1

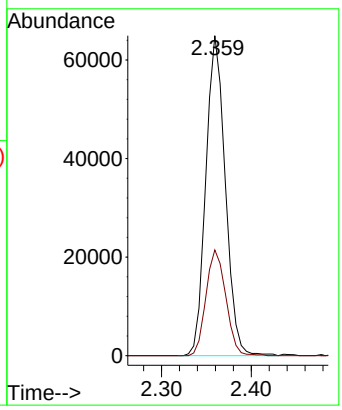




#3
Chloromethane
Concen: 34.404 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 50 Resp: 9780

Ion	Ratio	Lower	Upper
50	100		
52	33.0	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

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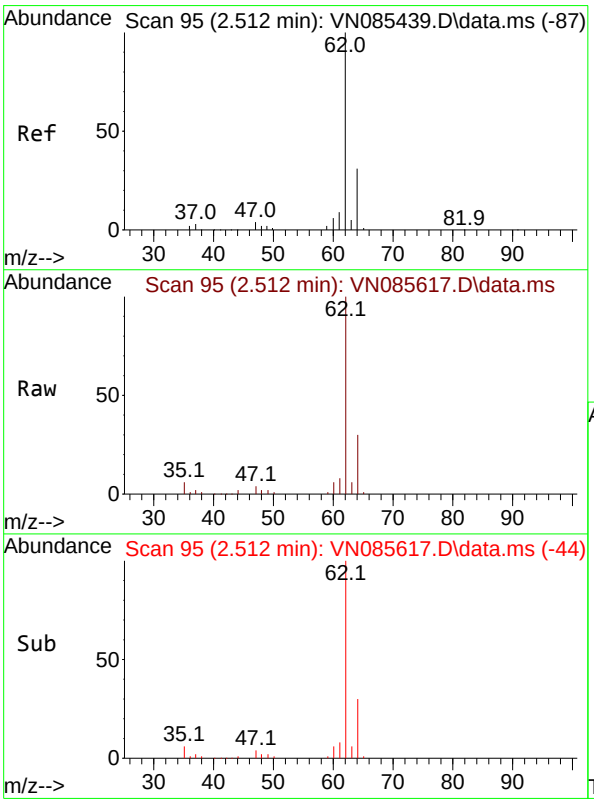
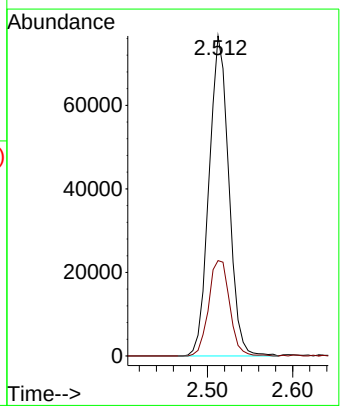
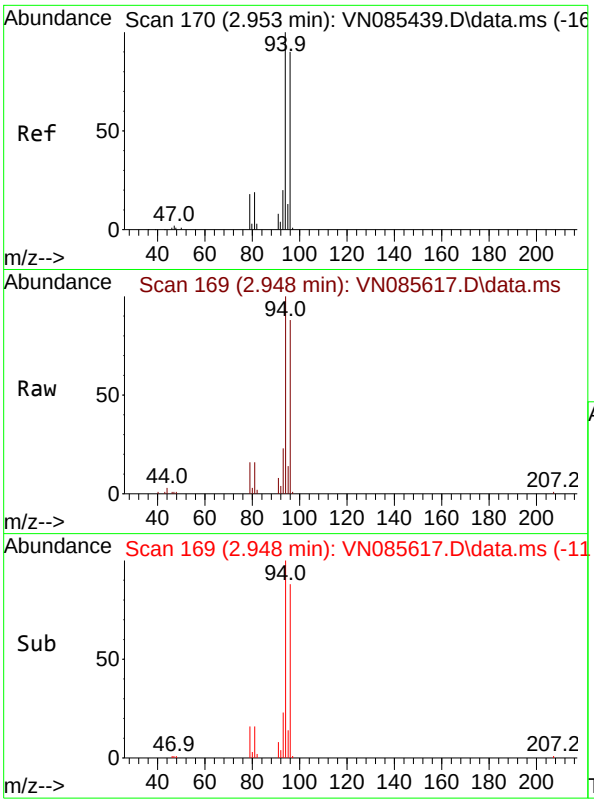


#4
Vinyl Chloride
Concen: 43.167 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 62 Resp: 123341

Ion	Ratio	Lower	Upper
62	100		
64	29.8	24.8	37.2

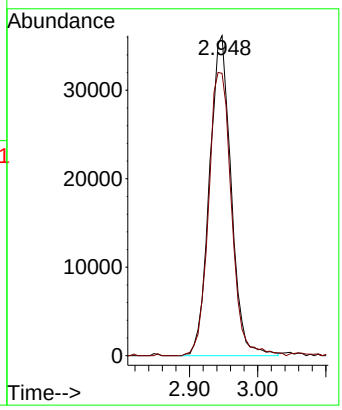




#5
Bromomethane
Concen: 46.361 ug/l
RT: 2.948 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 94 Resp: 8001

Ion	Ratio	Lower	Upper
94	100		
96	88.3	71.8	107.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
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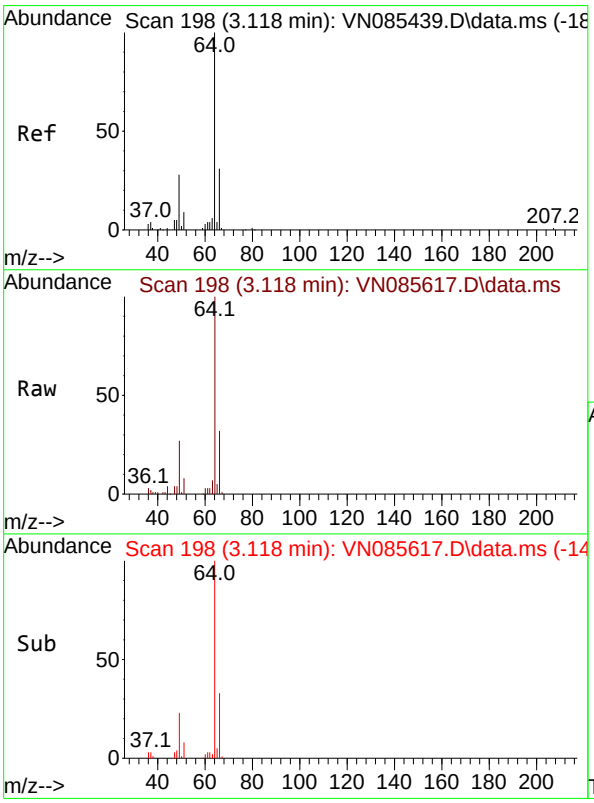
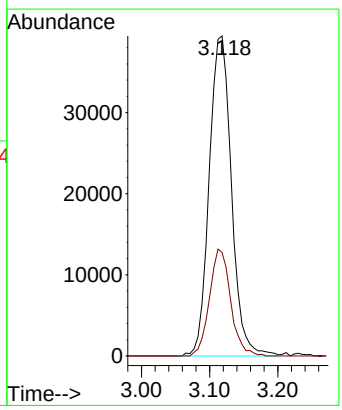
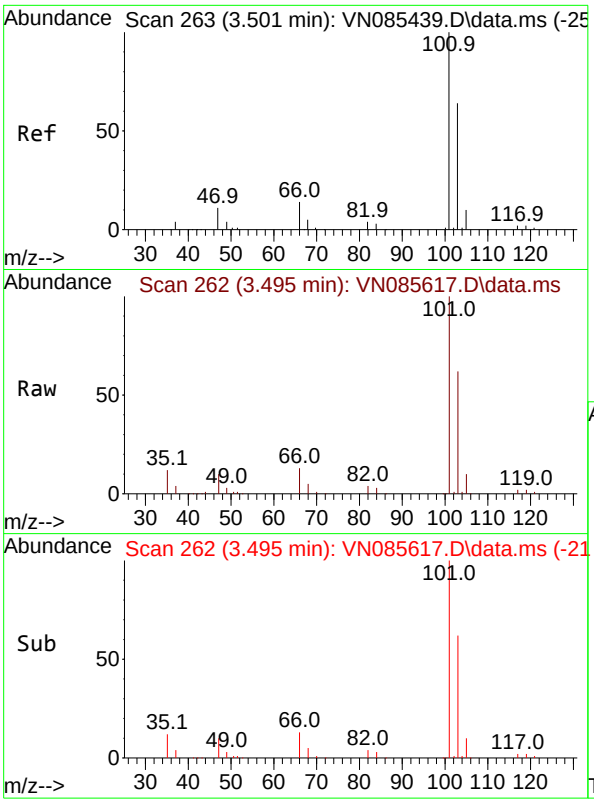


#6
Chloroethane
Concen: 49.419 ug/l
RT: 3.118 min Scan# 198
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 64 Resp: 89522

Ion	Ratio	Lower	Upper
64	100		
66	32.4	24.6	36.8

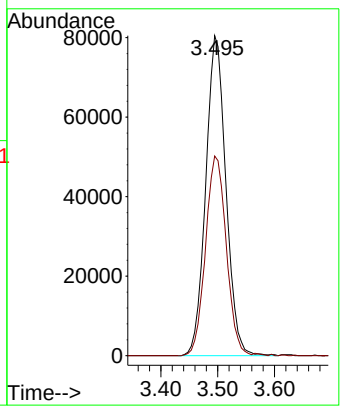




#7
Trichlorofluoromethane
Concen: 47.821 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:101 Resp: 19826

Ion	Ratio	Lower	Upper
101	100		
103	62.4	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
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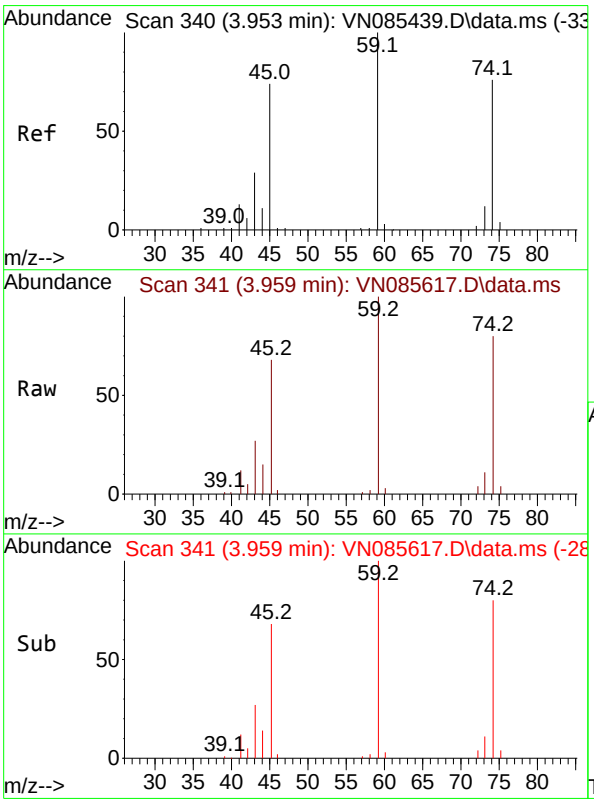
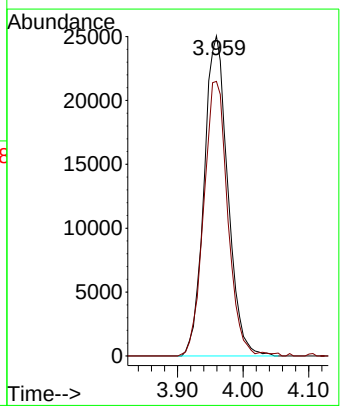
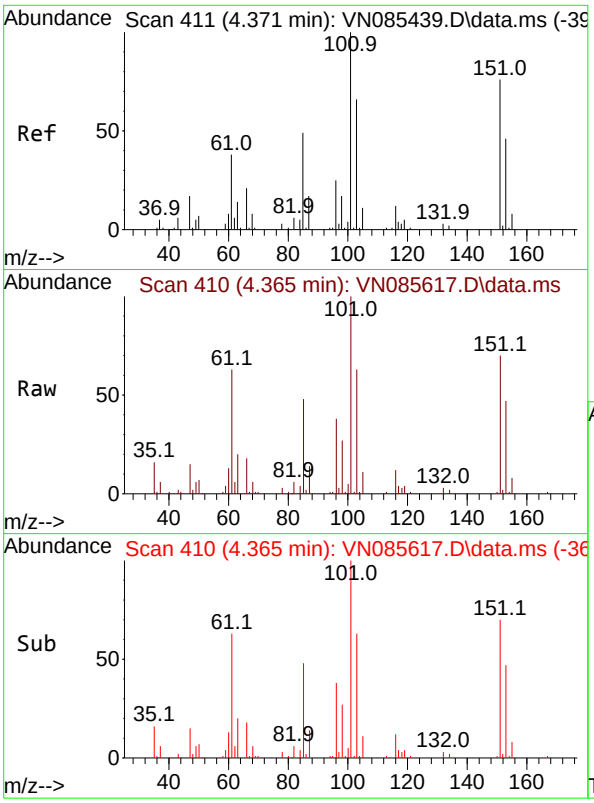


#8
Diethyl Ether
Concen: 43.869 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 74 Resp: 62830

Ion	Ratio	Lower	Upper
74	100		
45	86.5	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 46.609 ug/l
RT: 4.365 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:101 Resp: 10883

Ion	Ratio	Lower	Upper
101	100		
85	45.0	37.8	56.8
151	71.5	58.8	88.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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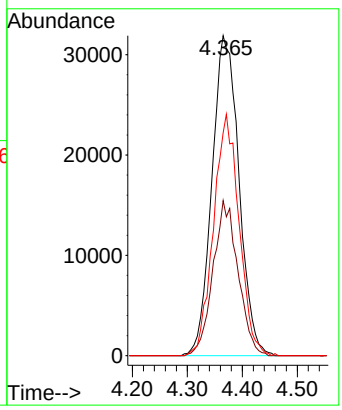
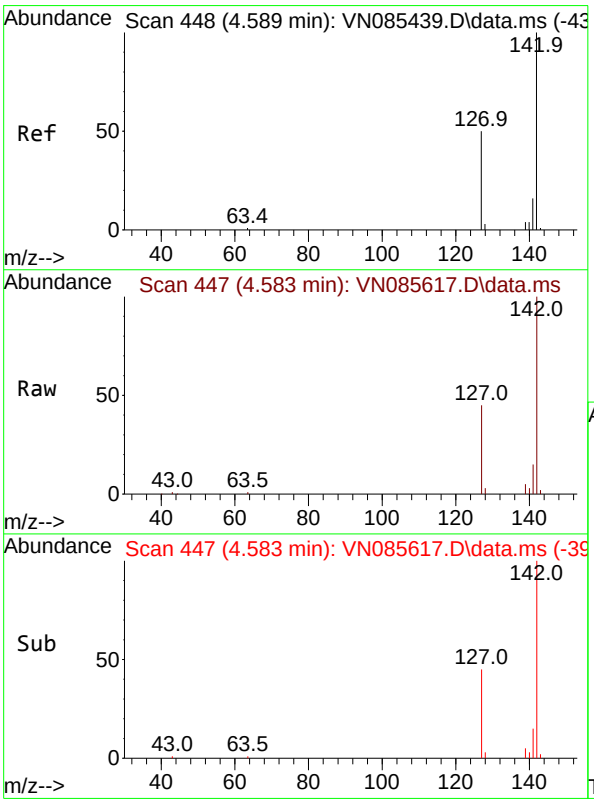
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

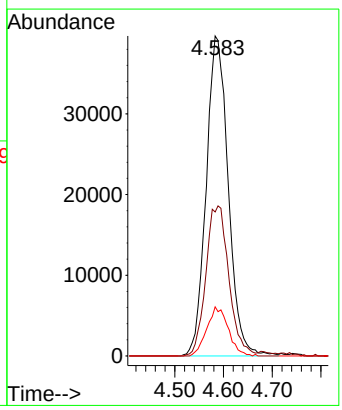


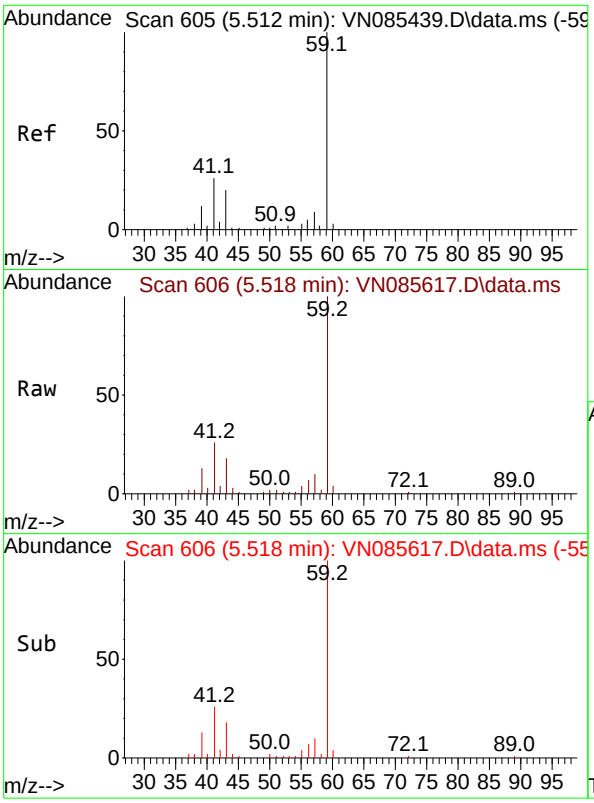


#10
Methyl Iodide
Concen: 46.624 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:142 Resp: 124678

Ion	Ratio	Lower	Upper
142	100		
127	45.0	40.3	60.5
141	15.4	12.8	19.2





#11
Tert butyl alcohol
Concen: 266.185 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 59 Resp: 9540

Ion	Ratio	Lower	Upper
59	100		
57	10.3	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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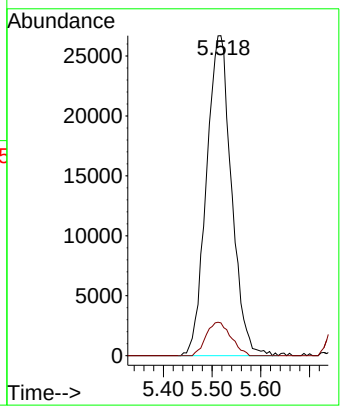
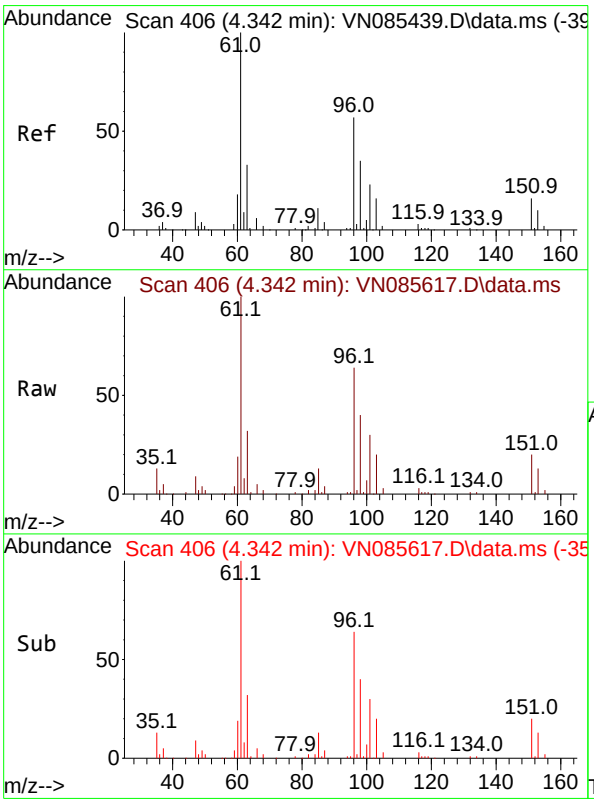
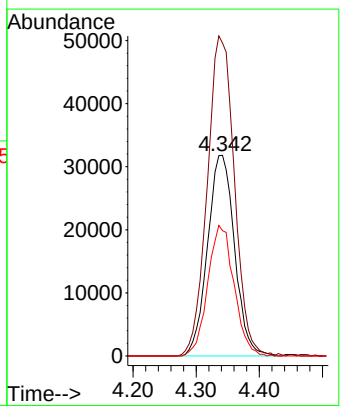


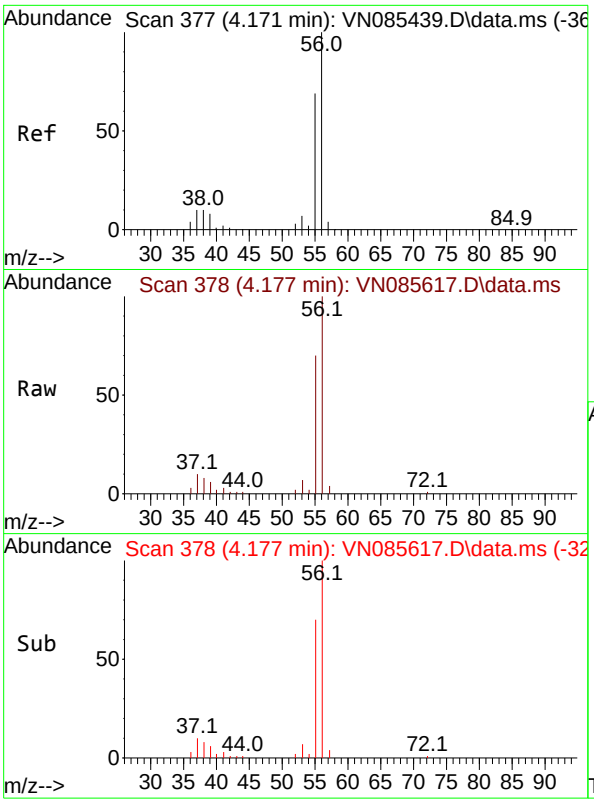


#12
1,1-Dichloroethene
Concen: 45.458 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 96 Resp: 94603

Ion	Ratio	Lower	Upper
96	100		
61	156.0	141.0	211.4
98	62.5	49.0	73.6

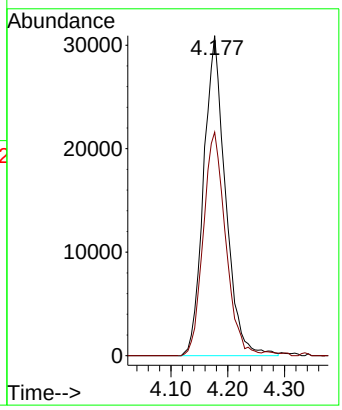




#13
Acrolein
Concen: 168.557 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 56 Resp: 8247

Ion	Ratio	Lower	Upper
56	100		
55	71.4	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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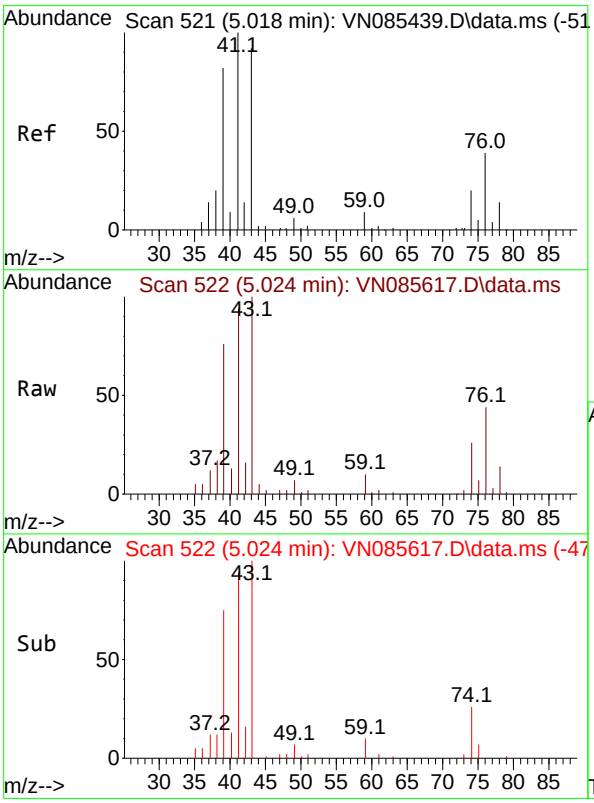
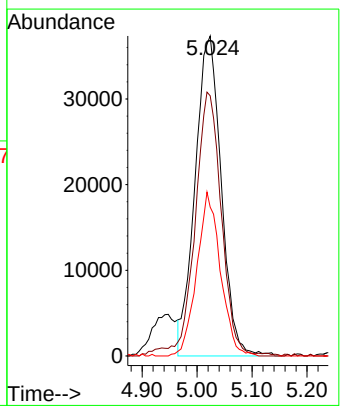
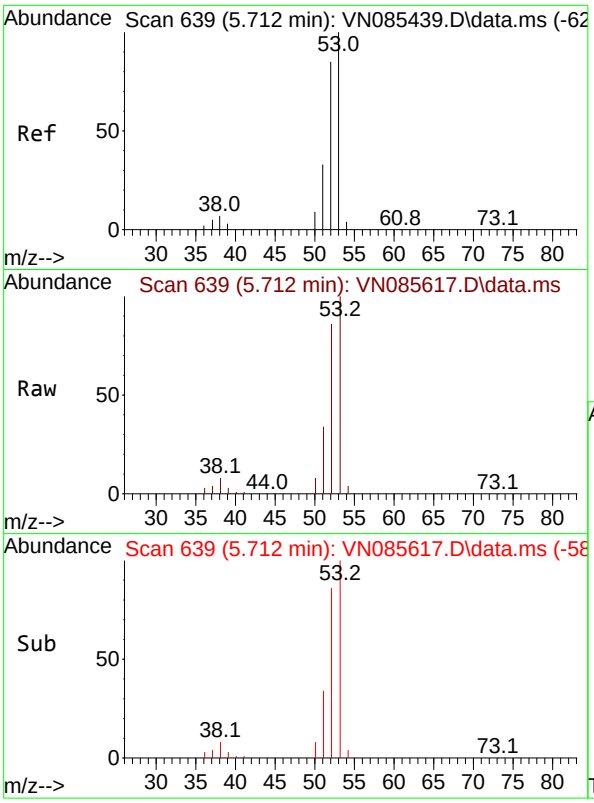


#14
Allyl chloride
Concen: 36.574 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 41 Resp: 123509

Ion	Ratio	Lower	Upper
41	100		
39	83.1	64.4	96.6
76	46.2	30.5	45.7#

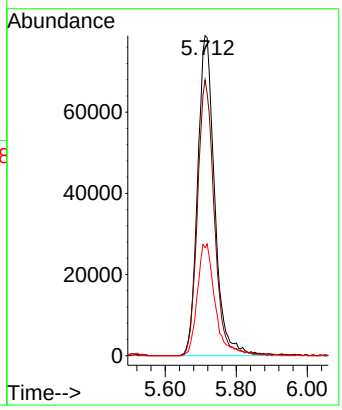




#15
Acrylonitrile
Concen: 231.327 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 53 Resp: 26335

Ion	Ratio	Lower	Upper
53	100		
52	84.6	65.5	98.3
51	36.8	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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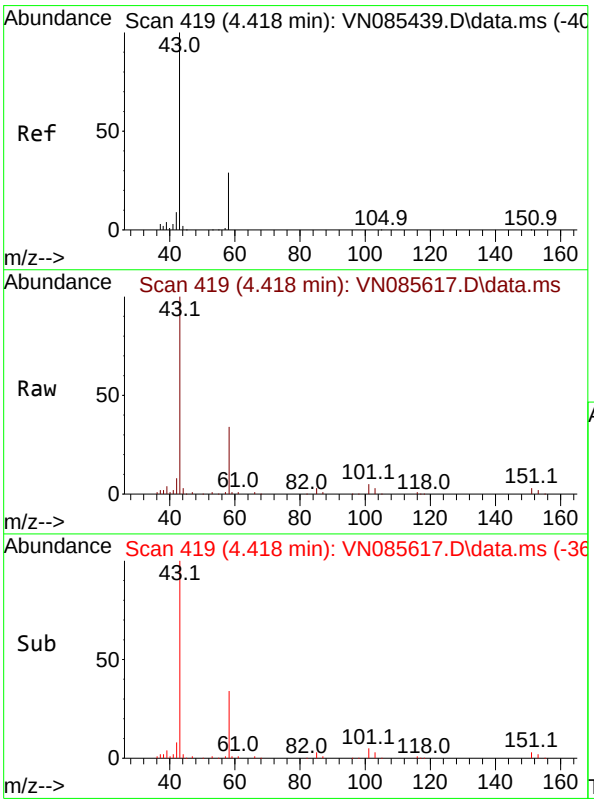
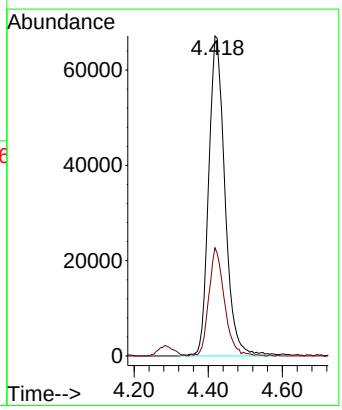
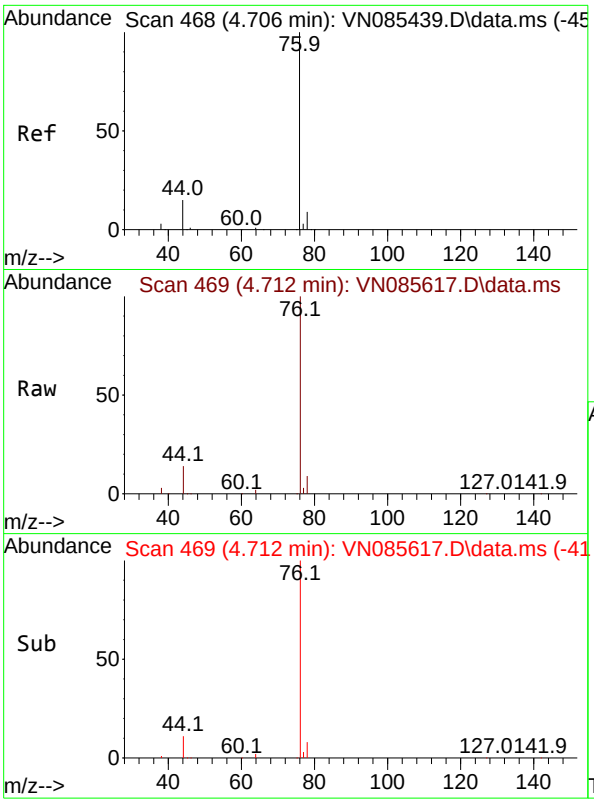


#16
Acetone
Concen: 202.320 ug/l
RT: 4.418 min Scan# 419
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 204618

Ion	Ratio	Lower	Upper
43	100		
58	33.5	23.8	35.6





#17
Carbon Disulfide
Concen: 34.849 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 76 Resp: 22330

Ion	Ratio	Lower	Upper
76	100		
78	8.7	6.9	10.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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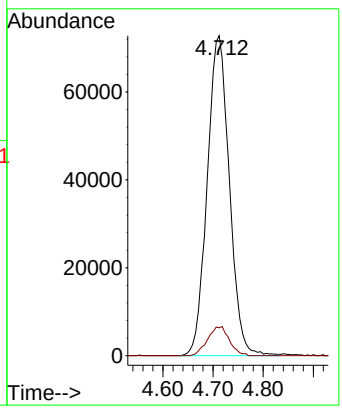
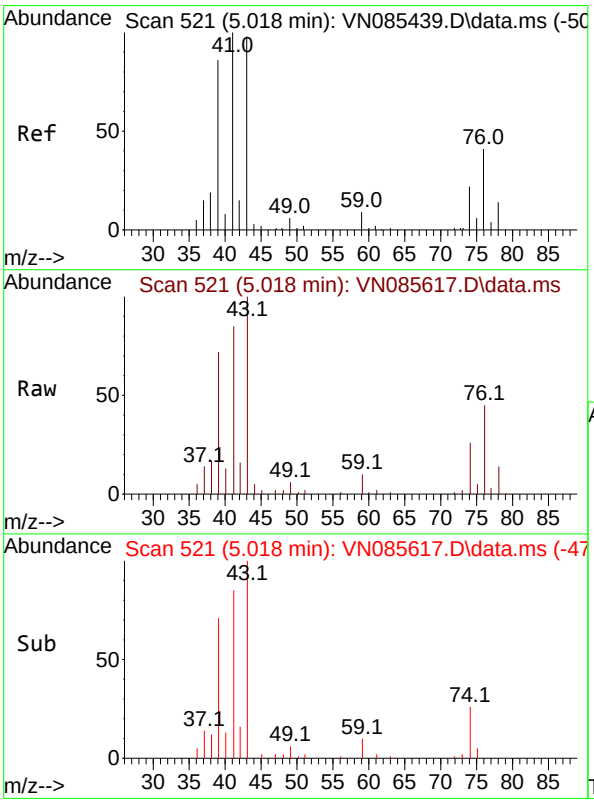
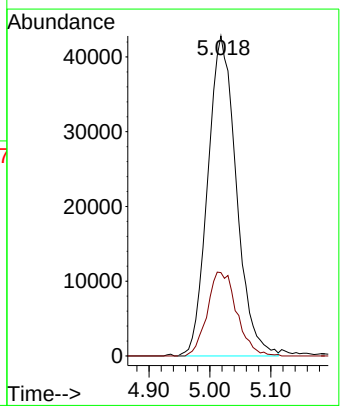


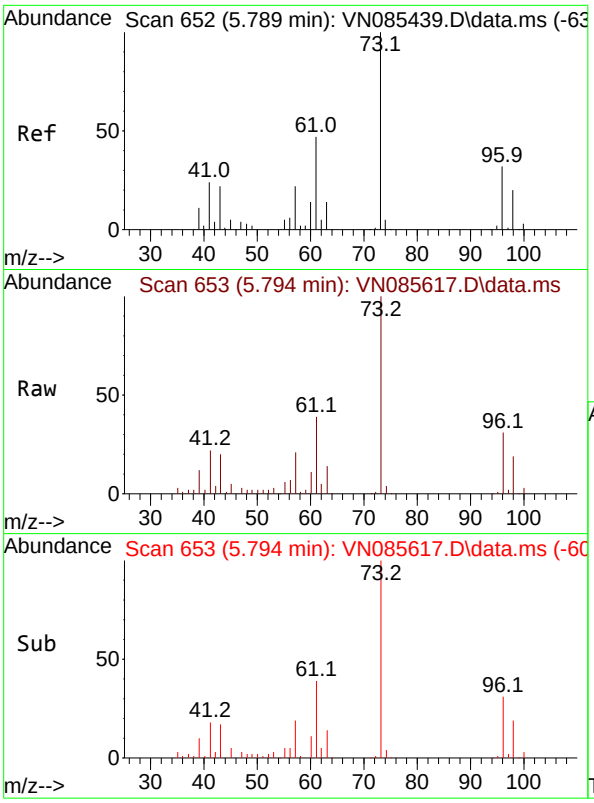


#18
Methyl Acetate
Concen: 45.361 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 139501

Ion	Ratio	Lower	Upper
43	100		
74	27.1	18.6	28.0





#19
Methyl tert-butyl Ether
Concen: 49.654 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 73 Resp: 33553

Ion	Ratio	Lower	Upper
73	100		
57	20.9	17.8	26.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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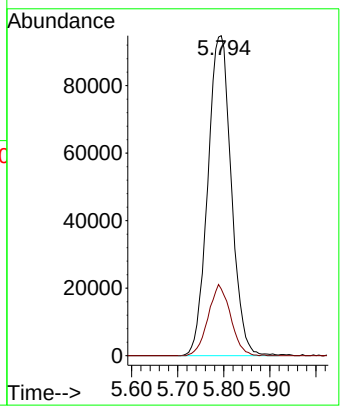
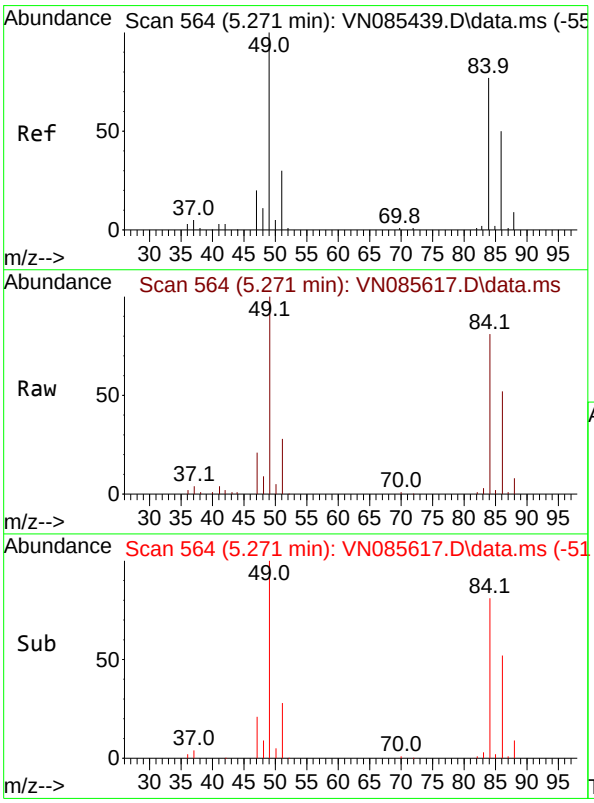
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

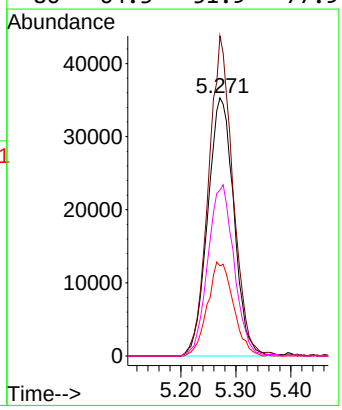


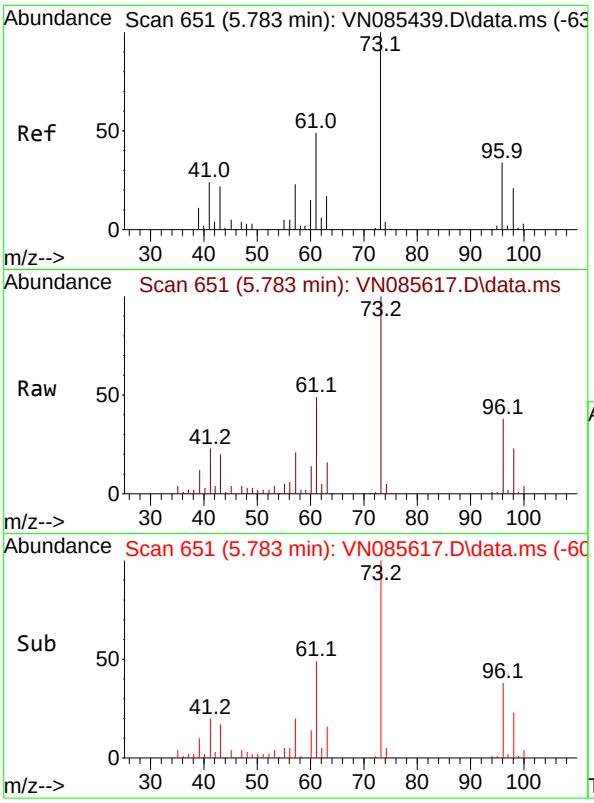


#20
Methylene Chloride
Concen: 46.650 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 84 Resp: 116799

Ion	Ratio	Lower	Upper
84	100		
49	124.0	104.1	156.1
51	34.9	31.0	46.4
86	64.3	51.9	77.9





#21
trans-1,2-Dichloroethene
Concen: 46.100 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 96 Resp: 10253

Ion	Ratio	Lower	Upper
96	100		
61	129.2	115.7	173.5
98	60.2	49.8	74.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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Reviewed By :John Carlone 02/04/2025
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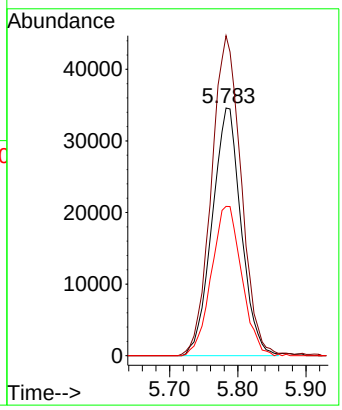
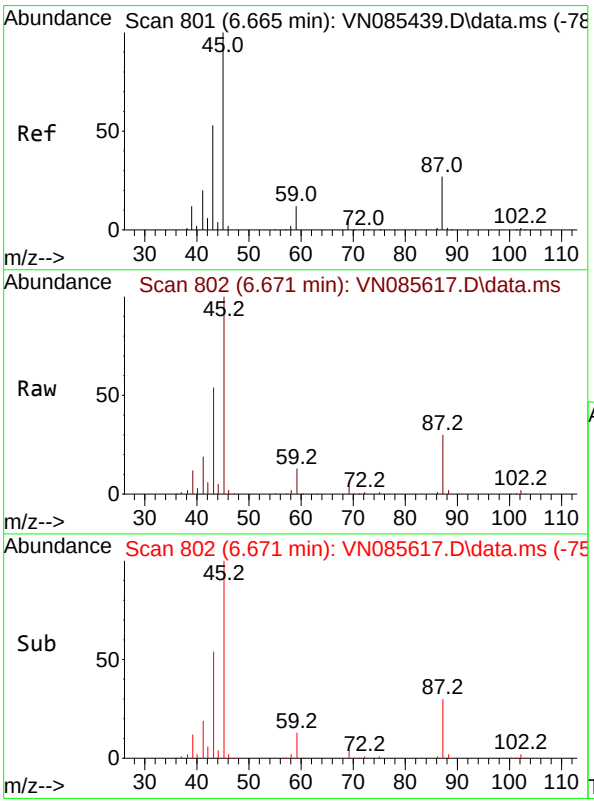
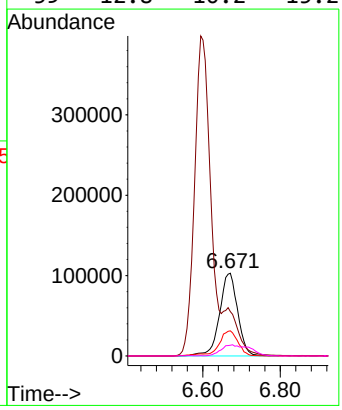


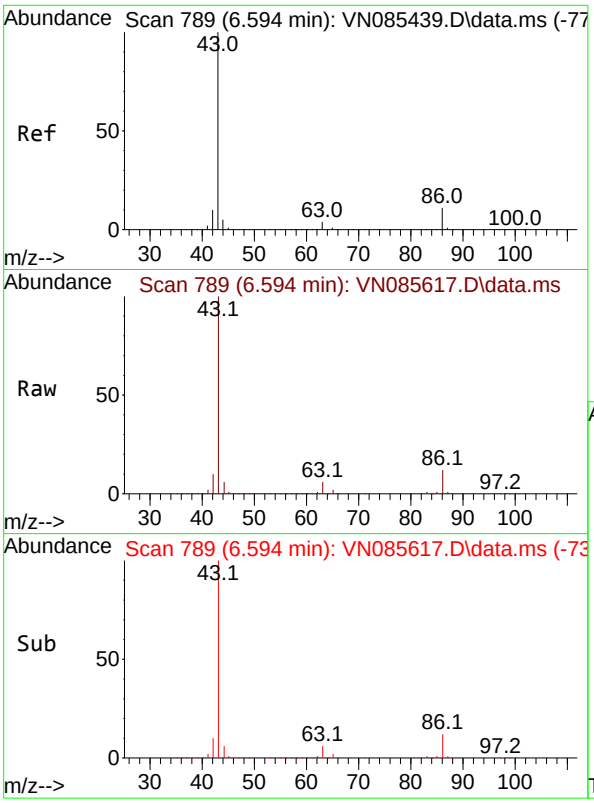


#22
Diisopropyl ether
Concen: 44.663 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 45 Resp: 334765

Ion	Ratio	Lower	Upper
45	100		
43	52.8	45.0	67.6
87	30.3	21.8	32.8
59	12.8	10.2	15.2





#23
Vinyl Acetate
Concen: 215.551 ug/l
RT: 6.594 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 113067

Ion	Ratio	Lower	Upper
43	100		
86	12.0	8.4	12.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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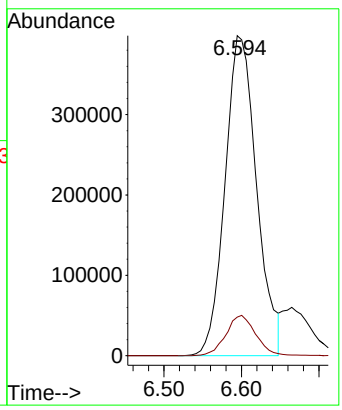
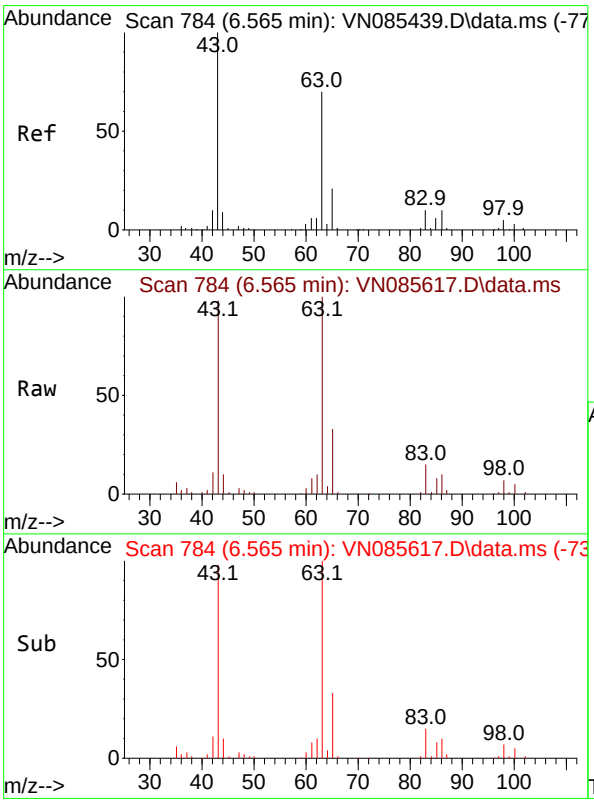
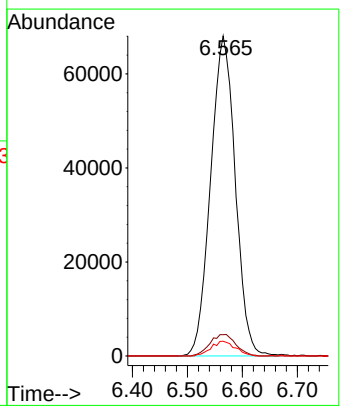


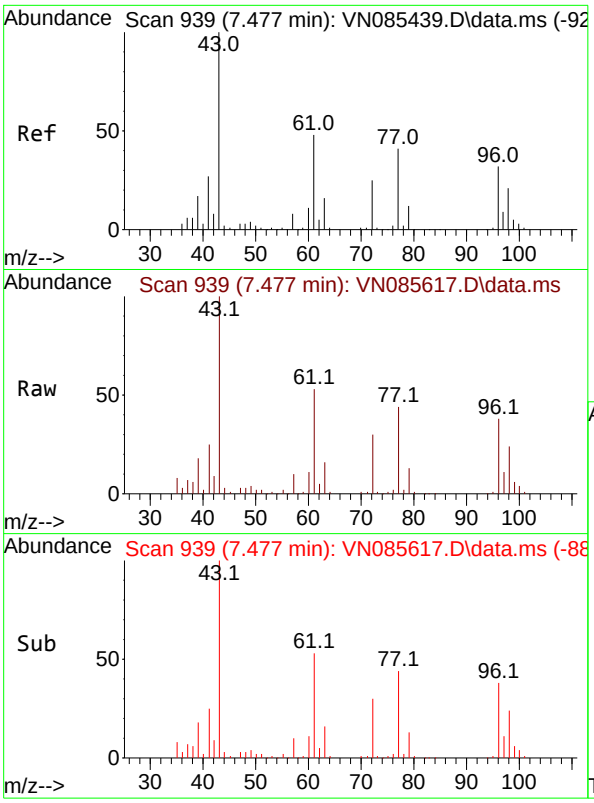


#24
1,1-Dichloroethane
Concen: 46.504 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 63 Resp: 212538

Ion	Ratio	Lower	Upper
63	100		
98	6.7	3.3	9.8
100	4.6	2.0	6.0





#25
2-Butanone
Concen: 218.881 ug/l
RT: 7.477 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 32576

Ion	Ratio	Lower	Upper
43	100		
72	29.7	20.2	30.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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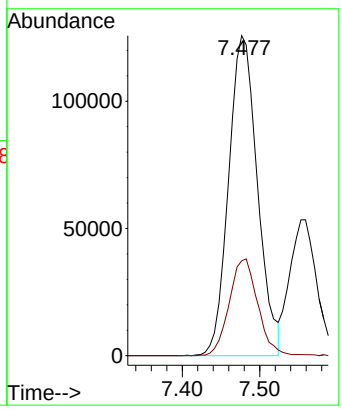
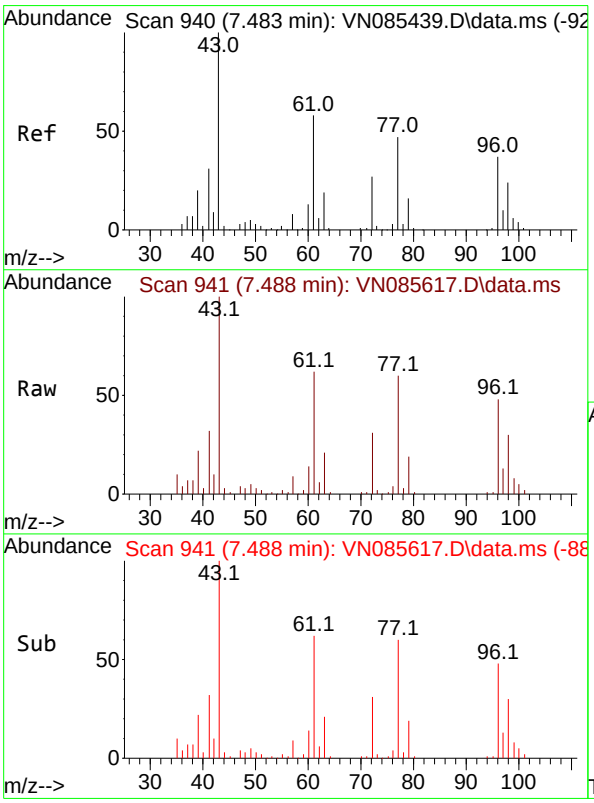
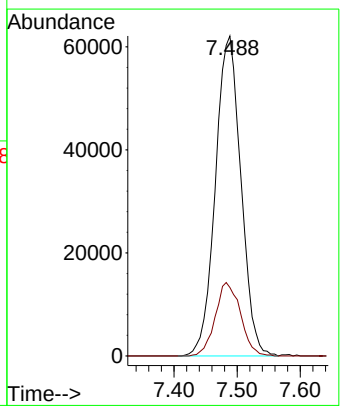


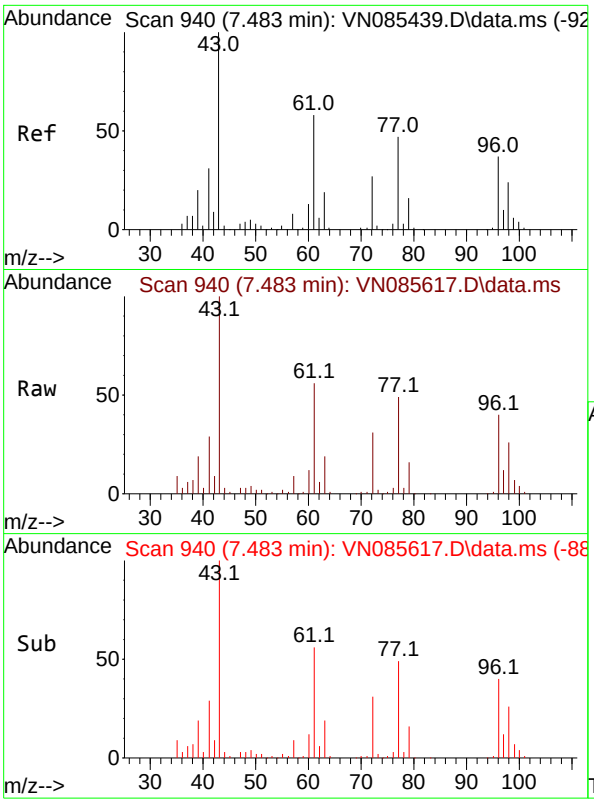


#26
2,2-Dichloropropane
Concen: 47.156 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 77 Resp: 174244

Ion	Ratio	Lower	Upper
77	100		
97	22.7	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 50.547 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 96 Resp: 13241

Ion	Ratio	Lower	Upper
96	100		
61	139.7	0.0	311.8
98	64.6	0.0	126.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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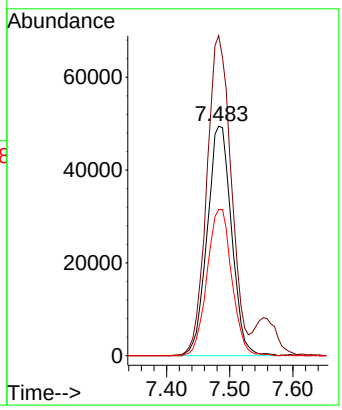
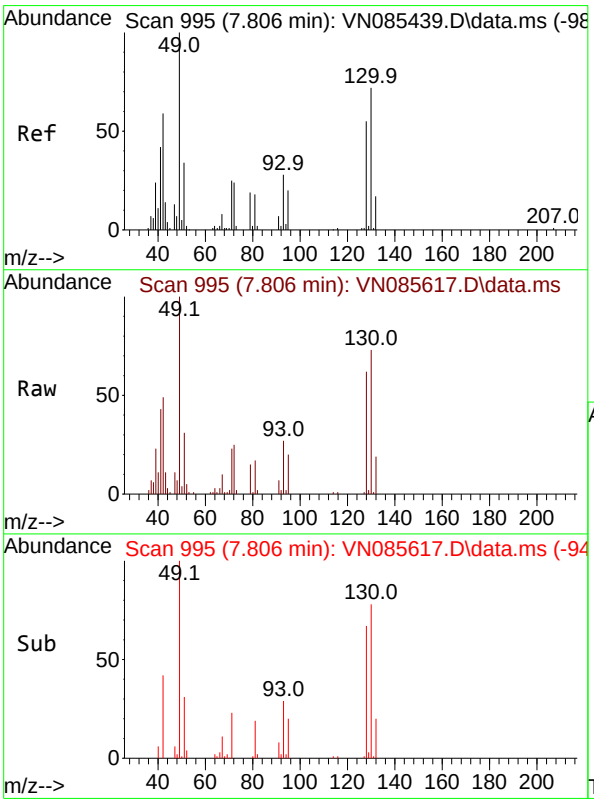
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

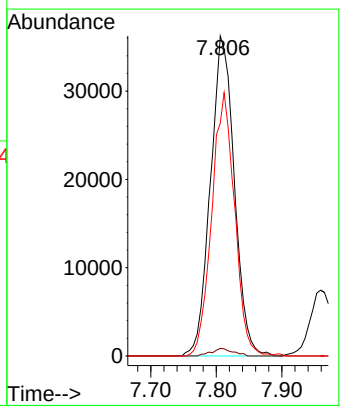


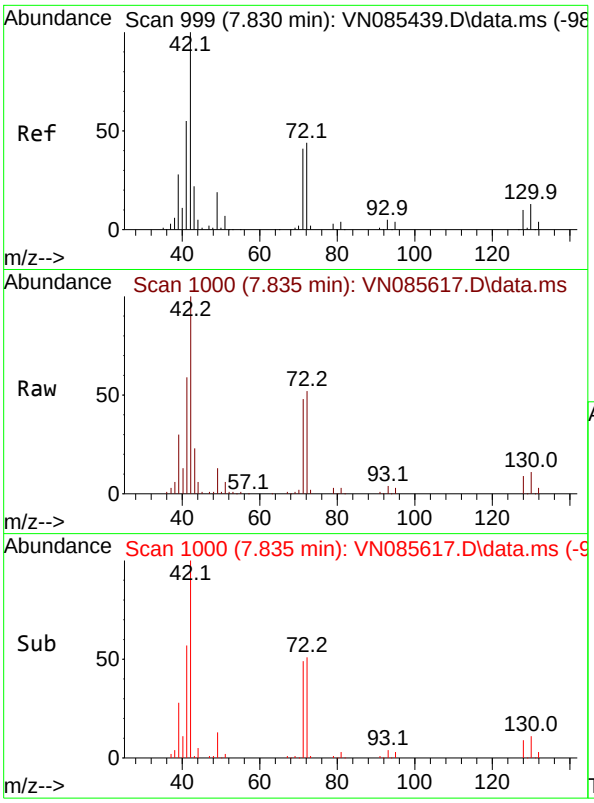


#28
Bromochloromethane
Concen: 43.090 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 49 Resp: 91622

Ion	Ratio	Lower	Upper
49	100		
129	2.1	0.0	4.4
130	78.8	55.0	82.4

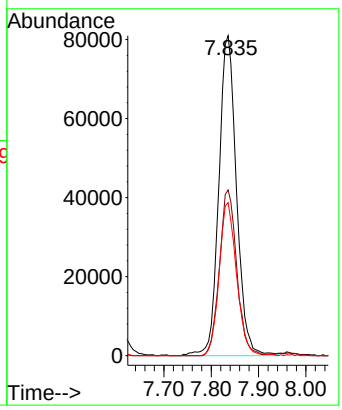




#29
Tetrahydrofuran
Concen: 223.073 ug/l
RT: 7.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 42 Resp: 21049

Ion	Ratio	Lower	Upper
42	100		
72	50.7	34.2	51.2
71	47.1	32.5	48.7



Instrument :
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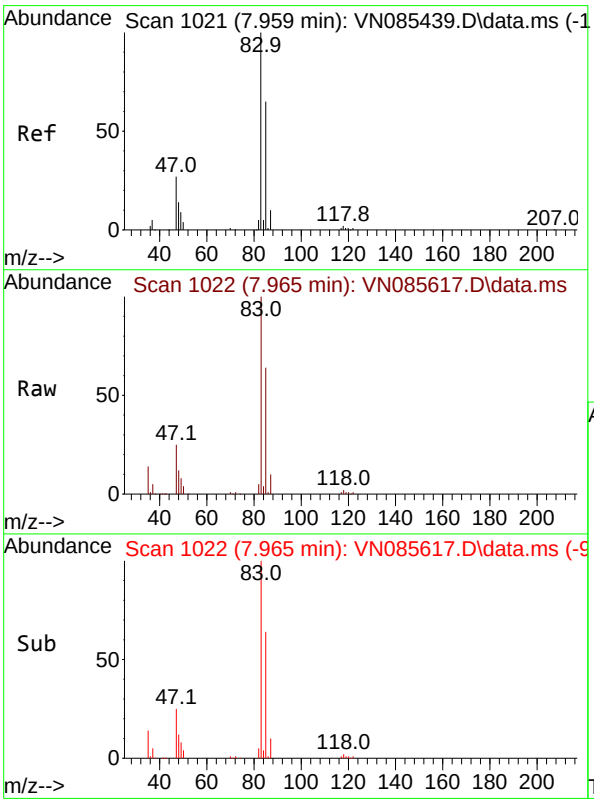
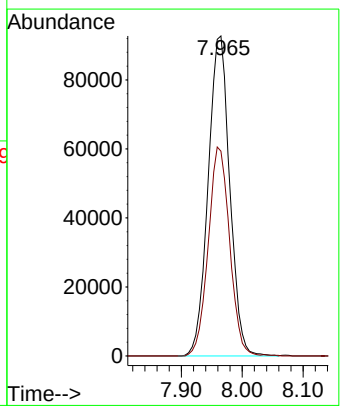
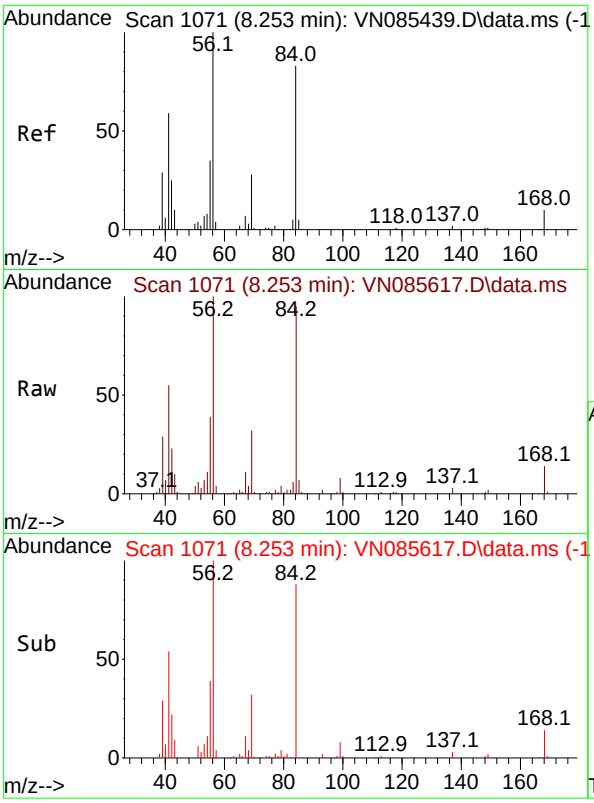


#30
Chloroform
Concen: 48.416 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 83 Resp: 228697

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.8	77.6

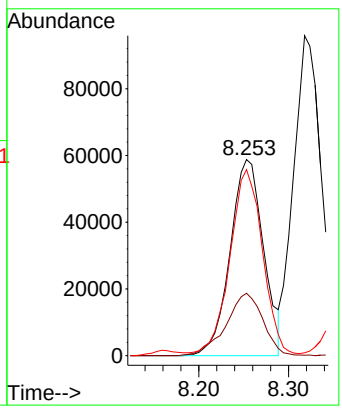




#31
Cyclohexane
Concen: 38.329 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 56 Resp: 15225

Ion	Ratio	Lower	Upper
56	100		
69	31.8	22.2	33.4
84	93.1	66.4	99.6



Instrument :
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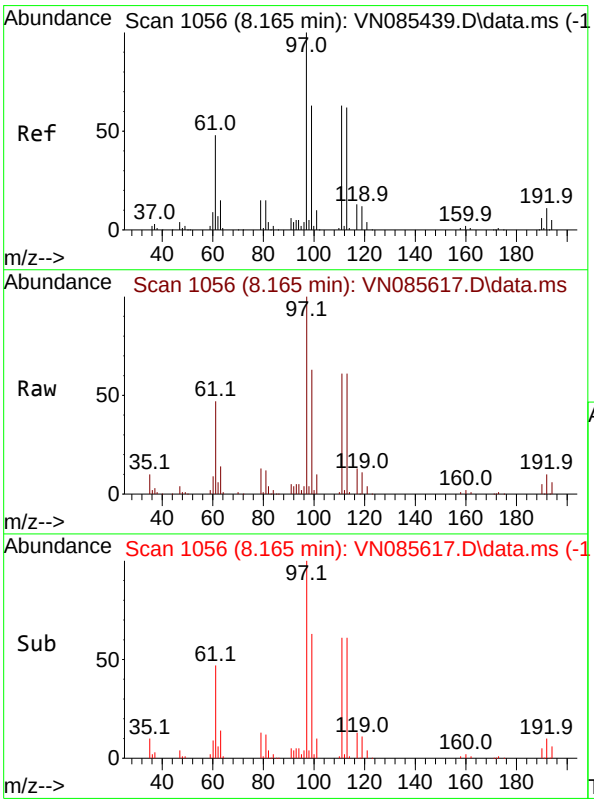
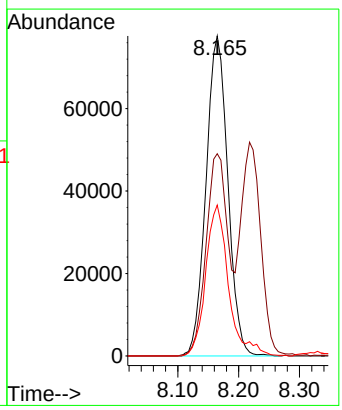
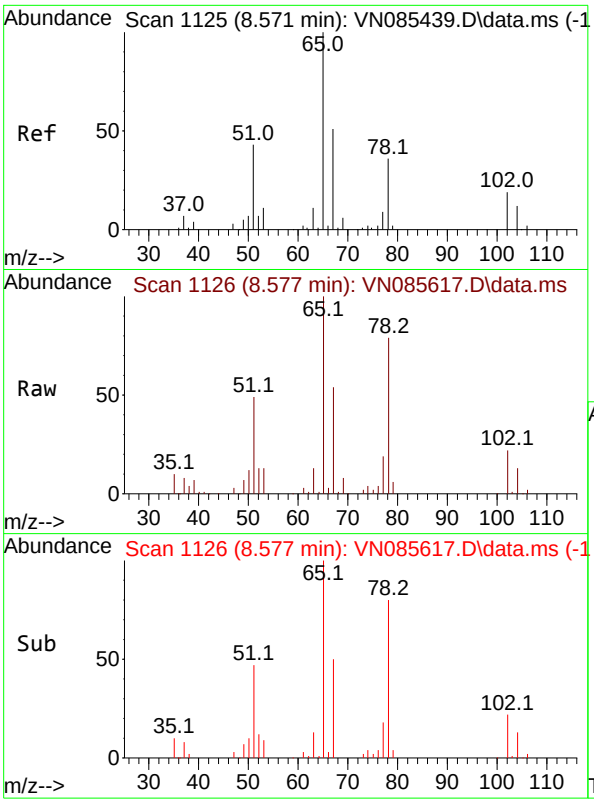


#32
1,1,1-Trichloroethane
Concen: 46.661 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 97 Resp: 193335

Ion	Ratio	Lower	Upper
97	100		
99	65.0	49.8	74.6
61	49.4	41.4	62.2

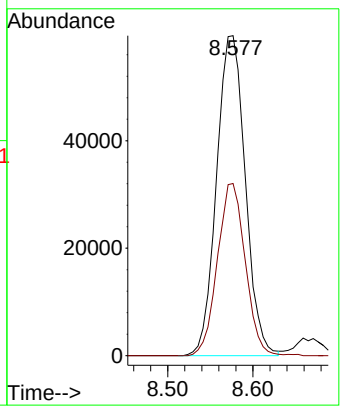




#33
1,2-Dichloroethane-d4
Concen: 44.566 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 65 Resp: 13949

Ion	Ratio	Lower	Upper
65	100		
67	52.1	0.0	101.6



Instrument :
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ClientSampleId :
VSTDCCC050

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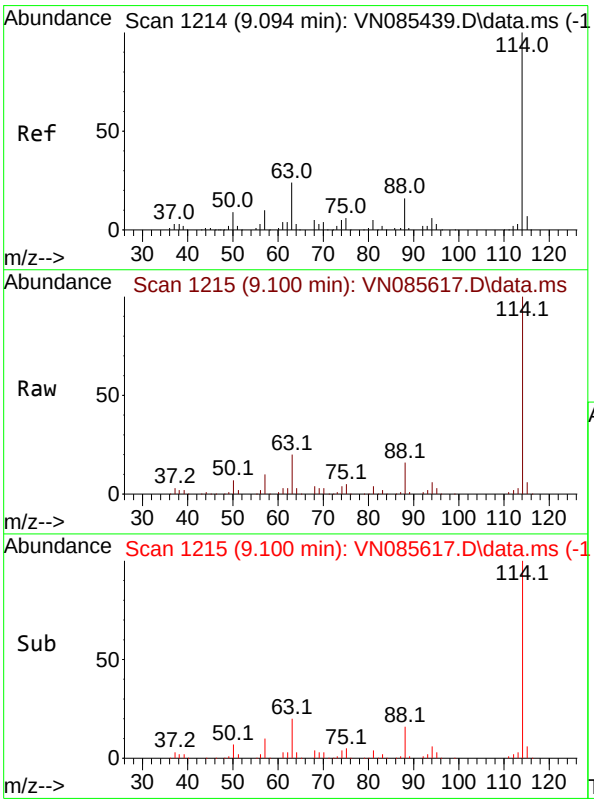
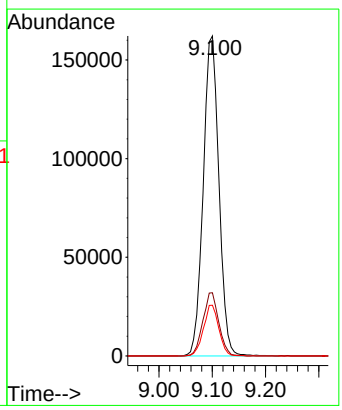
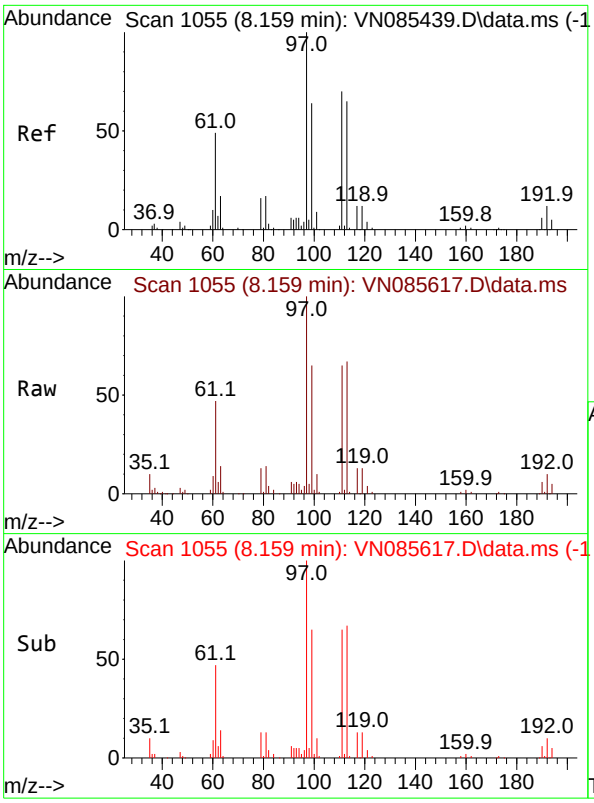


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:114 Resp: 331362

Ion	Ratio	Lower	Upper
114	100		
63	19.8	0.0	47.6
88	15.8	0.0	32.6

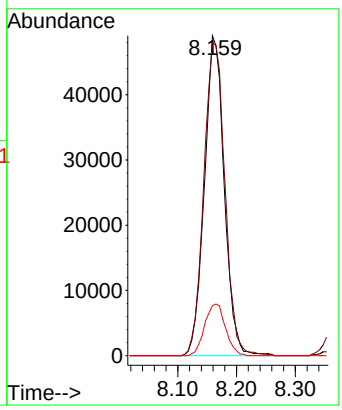




#35
Dibromofluoromethane
Concen: 49.931 ug/l
RT: 8.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:113 Resp: 11478

Ion	Ratio	Lower	Upper
113	100		
111	104.3	82.7	124.1
192	16.9	14.3	21.5



Instrument :
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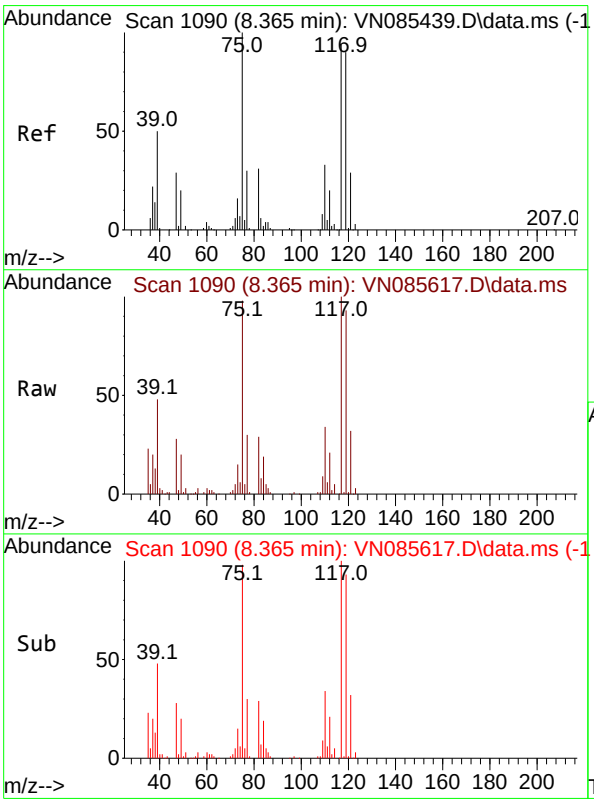
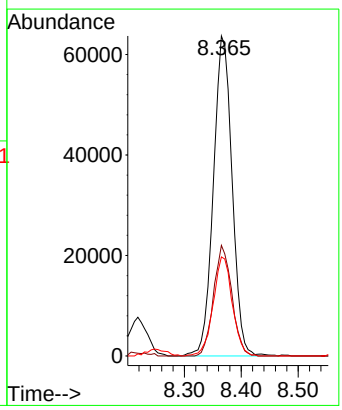
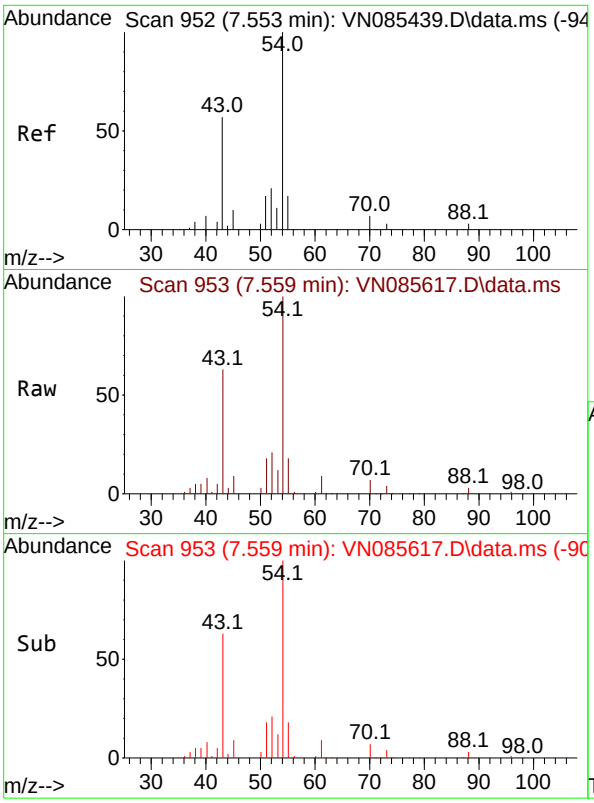


#36
1,1-Dichloropropene
Concen: 45.259 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 146021

Ion	Ratio	Lower	Upper
75	100		
110	33.7	16.5	49.5
77	31.6	24.4	36.6





#37
Ethyl Acetate
Concen: 40.735 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 13265

Ion	Ratio	Lower	Upper
43	100		
61	15.5	10.9	16.3
70	11.1	7.5	11.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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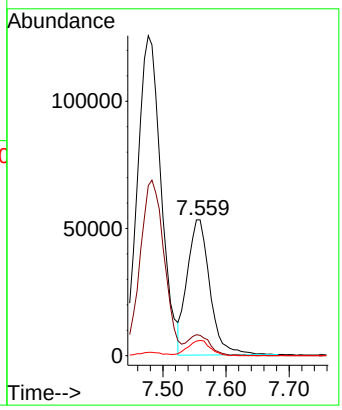
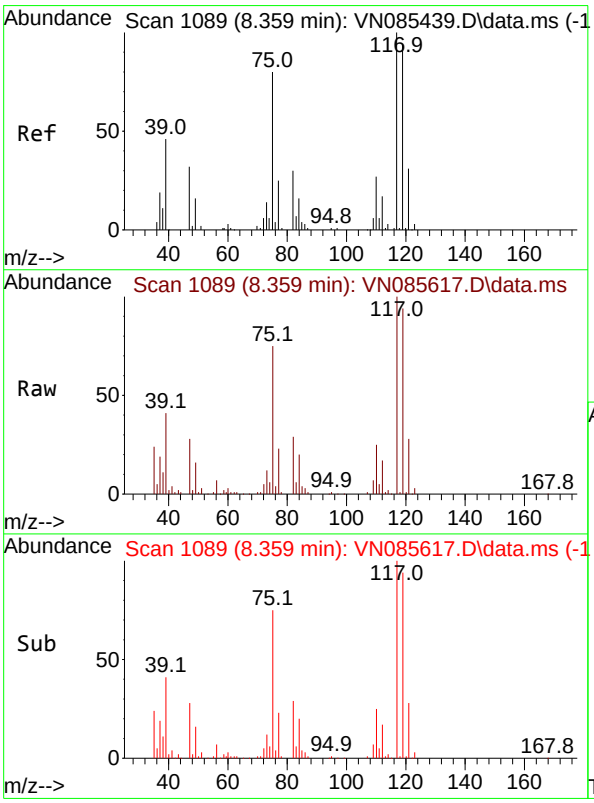
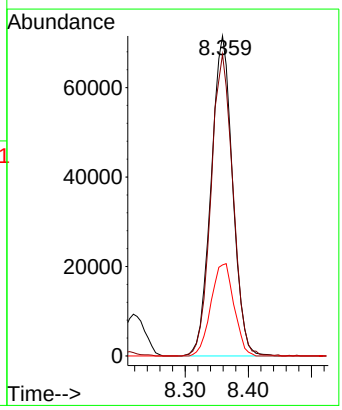


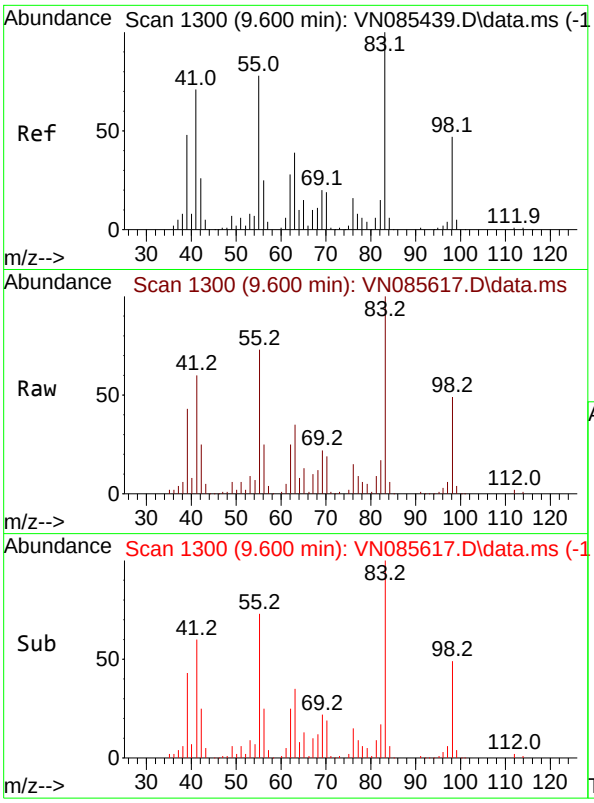


#38
Carbon Tetrachloride
Concen: 45.902 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:117 Resp: 169547

Ion	Ratio	Lower	Upper
117	100		
119	94.2	75.4	113.2
121	28.5	24.6	37.0

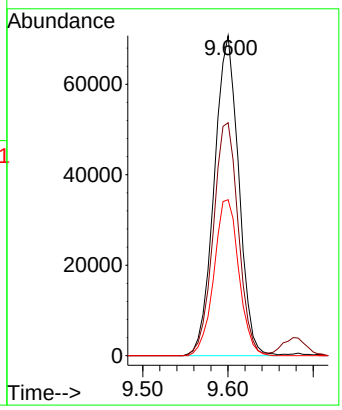




#39
Methylcyclohexane
Concen: 46.593 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 83 Resp: 14126

Ion	Ratio	Lower	Upper
83	100		
55	72.8	62.6	94.0
98	48.7	37.7	56.5



Instrument :
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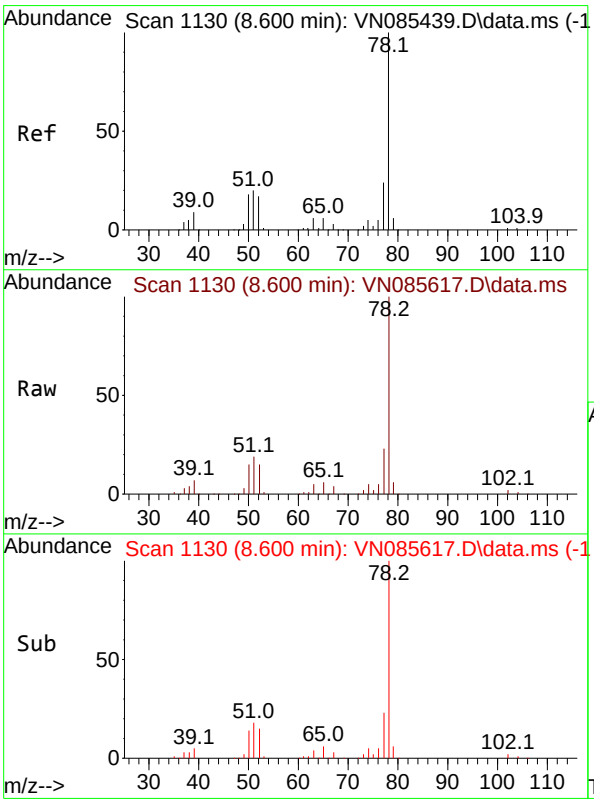
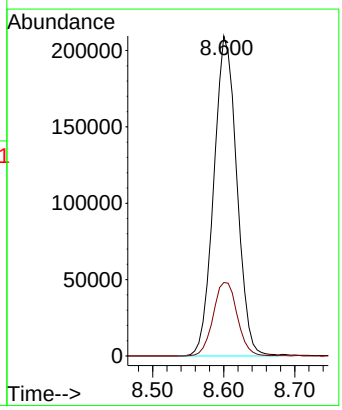
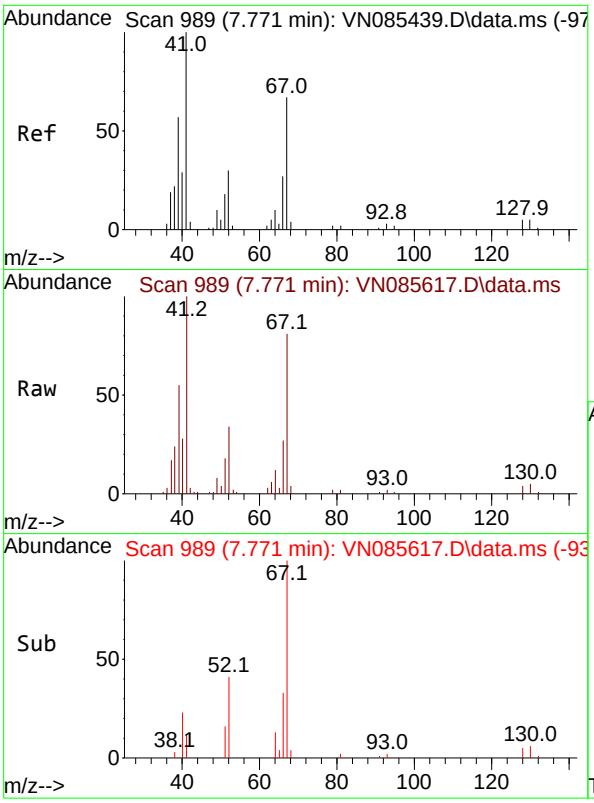


#40
Benzene
Concen: 48.614 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 78 Resp: 471269

Ion	Ratio	Lower	Upper
78	100		
77	22.9	19.0	28.6

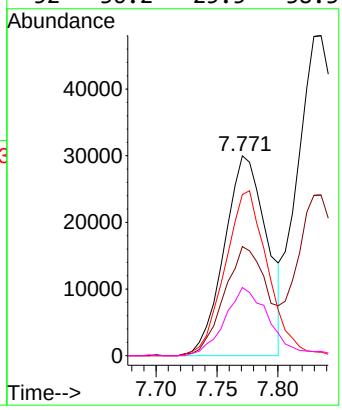




#41
Methacrylonitrile
Concen: 43.037 ug/l
RT: 7.771 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 41 Resp: 7291

Ion	Ratio	Lower	Upper
41	100		
39	55.4	46.0	69.0
67	82.8	57.4	86.2
52	36.2	25.5	38.3



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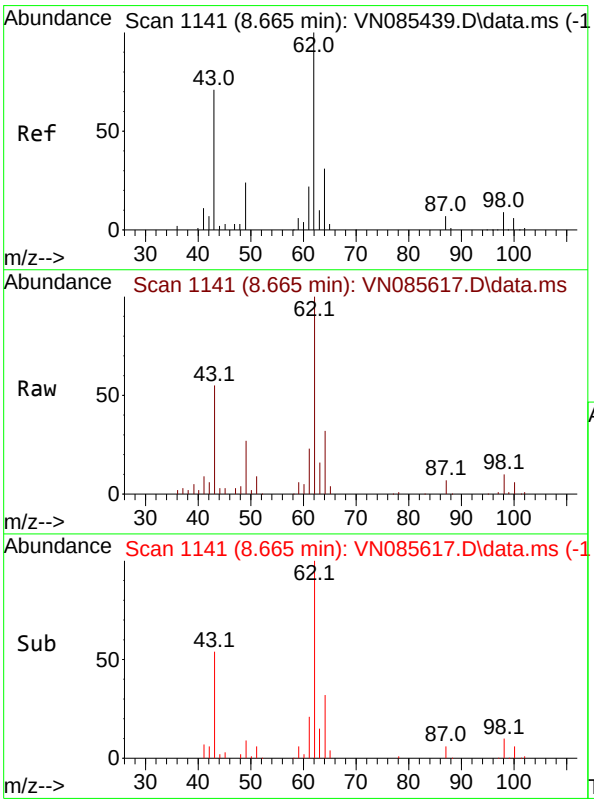
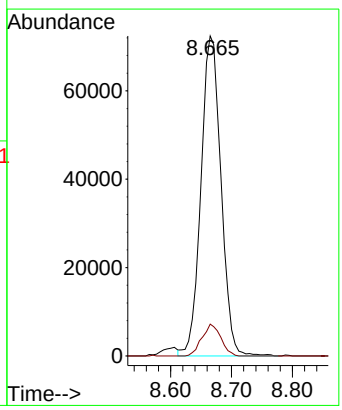
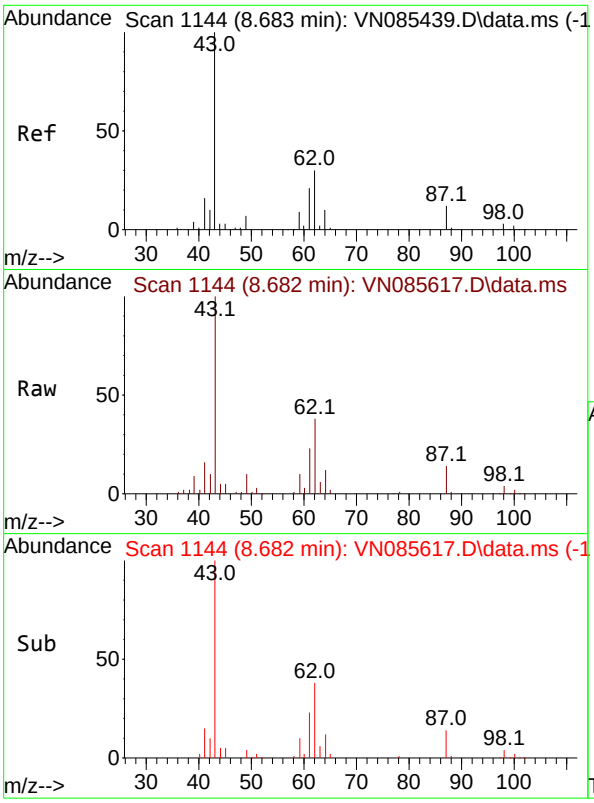


#42
1,2-Dichloroethane
Concen: 45.375 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 62 Resp: 165668

Ion	Ratio	Lower	Upper
62	100		
98	9.4	0.0	17.0

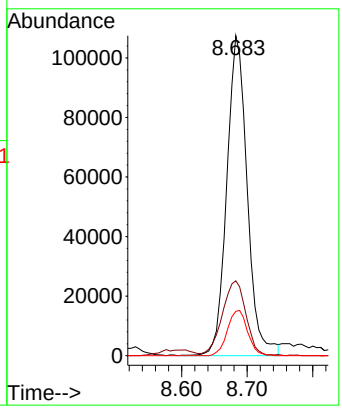




#43
Isopropyl Acetate
Concen: 44.700 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 23324

Ion	Ratio	Lower	Upper
43	100		
61	27.1	20.7	31.1
87	13.9	9.8	14.8



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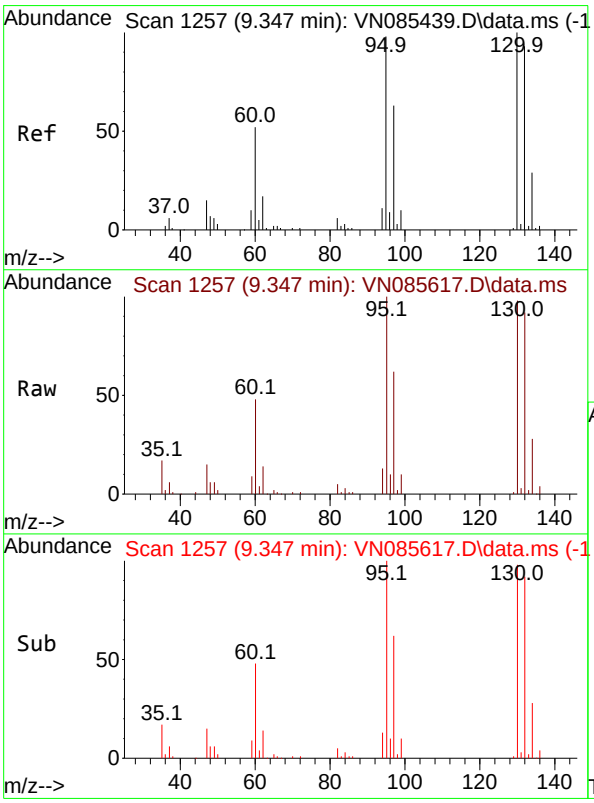
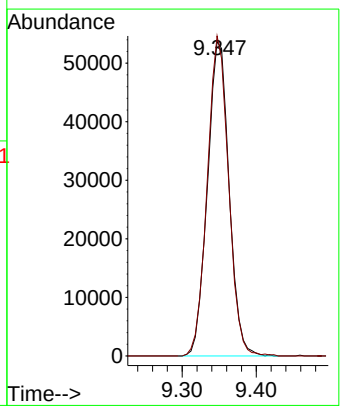
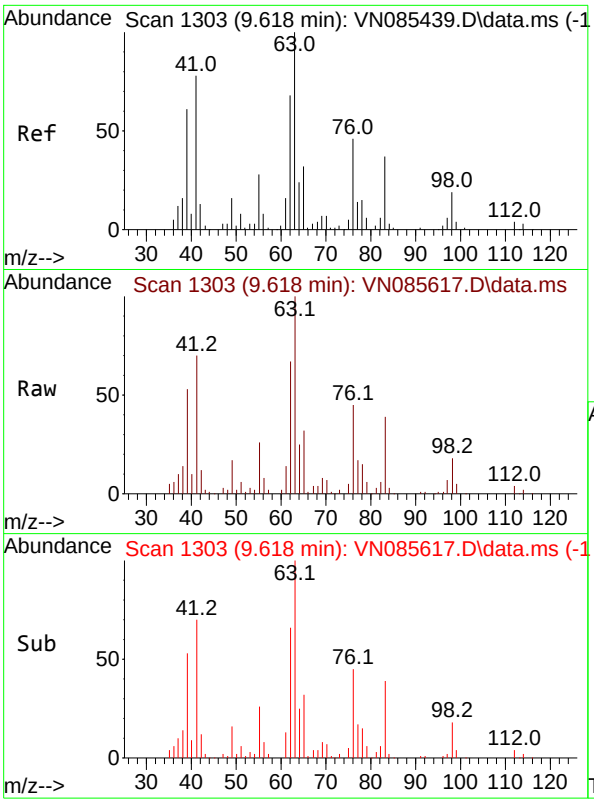


#44
Trichloroethene
Concen: 48.252 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:130 Resp: 108885

Ion	Ratio	Lower	Upper
130	100		
95	101.8	0.0	195.8

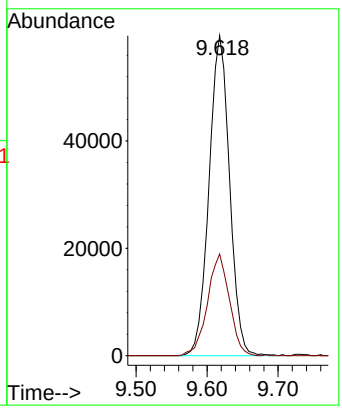




#45
1,2-Dichloropropane
Concen: 48.357 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 63 Resp: 11974

Ion	Ratio	Lower	Upper
63	100		
65	31.8	25.6	38.4



Instrument :
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ClientSampleId :
VSTDCCC050

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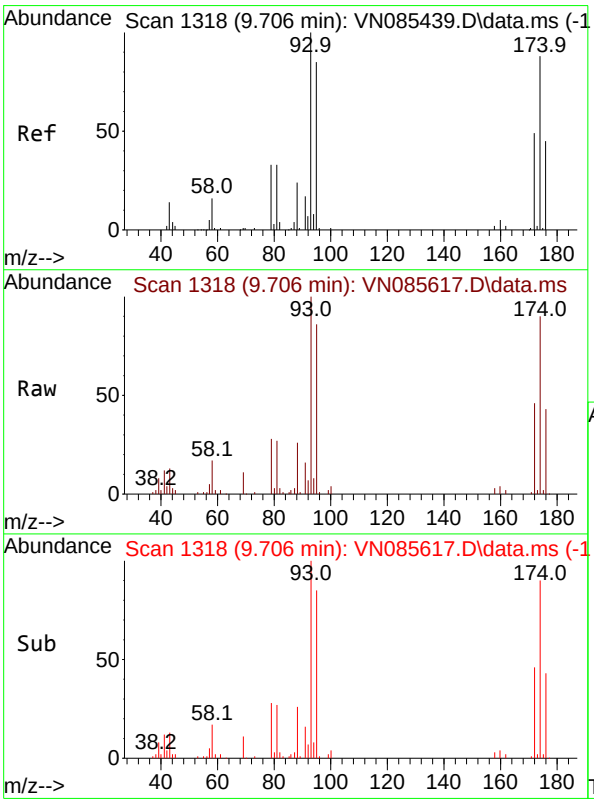
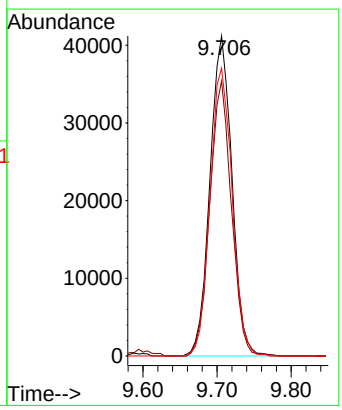
Supervised By :Mahesh Dadoda 02/04/2025

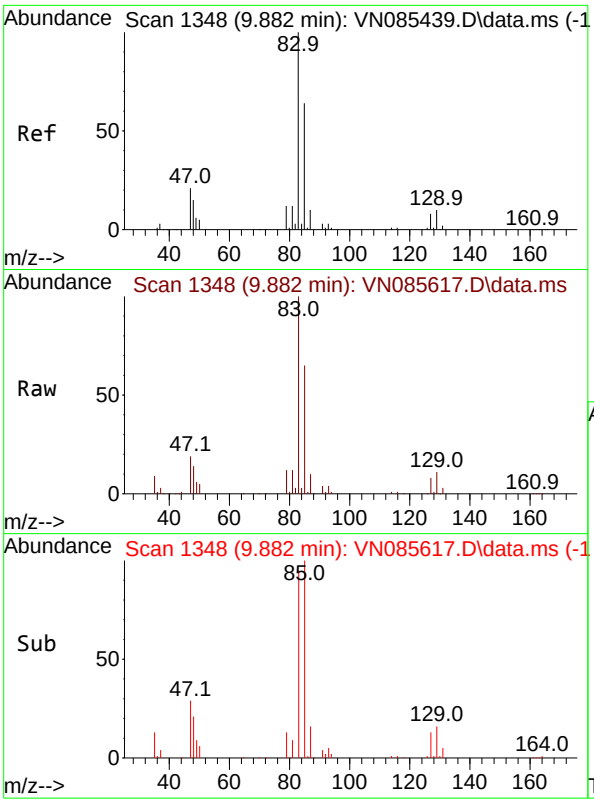


#46
Dibromomethane
Concen: 47.501 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 93 Resp: 84871

Ion	Ratio	Lower	Upper
93	100		
95	84.4	64.7	97.1
174	90.3	69.0	103.4

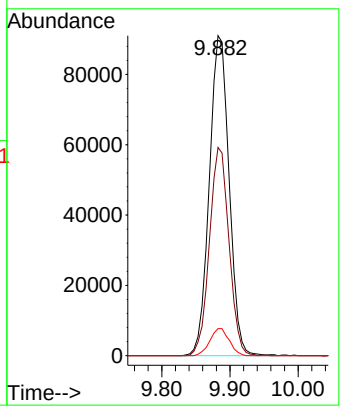




#47
Bromodichloromethane
Concen: 50.527 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 83 Resp: 18392

Ion	Ratio	Lower	Upper
83	100		
85	65.1	51.2	76.8
127	8.5	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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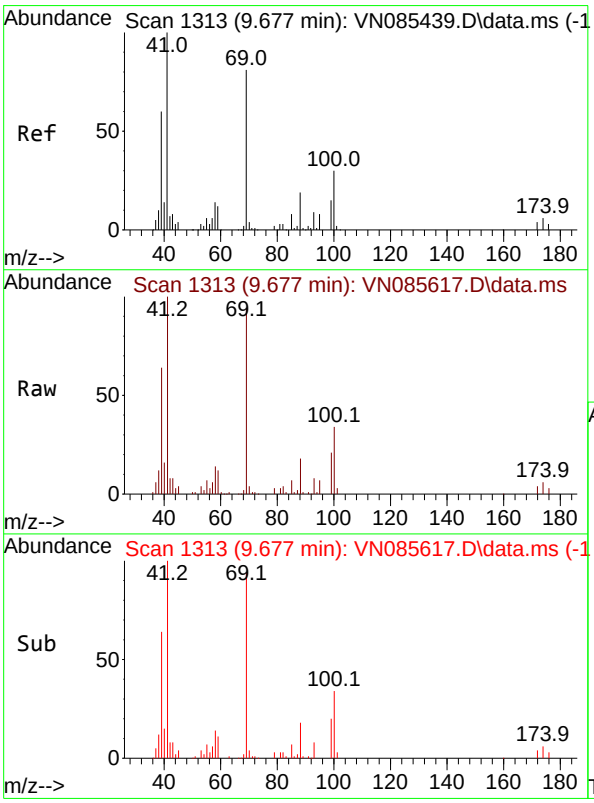
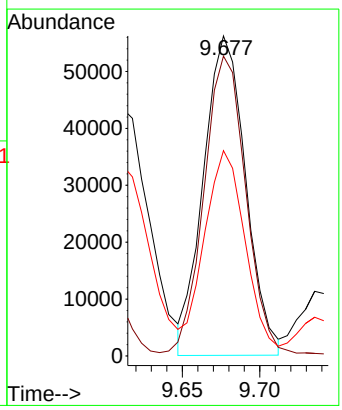
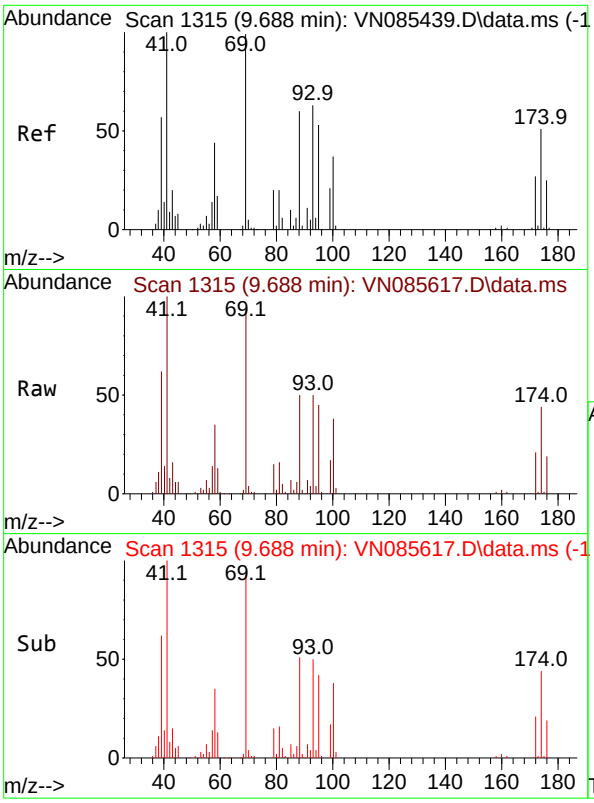


#48
Methyl methacrylate
Concen: 45.301 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 41 Resp: 106379

Ion	Ratio	Lower	Upper
41	100		
69	93.6	64.7	97.1
39	62.5	49.0	73.6

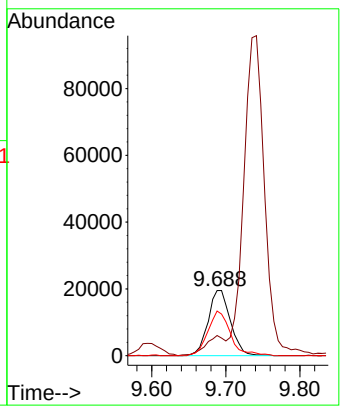




#49
1,4-Dioxane
Concen: 1035.537 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 88 Resp: 4095

Ion	Ratio	Lower	Upper
88	100		
43	26.9	26.6	39.8
58	69.0	59.5	89.3



Instrument :
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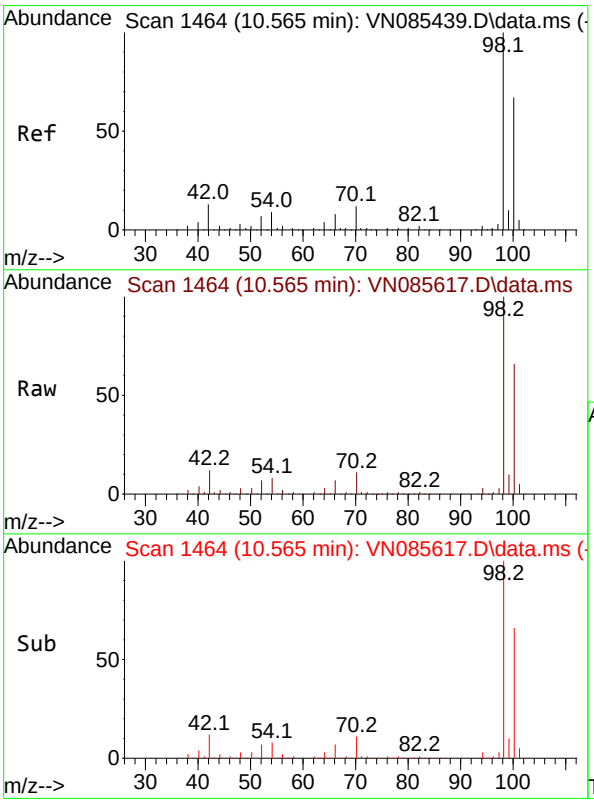
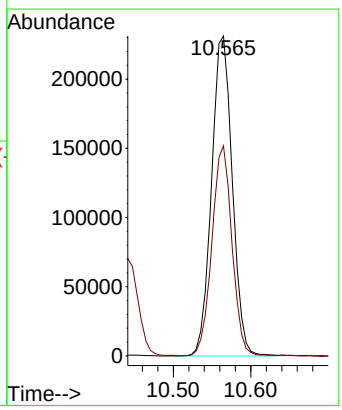
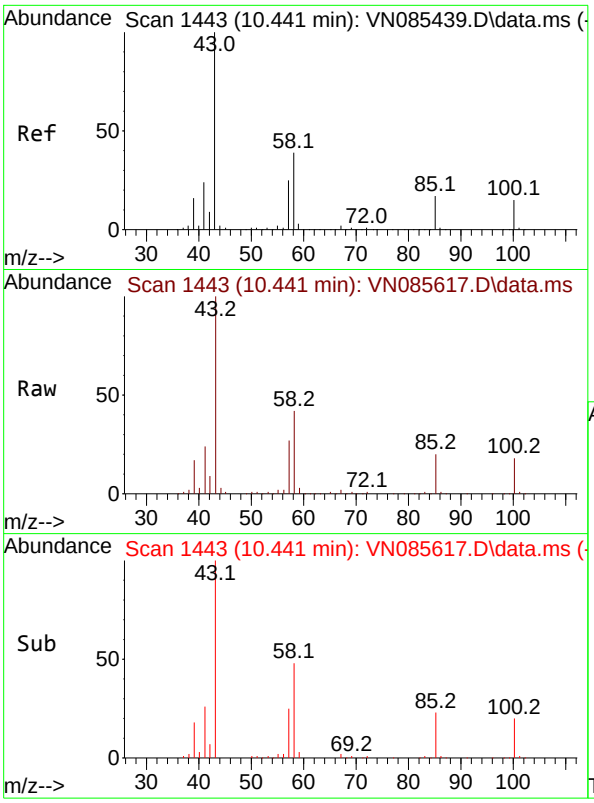


#50
Toluene-d8
Concen: 52.598 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 98 Resp: 429609

Ion	Ratio	Lower	Upper
98	100		
100	63.4	52.2	78.4





#51
4-Methyl-2-Pentanone
Concen: 233.994 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 70853

Ion	Ratio	Lower	Upper
43	100		
58	42.0	30.5	45.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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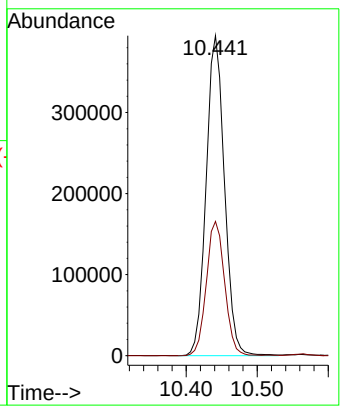
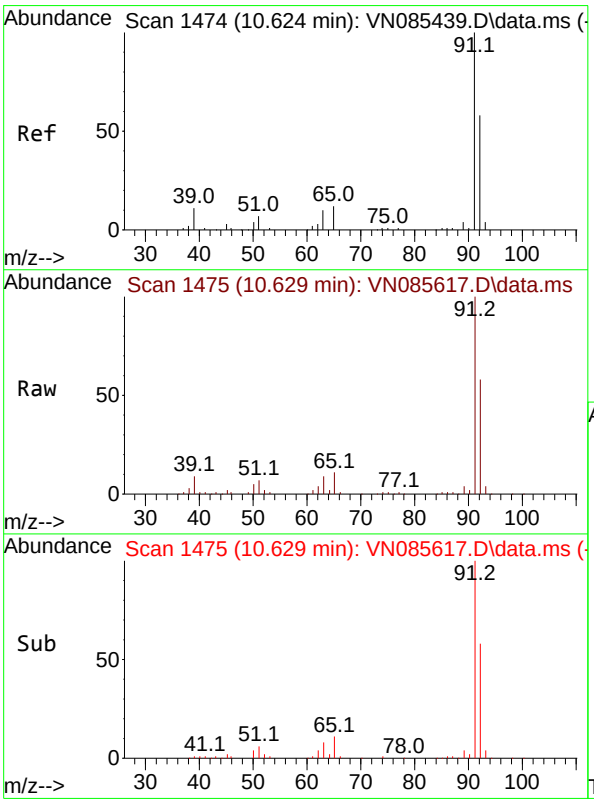
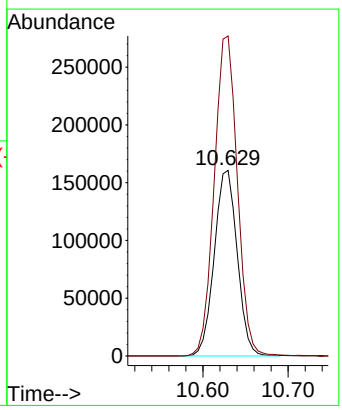


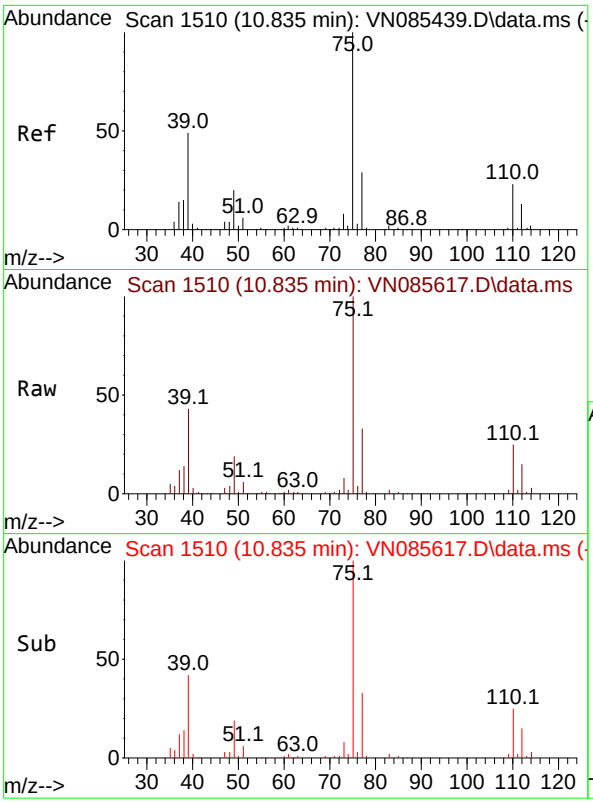


#52
Toluene
Concen: 53.534 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 92 Resp: 300704

Ion	Ratio	Lower	Upper
92	100		
91	173.9	139.2	208.8

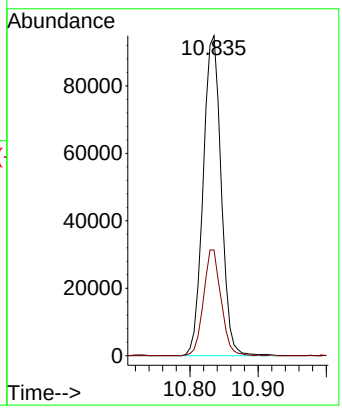




#53
t-1,3-Dichloropropene
Concen: 50.697 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 17439

Ion	Ratio	Lower	Upper
75	100		
77	33.0	23.5	35.3



Instrument :
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ClientSampleId :
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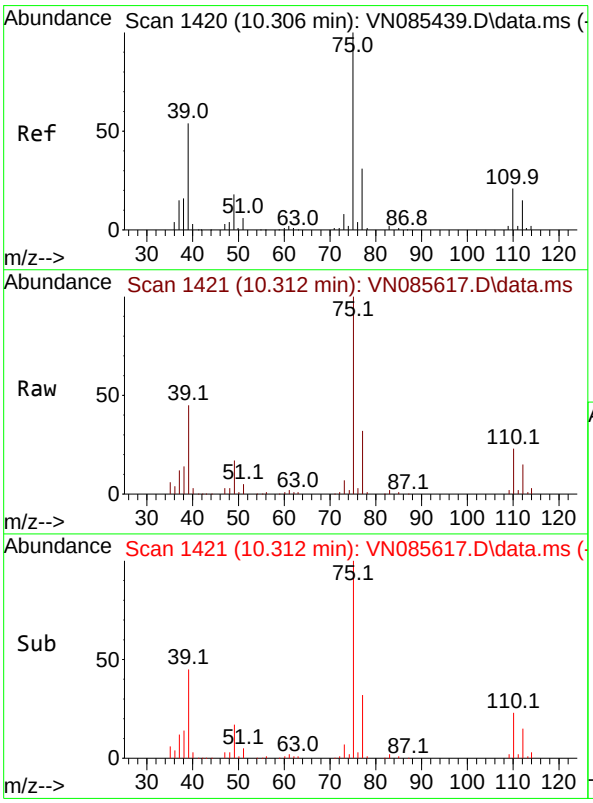
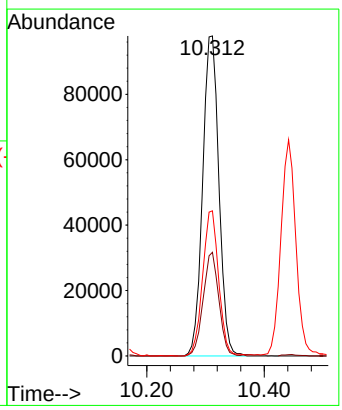
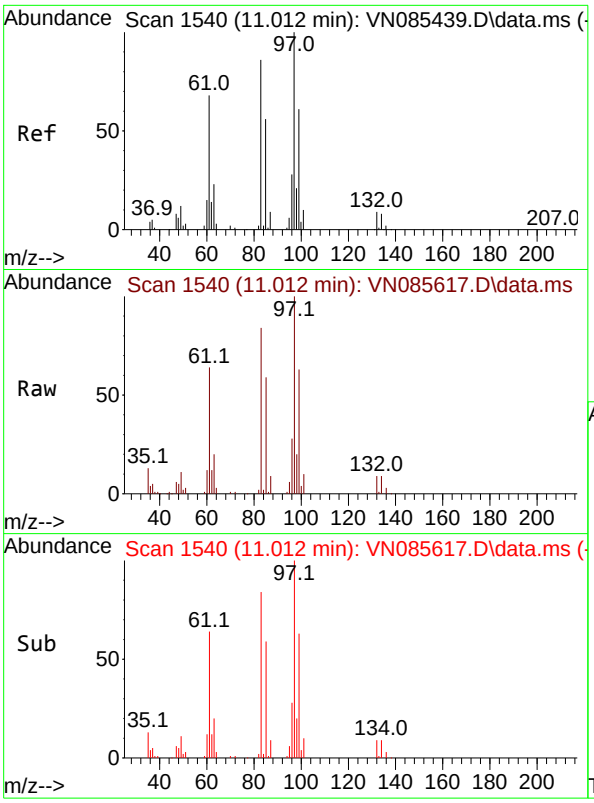


#54
cis-1,3-Dichloropropene
Concen: 51.107 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 187791

Ion	Ratio	Lower	Upper
75	100		
77	32.4	25.0	37.4
39	45.3	43.1	64.7

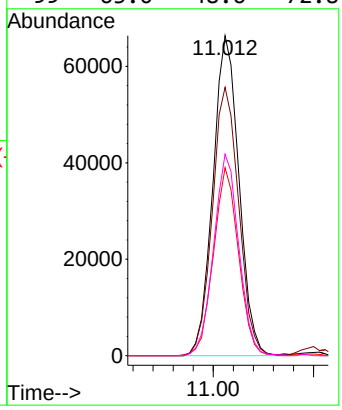




#55
1,1,2-Trichloroethane
Concen: 53.625 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 97 Resp: 11920

Ion	Ratio	Lower	Upper
97	100		
83	83.8	69.0	103.6
85	58.8	44.6	66.8
99	63.0	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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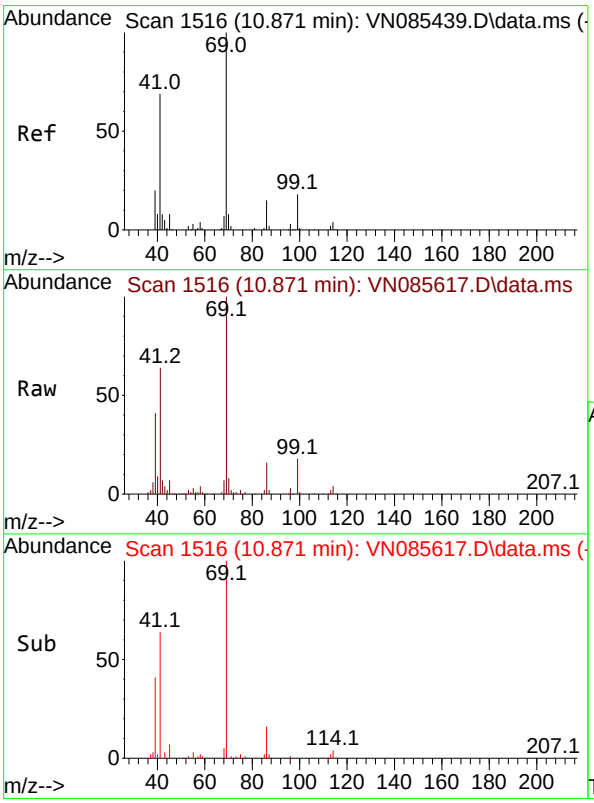
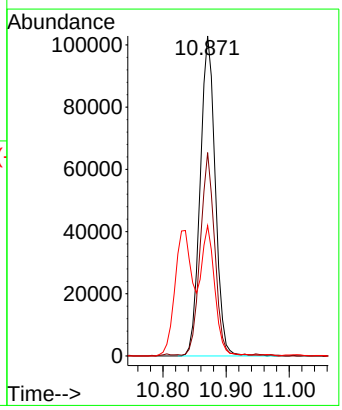
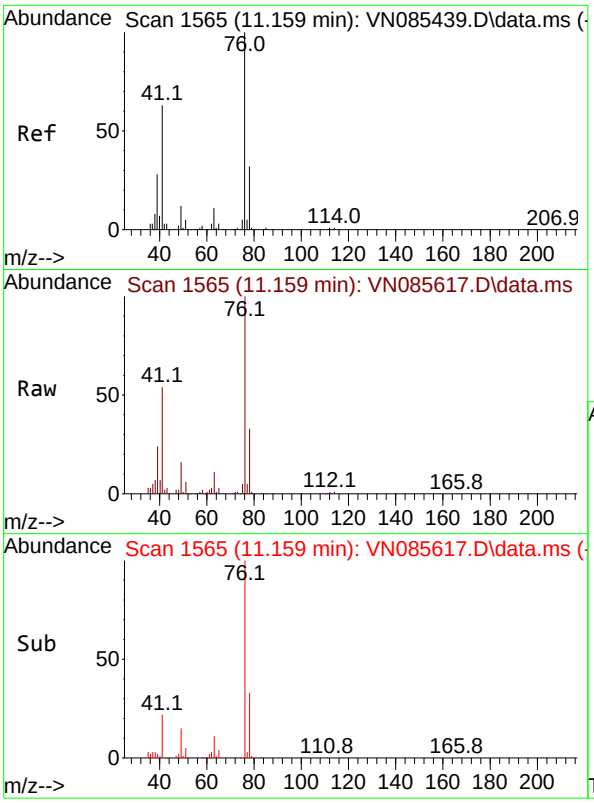


#56
Ethyl methacrylate
Concen: 45.764 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 69 Resp: 170732

Ion	Ratio	Lower	Upper
69	100		
41	59.8	54.6	82.0
39	36.3	32.4	48.6





#57
1,3-Dichloropropane
Concen: 52.111 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 76 Resp: 20142

Ion	Ratio	Lower	Upper
76	100		
78	32.1	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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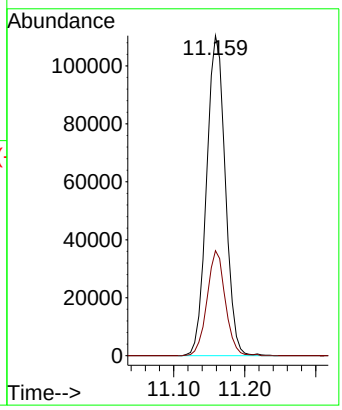
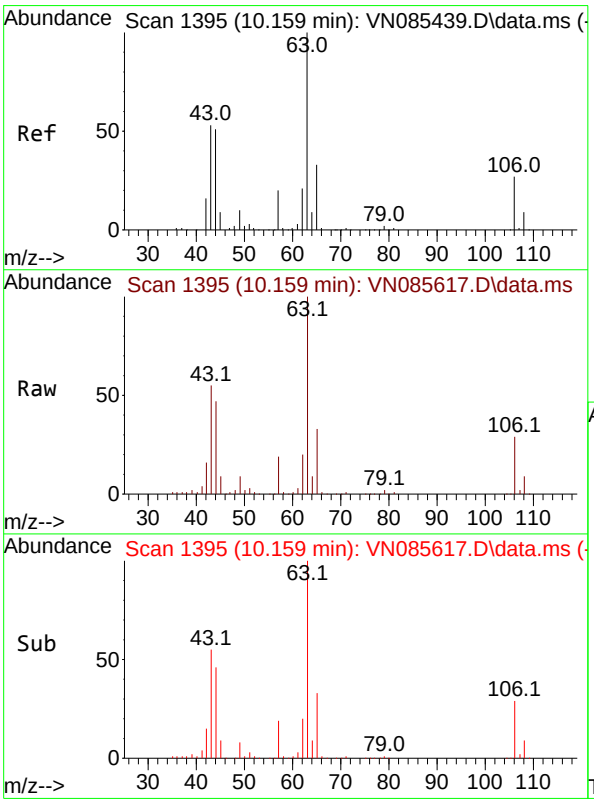
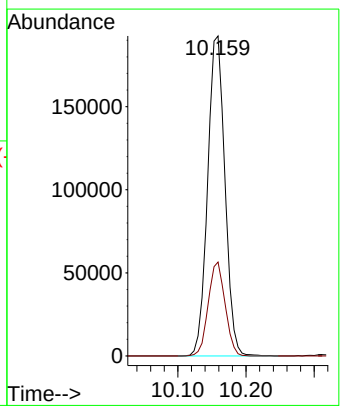


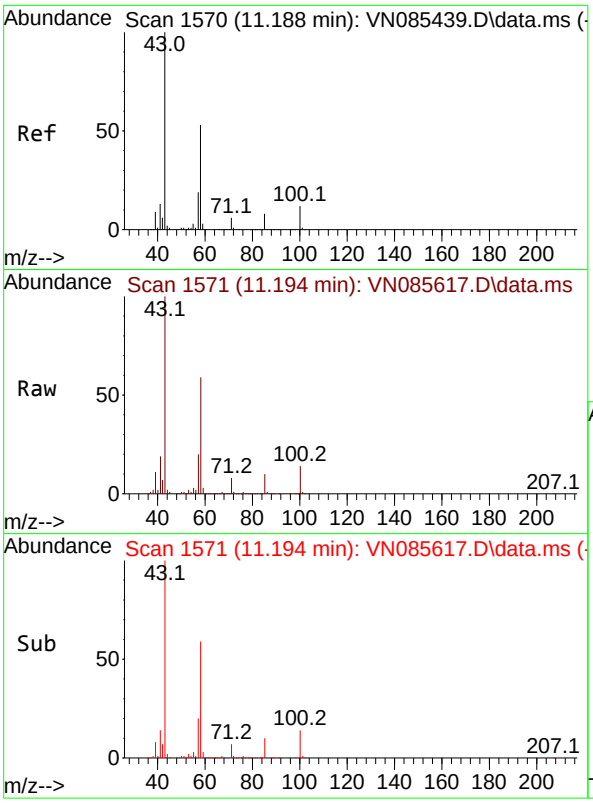


#58
2-Chloroethyl Vinyl ether
Concen: 241.104 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 63 Resp: 340114

Ion	Ratio	Lower	Upper
63	100		
106	28.6	21.6	32.4





#59
2-Hexanone
Concen: 238.718 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 50861

Ion	Ratio	Lower	Upper
43	100		
58	58.6	26.2	78.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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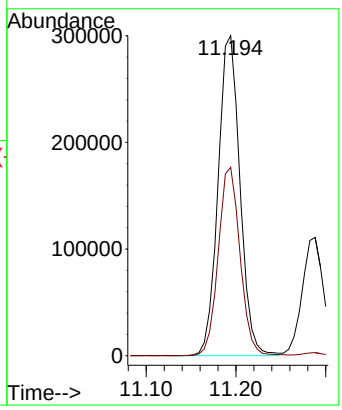
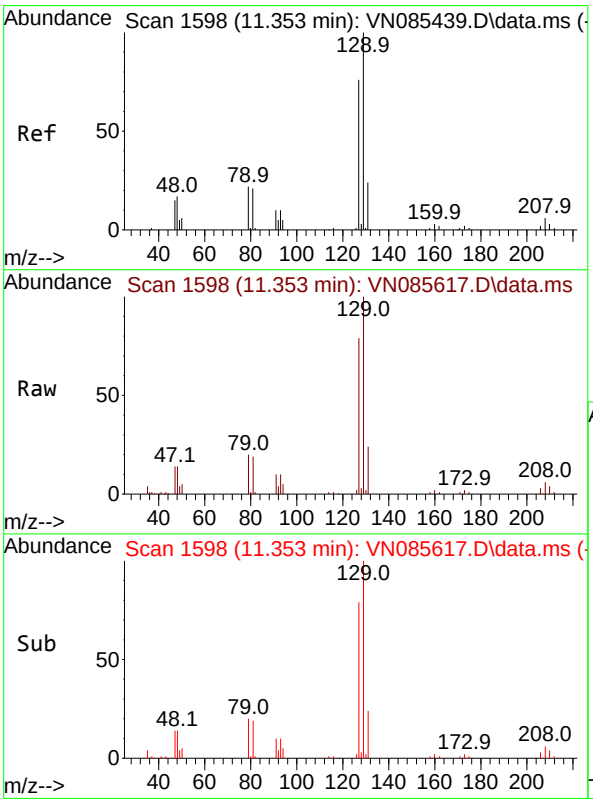
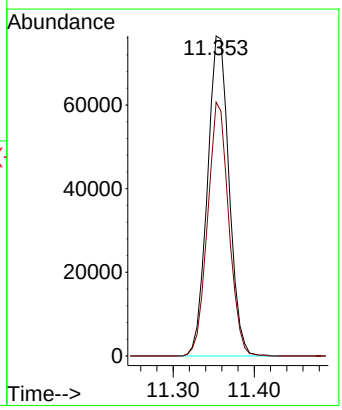


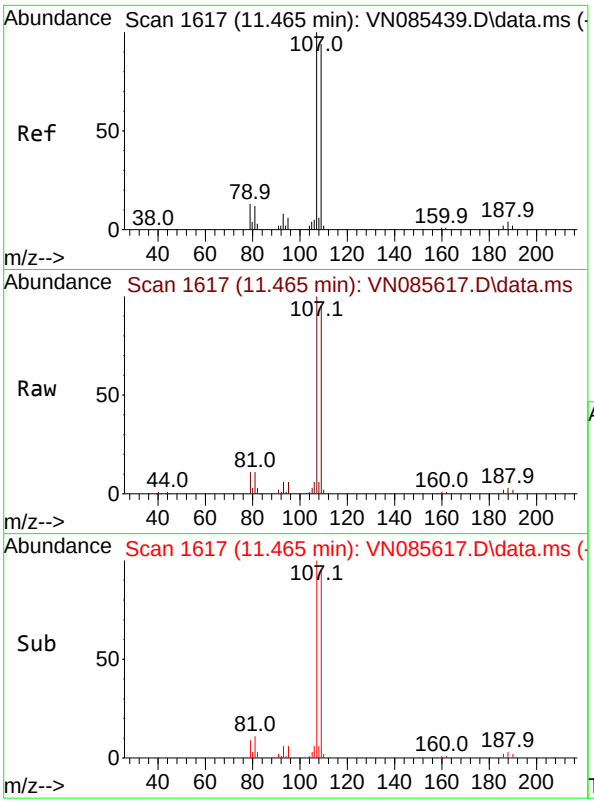


#60
Dibromochloromethane
Concen: 52.795 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:129 Resp: 141685

Ion	Ratio	Lower	Upper
129	100		
127	77.4	38.6	115.8





#61
1,2-Dibromoethane
Concen: 50.994 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:107 Resp: 11283

Ion	Ratio	Lower	Upper
107	100		
109	94.9	75.9	113.9

Instrument :
MSVOA_N
ClientSampleId :
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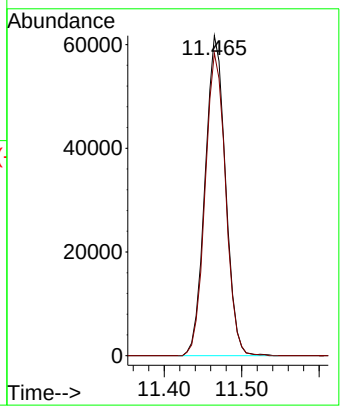
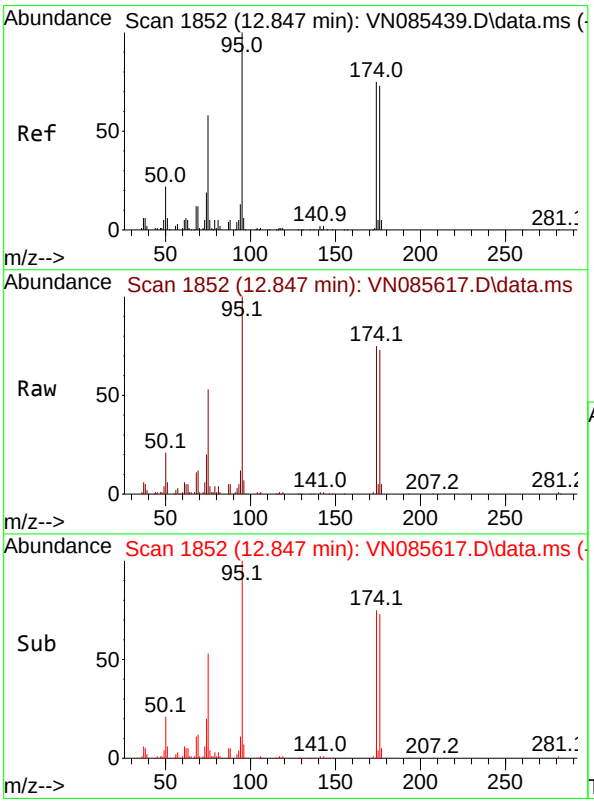
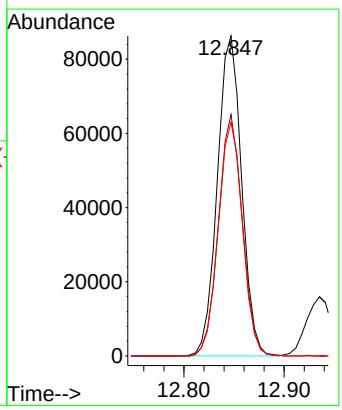


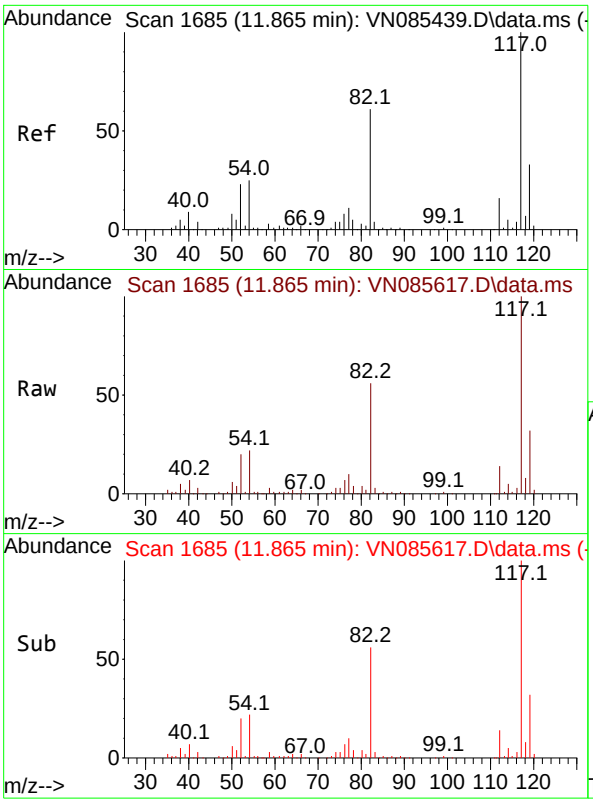


#62
4-Bromofluorobenzene
Concen: 51.906 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 95 Resp: 145023

Ion	Ratio	Lower	Upper
95	100		
174	74.1	0.0	145.0
176	72.7	0.0	142.4

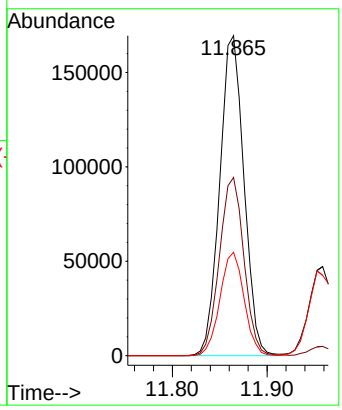




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:117 Resp: 30132

Ion	Ratio	Lower	Upper
117	100		
82	55.7	48.6	72.8
119	32.3	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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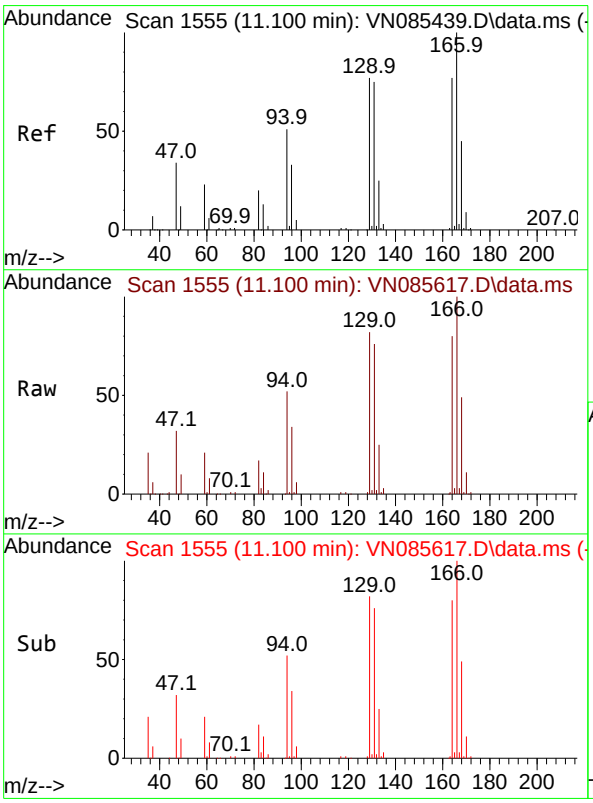
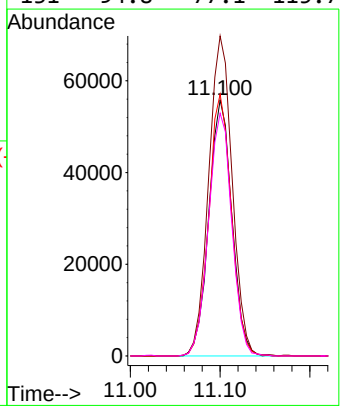
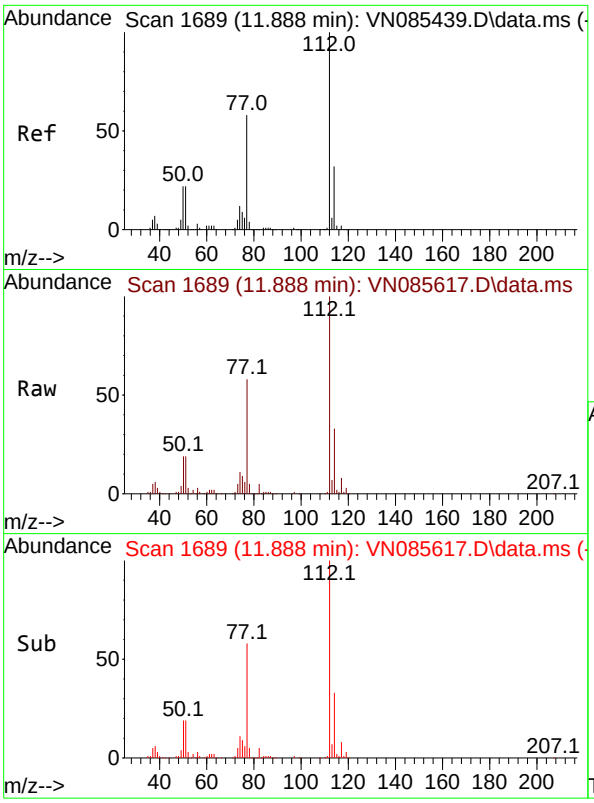


#64
Tetrachloroethene
Concen: 48.451 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:164 Resp: 99530

Ion	Ratio	Lower	Upper
164	100		
166	125.0	103.4	155.2
129	102.2	79.2	118.8
131	94.8	77.1	115.7

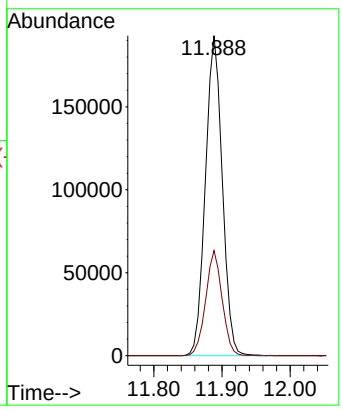




#65
Chlorobenzene
Concen: 50.273 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:112 Resp: 33184

Ion	Ratio	Lower	Upper
112	100		
114	32.9	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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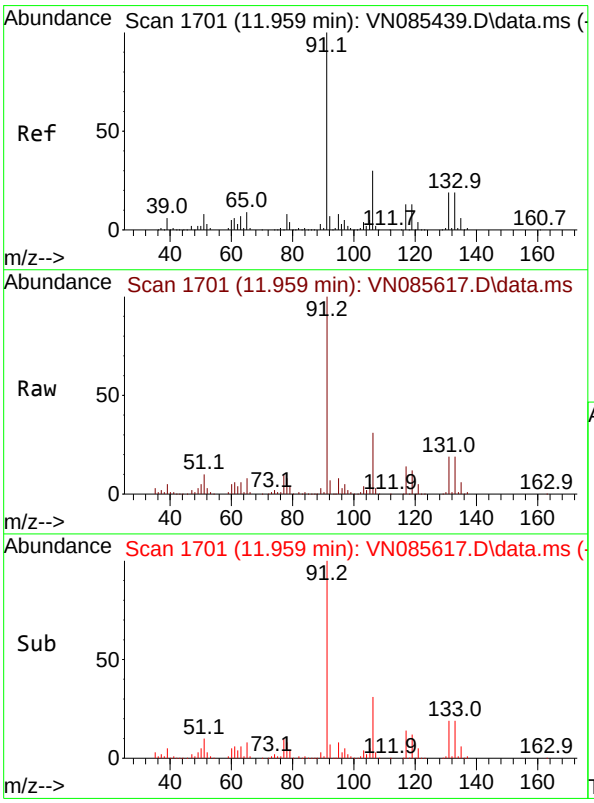
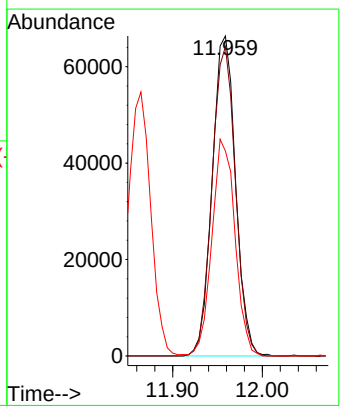
Supervised By :Mahesh Dadoda 02/04/2025

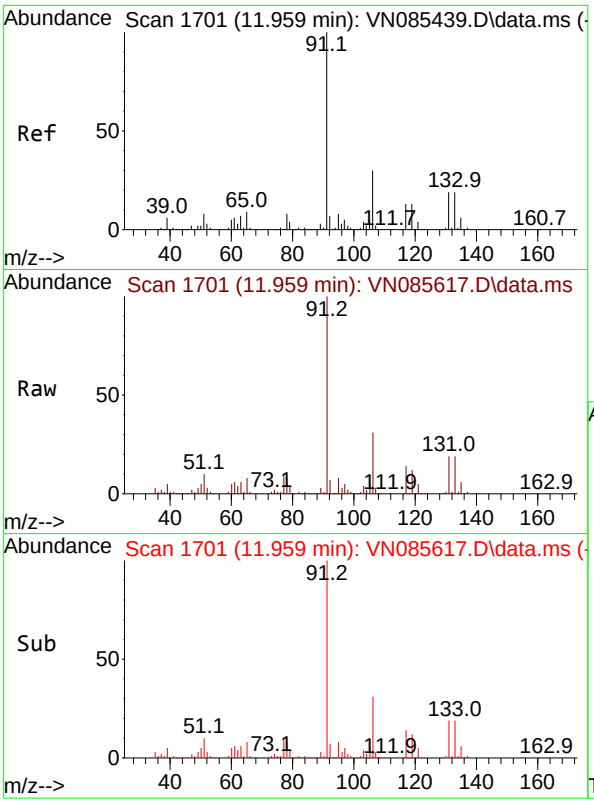


#66
1,1,1,2-Tetrachloroethane
Concen: 49.526 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:131 Resp: 119985

Ion	Ratio	Lower	Upper
131	100		
133	96.7	47.4	142.3
119	67.0	33.1	99.5





#67
Ethyl Benzene
Concen: 52.793 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 91 Resp: 56759

Ion	Ratio	Lower	Upper
91	100		
106	30.5	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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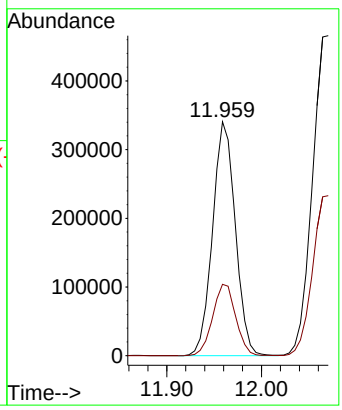
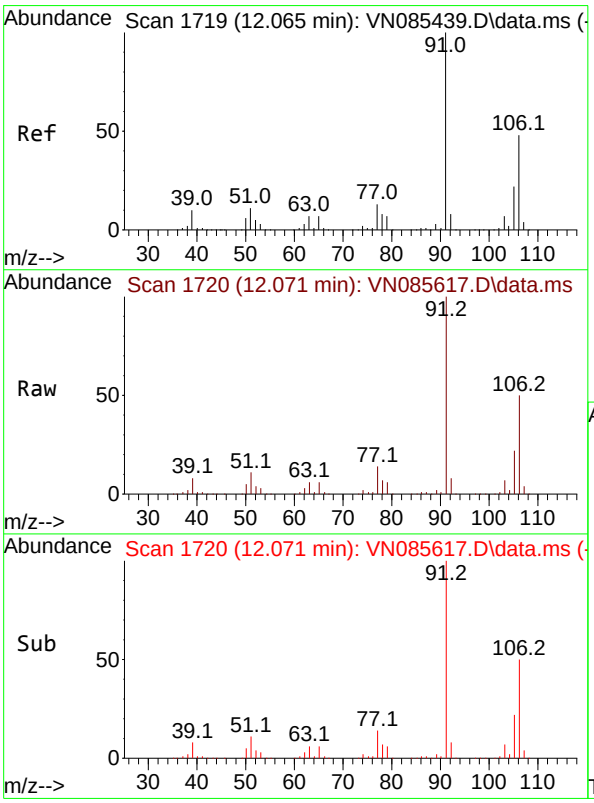
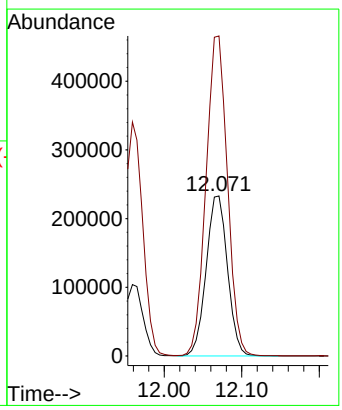


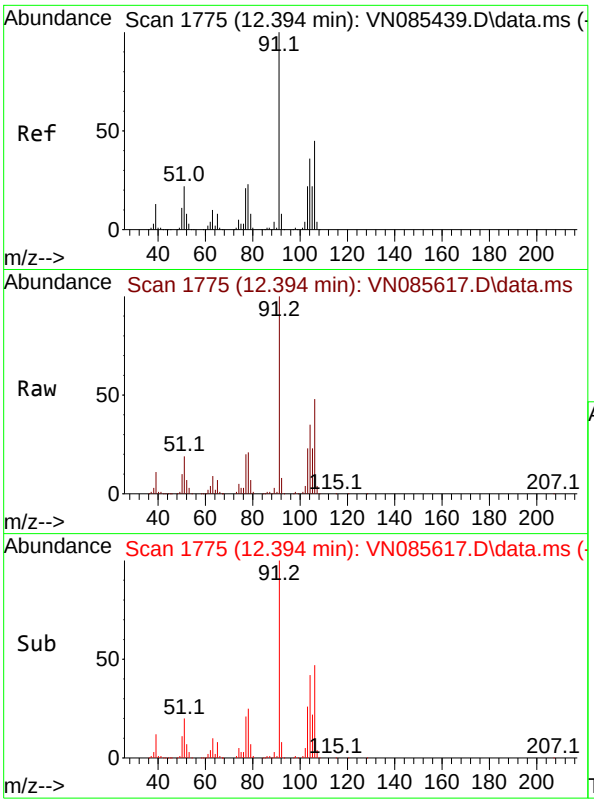


#68
m/p-Xylenes
Concen: 112.274 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:106 Resp: 446120

Ion	Ratio	Lower	Upper
106	100		
91	200.5	167.7	251.5





#69
o-Xylene
Concen: 56.132 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:106 Resp: 21315

Ion	Ratio	Lower	Upper
106	100		
91	210.1	110.4	331.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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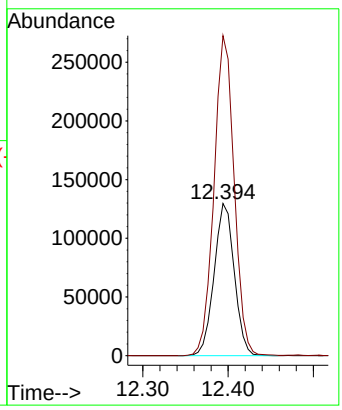
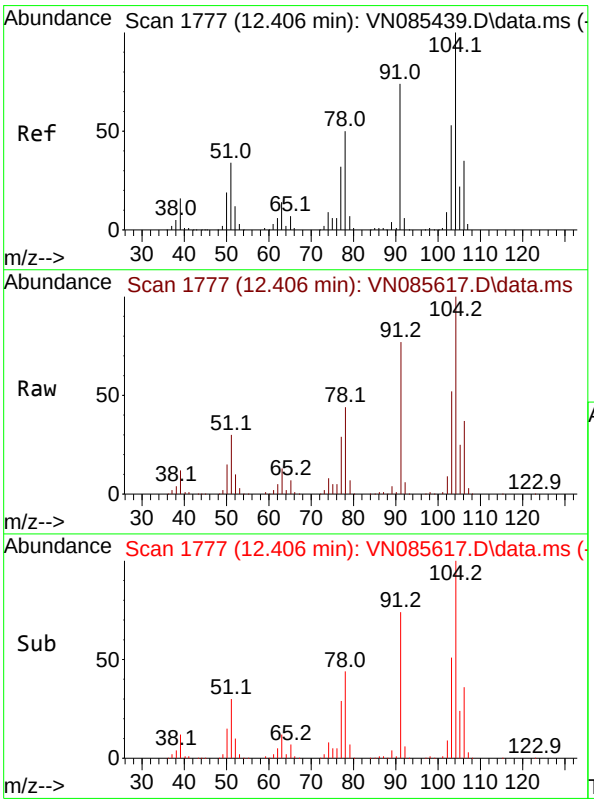
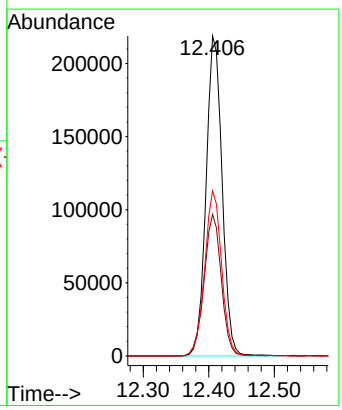


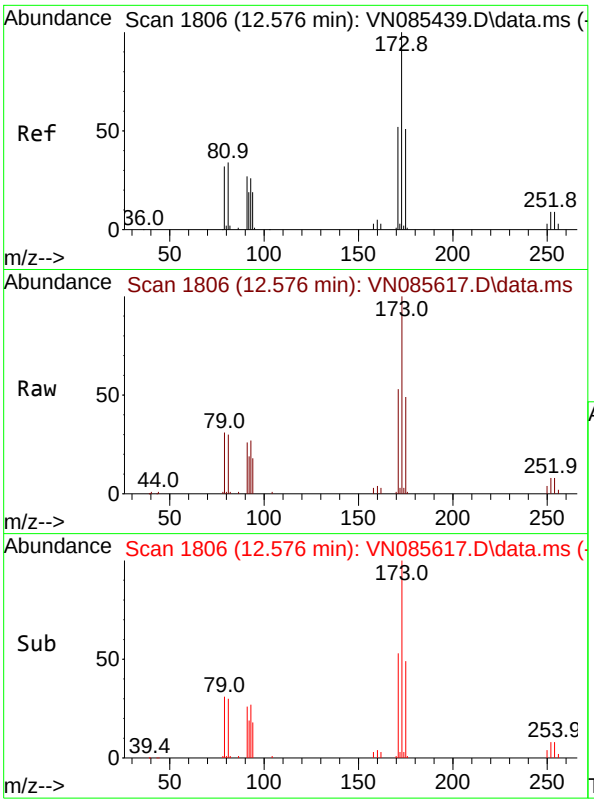


#70
Styrene
Concen: 59.204 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:104 Resp: 372069

Ion	Ratio	Lower	Upper
104	100		
78	47.4	42.5	63.7
103	54.7	43.8	65.8

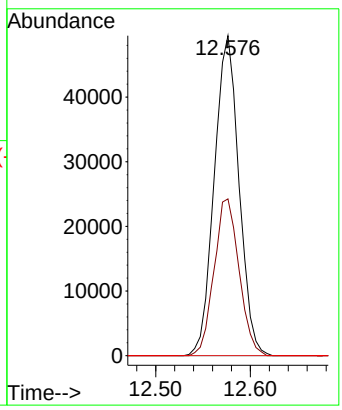




#71
Bromoform
Concen: 51.832 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:173 Resp: 8984

Ion	Ratio	Lower	Upper
173	100		
175	49.5	24.4	73.2
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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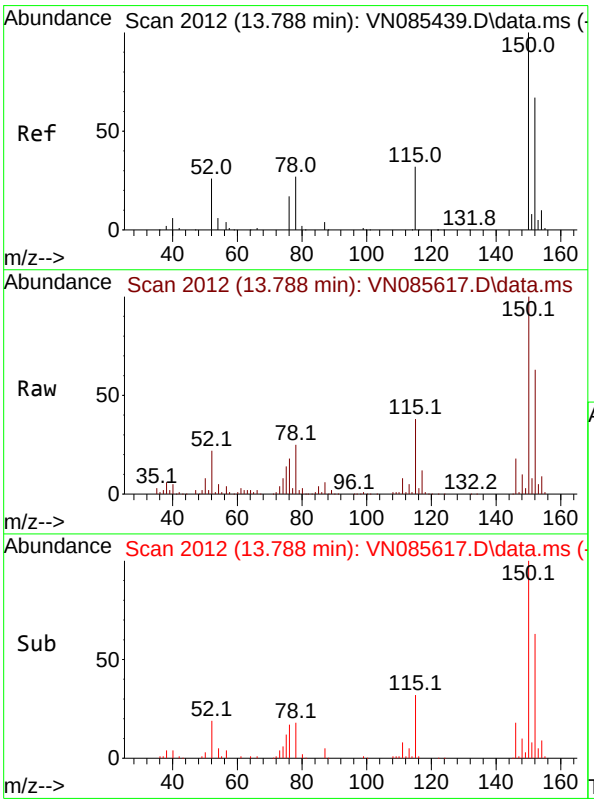
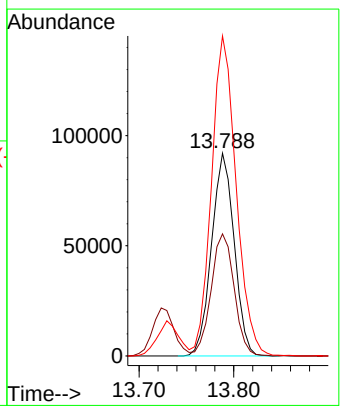
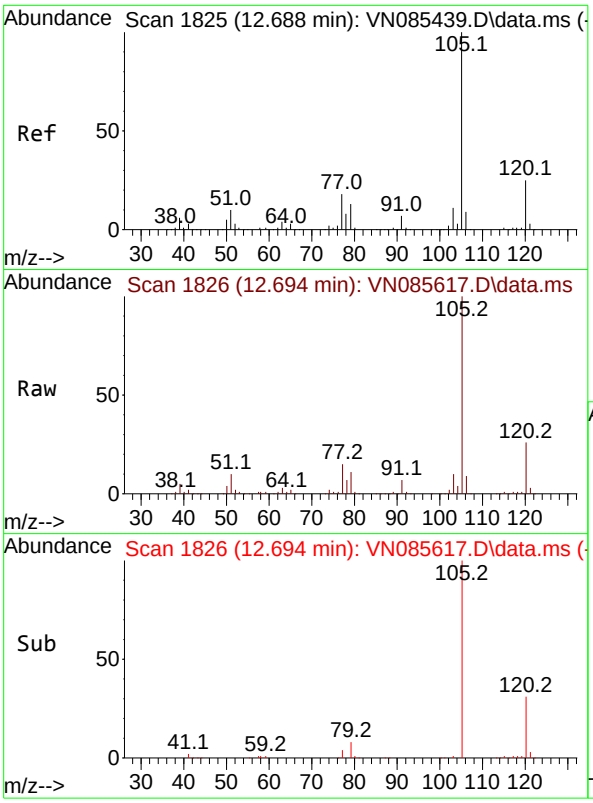


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:152 Resp: 152662

Ion	Ratio	Lower	Upper
152	100		
115	61.5	31.1	93.3
150	172.3	0.0	343.6





#73
Isopropylbenzene
Concen: 51.773 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:105 Resp: 53343

Ion	Ratio	Lower	Upper
105	100		
120	26.3	12.8	38.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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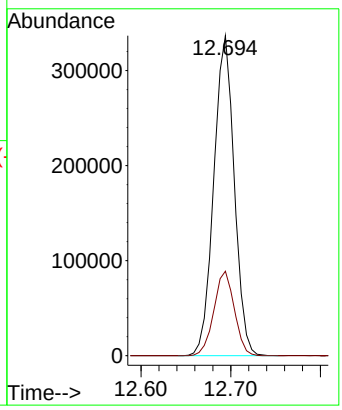
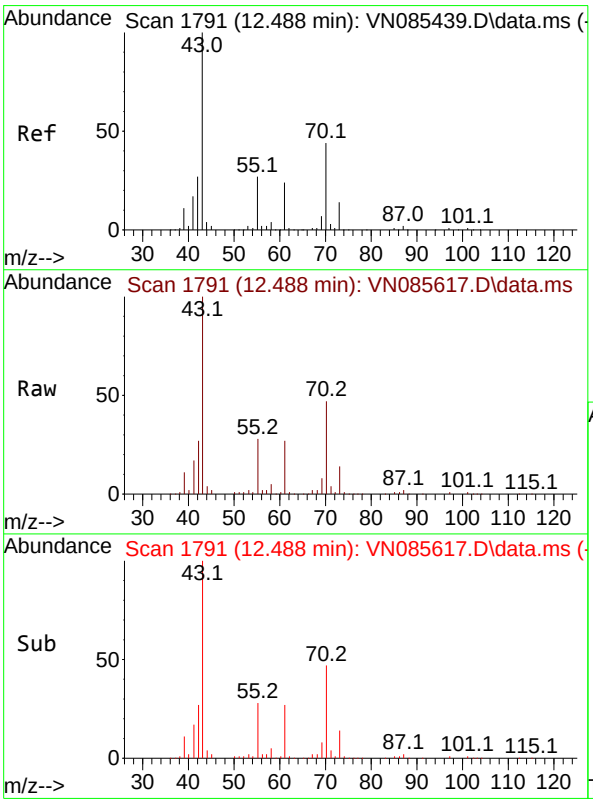
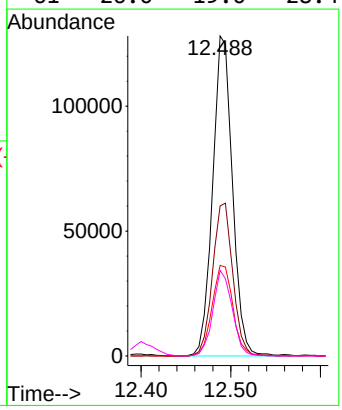


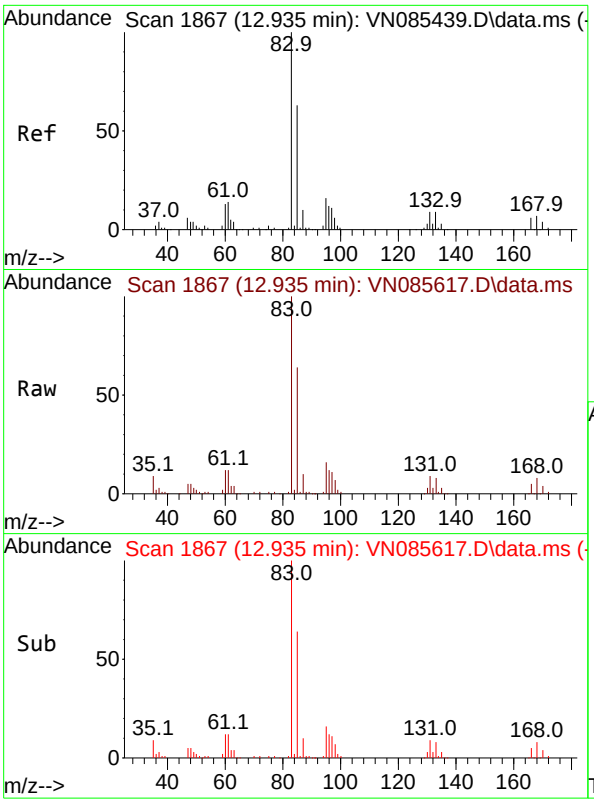


#74
N-amyl acetate
Concen: 42.452 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 43 Resp: 196603

Ion	Ratio	Lower	Upper
43	100		
70	48.7	34.0	51.0
55	29.8	21.4	32.2
61	26.0	19.0	28.4





#75
1,1,2,2-Tetrachloroethane
Concen: 47.726 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 83 Resp: 17370

Ion	Ratio	Lower	Upper
83	100		
131	10.0	4.8	14.4
85	63.7	32.2	96.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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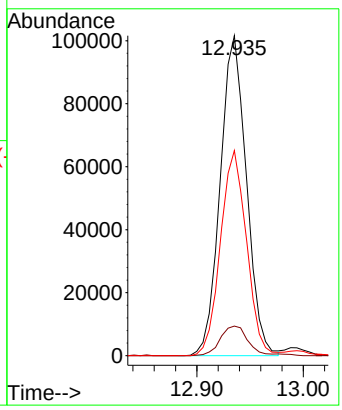
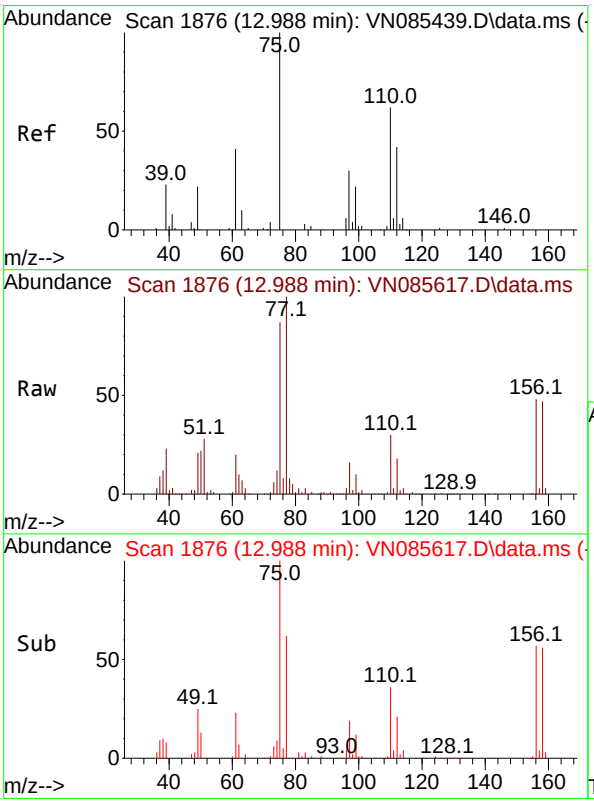
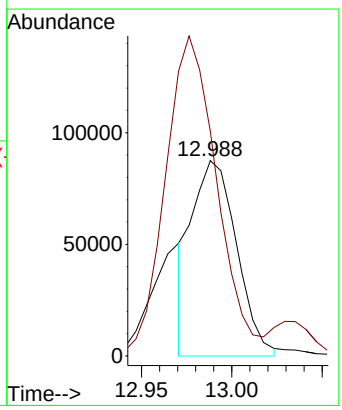


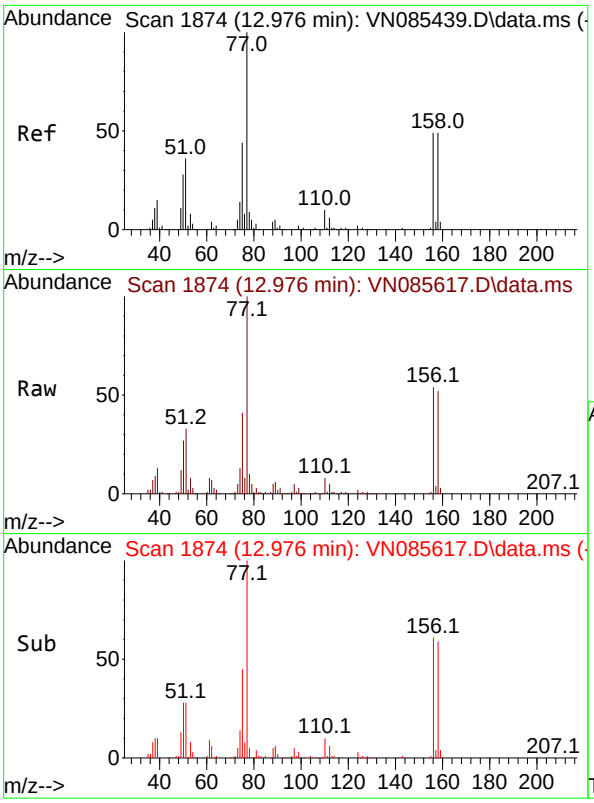


#76
1,2,3-Trichloropropane
Concen: 48.596 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 150787

Ion	Ratio	Lower	Upper
75	100		
77	188.8	109.7	329.2

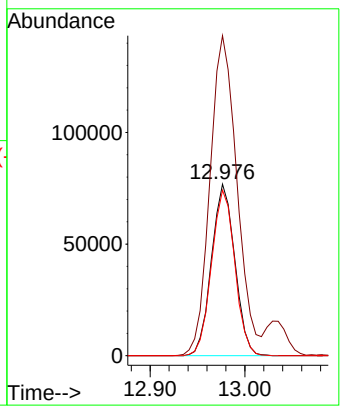




#77
Bromobenzene
Concen: 48.837 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:156 Resp: 13146

Ion	Ratio	Lower	Upper
156	100		
77	216.6	114.1	342.4
158	96.2	48.9	146.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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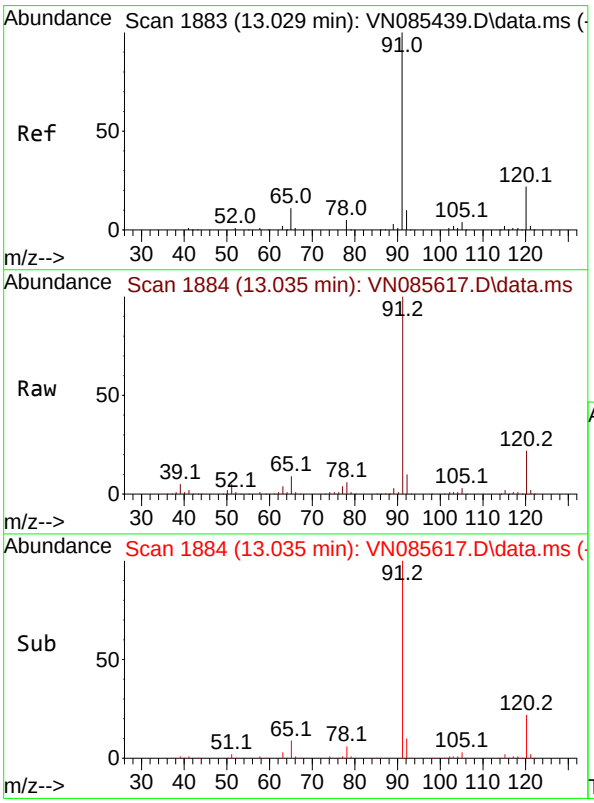
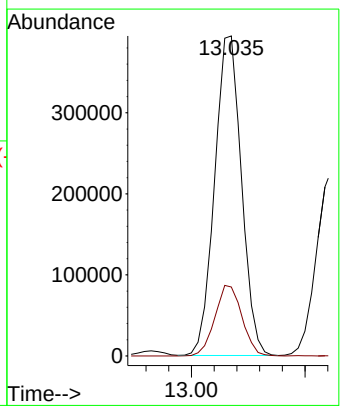
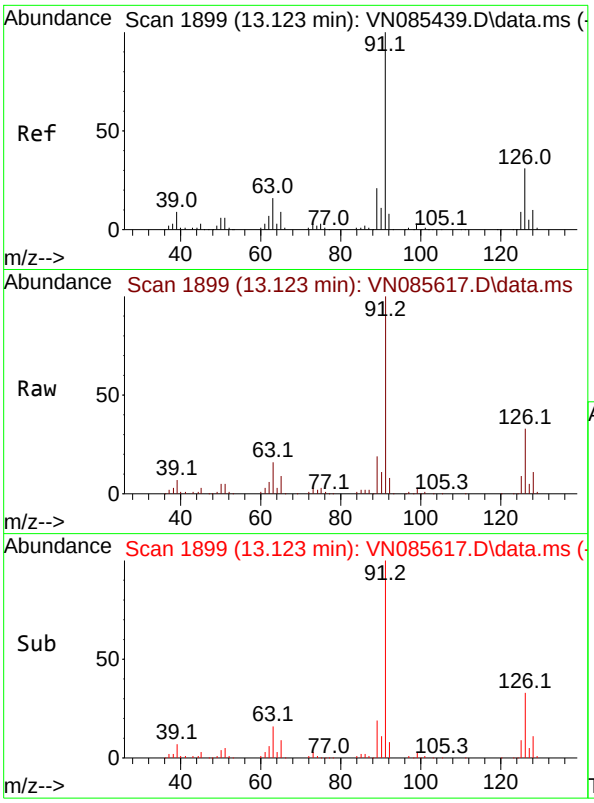


#78
n-propylbenzene
Concen: 53.002 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 91 Resp: 646489

Ion	Ratio	Lower	Upper
91	100		
120	22.3	10.9	32.6





#79
2-Chlorotoluene
Concen: 48.821 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 91 Resp: 38540

Ion	Ratio	Lower	Upper
91	100		
126	33.8	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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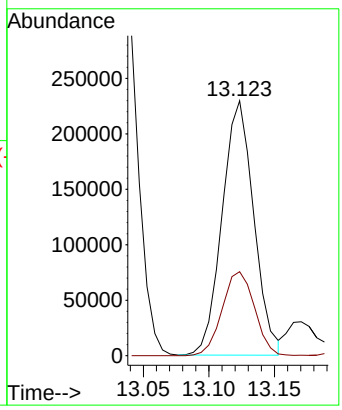
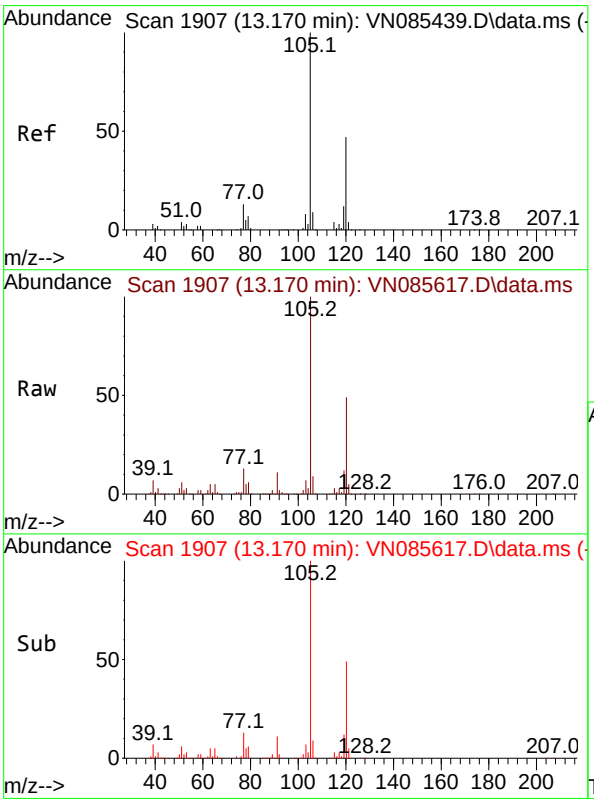
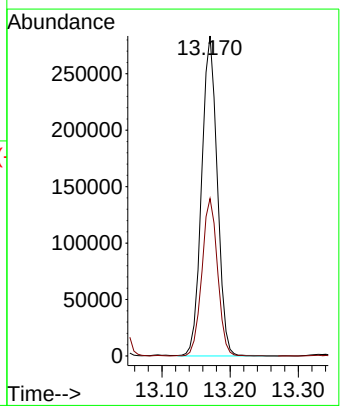


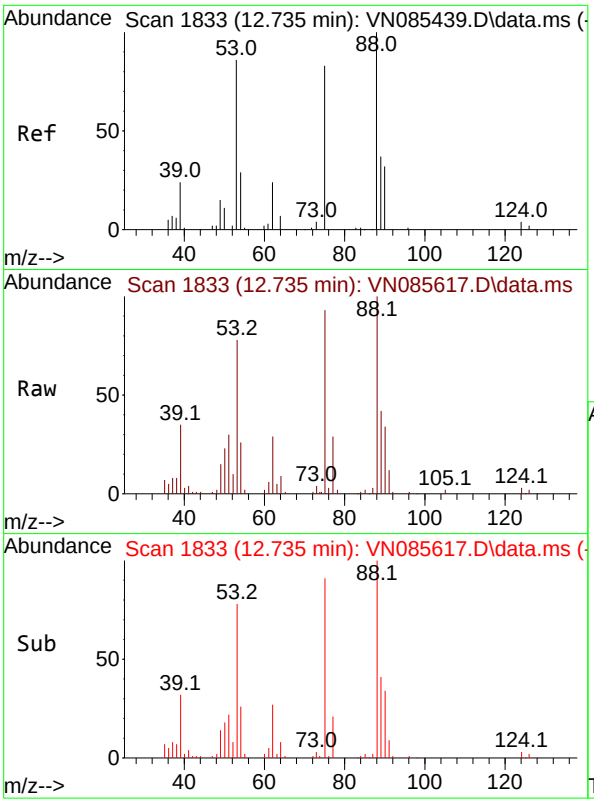


#80
1,3,5-Trimethylbenzene
Concen: 53.197 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:105 Resp: 452745

Ion	Ratio	Lower	Upper
105	100		
120	49.2	23.9	71.7





#81
trans-1,4-Dichloro-2-butene
Concen: 56.354 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 6463

Ion	Ratio	Lower	Upper
75	100		
53	80.9	95.6	143.4
89	42.8	37.0	55.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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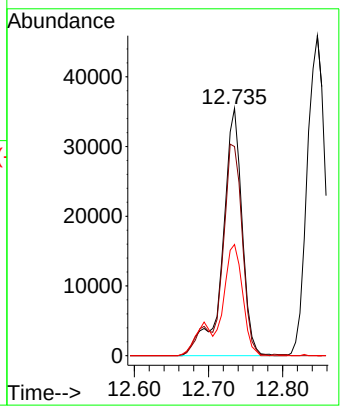
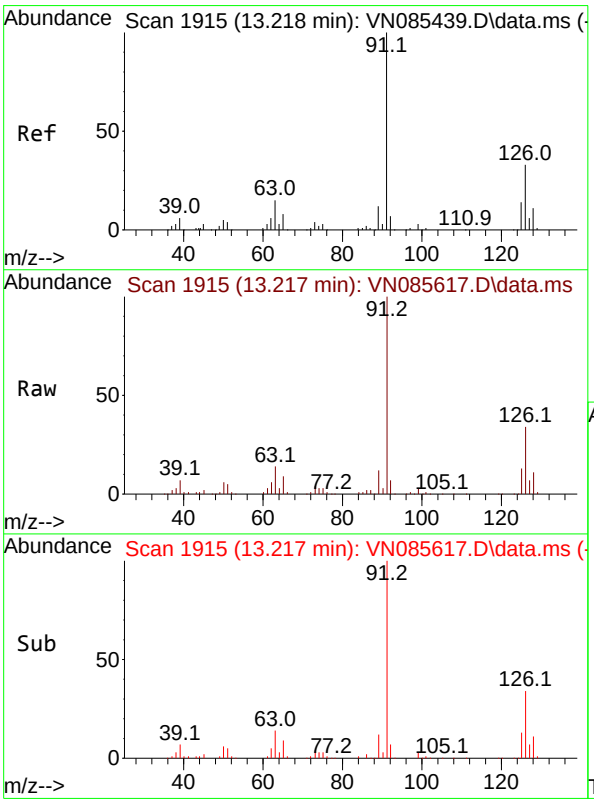
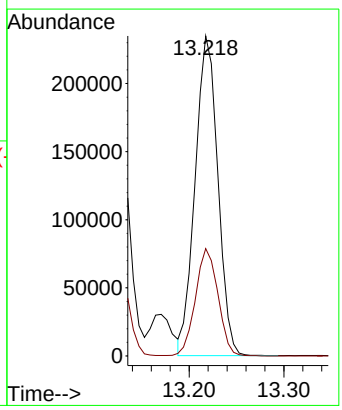


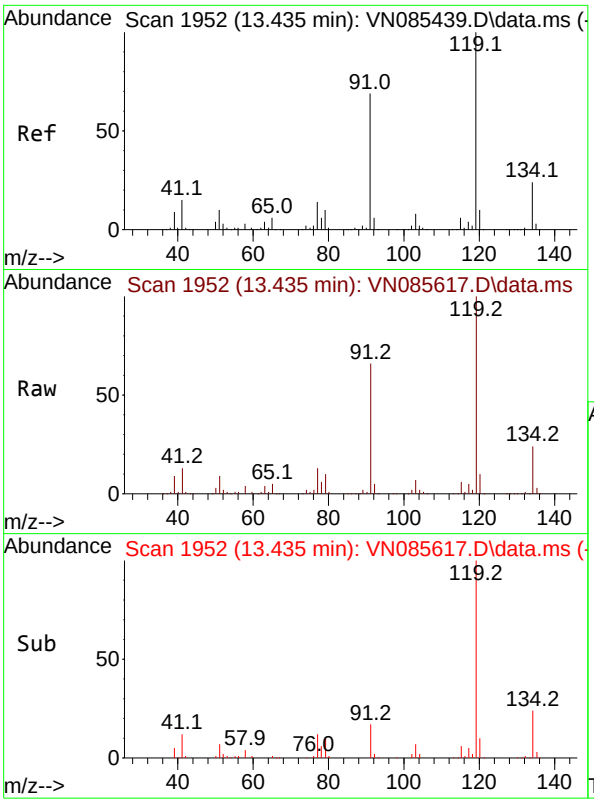


#82
4-Chlorotoluene
Concen: 49.770 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 91 Resp: 391197

Ion	Ratio	Lower	Upper
91	100		
126	33.4	15.9	47.7





#83
tert-Butylbenzene
Concen: 52.803 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

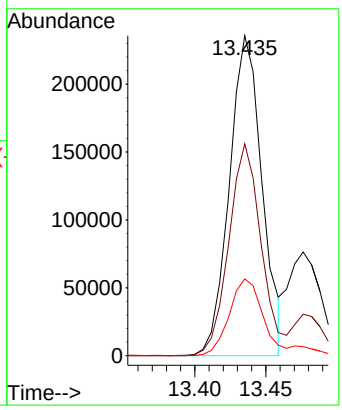
Tgt Ion:119 Resp: 37738

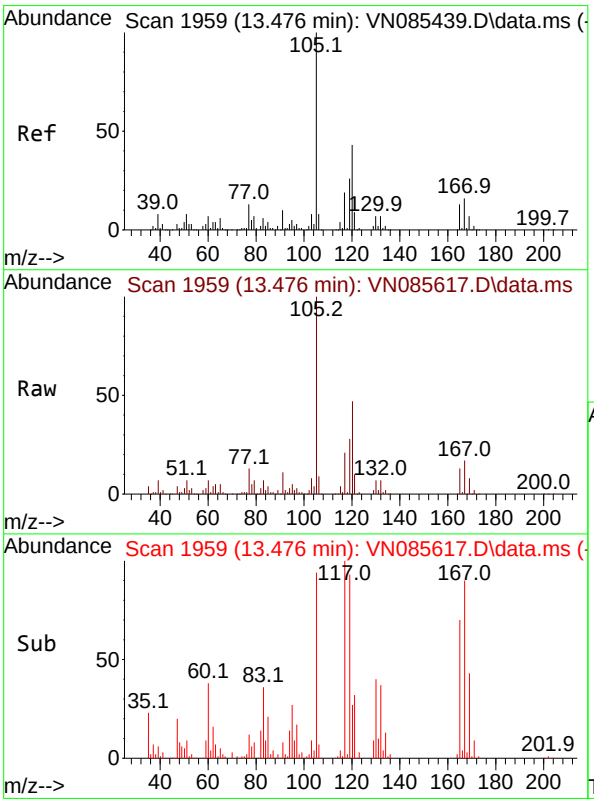
Ion	Ratio	Lower	Upper
119	100		
91	65.9	35.1	105.3
134	26.8	12.0	36.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

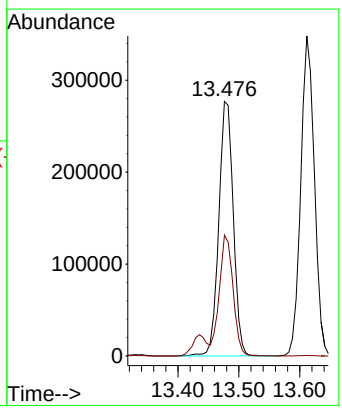


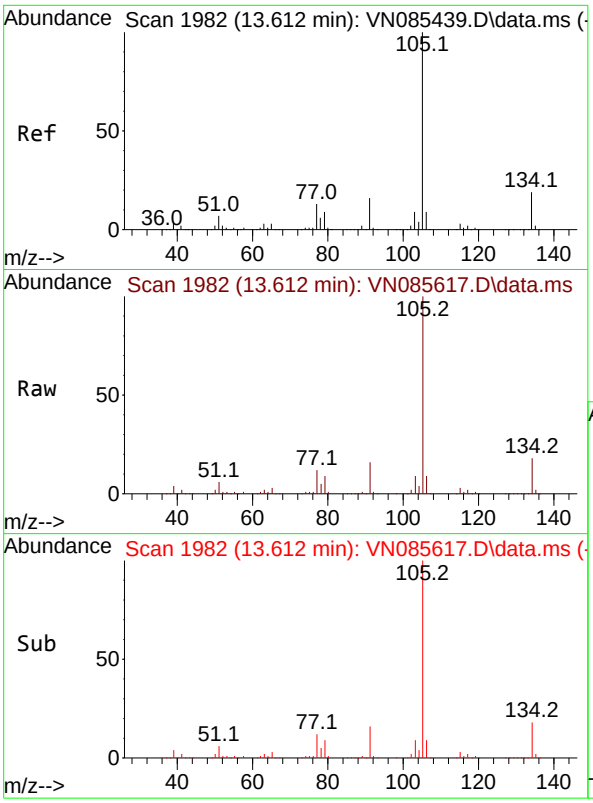


#84
1,2,4-Trimethylbenzene
Concen: 53.980 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:105 Resp: 457878

Ion	Ratio	Lower	Upper
105	100		
120	44.9	21.6	65.0





#85
sec-Butylbenzene
Concen: 54.590 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

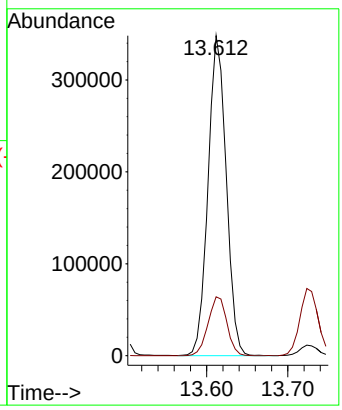
Tgt Ion:105 Resp: 54074

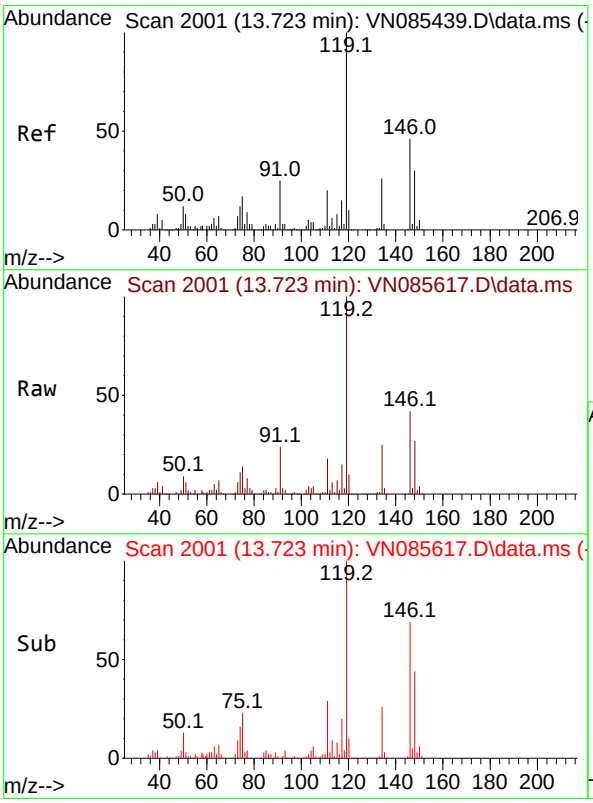
Ion	Ratio	Lower	Upper
105	100		
134	19.0	9.7	28.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

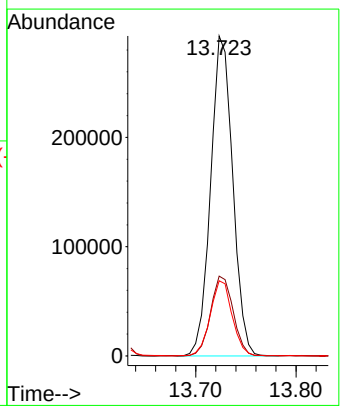


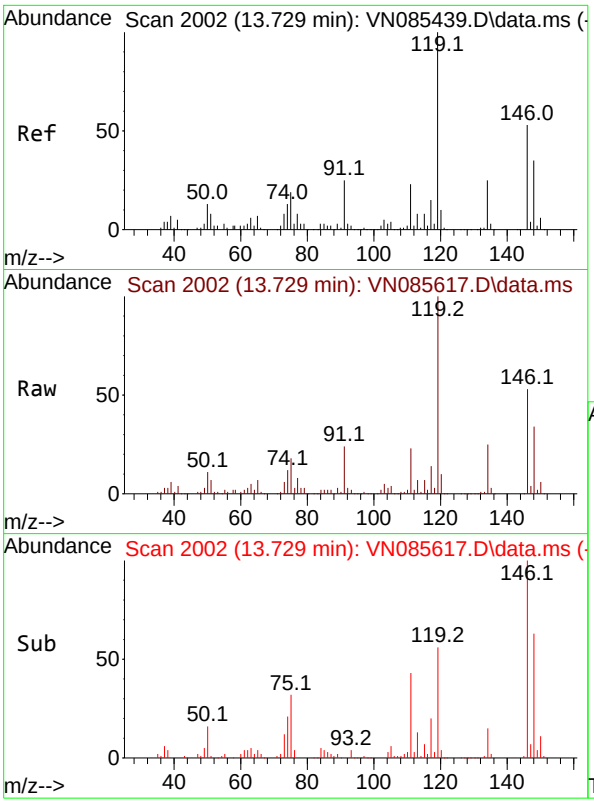


#86
p-Isopropyltoluene
Concen: 50.266 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:119 Resp: 448653

Ion	Ratio	Lower	Upper
119	100		
134	25.5	12.7	38.0
91	23.3	12.7	38.1

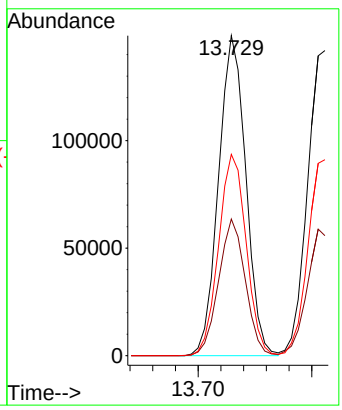




#87
1,3-Dichlorobenzene
Concen: 50.109 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:146 Resp: 24841

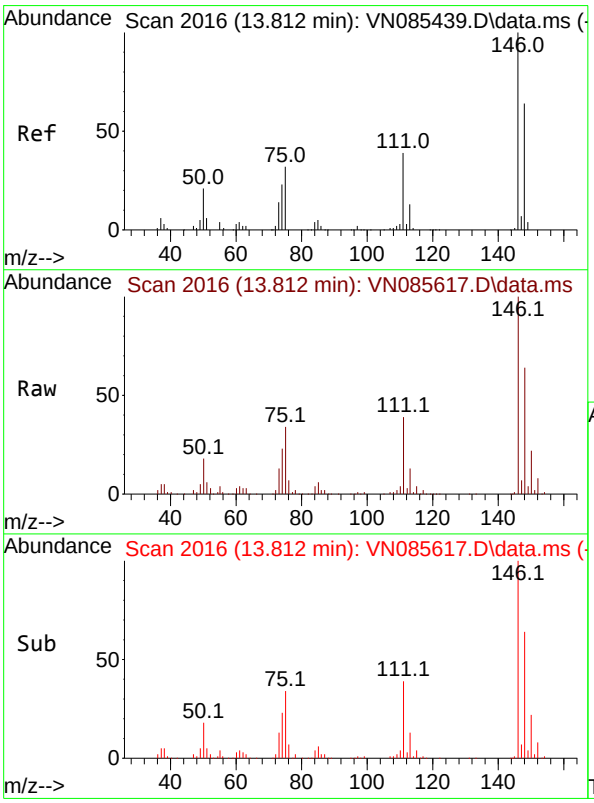
Ion	Ratio	Lower	Upper
146	100		
111	41.8	21.4	64.3
148	63.7	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

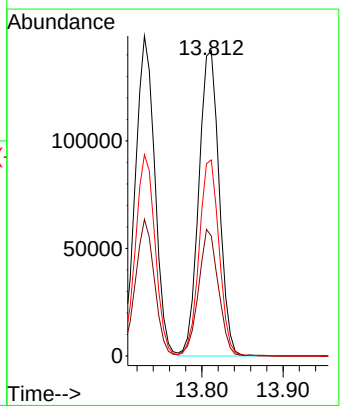
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

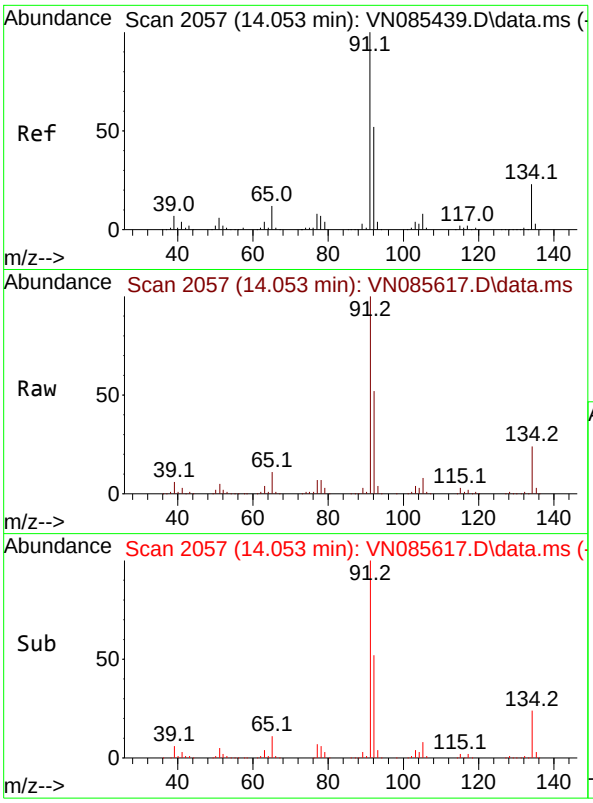


#88
1,4-Dichlorobenzene
Concen: 48.112 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:146 Resp: 247225

Ion	Ratio	Lower	Upper
146	100		
111	40.1	21.3	63.7
148	63.0	32.4	97.0





#89
n-Butylbenzene
Concen: 52.792 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

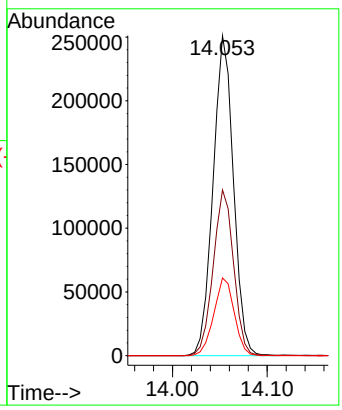
Tgt Ion: 91 Resp: 37515

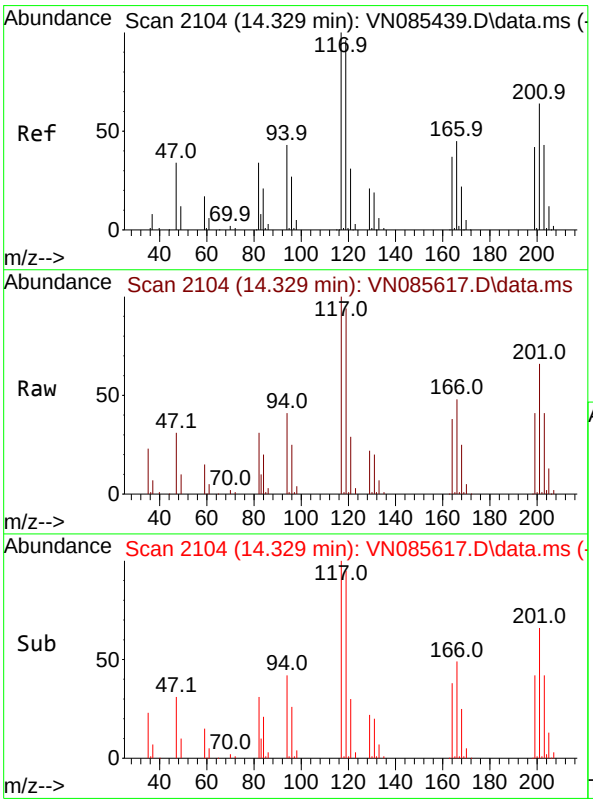
Ion	Ratio	Lower	Upper
91	100		
92	51.8	25.8	77.3
134	24.4	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

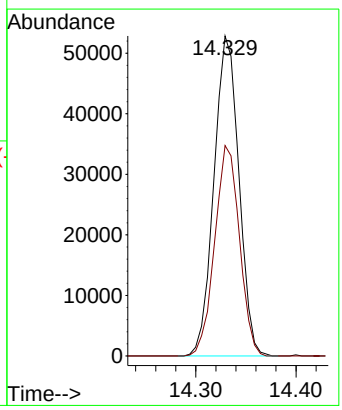


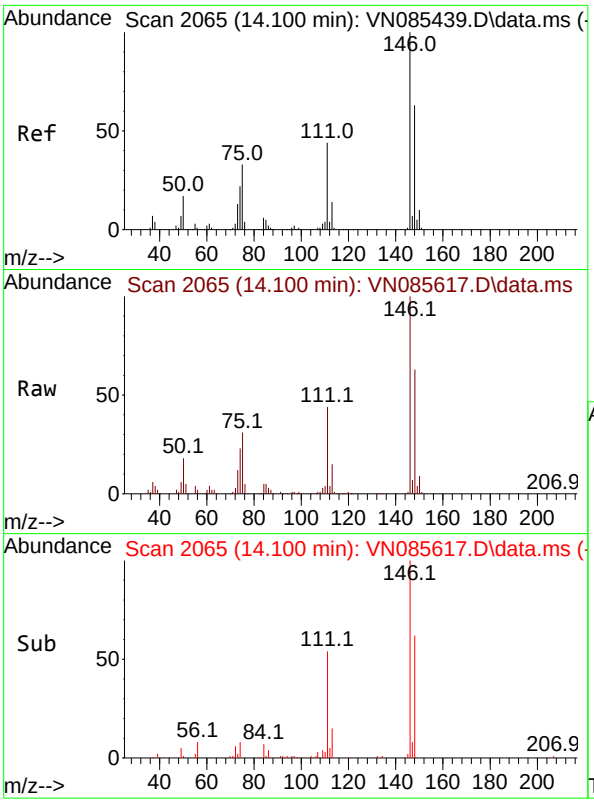


#90
Hexachloroethane
Concen: 48.339 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:117 Resp: 91155

Ion	Ratio	Lower	Upper
117	100		
201	65.2	33.7	101.0

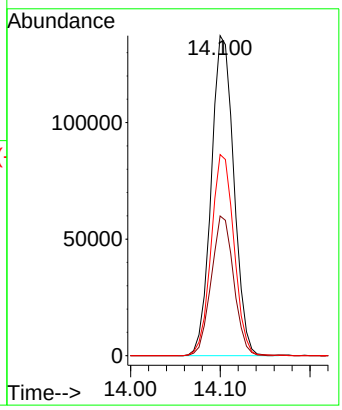




#91
1,2-Dichlorobenzene
Concen: 48.589 ug/l
RT: 14.100 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:146 Resp: 24026

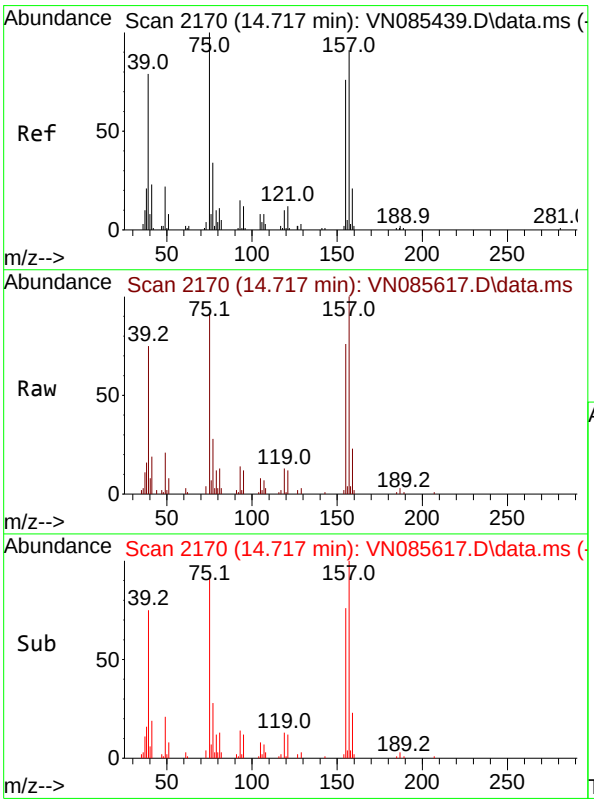
Ion	Ratio	Lower	Upper
146	100		
111	43.3	21.7	65.1
148	63.4	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

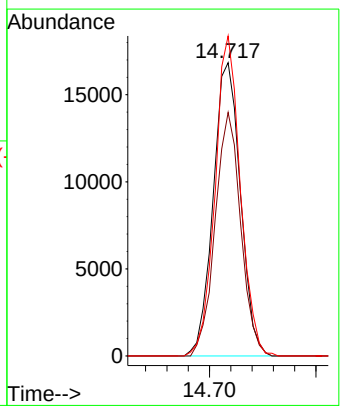
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

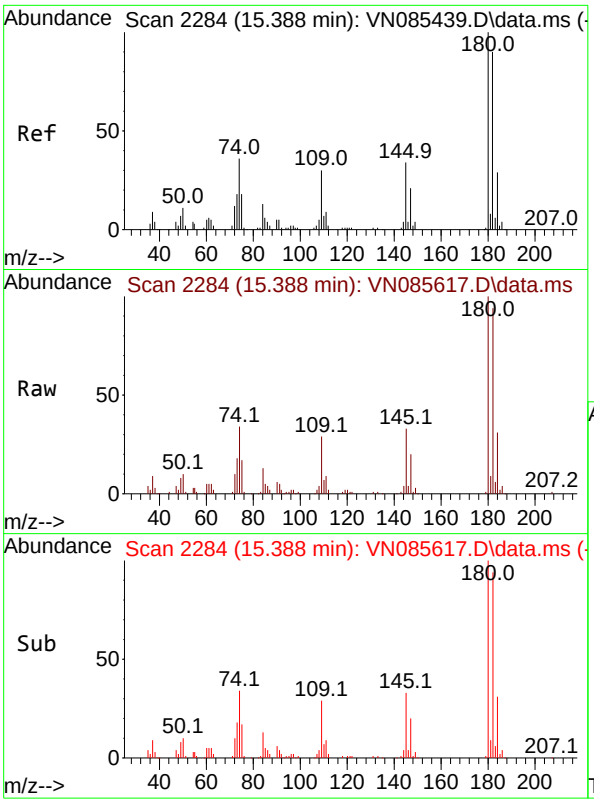


#92
1,2-Dibromo-3-Chloropropane
Concen: 44.867 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion: 75 Resp: 29819

Ion	Ratio	Lower	Upper
75	100		
155	78.2	36.4	109.2
157	101.3	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 48.782 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

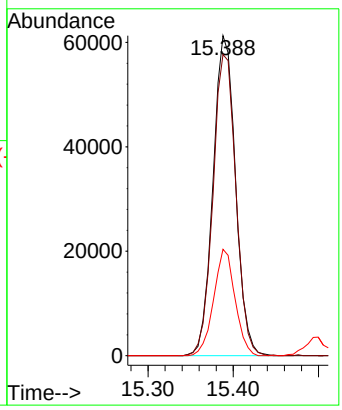
Tgt Ion:180 Resp: 11211

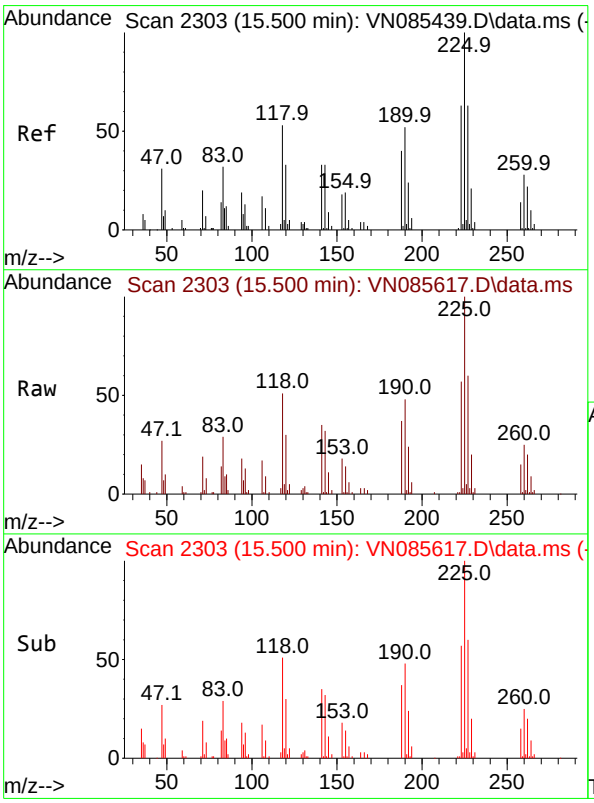
Ion	Ratio	Lower	Upper
180	100		
182	96.0	46.8	140.3
145	31.6	16.0	48.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

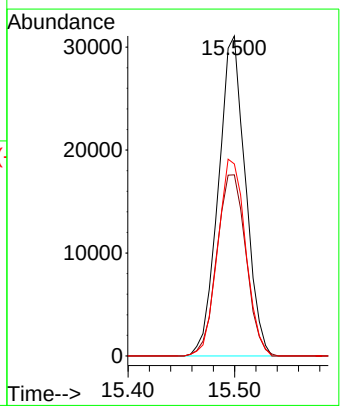


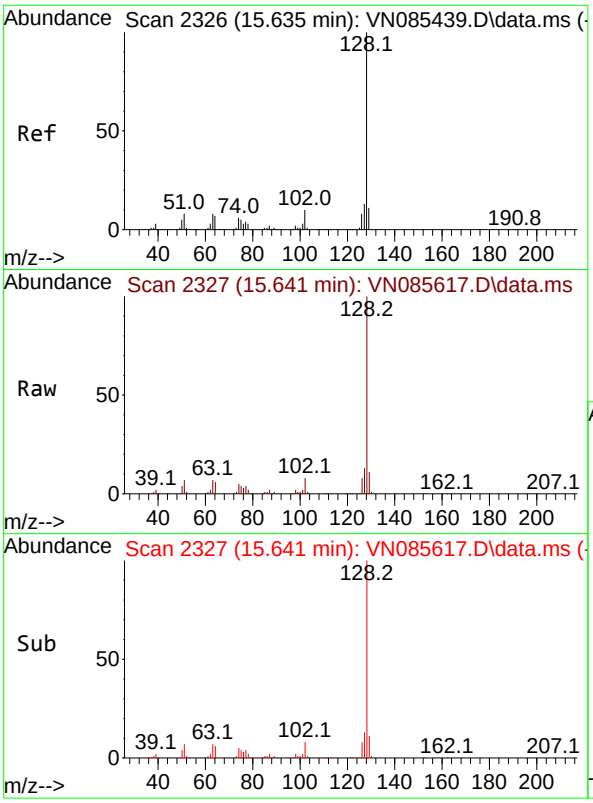


#94
Hexachlorobutadiene
Concen: 44.736 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:225 Resp: 54586

Ion	Ratio	Lower	Upper
225	100		
223	61.1	30.7	92.1
227	63.7	30.9	92.5

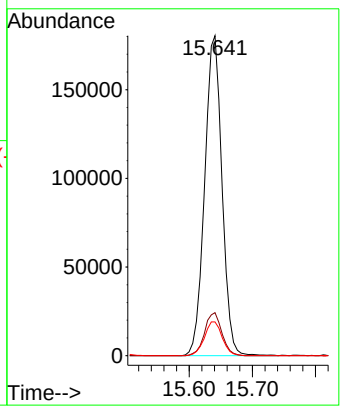




#95
Naphthalene
Concen: 50.085 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:128 Resp: 34349

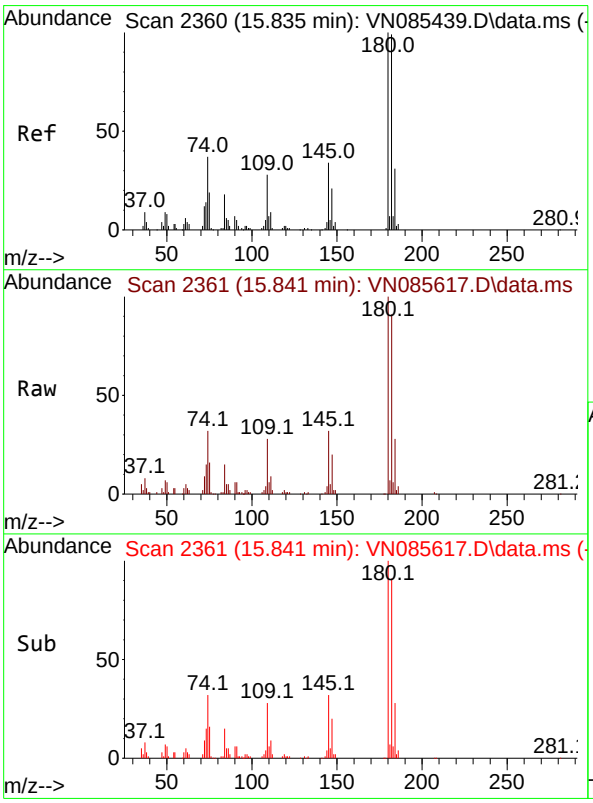
Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.6	16.0
129	10.9	8.8	13.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

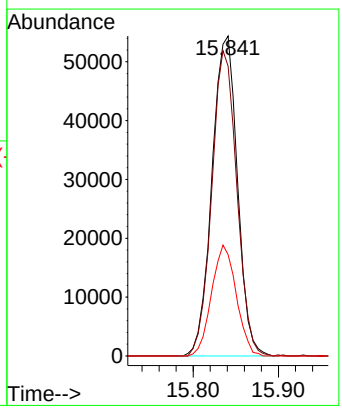
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025



#96
1,2,3-Trichlorobenzene
Concen: 48.450 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN085617.D
Acq: 03 Feb 2025 12:56

Tgt Ion:180 Resp: 112671

Ion	Ratio	Lower	Upper
180	100		
182	93.9	47.4	142.2
145	33.6	16.9	50.7



Sample Results: **VN085617.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	0.677	0.506	25.3#	78	0.00
3	P	Chloromethane	0.733	0.504	31.2#	72	0.00
4	C	Vinyl Chloride	0.737	0.636	13.7#	90	0.00
5	T	Bromomethane	0.445	0.413	7.2	96	0.00
6	T	Chloroethane	0.467	0.462	1.1	106	0.00
7	T	Trichlorofluoromethane	1.069	1.022	4.4	100	0.00
8	T	Diethyl Ether	0.369	0.324	12.2	88	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.602	0.561	6.8	101	0.00
10	T	Methyl Iodide	0.690	0.643	6.8	87	0.00
11	T	Tert butyl alcohol	0.092	0.098	-6.5	103	0.00
12	CM	1,1-Dichloroethene	0.537	0.488	9.1#	89	0.00
13	T	Acrolein	0.126	0.085	32.5#	59	0.00
14	T	Allyl chloride	0.871	0.637	26.9#	73	0.00
15	T	Acrylonitrile	0.294	0.272	7.5	89	0.00
16	T	Acetone	0.261	0.211	19.2	81	0.00
17	T	Carbon Disulfide	1.652	1.152	30.3#	76	0.00
18	T	Methyl Acetate	0.793	0.719	9.3	89	0.00
19	T	Methyl tert-butyl Ether	1.742	1.730	0.7	90	0.00
20	T	Methylene Chloride	0.646	0.602	6.8	93	0.00
21	T	trans-1,2-Dichloroethene	0.573	0.529	7.7	93	0.00
22	T	Diisopropyl ether	1.933	1.726	10.7	82	0.00
23	T	Vinyl Acetate	1.353	1.166	13.8	76	0.00
24	P	1,1-Dichloroethane	1.178	1.096	7.0	91	0.00
25	T	2-Butanone	0.384	0.336	12.5	84	0.00
26	T	2,2-Dichloropropane	0.953	0.899	5.7	93	0.00
27	T	cis-1,2-Dichloroethene	0.675	0.683	-1.2	97	0.00
28	T	Bromochloromethane	0.548	0.472	13.9	85	0.00
29	T	Tetrahydrofuran	0.243	0.217	10.7	81	0.00
30	C	Chloroform	1.218	1.179	3.2#	98	0.00
31	T	Cyclohexane	1.024	0.785	23.3	87	0.00
32	T	1,1,1-Trichloroethane	1.068	0.997	6.6	95	0.00
33	S	1,2-Dichloroethane-d4	0.807	0.719	10.9	84	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
35	S	Dibromofluoromethane	0.347	0.346	0.3	94	0.00
36	T	1,1-Dichloropropene	0.487	0.441	9.4	93	0.00
37	T	Ethyl Acetate	0.491	0.400	18.5	80	0.00
38	T	Carbon Tetrachloride	0.557	0.512	8.1	94	0.00
39	T	Methylcyclohexane	0.457	0.426	6.8	90	0.00
40	TM	Benzene	1.463	1.422	2.8	96	0.00
41	T	Methacrylonitrile	0.256	0.220	14.1	80	0.00
42	TM	1,2-Dichloroethane	0.551	0.500	9.3	89	0.00
43	T	Isopropyl Acetate	0.787	0.704	10.5	84	0.00
44	TM	Trichloroethene	0.341	0.329	3.5	99	0.00
45	C	1,2-Dichloropropane	0.374	0.361	3.5#	95	0.00
46	T	Dibromomethane	0.270	0.256	5.2	94	0.00
47	T	Bromodichloromethane	0.549	0.555	-1.1	97	0.00
48	T	Methyl methacrylate	0.354	0.321	9.3	80	0.00

Sample Results: **VN085617.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.006	0.006	0.0	95	0.00
50	S	Toluene-d8	1.232	1.296	-5.2	100	0.00
51	T	4-Methyl-2-Pentanone	0.457	0.428	6.3	85	0.00
52	CM	Toluene	0.848	0.907	-7.0#	102	0.00
53	T	t-1,3-Dichloropropene	0.519	0.526	-1.3	93	0.00
54	T	cis-1,3-Dichloropropene	0.554	0.567	-2.3	94	0.00
55	T	1,1,2-Trichloroethane	0.335	0.360	-7.5	103	0.00
56	T	Ethyl methacrylate	0.469	0.515	-9.8	92	0.00
57	T	1,3-Dichloropropane	0.583	0.608	-4.3	98	0.00
58	T	2-Chloroethyl Vinyl ether	0.213	0.205	3.8	83	0.00
59	T	2-Hexanone	0.321	0.307	4.4	84	0.00
60	T	Dibromochloromethane	0.405	0.428	-5.7	101	0.00
61	T	1,2-Dibromoethane	0.334	0.341	-2.1	99	0.00
62	S	4-Bromofluorobenzene	0.422	0.438	-3.8	95	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00
64	T	Tetrachloroethene	0.341	0.330	3.2	104	0.00
65	PM	Chlorobenzene	1.095	1.101	-0.5	104	0.00
66	T	1,1,1,2-Tetrachloroethane	0.402	0.398	1.0	103	0.00
67	C	Ethyl Benzene	1.784	1.884	-5.6#	102	0.00
68	T	m/p-Xylenes	0.659	0.740	-12.3	106	0.00
69	T	o-Xylene	0.630	0.707	-12.2	105	0.00
70	T	Styrene	1.043	1.235	-18.4	107	0.00
71	P	Bromoform	0.288	0.298	-3.5	97	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
73	T	Isopropylbenzene	3.375	3.494	-3.5	106	0.00
74	T	N-amyl acetate	1.517	1.288	15.1	83	0.00
75	P	1,1,2,2-Tetrachloroethane	1.192	1.138	4.5	103	0.00
76	T	1,2,3-Trichloropropane	1.016	0.988	2.8	115	0.00
77	T	Bromobenzene	0.882	0.861	2.4	105	0.00
78	T	n-propylbenzene	3.995	4.235	-6.0	106	0.00
79	T	2-Chlorotoluene	2.586	2.525	2.4	102	0.00
80	T	1,3,5-Trimethylbenzene	2.787	2.966	-6.4	105	0.00
81	T	trans-1,4-Dichloro-2-butene	0.376	0.423	-12.5	113	0.00
82	T	4-Chlorotoluene	2.574	2.563	0.4	103	0.00
83	T	tert-Butylbenzene	2.341	2.472	-5.6	106	0.00
84	T	1,2,4-Trimethylbenzene	2.778	2.999	-8.0	104	0.00
85	T	sec-Butylbenzene	3.244	3.542	-9.2	108	0.00
86	T	p-Isopropyltoluene	2.631	2.939	-11.7	107	0.00
87	T	1,3-Dichlorobenzene	1.624	1.627	-0.2	108	0.00
88	T	1,4-Dichlorobenzene	1.683	1.619	3.8	108	0.00
89	T	n-Butylbenzene	2.327	2.457	-5.6	103	0.00
90	T	Hexachloroethane	0.618	0.597	3.4	108	0.00
91	T	1,2-Dichlorobenzene	1.620	1.574	2.8	105	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.218	0.195	10.6	92	0.00
93	T	1,2,4-Trichlorobenzene	0.753	0.734	2.5	98	0.00
94	T	Hexachlorobutadiene	0.400	0.358	10.5	101	0.00
95	T	Naphthalene	2.246	2.250	-0.2	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.762	0.738	3.1	98	0.00

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

Evaluate Continuing Calibration Report

Sample Results: **VN085617.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	50.000	37.364	25.3#	78	0.00
3	P	Chloromethane	50.000	34.404	31.2#	72	0.00
4	C	Vinyl Chloride	50.000	43.167	13.7#	90	0.00
5	T	Bromomethane	50.000	46.361	7.3	96	0.00
6	T	Chloroethane	50.000	49.419	1.2	106	0.00
7	T	Trichlorofluoromethane	50.000	47.821	4.4	100	0.00
8	T	Diethyl Ether	50.000	43.869	12.3	88	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	46.609	6.8	101	0.00
10	T	Methyl Iodide	50.000	46.624	6.8	87	0.00
11	T	Tert butyl alcohol	250.000	266.185	-6.5	103	0.00
12	CM	1,1-Dichloroethene	50.000	45.458	9.1#	89	0.00
13	T	Acrolein	250.000	168.557	32.6#	59	0.00
14	T	Allyl chloride	50.000	36.574	26.9#	73	0.00
15	T	Acrylonitrile	250.000	231.327	7.5	89	0.00
16	T	Acetone	250.000	202.320	19.1	81	0.00
17	T	Carbon Disulfide	50.000	34.849	30.3#	76	0.00
18	T	Methyl Acetate	50.000	45.361	9.3	89	0.00
19	T	Methyl tert-butyl Ether	50.000	49.654	0.7	90	0.00
20	T	Methylene Chloride	50.000	46.650	6.7	93	0.00
21	T	trans-1,2-Dichloroethene	50.000	46.100	7.8	93	0.00
22	T	Diisopropyl ether	50.000	44.663	10.7	82	0.00
23	T	Vinyl Acetate	250.000	215.551	13.8	76	0.00
24	P	1,1-Dichloroethane	50.000	46.504	7.0	91	0.00
25	T	2-Butanone	250.000	218.881	12.4	84	0.00
26	T	2,2-Dichloropropane	50.000	47.156	5.7	93	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.547	-1.1	97	0.00
28	T	Bromochloromethane	50.000	43.090	13.8	85	0.00
29	T	Tetrahydrofuran	250.000	223.073	10.8	81	0.00
30	C	Chloroform	50.000	48.416	3.2#	98	0.00
31	T	Cyclohexane	50.000	38.329	23.3	87	0.00
32	T	1,1,1-Trichloroethane	50.000	46.661	6.7	95	0.00
33	S	1,2-Dichloroethane-d4	50.000	44.566	10.9	84	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	97	0.00
35	S	Dibromofluoromethane	50.000	49.931	0.1	94	0.00
36	T	1,1-Dichloropropene	50.000	45.259	9.5	93	0.00
37	T	Ethyl Acetate	50.000	40.735	18.5	80	0.00
38	T	Carbon Tetrachloride	50.000	45.902	8.2	94	0.00
39	T	Methylcyclohexane	50.000	46.593	6.8	90	0.00
40	TM	Benzene	50.000	48.614	2.8	96	0.00
41	T	Methacrylonitrile	50.000	43.037	13.9	80	0.00
42	TM	1,2-Dichloroethane	50.000	45.375	9.3	89	0.00
43	T	Isopropyl Acetate	50.000	44.700	10.6	84	0.00
44	TM	Trichloroethene	50.000	48.252	3.5	99	0.00
45	C	1,2-Dichloropropane	50.000	48.357	3.3#	95	0.00
46	T	Dibromomethane	50.000	47.501	5.0	94	0.00
47	T	Bromodichloromethane	50.000	50.527	-1.1	97	0.00
48	T	Methyl methacrylate	50.000	45.301	9.4	80	0.00

Sample Results: **VN085617.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1035.537	-3.6	95	0.00
50	S	Toluene-d8	50.000	52.598	-5.2	100	0.00
51	T	4-Methyl-2-Pentanone	250.000	233.994	6.4	85	0.00
52	CM	Toluene	50.000	53.534	-7.1#	102	0.00
53	T	t-1,3-Dichloropropene	50.000	50.697	-1.4	93	0.00
54	T	cis-1,3-Dichloropropene	50.000	51.107	-2.2	94	0.00
55	T	1,1,2-Trichloroethane	50.000	53.625	-7.2	103	0.00
56	T	Ethyl methacrylate	50.000	45.764	8.5	92	0.00
57	T	1,3-Dichloropropane	50.000	52.111	-4.2	98	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	241.104	3.6	83	0.00
59	T	2-Hexanone	250.000	238.718	4.5	84	0.00
60	T	Dibromochloromethane	50.000	52.795	-5.6	101	0.00
61	T	1,2-Dibromoethane	50.000	50.994	-2.0	99	0.00
62	S	4-Bromofluorobenzene	50.000	51.906	-3.8	95	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	101	0.00
64	T	Tetrachloroethene	50.000	48.451	3.1	104	0.00
65	PM	Chlorobenzene	50.000	50.273	-0.5	104	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	49.526	0.9	103	0.00
67	C	Ethyl Benzene	50.000	52.793	-5.6#	102	0.00
68	T	m/p-Xylenes	100.000	112.274	-12.3	106	0.00
69	T	o-Xylene	50.000	56.132	-12.3	105	0.00
70	T	Styrene	50.000	59.204	-18.4	107	0.00
71	P	Bromoform	50.000	51.832	-3.7	97	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	104	0.00
73	T	Isopropylbenzene	50.000	51.773	-3.5	106	0.00
74	T	N-amyl acetate	50.000	42.452	15.1	83	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	47.726	4.5	103	0.00
76	T	1,2,3-Trichloropropane	50.000	48.596	2.8	115	0.00
77	T	Bromobenzene	50.000	48.837	2.3	105	0.00
78	T	n-propylbenzene	50.000	53.002	-6.0	106	0.00
79	T	2-Chlorotoluene	50.000	48.821	2.4	102	0.00
80	T	1,3,5-Trimethylbenzene	50.000	53.197	-6.4	105	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	56.354	-12.7	113	0.00
82	T	4-Chlorotoluene	50.000	49.770	0.5	103	0.00
83	T	tert-Butylbenzene	50.000	52.803	-5.6	106	0.00
84	T	1,2,4-Trimethylbenzene	50.000	53.980	-8.0	104	0.00
85	T	sec-Butylbenzene	50.000	54.590	-9.2	108	0.00
86	T	p-Isopropyltoluene	50.000	50.266	-0.5	107	0.00
87	T	1,3-Dichlorobenzene	50.000	50.109	-0.2	108	0.00
88	T	1,4-Dichlorobenzene	50.000	48.112	3.8	108	0.00
89	T	n-Butylbenzene	50.000	52.792	-5.6	103	0.00
90	T	Hexachloroethane	50.000	48.339	3.3	108	0.00
91	T	1,2-Dichlorobenzene	50.000	48.589	2.8	105	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	44.867	10.3	92	0.00
93	T	1,2,4-Trichlorobenzene	50.000	48.782	2.4	98	0.00
94	T	Hexachlorobutadiene	50.000	44.736	10.5	101	0.00
95	T	Naphthalene	50.000	50.085	-0.2	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085617.D
Acq On : 03 Feb 2025 12:56
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 04 00:57:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.450	3.1	98	0.00

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: MSVOA_N Calibration Date/Time: 02/04/2025 11:05

Lab File ID: VN085645.D Init. Calib. Date(s): 01/14/2025 01/14/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.737	0.924		25.37	20
1,1-Dichloroethene	0.537	0.620		15.46	20
2-Butanone	0.384	0.371		-3.38	20
Carbon Tetrachloride	0.557	0.585		5.03	20
Chloroform	1.218	1.257		3.2	20
Benzene	1.463	1.643		12.3	20
1,2-Dichloroethane	0.551	0.538		-2.36	20
Trichloroethene	0.341	0.382		12.02	20
Tetrachloroethene	0.341	0.397		16.42	20
Chlorobenzene	1.095	1.230	0.3	12.33	20
1,2-Dichloroethane-d4	0.807	0.771		-4.46	20
Dibromofluoromethane	0.347	0.369		6.34	20
Toluene-d8	1.232	1.373		11.44	20
4-Bromofluorobenzene	0.422	0.472		11.85	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	200704	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	345148	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	309053	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	157058	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	154798	47.780	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 95.560%			
35) Dibromofluoromethane	8.165	113	127274	53.153	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.300%			
50) Toluene-d8	10.565	98	473979	55.713	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 111.420%			
62) 4-Bromofluorobenzene	12.847	95	163009	56.013	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 112.020%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	168819	62.124	ug/l	98
3) Chloromethane	2.359	50	151639	51.538	ug/l	99
4) Vinyl Chloride	2.512	62	185363	62.678	ug/l	98
5) Bromomethane	2.942	94	115992	64.931	ug/l	95
6) Chloroethane	3.118	64	116980	62.391	ug/l	98
7) Trichlorofluoromethane	3.495	101	227801	53.087	ug/l	99
8) Diethyl Ether	3.959	74	75659	51.037	ug/l	88
9) 1,1,2-Trichlorotrifluo...	4.371	101	136051	56.291	ug/l	97
10) Methyl Iodide	4.589	142	171090	61.814	ug/l	96
11) Tert butyl alcohol	5.518	59	90596	244.210	ug/l	100
12) 1,1-Dichloroethene	4.336	96	124529	57.812	ug/l	91
13) Acrolein	4.177	56	85431	168.697	ug/l	99
14) Allyl chloride	5.024	41	157091	44.944	ug/l #	94
15) Acrylonitrile	5.718	53	303850	257.863	ug/l	99
16) Acetone	4.424	43	236574	225.997	ug/l	94
17) Carbon Disulfide	4.712	76	378039	57.001	ug/l	98
18) Methyl Acetate	5.018	43	143957	45.225	ug/l	92
19) Methyl tert-butyl Ether	5.795	73	384956	55.039	ug/l	98
20) Methylene Chloride	5.277	84	141744	54.697	ug/l	91
21) trans-1,2-Dichloroethene	5.783	96	132371	57.502	ug/l	94
22) Diisopropyl ether	6.671	45	381754	49.208	ug/l	97
23) Vinyl Acetate	6.600	43	1409531	259.616	ug/l	95
24) 1,1-Dichloroethane	6.565	63	245805	51.962	ug/l	98
25) 2-Butanone	7.477	43	372307	241.685	ug/l	91
26) 2,2-Dichloropropane	7.489	77	220150	57.562	ug/l	98
27) cis-1,2-Dichloroethene	7.483	96	155112	57.208	ug/l	93
28) Bromochloromethane	7.806	49	95572	43.426	ug/l	87
29) Tetrahydrofuran	7.836	42	249949	255.923	ug/l	89
30) Chloroform	7.965	83	252335	51.611	ug/l	100
31) Cyclohexane	8.253	56	204306	49.690	ug/l	91
32) 1,1,1-Trichloroethane	8.165	97	225191	52.509	ug/l	96
36) 1,1-Dichloropropene	8.371	75	183927	54.731	ug/l	98
37) Ethyl Acetate	7.559	43	159199	46.933	ug/l	98
38) Carbon Tetrachloride	8.359	117	202078	52.524	ug/l	99
39) Methylcyclohexane	9.600	83	195859	62.021	ug/l	93
40) Benzene	8.606	78	567137	56.166	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	81539	46.204	ug/l		91
42) 1,2-Dichloroethane	8.671	62	185776	48.850	ug/l		97
43) Isopropyl Acetate	8.688	43	271553	49.962	ug/l		95
44) Trichloroethene	9.347	130	131785	56.068	ug/l		100
45) 1,2-Dichloropropane	9.618	63	137051	53.137	ug/l		99
46) Dibromomethane	9.706	93	97554	52.419	ug/l		96
47) Bromodichloromethane	9.882	83	202509	53.411	ug/l		98
48) Methyl methacrylate	9.677	41	122409	50.045	ug/l		89
49) 1,4-Dioxane	9.694	88	47051	1142.294	ug/l	#	89
51) 4-Methyl-2-Pentanone	10.441	43	800853	253.917	ug/l		94
52) Toluene	10.629	92	351922	60.150	ug/l		100
53) t-1,3-Dichloropropene	10.835	75	204407	57.048	ug/l		97
54) cis-1,3-Dichloropropene	10.312	75	221256	57.810	ug/l	#	90
55) 1,1,2-Trichloroethane	11.012	97	129296	55.842	ug/l		99
56) Ethyl methacrylate	10.871	69	199066	50.997	ug/l		90
57) 1,3-Dichloropropane	11.159	76	225579	56.030	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.159	63	335470	228.313	ug/l		97
59) 2-Hexanone	11.194	43	580109	261.399	ug/l		91
60) Dibromochloromethane	11.359	129	152370	54.508	ug/l		98
61) 1,2-Dibromoethane	11.465	107	129588	56.226	ug/l		99
64) Tetrachloroethene	11.100	164	122776	58.273	ug/l		96
65) Chlorobenzene	11.888	112	380252	56.165	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.959	131	133801	53.847	ug/l		100
67) Ethyl Benzene	11.959	91	654450	59.349	ug/l		97
68) m/p-Xylenes	12.071	106	518534	127.234	ug/l		95
69) o-Xylene	12.394	106	241242	61.940	ug/l		96
70) Styrene	12.412	104	419116	65.022	ug/l		97
71) Bromoform	12.576	173	99802	56.133	ug/l	#	98
73) Isopropylbenzene	12.694	105	606175	57.186	ug/l		99
74) N-amyl acetate	12.494	43	234045	49.123	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.935	83	188424	50.322	ug/l		100
76) 1,2,3-Trichloropropane	12.994	75	153753m	48.165	ug/l		
77) Bromobenzene	12.976	156	148155	53.497	ug/l		95
78) n-propylbenzene	13.035	91	731968	58.330	ug/l		99
79) 2-Chlorotoluene	13.123	91	439835	54.157	ug/l		96
80) 1,3,5-Trimethylbenzene	13.171	105	514612	58.774	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.735	75	68031	57.659	ug/l	#	81
82) 4-Chlorotoluene	13.218	91	445323	55.070	ug/l		97
83) tert-Butylbenzene	13.435	119	411462	55.960	ug/l		96
84) 1,2,4-Trimethylbenzene	13.482	105	519388	59.518	ug/l		98
85) sec-Butylbenzene	13.612	105	605413	59.408	ug/l		99
86) p-Isopropyltoluene	13.729	119	506039	54.534	ug/l		97
87) 1,3-Dichlorobenzene	13.729	146	277733	54.455	ug/l		99
88) 1,4-Dichlorobenzene	13.812	146	278955	52.768	ug/l		97
89) n-Butylbenzene	14.053	91	429742	58.781	ug/l		99
90) Hexachloroethane	14.329	117	98723	50.887	ug/l		98
91) 1,2-Dichlorobenzene	14.106	146	266234	52.333	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	33244	48.620	ug/l		93
93) 1,2,4-Trichlorobenzene	15.388	180	124629	52.709	ug/l		98
94) Hexachlorobutadiene	15.500	225	60840	48.466	ug/l		99
95) Naphthalene	15.641	128	394392	55.897	ug/l		99
96) 1,2,3-Trichlorobenzene	15.835	180	125197	52.330	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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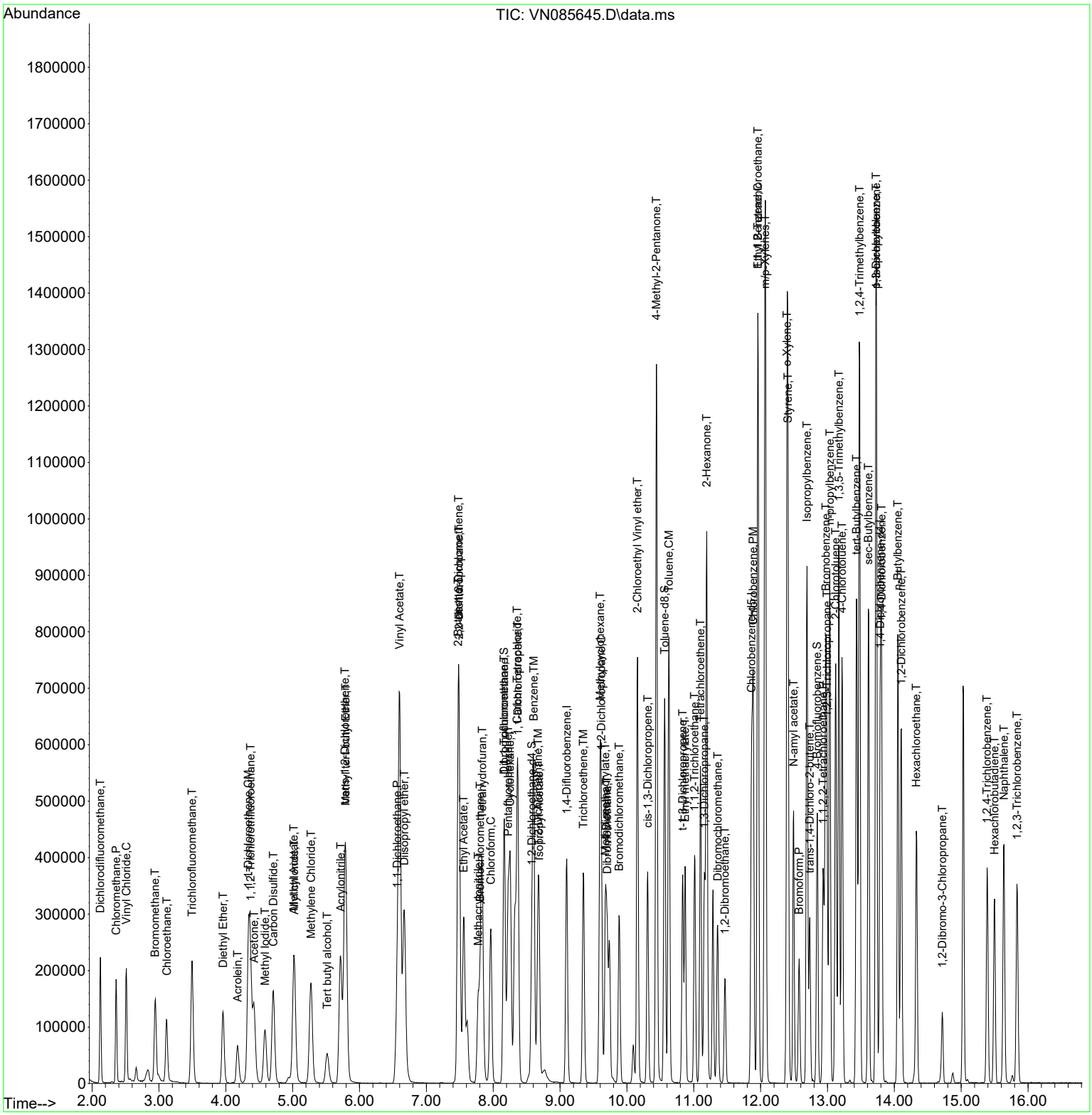
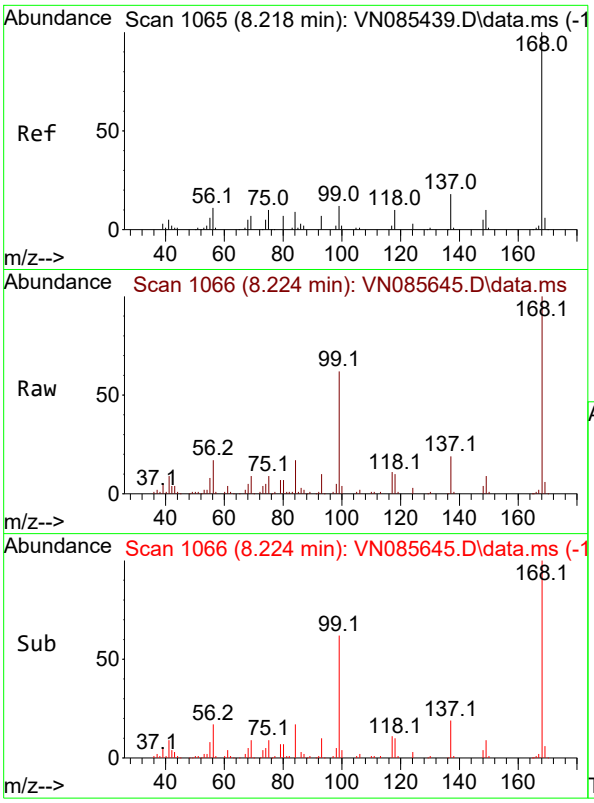
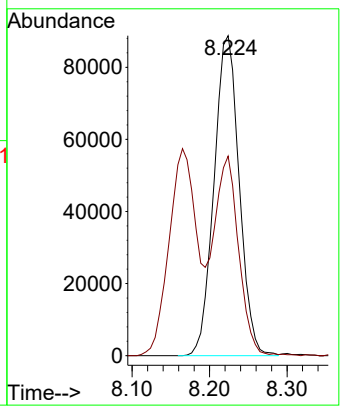




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:168 Resp: 20070

Ion	Ratio	Lower	Upper
168	100		
99	62.0	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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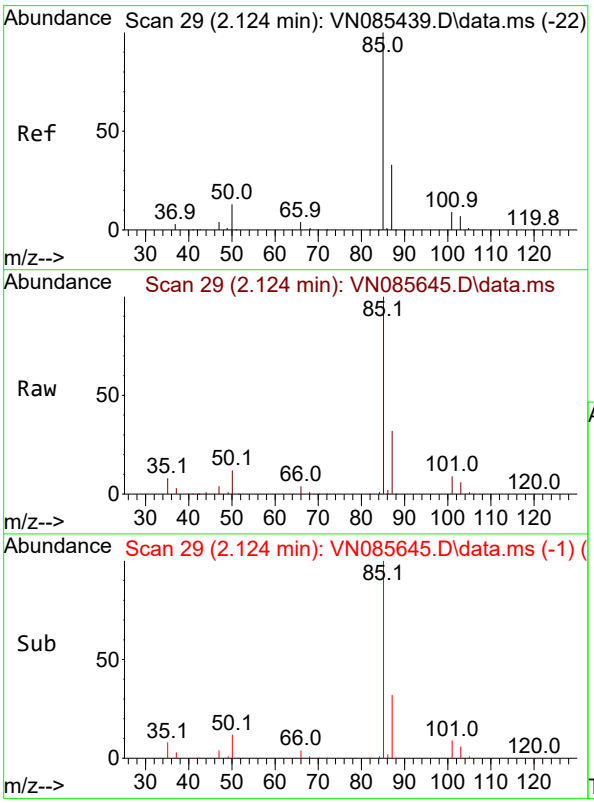
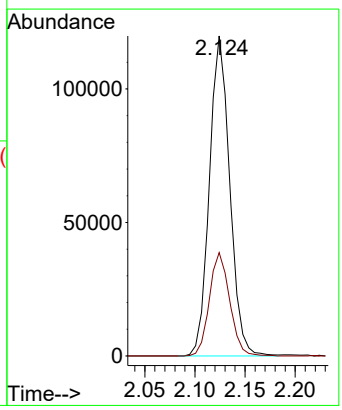
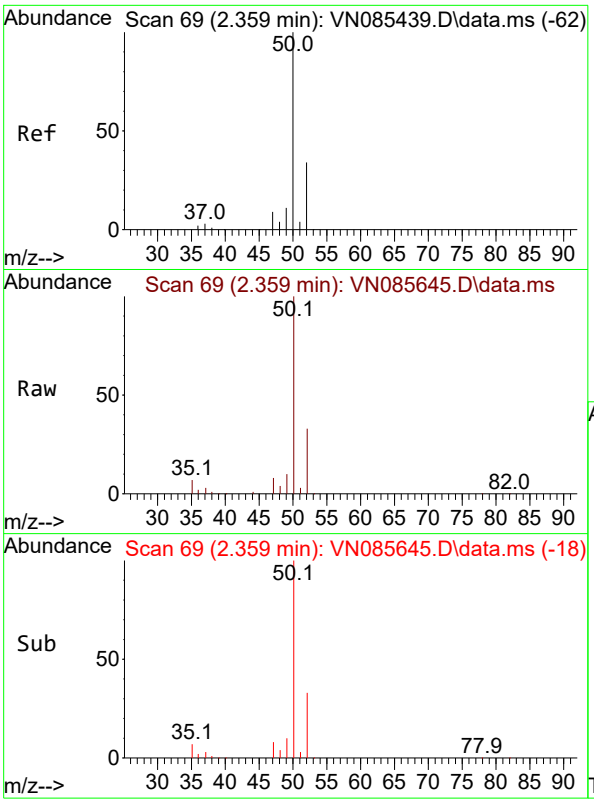


#2
Dichlorodifluoromethane
Concen: 62.124 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 85 Resp: 168819

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.7	50.1

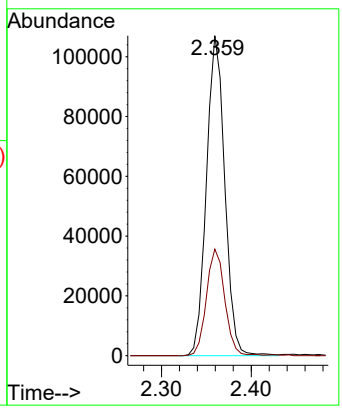




#3
Chloromethane
Concen: 51.538 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 50 Resp: 15163

Ion	Ratio	Lower	Upper
50	100		
52	33.3	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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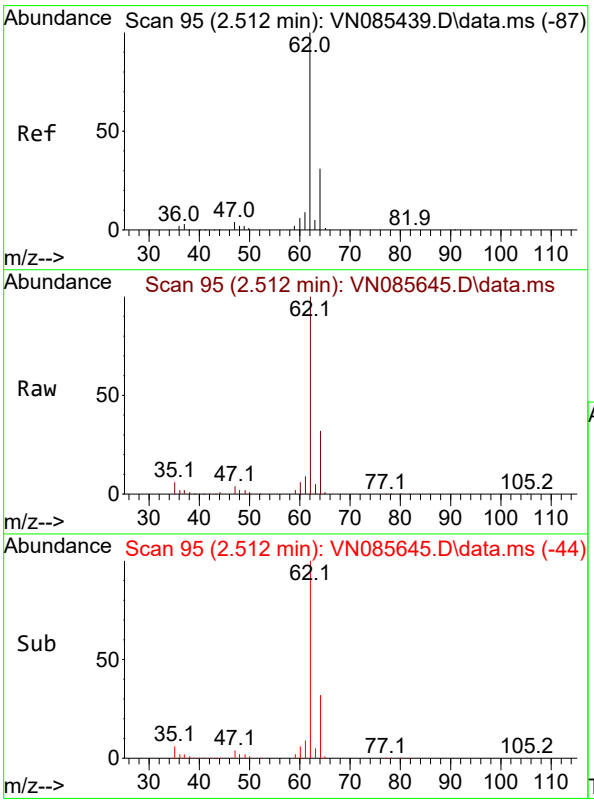
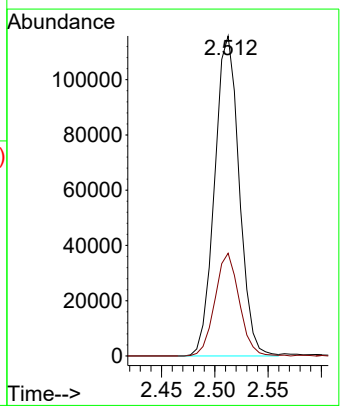
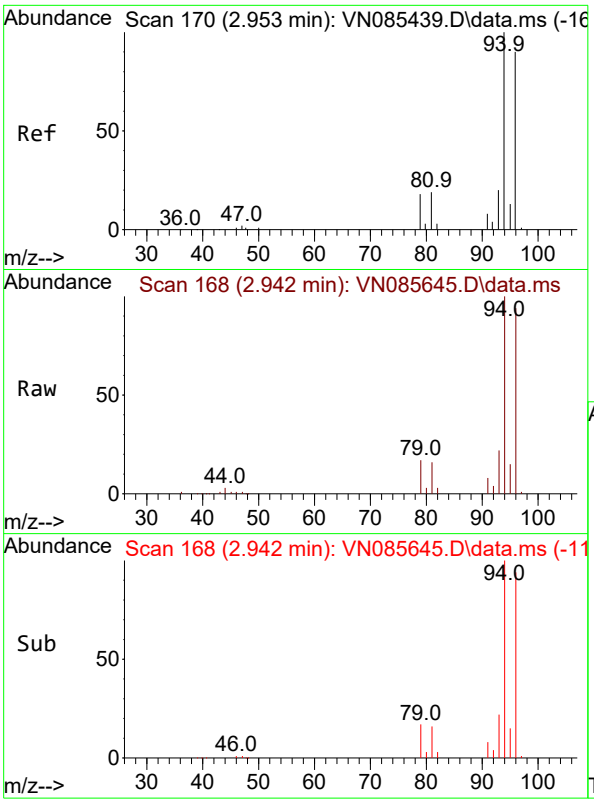


#4
Vinyl Chloride
Concen: 62.678 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 62 Resp: 185363

Ion	Ratio	Lower	Upper
62	100		
64	32.1	24.8	37.2





#5
Bromomethane
Concen: 64.931 ug/l
RT: 2.942 min Scan# 1
Delta R.T. -0.012 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 94 Resp: 11599

Ion	Ratio	Lower	Upper
94	100		
96	94.0	71.8	107.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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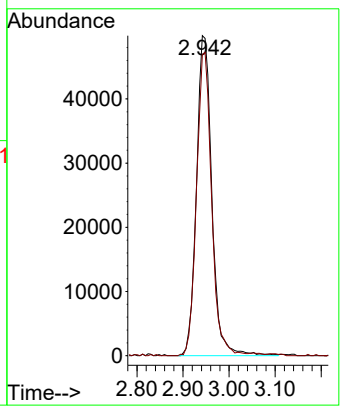
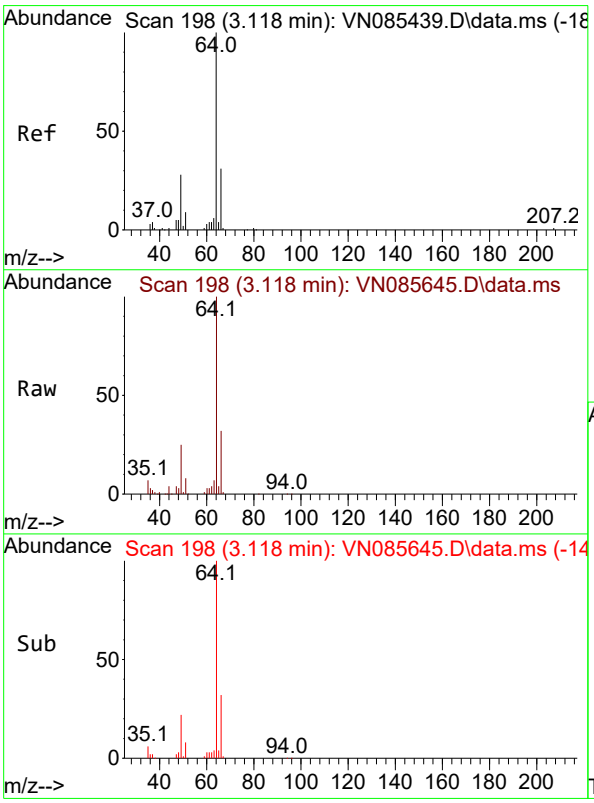
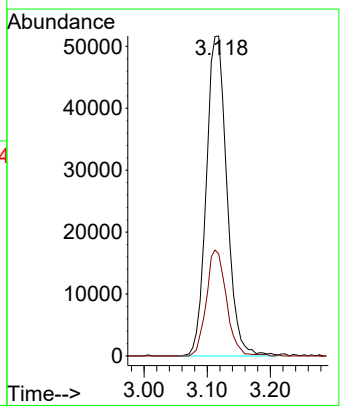


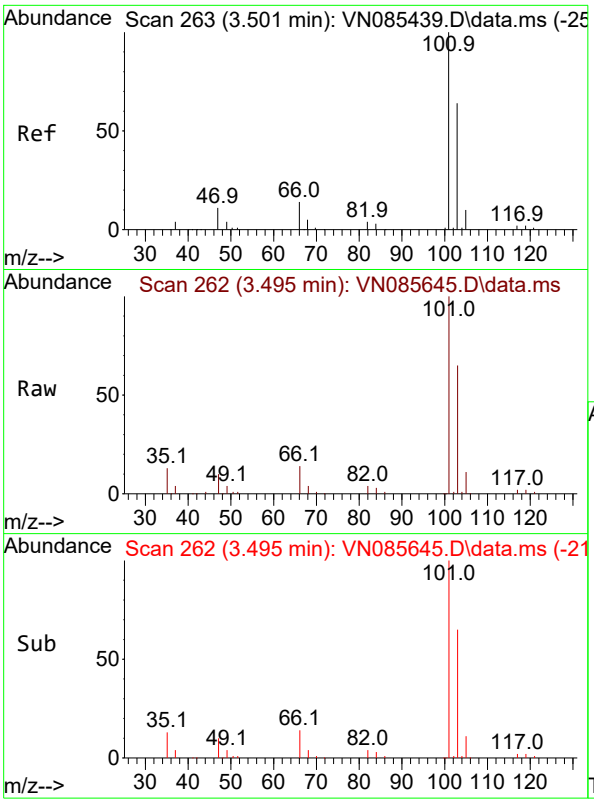


#6
Chloroethane
Concen: 62.391 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 64 Resp: 116980

Ion	Ratio	Lower	Upper
64	100		
66	31.9	24.6	36.8

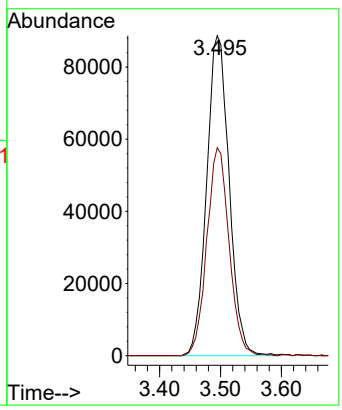




#7
Trichlorofluoromethane
Concen: 53.087 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:101 Resp: 22780

Ion	Ratio	Lower	Upper
101	100		
103	65.0	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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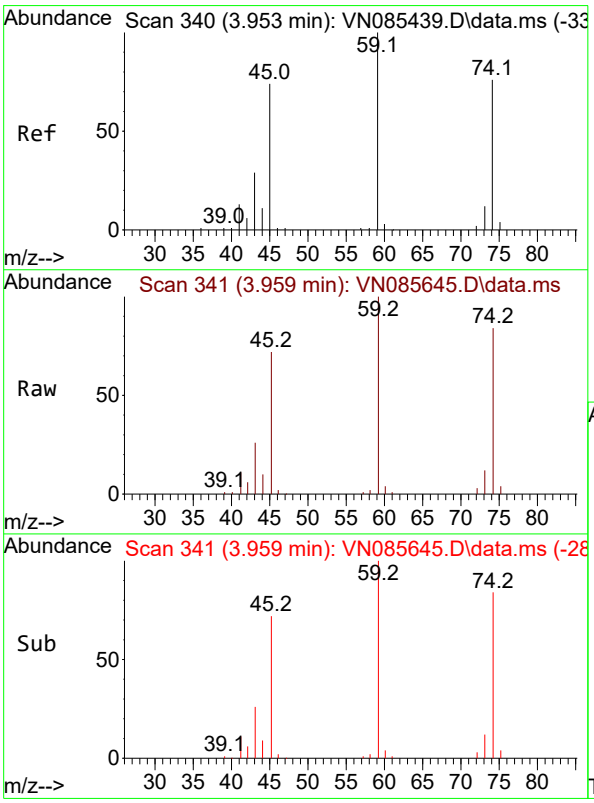
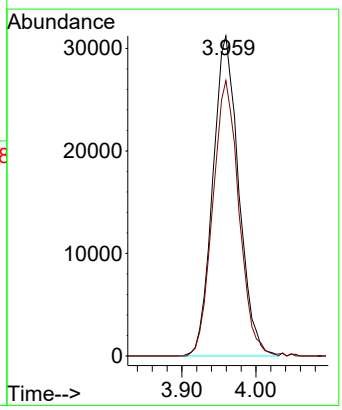
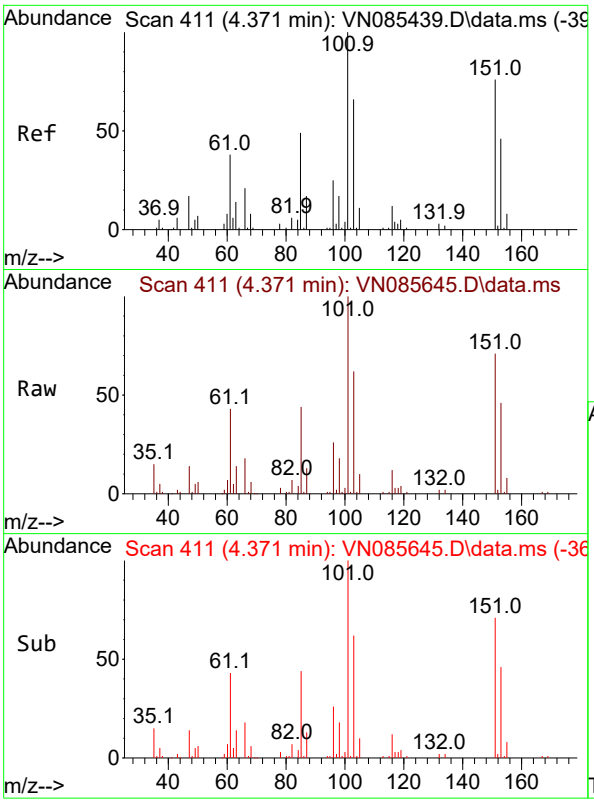


#8
Diethyl Ether
Concen: 51.037 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 74 Resp: 75659

Ion	Ratio	Lower	Upper
74	100		
45	87.0	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 56.291 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:101 Resp: 13605

Ion	Ratio	Lower	Upper
101	100		
85	44.6	37.8	56.8
151	71.5	58.8	88.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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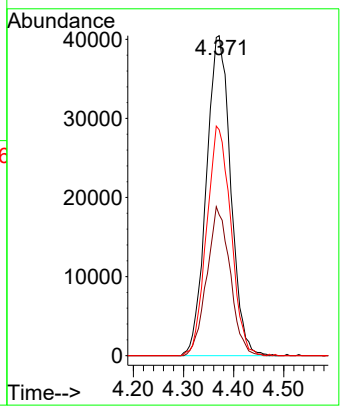
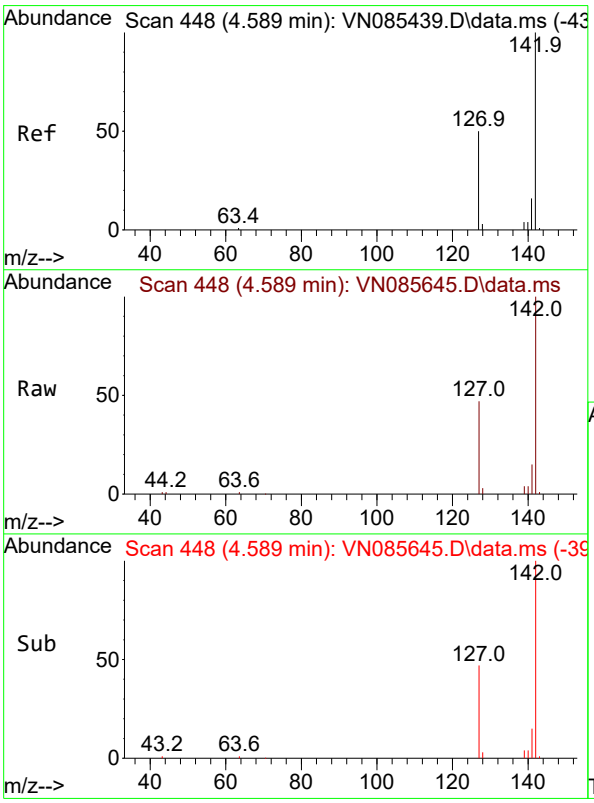
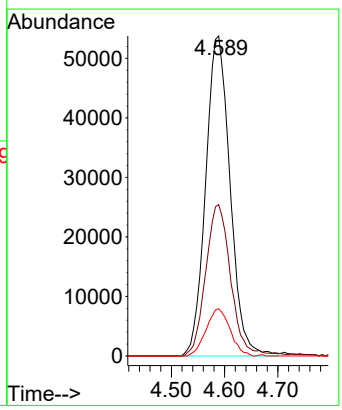


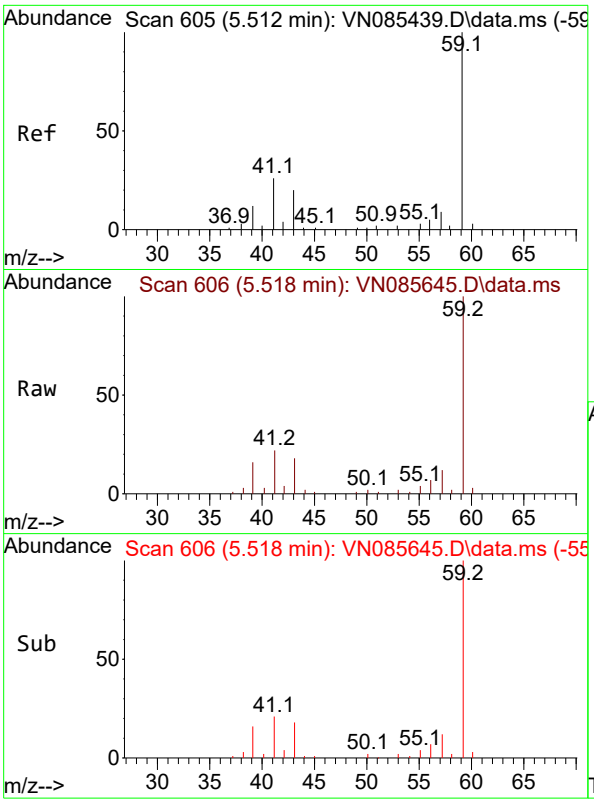


#10
Methyl Iodide
Concen: 61.814 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:142 Resp: 171090

Ion	Ratio	Lower	Upper
142	100		
127	47.3	40.3	60.5
141	14.8	12.8	19.2

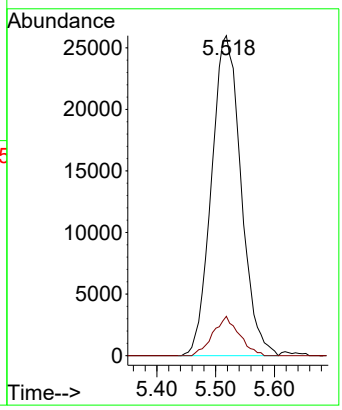




#11
Tert butyl alcohol
Concen: 244.210 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 59 Resp: 9059

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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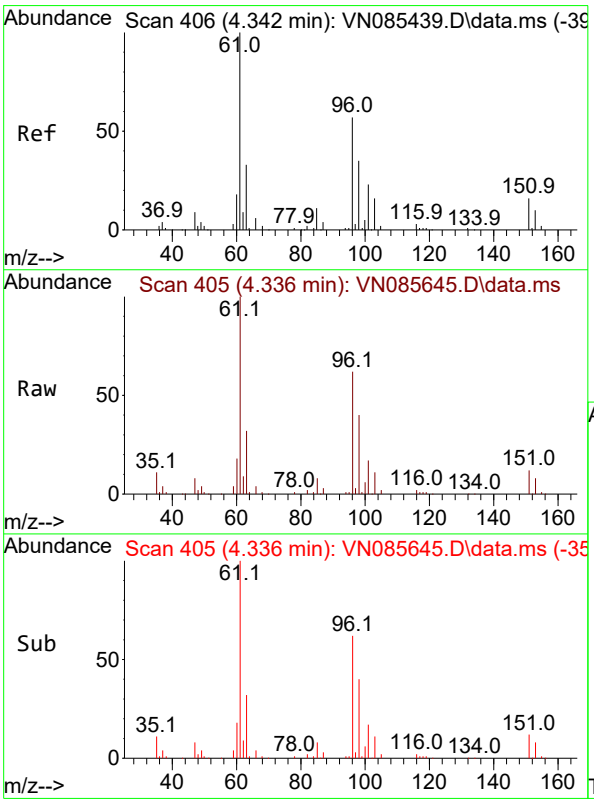
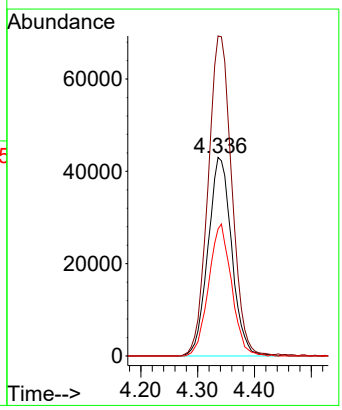
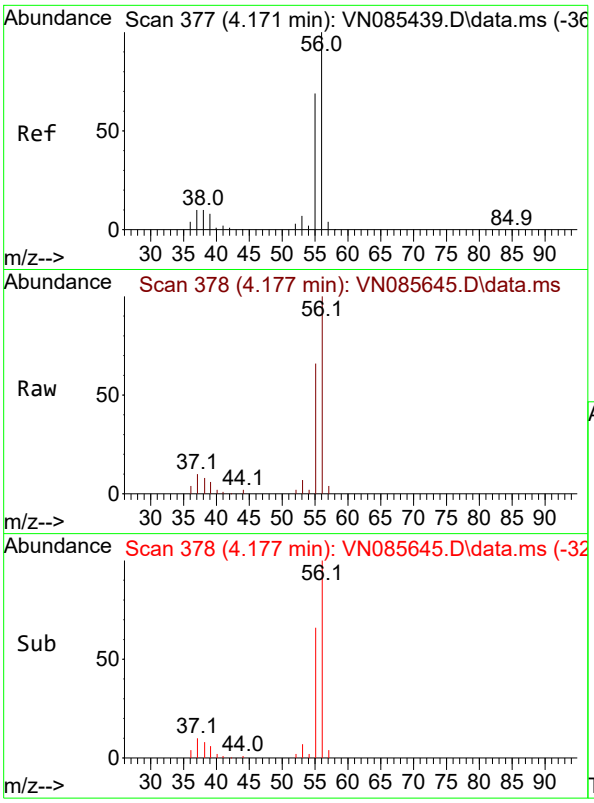


#12
1,1-Dichloroethene
Concen: 57.812 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 96 Resp: 124529

Ion	Ratio	Lower	Upper
96	100		
61	161.2	141.0	211.4
98	63.9	49.0	73.6

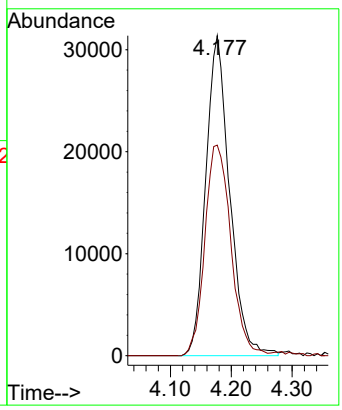




#13
Acrolein
Concen: 168.697 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 56 Resp: 8543

Ion	Ratio	Lower	Upper
56	100		
55	71.5	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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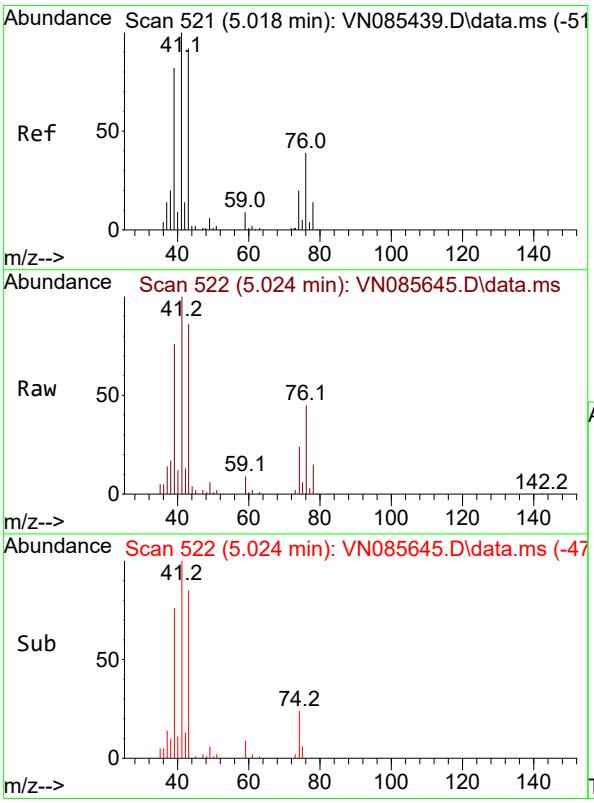
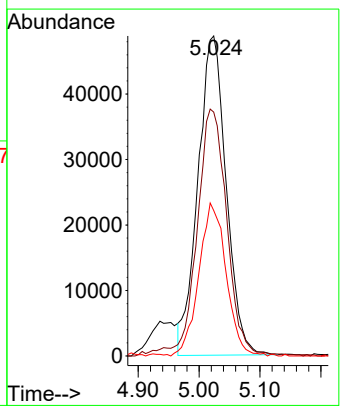
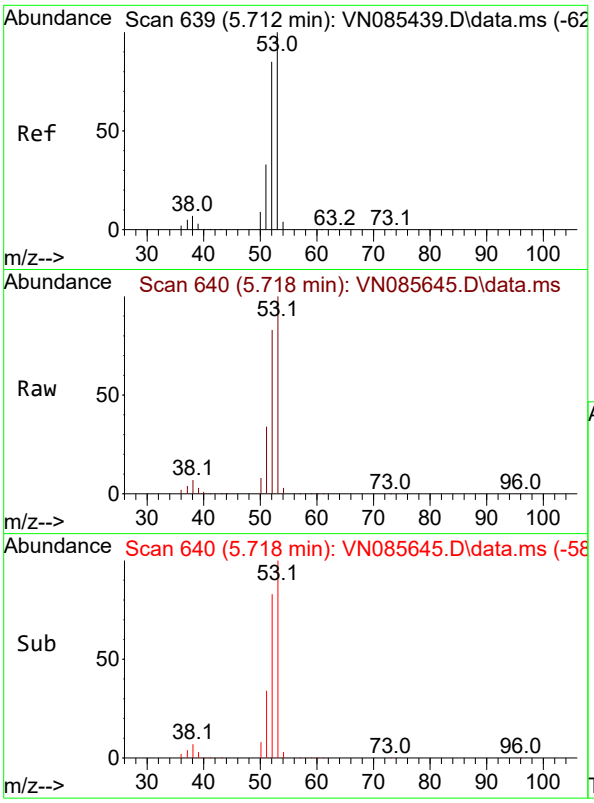


#14
Allyl chloride
Concen: 44.944 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 41 Resp: 157091

Ion	Ratio	Lower	Upper
41	100		
39	82.1	64.4	96.6
76	46.3	30.5	45.7#





#15
Acrylonitrile
Concen: 257.863 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 53 Resp: 30385

Ion	Ratio	Lower	Upper
53	100		
52	82.0	65.5	98.3
51	36.3	29.8	44.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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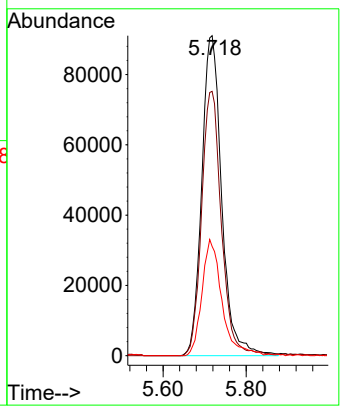
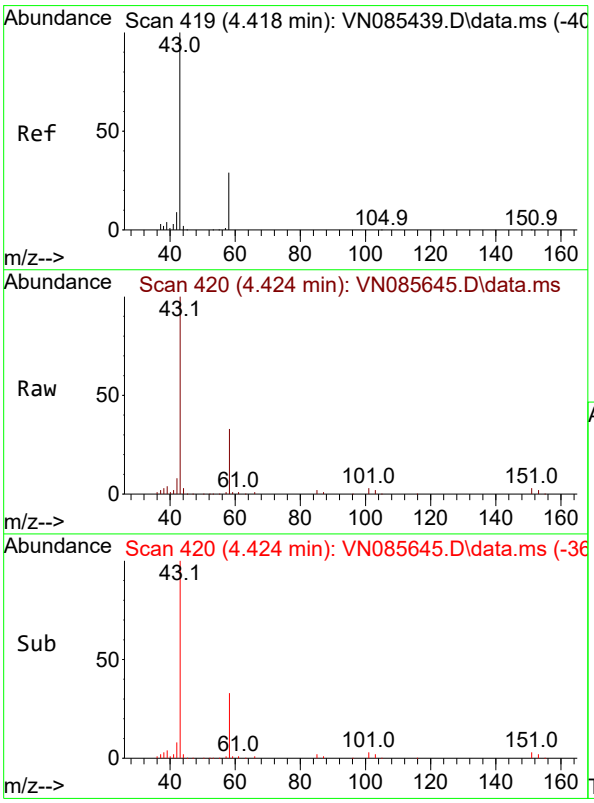
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

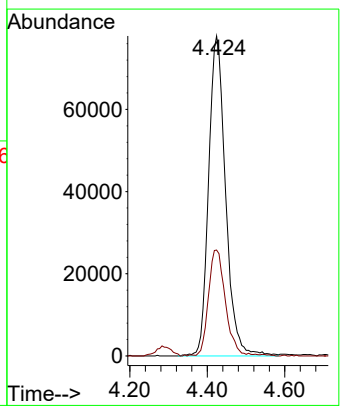


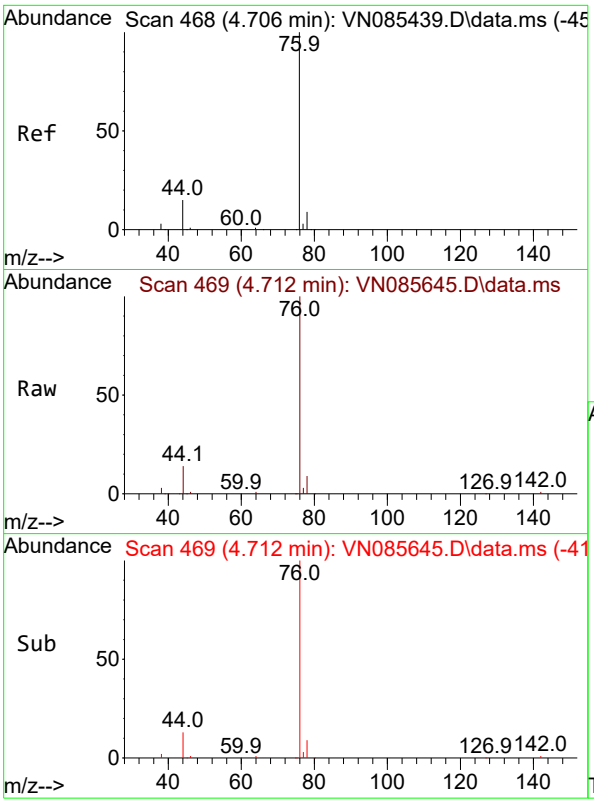


#16
Acetone
Concen: 225.997 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 236574

Ion	Ratio	Lower	Upper
43	100		
58	33.1	23.8	35.6

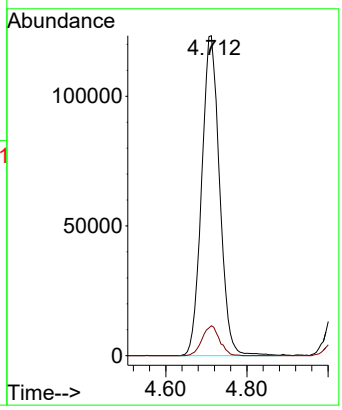




#17
Carbon Disulfide
Concen: 57.001 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 76 Resp: 37803

Ion	Ratio	Lower	Upper
76	100		
78	9.4	6.9	10.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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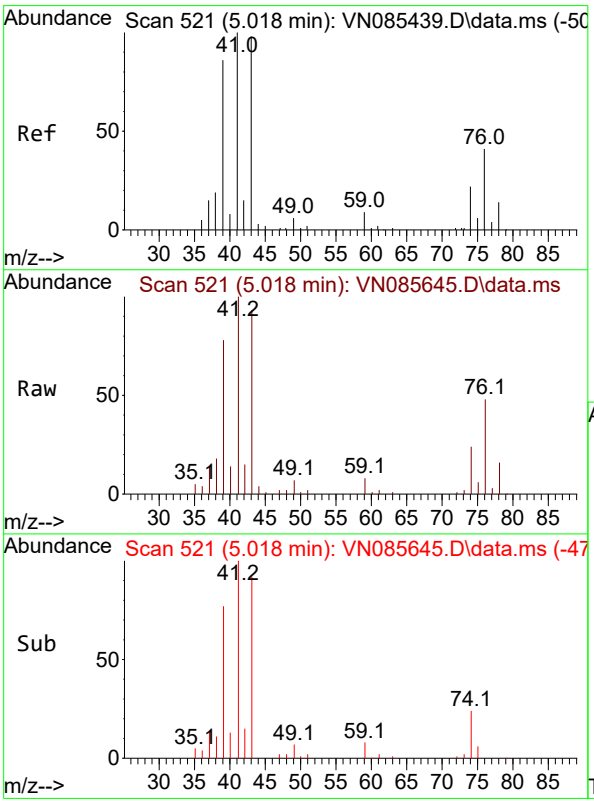
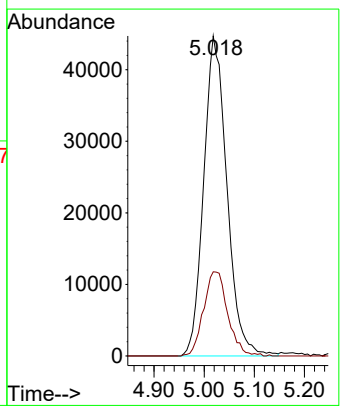
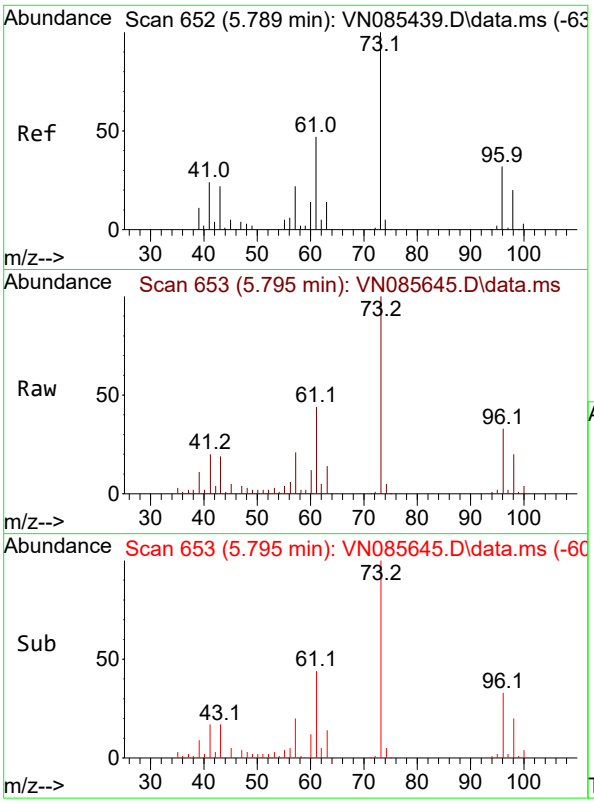


#18
Methyl Acetate
Concen: 45.225 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 143957

Ion	Ratio	Lower	Upper
43	100		
74	27.3	18.6	28.0

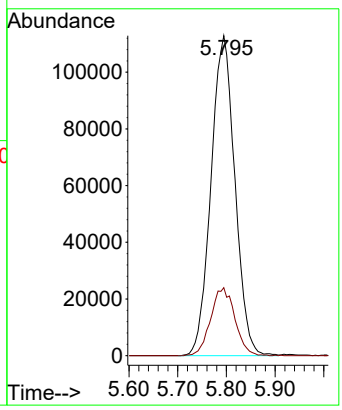




#19
Methyl tert-butyl Ether
Concen: 55.039 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 73 Resp: 38495

Ion	Ratio	Lower	Upper
73	100		
57	21.2	17.8	26.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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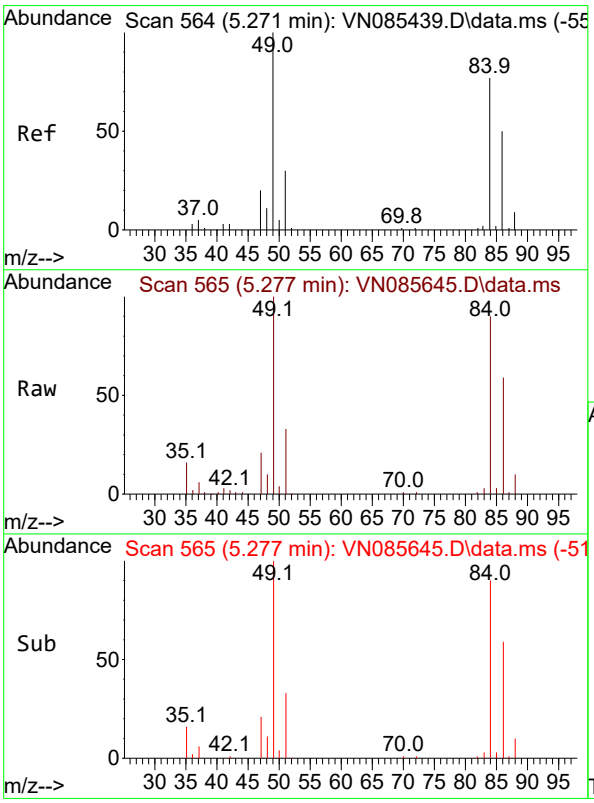
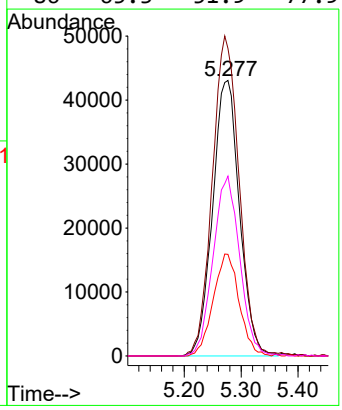
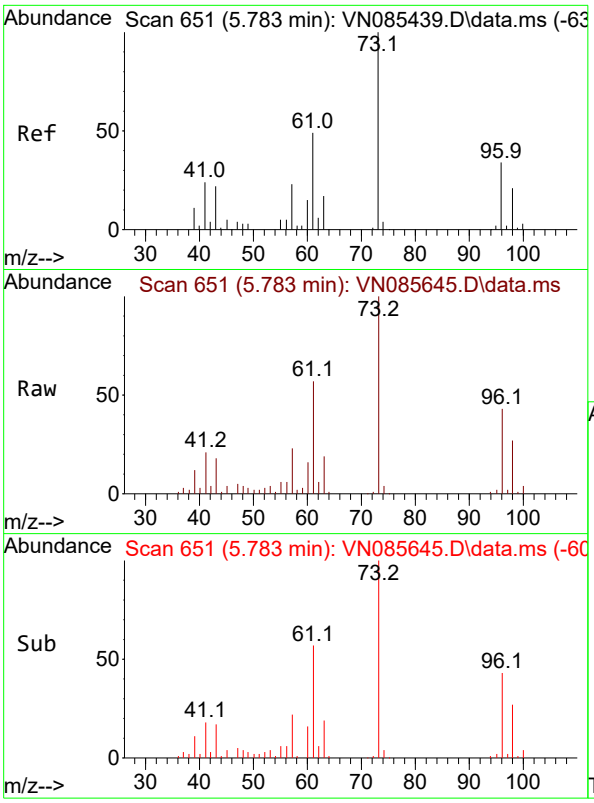


#20
Methylene Chloride
Concen: 54.697 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 84 Resp: 141744

Ion	Ratio	Lower	Upper
84	100		
49	111.6	104.1	156.1
51	36.9	31.0	46.4
86	65.3	51.9	77.9





#21
trans-1,2-Dichloroethene
Concen: 57.502 ug/l
RT: 5.783 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 96 Resp: 13237

Ion	Ratio	Lower	Upper
96	100		
61	133.3	115.7	173.5
98	62.5	49.8	74.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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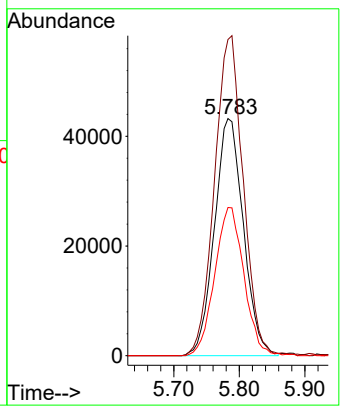
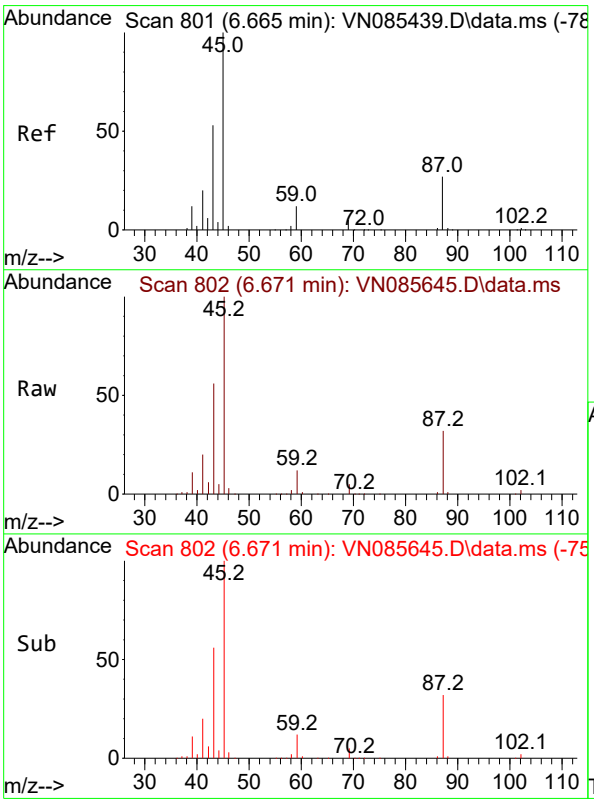
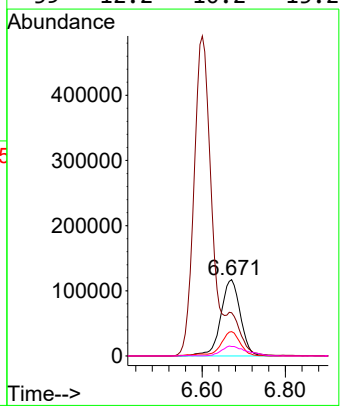


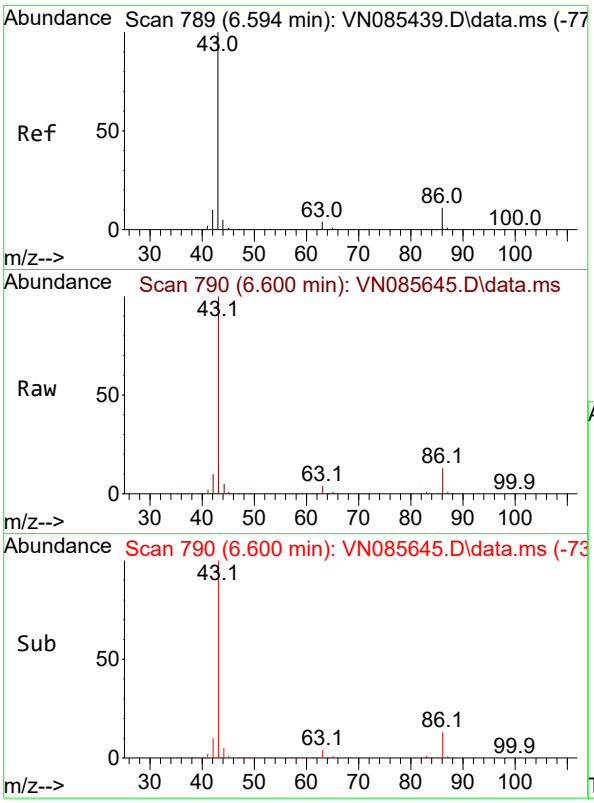


#22
Diisopropyl ether
Concen: 49.208 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 45 Resp: 381754

Ion	Ratio	Lower	Upper
45	100		
43	55.5	45.0	67.6
87	31.9	21.8	32.8
59	12.2	10.2	15.2





#23
Vinyl Acetate
Concen: 259.616 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 140953

Ion	Ratio	Lower	Upper
43	100		
86	12.5	8.4	12.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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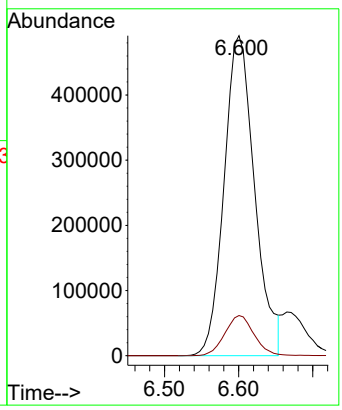
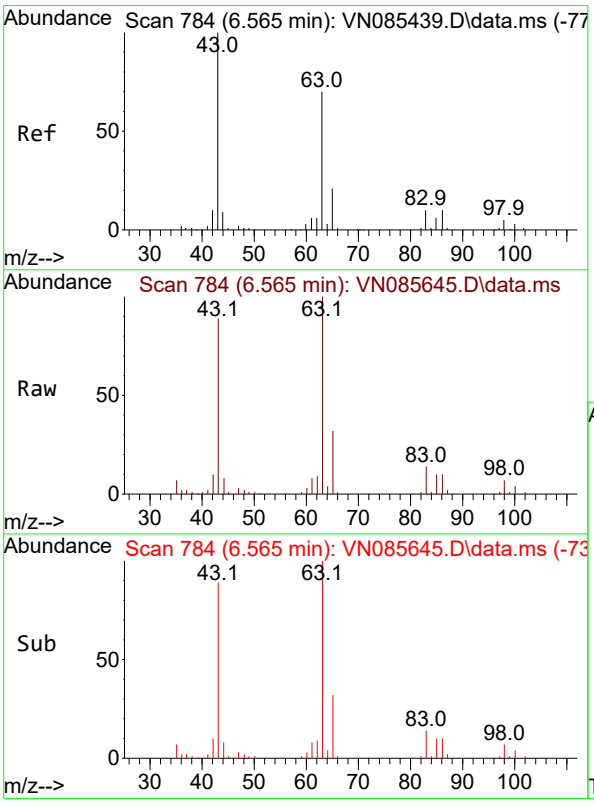
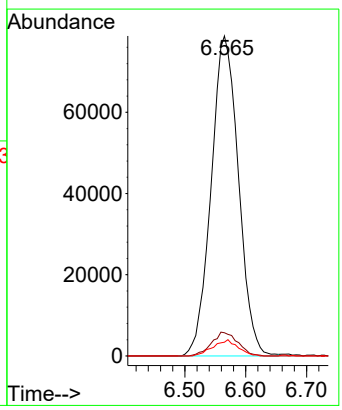


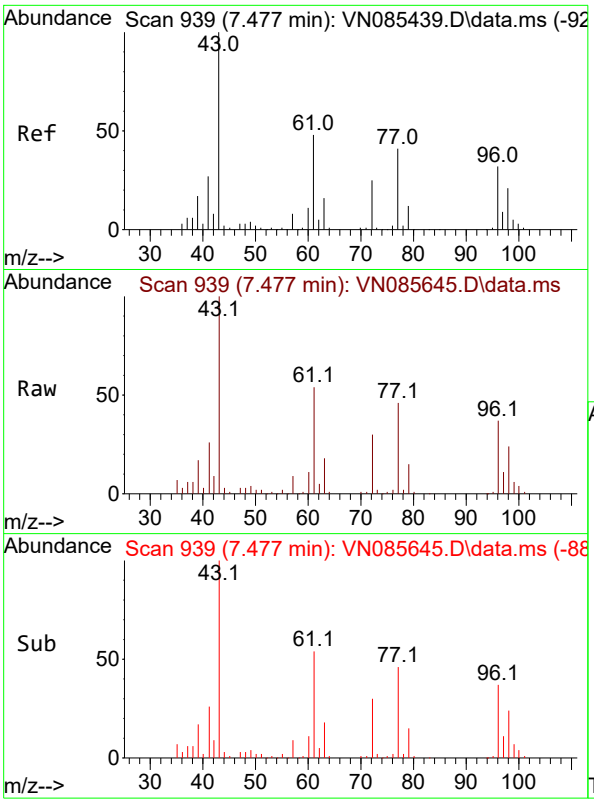


#24
1,1-Dichloroethane
Concen: 51.962 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 63 Resp: 245805

Ion	Ratio	Lower	Upper
63	100		
98	7.2	3.3	9.8
100	4.3	2.0	6.0





#25
2-Butanone
Concen: 241.685 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 37230

Ion	Ratio	Lower	Upper
43	100		
72	29.8	20.2	30.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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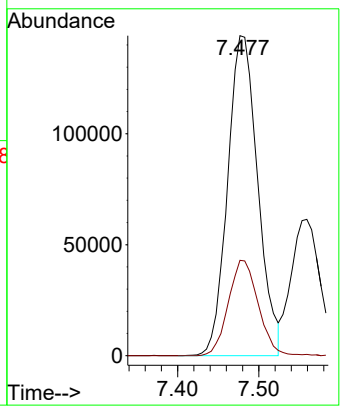
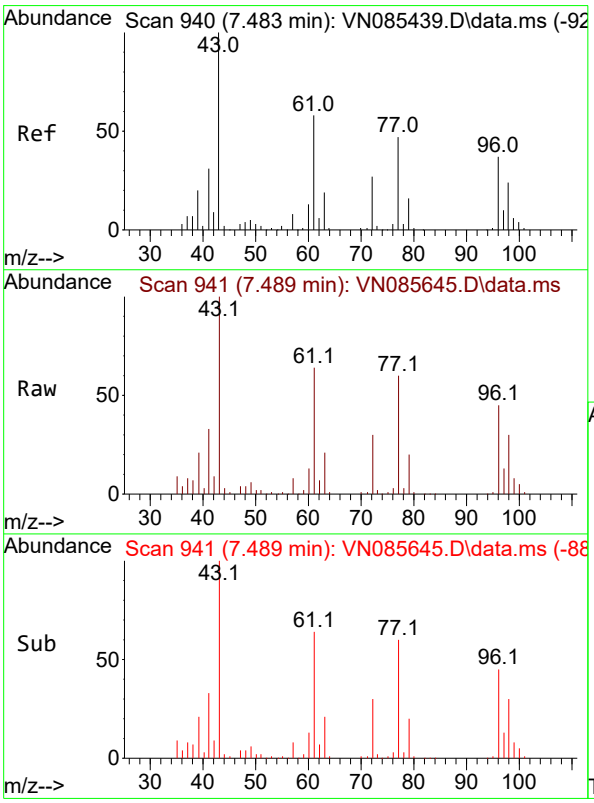
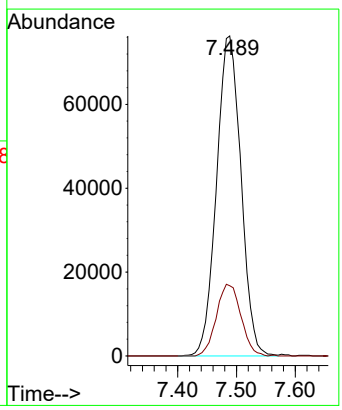


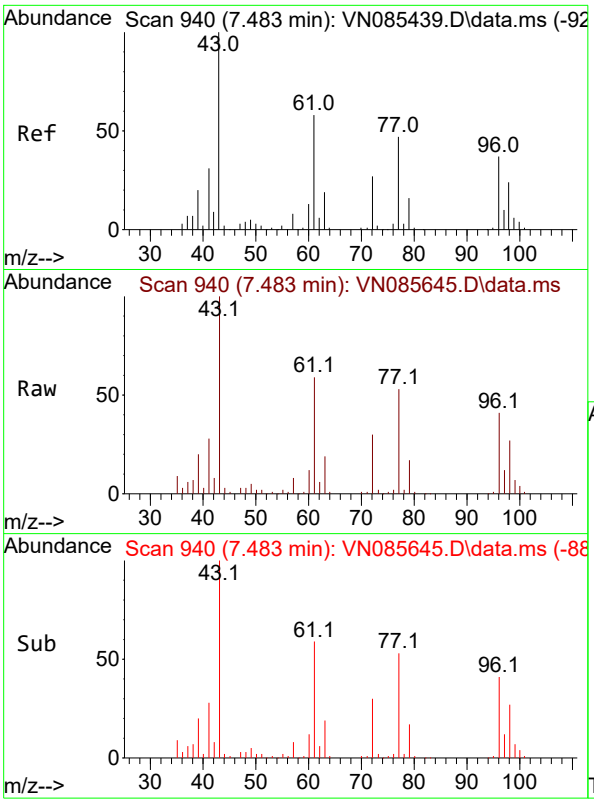


#26
2,2-Dichloropropane
Concen: 57.562 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 77 Resp: 220150

Ion	Ratio	Lower	Upper
77	100		
97	22.5	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 57.208 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 96 Resp: 15511

Ion	Ratio	Lower	Upper
96	100		
61	143.8	0.0	311.8
98	64.1	0.0	126.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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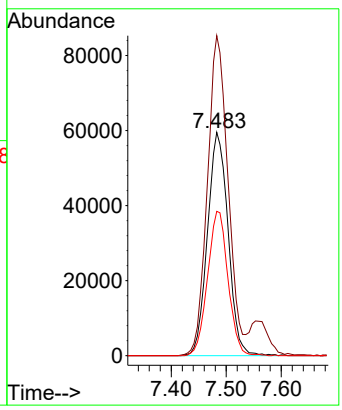
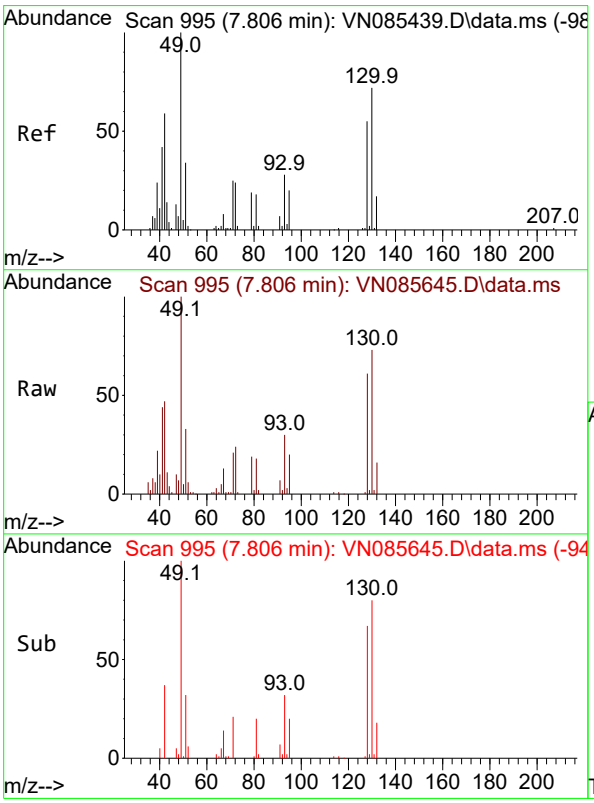
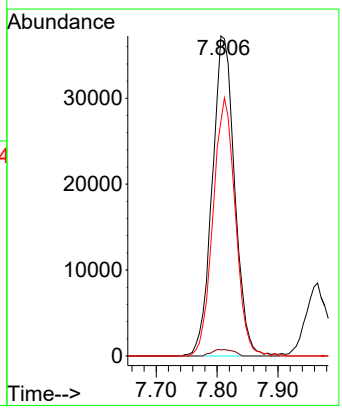


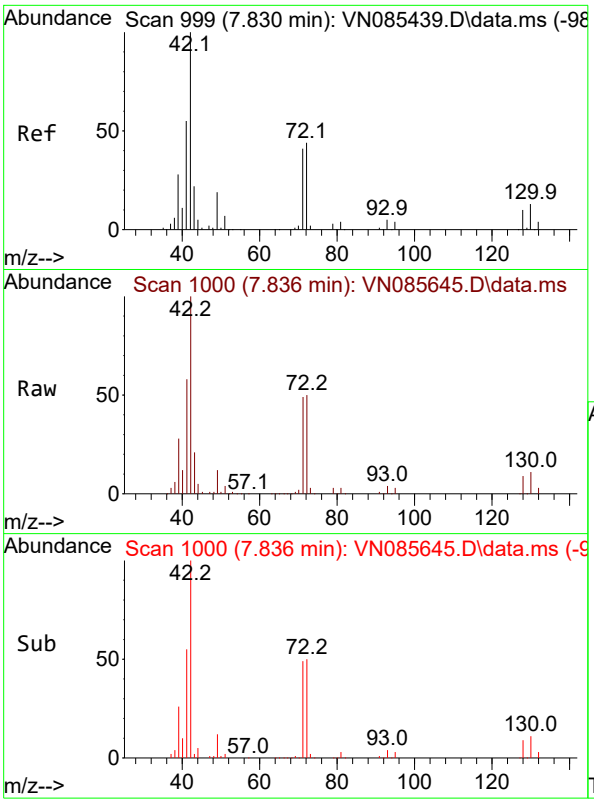


#28
Bromochloromethane
Concen: 43.426 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 49 Resp: 95572

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.4
130	79.8	55.0	82.4

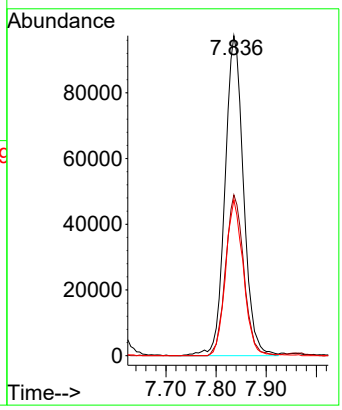




#29
Tetrahydrofuran
Concen: 255.923 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 42 Resp: 24994

Ion	Ratio	Lower	Upper
42	100		
72	49.7	34.2	51.2
71	46.9	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
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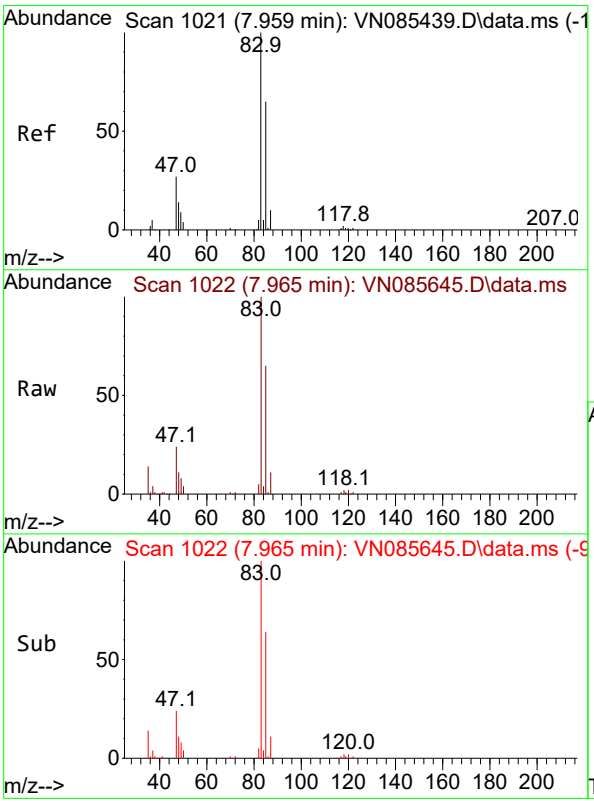
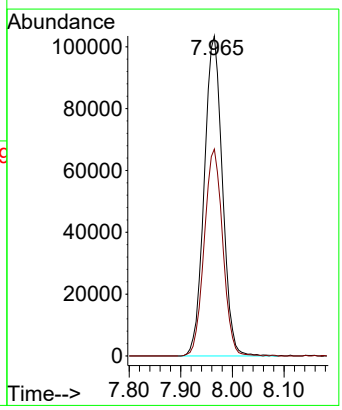
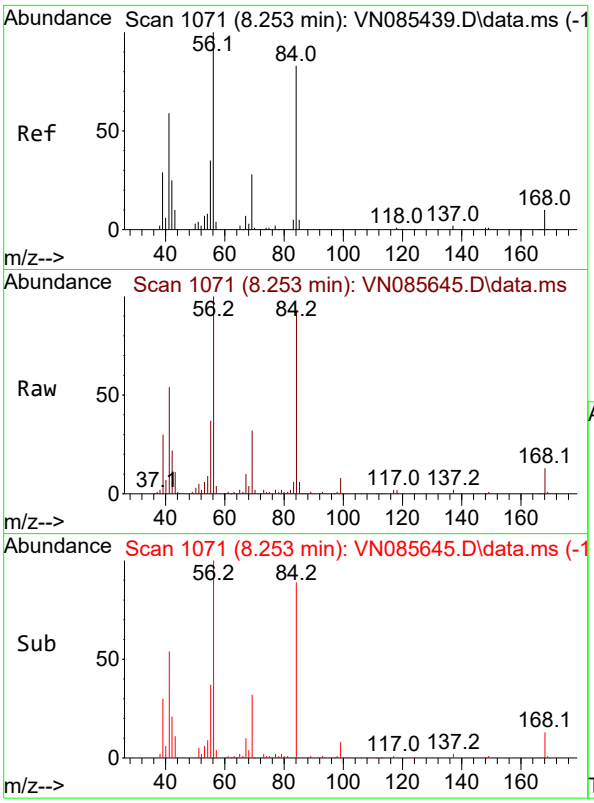


#30
Chloroform
Concen: 51.611 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 83 Resp: 252335

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.8	77.6

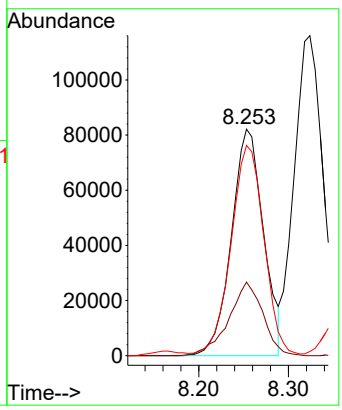




#31
Cyclohexane
Concen: 49.690 ug/l
RT: 8.253 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 56 Resp: 20430

Ion	Ratio	Lower	Upper
56	100		
69	32.5	22.2	33.4
84	91.5	66.4	99.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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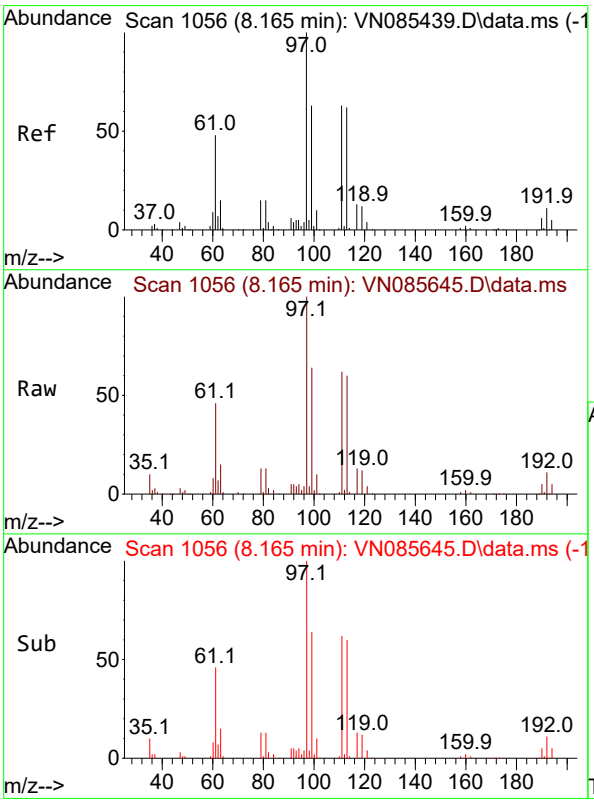
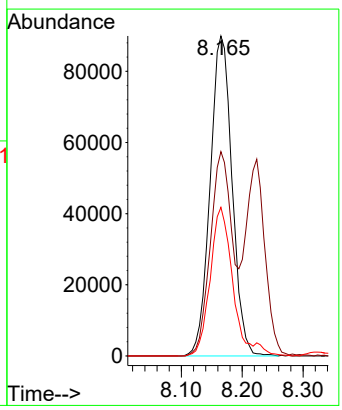
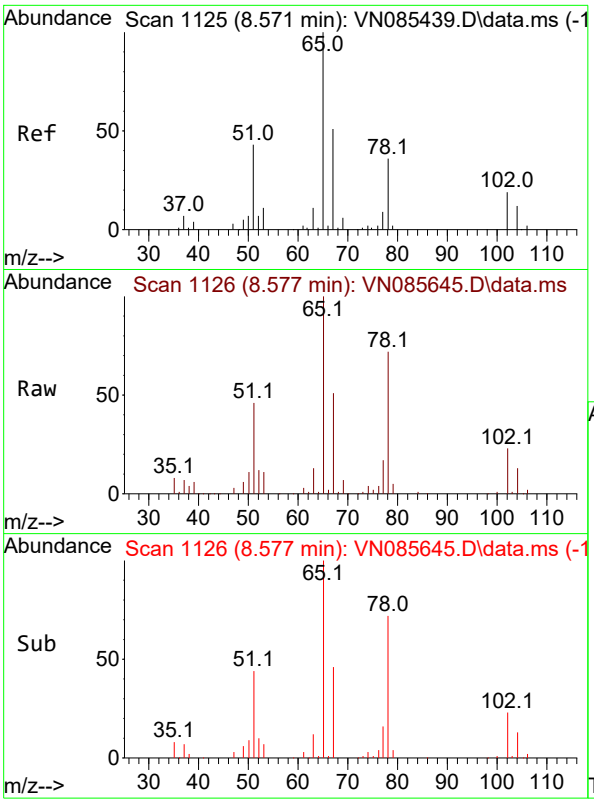


#32
1,1,1-Trichloroethane
Concen: 52.509 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 97 Resp: 225191

Ion	Ratio	Lower	Upper
97	100		
99	64.3	49.8	74.6
61	48.2	41.4	62.2

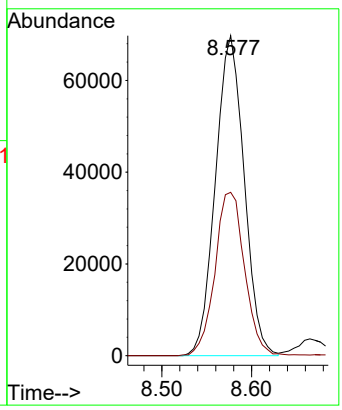




#33
1,2-Dichloroethane-d4
Concen: 47.780 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 65 Resp: 15479

Ion	Ratio	Lower	Upper
65	100		
67	52.9	0.0	101.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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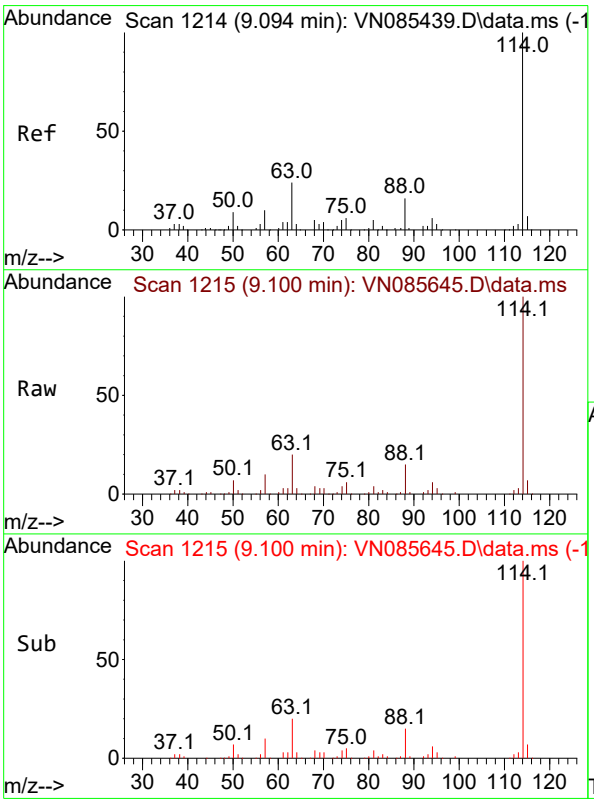
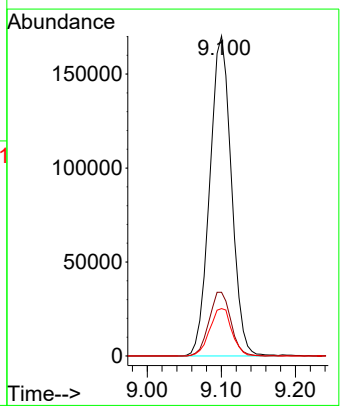
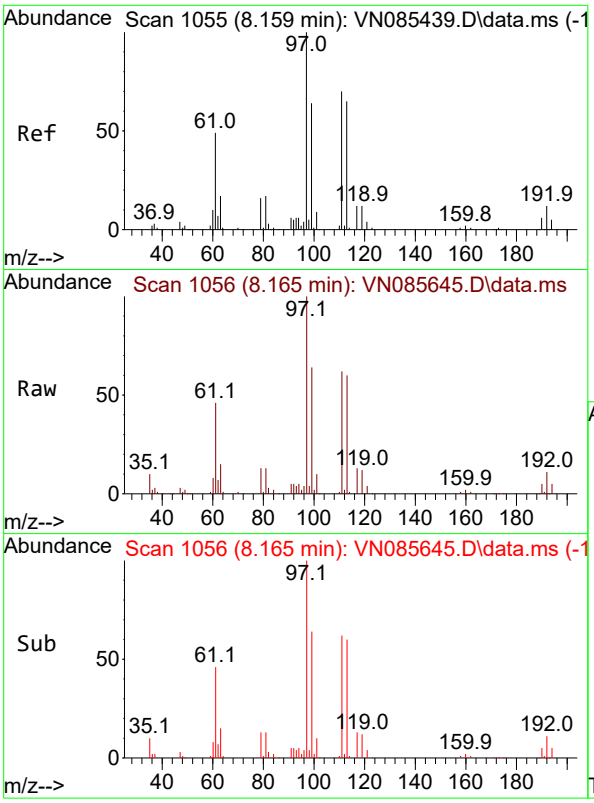


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:114 Resp: 345148

Ion	Ratio	Lower	Upper
114	100		
63	19.9	0.0	47.6
88	14.8	0.0	32.6

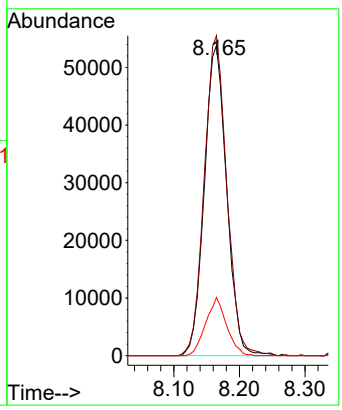




#35
Dibromofluoromethane
Concen: 53.153 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:113 Resp: 12727

Ion	Ratio	Lower	Upper
113	100		
111	104.1	82.7	124.1
192	17.6	14.3	21.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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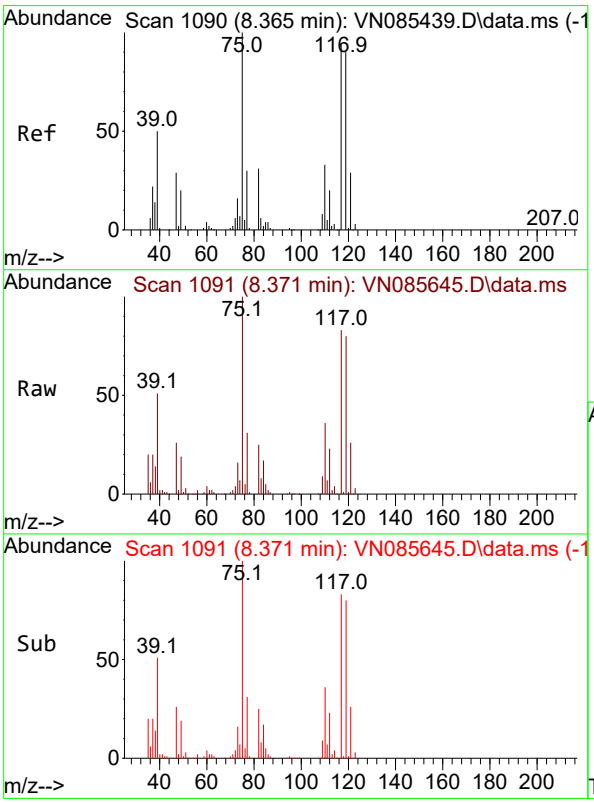
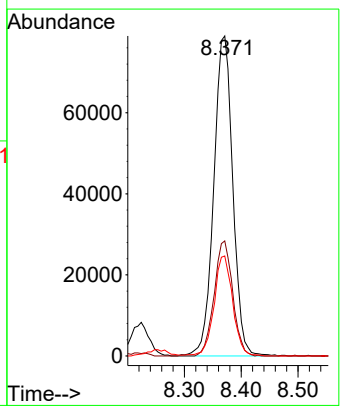
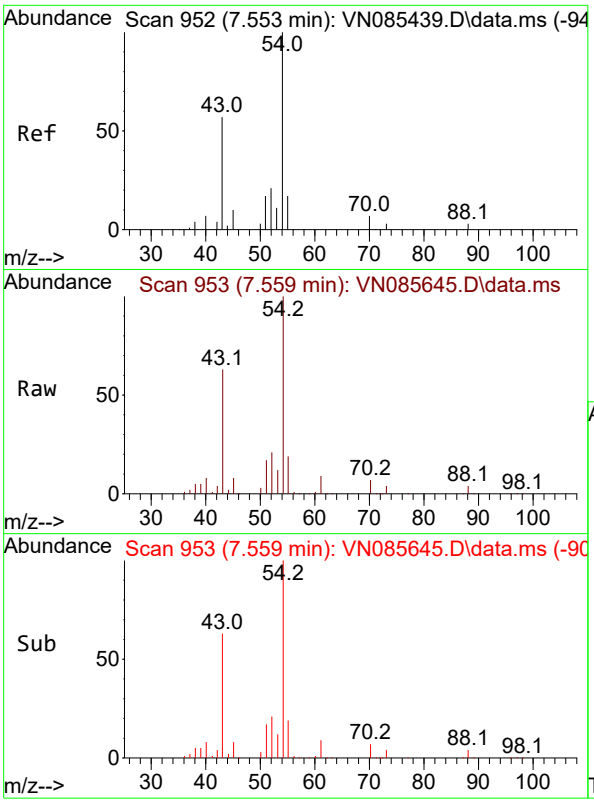


#36
1,1-Dichloropropene
Concen: 54.731 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 183927

Ion	Ratio	Lower	Upper
75	100		
110	35.1	16.5	49.5
77	30.7	24.4	36.6

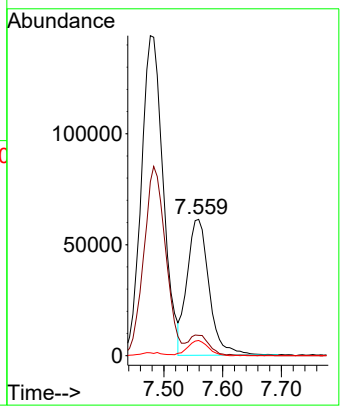




#37
Ethyl Acetate
Concen: 46.933 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 15919

Ion	Ratio	Lower	Upper
43	100		
61	14.2	10.9	16.3
70	10.4	7.5	11.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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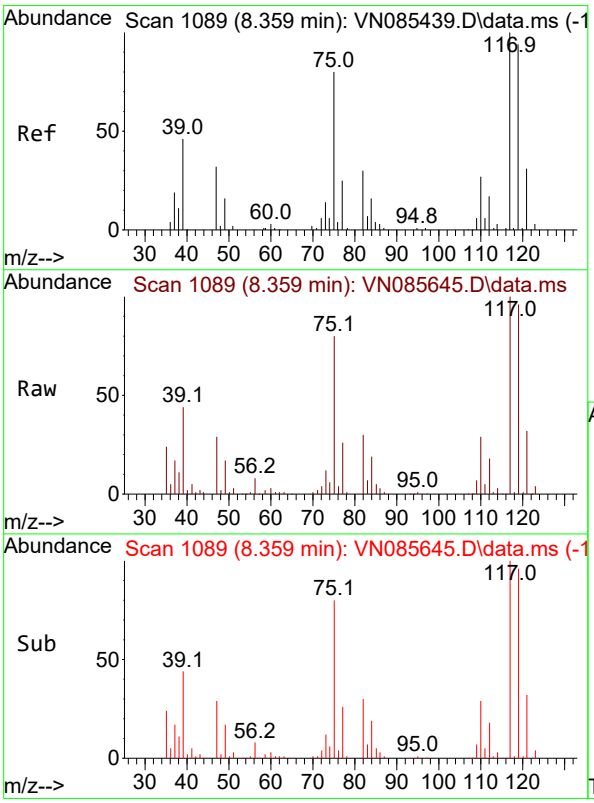
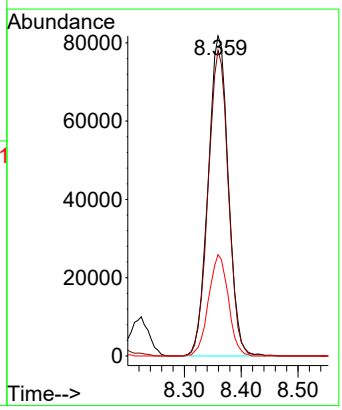
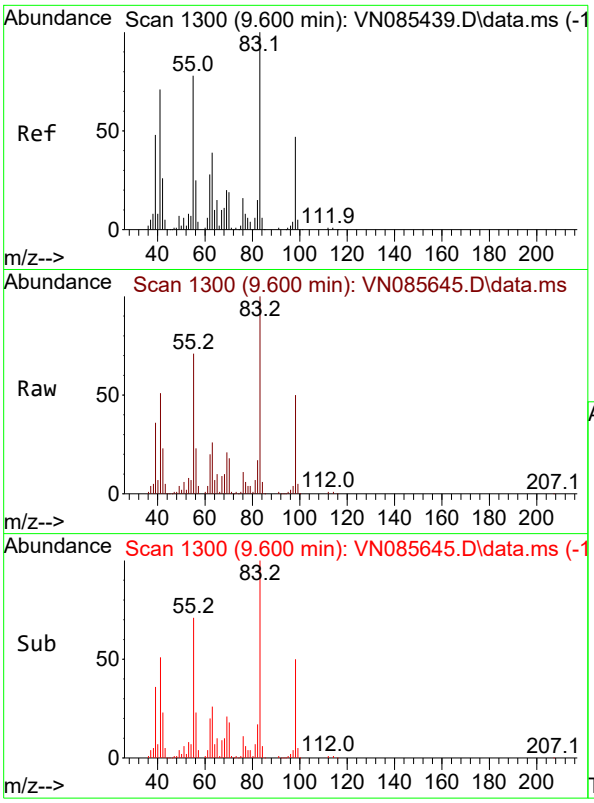


#38
Carbon Tetrachloride
Concen: 52.524 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:117 Resp: 202078

Ion	Ratio	Lower	Upper
117	100		
119	95.5	75.4	113.2
121	31.6	24.6	37.0





#39
Methylcyclohexane
Concen: 62.021 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 83 Resp: 19585

Ion	Ratio	Lower	Upper
83	100		
55	70.7	62.6	94.0
98	49.5	37.7	56.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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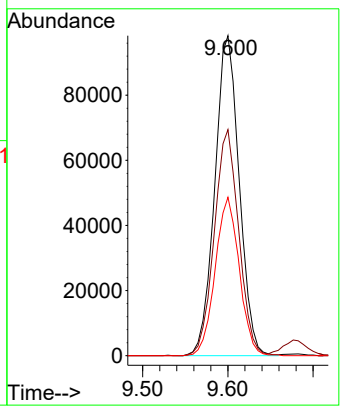
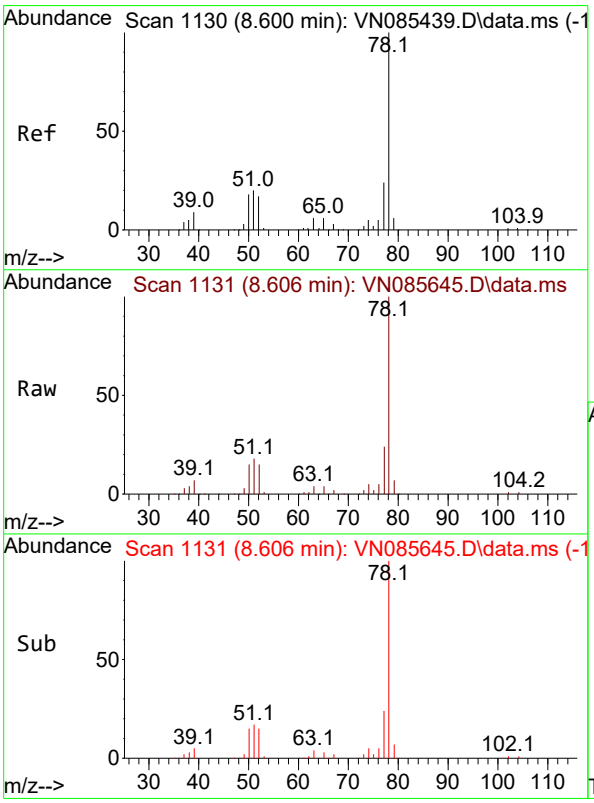
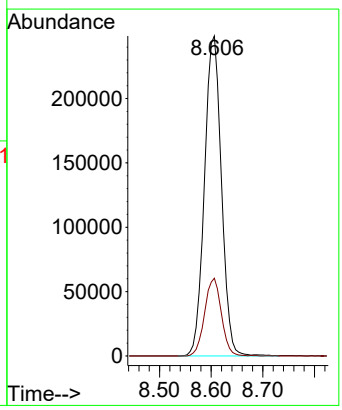


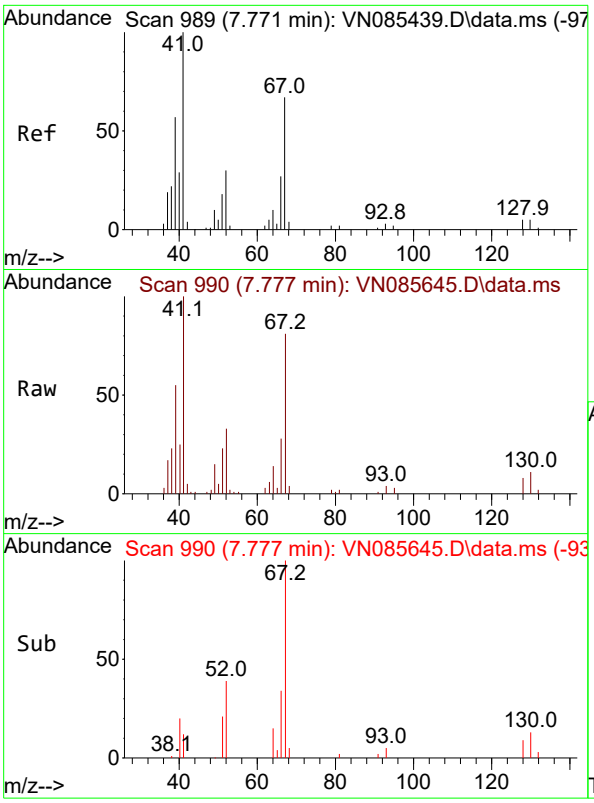


#40
Benzene
Concen: 56.166 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 78 Resp: 567137

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.0	28.6

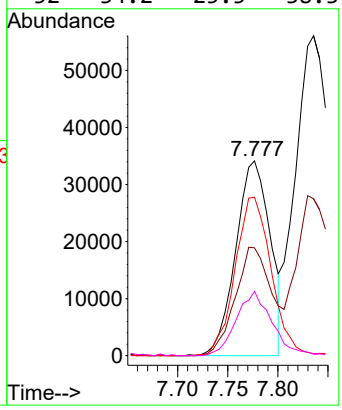




#41
Methacrylonitrile
Concen: 46.204 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 41 Resp: 8153

Ion	Ratio	Lower	Upper
41	100		
39	60.2	46.0	69.0
67	85.5	57.4	86.2
52	34.2	25.5	38.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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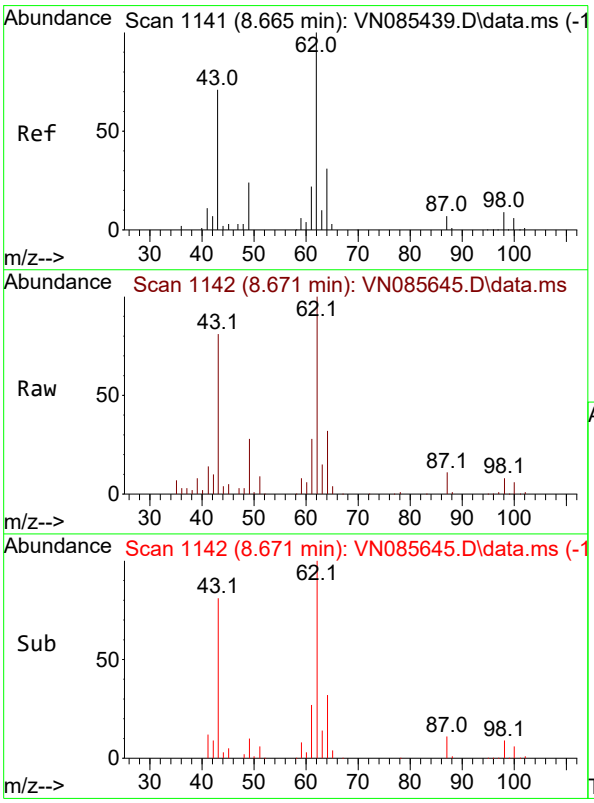
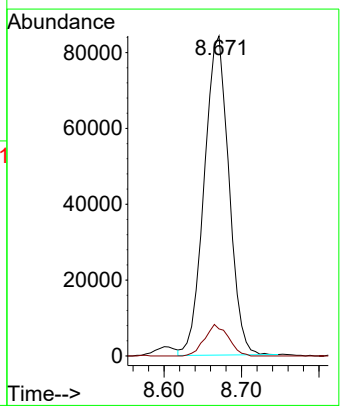
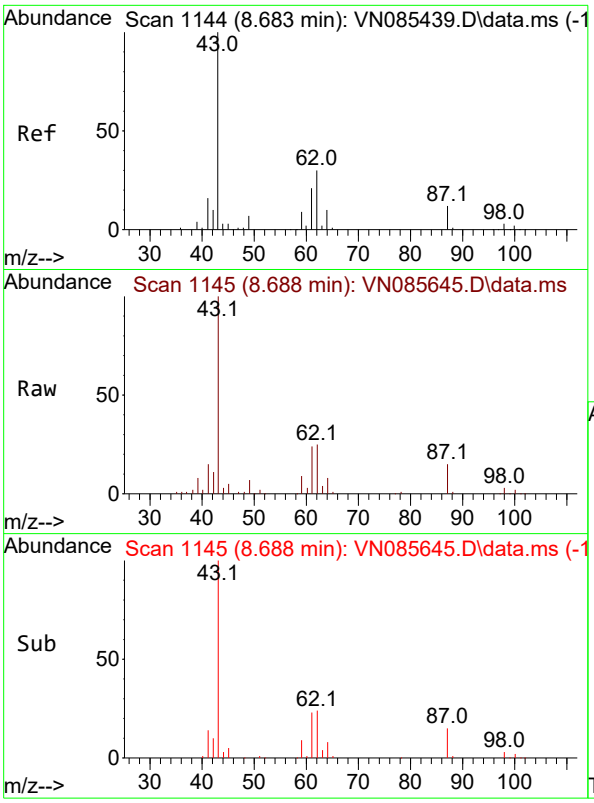


#42
1,2-Dichloroethane
Concen: 48.850 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 62 Resp: 185776

Ion	Ratio	Lower	Upper
62	100		
98	9.5	0.0	17.0





#43
Isopropyl Acetate
Concen: 49.962 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 27155

Ion	Ratio	Lower	Upper
43	100		
61	27.9	20.7	31.1
87	14.6	9.8	14.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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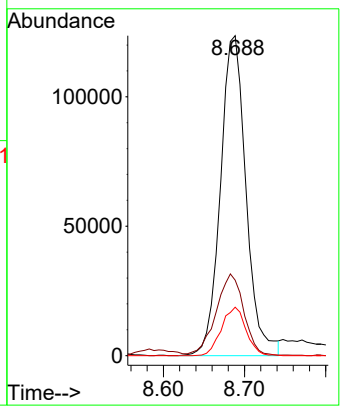
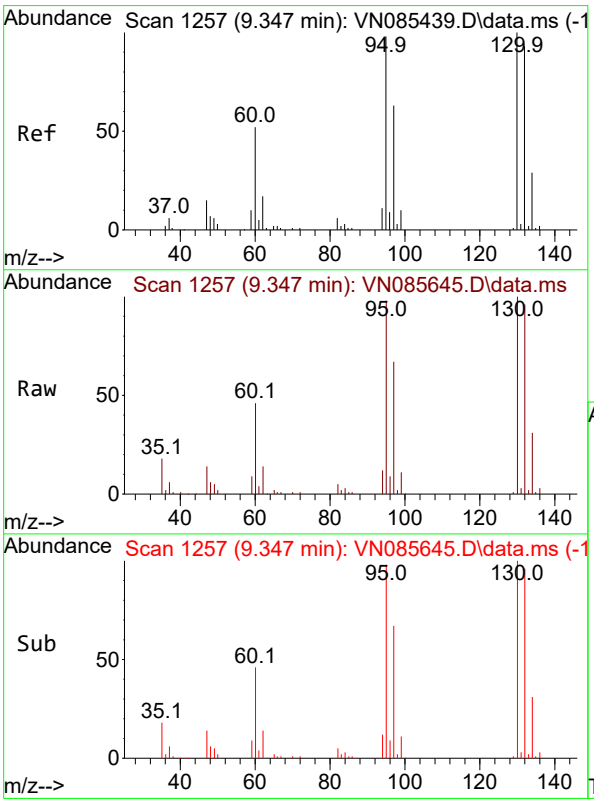
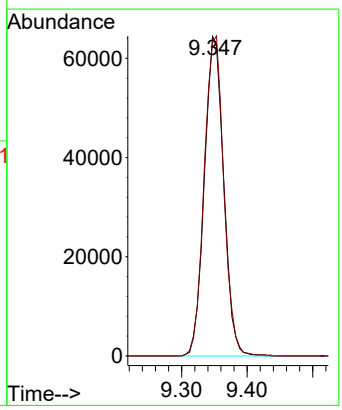


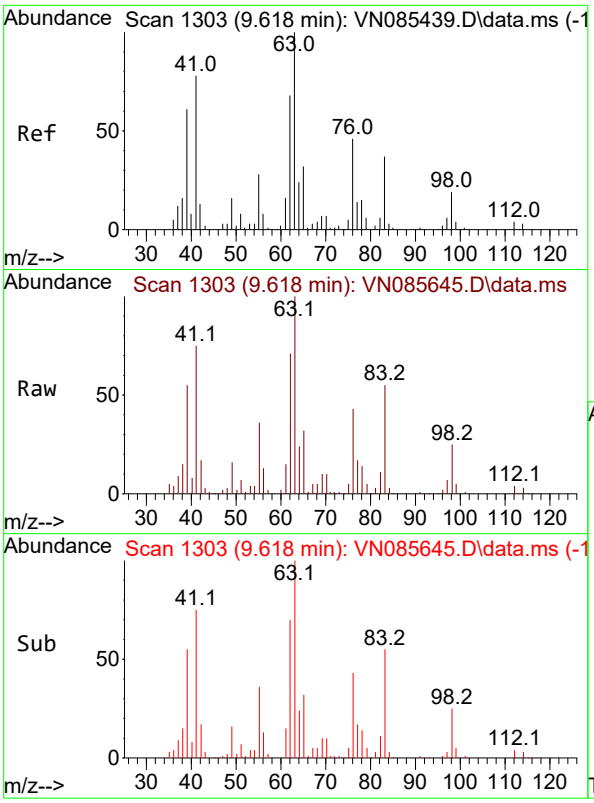


#44
Trichloroethene
Concen: 56.068 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:130 Resp: 131785

Ion	Ratio	Lower	Upper
130	100		
95	98.1	0.0	195.8

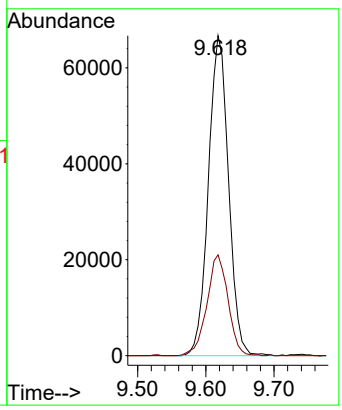




#45
1,2-Dichloropropane
Concen: 53.137 ug/l
RT: 9.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 63 Resp: 13705

Ion	Ratio	Lower	Upper
63	100		
65	31.5	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
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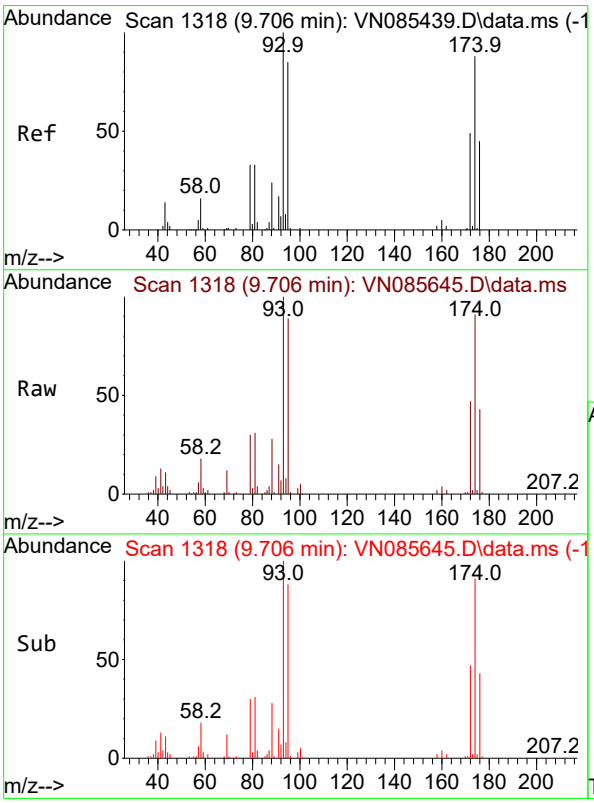
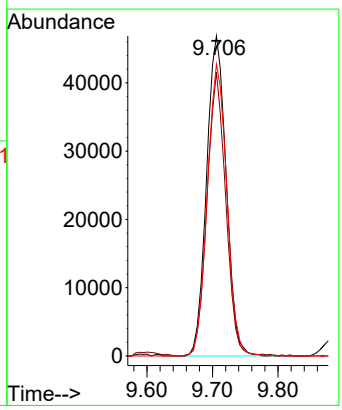
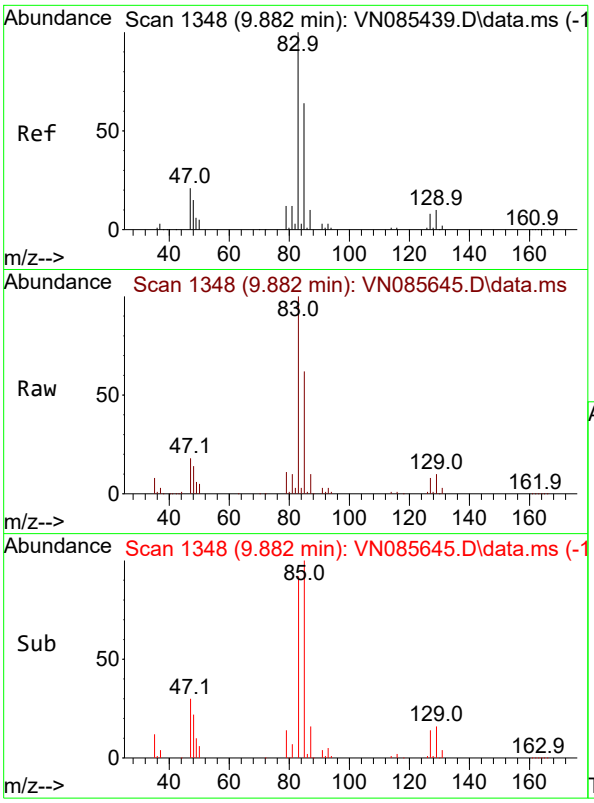


#46
Dibromomethane
Concen: 52.419 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 93 Resp: 97554

Ion	Ratio	Lower	Upper
93	100		
95	84.0	64.7	97.1
174	90.8	69.0	103.4

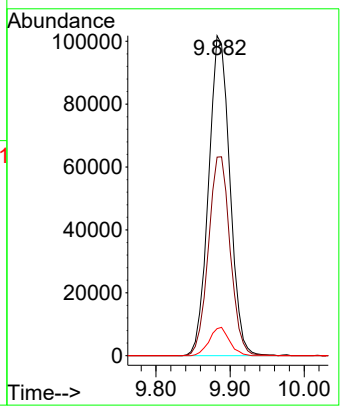




#47
Bromodichloromethane
Concen: 53.411 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 83 Resp: 20250

Ion	Ratio	Lower	Upper
83	100		
85	62.0	51.2	76.8
127	8.5	6.5	9.7



Instrument :
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ClientSampleId :
VSTDCCC050

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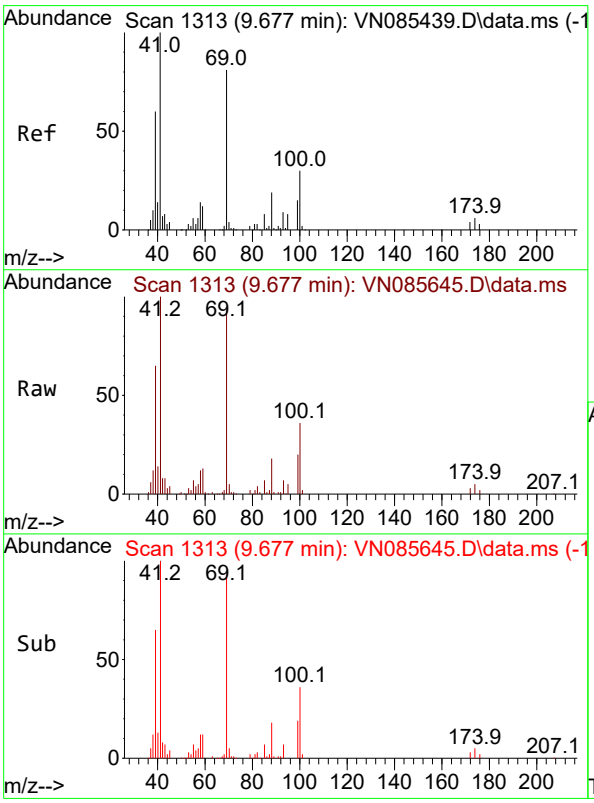
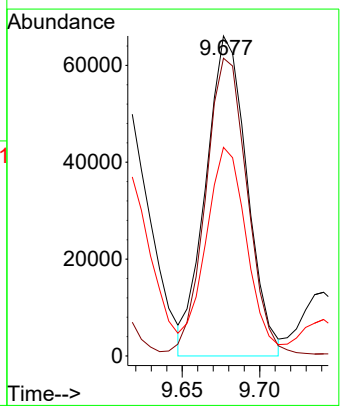
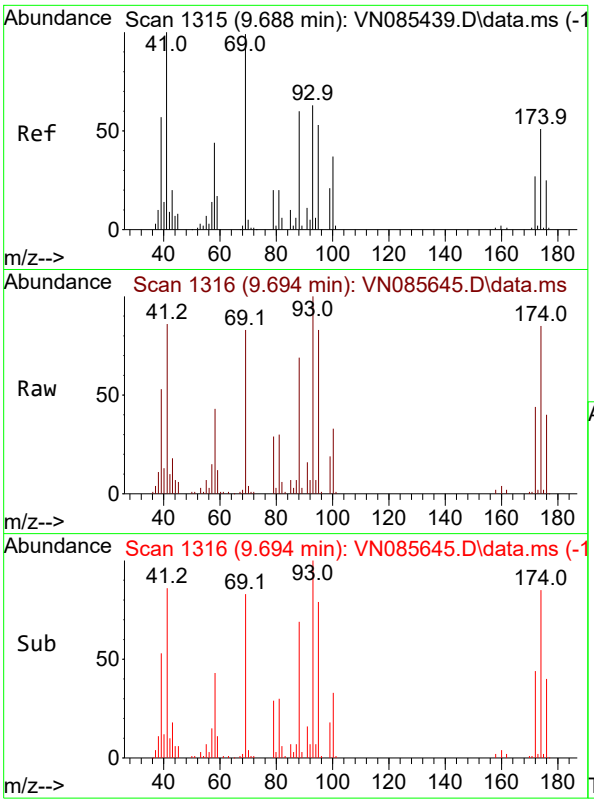


#48
Methyl methacrylate
Concen: 50.045 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 41 Resp: 122409

Ion	Ratio	Lower	Upper
41	100		
69	94.5	64.7	97.1
39	65.0	49.0	73.6





#49
1,4-Dioxane
Concen: 1142.294 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 88 Resp: 4705

Ion	Ratio	Lower	Upper
88	100		
43	24.5	26.6	39.8
58	66.8	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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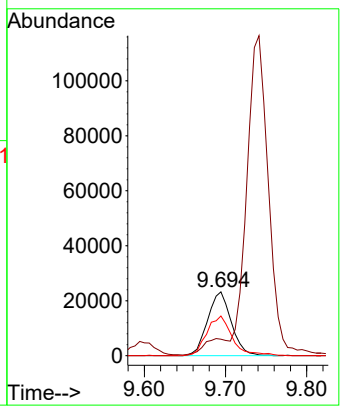
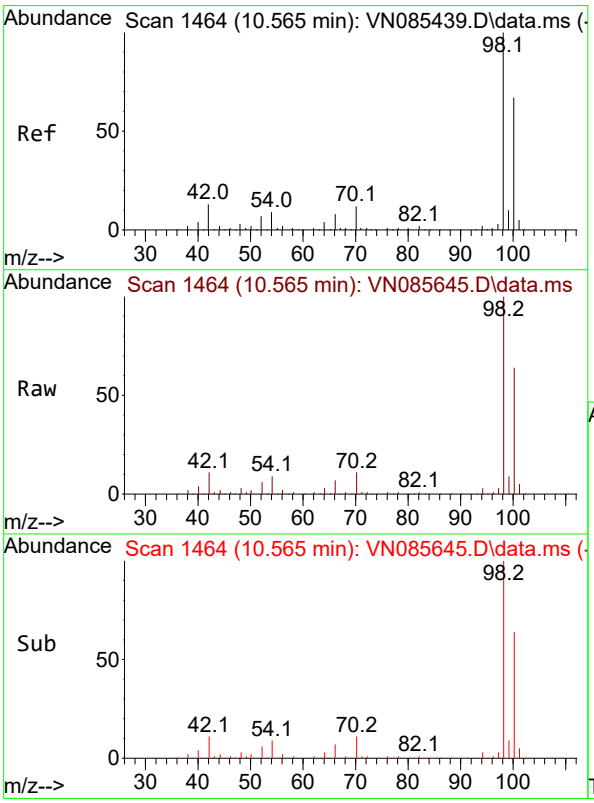
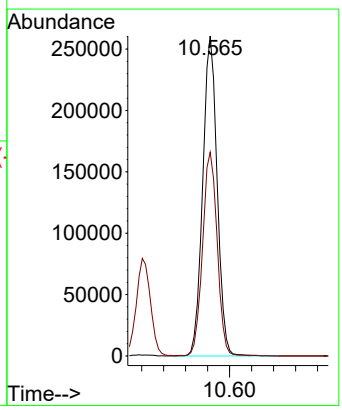


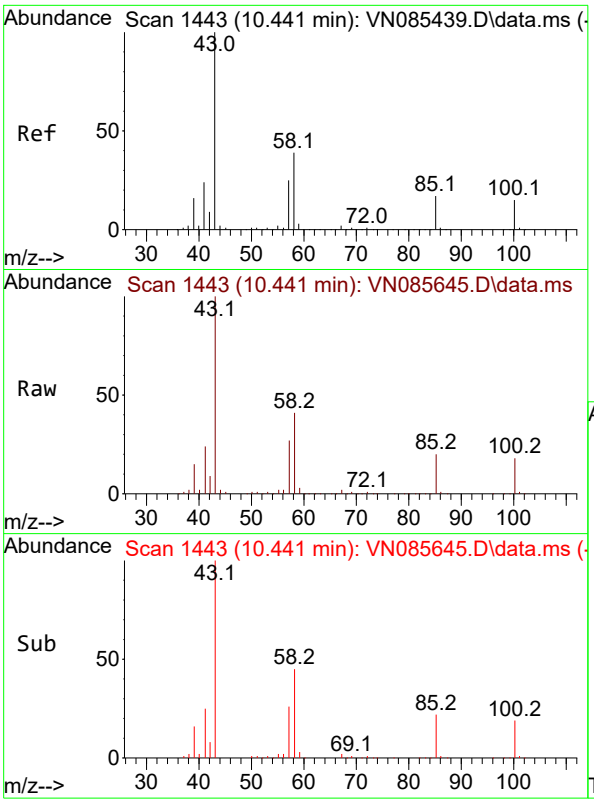


#50
Toluene-d8
Concen: 55.713 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 98 Resp: 473979

Ion	Ratio	Lower	Upper
98	100		
100	64.3	52.2	78.4





#51
4-Methyl-2-Pentanone
Concen: 253.917 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 80085

Ion	Ratio	Lower	Upper
43	100		
58	41.9	30.5	45.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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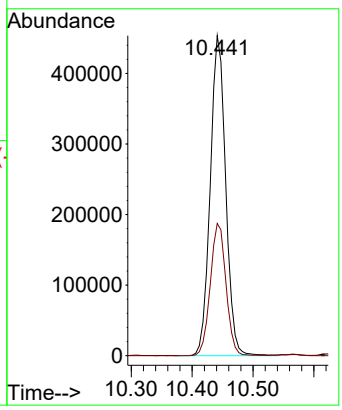
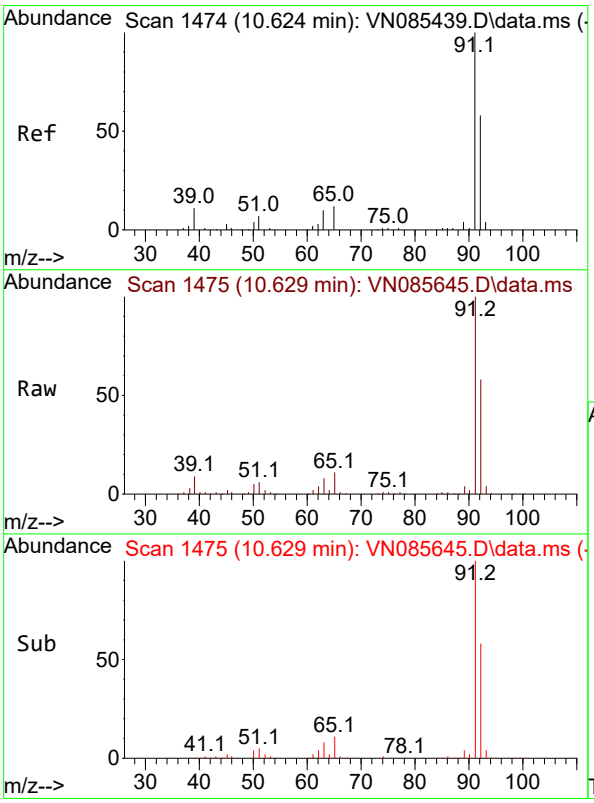
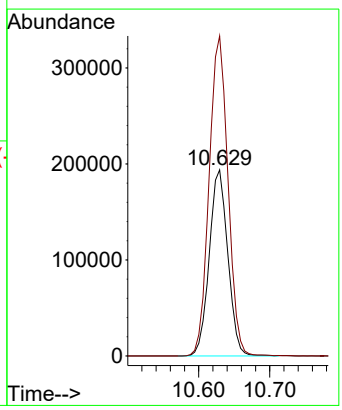


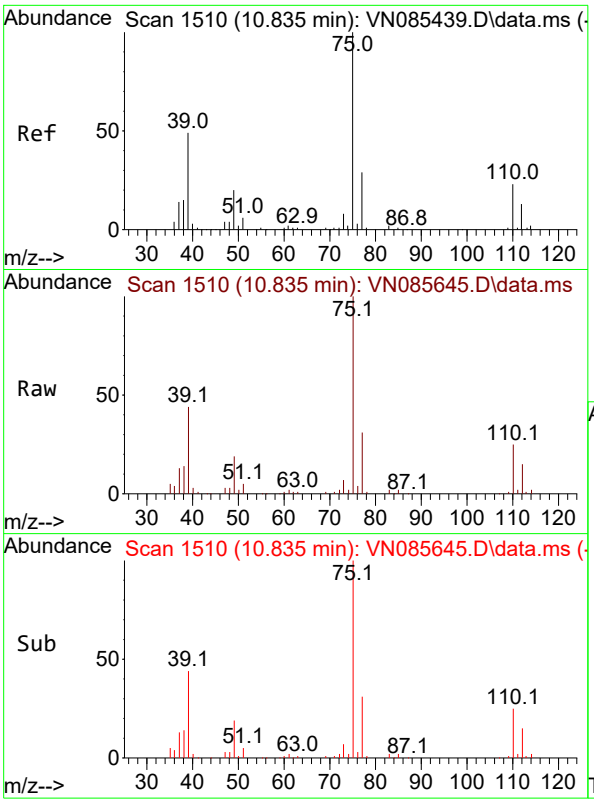


#52
Toluene
Concen: 60.150 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 92 Resp: 351922

Ion	Ratio	Lower	Upper
92	100		
91	174.5	139.2	208.8

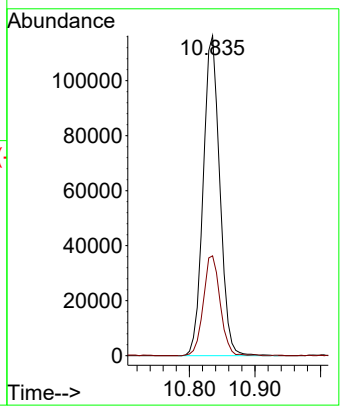




#53
t-1,3-Dichloropropene
Concen: 57.048 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 20440

Ion	Ratio	Lower	Upper
75	100		
77	31.2	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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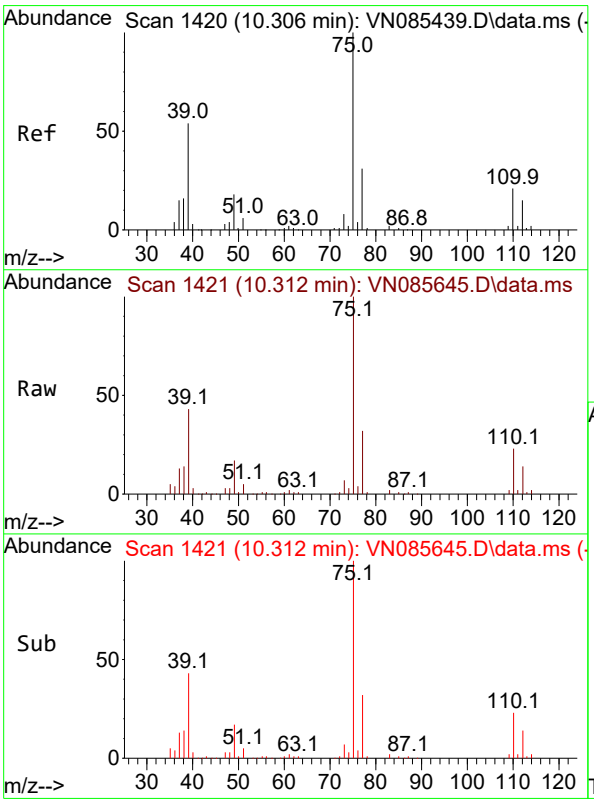
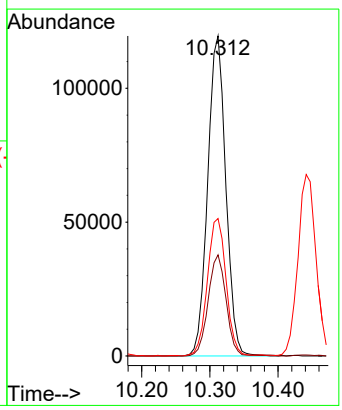
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

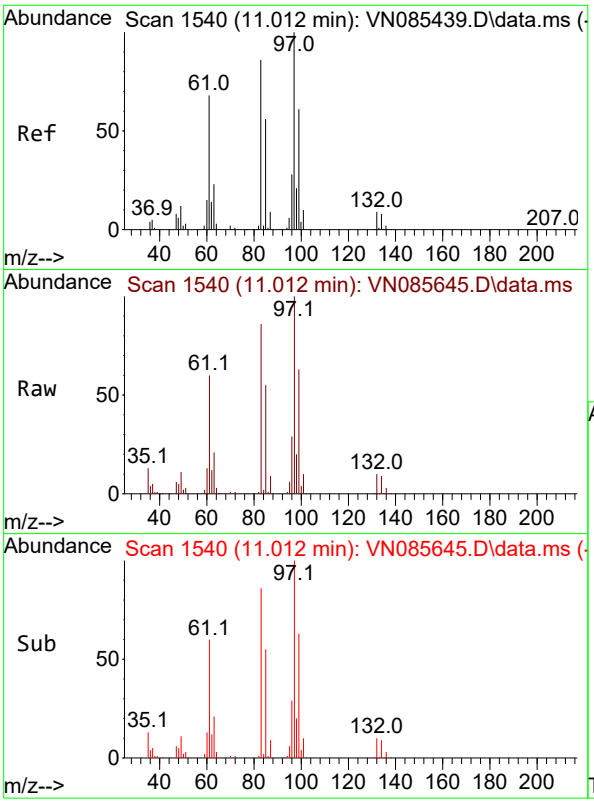


#54
cis-1,3-Dichloropropene
Concen: 57.810 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 221256

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.0	37.4
39	42.8	43.1	64.7#

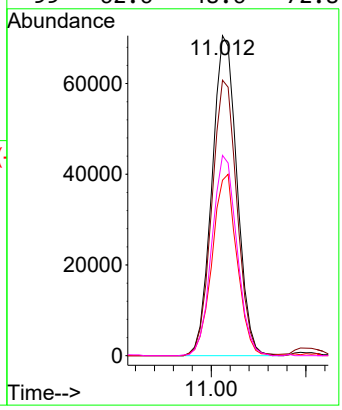




#55
1,1,2-Trichloroethane
Concen: 55.842 ug/l
RT: 11.012 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 97 Resp: 12929

Ion	Ratio	Lower	Upper
97	100		
83	86.1	69.0	103.6
85	54.9	44.6	66.8
99	62.6	48.6	72.8



Instrument :
MSVOA_N
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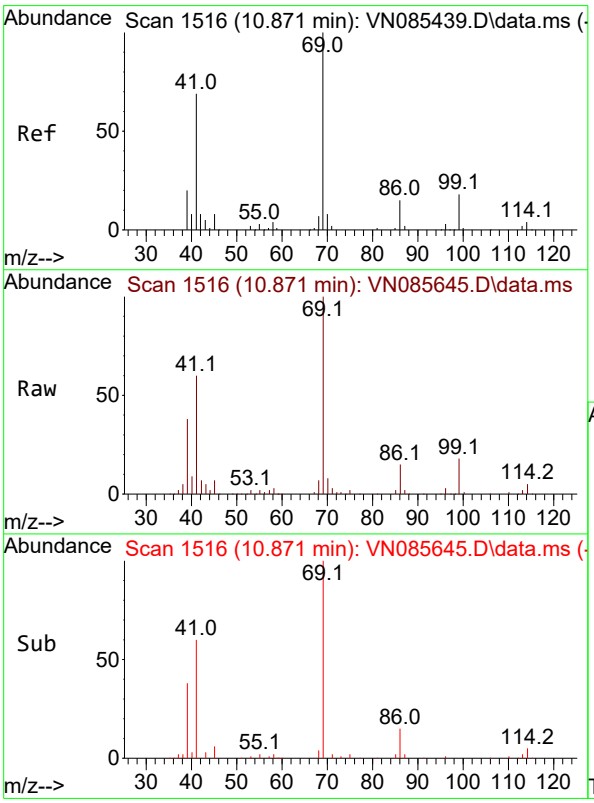
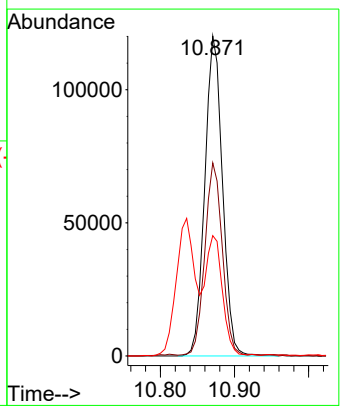
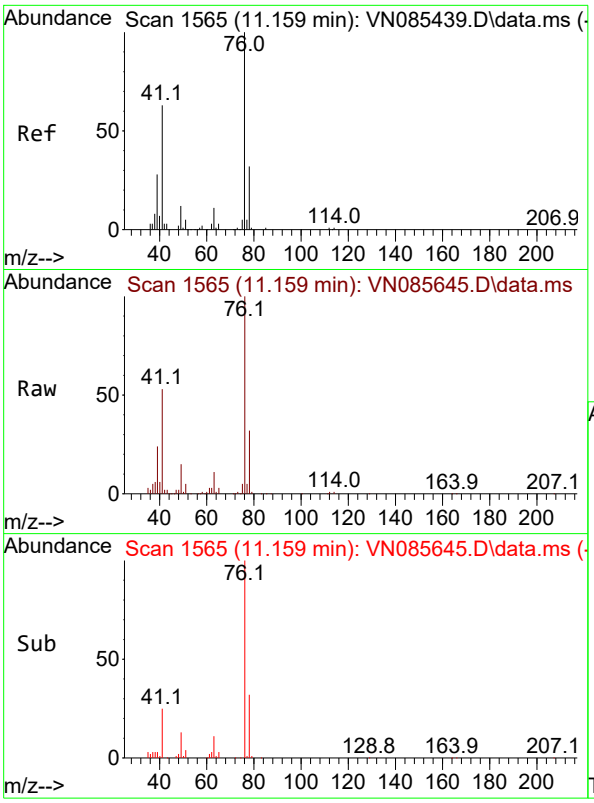


#56
Ethyl methacrylate
Concen: 50.997 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 69 Resp: 199066

Ion	Ratio	Lower	Upper
69	100		
41	59.3	54.6	82.0
39	35.8	32.4	48.6

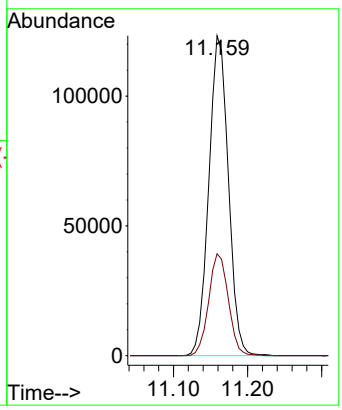




#57
1,3-Dichloropropane
Concen: 56.030 ug/l
RT: 11.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 76 Resp: 22557

Ion	Ratio	Lower	Upper
76	100		
78	32.0	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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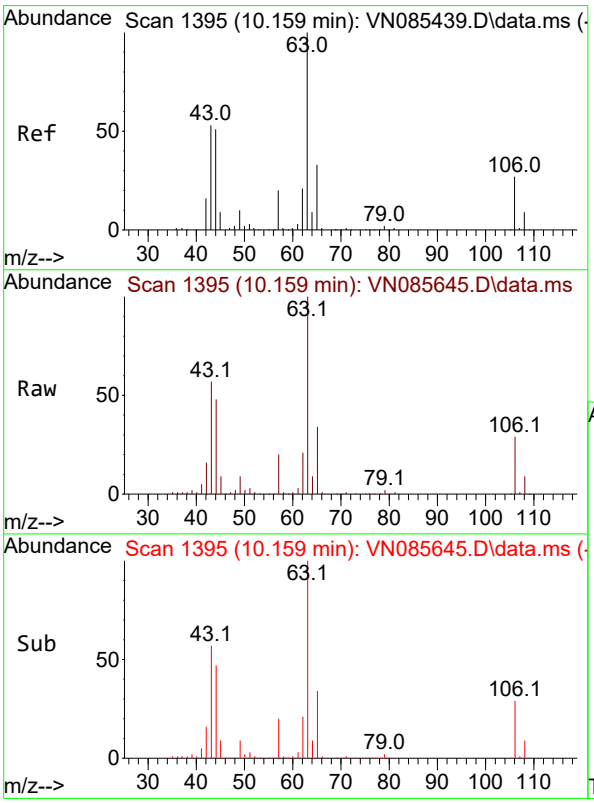
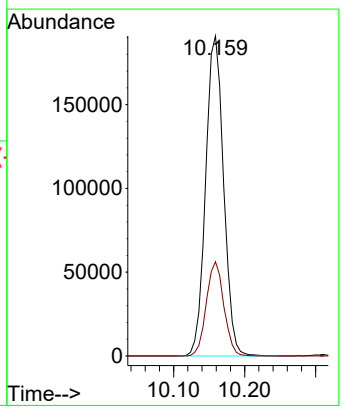
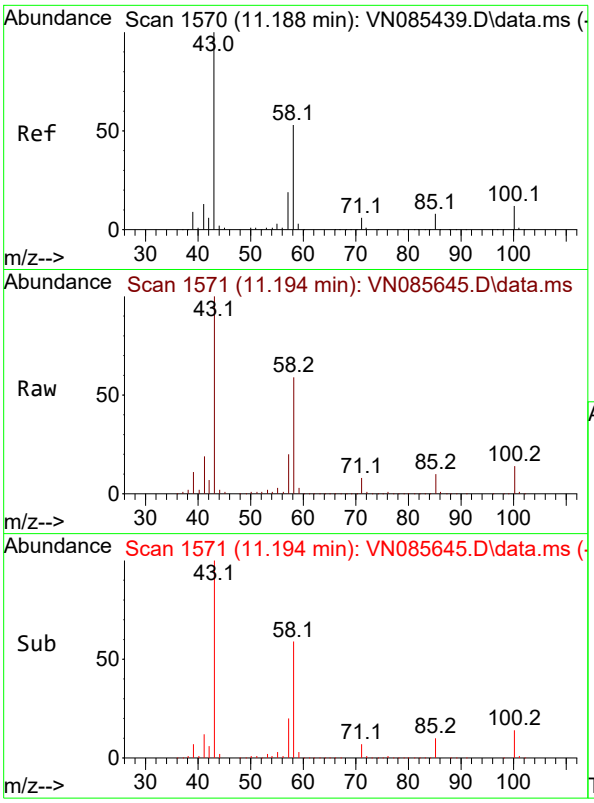


#58
2-Chloroethyl Vinyl ether
Concen: 228.313 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 63 Resp: 335470

Ion	Ratio	Lower	Upper
63	100		
106	28.7	21.6	32.4

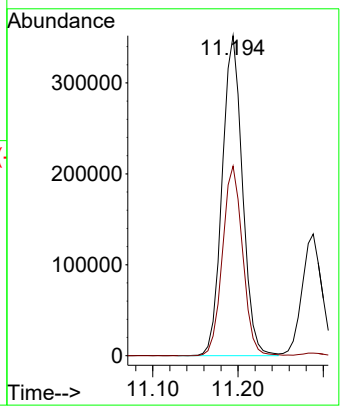




#59
2-Hexanone
Concen: 261.399 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 58010

Ion	Ratio	Lower	Upper
43	100		
58	58.9	26.2	78.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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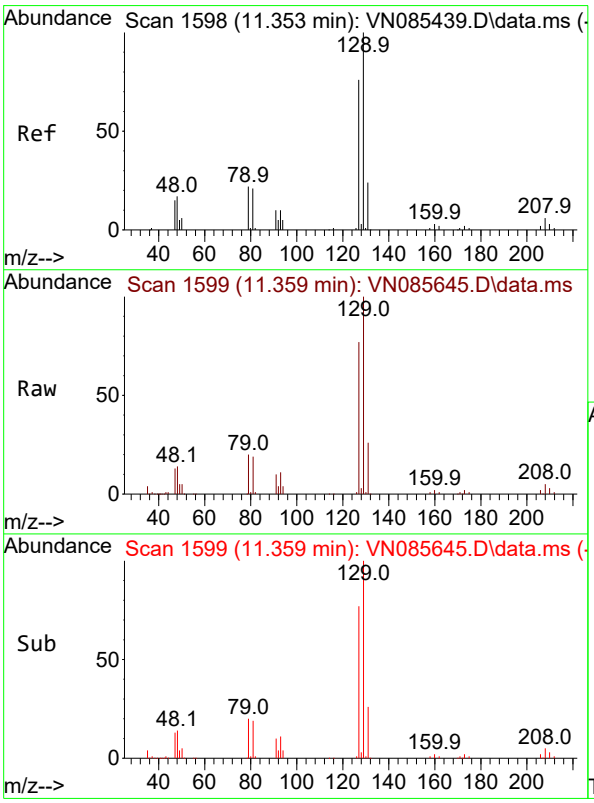
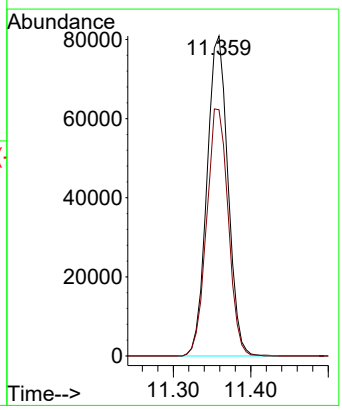
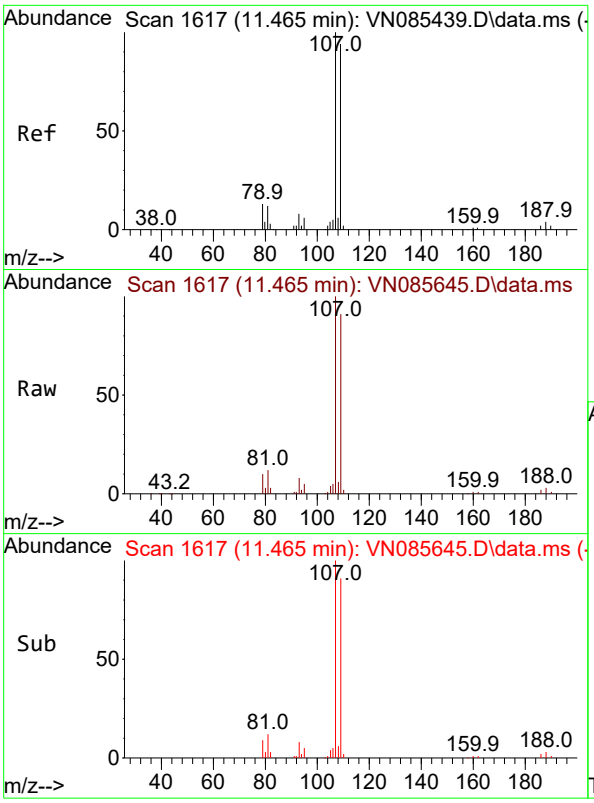


#60
Dibromochloromethane
Concen: 54.508 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:129 Resp: 152370

Ion	Ratio	Lower	Upper
129	100		
127	79.3	38.6	115.8

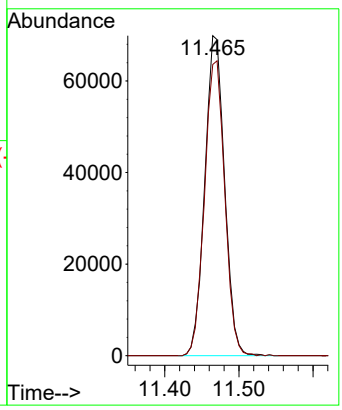




#61
1,2-Dibromoethane
Concen: 56.226 ug/l
RT: 11.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:107 Resp: 12958

Ion	Ratio	Lower	Upper
107	100		
109	94.2	75.9	113.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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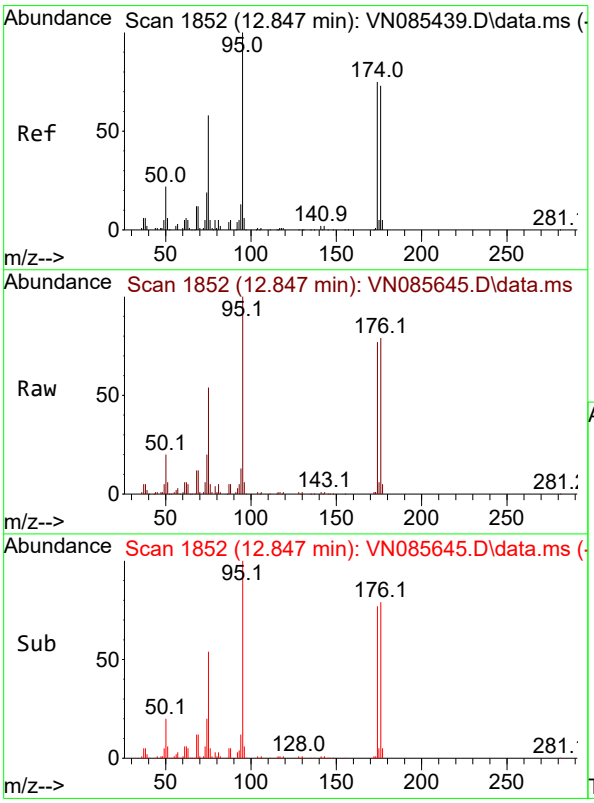
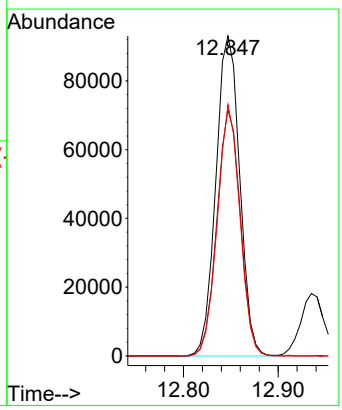
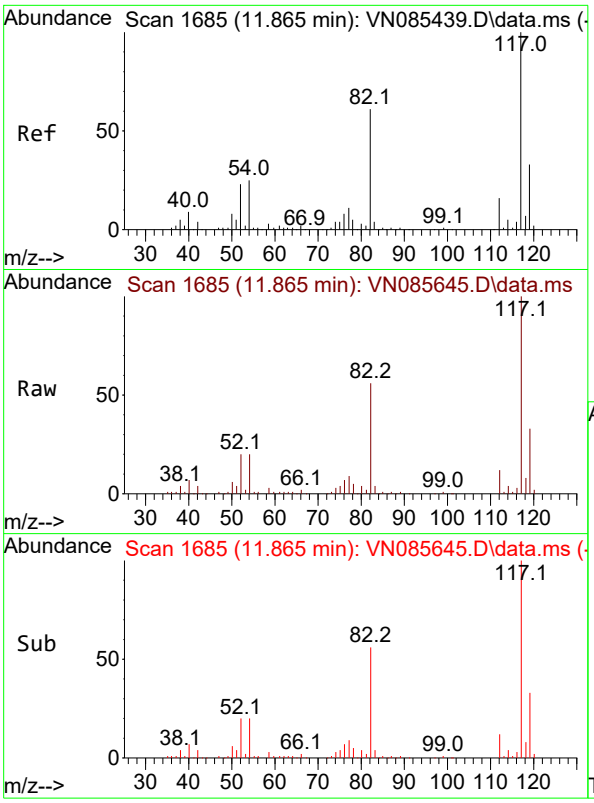


#62
4-Bromofluorobenzene
Concen: 56.013 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 95 Resp: 163009

Ion	Ratio	Lower	Upper
95	100		
174	75.9	0.0	145.0
176	73.9	0.0	142.4





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:117 Resp: 30905

Ion	Ratio	Lower	Upper
117	100		
82	56.3	48.6	72.8
119	32.8	26.6	39.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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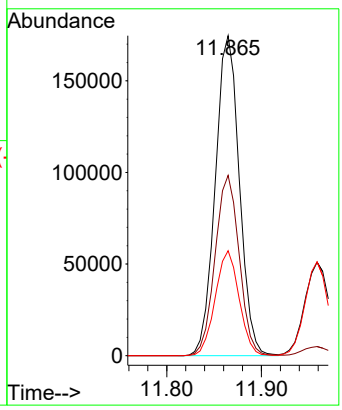
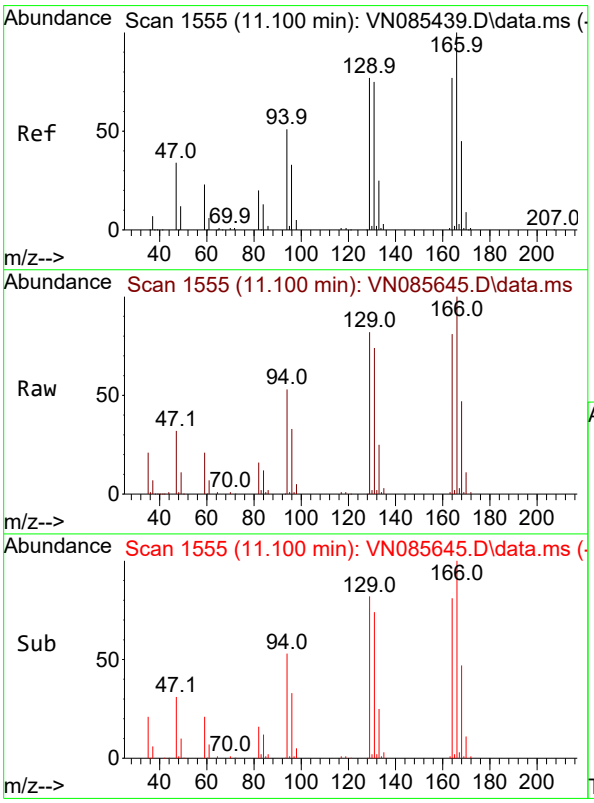
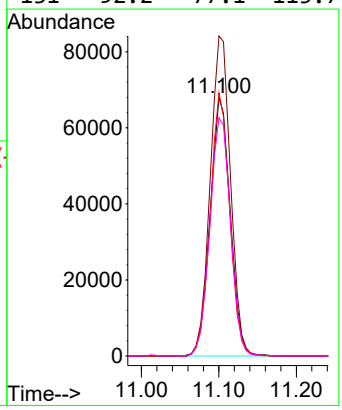


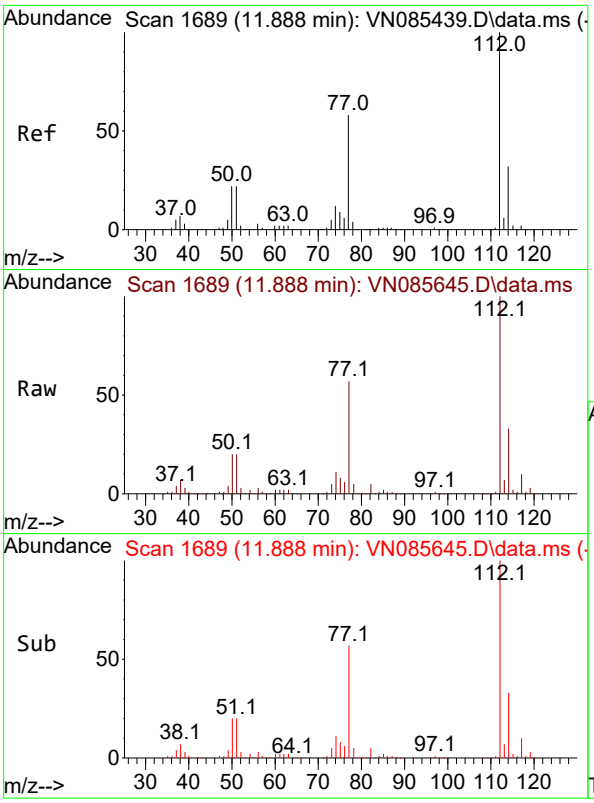


#64
Tetrachloroethene
Concen: 58.273 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:164 Resp: 122776

Ion	Ratio	Lower	Upper
164	100		
166	123.9	103.4	155.2
129	101.8	79.2	118.8
131	92.2	77.1	115.7

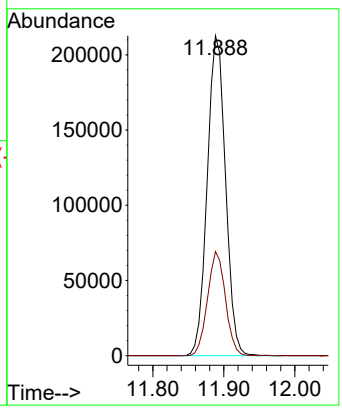




#65
Chlorobenzene
Concen: 56.165 ug/l
RT: 11.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:112 Resp: 38025

Ion	Ratio	Lower	Upper
112	100		
114	32.6	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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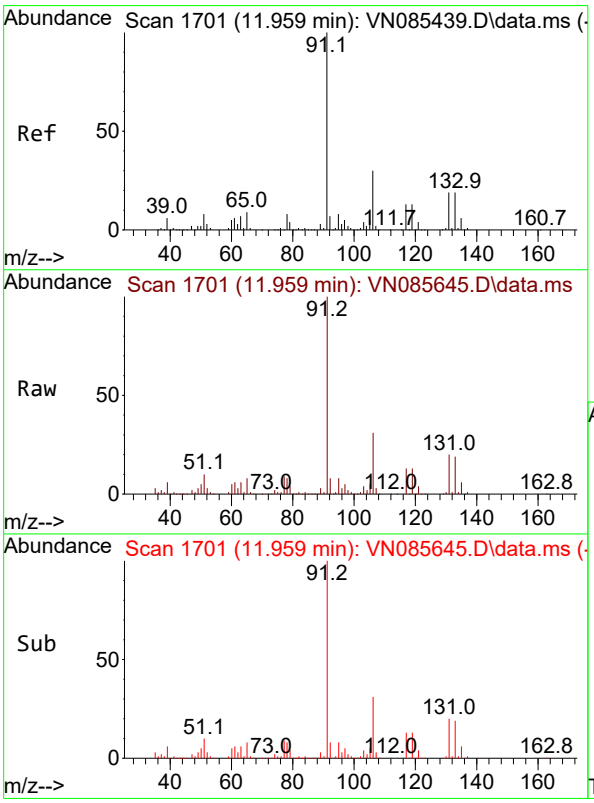
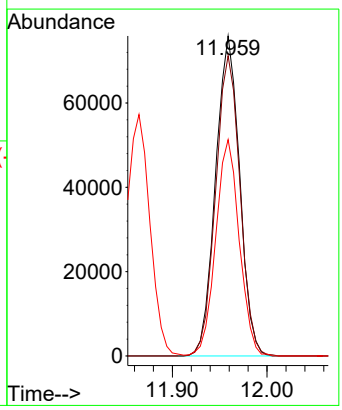
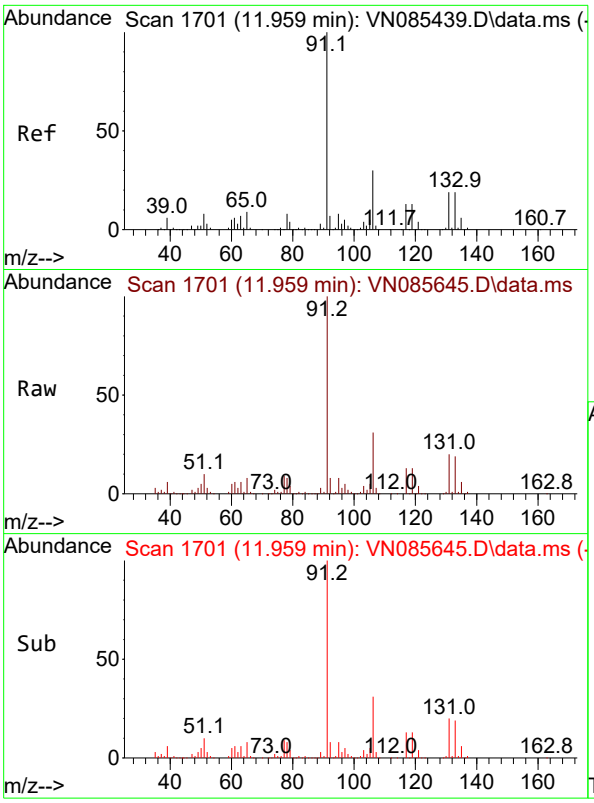


#66
1,1,1,2-Tetrachloroethane
Concen: 53.847 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:131 Resp: 133801

Ion	Ratio	Lower	Upper
131	100		
133	95.1	47.4	142.3
119	66.4	33.1	99.5

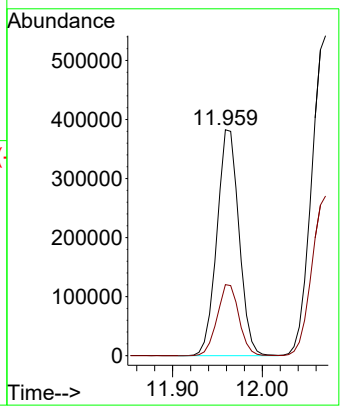




#67
Ethyl Benzene
Concen: 59.349 ug/l
RT: 11.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 6544

Ion	Ratio	Lower	Upper
91	100		
106	31.5	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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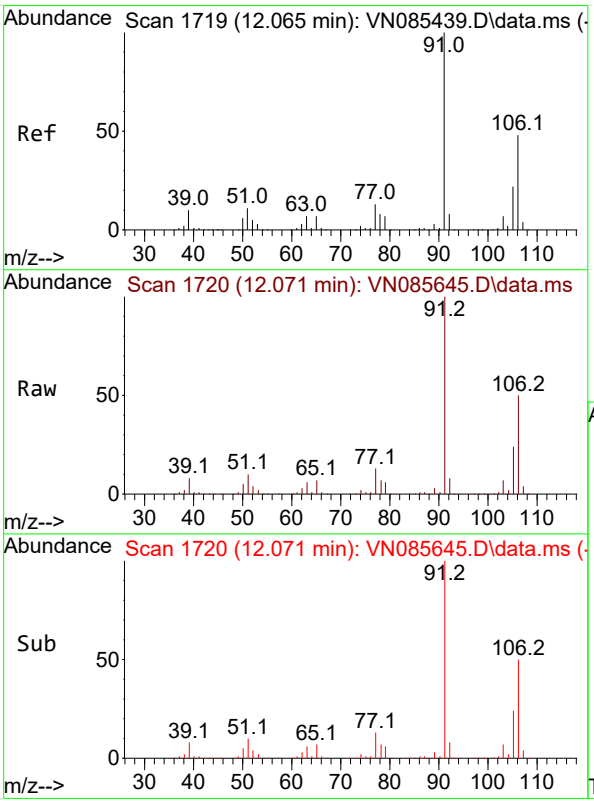
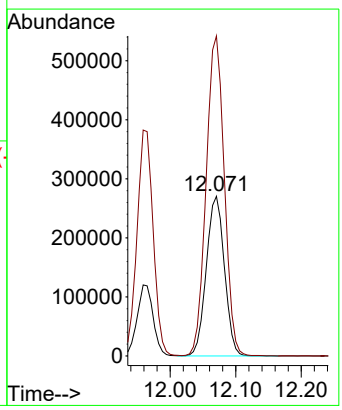
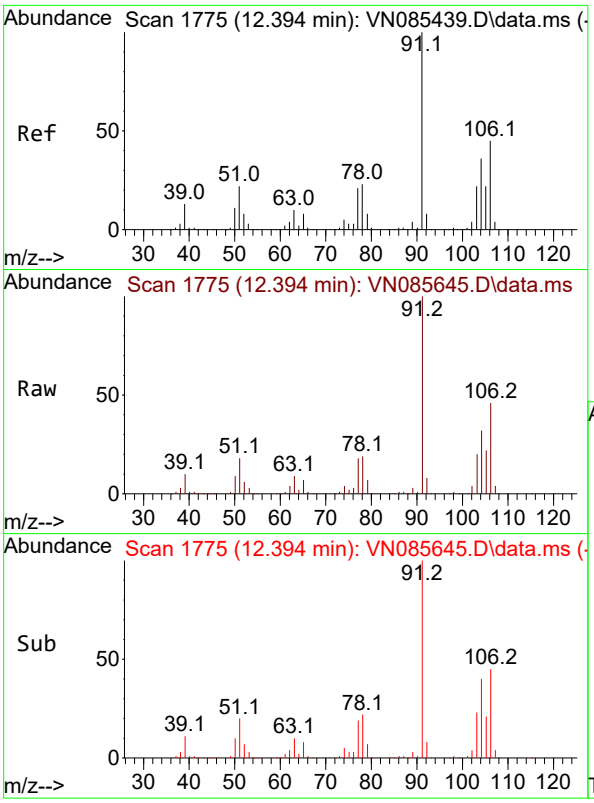


#68
m/p-Xylenes
Concen: 127.234 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:106 Resp: 518534

Ion	Ratio	Lower	Upper
106	100		
91	201.3	167.7	251.5





#69
o-Xylene
Concen: 61.940 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:106 Resp: 24124

Ion	Ratio	Lower	Upper
106	100		
91	214.2	110.4	331.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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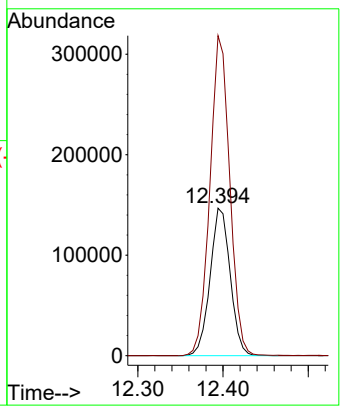
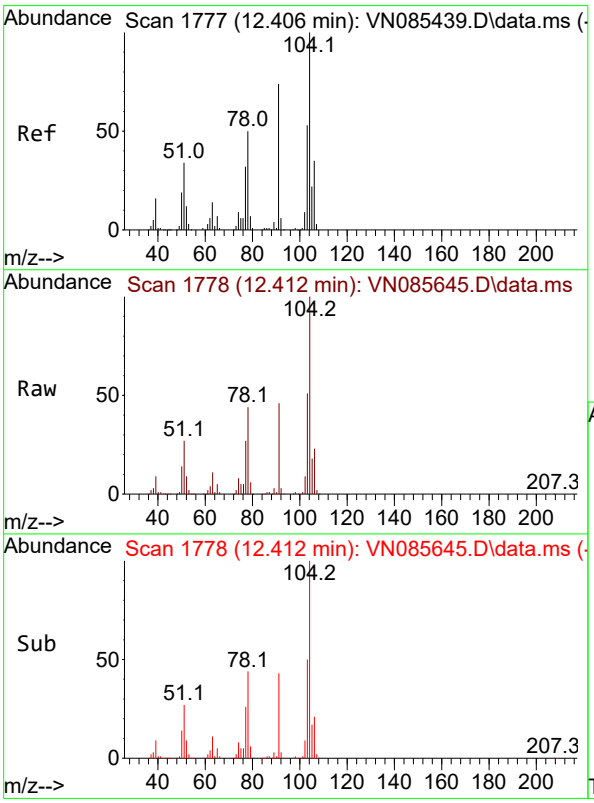
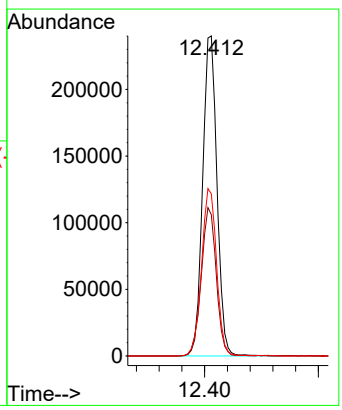


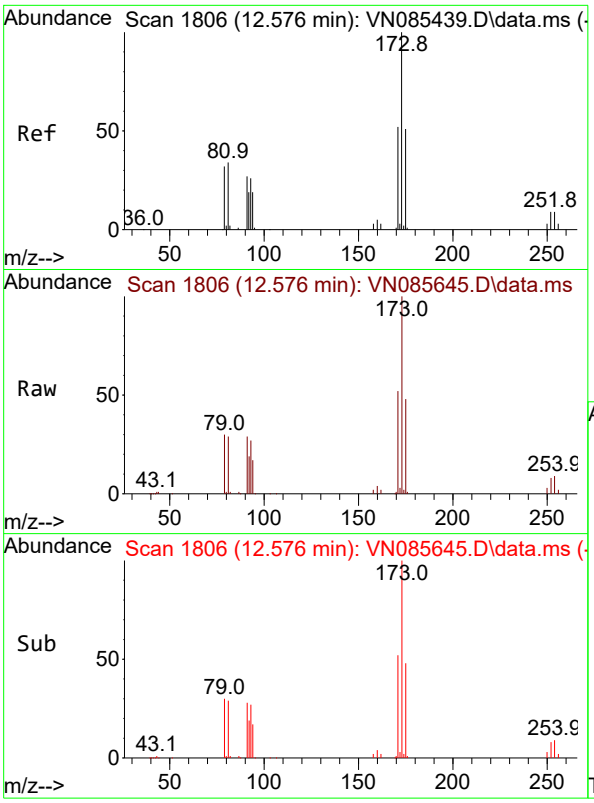


#70
Styrene
Concen: 65.022 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:104 Resp: 419116

Ion	Ratio	Lower	Upper
104	100		
78	48.4	42.5	63.7
103	54.9	43.8	65.8

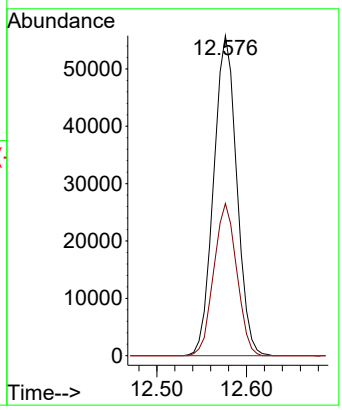




#71
Bromoform
Concen: 56.133 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:173 Resp: 9980

Ion	Ratio	Lower	Upper
173	100		
175	47.2	24.4	73.2
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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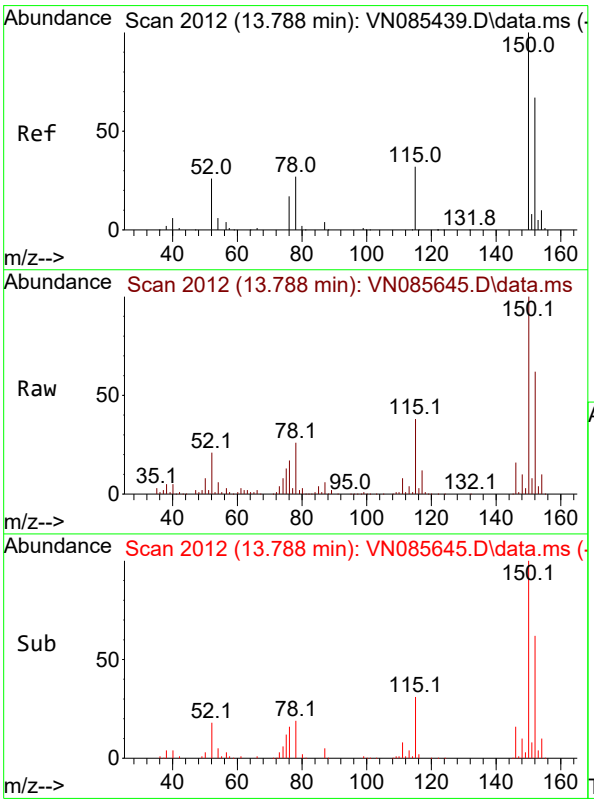
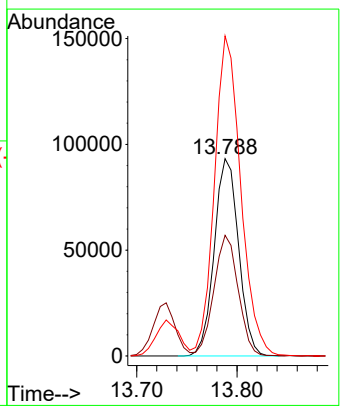
Supervised By :Mahesh Dadoda 02/06/2025

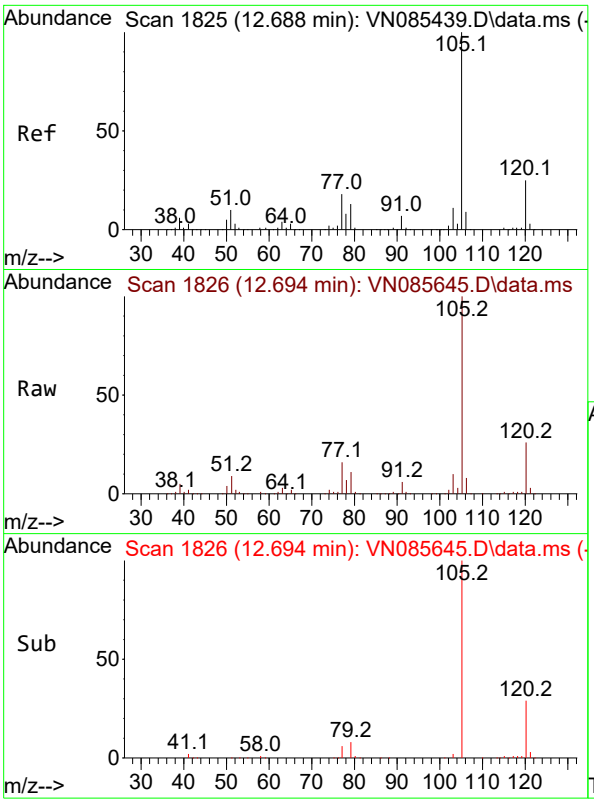


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:152 Resp: 157058

Ion	Ratio	Lower	Upper
152	100		
115	61.2	31.1	93.3
150	175.6	0.0	343.6

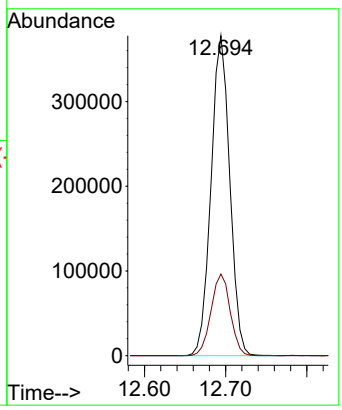




#73
Isopropylbenzene
Concen: 57.186 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 60617

Ion	Ratio	Lower	Upper
105	100		
120	26.1	12.8	38.3



Instrument :
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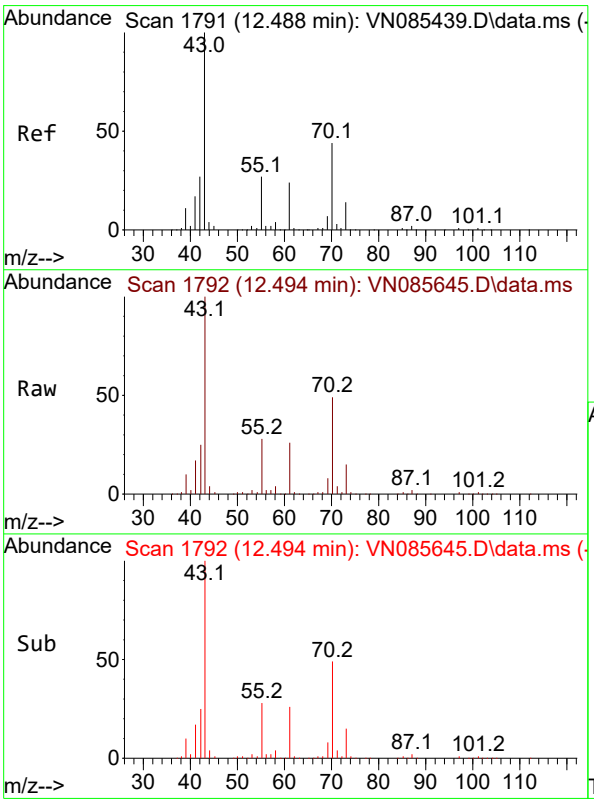
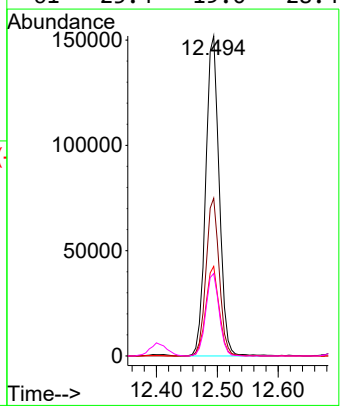
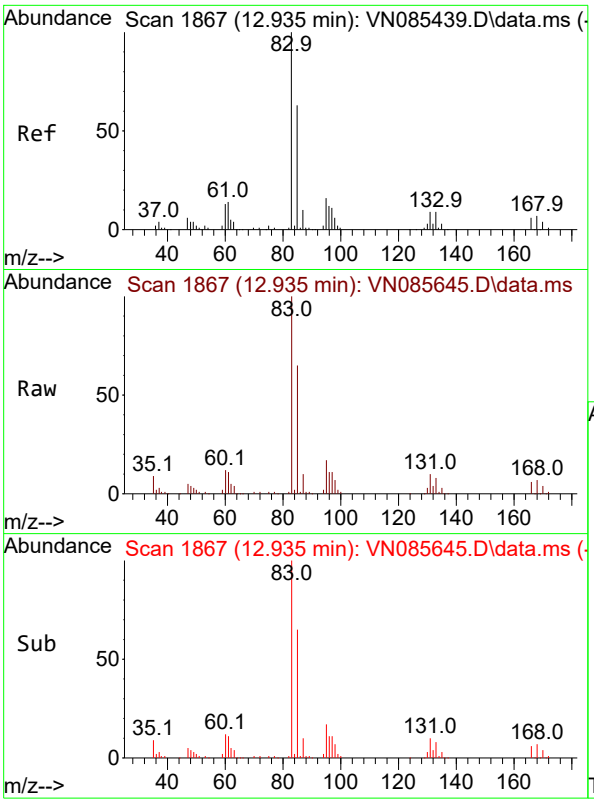


#74
N-amyl acetate
Concen: 49.123 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 43 Resp: 234045

Ion	Ratio	Lower	Upper
43	100		
70	48.2	34.0	51.0
55	27.8	21.4	32.2
61	25.4	19.0	28.4

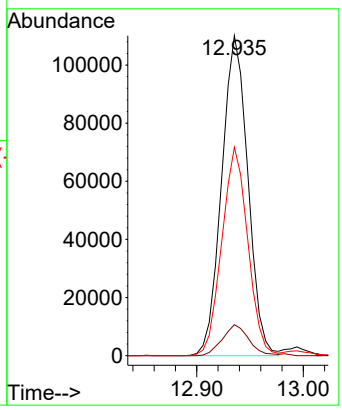




#75
1,1,2,2-Tetrachloroethane
Concen: 50.322 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 83 Resp: 18842

Ion	Ratio	Lower	Upper
83	100		
131	9.9	4.8	14.4
85	64.2	32.2	96.6



Instrument :
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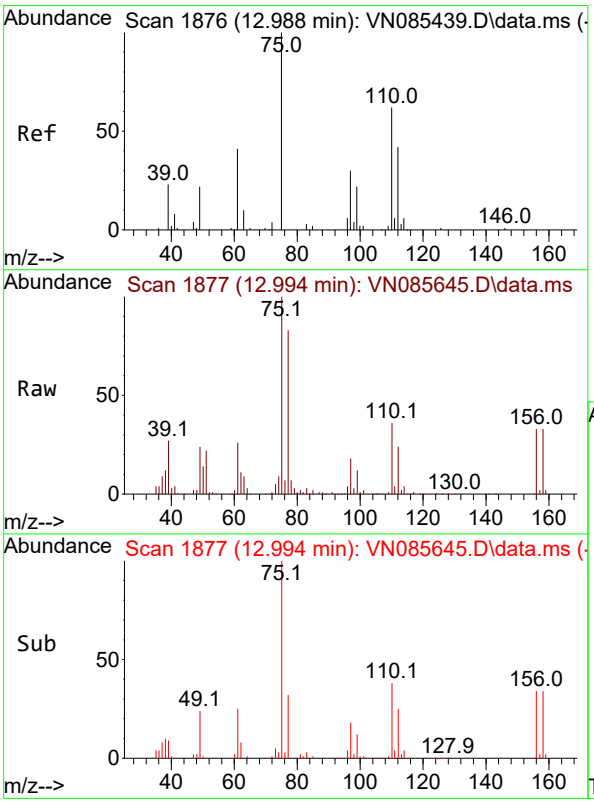
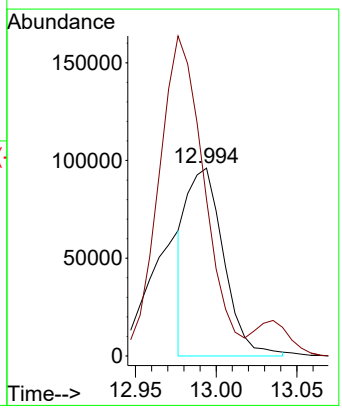
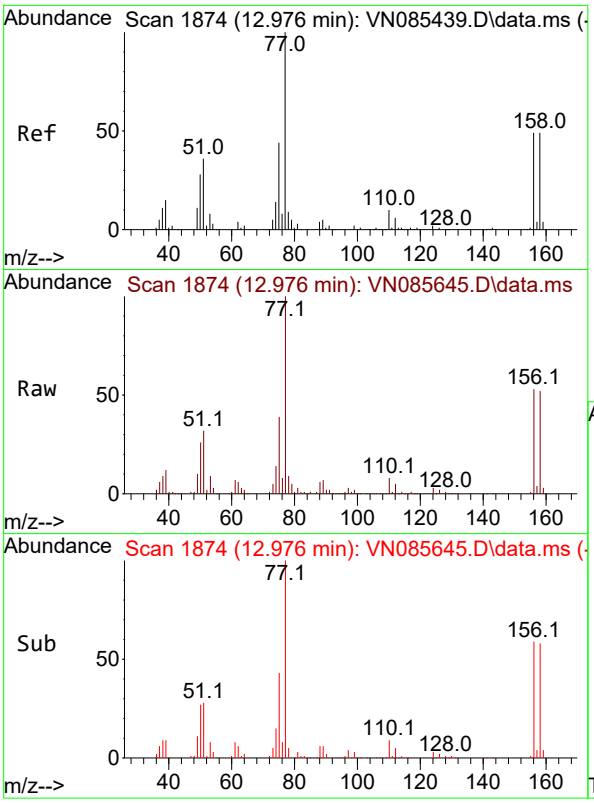


#76
1,2,3-Trichloropropane
Concen: 48.165 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 153753

Ion	Ratio	Lower	Upper
75	100		
77	209.9	109.7	329.2

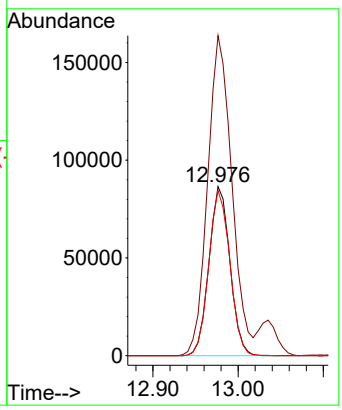




#77
Bromobenzene
Concen: 53.497 ug/l
RT: 12.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:156 Resp: 14815

Ion	Ratio	Lower	Upper
156	100		
77	217.8	114.1	342.4
158	98.2	48.9	146.8



Instrument :
MSVOA_N
ClientSampleId :
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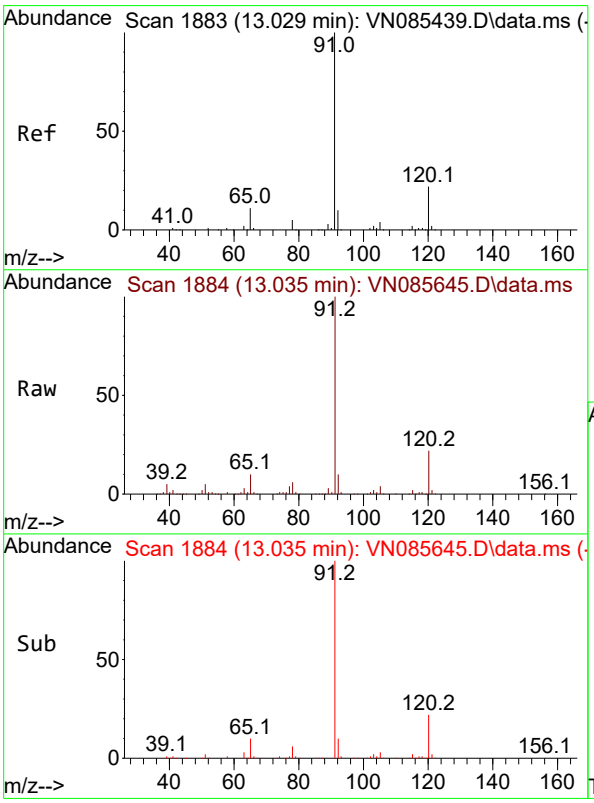
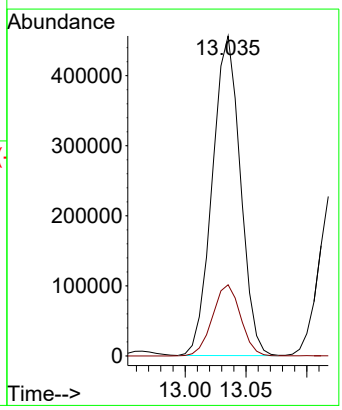
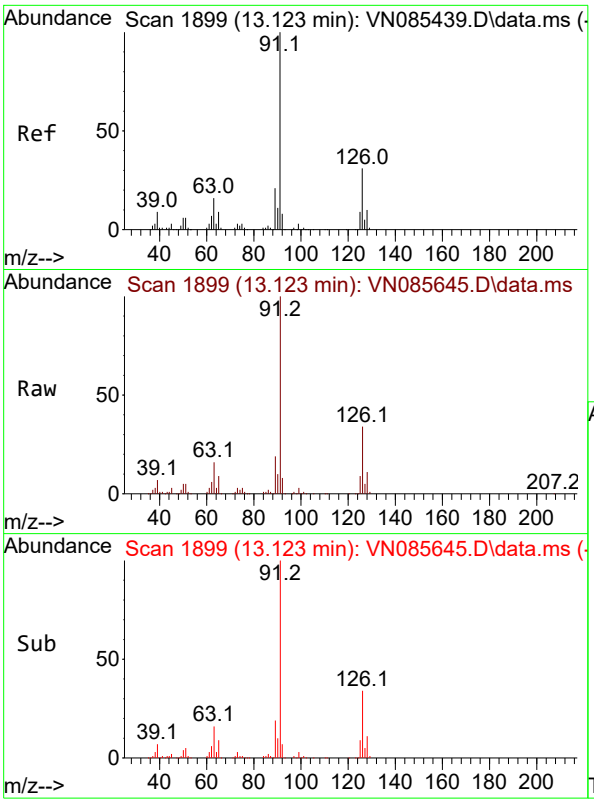


#78
n-propylbenzene
Concen: 58.330 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 731968

Ion	Ratio	Lower	Upper
91	100		
120	22.3	10.9	32.6

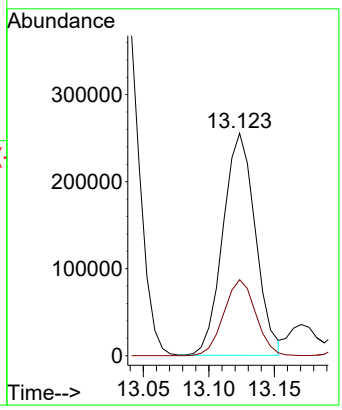




#79
2-Chlorotoluene
Concen: 54.157 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 43983

Ion	Ratio	Lower	Upper
91	100		
126	33.7	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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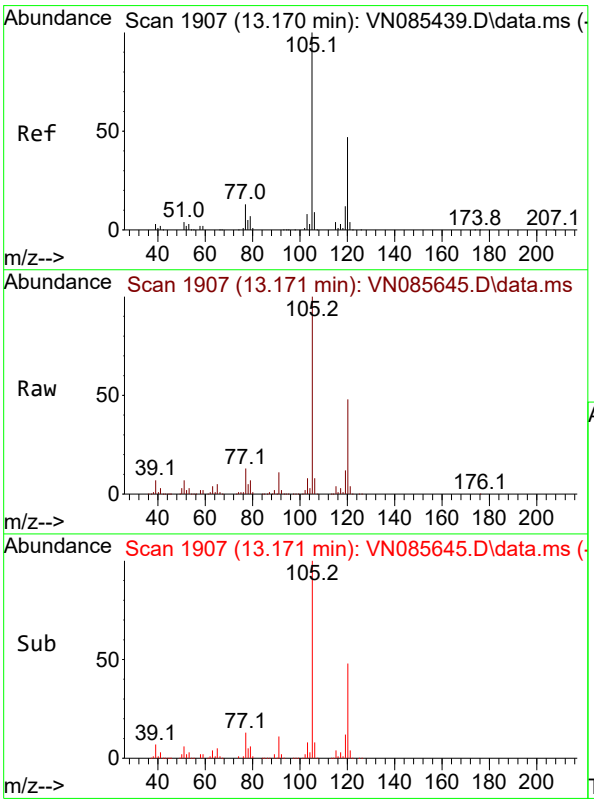
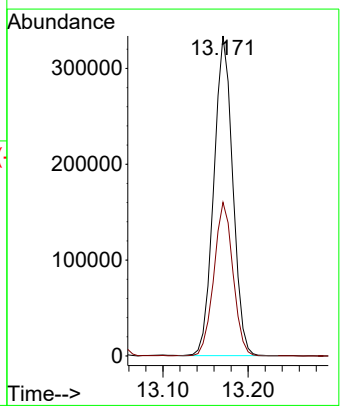
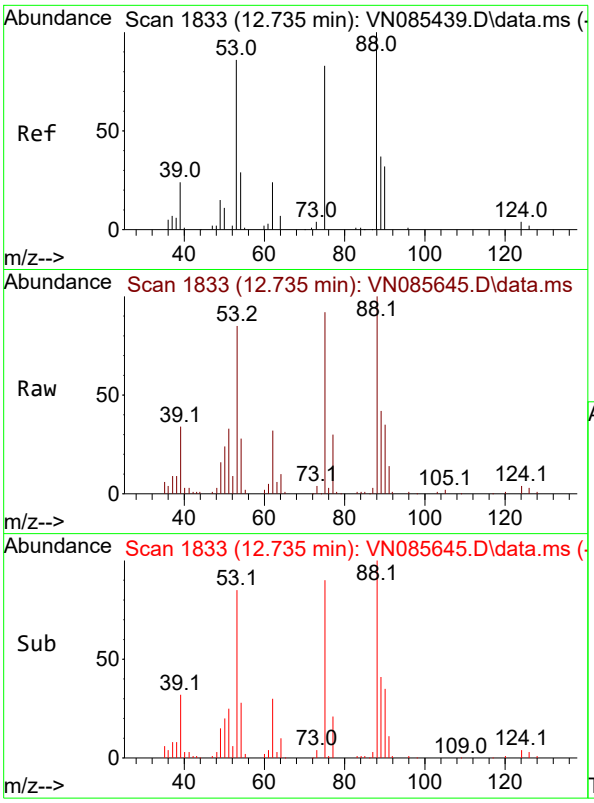


#80
1,3,5-Trimethylbenzene
Concen: 58.774 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 514612

Ion	Ratio	Lower	Upper
105	100		
120	48.4	23.9	71.7





#81
trans-1,4-Dichloro-2-butene
Concen: 57.659 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 6803

Ion	Ratio	Lower	Upper
75	100		
53	90.8	95.6	143.4
89	44.8	37.0	55.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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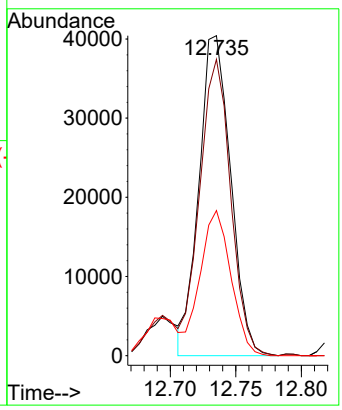
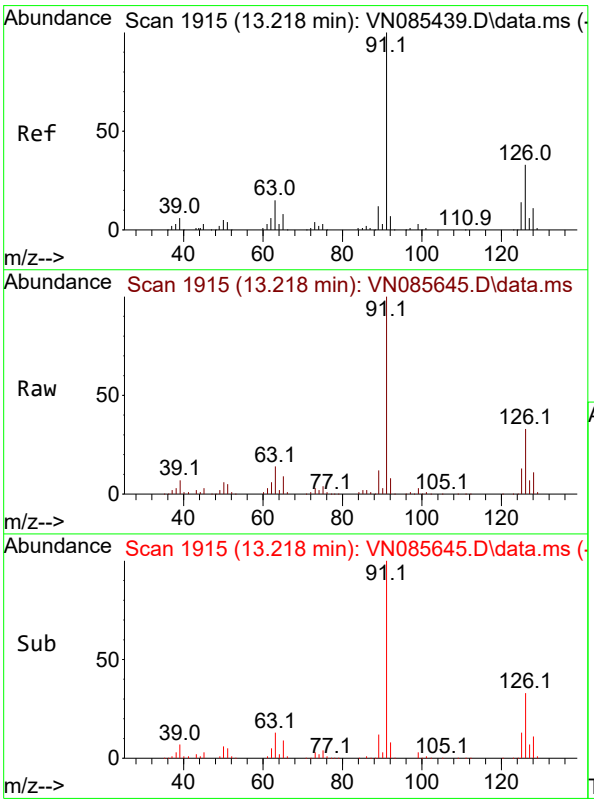
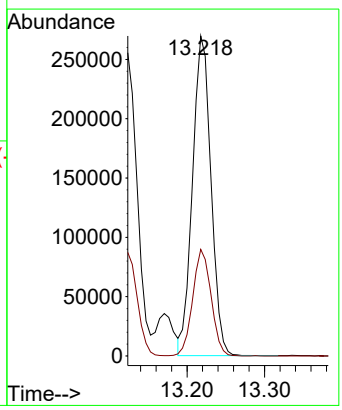


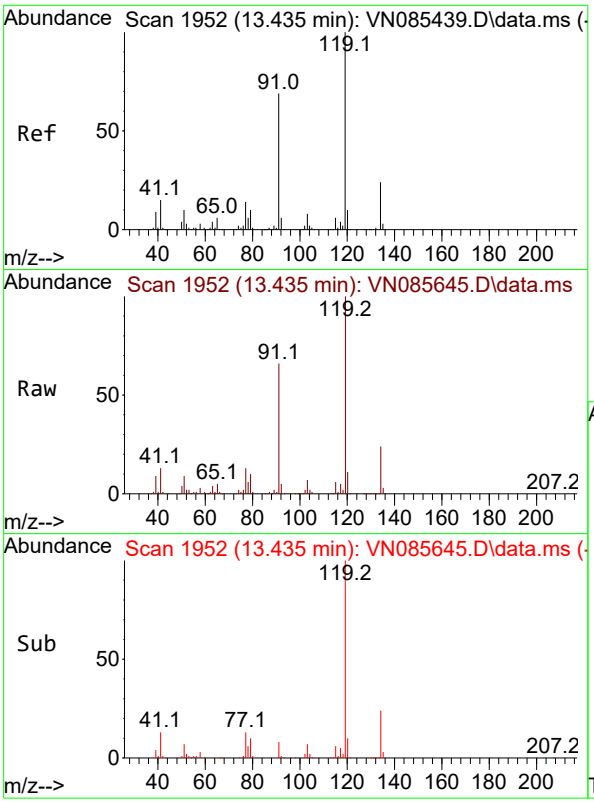


#82
4-Chlorotoluene
Concen: 55.070 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 445323

Ion	Ratio	Lower	Upper
91	100		
126	33.2	15.9	47.7

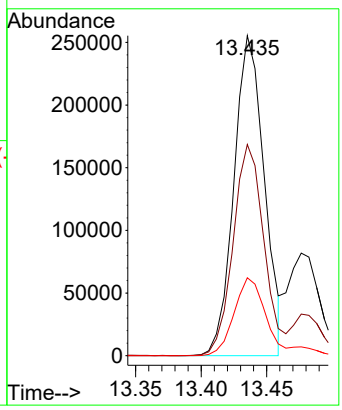




#83
tert-Butylbenzene
Concen: 55.960 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:119 Resp: 41146

Ion	Ratio	Lower	Upper
119	100		
91	67.4	35.1	105.3
134	27.2	12.0	36.1



Instrument :
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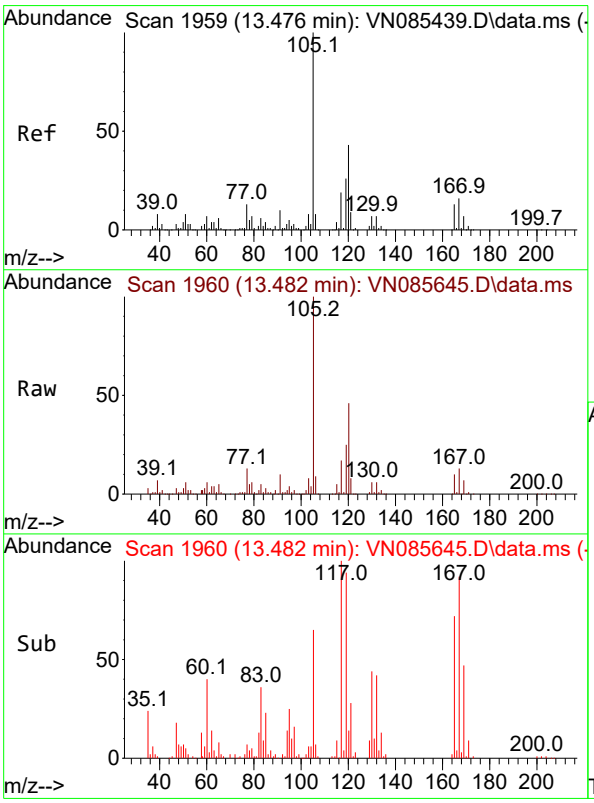
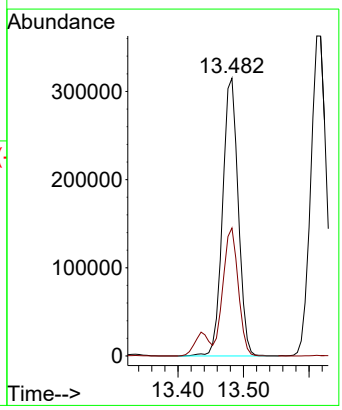
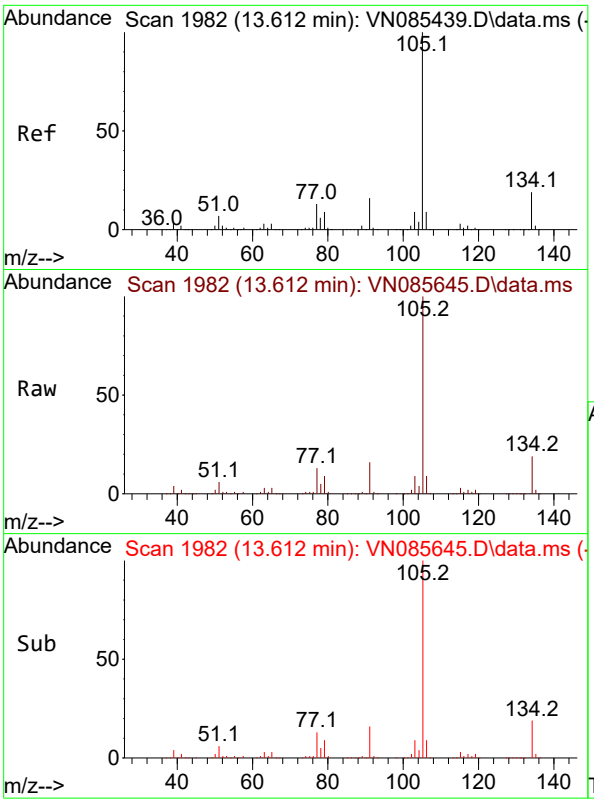


#84
1,2,4-Trimethylbenzene
Concen: 59.518 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 519388

Ion	Ratio	Lower	Upper
105	100		
120	44.8	21.6	65.0





#85
sec-Butylbenzene
Concen: 59.408 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:105 Resp: 60541

Ion	Ratio	Lower	Upper
105	100		
134	19.7	9.7	28.9

Instrument :
MSVOA_N
ClientSampleId :
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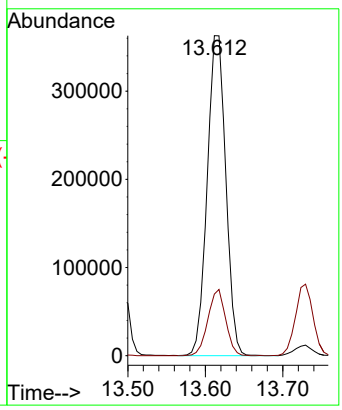
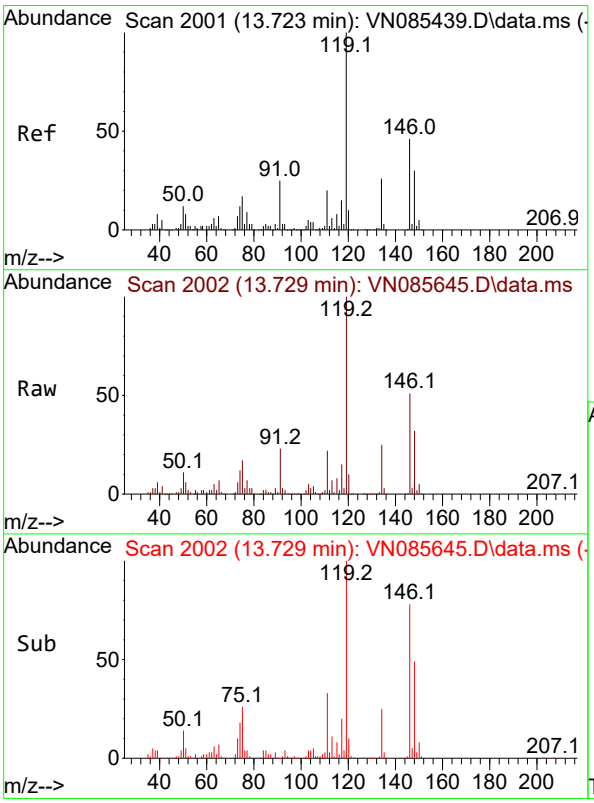
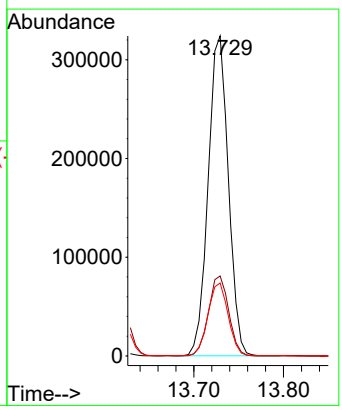


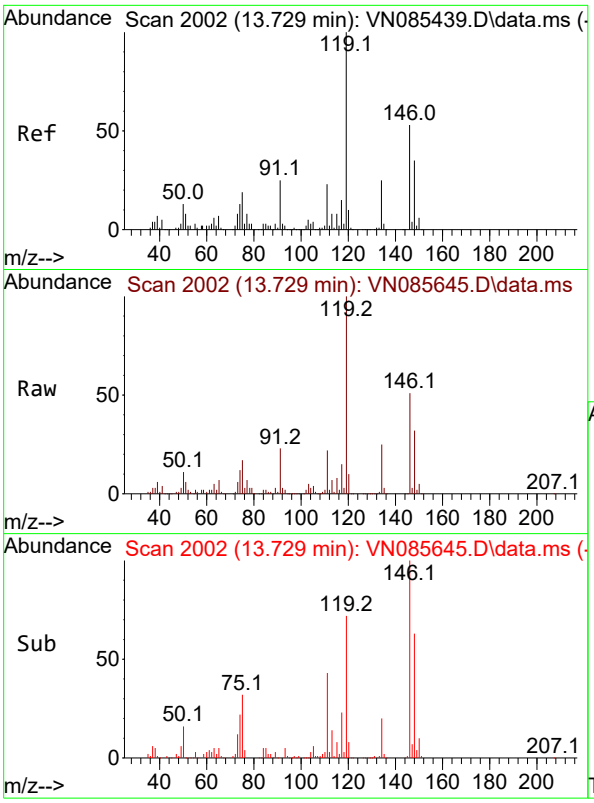


#86
p-Isopropyltoluene
Concen: 54.534 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:119 Resp: 506039

Ion	Ratio	Lower	Upper
119	100		
134	25.2	12.7	38.0
91	22.8	12.7	38.1

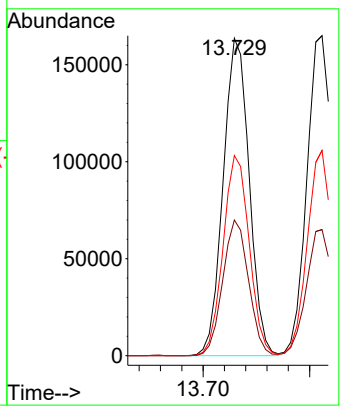




#87
1,3-Dichlorobenzene
Concen: 54.455 ug/l
RT: 13.729 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:146 Resp: 27773

Ion	Ratio	Lower	Upper
146	100		
111	42.4	21.4	64.3
148	63.4	32.3	96.9



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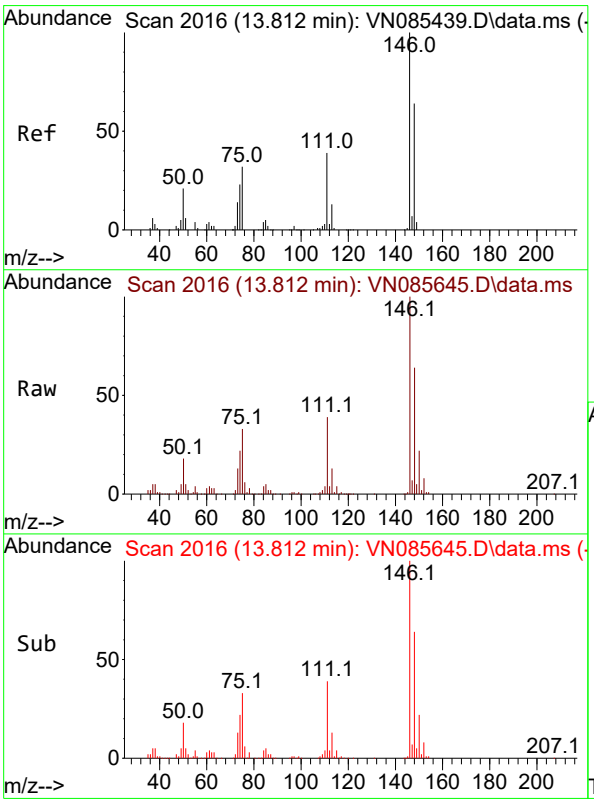
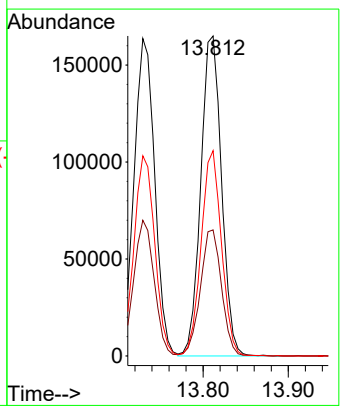
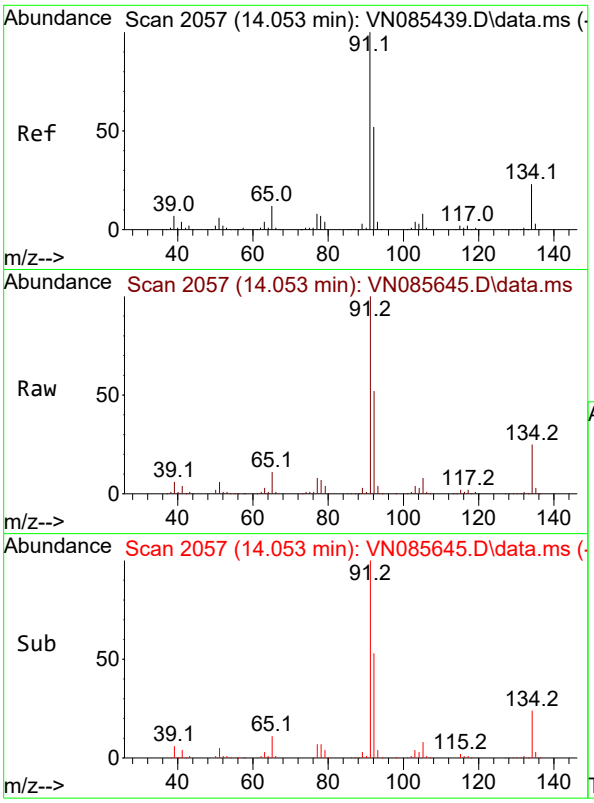


#88
1,4-Dichlorobenzene
Concen: 52.768 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:146 Resp: 278955

Ion	Ratio	Lower	Upper
146	100		
111	40.4	21.3	63.7
148	63.0	32.4	97.0





#89
n-Butylbenzene
Concen: 58.781 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 91 Resp: 42974

Ion	Ratio	Lower	Upper
91	100		
92	52.0	25.8	77.3
134	24.6	11.7	35.1

Instrument :
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ClientSampleId :
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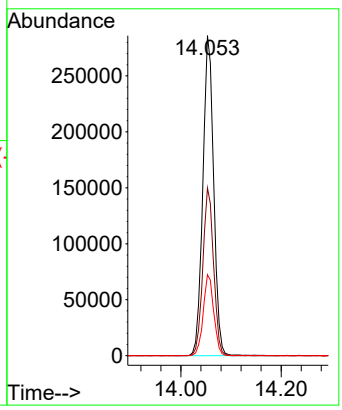
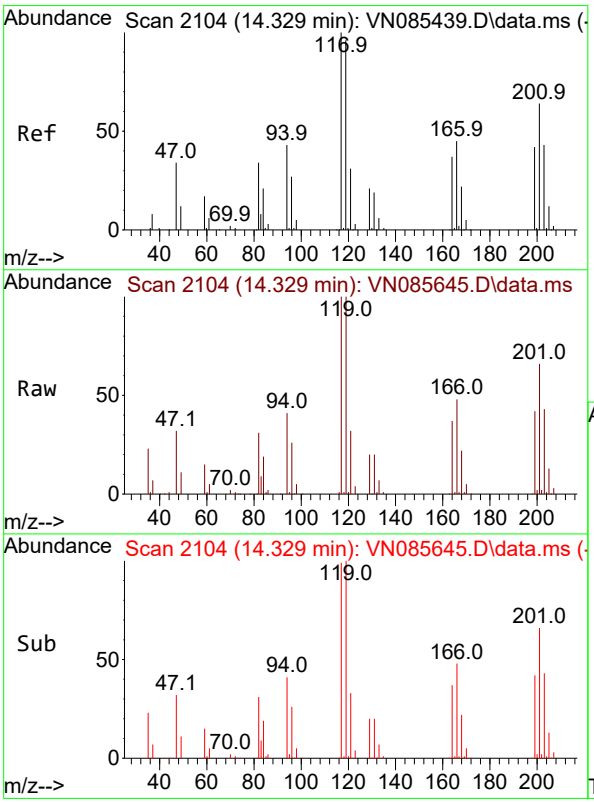
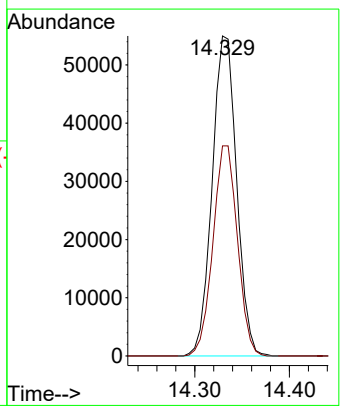


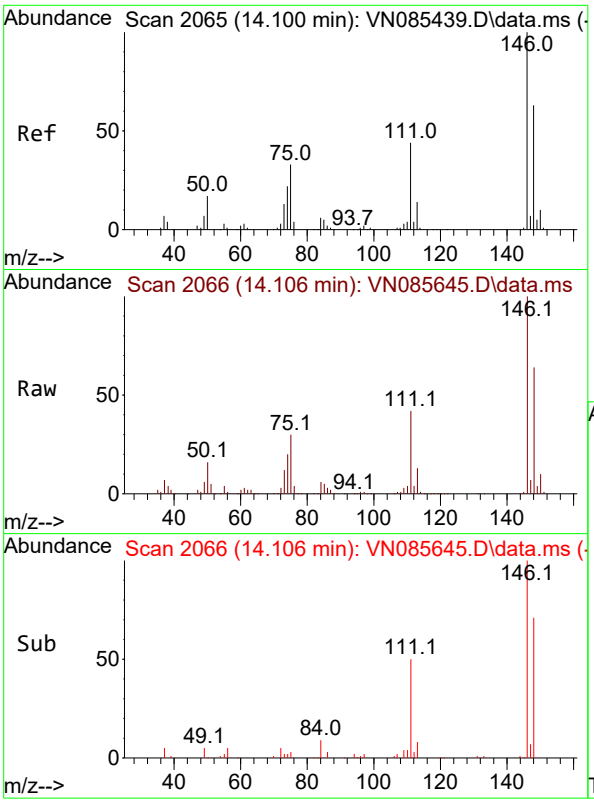


#90
Hexachloroethane
Concen: 50.887 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:117 Resp: 98723

Ion	Ratio	Lower	Upper
117	100		
201	65.8	33.7	101.0

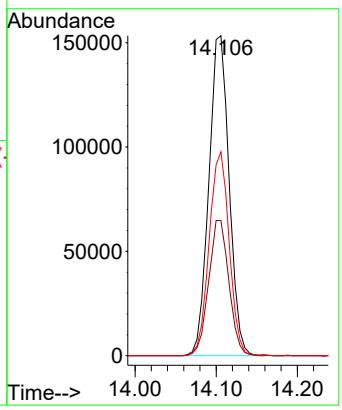




#91
1,2-Dichlorobenzene
Concen: 52.333 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:146 Resp: 26623

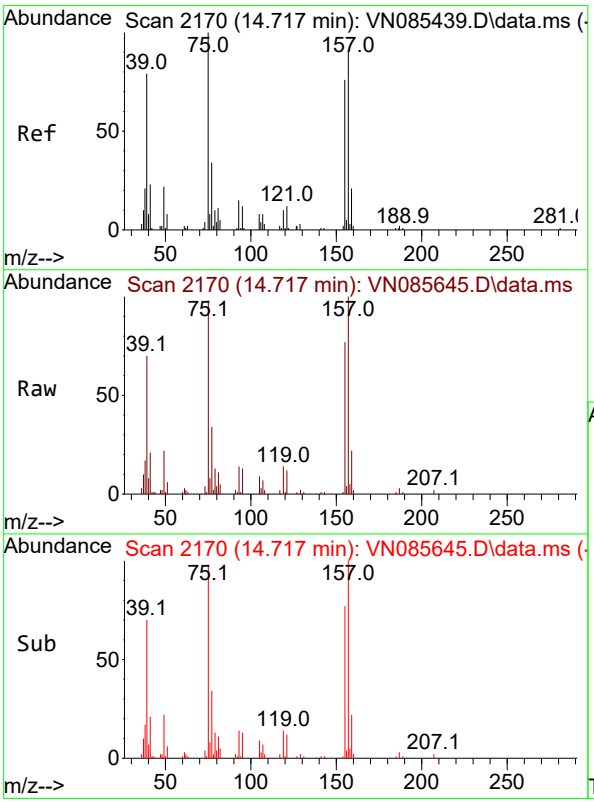
Ion	Ratio	Lower	Upper
146	100		
111	42.2	21.7	65.1
148	62.9	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

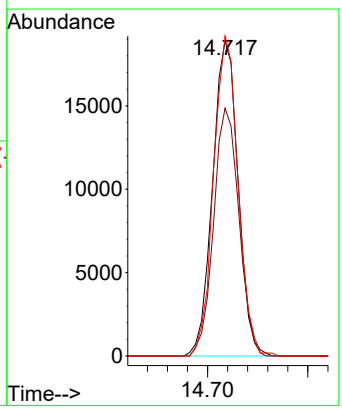
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

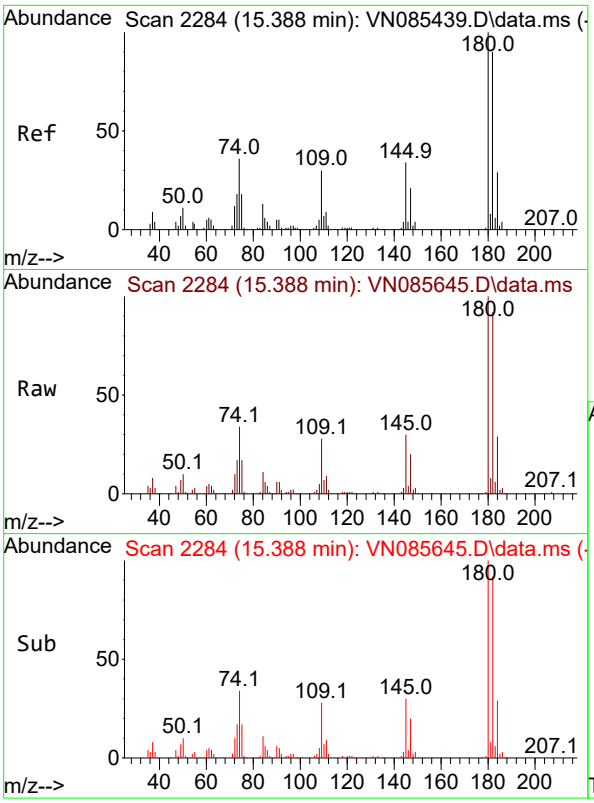


#92
1,2-Dibromo-3-Chloropropane
Concen: 48.620 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion: 75 Resp: 33244

Ion	Ratio	Lower	Upper
75	100		
155	78.3	36.4	109.2
157	97.5	45.4	136.1

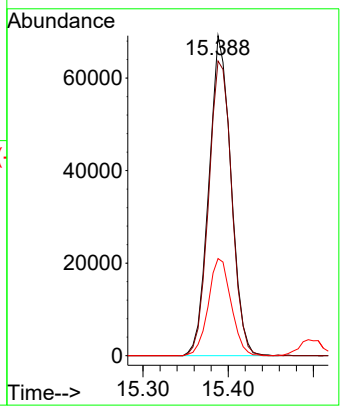




#93
1,2,4-Trichlorobenzene
Concen: 52.709 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:180 Resp: 12462

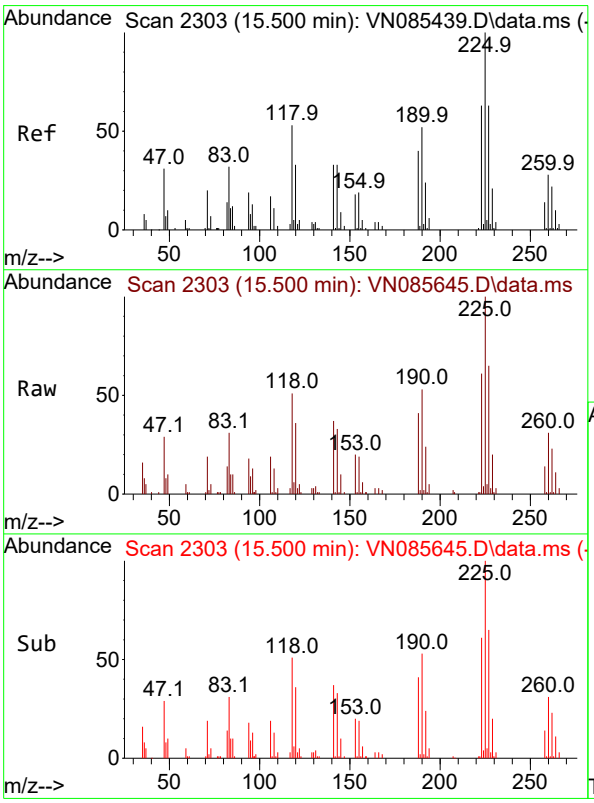
Ion	Ratio	Lower	Upper
180	100		
182	95.6	46.8	140.3
145	31.2	16.0	48.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

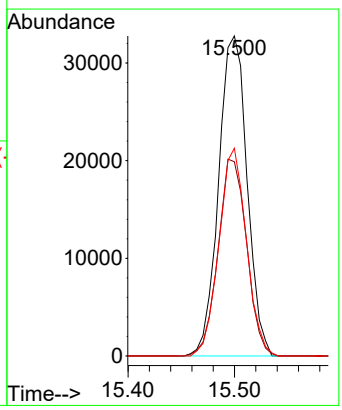
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

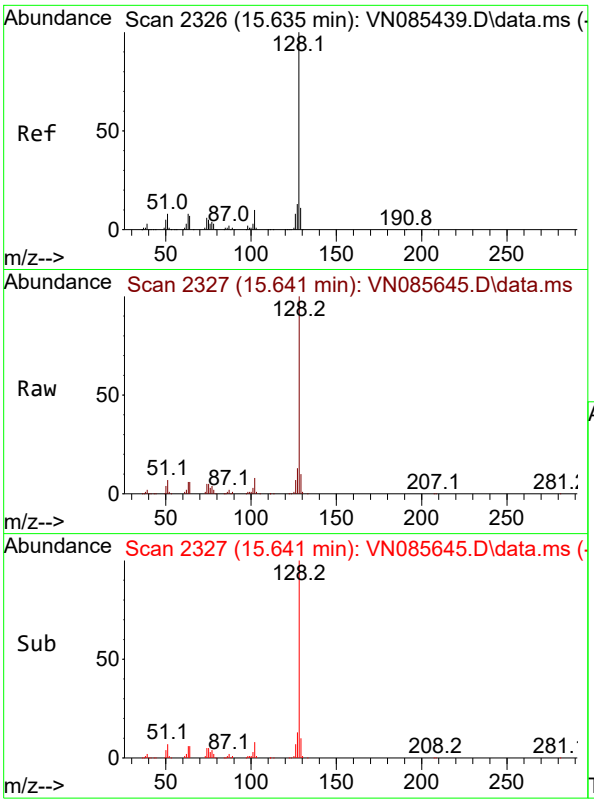


#94
Hexachlorobutadiene
Concen: 48.466 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:225 Resp: 60840

Ion	Ratio	Lower	Upper
225	100		
223	61.7	30.7	92.1
227	62.6	30.9	92.5

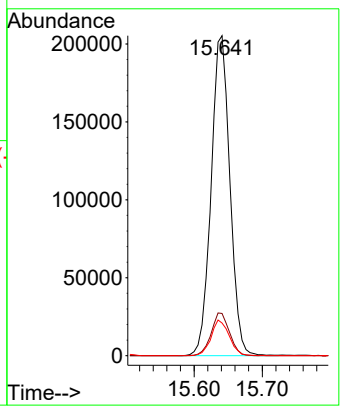




#95
Naphthalene
Concen: 55.897 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:128 Resp: 39439

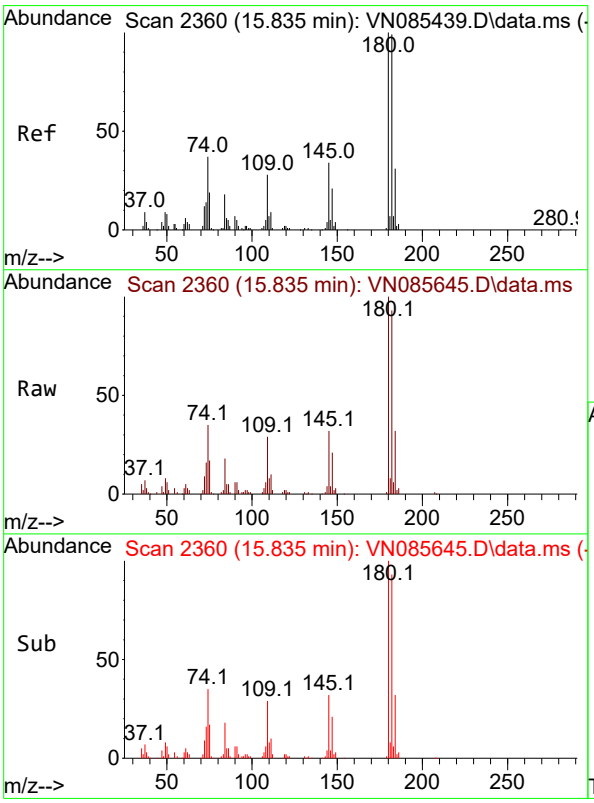
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.6	16.0
129	10.7	8.8	13.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

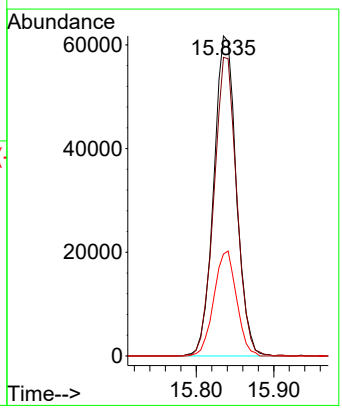
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025



#96
1,2,3-Trichlorobenzene
Concen: 52.330 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN085645.D
Acq: 04 Feb 2025 11:05

Tgt Ion:180 Resp: 125197

Ion	Ratio	Lower	Upper
180	100		
182	94.0	47.4	142.2
145	32.8	16.9	50.7



Sample Results: **VN085645.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	101	0.00
2	T	Dichlorodifluoromethane	0.677	0.841	-24.2	135	0.00
3	P	Chloromethane	0.733	0.756	-3.1	112	0.00
4	C	Vinyl Chloride	0.737	0.924	-25.4#	135	0.00
5	T	Bromomethane	0.445	0.578	-29.9#	139	-0.01
6	T	Chloroethane	0.467	0.583	-24.8	138	0.00
7	T	Trichlorofluoromethane	1.069	1.135	-6.2	115	0.00
8	T	Diethyl Ether	0.369	0.377	-2.2	105	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.602	0.678	-12.6	126	0.00
10	T	Methyl Iodide	0.690	0.852	-23.5	119	0.00
11	T	Tert butyl alcohol	0.092	0.090	2.2	98	0.00
12	CM	1,1-Dichloroethene	0.537	0.620	-15.5#	117	0.00
13	T	Acrolein	0.126	0.085	32.5#	61	0.00
14	T	Allyl chloride	0.871	0.783	10.1	93	0.00
15	T	Acrylonitrile	0.294	0.303	-3.1	102	0.00
16	T	Acetone	0.261	0.236	9.6	94	0.00
17	T	Carbon Disulfide	1.652	1.884	-14.0	128	0.00
18	T	Methyl Acetate	0.793	0.717	9.6	91	0.00
19	T	Methyl tert-butyl Ether	1.742	1.918	-10.1	103	0.00
20	T	Methylene Chloride	0.646	0.706	-9.3	113	0.00
21	T	trans-1,2-Dichloroethene	0.573	0.660	-15.2	120	0.00
22	T	Diisopropyl ether	1.933	1.902	1.6	94	0.00
23	T	Vinyl Acetate	1.353	1.405	-3.8	95	0.00
24	P	1,1-Dichloroethane	1.178	1.225	-4.0	105	0.00
25	T	2-Butanone	0.384	0.371	3.4	96	0.00
26	T	2,2-Dichloropropane	0.953	1.097	-15.1	118	0.00
27	T	cis-1,2-Dichloroethene	0.675	0.773	-14.5	114	0.00
28	T	Bromochloromethane	0.548	0.476	13.1	88	0.00
29	T	Tetrahydrofuran	0.243	0.249	-2.5	96	0.00
30	C	Chloroform	1.218	1.257	-3.2#	108	0.00
31	T	Cyclohexane	1.024	1.018	0.6	116	0.00
32	T	1,1,1-Trichloroethane	1.068	1.122	-5.1	111	0.00
33	S	1,2-Dichloroethane-d4	0.807	0.771	4.5	93	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00
35	S	Dibromofluoromethane	0.347	0.369	-6.3	105	0.00
36	T	1,1-Dichloropropene	0.487	0.533	-9.4	117	0.00
37	T	Ethyl Acetate	0.491	0.461	6.1	96	0.00
38	T	Carbon Tetrachloride	0.557	0.585	-5.0	112	0.00
39	T	Methylcyclohexane	0.457	0.567	-24.1	125	0.00
40	TM	Benzene	1.463	1.643	-12.3	115	0.00
41	T	Methacrylonitrile	0.256	0.236	7.8	89	0.00
42	TM	1,2-Dichloroethane	0.551	0.538	2.4	100	0.00
43	T	Isopropyl Acetate	0.787	0.787	0.0	98	0.00
44	TM	Trichloroethene	0.341	0.382	-12.0	120	0.00
45	C	1,2-Dichloropropane	0.374	0.397	-6.1#	109	0.00
46	T	Dibromomethane	0.270	0.283	-4.8	108	0.00
47	T	Bromodichloromethane	0.549	0.587	-6.9	107	0.00
48	T	Methyl methacrylate	0.354	0.355	-0.3	92	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.006	0.007	-16.7	109	0.00
50	S	Toluene-d8	1.232	1.373	-11.4	110	0.00
51	T	4-Methyl-2-Pentanone	0.457	0.464	-1.5	96	0.00
52	CM	Toluene	0.848	1.020	-20.3#	119	0.00
53	T	t-1,3-Dichloropropene	0.519	0.592	-14.1	109	0.00
54	T	cis-1,3-Dichloropropene	0.554	0.641	-15.7	111	0.00
55	T	1,1,2-Trichloroethane	0.335	0.375	-11.9	112	0.00
56	T	Ethyl methacrylate	0.469	0.577	-23.0	108	0.00
57	T	1,3-Dichloropropane	0.583	0.654	-12.2	110	0.00
58	T	2-Chloroethyl Vinyl ether	0.213	0.194	8.9	82	0.00
59	T	2-Hexanone	0.321	0.336	-4.7	96	0.00
60	T	Dibromochloromethane	0.405	0.441	-8.9	108	0.00
61	T	1,2-Dibromoethane	0.334	0.375	-12.3	114	0.00
62	S	4-Bromofluorobenzene	0.422	0.472	-11.8	107	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
64	T	Tetrachloroethene	0.341	0.397	-16.4	128	0.00
65	PM	Chlorobenzene	1.095	1.230	-12.3	119	0.00
66	T	1,1,1,2-Tetrachloroethane	0.402	0.433	-7.7	115	0.00
67	C	Ethyl Benzene	1.784	2.118	-18.7#	118	0.00
68	T	m/p-Xylenes	0.659	0.839	-27.3#	123	0.00
69	T	o-Xylene	0.630	0.781	-24.0	119	0.00
70	T	Styrene	1.043	1.356	-30.0#	120	0.00
71	P	Bromoform	0.288	0.323	-12.2	108	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
73	T	Isopropylbenzene	3.375	3.860	-14.4	120	0.00
74	T	N-amyl acetate	1.517	1.490	1.8	98	0.00
75	P	1,1,2,2-Tetrachloroethane	1.192	1.200	-0.7	112	0.00
76	T	1,2,3-Trichloropropane	1.016	0.979	3.6	117	0.00
77	T	Bromobenzene	0.882	0.943	-6.9	118	0.00
78	T	n-propylbenzene	3.995	4.660	-16.6	120	0.00
79	T	2-Chlorotoluene	2.586	2.800	-8.3	116	0.00
80	T	1,3,5-Trimethylbenzene	2.787	3.277	-17.6	119	0.00
81	T	trans-1,4-Dichloro-2-butene	0.376	0.433	-15.2	119	0.00
82	T	4-Chlorotoluene	2.574	2.835	-10.1	117	0.00
83	T	tert-Butylbenzene	2.341	2.620	-11.9	115	0.00
84	T	1,2,4-Trimethylbenzene	2.778	3.307	-19.0	117	0.00
85	T	sec-Butylbenzene	3.244	3.855	-18.8	121	0.00
86	T	p-Isopropyltoluene	2.631	3.222	-22.5	120	0.00
87	T	1,3-Dichlorobenzene	1.624	1.768	-8.9	121	0.00
88	T	1,4-Dichlorobenzene	1.683	1.776	-5.5	122	0.00
89	T	n-Butylbenzene	2.327	2.736	-17.6	118	0.00
90	T	Hexachloroethane	0.618	0.629	-1.8	117	0.00
91	T	1,2-Dichlorobenzene	1.620	1.695	-4.6	117	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.218	0.212	2.8	102	0.00
93	T	1,2,4-Trichlorobenzene	0.753	0.794	-5.4	109	0.00
94	T	Hexachlorobutadiene	0.400	0.387	3.3	113	0.00
95	T	Naphthalene	2.246	2.511	-11.8	108	0.00

Sample Results: **VN085645.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.762	0.797	-4.6	109	0.00

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

Sample Results: **VN085645.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	101	0.00
2	T	Dichlorodifluoromethane	50.000	62.124	-24.2	135	0.00
3	P	Chloromethane	50.000	51.538	-3.1	112	0.00
4	C	Vinyl Chloride	50.000	62.678	-25.4#	135	0.00
5	T	Bromomethane	50.000	64.931	-29.9#	139	-0.01
6	T	Chloroethane	50.000	62.391	-24.8	138	0.00
7	T	Trichlorofluoromethane	50.000	53.087	-6.2	115	0.00
8	T	Diethyl Ether	50.000	51.037	-2.1	105	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	56.291	-12.6	126	0.00
10	T	Methyl Iodide	50.000	61.814	-23.6	119	0.00
11	T	Tert butyl alcohol	250.000	244.210	2.3	98	0.00
12	CM	1,1-Dichloroethene	50.000	57.812	-15.6#	117	0.00
13	T	Acrolein	250.000	168.697	32.5#	61	0.00
14	T	Allyl chloride	50.000	44.944	10.1	93	0.00
15	T	Acrylonitrile	250.000	257.863	-3.1	102	0.00
16	T	Acetone	250.000	225.997	9.6	94	0.00
17	T	Carbon Disulfide	50.000	57.001	-14.0	128	0.00
18	T	Methyl Acetate	50.000	45.225	9.5	91	0.00
19	T	Methyl tert-butyl Ether	50.000	55.039	-10.1	103	0.00
20	T	Methylene Chloride	50.000	54.697	-9.4	113	0.00
21	T	trans-1,2-Dichloroethene	50.000	57.502	-15.0	120	0.00
22	T	Diisopropyl ether	50.000	49.208	1.6	94	0.00
23	T	Vinyl Acetate	250.000	259.616	-3.8	95	0.00
24	P	1,1-Dichloroethane	50.000	51.962	-3.9	105	0.00
25	T	2-Butanone	250.000	241.685	3.3	96	0.00
26	T	2,2-Dichloropropane	50.000	57.562	-15.1	118	0.00
27	T	cis-1,2-Dichloroethene	50.000	57.208	-14.4	114	0.00
28	T	Bromochloromethane	50.000	43.426	13.1	88	0.00
29	T	Tetrahydrofuran	250.000	255.923	-2.4	96	0.00
30	C	Chloroform	50.000	51.611	-3.2#	108	0.00
31	T	Cyclohexane	50.000	49.690	0.6	116	0.00
32	T	1,1,1-Trichloroethane	50.000	52.509	-5.0	111	0.00
33	S	1,2-Dichloroethane-d4	50.000	47.780	4.4	93	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	102	0.00
35	S	Dibromofluoromethane	50.000	53.153	-6.3	105	0.00
36	T	1,1-Dichloropropene	50.000	54.731	-9.5	117	0.00
37	T	Ethyl Acetate	50.000	46.933	6.1	96	0.00
38	T	Carbon Tetrachloride	50.000	52.524	-5.0	112	0.00
39	T	Methylcyclohexane	50.000	62.021	-24.0	125	0.00
40	TM	Benzene	50.000	56.166	-12.3	115	0.00
41	T	Methacrylonitrile	50.000	46.204	7.6	89	0.00
42	TM	1,2-Dichloroethane	50.000	48.850	2.3	100	0.00
43	T	Isopropyl Acetate	50.000	49.962	0.1	98	0.00
44	TM	Trichloroethene	50.000	56.068	-12.1	120	0.00
45	C	1,2-Dichloropropane	50.000	53.137	-6.3#	109	0.00
46	T	Dibromomethane	50.000	52.419	-4.8	108	0.00
47	T	Bromodichloromethane	50.000	53.411	-6.8	107	0.00
48	T	Methyl methacrylate	50.000	50.045	-0.1	92	0.00

Sample Results: **VN085645.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1142.294	-14.2	109	0.00
50	S	Toluene-d8	50.000	55.713	-11.4	110	0.00
51	T	4-Methyl-2-Pentanone	250.000	253.917	-1.6	96	0.00
52	CM	Toluene	50.000	60.150	-20.3#	119	0.00
53	T	t-1,3-Dichloropropene	50.000	57.048	-14.1	109	0.00
54	T	cis-1,3-Dichloropropene	50.000	57.810	-15.6	111	0.00
55	T	1,1,2-Trichloroethane	50.000	55.842	-11.7	112	0.00
56	T	Ethyl methacrylate	50.000	50.997	-2.0	108	0.00
57	T	1,3-Dichloropropane	50.000	56.030	-12.1	110	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	228.313	8.7	82	0.00
59	T	2-Hexanone	250.000	261.399	-4.6	96	0.00
60	T	Dibromochloromethane	50.000	54.508	-9.0	108	0.00
61	T	1,2-Dibromoethane	50.000	56.226	-12.5	114	0.00
62	S	4-Bromofluorobenzene	50.000	56.013	-12.0	107	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	104	0.00
64	T	Tetrachloroethene	50.000	58.273	-16.5	128	0.00
65	PM	Chlorobenzene	50.000	56.165	-12.3	119	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	53.847	-7.7	115	0.00
67	C	Ethyl Benzene	50.000	59.349	-18.7#	118	0.00
68	T	m/p-Xylenes	100.000	127.234	-27.2#	123	0.00
69	T	o-Xylene	50.000	61.940	-23.9	119	0.00
70	T	Styrene	50.000	65.022	-30.0#	120	0.00
71	P	Bromoform	50.000	56.133	-12.3	108	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	107	0.00
73	T	Isopropylbenzene	50.000	57.186	-14.4	120	0.00
74	T	N-amyl acetate	50.000	49.123	1.8	98	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	50.322	-0.6	112	0.00
76	T	1,2,3-Trichloropropane	50.000	48.165	3.7	117	0.00
77	T	Bromobenzene	50.000	53.497	-7.0	118	0.00
78	T	n-propylbenzene	50.000	58.330	-16.7	120	0.00
79	T	2-Chlorotoluene	50.000	54.157	-8.3	116	0.00
80	T	1,3,5-Trimethylbenzene	50.000	58.774	-17.5	119	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	57.659	-15.3	119	0.00
82	T	4-Chlorotoluene	50.000	55.070	-10.1	117	0.00
83	T	tert-Butylbenzene	50.000	55.960	-11.9	115	0.00
84	T	1,2,4-Trimethylbenzene	50.000	59.518	-19.0	117	0.00
85	T	sec-Butylbenzene	50.000	59.408	-18.8	121	0.00
86	T	p-Isopropyltoluene	50.000	54.534	-9.1	120	0.00
87	T	1,3-Dichlorobenzene	50.000	54.455	-8.9	121	0.00
88	T	1,4-Dichlorobenzene	50.000	52.768	-5.5	122	0.00
89	T	n-Butylbenzene	50.000	58.781	-17.6	118	0.00
90	T	Hexachloroethane	50.000	50.887	-1.8	117	0.00
91	T	1,2-Dichlorobenzene	50.000	52.333	-4.7	117	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	48.620	2.8	102	0.00
93	T	1,2,4-Trichlorobenzene	50.000	52.709	-5.4	109	0.00
94	T	Hexachlorobutadiene	50.000	48.466	3.1	113	0.00
95	T	Naphthalene	50.000	55.897	-11.8	108	0.00

Sample Results: **VN085645.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085645.D
Acq On : 04 Feb 2025 11:05
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Feb 05 01:01:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	52.330	-4.7	109	0.00

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

QC SAMPLE DATA

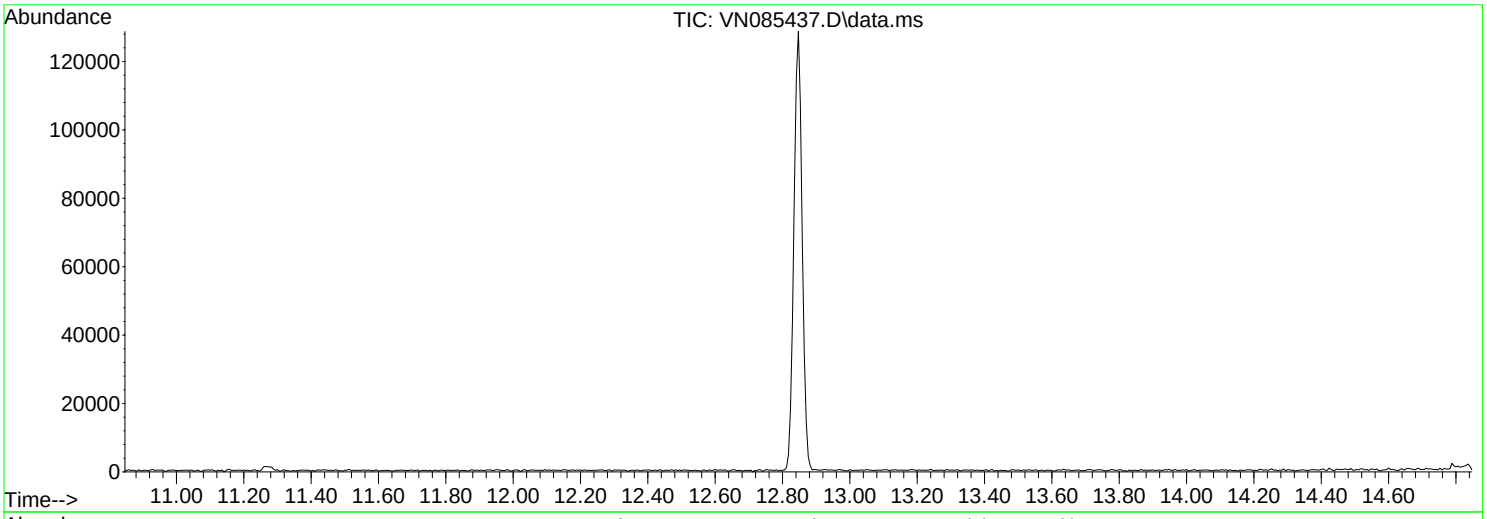
Sample Results: **VN085437.D**

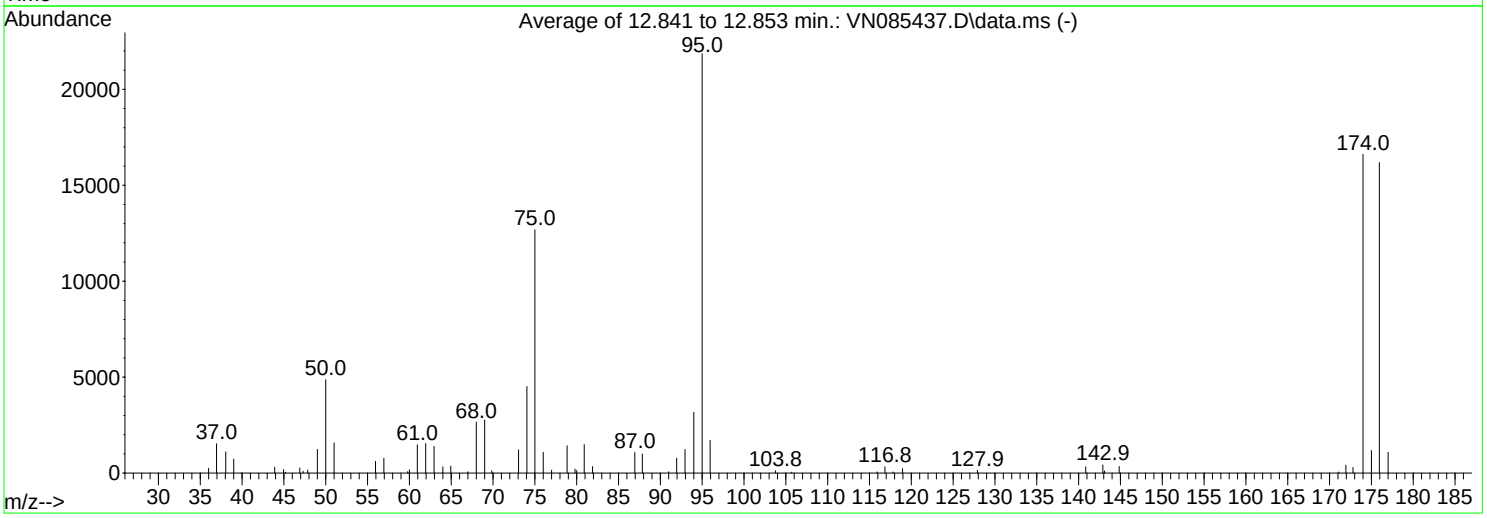
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085437.D
Acq On : 14 Jan 2025 14:22
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

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





AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	4864	PASS
75	95	30	60	58.0	12679	PASS
95	95	100	100	100.0	21856	PASS
96	95	5	9	7.8	1703	PASS
173	174	0.00	2	1.8	296	PASS
174	95	50	100	76.0	16613	PASS
175	174	5	9	7.1	1179	PASS
176	174	95	101	97.4	16185	PASS
177	176	5	9	6.7	1079	PASS

Average of 12.841 to 12.853 min.: VN085437.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	254	49.00	1237	64.95	364	79.80	211
36.95	1525	50.00	4864	67.00	71	80.00	136
38.05	1107	51.00	1571	68.00	2658	80.90	1487
39.00	730	55.95	608	69.00	2763	81.90	338
39.90	5	56.95	779	69.85	123	86.95	1072
43.90	302	59.80	76	73.05	1212	87.85	997
44.95	180	60.00	170	74.05	4514	91.00	68
45.20	50	60.95	1471	75.00	12679	91.95	773
46.90	269	61.95	1539	76.00	1086	92.95	1234
47.30	94	62.95	1390	77.00	153	94.00	3163
47.85	154	64.00	325	78.85	1426	95.00	21856

Instrument :
MSVOA_N
ClientSampleId :
BFB

Average of 12.841 to 12.853 min.: VN085437.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.95	1703	144.85	346				
103.75	127	171.10	56				
105.70	51	171.95	407				
115.90	59	172.80	296				
116.85	327	174.00	16613				
117.80	58	175.00	1179				
118.95	233	175.95	16185				
127.90	145	177.00	1079				
140.85	328						
142.90	422						
143.10	115						

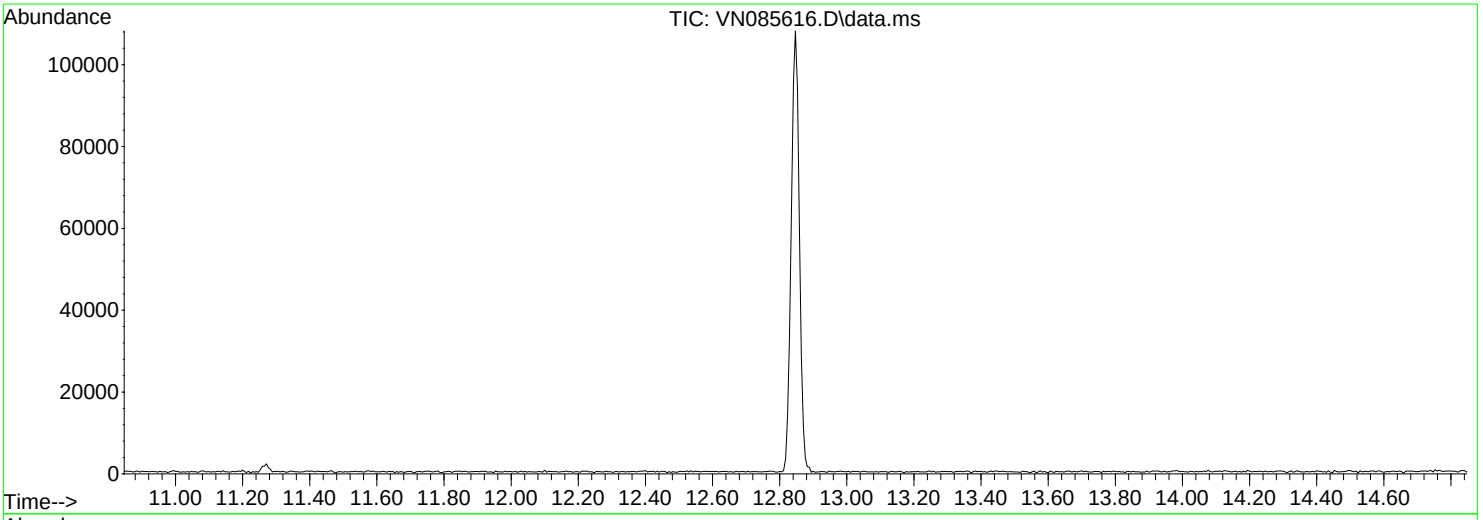
Sample Results: **VN085616.D**

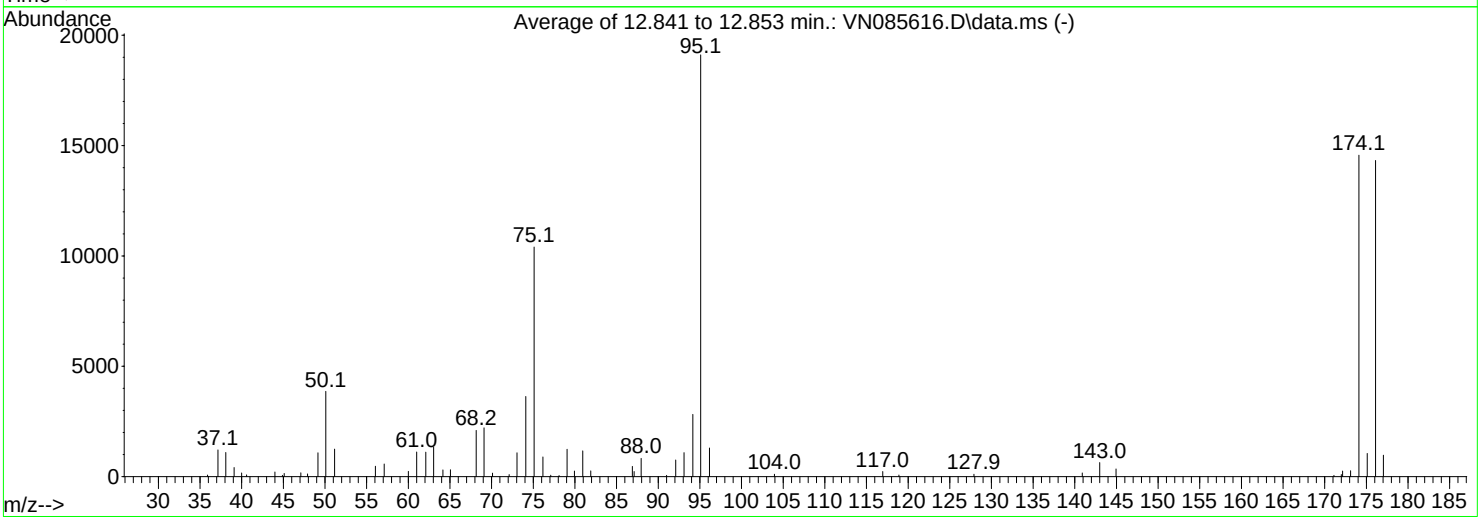
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085616.D
Acq On : 03 Feb 2025 12:23
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

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





AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	3864	PASS
75	95	30	60	54.4	10405	PASS
95	95	100	100	100.0	19112	PASS
96	95	5	9	6.8	1297	PASS
173	174	0.00	2	1.9	270	PASS
174	95	50	100	76.2	14567	PASS
175	174	5	9	7.2	1052	PASS
176	174	95	101	98.4	14328	PASS
177	176	5	9	6.8	972	PASS

Average of 12.841 to 12.853 min.: VN085616.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	74	49.15	1081	68.15	2097	79.95	25
37.15	1211	50.10	3864	69.10	2213	80.95	116
38.10	1095	51.15	1245	70.10	160	81.90	26
39.10	414	56.05	469	72.10	95	86.90	46
40.00	169	57.10	576	73.05	1077	87.10	230
40.60	80	60.00	237	74.10	3635	87.95	829
44.00	214	61.00	1118	75.10	10405	91.00	56
44.90	60	62.10	1112	76.15	891	92.10	756
45.10	147	63.05	1332	77.10	67	93.10	1091
47.10	175	64.15	308	78.10	54	94.15	2822
47.90	122	65.05	309	79.05	1243	95.10	19112

Instrument :
MSVOA_N
ClientSampleId :
BFB

Average of 12.841 to 12.853 min.: VN085616.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.15	1297	173.10	270				
103.95	109	174.10	14567				
116.95	235	175.10	1052				
118.90	74	176.10	14328				
127.90	109	177.05	972				
140.90	170						
143.00	641						
144.95	346						
171.10	58						
172.00	94						
172.15	255						

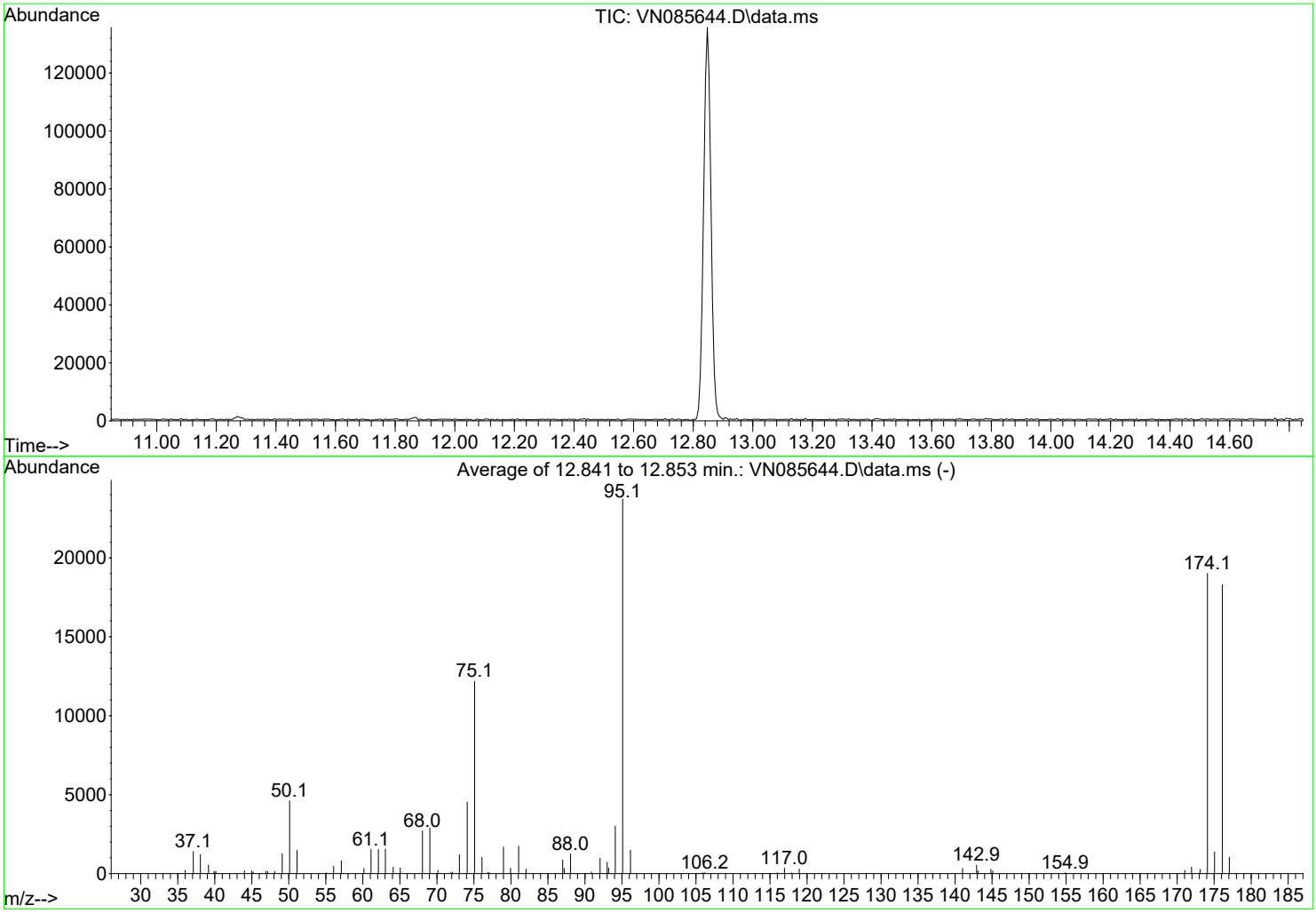
Sample Results: **VN085644.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085644.D
Acq On : 04 Feb 2025 09:55
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

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



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	4605	PASS
75	95	30	60	51.3	12174	PASS
95	95	100	100	100.0	23728	PASS
96	95	5	9	6.3	1483	PASS
173	174	0.00	2	1.4	274	PASS
174	95	50	100	80.1	19016	PASS
175	174	5	9	7.2	1374	PASS
176	174	95	101	96.3	18307	PASS
177	176	5	9	5.7	1035	PASS

Average of 12.841 to 12.853 min.: VN085644.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	203	47.15	152	63.05	1569	76.10	103
37.10	1397	48.10	133	64.10	406	76.90	7
38.05	1215	49.10	1273	65.05	361	77.10	5
39.15	549	50.10	4605	68.05	2699	79.00	168
39.90	155	51.10	1478	69.05	2899	79.95	343
40.00	71	55.10	51	70.15	210	81.05	1741
40.15	151	56.05	461	71.90	59	82.05	293
44.00	181	57.10	816	72.10	91	87.00	867
45.00	171	60.15	321	73.05	1198	87.20	320
45.20	92	61.10	1529	74.10	4528	88.05	1251
46.90	157	62.10	1522	75.10	12174	90.85	102

Instrument :
MSVOA_N
ClientSampleId :
BFB

Average of 12.841 to 12.853 min.: VN085644.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.05	972	118.95	300	175.05	1374		
93.00	714	141.00	324	176.10	18307		
93.20	356	142.90	533	177.05	1035		
94.10	3005	143.10	179				
95.10	23728	144.85	279				
96.15	1483	145.10	170				
105.90	53	154.90	57				
106.20	61	171.05	211				
116.00	54	171.95	423				
116.95	344	173.10	274				
117.90	53	174.10	19016				

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0203WBL01	SDG No.:	Q1241
Lab Sample ID:	VN0203WBL01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085618.D	1		02/03/25 13:34	VN020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	25.0	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.4		74 - 125	101%	SPK: 50
1868-53-7	Dibromofluoromethane	50.6		75 - 124	101%	SPK: 50
2037-26-5	Toluene-d8	50.1		86 - 113	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.6		77 - 121	85%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	184000	8.224			
540-36-3	1,4-Difluorobenzene	355000	9.1			
3114-55-4	Chlorobenzene-d5	307000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	112000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085618.D
Acq On : 03 Feb 2025 13:34
Operator : JC\MD
Sample : VN0203WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBL01

Quant Time: Feb 04 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	183958	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	354826	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	307130	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	111992	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	149772	50.437	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.880%			
35) Dibromofluoromethane	8.165	113	124502	50.577	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.160%			
50) Toluene-d8	10.565	98	438134	50.095	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.180%			
62) 4-Bromofluorobenzene	12.847	95	127520	42.623	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 85.240%			

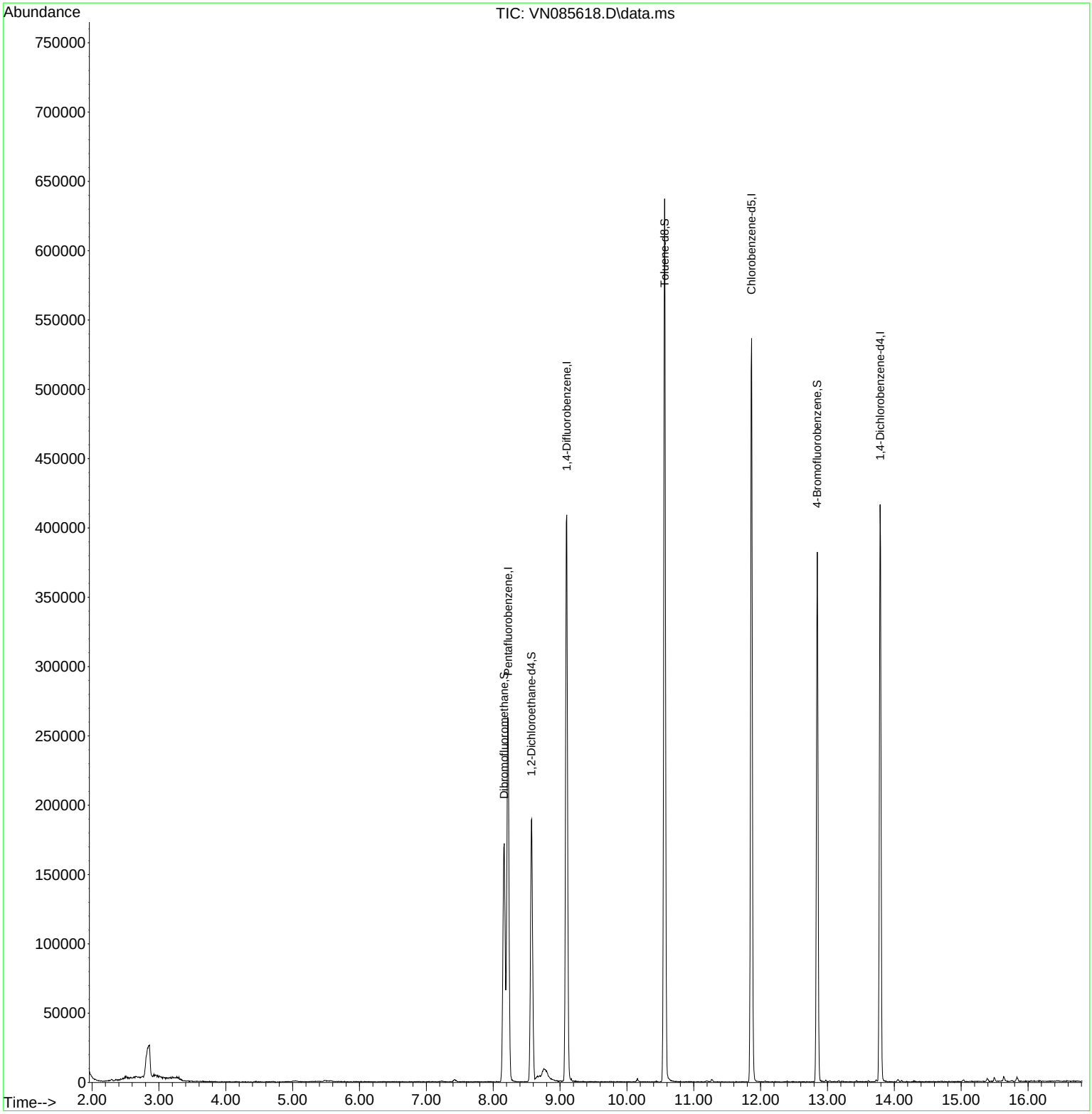
Target Compounds Qvalue

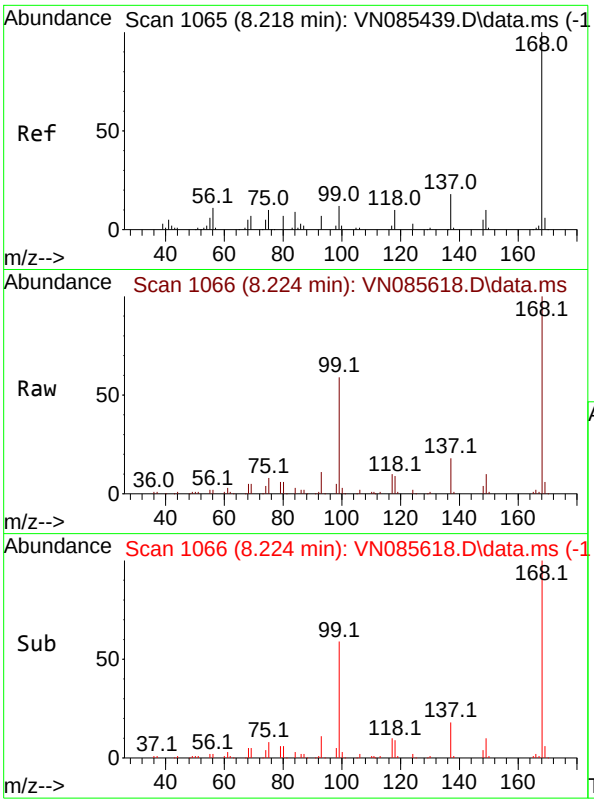
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085618.D
Acq On : 03 Feb 2025 13:34
Operator : JC\MD
Sample : VN0203WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBL01

Quant Time: Feb 04 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



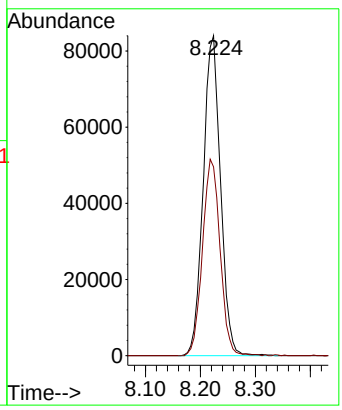


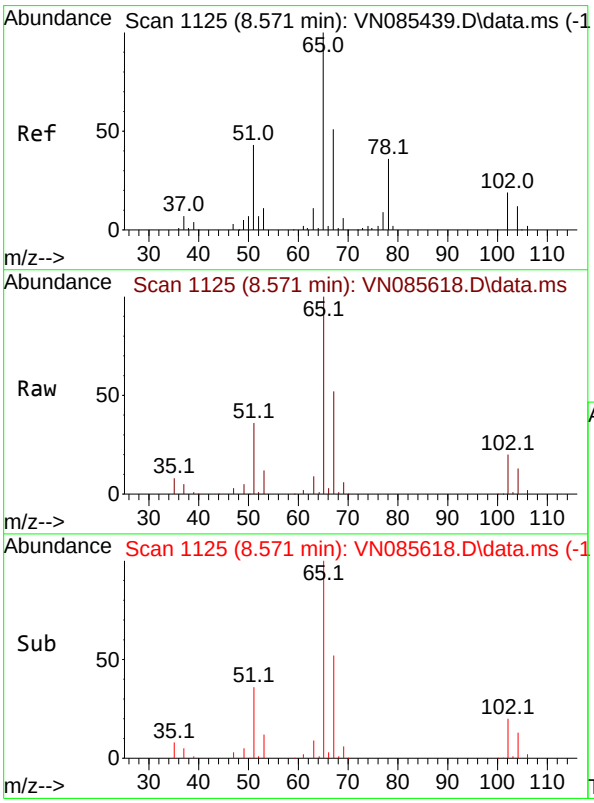
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBL01

Tgt Ion:168 Resp: 183958

Ion	Ratio	Lower	Upper
168	100		
99	59.0	53.6	80.4

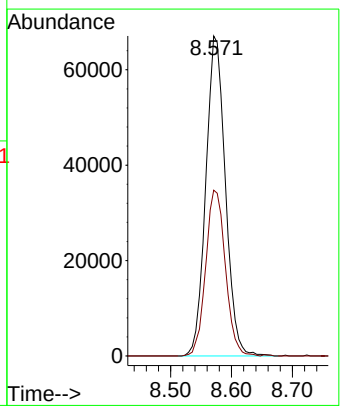


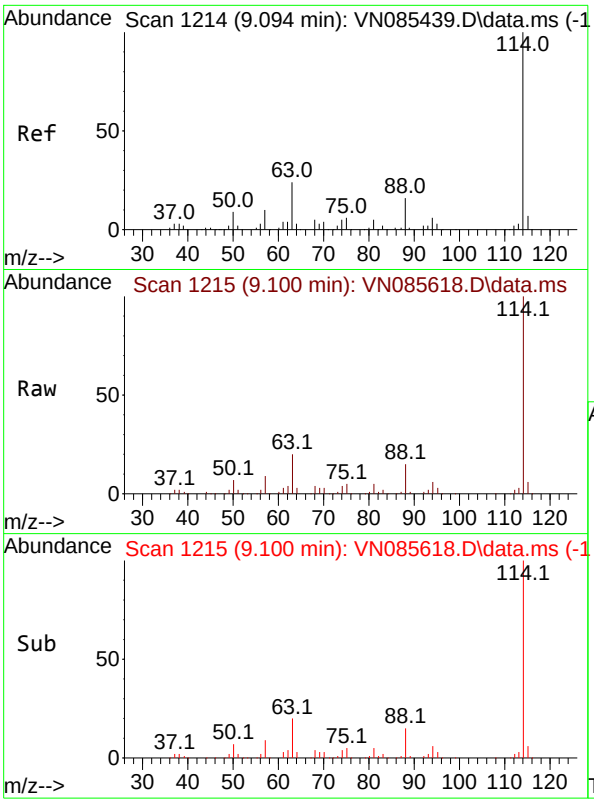


#33
1,2-Dichloroethane-d4
Concen: 50.437 ug/l
RT: 8.571 min Scan# 1125
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion: 65 Resp: 149772

Ion	Ratio	Lower	Upper
65	100		
67	52.1	0.0	101.6



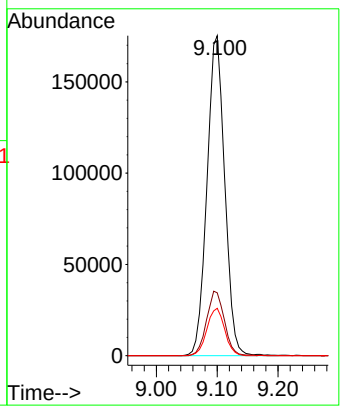


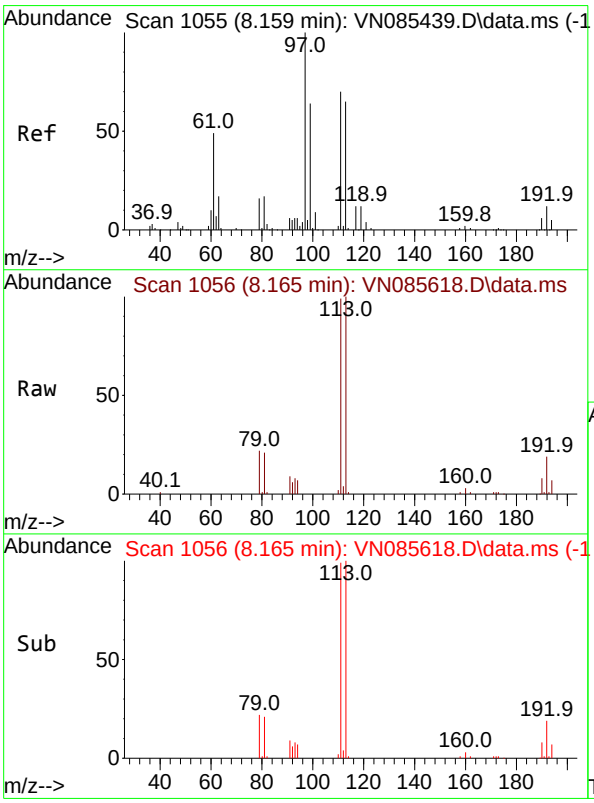
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBL01

Tgt Ion:114 Resp: 354826

Ion	Ratio	Lower	Upper
114	100		
63	19.7	0.0	47.6
88	14.8	0.0	32.6

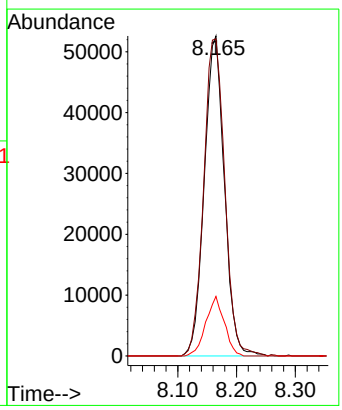


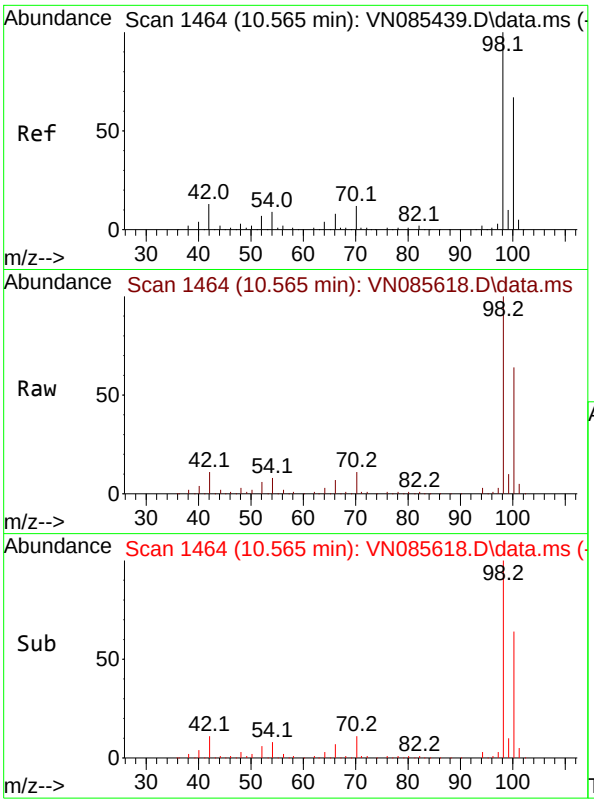


#35
Dibromofluoromethane
Concen: 50.577 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion:113 Resp: 124502

Ion	Ratio	Lower	Upper
113	100		
111	104.3	82.7	124.1
192	17.2	14.3	21.5



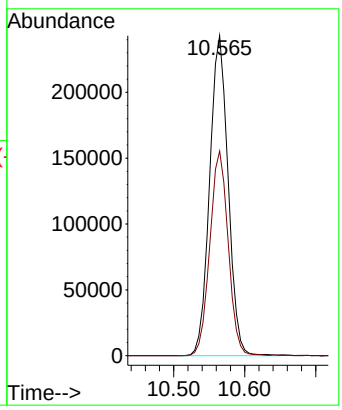


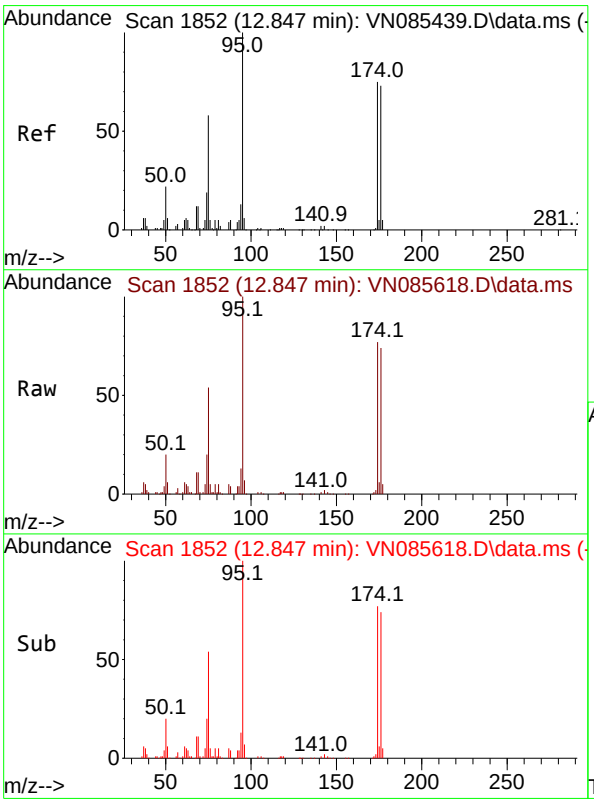
#50
Toluene-d8
Concen: 50.095 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBL01

Tgt Ion: 98 Resp: 438134

Ion	Ratio	Lower	Upper
98	100		
100	63.6	52.2	78.4

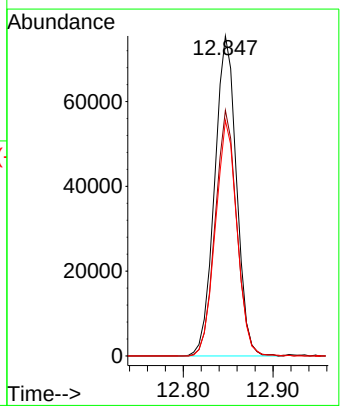


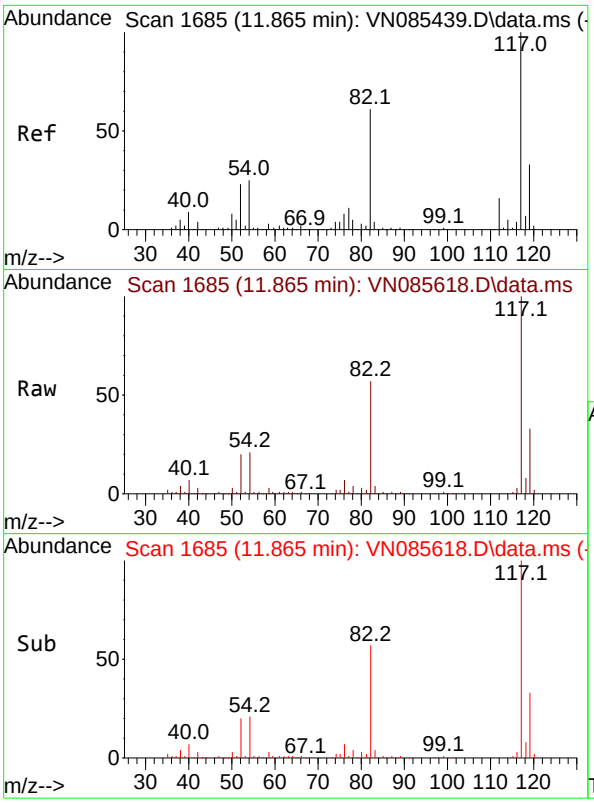


#62
4-Bromofluorobenzene
Concen: 42.623 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion: 95 Resp: 127520

Ion	Ratio	Lower	Upper
95	100		
174	75.8	0.0	145.0
176	72.7	0.0	142.4



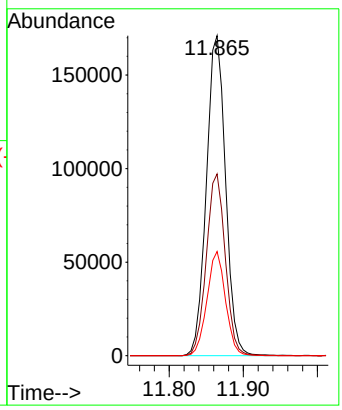


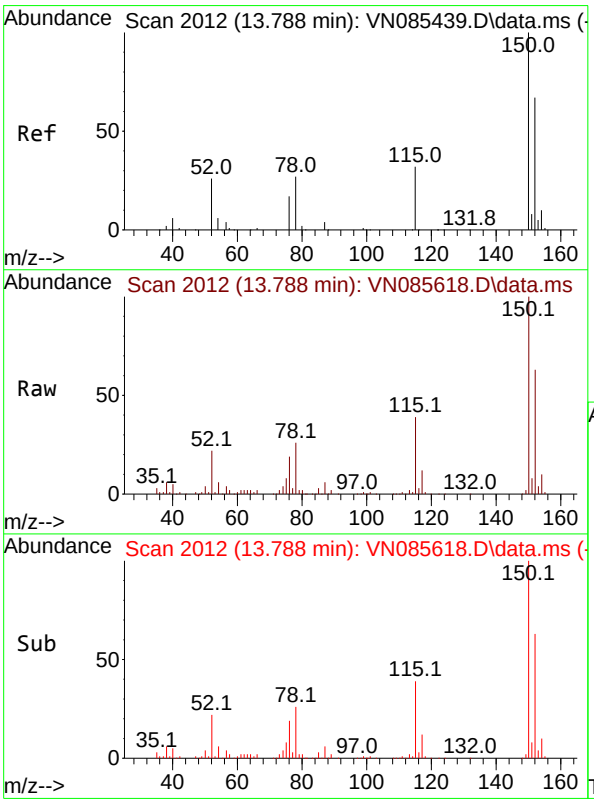
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBL01

Tgt Ion:117 Resp: 307130

Ion	Ratio	Lower	Upper
117	100		
82	56.8	48.6	72.8
119	32.6	26.6	39.8

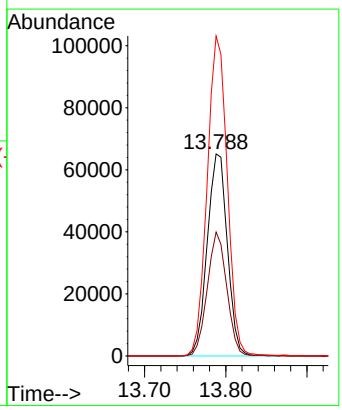




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085618.D
Acq: 03 Feb 2025 13:34

Tgt Ion:152 Resp: 111992

Ion	Ratio	Lower	Upper
152	100		
115	59.5	31.1	93.3
150	158.2	0.0	343.6



Raw Data: **VN085647.D**

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0204WBL01	SDG No.:	Q1241
Lab Sample ID:	VN0204WBL01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085647.D	1		02/04/25 12:31	VN020425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	1.00	U	0.34	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U	0.26	1.00	ug/L
78-93-3	2-Butanone	5.00	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.25	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.26	1.00	ug/L
71-43-2	Benzene	1.00	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.32	1.00	ug/L
127-18-4	Tetrachloroethene	1.00	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.13	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.9		74 - 125	100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		75 - 124	101%	SPK: 50
2037-26-5	Toluene-d8	49.2		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.2		77 - 121	88%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	198000	8.224			
540-36-3	1,4-Difluorobenzene	379000	9.1			
3114-55-4	Chlorobenzene-d5	329000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	132000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085647.D
Acq On : 04 Feb 2025 12:31
Operator : JC\MD
Sample : VN0204WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBL01

Quant Time: Feb 05 01:02:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	197983	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	379434	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	328690	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	132287	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	159588	49.936	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 99.880%			
35) Dibromofluoromethane	8.165	113	132313	50.264	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.520%			
50) Toluene-d8	10.565	98	460162	49.201	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.400%			
62) 4-Bromofluorobenzene	12.847	95	141527	44.237	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 88.480%			

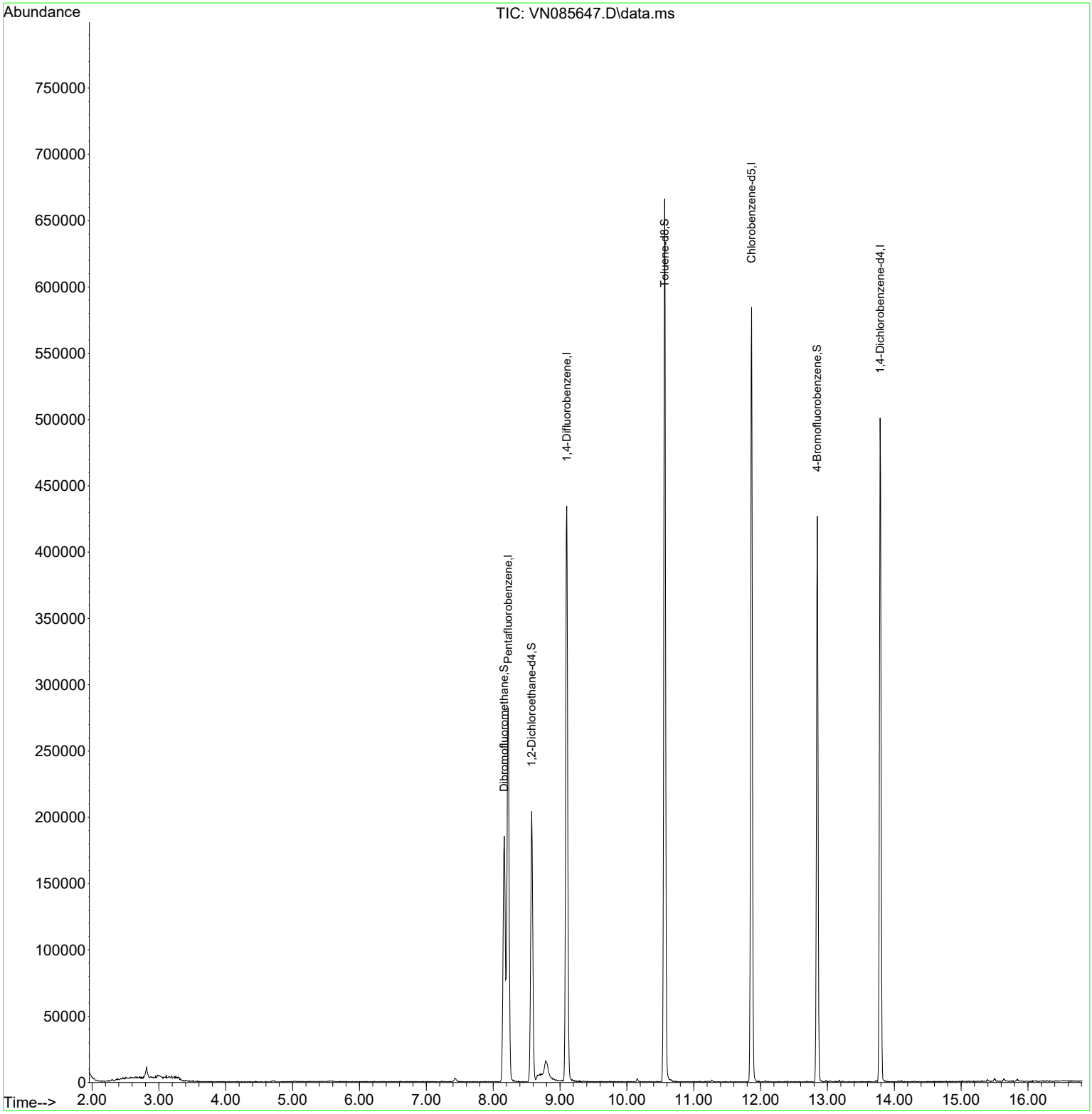
Target Compounds Qvalue

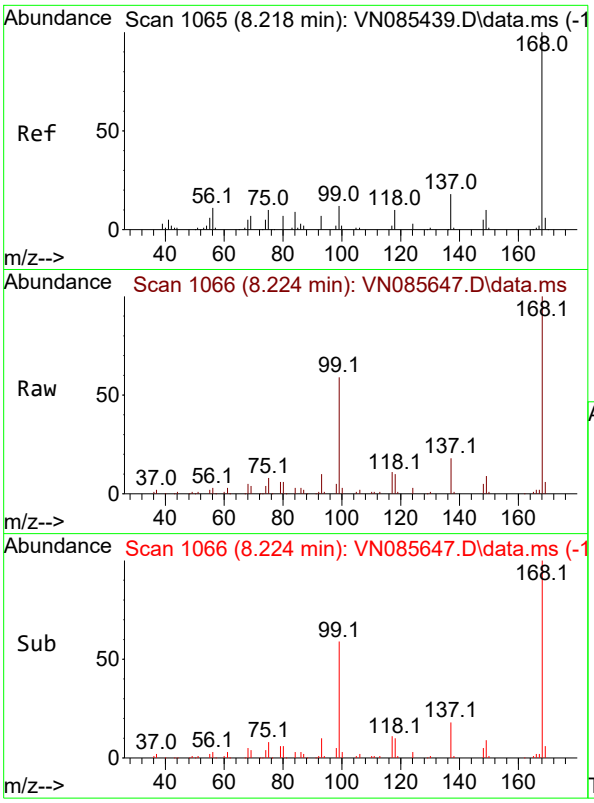
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085647.D
Acq On : 04 Feb 2025 12:31
Operator : JC\MD
Sample : VN0204WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBL01

Quant Time: Feb 05 01:02:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



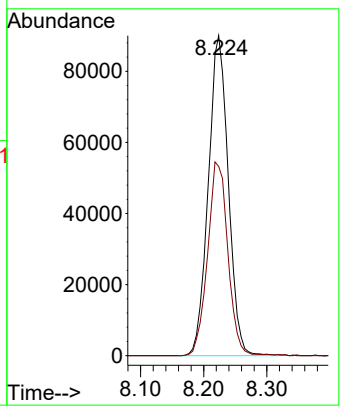


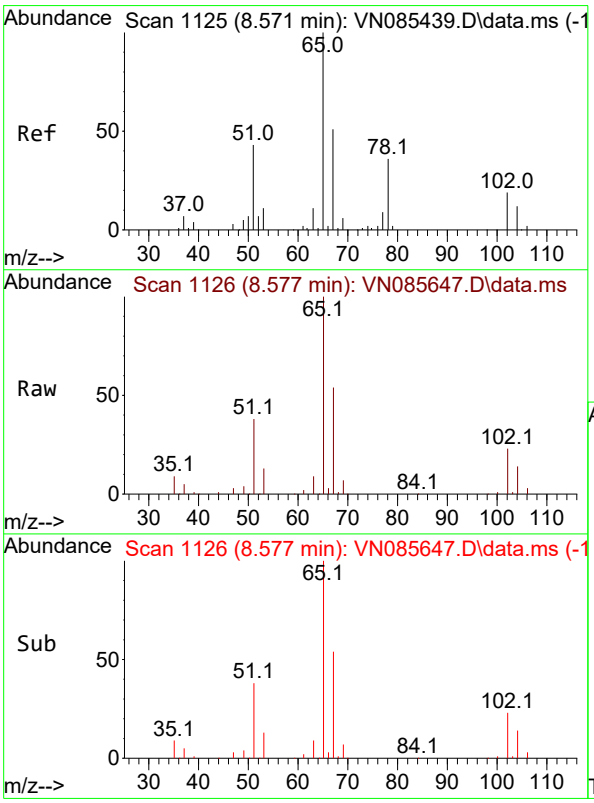
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBL01

Tgt Ion:168 Resp: 197983

Ion	Ratio	Lower	Upper
168	100		
99	59.2	53.6	80.4

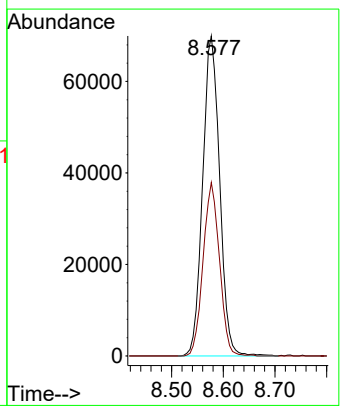


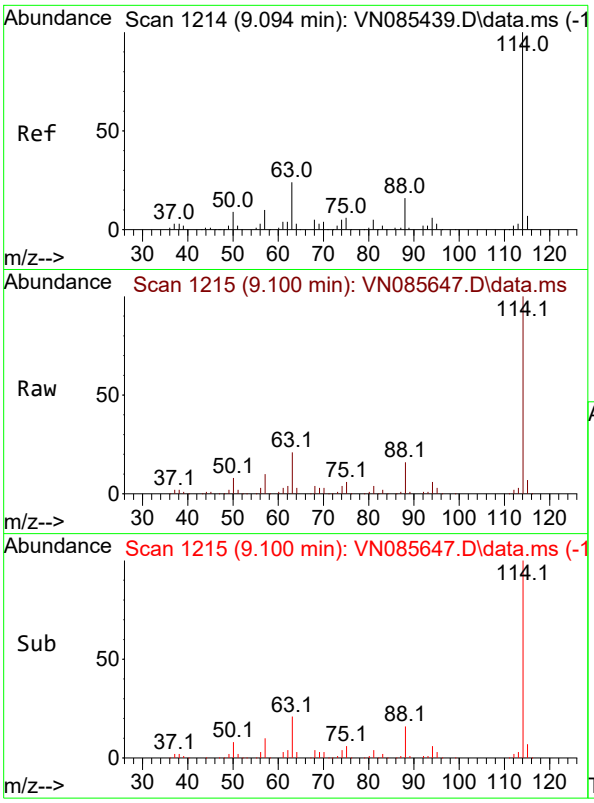


#33
1,2-Dichloroethane-d4
Concen: 49.936 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion: 65 Resp: 159588

Ion	Ratio	Lower	Upper
65	100		
67	52.3	0.0	101.6



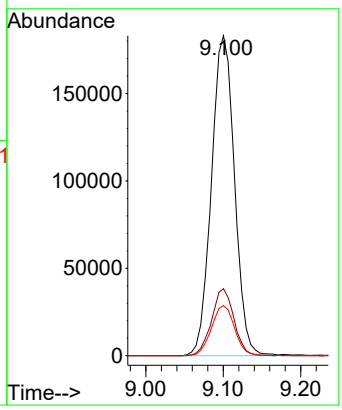


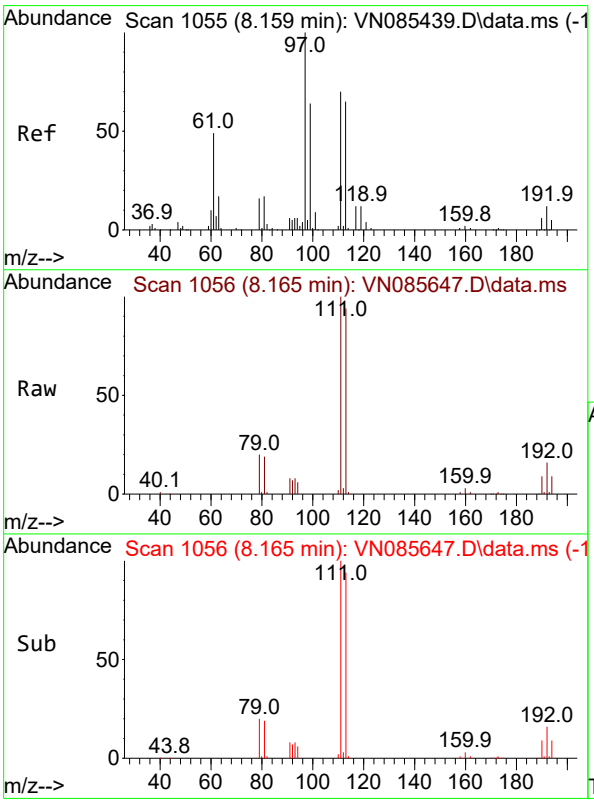
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBL01

Tgt Ion:114 Resp: 379434

Ion	Ratio	Lower	Upper
114	100		
63	21.0	0.0	47.6
88	15.7	0.0	32.6

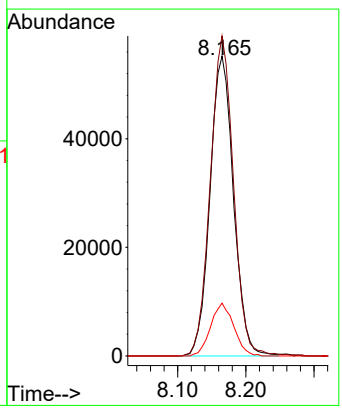


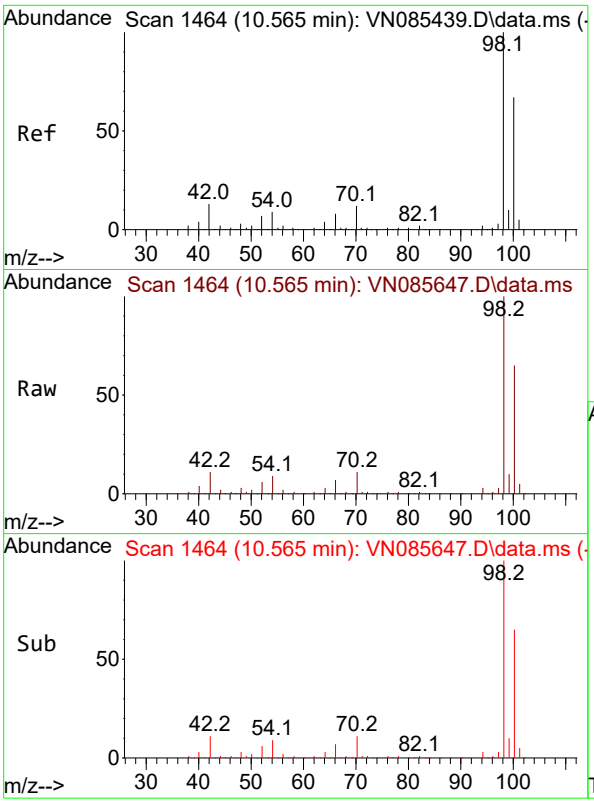


#35
Dibromofluoromethane
Concen: 50.264 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion:113 Resp: 132313

Ion	Ratio	Lower	Upper
113	100		
111	105.6	82.7	124.1
192	17.4	14.3	21.5



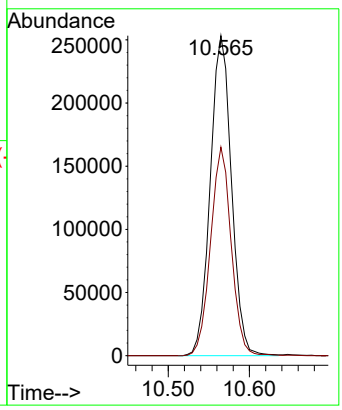


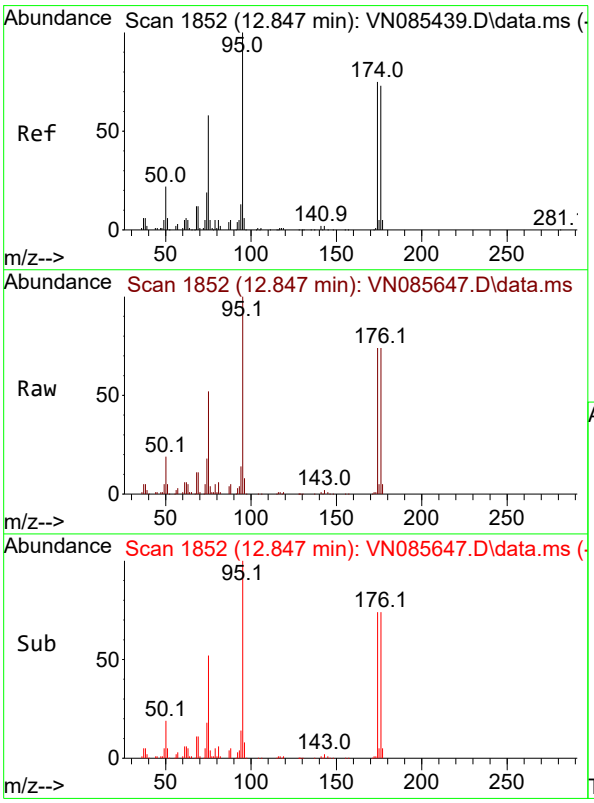
#50
Toluene-d8
Concen: 49.201 ug/l
RT: 10.565 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBL01

Tgt Ion: 98 Resp: 460162

Ion	Ratio	Lower	Upper
98	100		
100	63.4	52.2	78.4

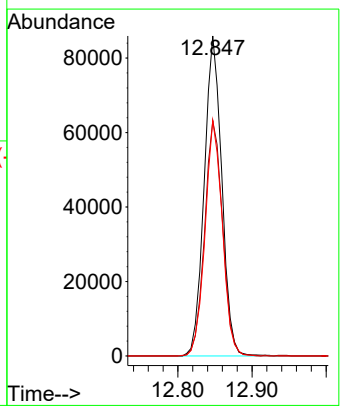


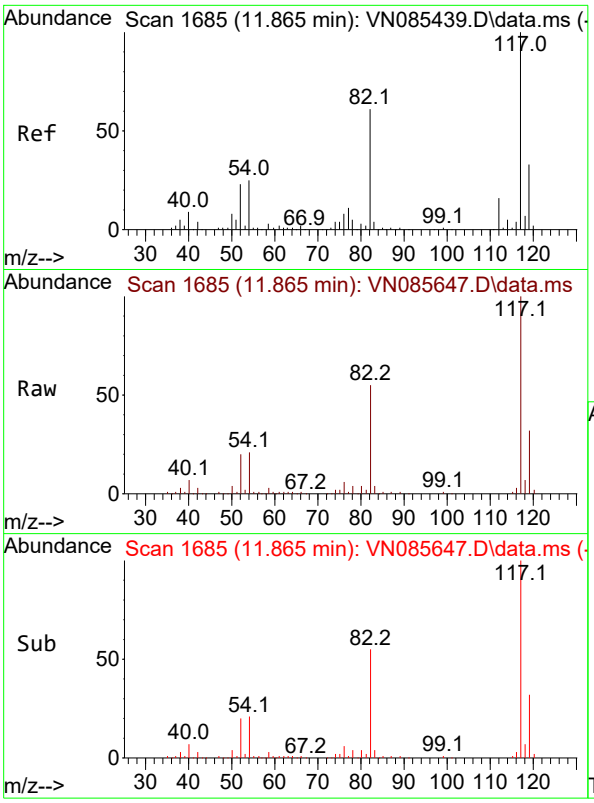


#62
4-Bromofluorobenzene
Concen: 44.237 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion: 95 Resp: 141527

Ion	Ratio	Lower	Upper
95	100		
174	75.4	0.0	145.0
176	72.4	0.0	142.4



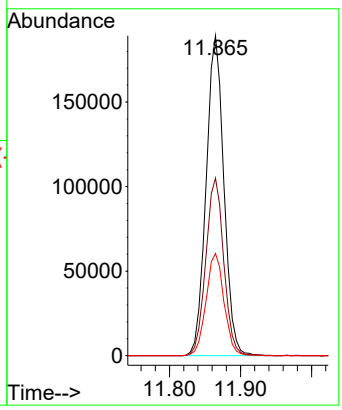


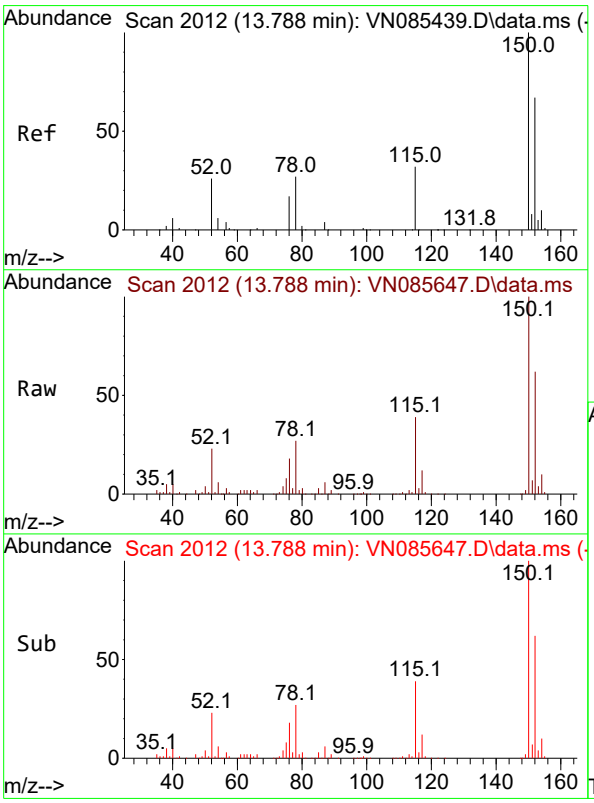
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBL01

Tgt Ion:117 Resp: 328690

Ion	Ratio	Lower	Upper
117	100		
82	55.5	48.6	72.8
119	31.9	26.6	39.8

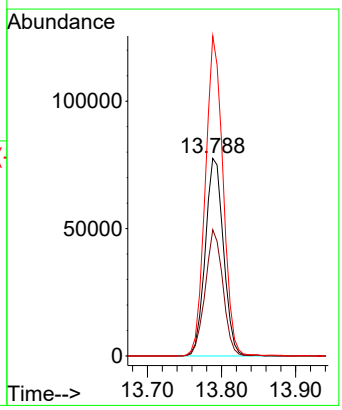




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085647.D
Acq: 04 Feb 2025 12:31

Tgt Ion:152 Resp: 132287

Ion	Ratio	Lower	Upper
152	100		
115	61.9	31.1	93.3
150	156.8	0.0	343.6



Raw Data: **VN085619.D**

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0203WBS01	SDG No.:	Q1241
Lab Sample ID:	VN0203WBS01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085619.D	1		02/03/25 13:58	VN020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	18.0		0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	17.3		0.26	5.00	ug/L
78-93-3	2-Butanone	88.6		1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	17.5		0.25	5.00	ug/L
67-66-3	Chloroform	19.0		0.26	5.00	ug/L
71-43-2	Benzene	18.6		0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	17.2		0.24	5.00	ug/L
79-01-6	Trichloroethene	18.4		0.32	5.00	ug/L
127-18-4	Tetrachloroethene	19.2		0.25	5.00	ug/L
108-90-7	Chlorobenzene	19.0		0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.8		74 - 125	96%	SPK: 50
1868-53-7	Dibromofluoromethane	52.2		75 - 124	104%	SPK: 50
2037-26-5	Toluene-d8	54.6		86 - 113	109%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.1		77 - 121	102%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	189000	8.224			
540-36-3	1,4-Difluorobenzene	327000	9.1			
3114-55-4	Chlorobenzene-d5	287000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	141000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085619.D
Acq On : 03 Feb 2025 13:58
Operator : JC\MD
Sample : VN0203WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 00:57:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	188870	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	327054	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	287245	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	141185	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	145603	47.758	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 95.520%			
35) Dibromofluoromethane	8.165	113	118527	52.239	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.480%			
50) Toluene-d8	10.565	98	440013	54.582	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 109.160%			
62) 4-Bromofluorobenzene	12.847	95	140993	51.128	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 102.260%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	38687	15.128	ug/l	97
3) Chloromethane	2.359	50	39178	14.150	ug/l	99
4) Vinyl Chloride	2.512	62	50107	18.004	ug/l	98
5) Bromomethane	2.959	94	32854	19.544	ug/l	100
6) Chloroethane	3.124	64	34668	19.648	ug/l	92
7) Trichlorofluoromethane	3.495	101	71688	17.753	ug/l	95
8) Diethyl Ether	3.959	74	22305	15.989	ug/l	93
9) 1,1,2-Trichlorotrifluo...	4.377	101	41316	18.165	ug/l	98
10) Methyl Iodide	4.589	142	44373	17.036	ug/l	97
11) Tert butyl alcohol	5.518	59	34586	99.071	ug/l	100
12) 1,1-Dichloroethene	4.347	96	35011	17.272	ug/l	91
13) Acrolein	4.183	56	24346	51.087	ug/l	99
14) Allyl chloride	5.018	41	46069	14.006	ug/l	95
15) Acrylonitrile	5.712	53	105201	94.873	ug/l	99
16) Acetone	4.424	43	84320	85.597	ug/l	93
17) Carbon Disulfide	4.718	76	83320	13.350	ug/l	98
18) Methyl Acetate	5.030	43	57710	19.266	ug/l	95
19) Methyl tert-butyl Ether	5.794	73	120113	18.249	ug/l	97
20) Methylene Chloride	5.277	84	45987	18.858	ug/l	91
21) trans-1,2-Dichloroethene	5.789	96	37886	17.489	ug/l	93
22) Diisopropyl ether	6.665	45	121562	16.651	ug/l	98
23) Vinyl Acetate	6.600	43	406095	79.484	ug/l #	93
24) 1,1-Dichloroethane	6.571	63	79173	17.785	ug/l	97
25) 2-Butanone	7.483	43	128446	88.606	ug/l	96
26) 2,2-Dichloropropane	7.488	77	68597	19.060	ug/l	97
27) cis-1,2-Dichloroethene	7.488	96	47714	18.700	ug/l	93
28) Bromochloromethane	7.812	49	37432	18.074	ug/l	87
29) Tetrahydrofuran	7.835	42	82755	90.042	ug/l	90
30) Chloroform	7.965	83	87616	19.043	ug/l	96
31) Cyclohexane	8.253	56	54962	14.205	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	72591	17.987	ug/l	97
36) 1,1-Dichloropropene	8.371	75	52640	16.530	ug/l	97
37) Ethyl Acetate	7.553	43	52153	16.226	ug/l #	97
38) Carbon Tetrachloride	8.359	117	63941	17.539	ug/l	97
39) Methylcyclohexane	9.594	83	47017	15.712	ug/l	99
40) Benzene	8.600	78	178066	18.610	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085619.D
Acq On : 03 Feb 2025 13:58
Operator : JC\MD
Sample : VN0203WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 00:57:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	27186	16.257	ug/l		93
42) 1,2-Dichloroethane	8.665	62	62118	17.238	ug/l		97
43) Isopropyl Acetate	8.688	43	90788	17.628	ug/l		98
44) Trichloroethene	9.347	130	40975	18.397	ug/l		95
45) 1,2-Dichloropropane	9.618	63	44363	18.152	ug/l		97
46) Dibromomethane	9.706	93	32561	18.464	ug/l		99
47) Bromodichloromethane	9.882	83	68763	19.139	ug/l		97
48) Methyl methacrylate	9.677	41	36614	15.797	ug/l	#	86
49) 1,4-Dioxane	9.694	88	16166	414.188	ug/l	#	78
51) 4-Methyl-2-Pentanone	10.441	43	273103	91.380	ug/l		95
52) Toluene	10.629	92	109097	19.678	ug/l		99
53) t-1,3-Dichloropropene	10.835	75	63985	18.846	ug/l		97
54) cis-1,3-Dichloropropene	10.312	75	67151	18.516	ug/l		92
55) 1,1,2-Trichloroethane	11.012	97	44783	20.411	ug/l		97
56) Ethyl methacrylate	10.871	69	57740	16.950	ug/l		94
57) 1,3-Dichloropropane	11.159	76	74082	19.419	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.159	63	104900	75.342	ug/l		97
59) 2-Hexanone	11.194	43	193608	92.067	ug/l		95
60) Dibromochloromethane	11.359	129	51263	19.353	ug/l		99
61) 1,2-Dibromoethane	11.465	107	42556	19.486	ug/l		99
64) Tetrachloroethene	11.100	164	37520	19.160	ug/l		98
65) Chlorobenzene	11.888	112	119593	19.005	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.959	131	44553	19.291	ug/l		99
67) Ethyl Benzene	11.959	91	191202	18.656	ug/l		100
68) m/p-Xylenes	12.070	106	150700	39.785	ug/l		96
69) o-Xylene	12.394	106	68756	18.994	ug/l		98
70) Styrene	12.406	104	118783	19.827	ug/l		97
71) Bromoform	12.576	173	33352	20.183	ug/l	#	98
73) Isopropylbenzene	12.694	105	175479	18.416	ug/l		99
74) N-amyl acetate	12.494	43	67669	15.799	ug/l		91
75) 1,1,2,2-Tetrachloroethane	12.935	83	66278	19.691	ug/l		99
76) 1,2,3-Trichloropropane	12.988	75	57701m	20.108	ug/l		
77) Bromobenzene	12.976	156	45701	18.357	ug/l		96
78) n-propylbenzene	13.035	91	212161	18.808	ug/l		100
79) 2-Chlorotoluene	13.123	91	132501	18.149	ug/l		96
80) 1,3,5-Trimethylbenzene	13.170	105	151767	19.282	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.735	75	20631	19.452	ug/l		90
82) 4-Chlorotoluene	13.217	91	133497	18.365	ug/l		97
83) tert-Butylbenzene	13.435	119	121493	18.381	ug/l		97
84) 1,2,4-Trimethylbenzene	13.476	105	151424	19.303	ug/l		97
85) sec-Butylbenzene	13.612	105	174506	19.049	ug/l		99
86) p-Isopropyltoluene	13.723	119	139399	18.340	ug/l		99
87) 1,3-Dichlorobenzene	13.729	146	83480	18.208	ug/l		100
88) 1,4-Dichlorobenzene	13.812	146	85839	18.063	ug/l		99
89) n-Butylbenzene	14.053	91	114517	17.425	ug/l		98
90) Hexachloroethane	14.329	117	31928	18.308	ug/l		97
91) 1,2-Dichlorobenzene	14.106	146	84316	18.437	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.717	75	11783	19.170	ug/l		95
93) 1,2,4-Trichlorobenzene	15.388	180	34556	16.258	ug/l		99
94) Hexachlorobutadiene	15.500	225	18281	16.200	ug/l		97
95) Naphthalene	15.635	128	102342	16.136	ug/l		99
96) 1,2,3-Trichlorobenzene	15.835	180	34678	16.124	ug/l		97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085619.D
Acq On : 03 Feb 2025 13:58
Operator : JC\MD
Sample : VN0203WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 00:57:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085619.D
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Operator : JC\MD
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Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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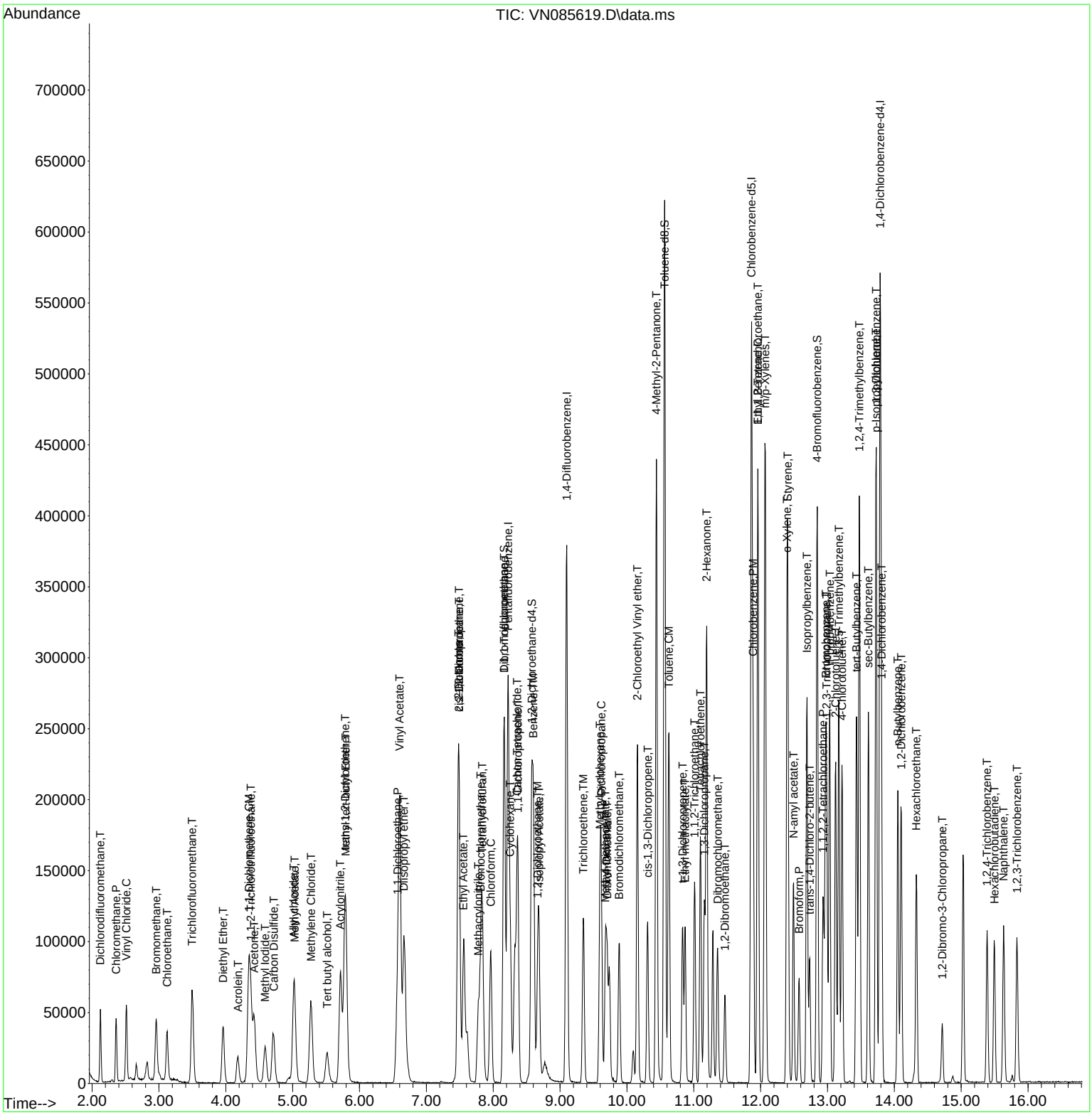
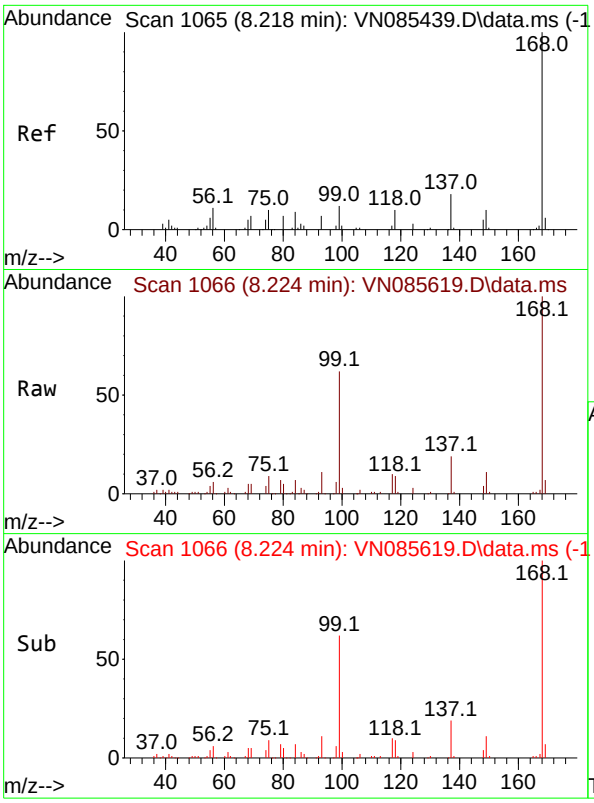
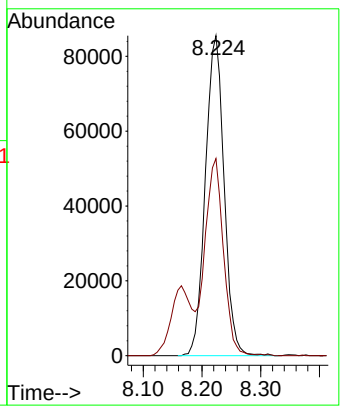




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:168 Resp: 18887

Ion	Ratio	Lower	Upper
168	100		
99	61.6	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
APPROVED

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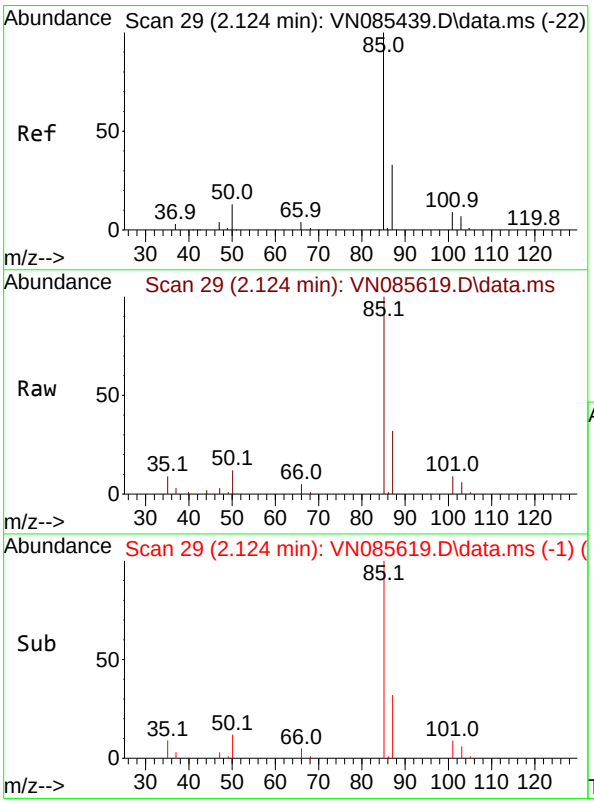
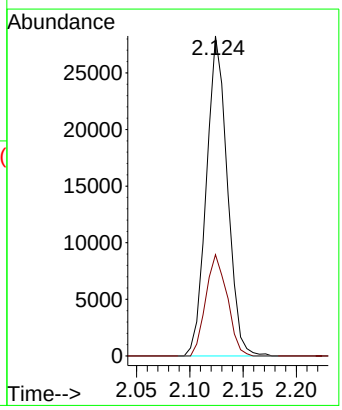
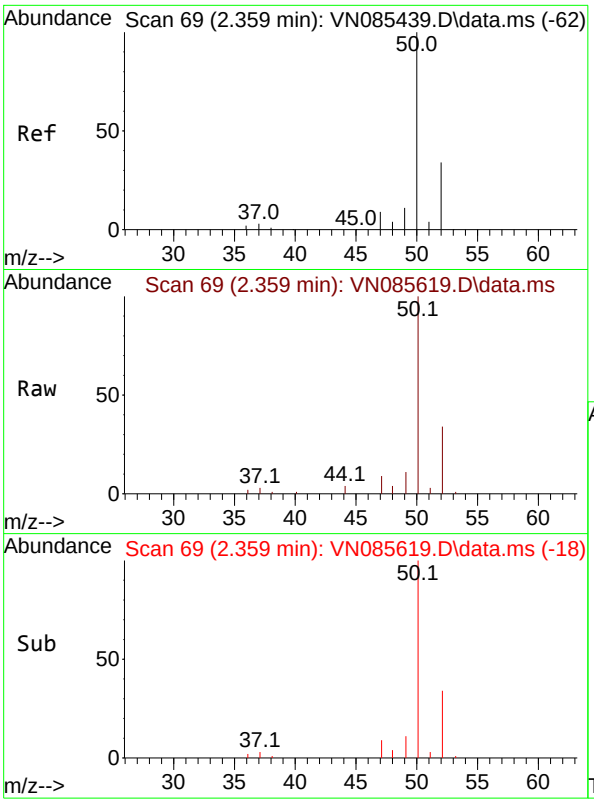


#2
Dichlorodifluoromethane
Concen: 15.128 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 85 Resp: 38687

Ion	Ratio	Lower	Upper
85	100		
87	31.6	16.7	50.1

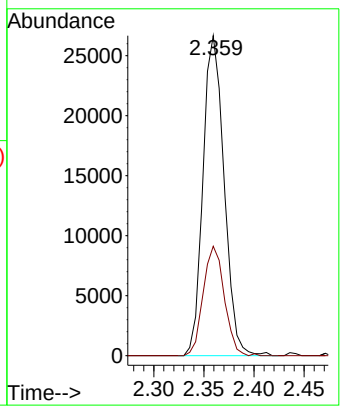




#3
Chloromethane
Concen: 14.150 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 50 Resp: 3917

Ion	Ratio	Lower	Upper
50	100		
52	34.2	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
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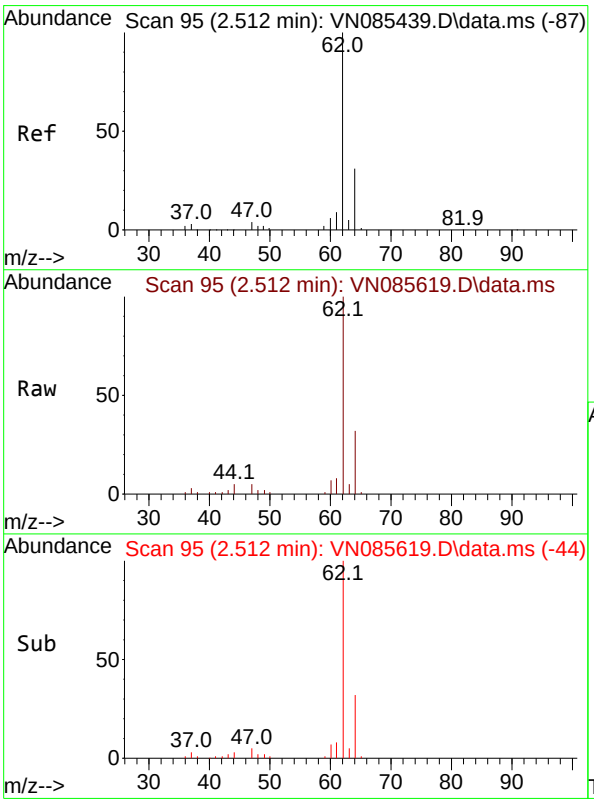
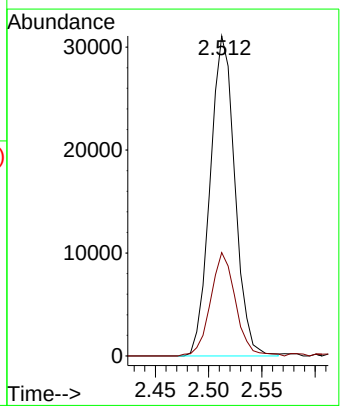
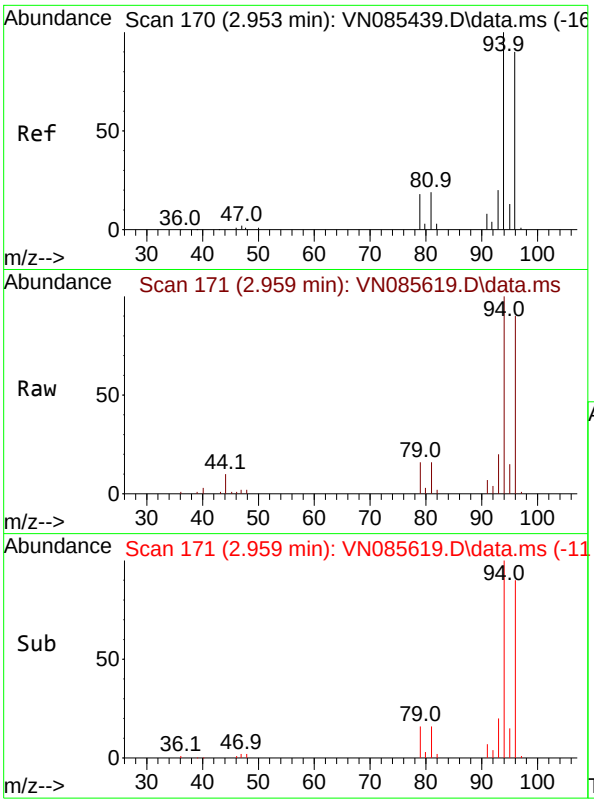


#4
Vinyl Chloride
Concen: 18.004 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 62 Resp: 50107

Ion	Ratio	Lower	Upper
62	100		
64	32.3	24.8	37.2





#5
Bromomethane
Concen: 19.544 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 94 Resp: 3285

Ion	Ratio	Lower	Upper
94	100		
96	89.7	71.8	107.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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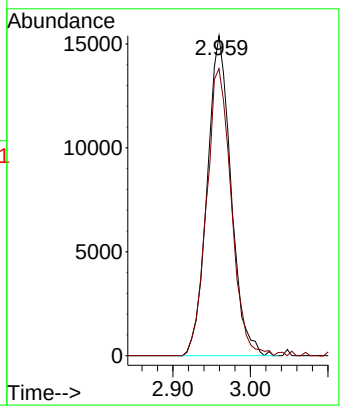
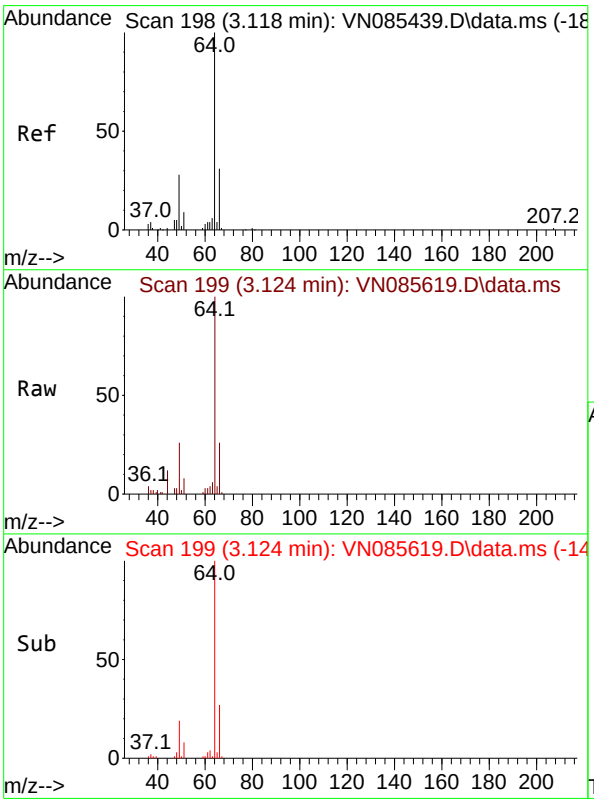
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

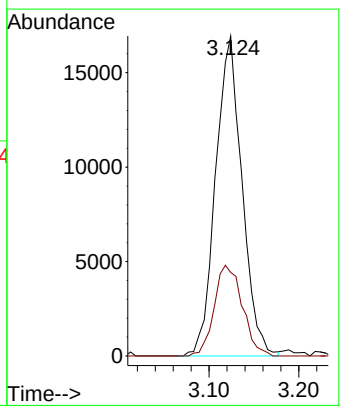


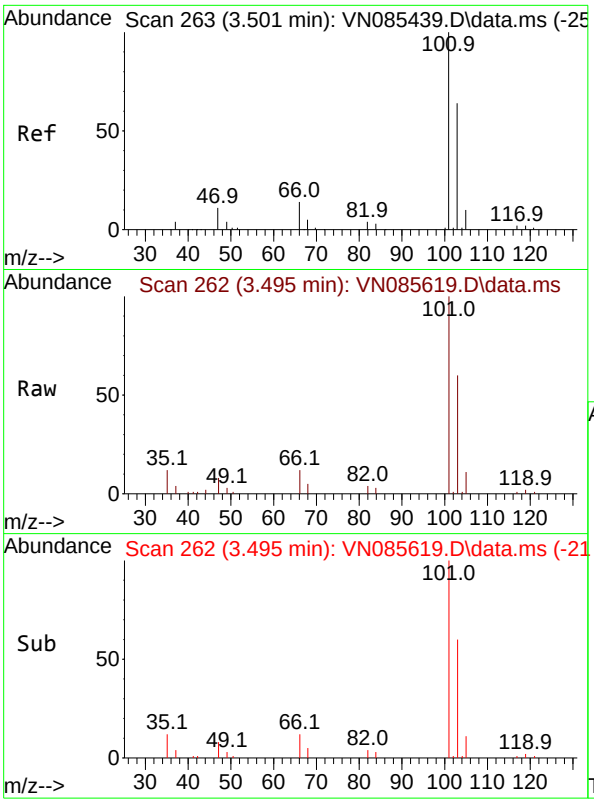


#6
Chloroethane
Concen: 19.648 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 64 Resp: 34668

Ion	Ratio	Lower	Upper
64	100		
66	26.1	24.6	36.8

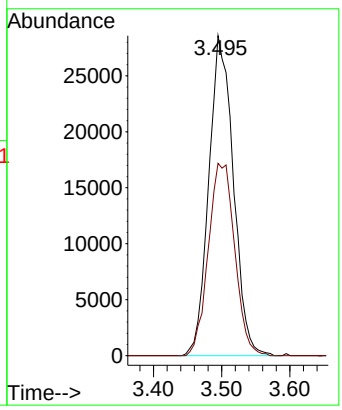




#7
Trichlorofluoromethane
Concen: 17.753 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:101 Resp: 7168

Ion	Ratio	Lower	Upper
101	100		
103	60.1	51.4	77.2



Instrument :
MSVOA_N
ClientSampleId :
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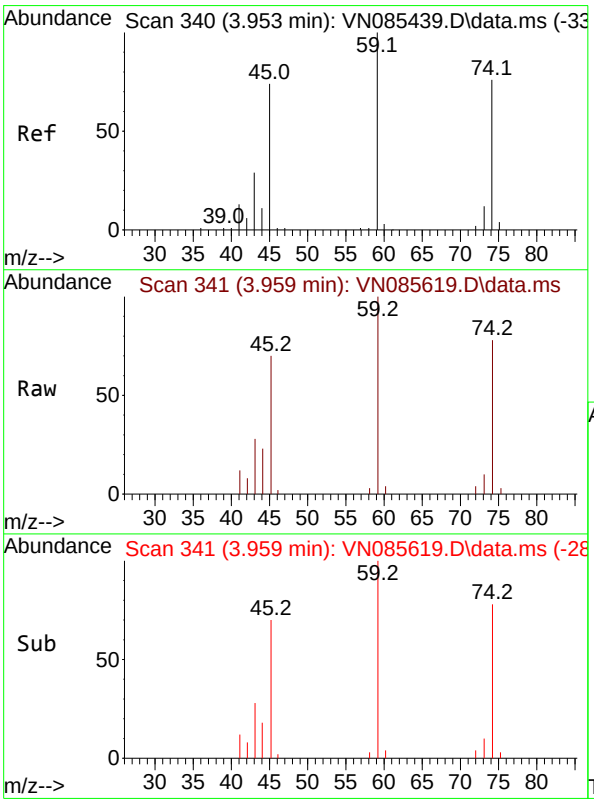
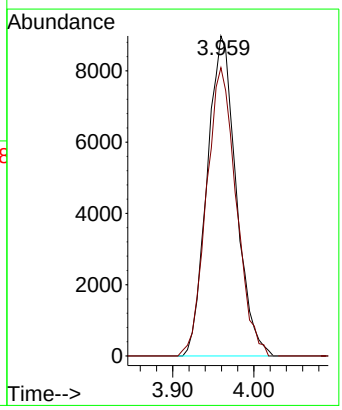
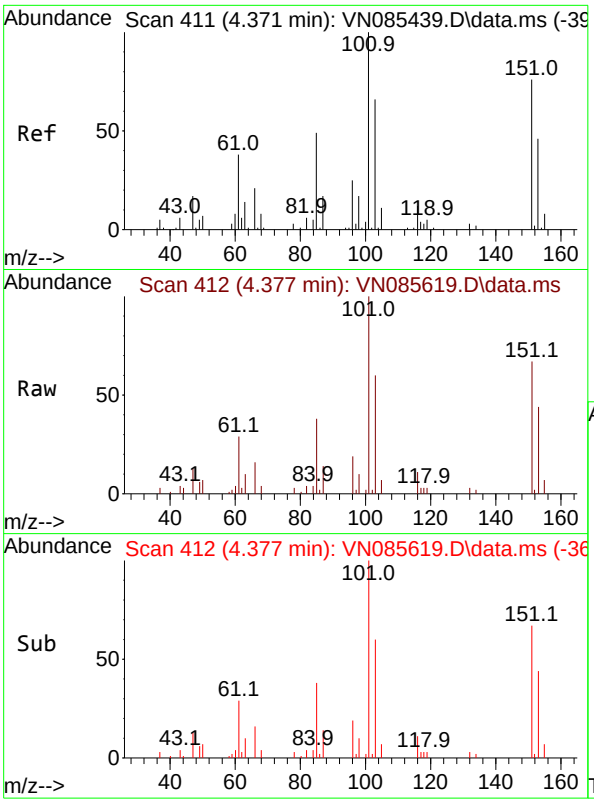


#8
Diethyl Ether
Concen: 15.989 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 74 Resp: 22305

Ion	Ratio	Lower	Upper
74	100		
45	92.2	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.165 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Tgt Ion:101 Resp: 4131(

Ion	Ratio	Lower	Upper
101	100		
85	45.8	37.8	56.8
151	74.8	58.8	88.2

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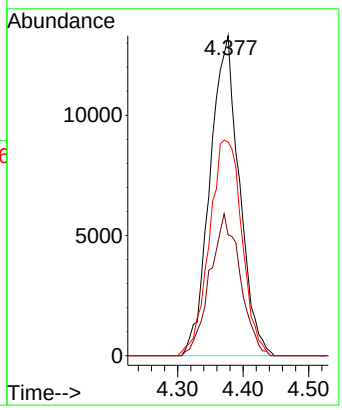
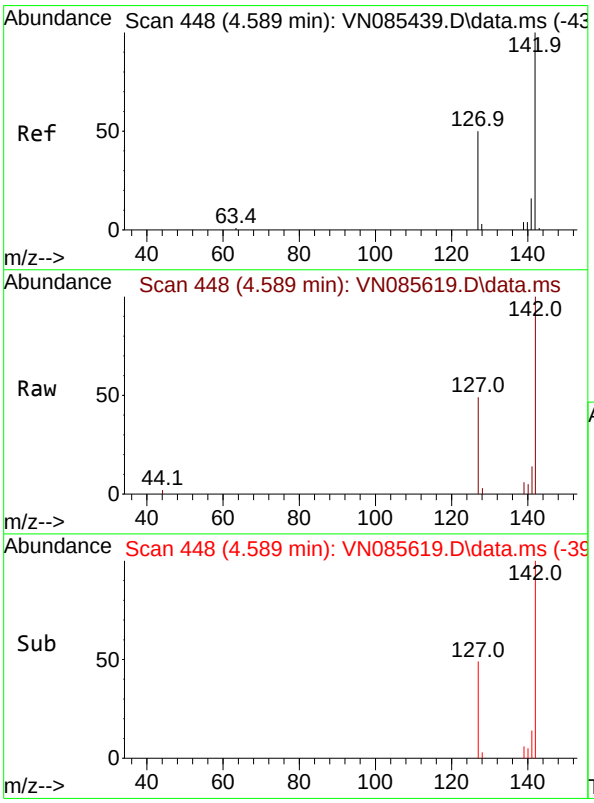
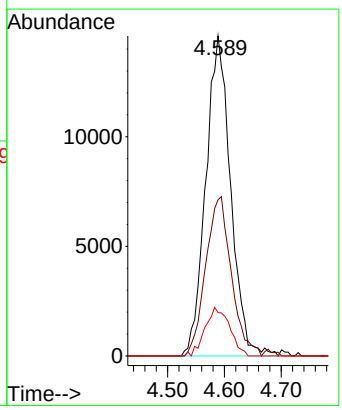


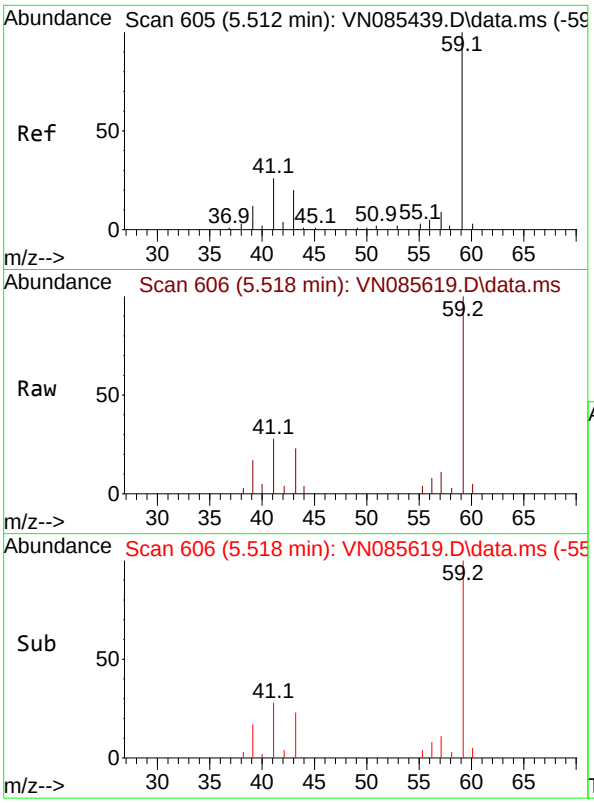


#10
Methyl Iodide
Concen: 17.036 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:142 Resp: 44373

Ion	Ratio	Lower	Upper
142	100		
127	48.8	40.3	60.5
141	13.6	12.8	19.2





#11
Tert butyl alcohol
Concen: 99.071 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 59 Resp: 3458

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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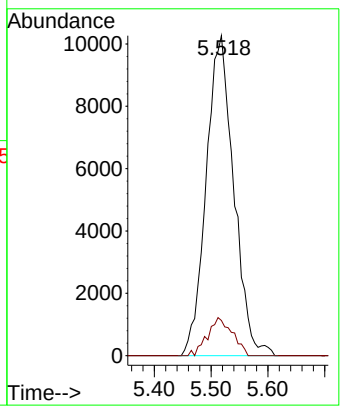
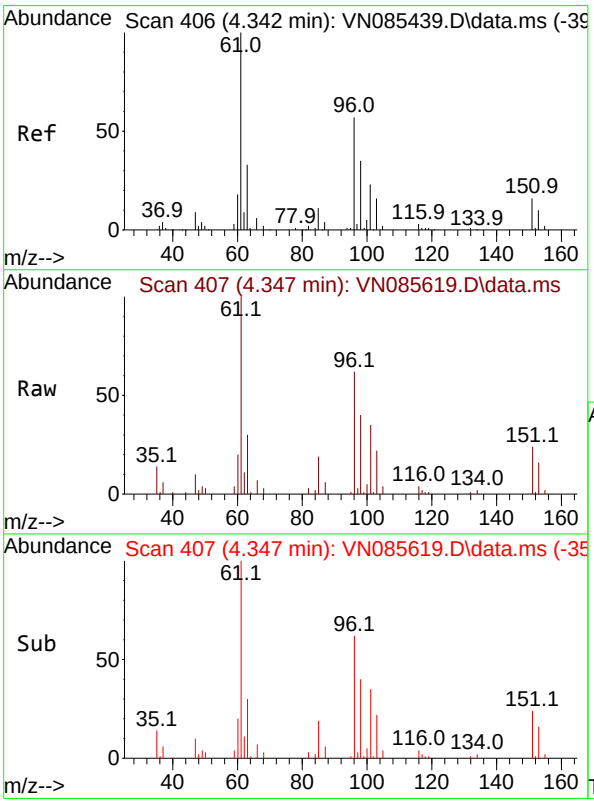
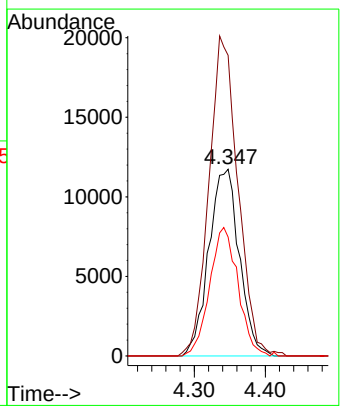


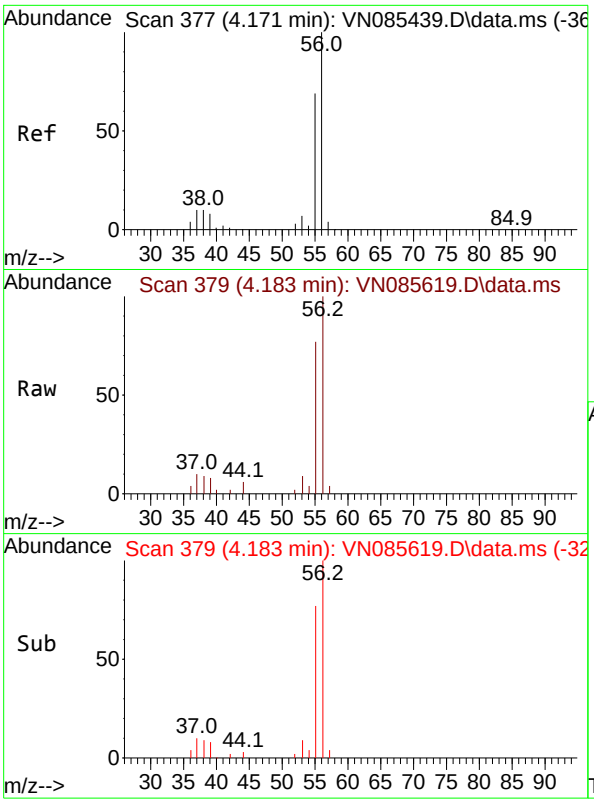


#12
1,1-Dichloroethene
Concen: 17.272 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 96 Resp: 35011

Ion	Ratio	Lower	Upper
96	100		
61	161.0	141.0	211.4
98	63.6	49.0	73.6

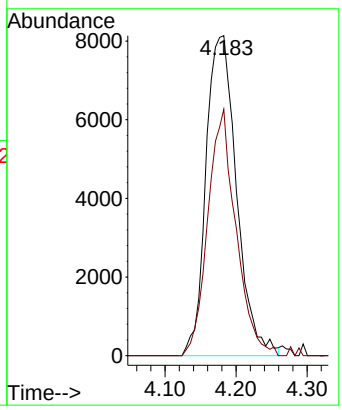




#13
Acrolein
Concen: 51.087 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.012 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 56 Resp: 2434

Ion	Ratio	Lower	Upper
56	100		
55	70.9	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
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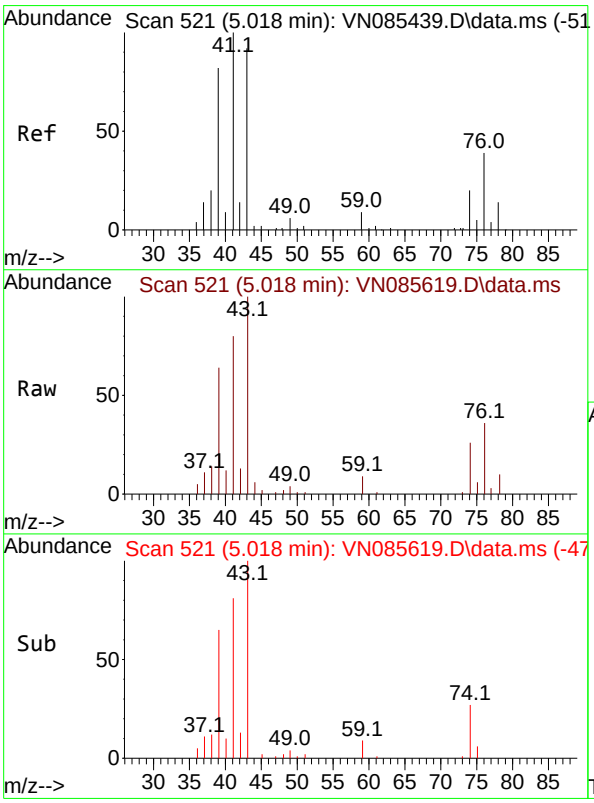
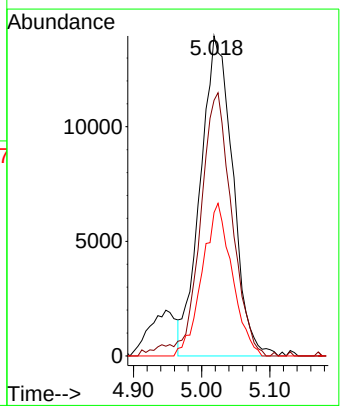
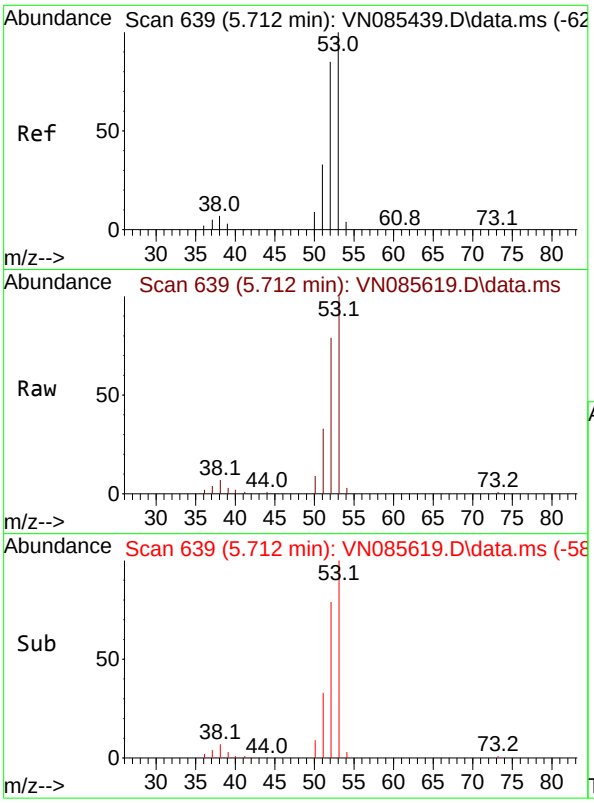


#14
Allyl chloride
Concen: 14.006 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 41 Resp: 46069

Ion	Ratio	Lower	Upper
41	100		
39	78.3	64.4	96.6
76	44.1	30.5	45.7

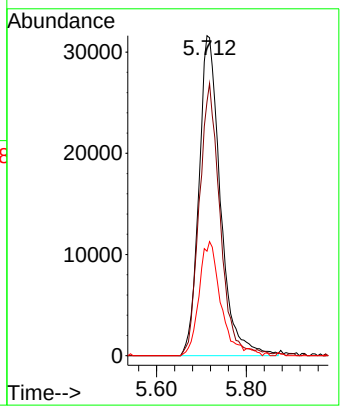




#15
Acrylonitrile
Concen: 94.873 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 53 Resp: 10520

Ion	Ratio	Lower	Upper
53	100		
52	82.3	65.5	98.3
51	35.6	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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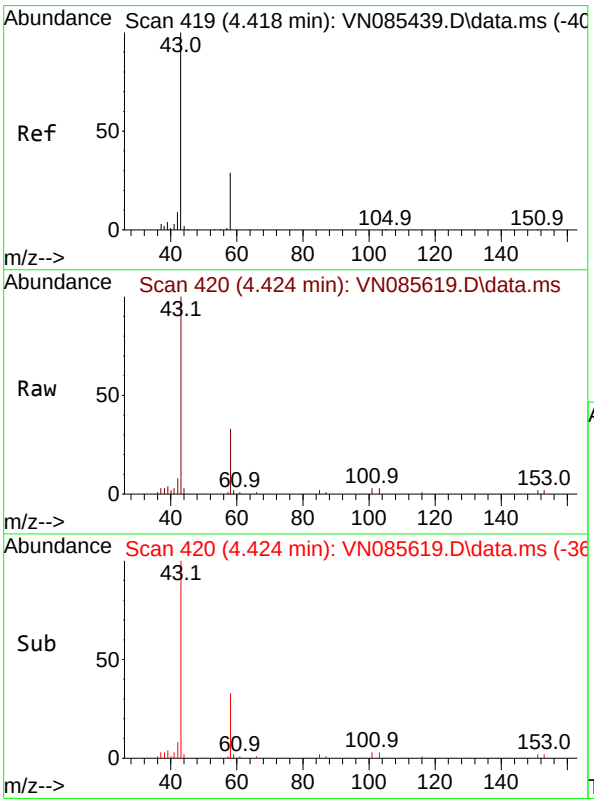
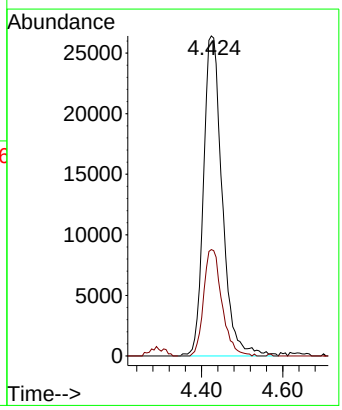
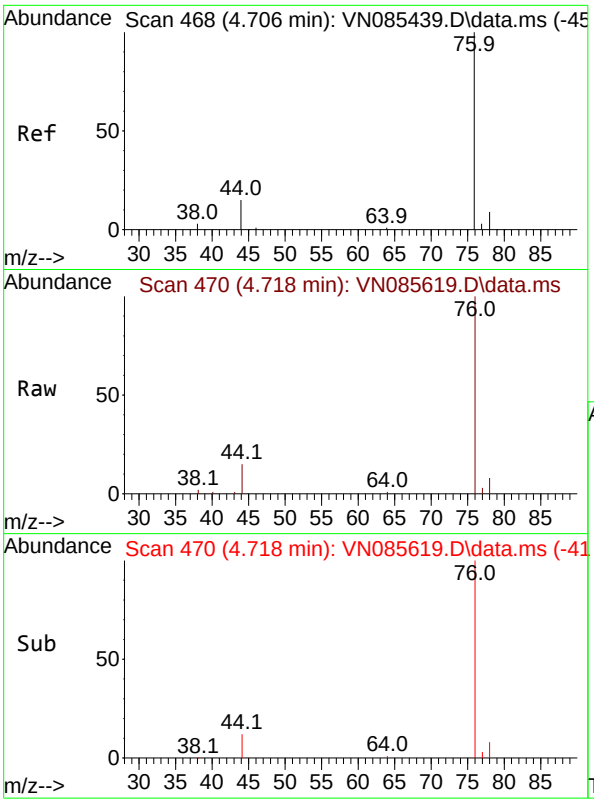


#16
Acetone
Concen: 85.597 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 84320

Ion	Ratio	Lower	Upper
43	100		
58	33.2	23.8	35.6

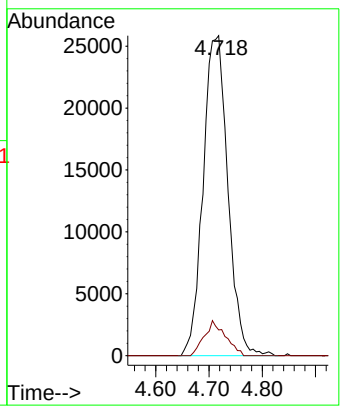




#17
Carbon Disulfide
Concen: 13.350 ug/l
RT: 4.718 min Scan# 4
Delta R.T. 0.012 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 76 Resp: 8332

Ion	Ratio	Lower	Upper
76	100		
78	8.1	6.9	10.3



Instrument :
MSVOA_N
ClientSampleId :
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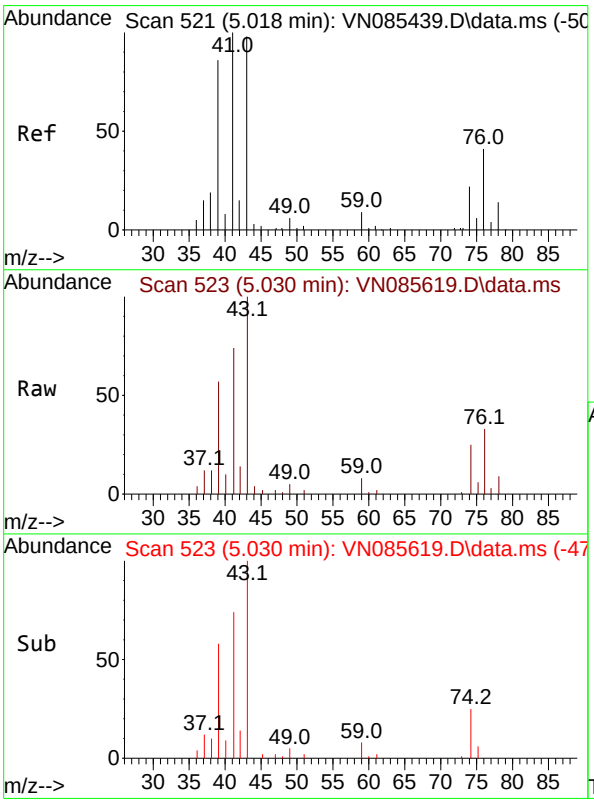
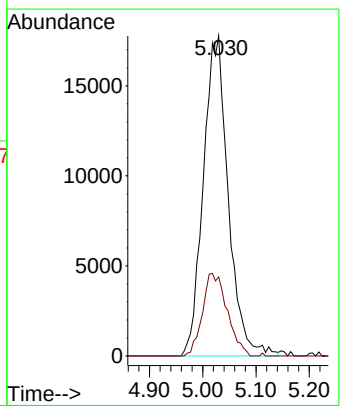
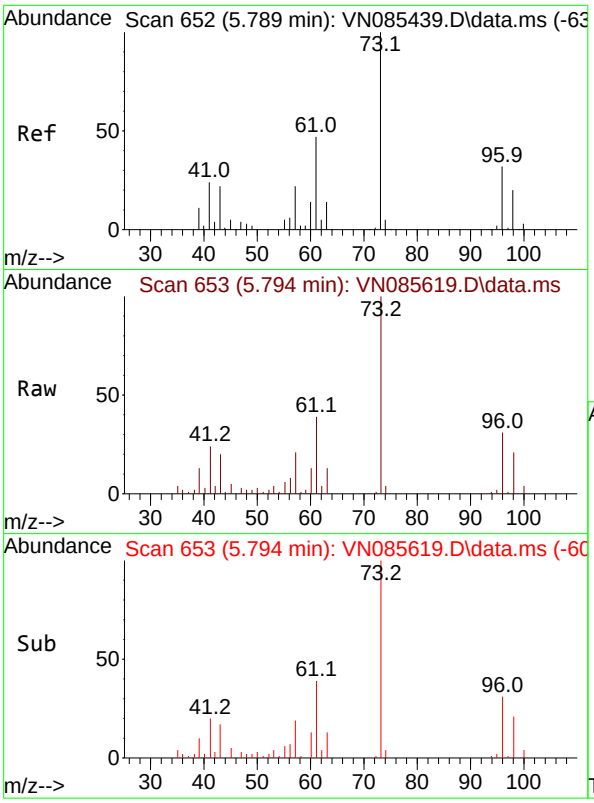


#18
Methyl Acetate
Concen: 19.266 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 57710

Ion	Ratio	Lower	Upper
43	100		
74	25.6	18.6	28.0





#19
Methyl tert-butyl Ether
Concen: 18.249 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 73 Resp: 12011

Ion	Ratio	Lower	Upper
73	100		
57	20.7	17.8	26.8

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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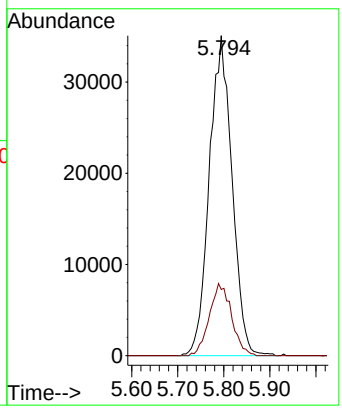
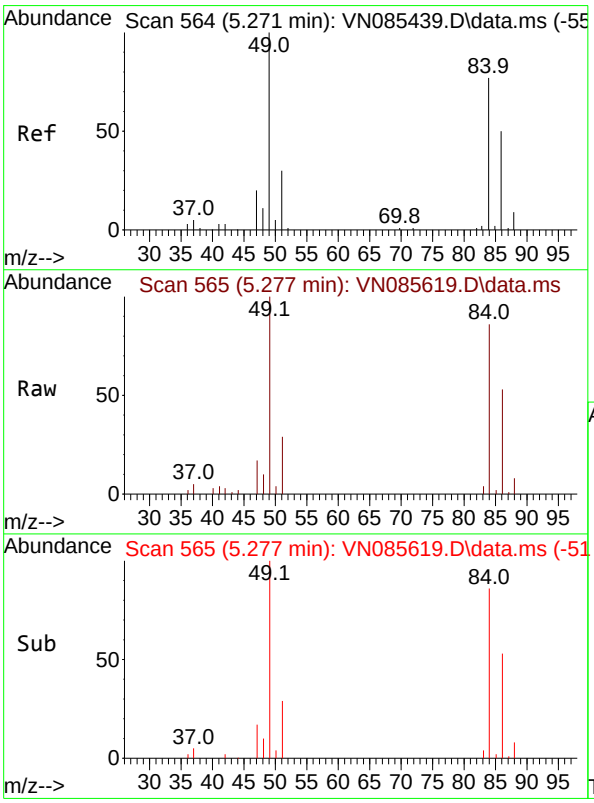
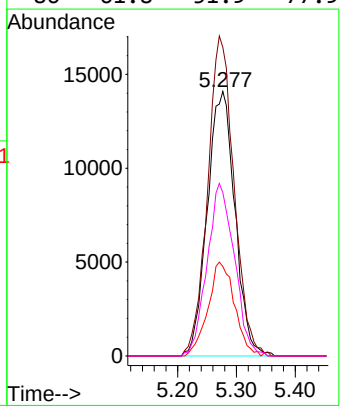


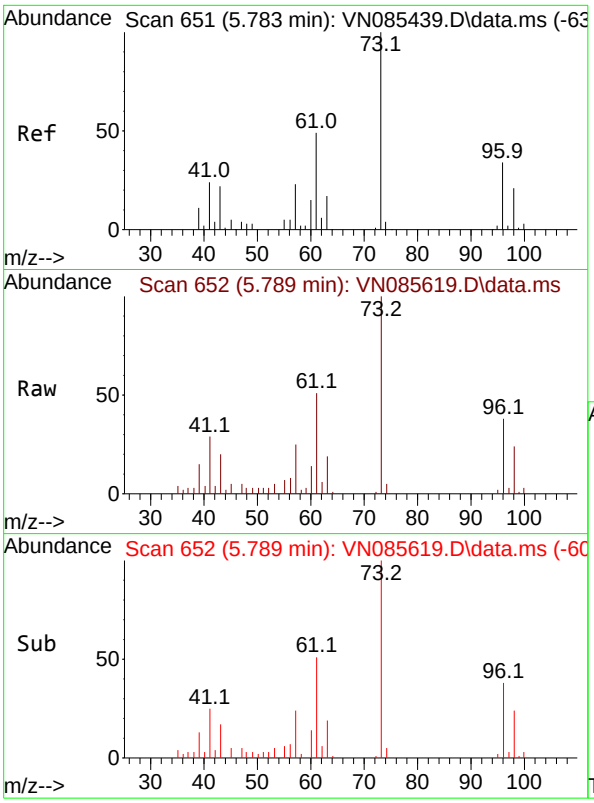


#20
Methylene Chloride
Concen: 18.858 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 84 Resp: 45987

Ion	Ratio	Lower	Upper
84	100		
49	116.7	104.1	156.1
51	33.8	31.0	46.4
86	61.8	51.9	77.9

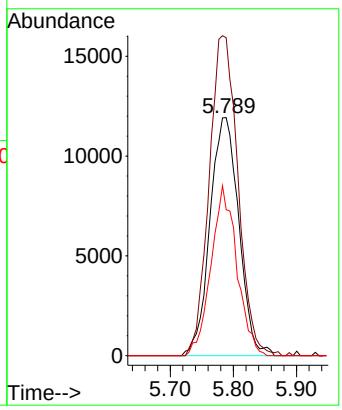




#21
trans-1,2-Dichloroethene
Concen: 17.489 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 96 Resp: 3788

Ion	Ratio	Lower	Upper
96	100		
61	133.6	115.7	173.5
98	61.3	49.8	74.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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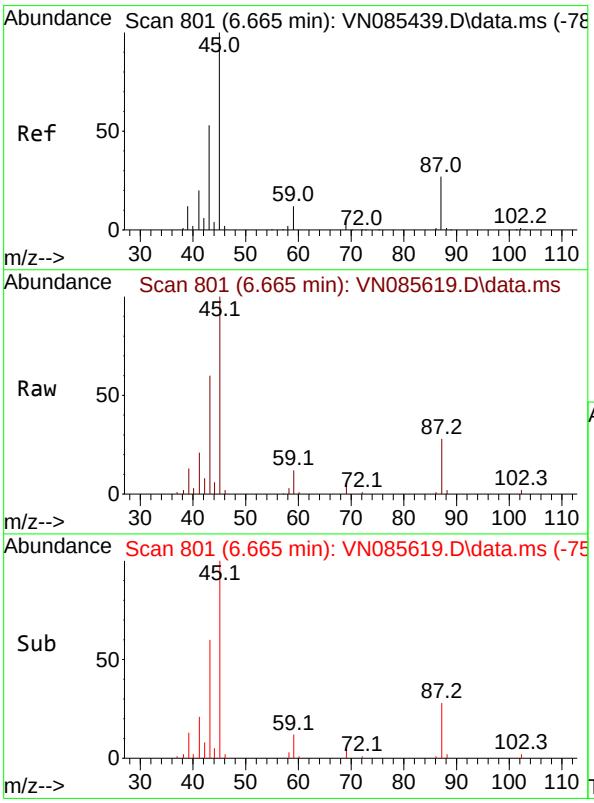
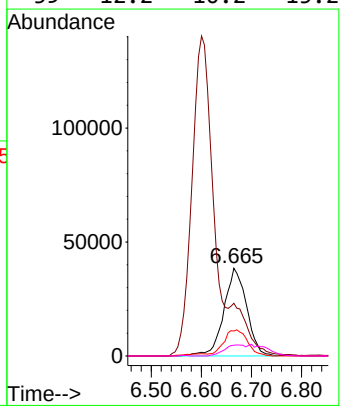
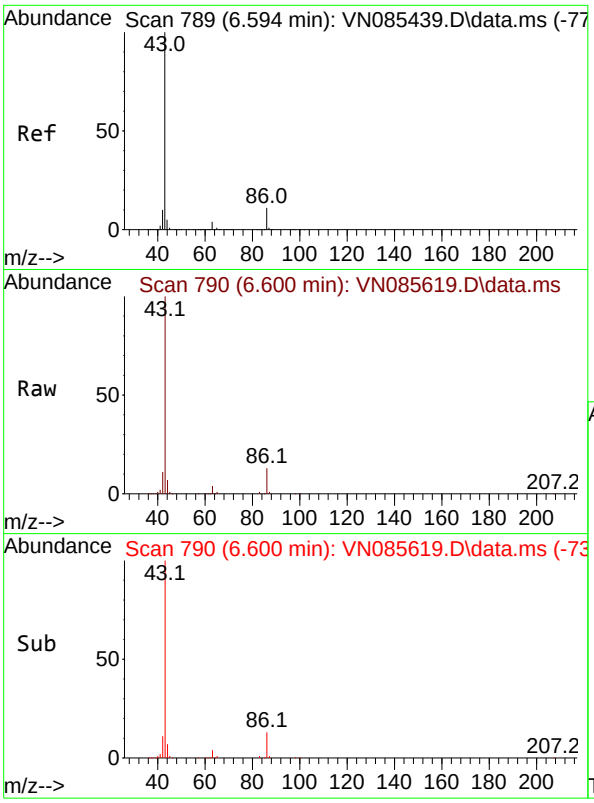


#22
Diisopropyl ether
Concen: 16.651 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 45 Resp: 121562

Ion	Ratio	Lower	Upper
45	100		
43	57.9	45.0	67.6
87	28.5	21.8	32.8
59	12.2	10.2	15.2





#23
Vinyl Acetate
Concen: 79.484 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 40609

Ion	Ratio	Lower	Upper
43	100		
86	12.9	8.4	12.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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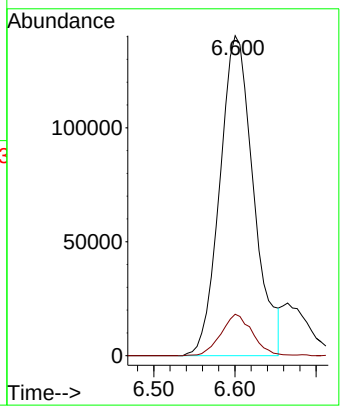
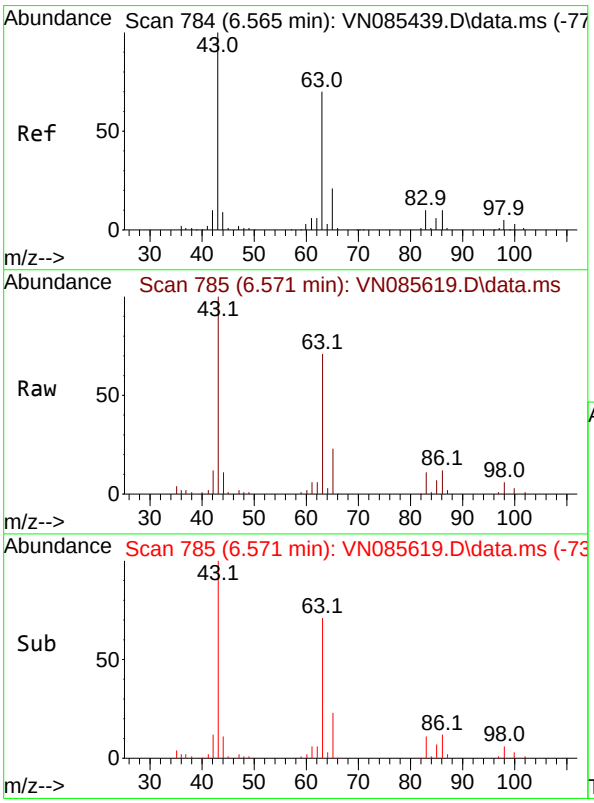
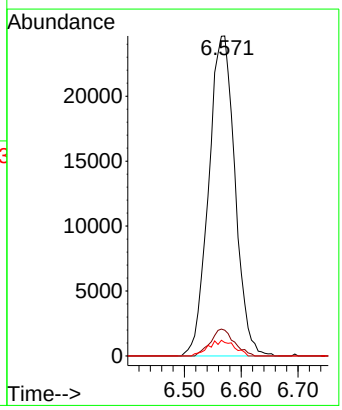


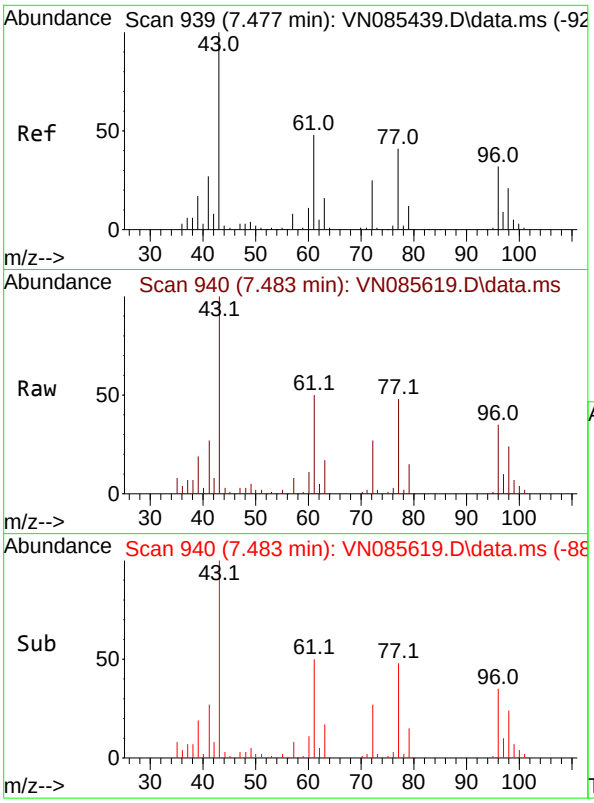


#24
1,1-Dichloroethane
Concen: 17.785 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 63 Resp: 79173

Ion	Ratio	Lower	Upper
63	100		
98	8.1	3.3	9.8
100	4.2	2.0	6.0





#25
2-Butanone
Concen: 88.606 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 12844

Ion	Ratio	Lower	Upper
43	100		
72	27.2	20.2	30.4

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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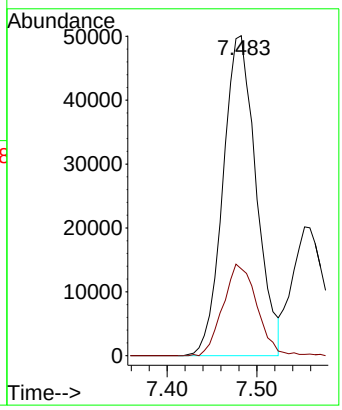
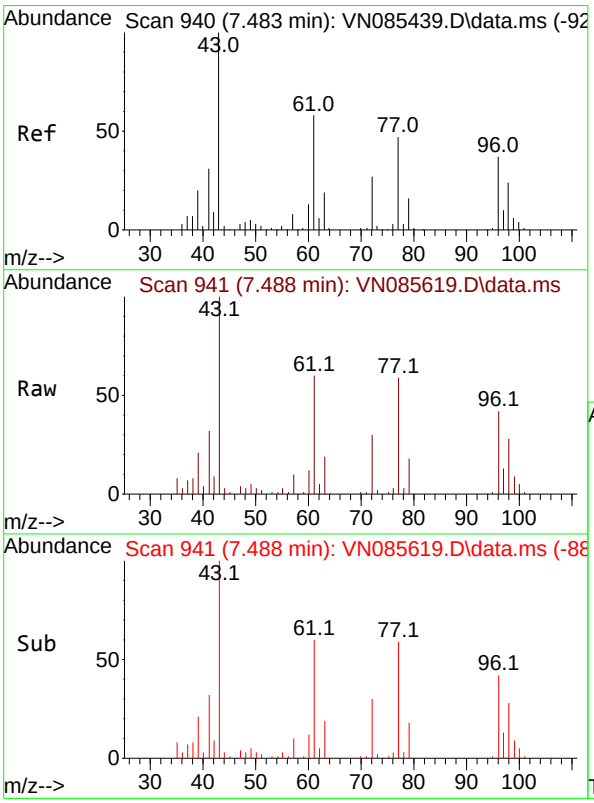
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

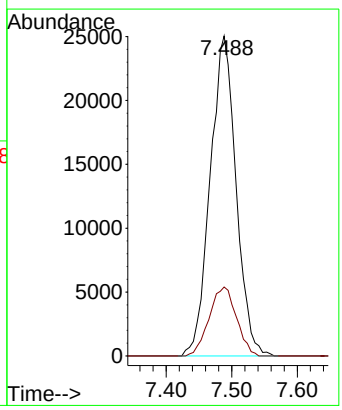


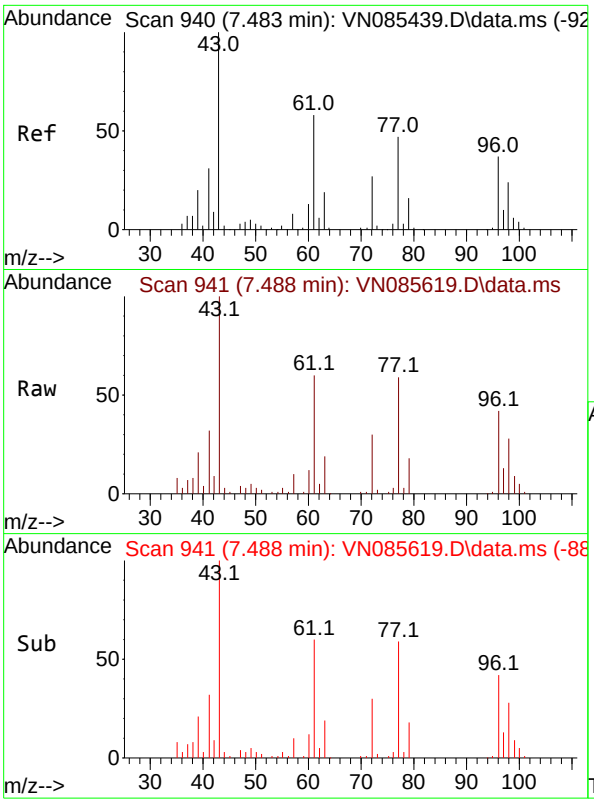


#26
2,2-Dichloropropane
Concen: 19.060 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 77 Resp: 68597

Ion	Ratio	Lower	Upper
77	100		
97	22.7	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 18.700 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 96 Resp: 4771

Ion	Ratio	Lower	Upper
96	100		
61	144.9	0.0	311.8
98	65.6	0.0	126.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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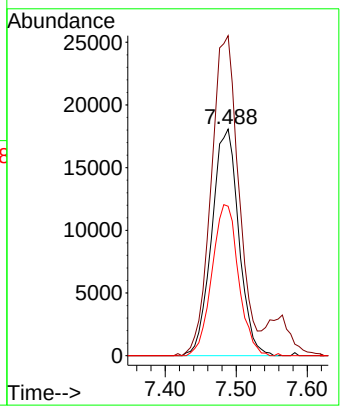
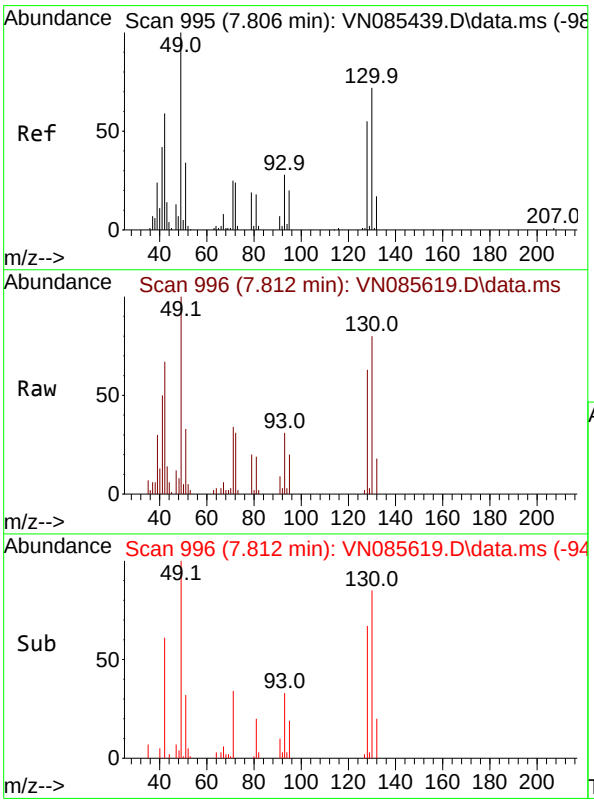
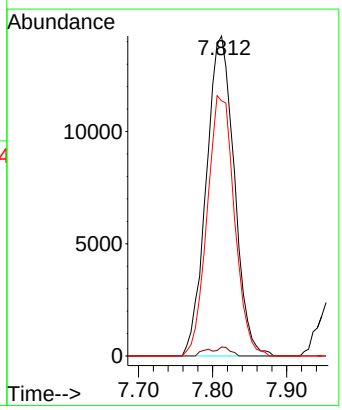


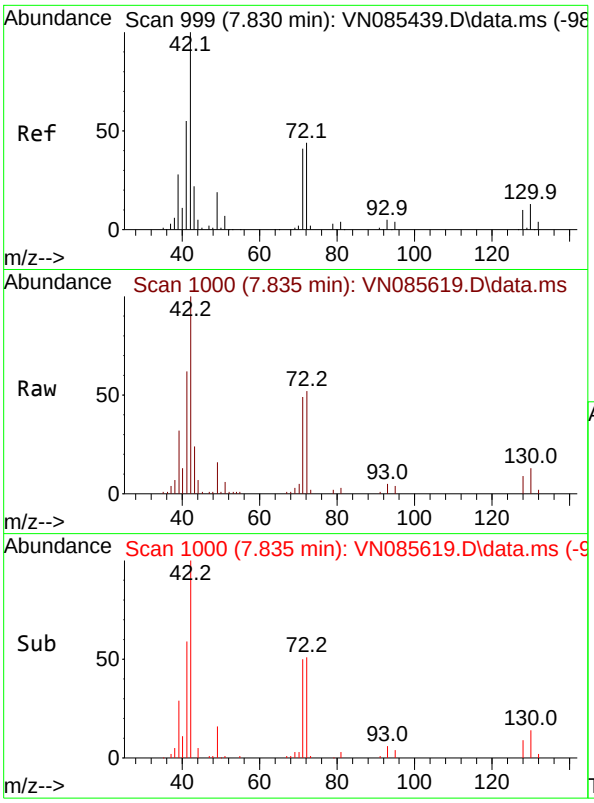


#28
Bromochloromethane
Concen: 18.074 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 49 Resp: 37432

Ion	Ratio	Lower	Upper
49	100		
129	1.3	0.0	4.4
130	79.3	55.0	82.4

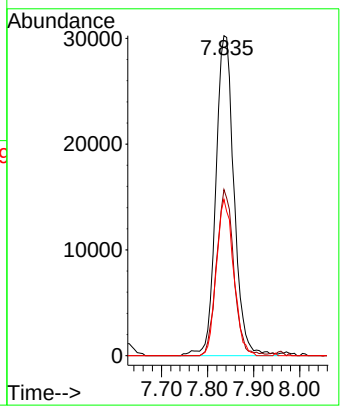




#29
Tetrahydrofuran
Concen: 90.042 ug/l
RT: 7.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 42 Resp: 8275

Ion	Ratio	Lower	Upper
42	100		
72	49.2	34.2	51.2
71	46.3	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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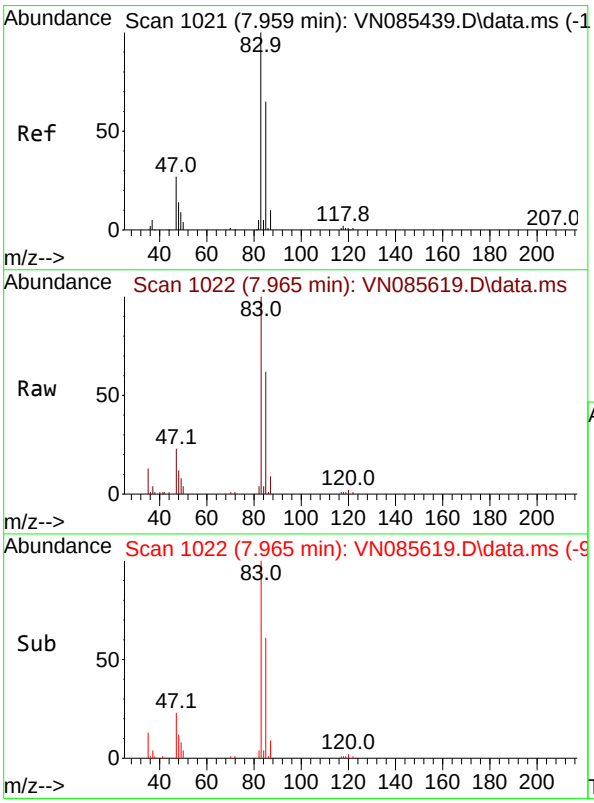
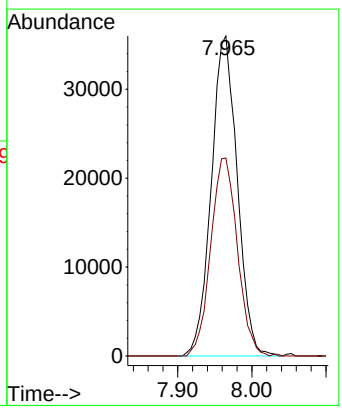
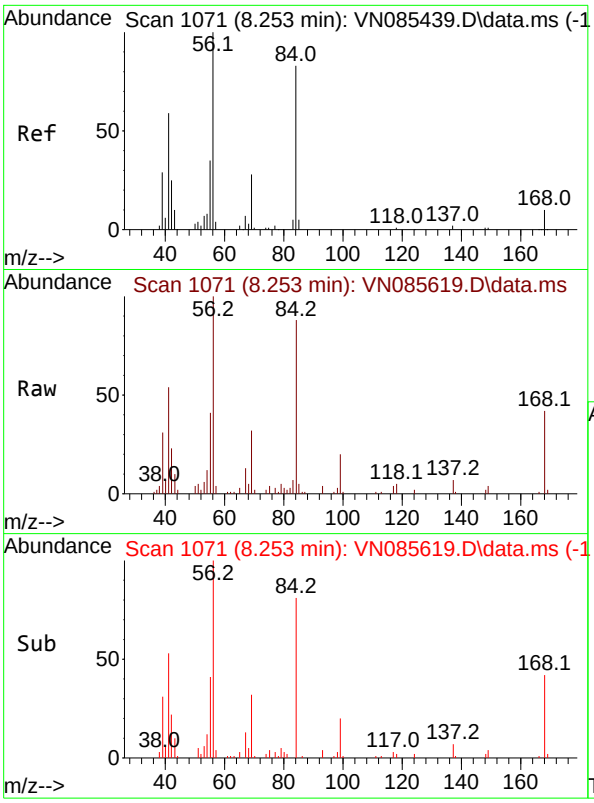


#30
Chloroform
Concen: 19.043 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 87616

Ion	Ratio	Lower	Upper
83	100		
85	61.8	51.8	77.6

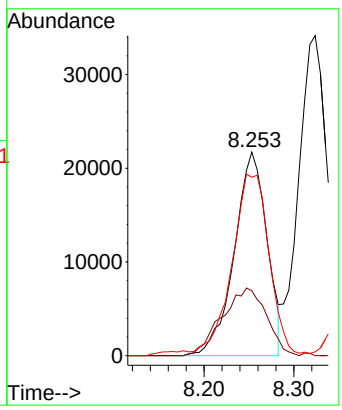




#31
Cyclohexane
Concen: 14.205 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 56 Resp: 5496

Ion	Ratio	Lower	Upper
56	100		
69	31.9	22.2	33.4
84	85.9	66.4	99.6



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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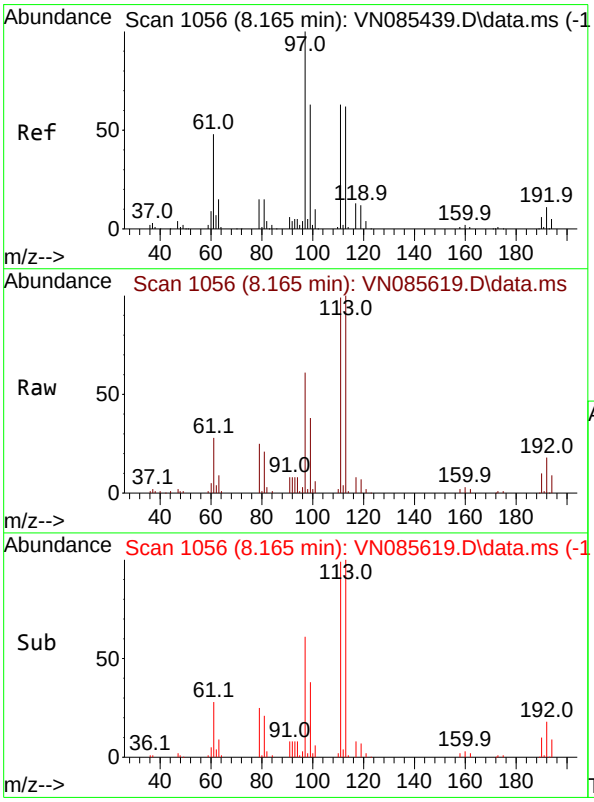
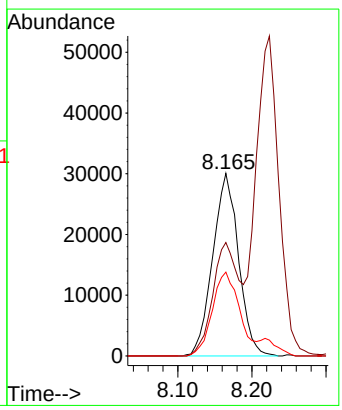
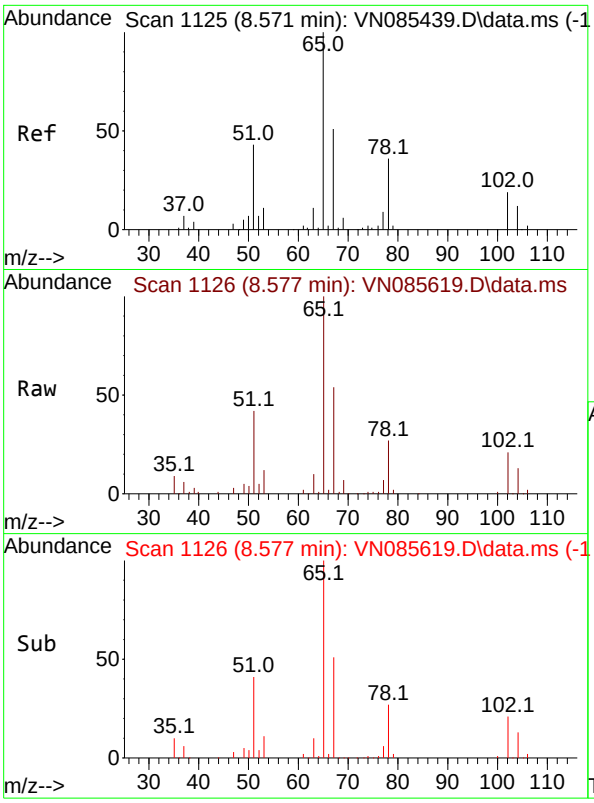


#32
1,1,1-Trichloroethane
Concen: 17.987 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 97 Resp: 72591

Ion	Ratio	Lower	Upper
97	100		
99	63.1	49.8	74.6
61	48.7	41.4	62.2

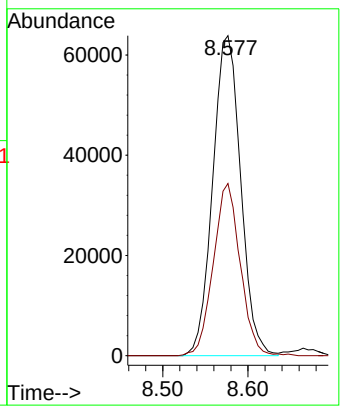




#33
1,2-Dichloroethane-d4
Concen: 47.758 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 65 Resp: 14560

Ion	Ratio	Lower	Upper
65	100		
67	51.8	0.0	101.6



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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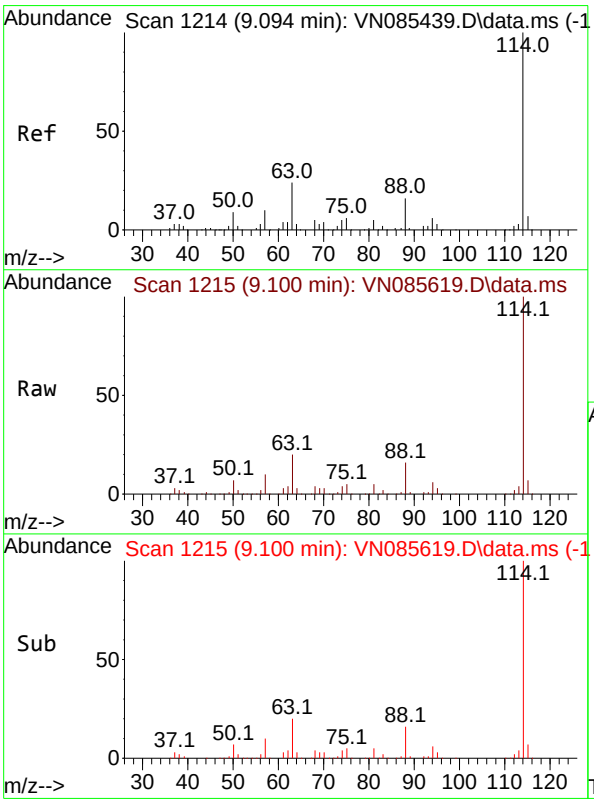
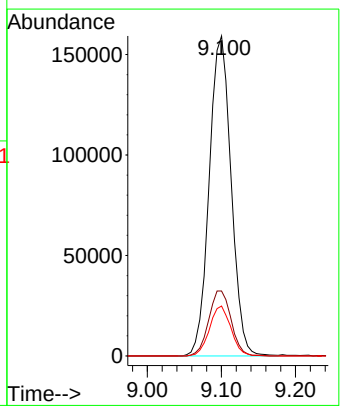
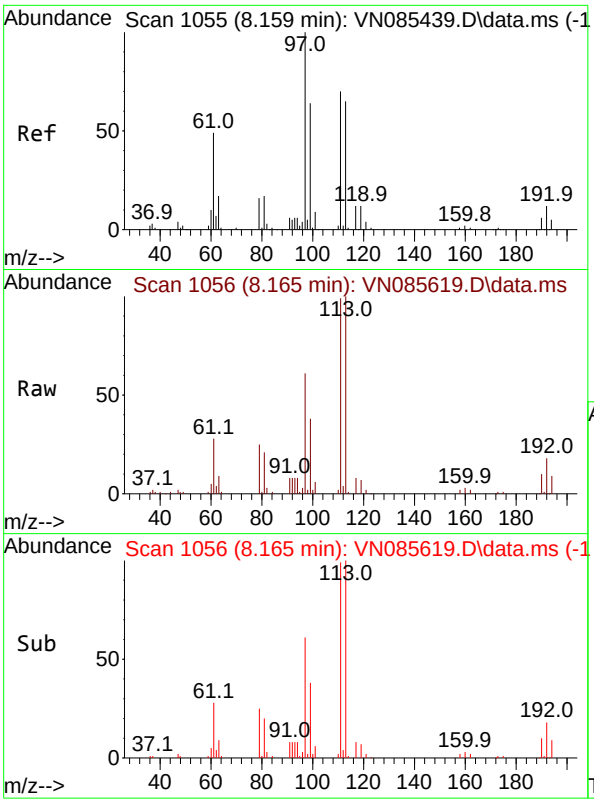


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:114 Resp: 327054

Ion	Ratio	Lower	Upper
114	100		
63	20.3	0.0	47.6
88	15.6	0.0	32.6

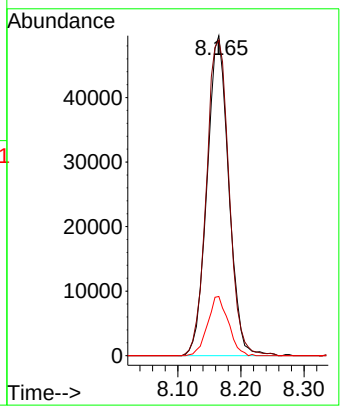




#35
Dibromofluoromethane
Concen: 52.239 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:113 Resp: 11852

Ion	Ratio	Lower	Upper
113	100		
111	102.7	82.7	124.1
192	17.7	14.3	21.5



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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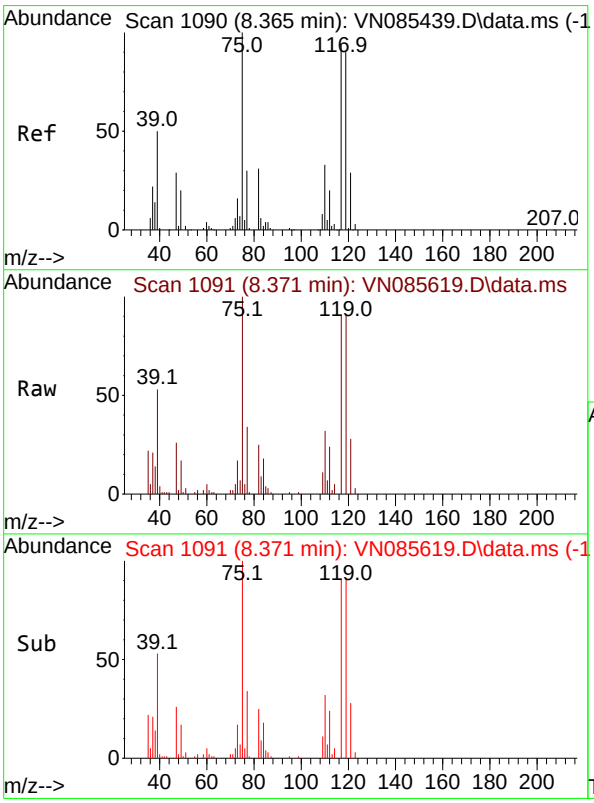
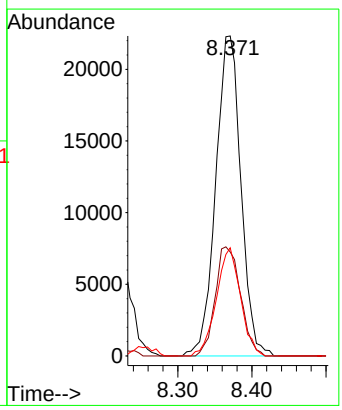
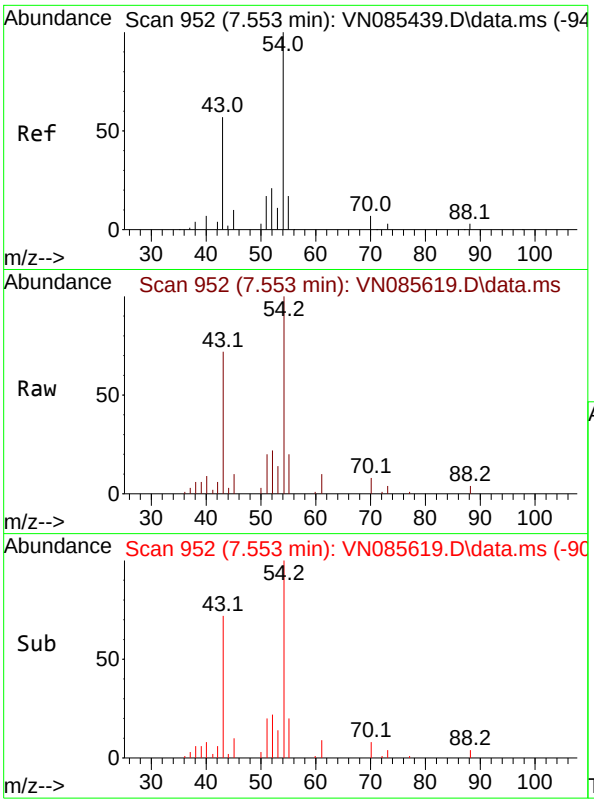


#36
1,1-Dichloropropene
Concen: 16.530 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 52640

Ion	Ratio	Lower	Upper
75	100		
110	34.2	16.5	49.5
77	32.4	24.4	36.6

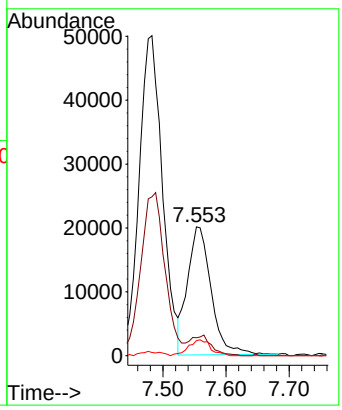




#37
Ethyl Acetate
Concen: 16.226 ug/l
RT: 7.553 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 5215

Ion	Ratio	Lower	Upper
43	100		
61	14.1	10.9	16.3
70	11.5	7.5	11.3#



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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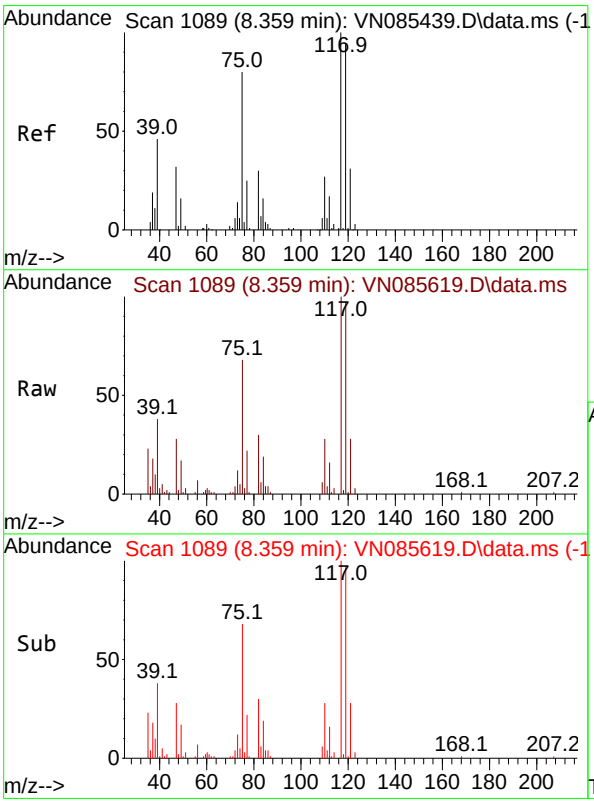
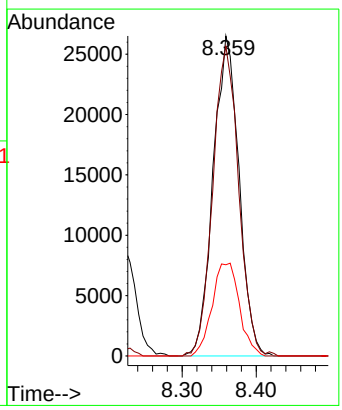
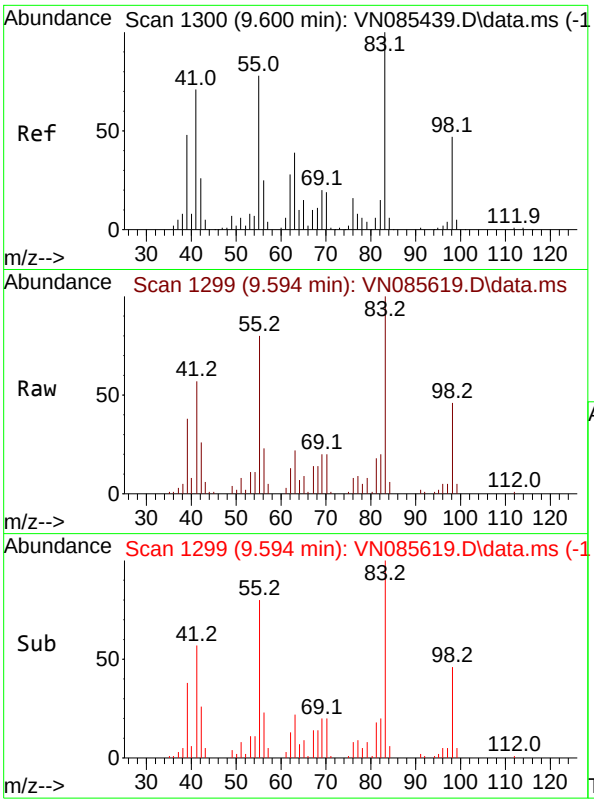


#38
Carbon Tetrachloride
Concen: 17.539 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:117 Resp: 63941

Ion	Ratio	Lower	Upper
117	100		
119	96.8	75.4	113.2
121	28.5	24.6	37.0

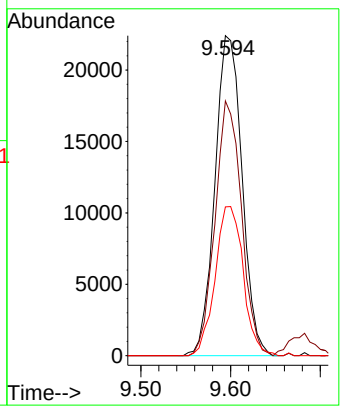




#39
Methylcyclohexane
Concen: 15.712 ug/l
RT: 9.594 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 4701

Ion	Ratio	Lower	Upper
83	100		
55	79.6	62.6	94.0
98	46.5	37.7	56.5



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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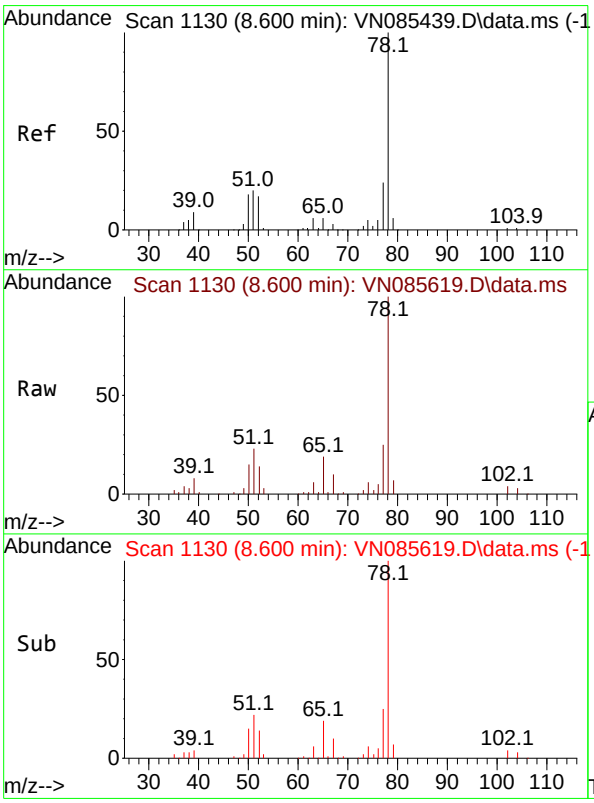
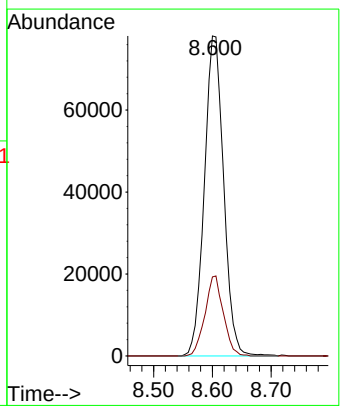
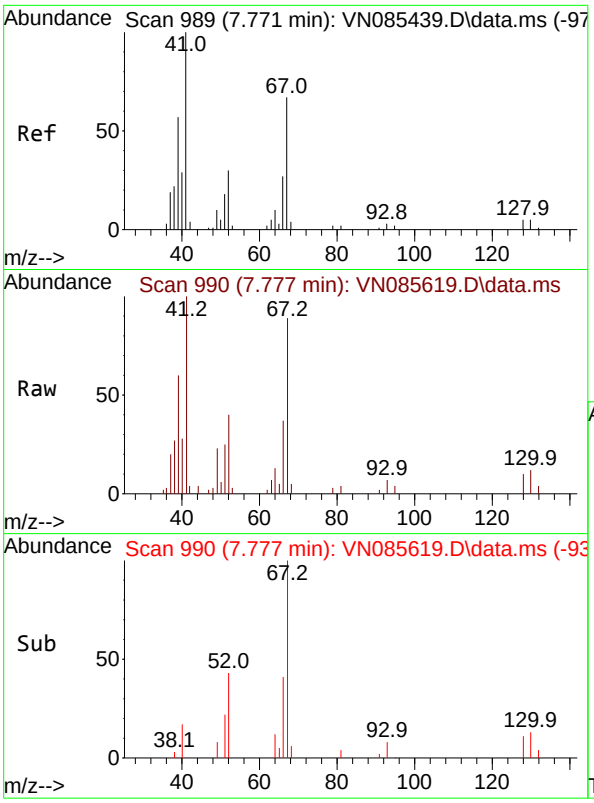


#40
Benzene
Concen: 18.610 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 78 Resp: 178066

Ion	Ratio	Lower	Upper
78	100		
77	24.7	19.0	28.6

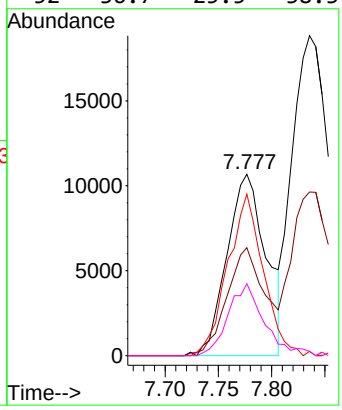




#41
Methacrylonitrile
Concen: 16.257 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 41 Resp: 2718

Ion	Ratio	Lower	Upper
41	100		
39	58.7	46.0	69.0
67	81.3	57.4	86.2
52	36.7	25.5	38.3



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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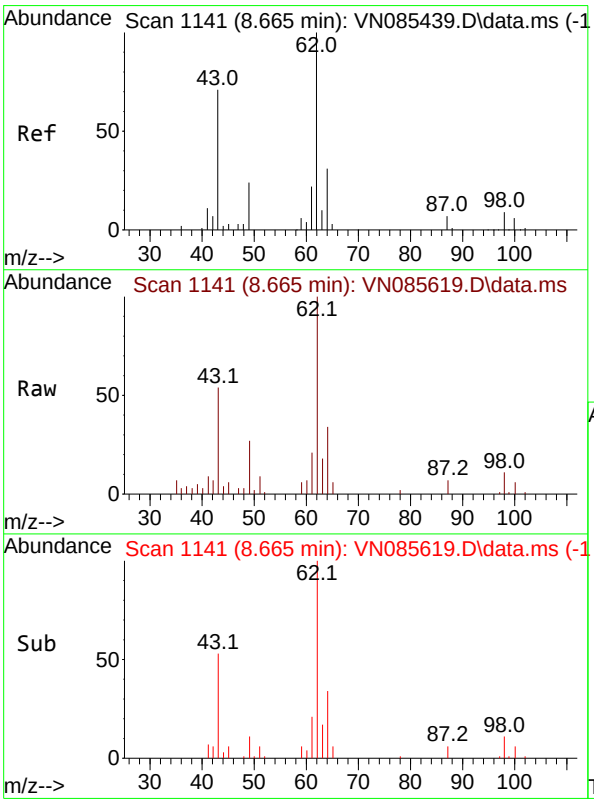
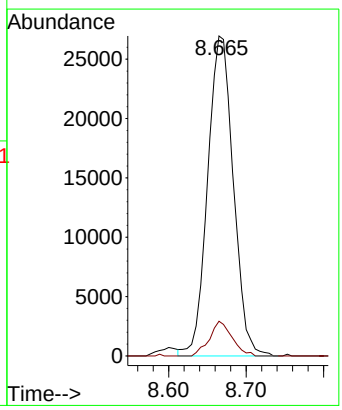
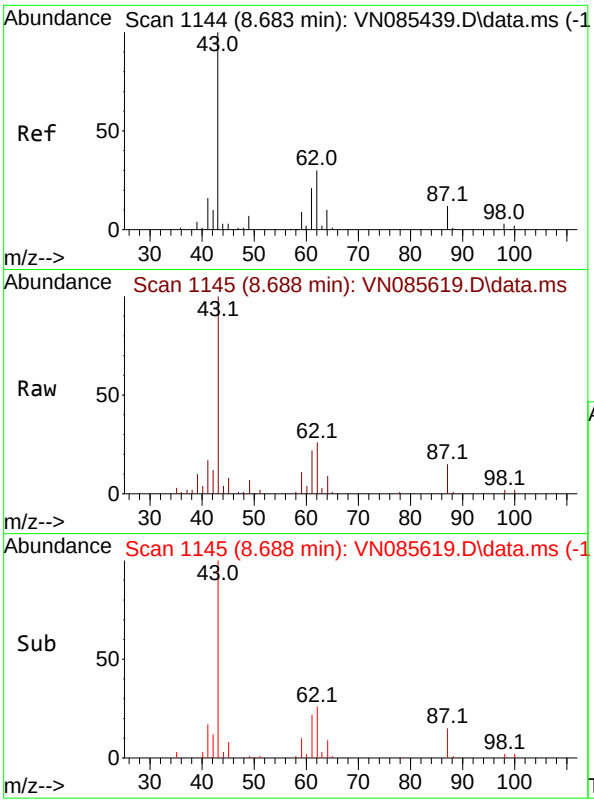


#42
1,2-Dichloroethane
Concen: 17.238 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 62 Resp: 62118

Ion	Ratio	Lower	Upper
62	100		
98	9.5	0.0	17.0

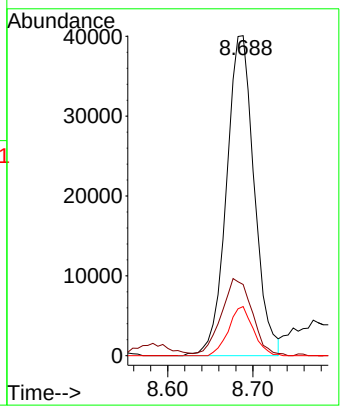




#43
Isopropyl Acetate
Concen: 17.628 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 9078

Ion	Ratio	Lower	Upper
43	100		
61	26.7	20.7	31.1
87	13.7	9.8	14.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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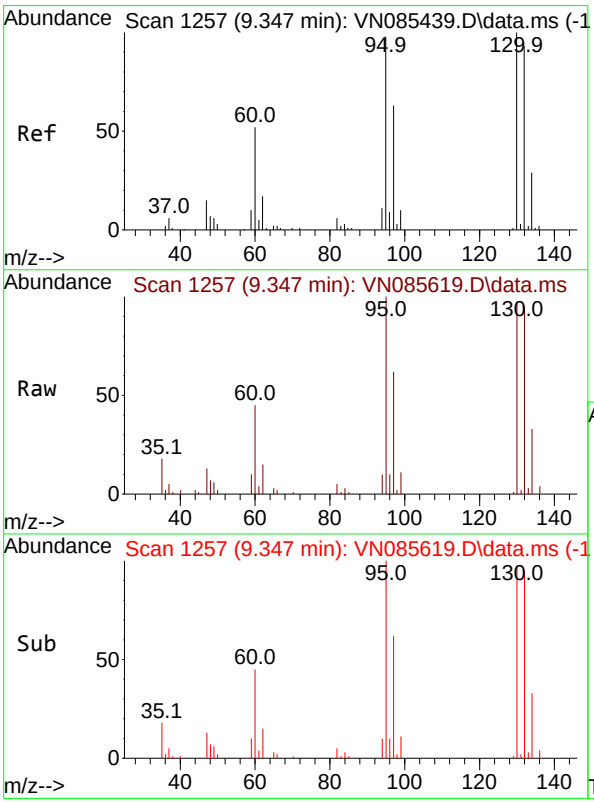
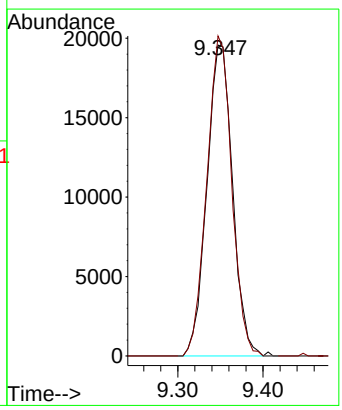
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

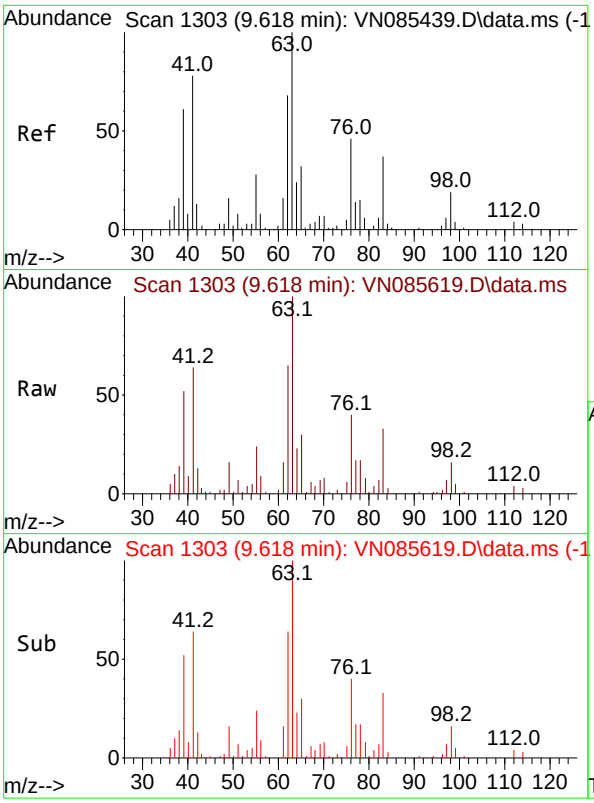


#44
Trichloroethene
Concen: 18.397 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:130 Resp: 40975

Ion	Ratio	Lower	Upper
130	100		
95	102.9	0.0	195.8

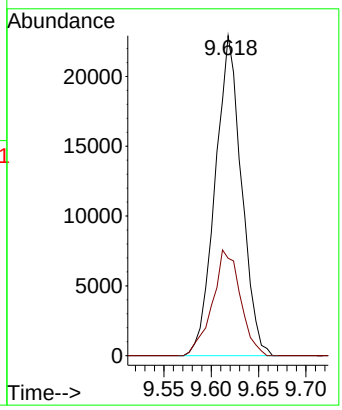




#45
1,2-Dichloropropane
Concen: 18.152 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 63 Resp: 4436

Ion	Ratio	Lower	Upper
63	100		
65	30.5	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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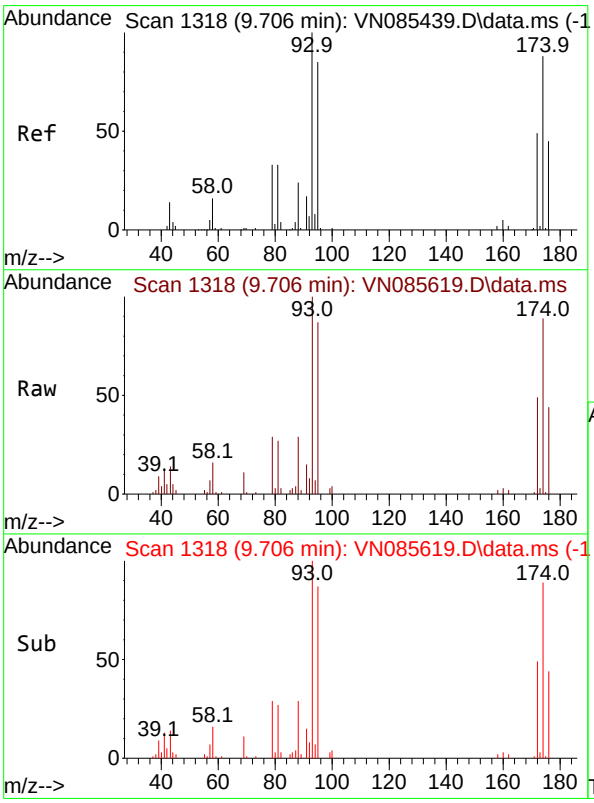
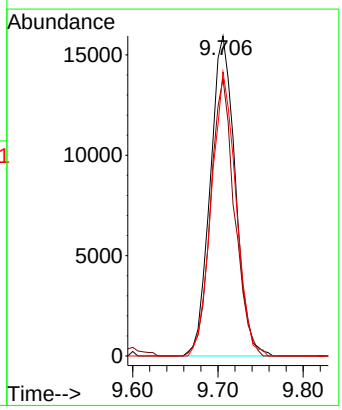
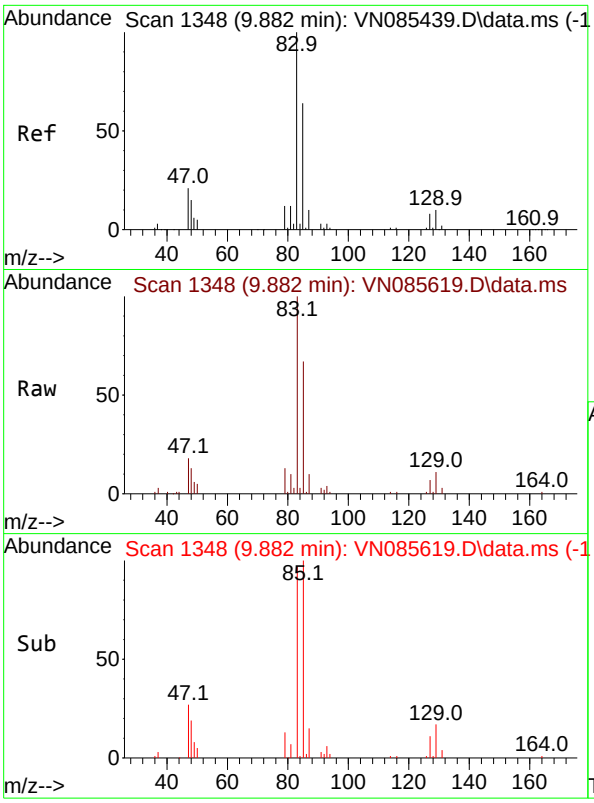


#46
Dibromomethane
Concen: 18.464 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 93 Resp: 32561

Ion	Ratio	Lower	Upper
93	100		
95	82.8	64.7	97.1
174	86.8	69.0	103.4

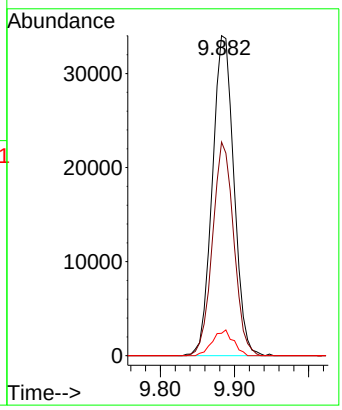




#47
Bromodichloromethane
Concen: 19.139 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 6876

Ion	Ratio	Lower	Upper
83	100		
85	66.8	51.2	76.8
127	7.0	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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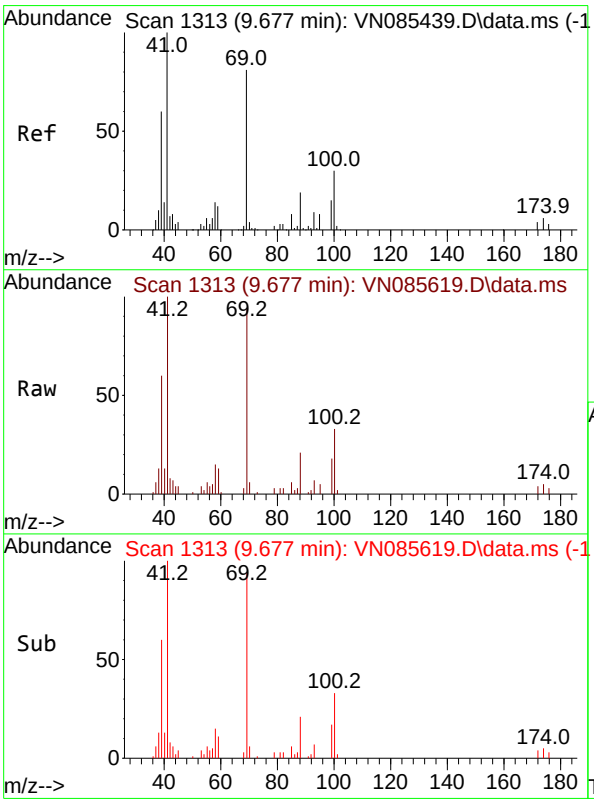
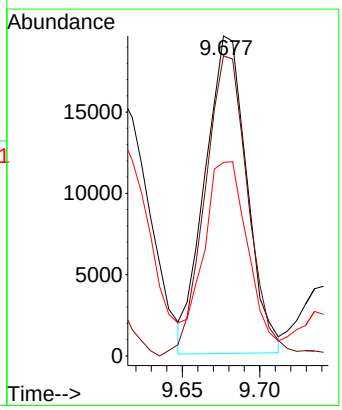
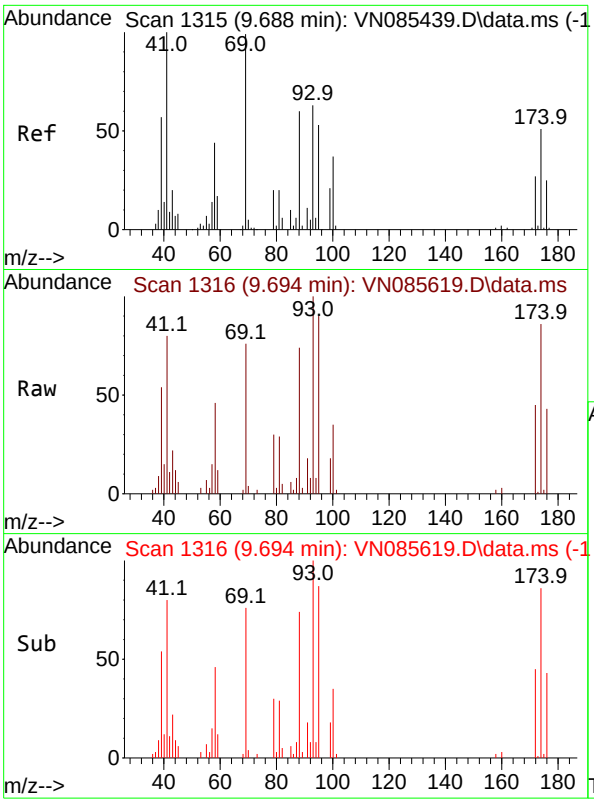


#48
Methyl methacrylate
Concen: 15.797 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 41 Resp: 36614

Ion	Ratio	Lower	Upper
41	100		
69	98.0	64.7	97.1#
39	65.9	49.0	73.6





#49
1,4-Dioxane
Concen: 414.188 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 88 Resp: 1616

Ion	Ratio	Lower	Upper
88	100		
43	0.0	26.6	39.8#
58	69.0	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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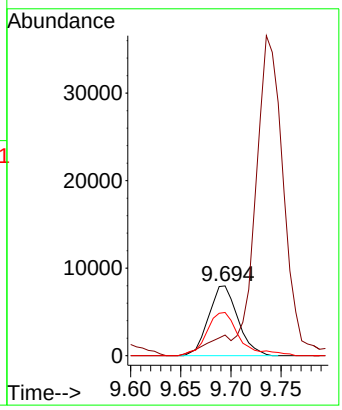
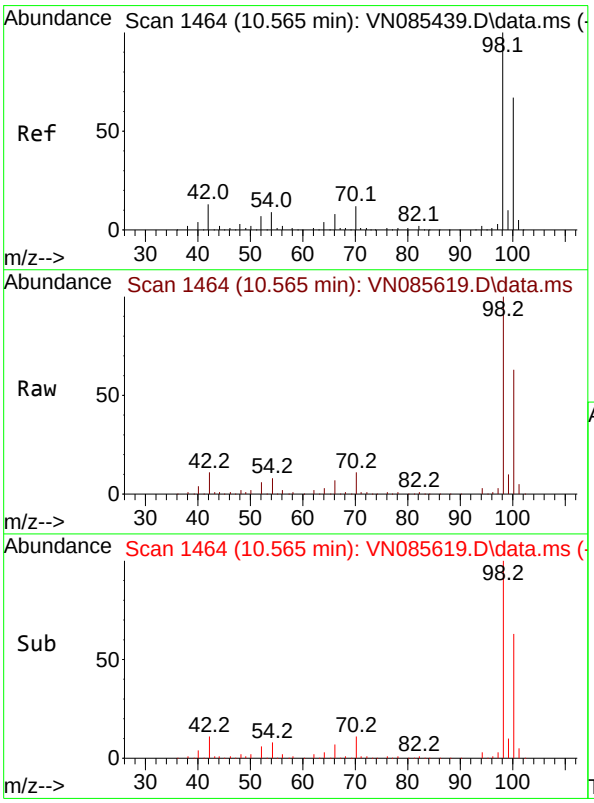
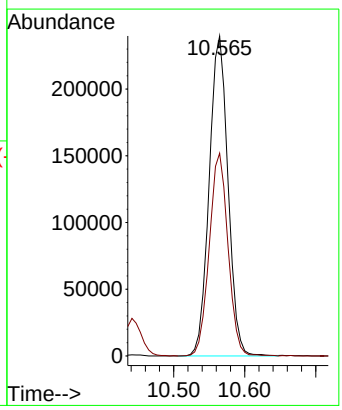


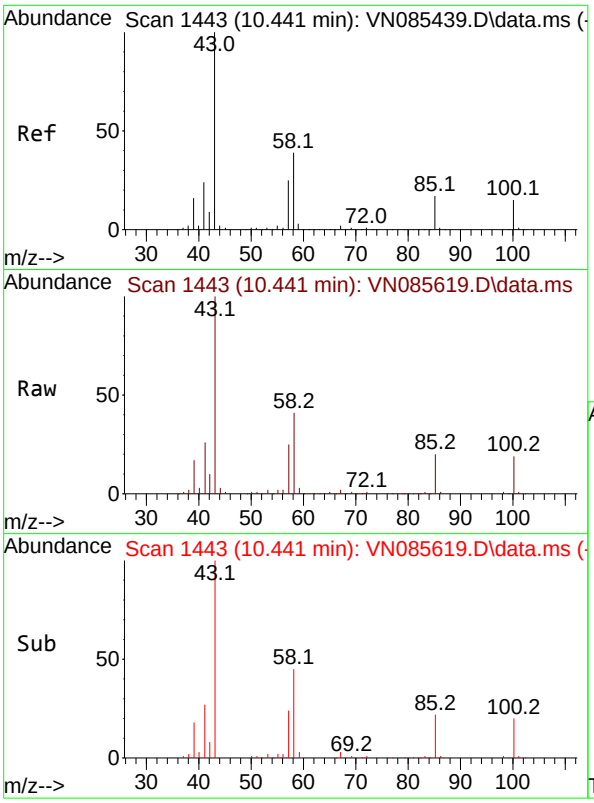


#50
Toluene-d8
Concen: 54.582 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 98 Resp: 440013

Ion	Ratio	Lower	Upper
98	100		
100	63.1	52.2	78.4





#51
4-Methyl-2-Pentanone
Concen: 91.380 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 27310

Ion	Ratio	Lower	Upper
43	100		
58	41.1	30.5	45.7

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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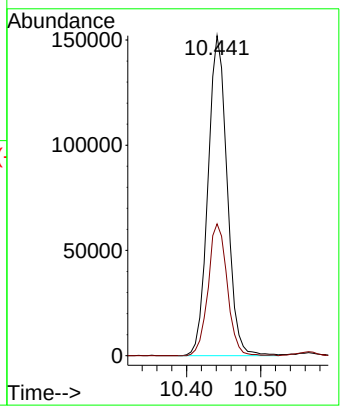
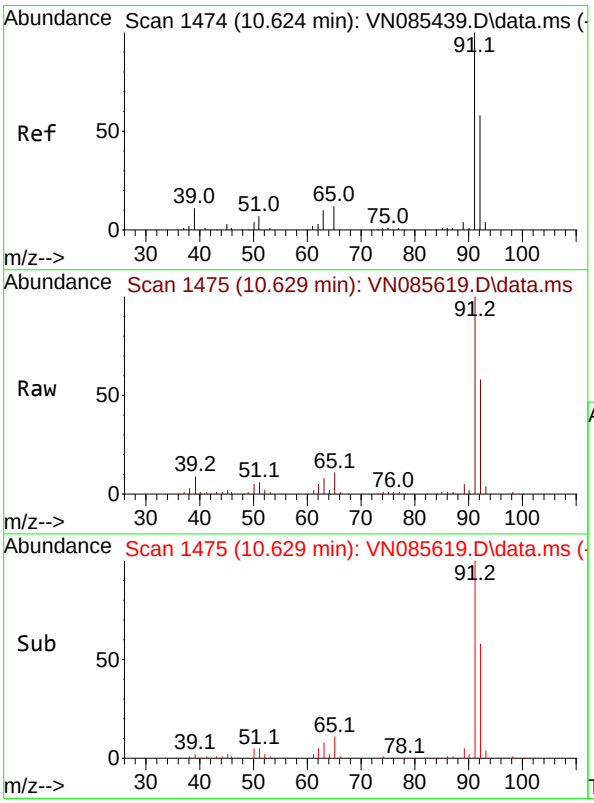
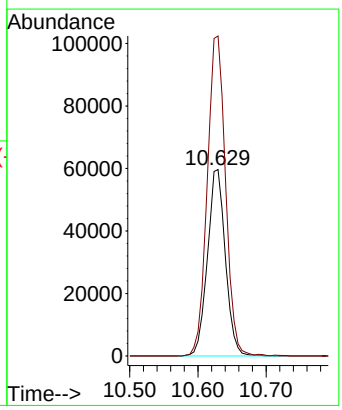


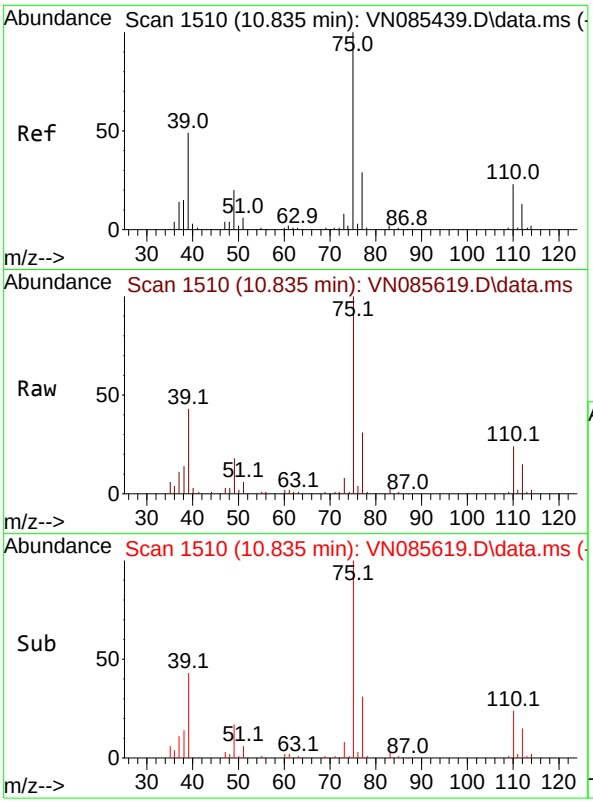


#52
Toluene
Concen: 19.678 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 92 Resp: 109097

Ion	Ratio	Lower	Upper
92	100		
91	175.1	139.2	208.8

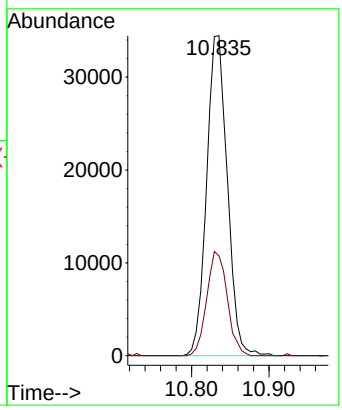




#53
t-1,3-Dichloropropene
Concen: 18.846 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 6398

Ion	Ratio	Lower	Upper
75	100		
77	31.2	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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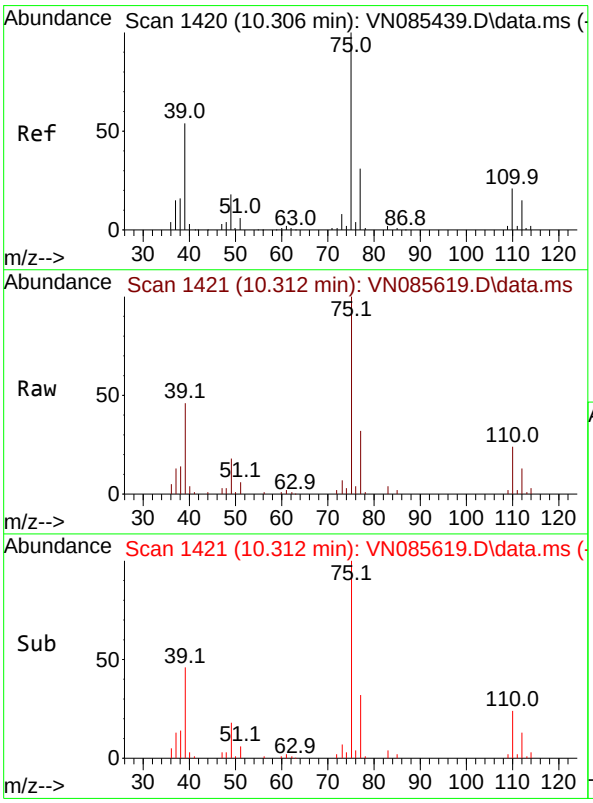
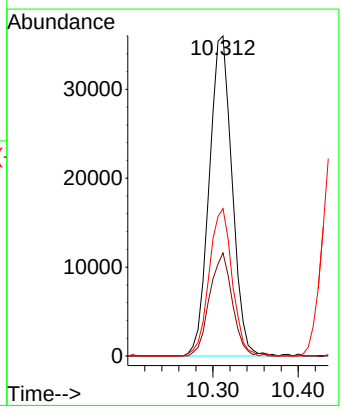
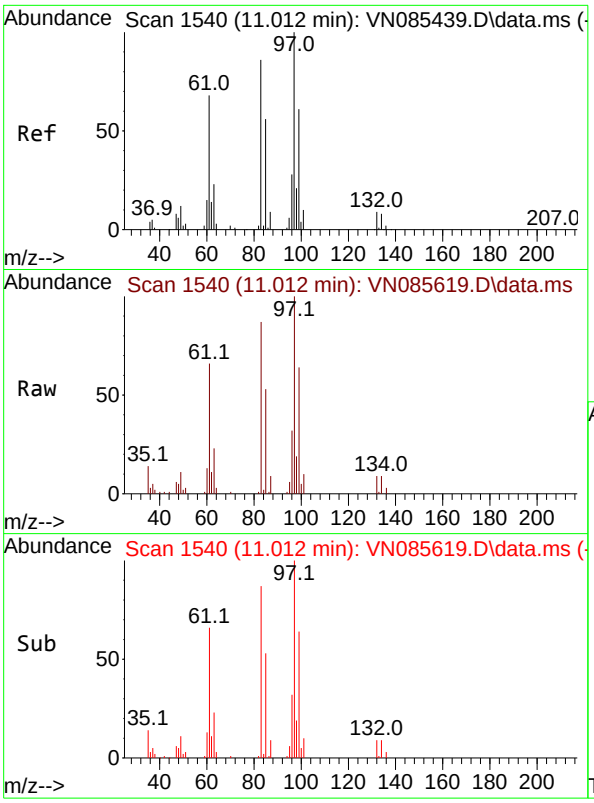


#54
cis-1,3-Dichloropropene
Concen: 18.516 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 67151

Ion	Ratio	Lower	Upper
75	100		
77	32.2	25.0	37.4
39	46.0	43.1	64.7

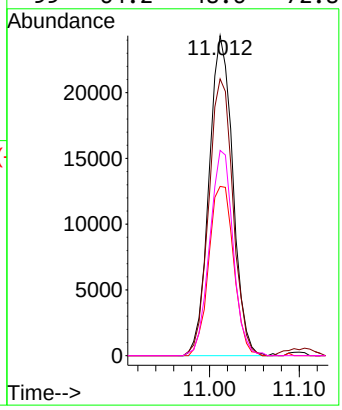




#55
1,1,2-Trichloroethane
Concen: 20.411 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 97 Resp: 4478

Ion	Ratio	Lower	Upper
97	100		
83	86.5	69.0	103.6
85	52.9	44.6	66.8
99	64.2	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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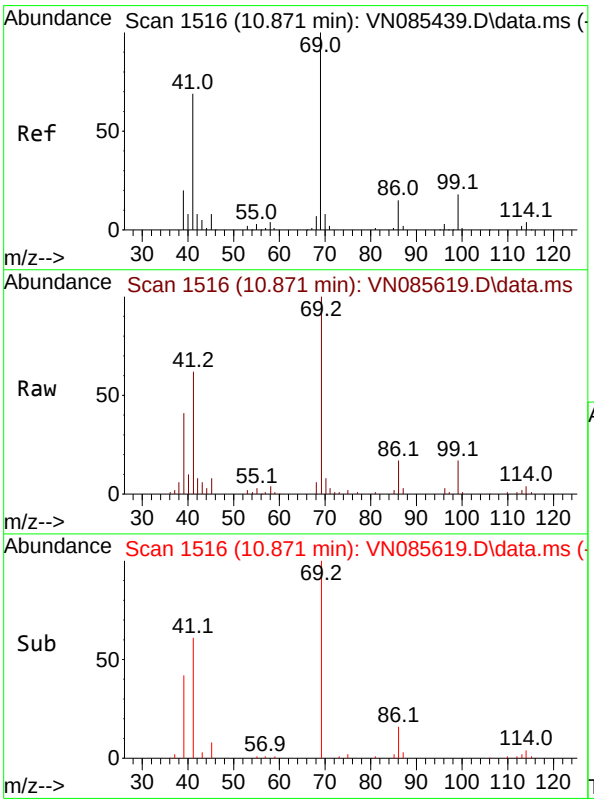
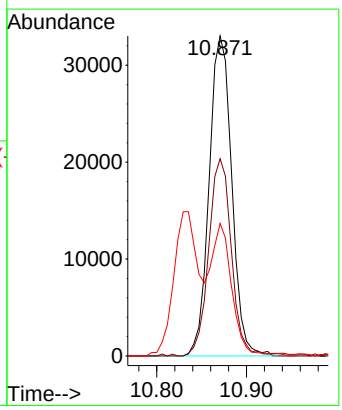
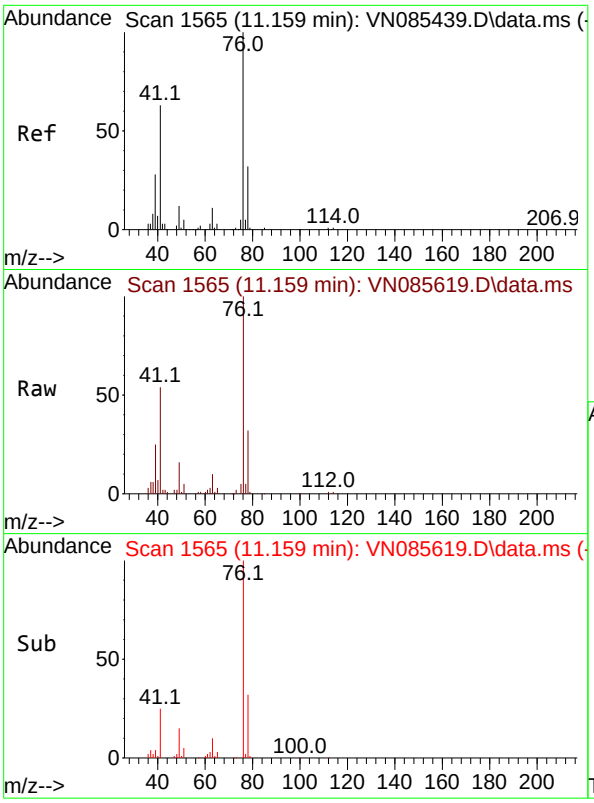


#56
Ethyl methacrylate
Concen: 16.950 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 69 Resp: 57740

Ion	Ratio	Lower	Upper
69	100		
41	61.7	54.6	82.0
39	38.4	32.4	48.6





#57
1,3-Dichloropropane
Concen: 19.419 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 76 Resp: 7408

Ion	Ratio	Lower	Upper
76	100		
78	32.6	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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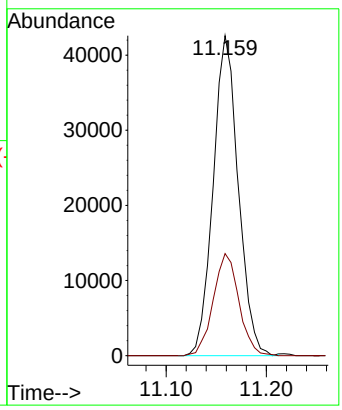
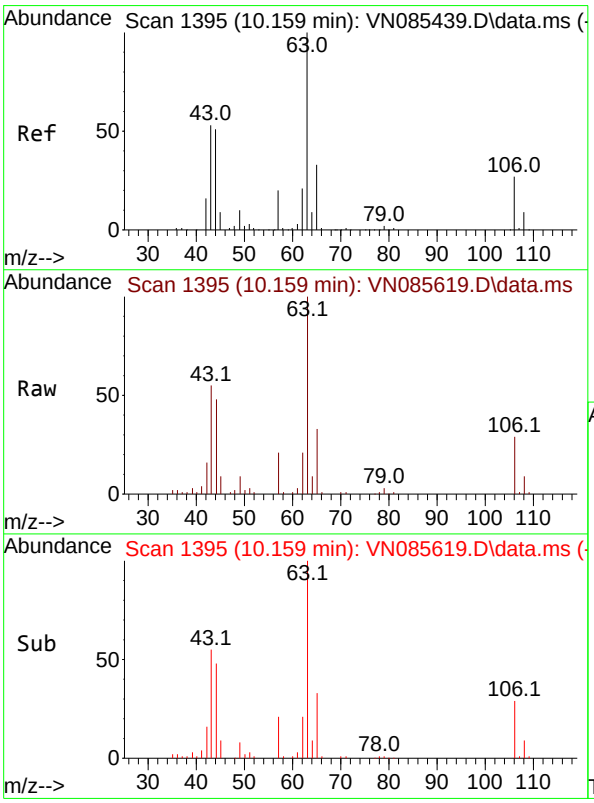
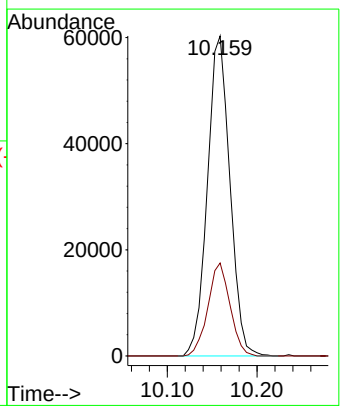


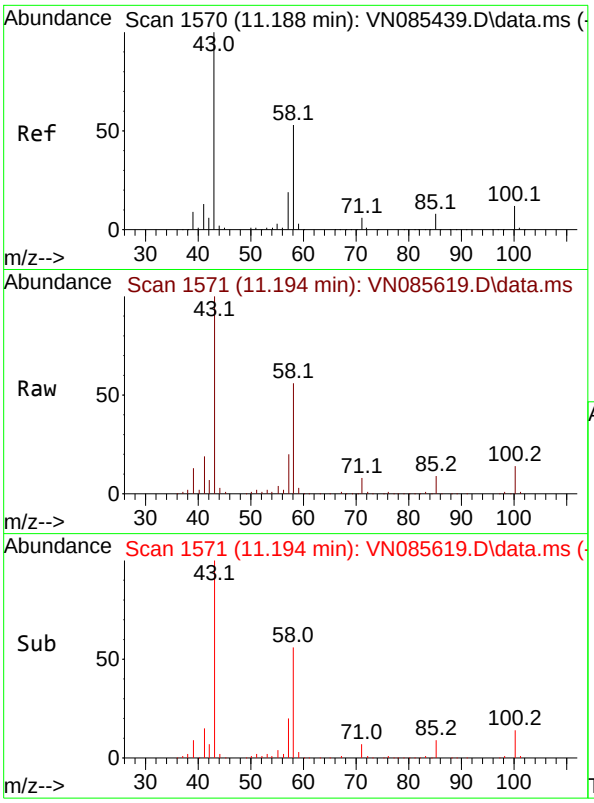


#58
2-Chloroethyl Vinyl ether
Concen: 75.342 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 63 Resp: 104900

Ion	Ratio	Lower	Upper
63	100		
106	28.6	21.6	32.4





#59
2-Hexanone
Concen: 92.067 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 19360

Ion	Ratio	Lower	Upper
43	100		
58	56.1	26.2	78.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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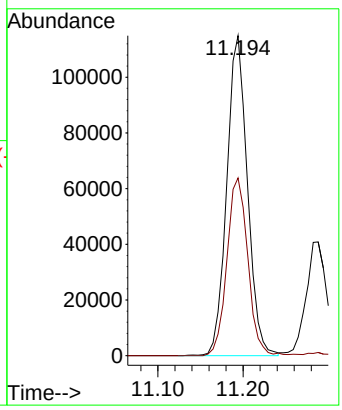
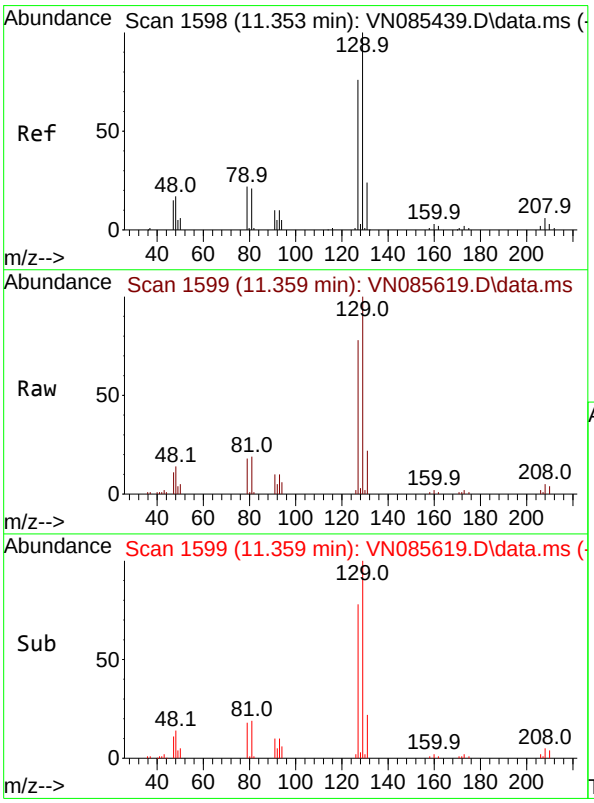
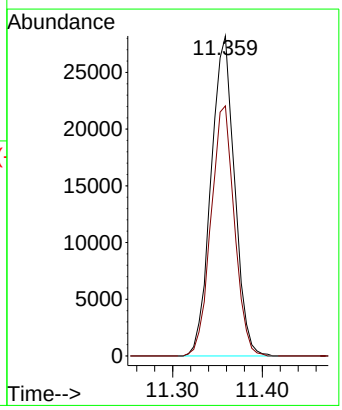


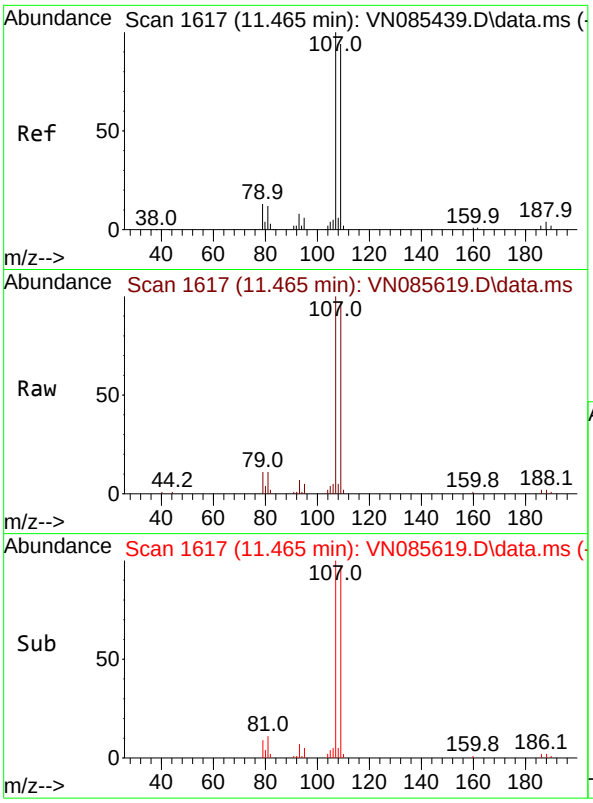


#60
Dibromochloromethane
Concen: 19.353 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:129 Resp: 51263

Ion	Ratio	Lower	Upper
129	100		
127	77.7	38.6	115.8





#61
1,2-Dibromoethane
Concen: 19.486 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:107 Resp: 4255

Ion	Ratio	Lower	Upper
107	100		
109	94.1	75.9	113.9

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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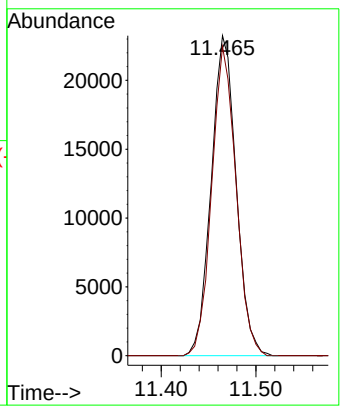
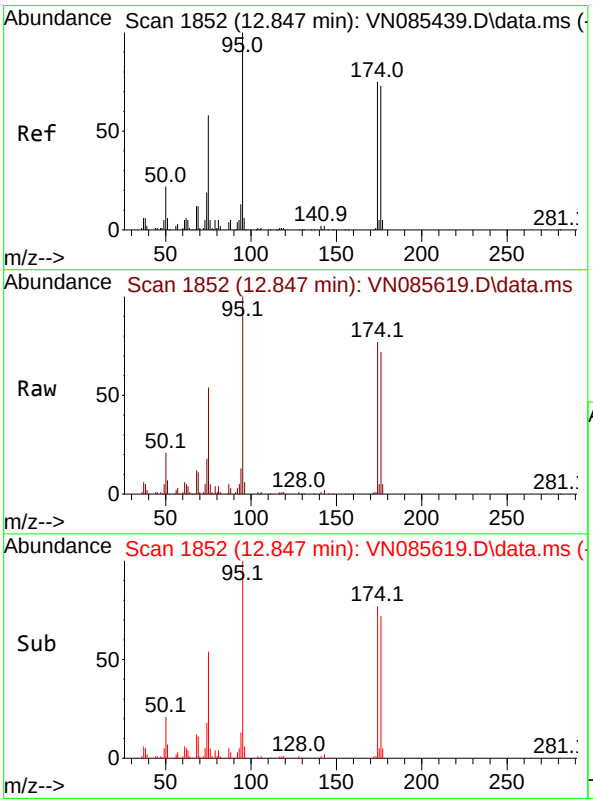
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

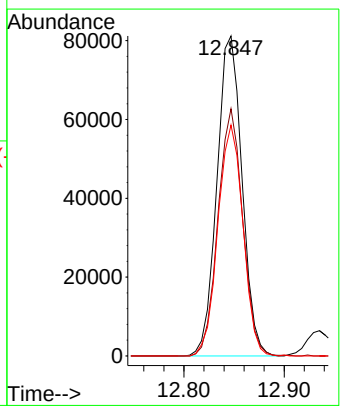


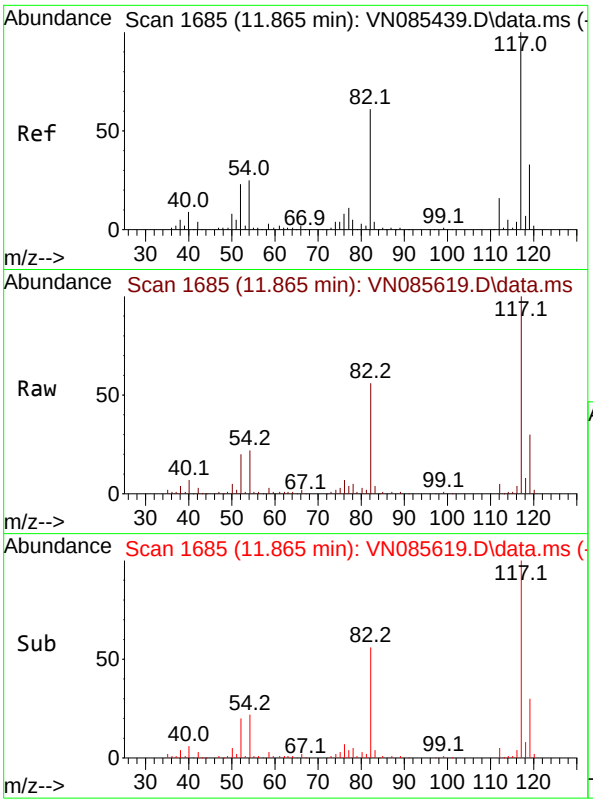


#62
4-Bromofluorobenzene
Concen: 51.128 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 95 Resp: 140993

Ion	Ratio	Lower	Upper
95	100		
174	76.0	0.0	145.0
176	72.1	0.0	142.4

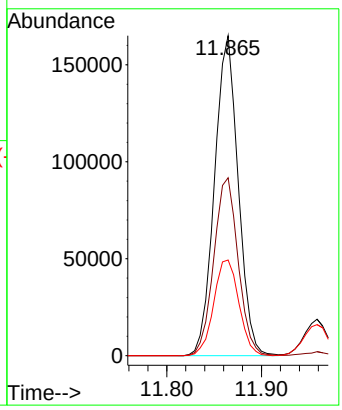




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:117 Resp: 28724

Ion	Ratio	Lower	Upper
117	100		
82	55.6	48.6	72.8
119	29.9	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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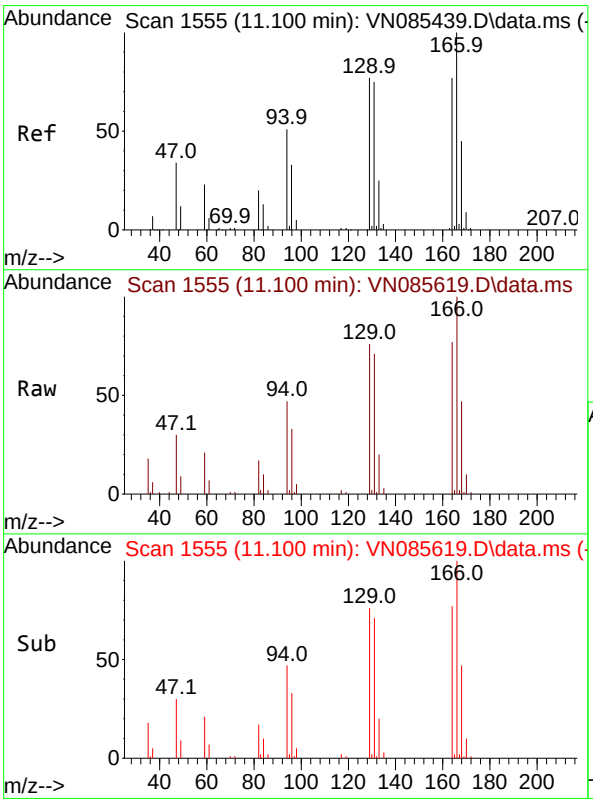
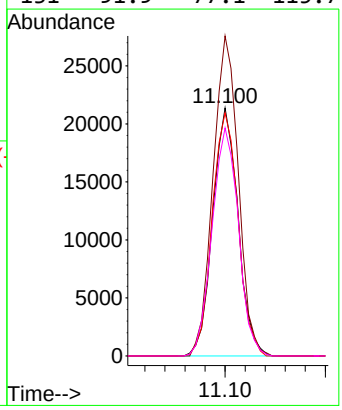
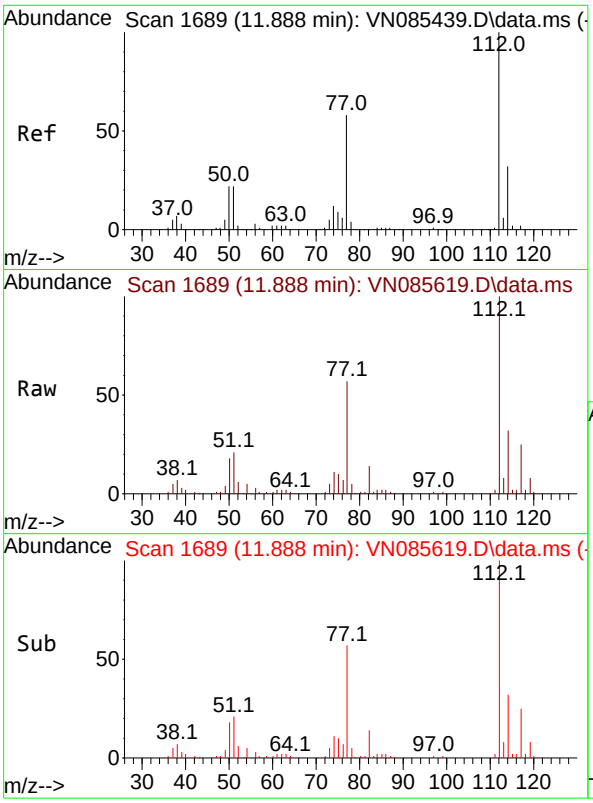


#64
Tetrachloroethene
Concen: 19.160 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:164 Resp: 37520

Ion	Ratio	Lower	Upper
164	100		
166	129.0	103.4	155.2
129	98.0	79.2	118.8
131	91.9	77.1	115.7

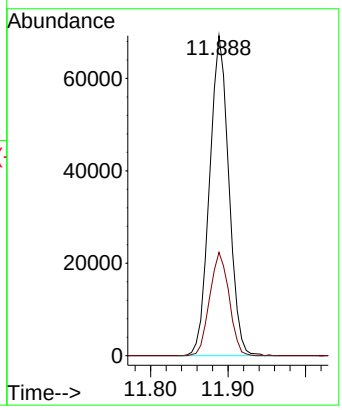




#65
Chlorobenzene
Concen: 19.005 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:112 Resp: 11959

Ion	Ratio	Lower	Upper
112	100		
114	32.3	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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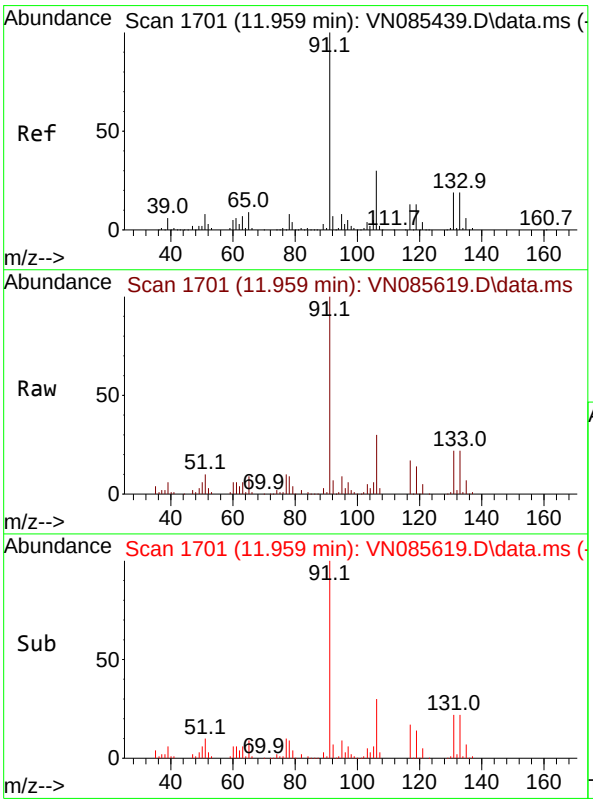
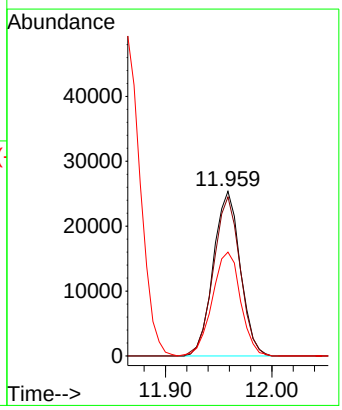
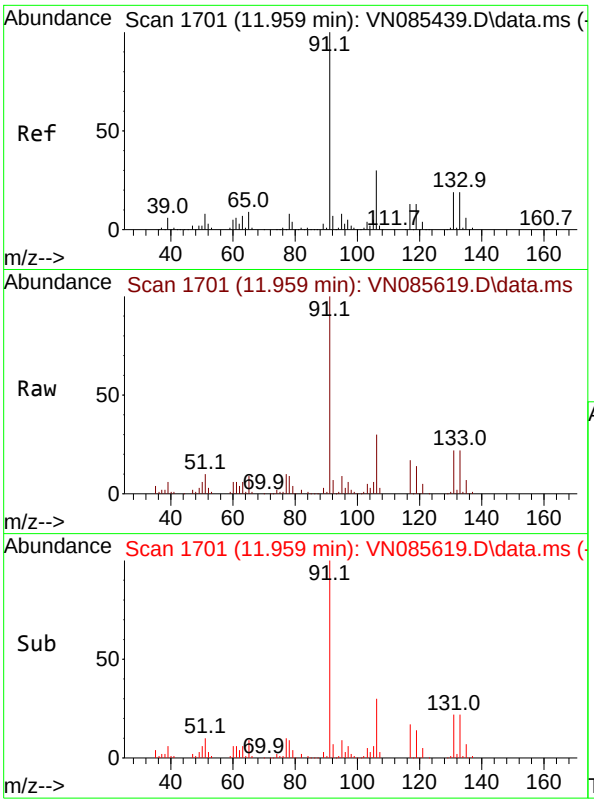


#66
1,1,1,2-Tetrachloroethane
Concen: 19.291 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:131 Resp: 44553

Ion	Ratio	Lower	Upper
131	100		
133	96.0	47.4	142.3
119	66.2	33.1	99.5





#67
Ethyl Benzene
Concen: 18.656 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 19120

Ion	Ratio	Lower	Upper
91	100		
106	29.7	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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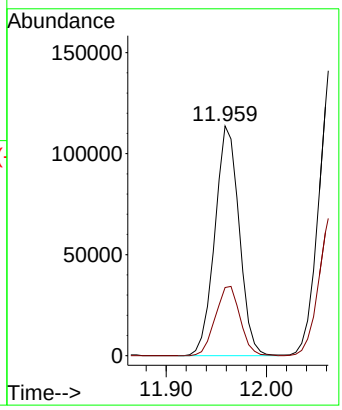
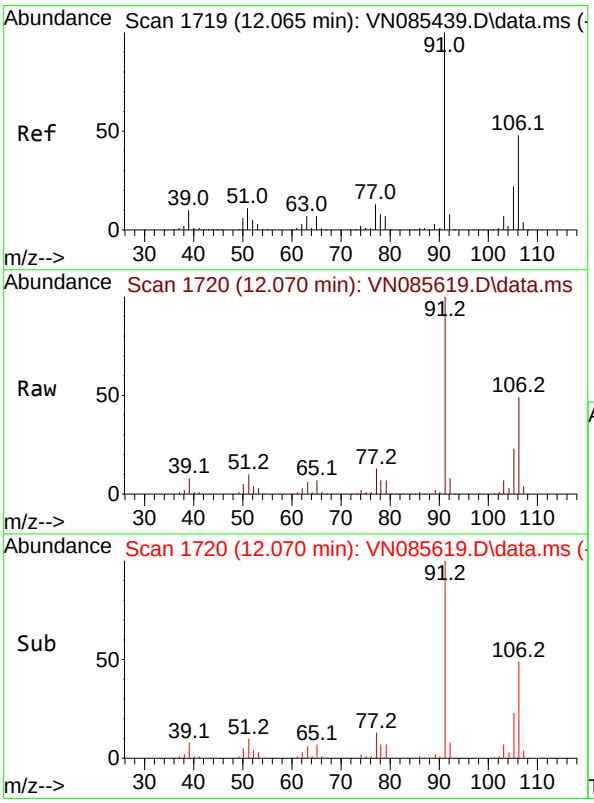
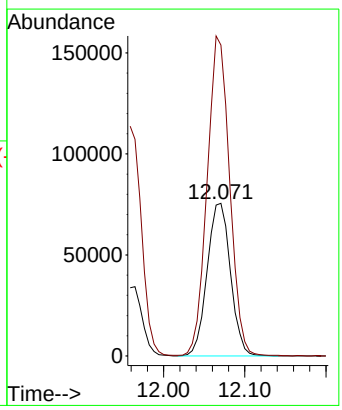


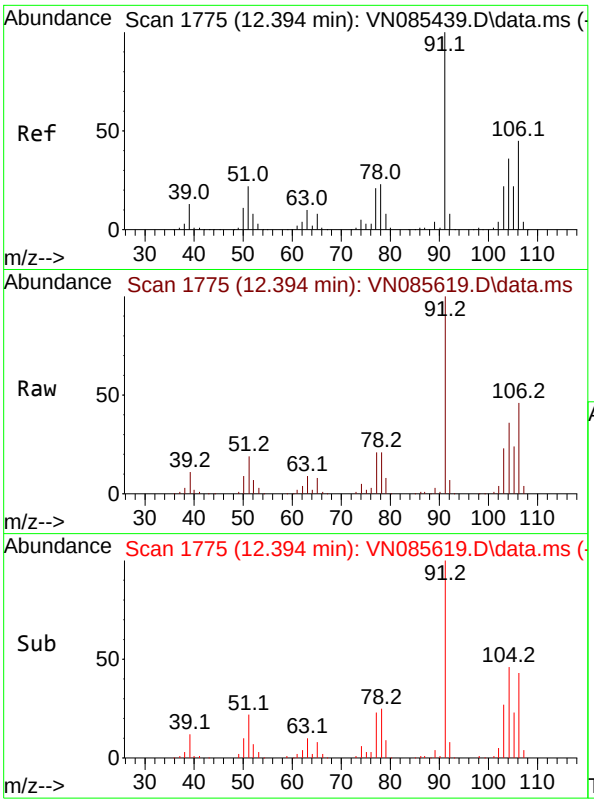


#68
m/p-Xylenes
Concen: 39.785 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:106 Resp: 150700

Ion	Ratio	Lower	Upper
106	100		
91	202.7	167.7	251.5





#69
o-Xylene
Concen: 18.994 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:106 Resp: 6875

Ion	Ratio	Lower	Upper
106	100		
91	217.4	110.4	331.2

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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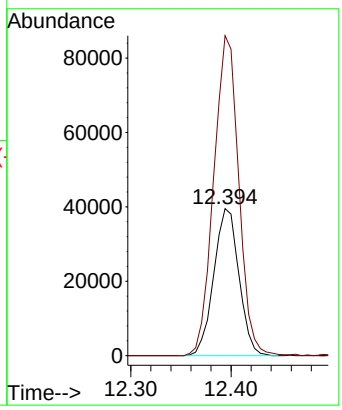
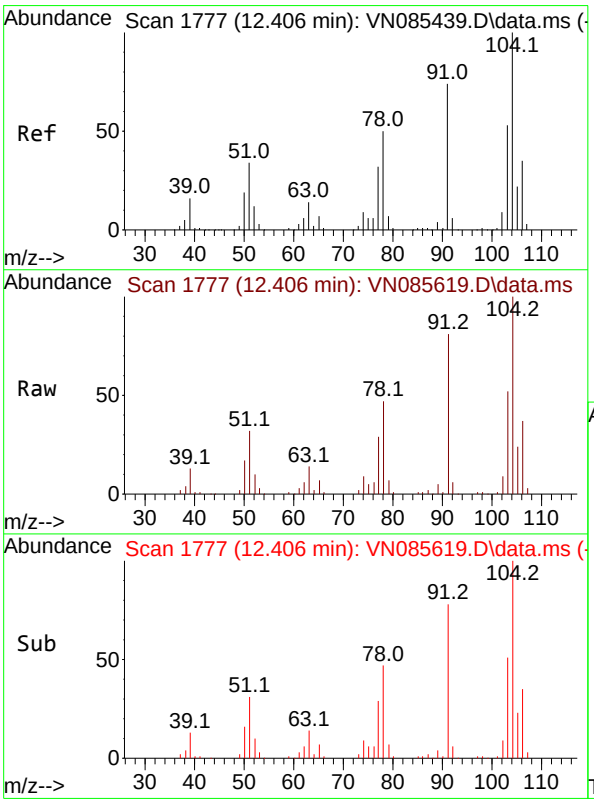
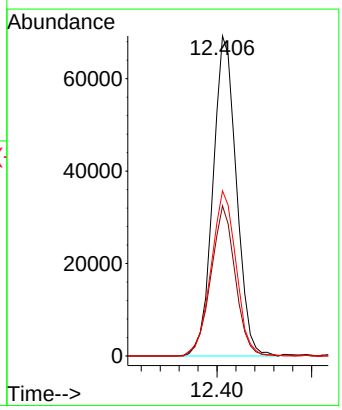


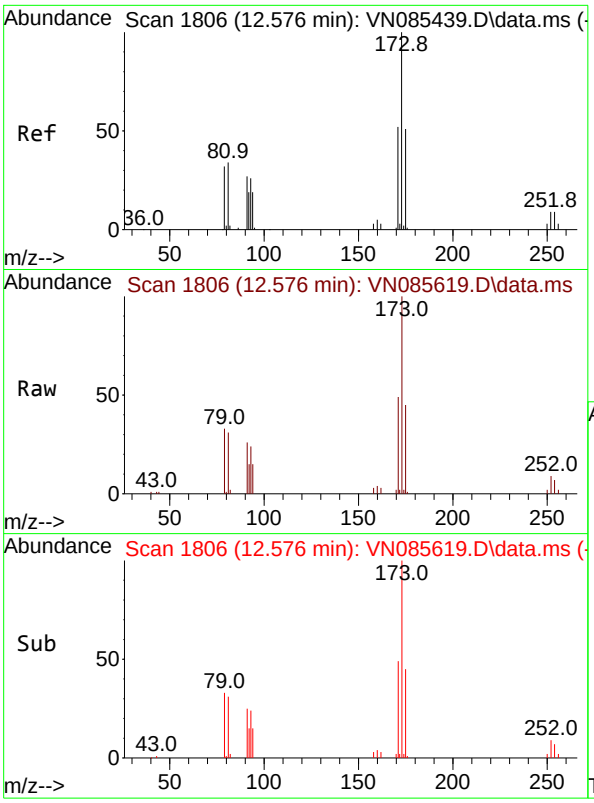


#70
Styrene
Concen: 19.827 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:104 Resp: 118783

Ion	Ratio	Lower	Upper
104	100		
78	48.8	42.5	63.7
103	55.0	43.8	65.8





#71
Bromoform
Concen: 20.183 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:173 Resp: 3335

Ion	Ratio	Lower	Upper
173	100		
175	47.2	24.4	73.2
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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Reviewed By :John Carlone 02/04/2025
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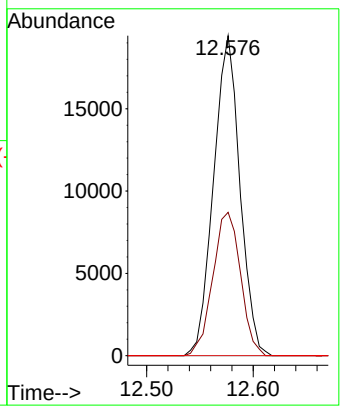
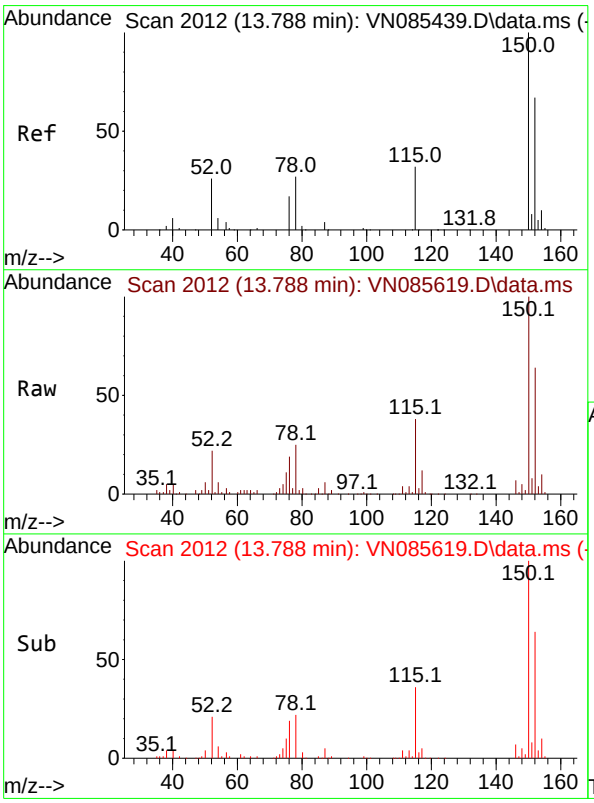
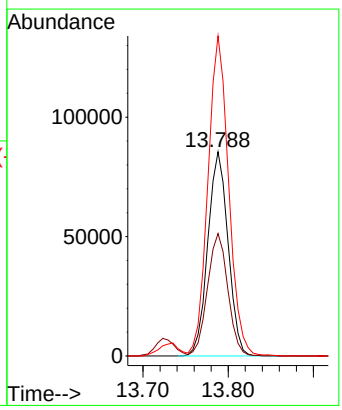


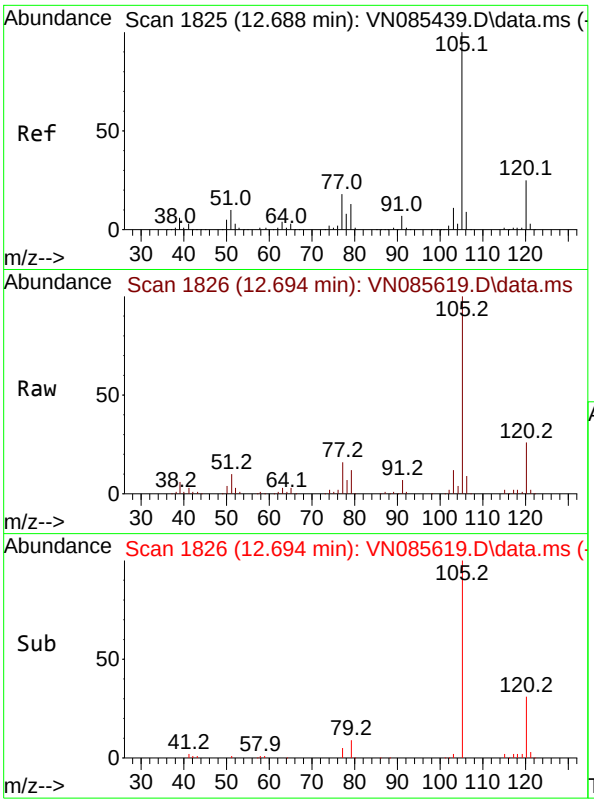


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:152 Resp: 141185

Ion	Ratio	Lower	Upper
152	100		
115	60.3	31.1	93.3
150	160.4	0.0	343.6

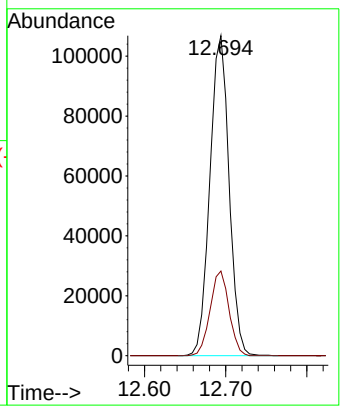




#73
Isopropylbenzene
Concen: 18.416 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 17547

Ion	Ratio	Lower	Upper
105	100		
120	26.0	12.8	38.3



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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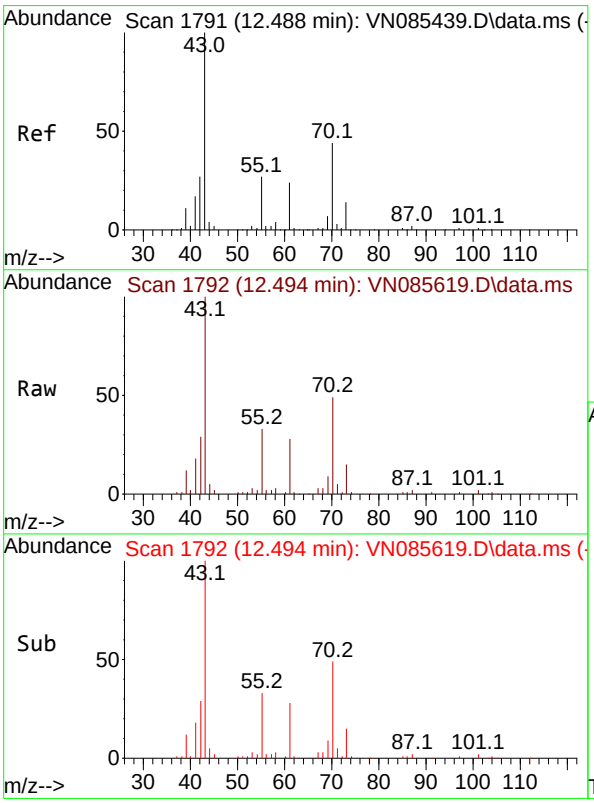
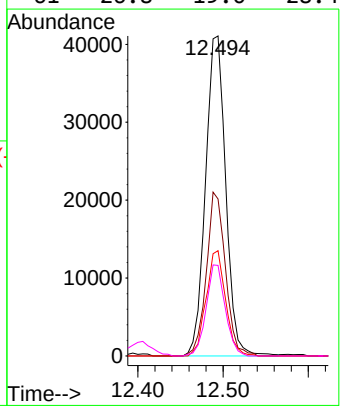
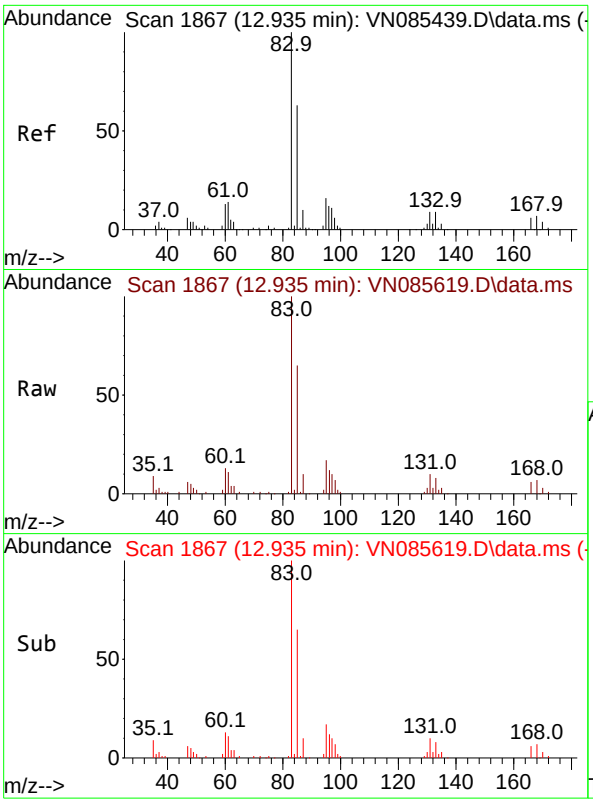


#74
N-amyl acetate
Concen: 15.799 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 43 Resp: 67669

Ion	Ratio	Lower	Upper
43	100		
70	48.3	34.0	51.0
55	31.8	21.4	32.2
61	26.8	19.0	28.4





#75
1,1,2,2-Tetrachloroethane
Concen: 19.691 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 83 Resp: 6627

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	63.5	32.2	96.6

Instrument :
MSVOA_N
ClientSampleId :
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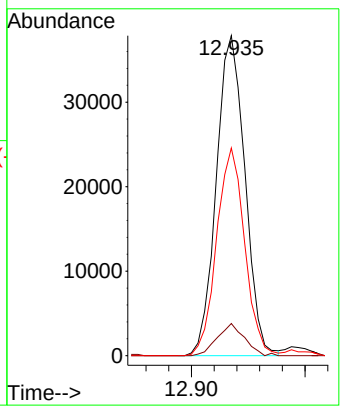
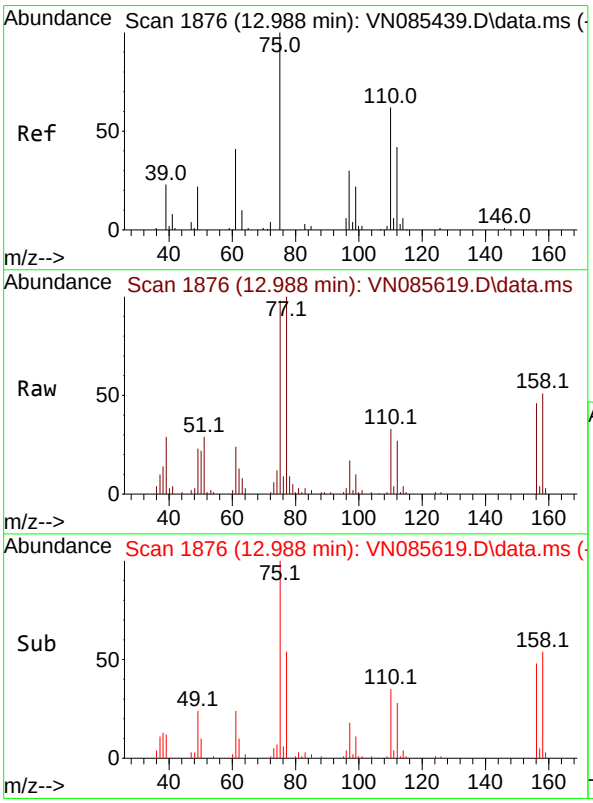
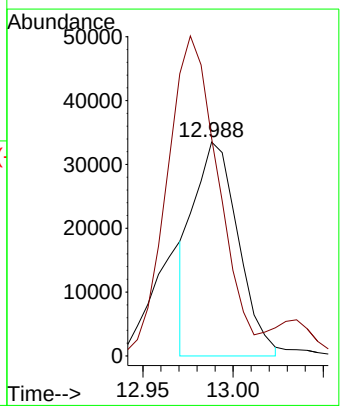


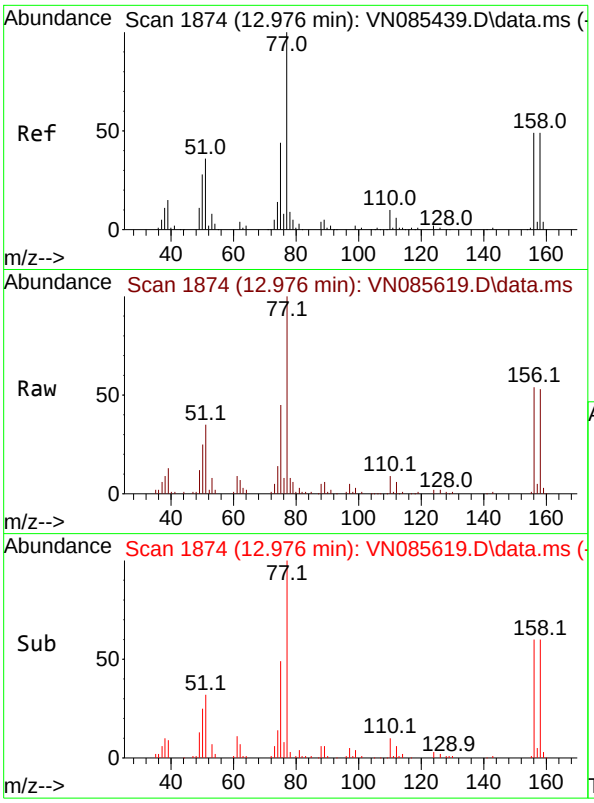


#76
1,2,3-Trichloropropane
Concen: 20.108 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 57701

Ion	Ratio	Lower	Upper
75	100		
77	174.2	109.7	329.2

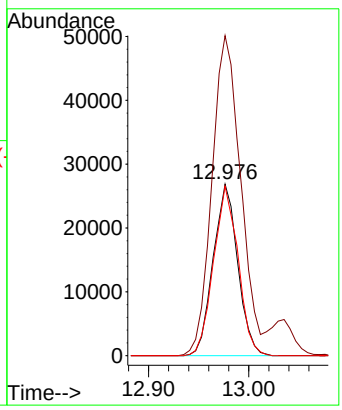




#77
Bromobenzene
Concen: 18.357 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:156 Resp: 4570

Ion	Ratio	Lower	Upper
156	100		
77	219.9	114.1	342.4
158	98.9	48.9	146.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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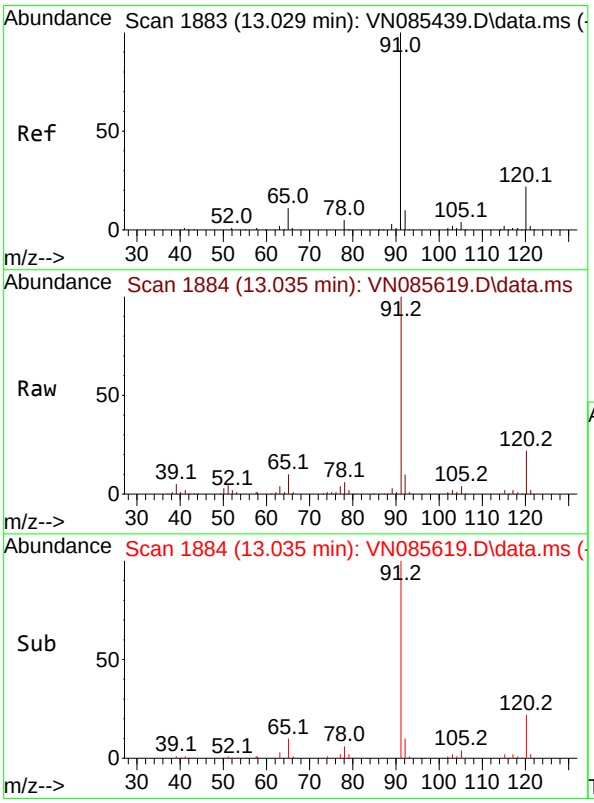
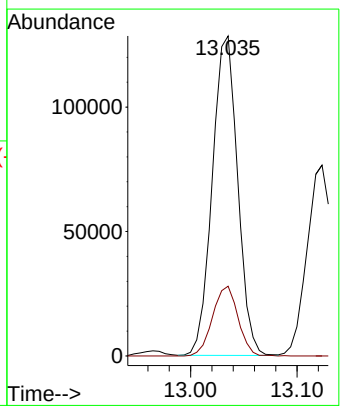
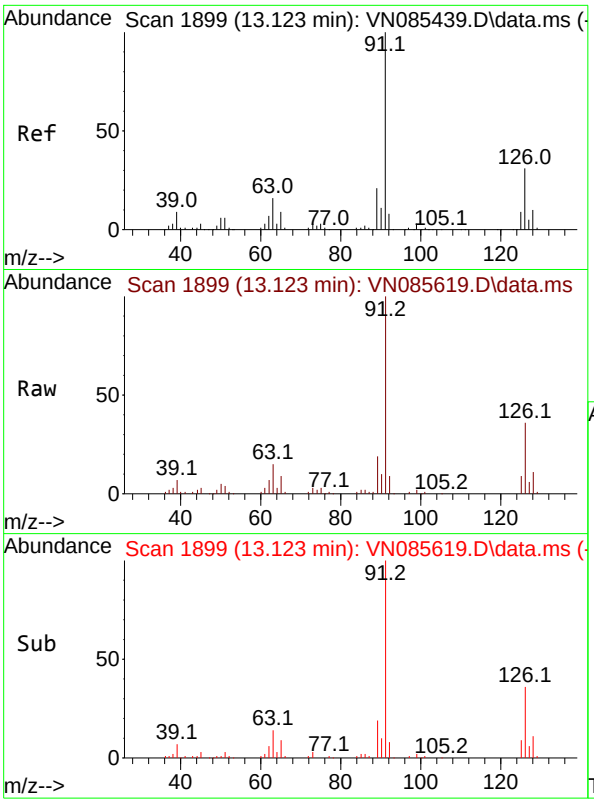


#78
n-propylbenzene
Concen: 18.808 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 212161

Ion	Ratio	Lower	Upper
91	100		
120	21.9	10.9	32.6





#79
2-Chlorotoluene
Concen: 18.149 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 13250

Ion	Ratio	Lower	Upper
91	100		
126	33.4	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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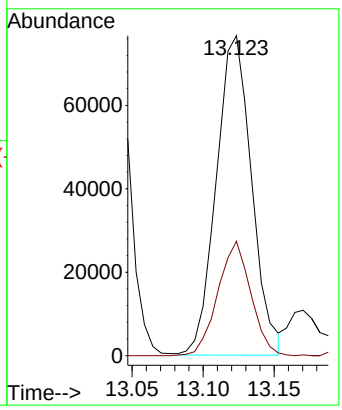
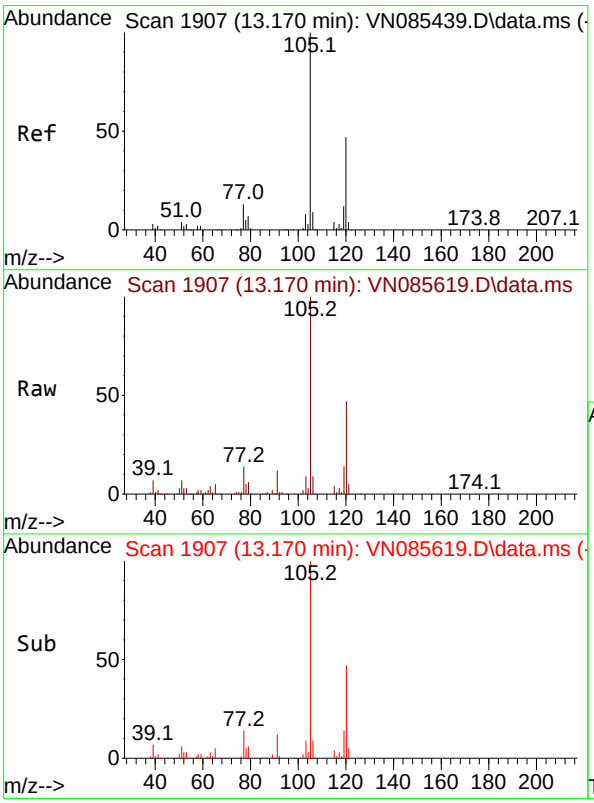
Supervised By :Mahesh Dadoda 02/04/2025

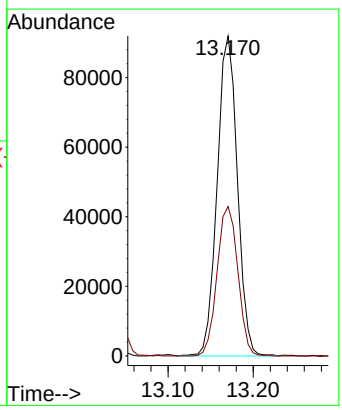


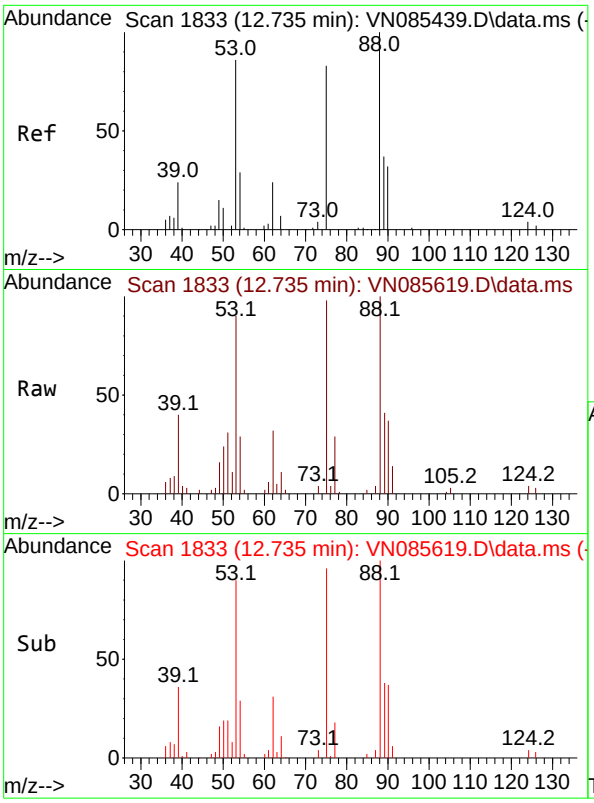


#80
1,3,5-Trimethylbenzene
Concen: 19.282 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 151767

Ion	Ratio	Lower	Upper
105	100		
120	47.9	23.9	71.7





#81
trans-1,4-Dichloro-2-butene
Concen: 19.452 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Tgt Ion: 75 Resp: 2063

Ion	Ratio	Lower	Upper
75	100		
53	104.9	95.6	143.4
89	46.4	37.0	55.6

Manual Integrations
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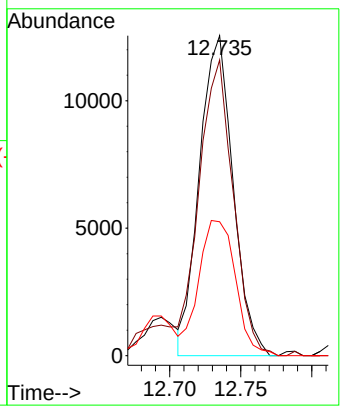
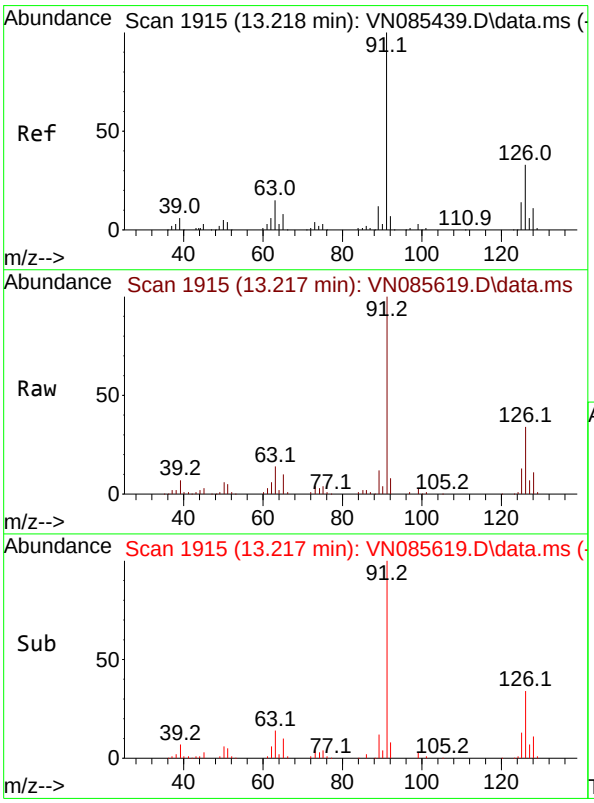
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

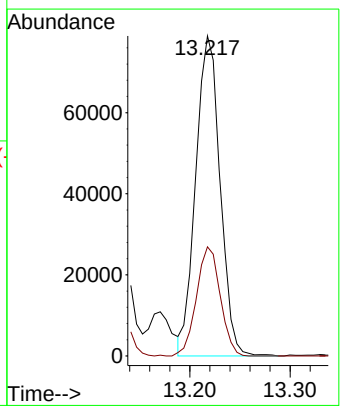


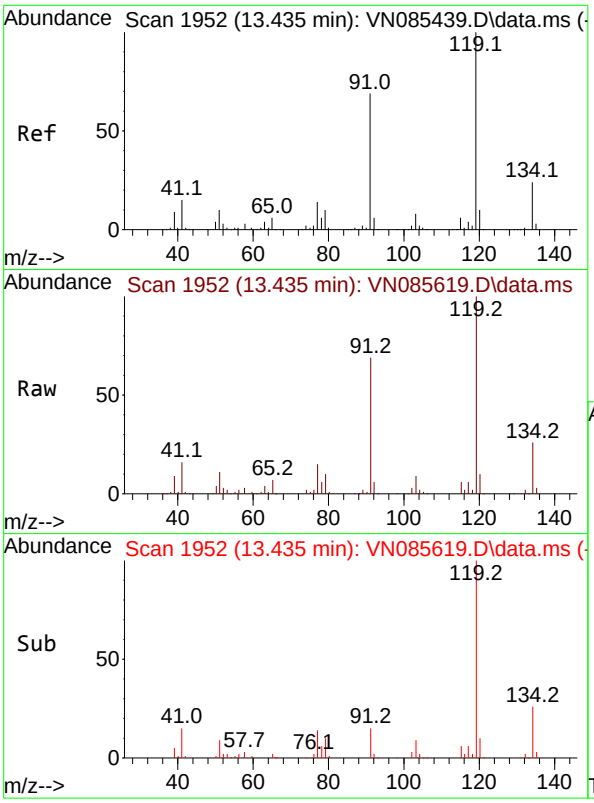


#82
4-Chlorotoluene
Concen: 18.365 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 133497

Ion	Ratio	Lower	Upper
91	100		
126	33.2	15.9	47.7

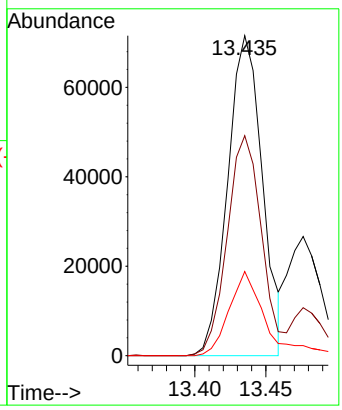




#83
tert-Butylbenzene
Concen: 18.381 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:119 Resp: 12149

Ion	Ratio	Lower	Upper
119	100		
91	68.9	35.1	105.3
134	27.2	12.0	36.1



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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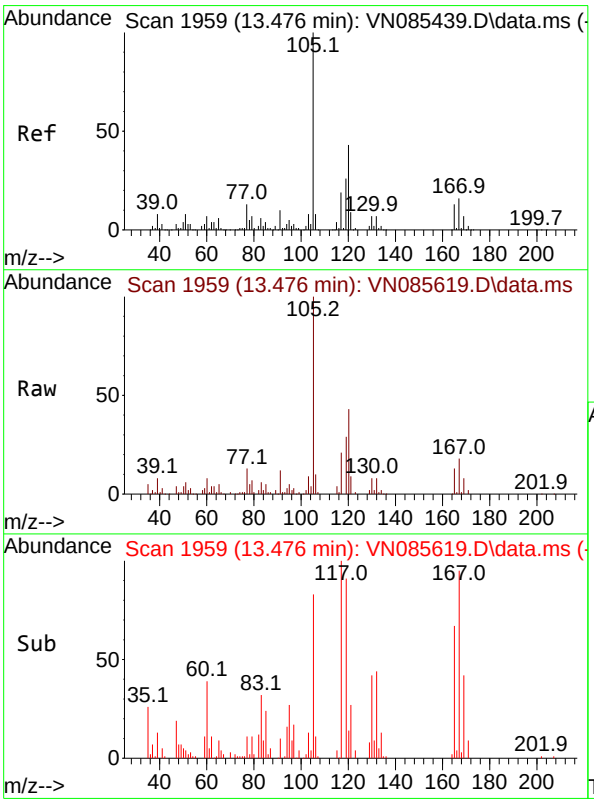
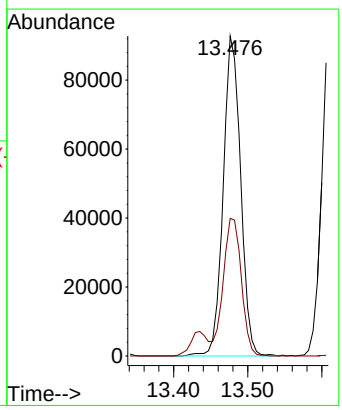
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

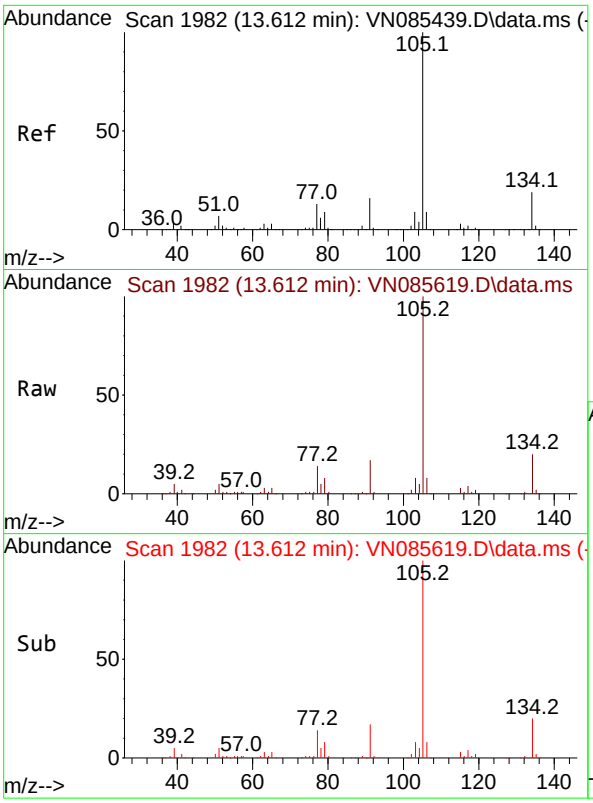


#84
1,2,4-Trimethylbenzene
Concen: 19.303 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 151424

Ion	Ratio	Lower	Upper
105	100		
120	45.3	21.6	65.0





#85
sec-Butylbenzene
Concen: 19.049 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:105 Resp: 17450

Ion	Ratio	Lower	Upper
105	100		
134	19.6	9.7	28.9

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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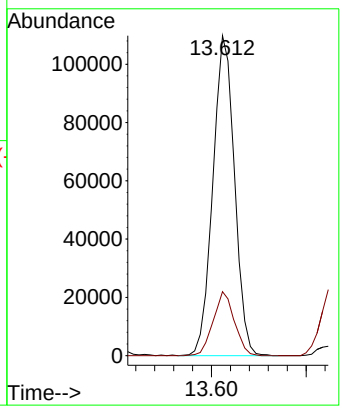
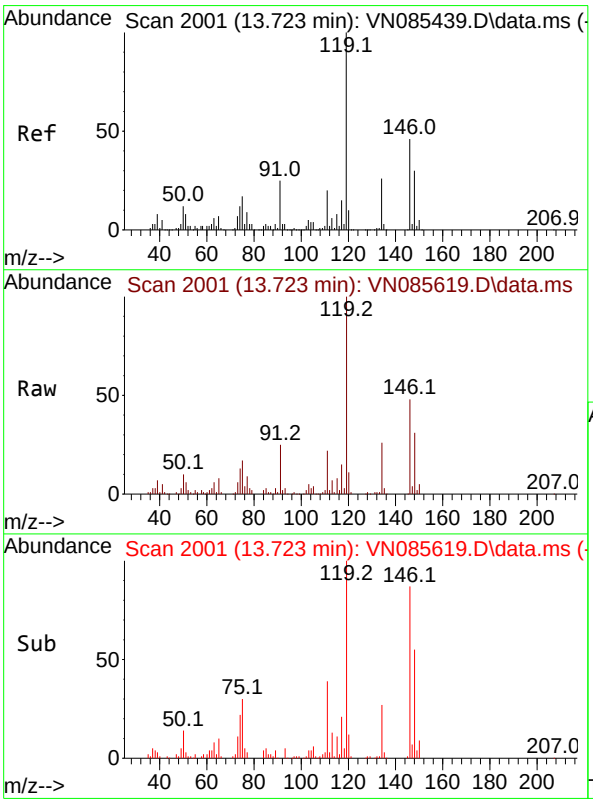
Supervised By :Mahesh Dadoda 02/04/2025

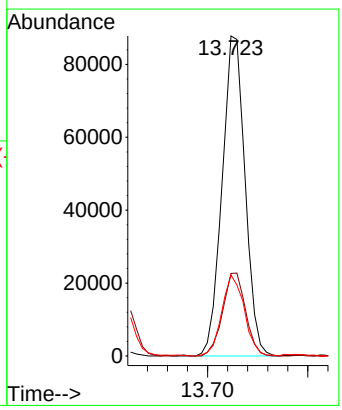


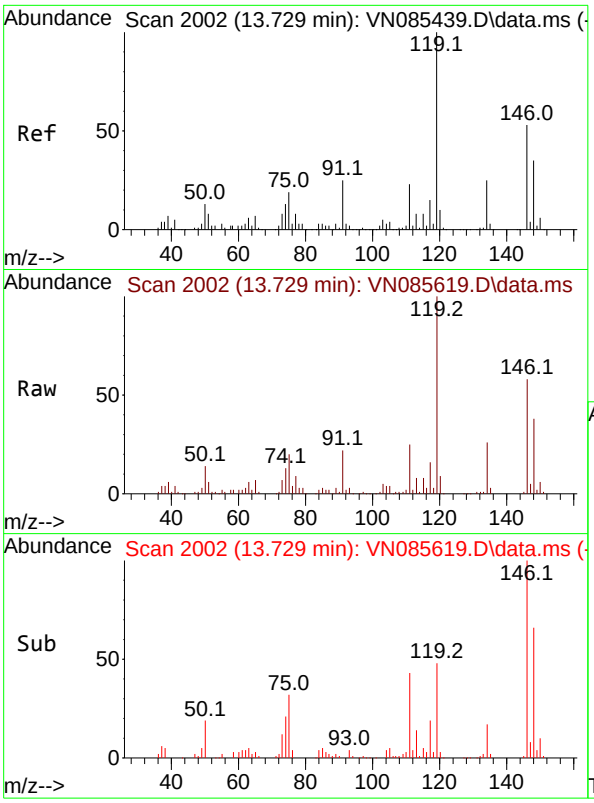


#86
p-Isopropyltoluene
Concen: 18.340 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:119 Resp: 139399

Ion	Ratio	Lower	Upper
119	100		
134	25.8	12.7	38.0
91	24.7	12.7	38.1

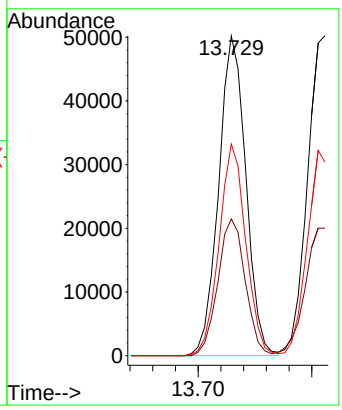




#87
1,3-Dichlorobenzene
Concen: 18.208 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:146 Resp: 8348

Ion	Ratio	Lower	Upper
146	100		
111	43.0	21.4	64.3
148	65.0	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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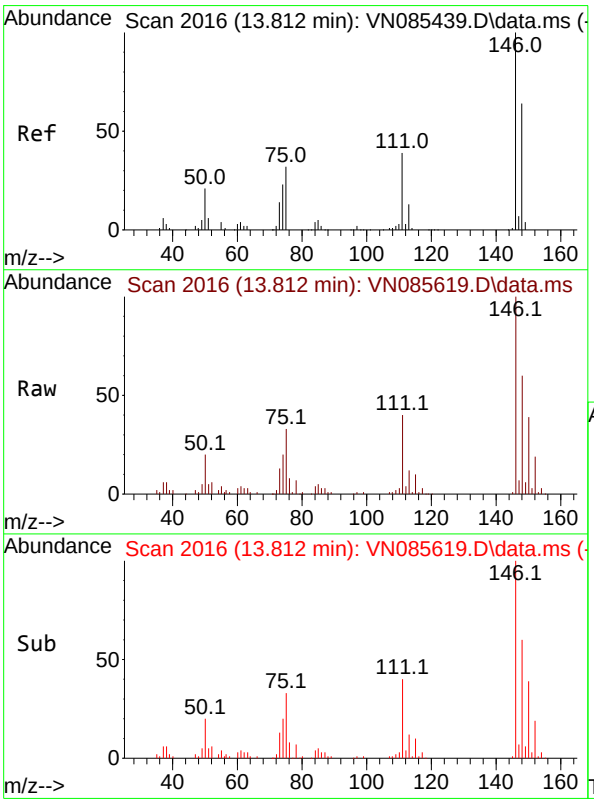
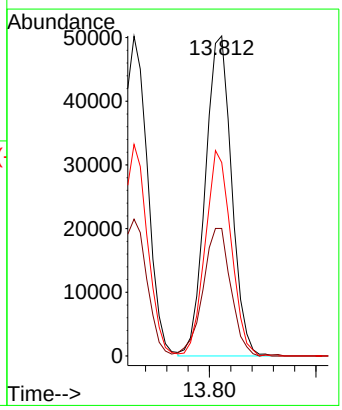
Supervised By :Mahesh Dadoda 02/04/2025

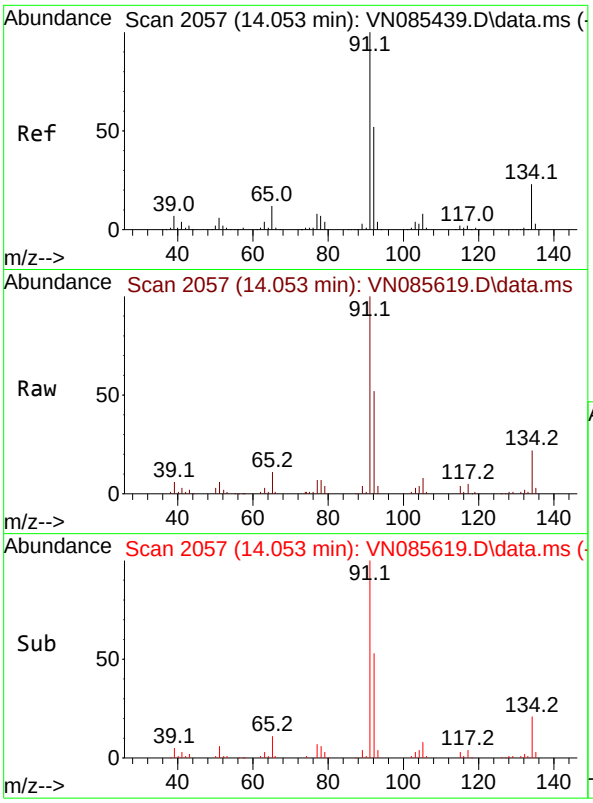


#88
1,4-Dichlorobenzene
Concen: 18.063 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:146 Resp: 85839

Ion	Ratio	Lower	Upper
146	100		
111	42.3	21.3	63.7
148	63.5	32.4	97.0

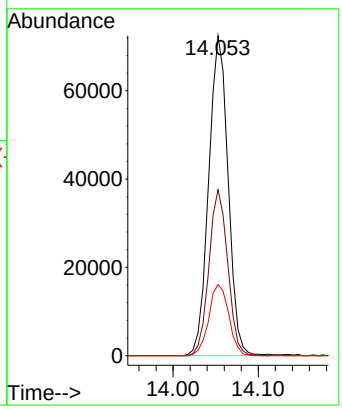




#89
n-Butylbenzene
Concen: 17.425 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 91 Resp: 11451

Ion	Ratio	Lower	Upper
91	100		
92	50.3	25.8	77.3
134	22.9	11.7	35.1



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

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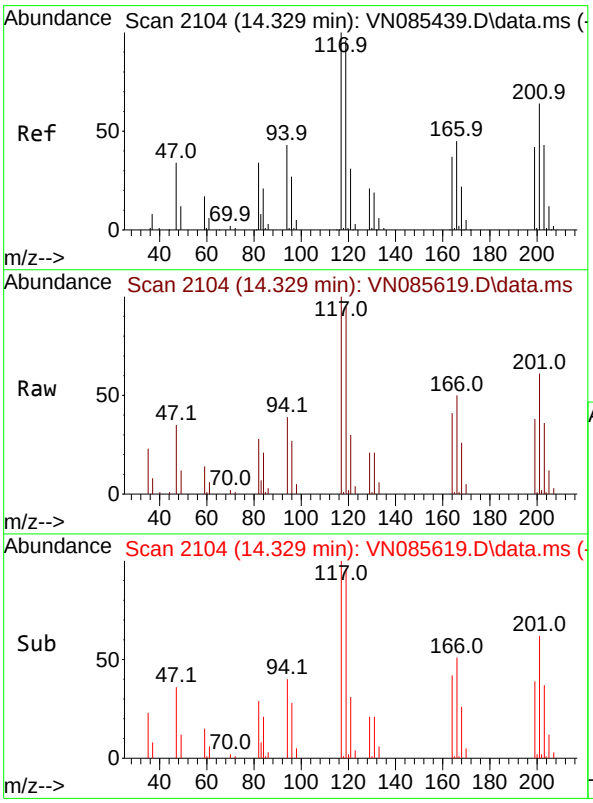
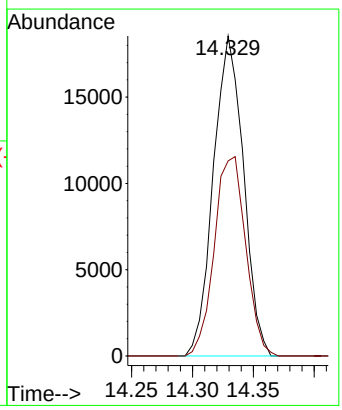
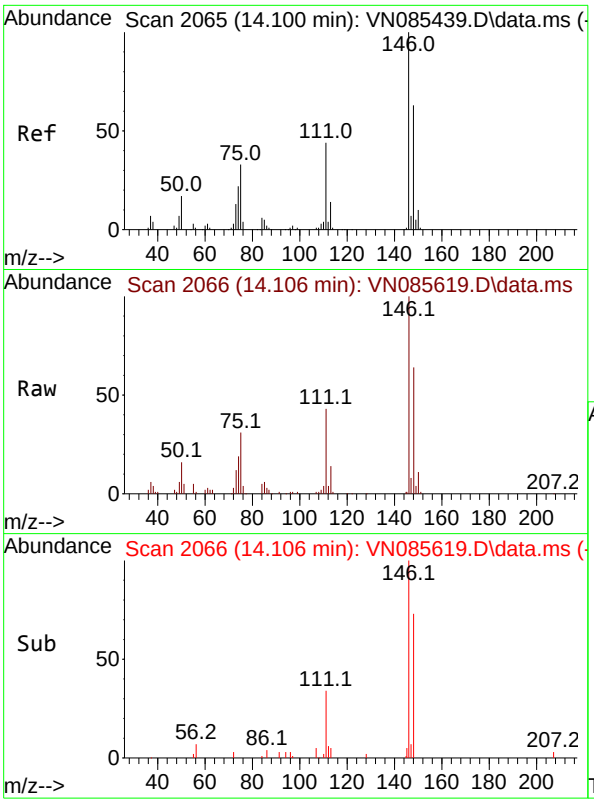


#90
Hexachloroethane
Concen: 18.308 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:117 Resp: 31928

Ion	Ratio	Lower	Upper
117	100		
201	64.9	33.7	101.0

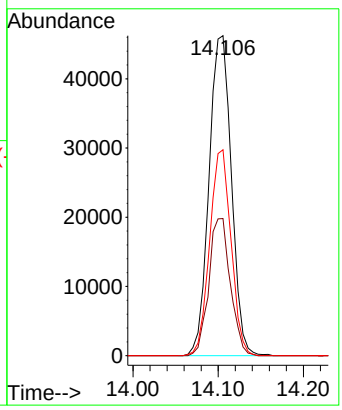




#91
1,2-Dichlorobenzene
Concen: 18.437 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:146 Resp: 8431

Ion	Ratio	Lower	Upper
146	100		
111	41.4	21.7	65.1
148	61.5	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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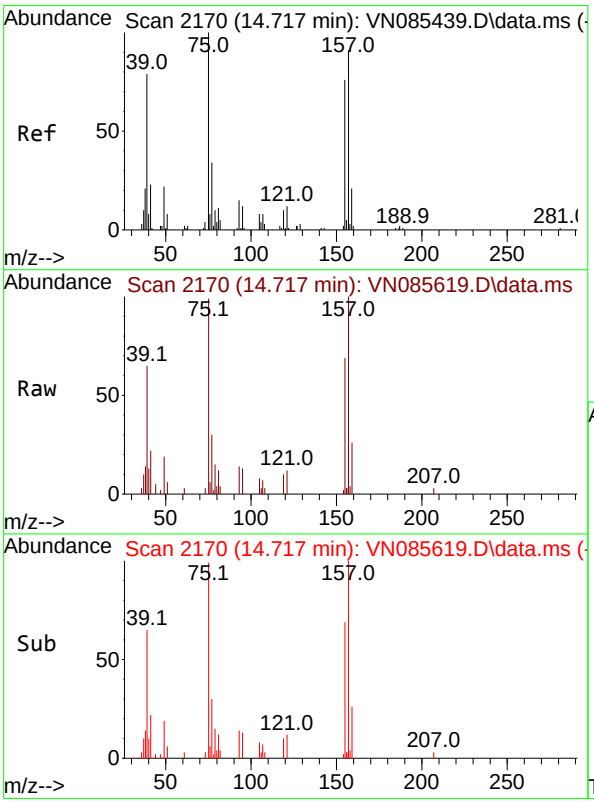
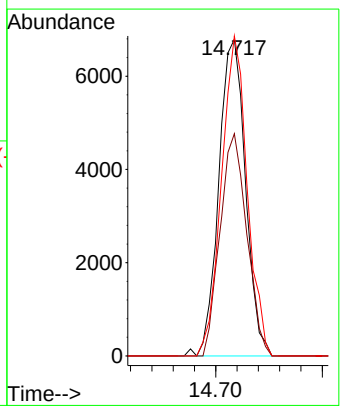
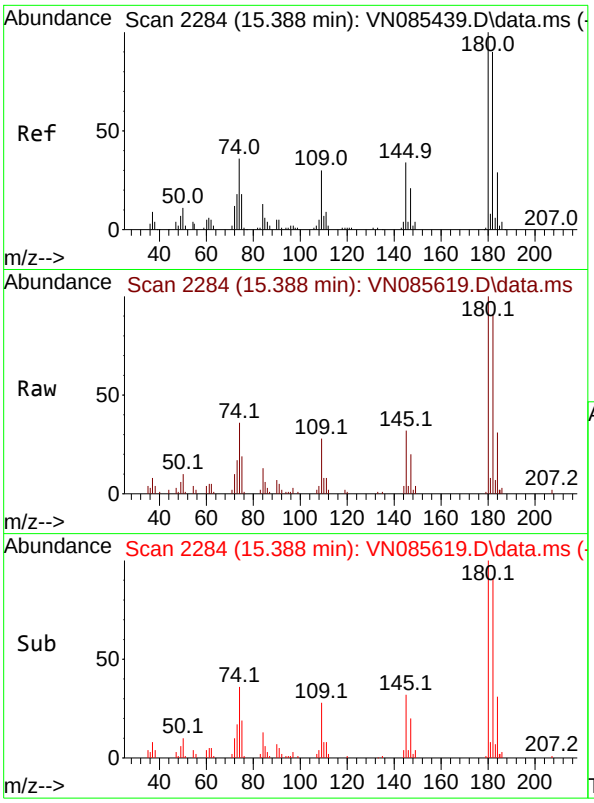


#92
1,2-Dibromo-3-Chloropropane
Concen: 19.170 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion: 75 Resp: 11783

Ion	Ratio	Lower	Upper
75	100		
155	70.4	36.4	109.2
157	97.6	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 16.258 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:180 Resp: 3455

Ion	Ratio	Lower	Upper
180	100		
182	94.6	46.8	140.3
145	32.5	16.0	48.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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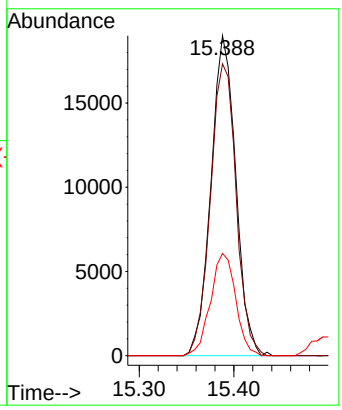
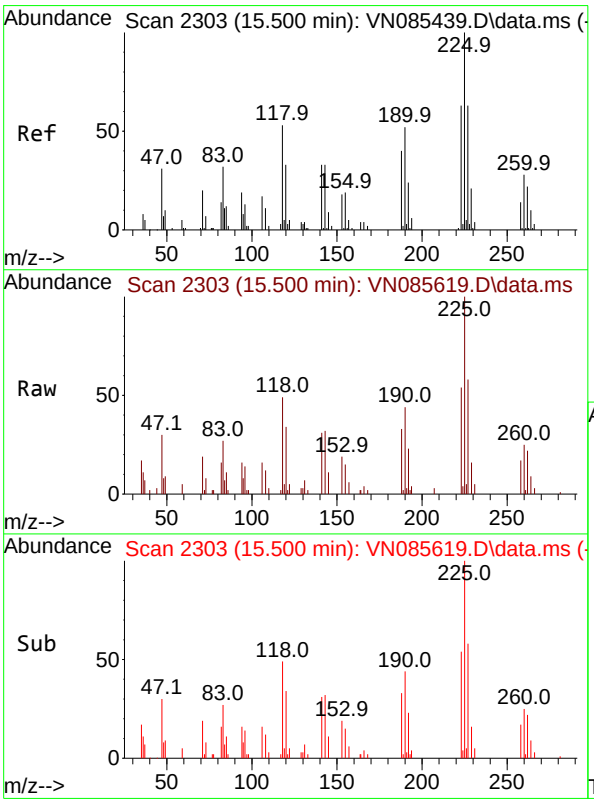
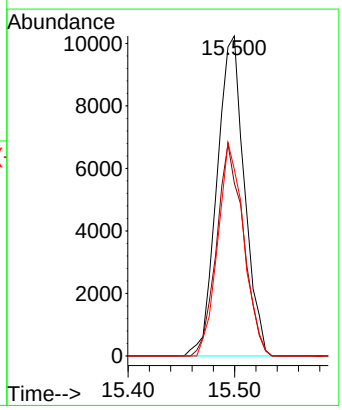


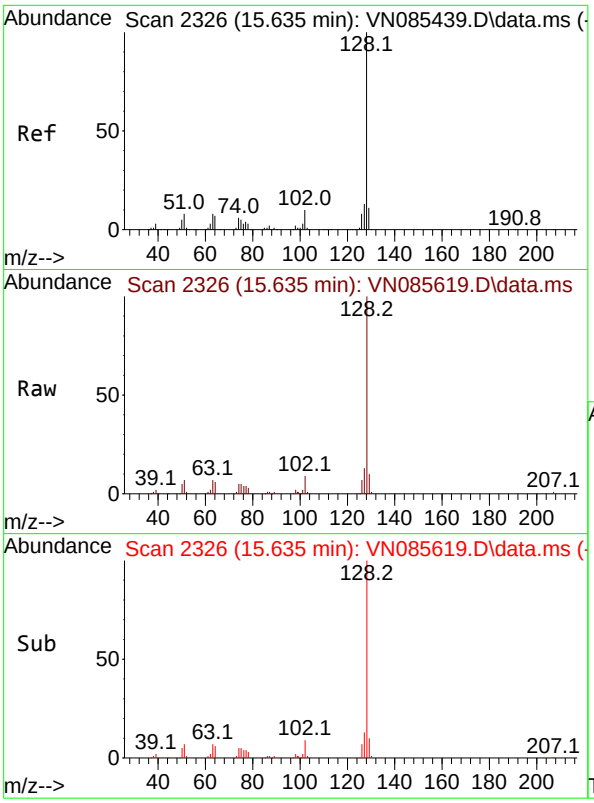


#94
Hexachlorobutadiene
Concen: 16.200 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:225 Resp: 18281

Ion	Ratio	Lower	Upper
225	100		
223	64.9	30.7	92.1
227	63.2	30.9	92.5

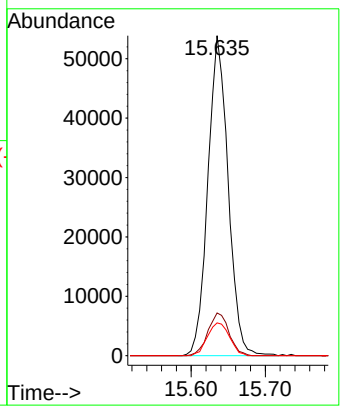




#95
Naphthalene
Concen: 16.136 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:128 Resp: 10234

Ion	Ratio	Lower	Upper
128	100		
127	13.9	10.6	16.0
129	11.2	8.8	13.2



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBS01

Manual Integrations
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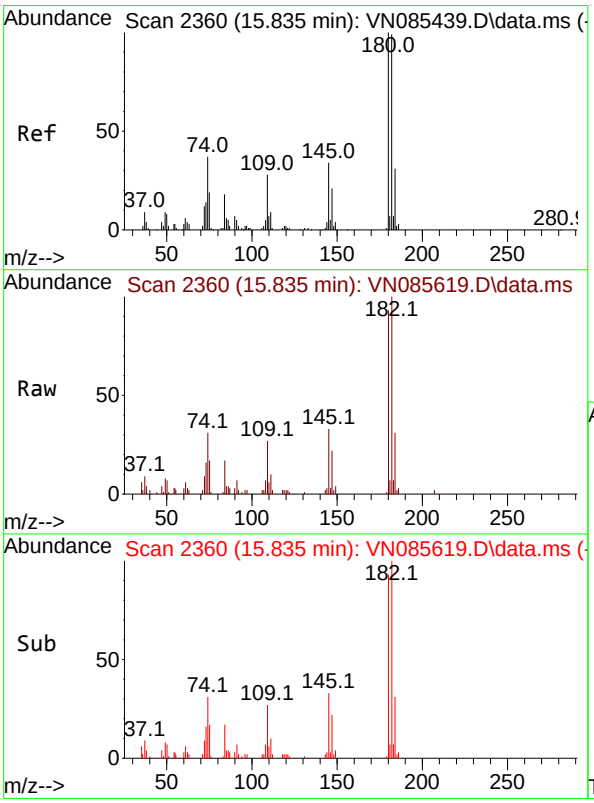
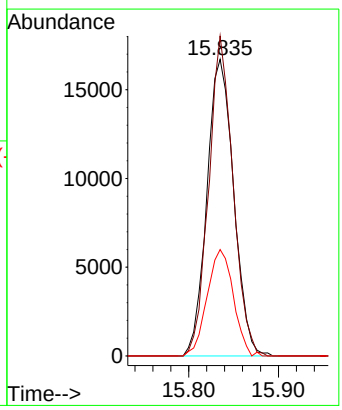


#96
1,2,3-Trichlorobenzene
Concen: 16.124 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085619.D
Acq: 03 Feb 2025 13:58

Tgt Ion:180 Resp: 34678

Ion	Ratio	Lower	Upper
180	100		
182	97.8	47.4	142.2
145	35.0	16.9	50.7



Raw Data: **VN085651.D**

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0204WBS02	SDG No.:	Q1241
Lab Sample ID:	VN0204WBS02	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085651.D	1		02/04/25 14:51	VN020425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	25.2		0.34	1.00	ug/L
75-35-4	1,1-Dichloroethene	21.6		0.26	1.00	ug/L
78-93-3	2-Butanone	99.4		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.1		0.25	1.00	ug/L
67-66-3	Chloroform	20.1		0.26	1.00	ug/L
71-43-2	Benzene	20.6		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.2		0.24	1.00	ug/L
79-01-6	Trichloroethene	19.8		0.32	1.00	ug/L
127-18-4	Tetrachloroethene	21.2		0.25	1.00	ug/L
108-90-7	Chlorobenzene	20.7		0.13	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	45.2		74 - 125	90%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		75 - 124	97%	SPK: 50
2037-26-5	Toluene-d8	49.8		86 - 113	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		77 - 121	96%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	206000	8.224			
540-36-3	1,4-Difluorobenzene	367000	9.1			
3114-55-4	Chlorobenzene-d5	318000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	150000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 01:04:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations APPROVED

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	206401	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	367320	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	317764	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	150317	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	150502	45.172	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 90.340%			
35) Dibromofluoromethane	8.165	113	124212	48.743	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.480%			
50) Toluene-d8	10.565	98	450633	49.771	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 99.540%			
62) 4-Bromofluorobenzene	12.847	95	148181	47.844	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 95.680%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	65996	23.616	ug/l	99
3) Chloromethane	2.359	50	62270	20.580	ug/l	97
4) Vinyl Chloride	2.512	62	76709	25.222	ug/l	98
5) Bromomethane	2.954	94	45534	24.786	ug/l	97
6) Chloroethane	3.118	64	47623	24.698	ug/l	92
7) Trichlorofluoromethane	3.495	101	90803	20.577	ug/l	99
8) Diethyl Ether	3.965	74	28815	18.901	ug/l	91
9) 1,1,2-Trichlorotrifluo...	4.371	101	53527	21.535	ug/l	98
10) Methyl Iodide	4.589	142	63259	22.224	ug/l	97
11) Tert butyl alcohol	5.524	59	41188	107.962	ug/l	98
12) 1,1-Dichloroethene	4.342	96	47753	21.557	ug/l	93
13) Acrolein	4.183	56	31533	60.548	ug/l	99
14) Allyl chloride	5.024	41	59657m	16.597	ug/l	
15) Acrylonitrile	5.718	53	123860	102.213	ug/l	99
16) Acetone	4.424	43	100115	92.999	ug/l	97
17) Carbon Disulfide	4.712	76	147410	21.613	ug/l	96
18) Methyl Acetate	5.030	43	62179	18.995	ug/l	94
19) Methyl tert-butyl Ether	5.795	73	145880	20.281	ug/l	96
20) Methylene Chloride	5.277	84	56823	21.322	ug/l	91
21) trans-1,2-Dichloroethene	5.789	96	51109	21.589	ug/l	89
22) Diisopropyl ether	6.671	45	148162	18.571	ug/l	95
23) Vinyl Acetate	6.606	43	533384	95.530	ug/l	96
24) 1,1-Dichloroethane	6.565	63	96240	19.783	ug/l	95
25) 2-Butanone	7.483	43	157483	99.409	ug/l #	87
26) 2,2-Dichloropropane	7.489	77	85009	21.614	ug/l	96
27) cis-1,2-Dichloroethene	7.483	96	58653	21.035	ug/l	93
28) Bromochloromethane	7.812	49	33036	14.596	ug/l	86
29) Tetrahydrofuran	7.836	42	102635	102.187	ug/l	90
30) Chloroform	7.965	83	101271	20.142	ug/l	99
31) Cyclohexane	8.259	56	78673	18.606	ug/l	90
32) 1,1,1-Trichloroethane	8.165	97	88190	19.996	ug/l	96
36) 1,1-Dichloropropene	8.371	75	70286	19.652	ug/l	99
37) Ethyl Acetate	7.559	43	65973	18.275	ug/l	98
38) Carbon Tetrachloride	8.365	117	78107	19.076	ug/l	96
39) Methylcyclohexane	9.600	83	67494	20.082	ug/l	94
40) Benzene	8.606	78	221792	20.639	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 01:04:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations APPROVED

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	34320	18.274	ug/l		92
42) 1,2-Dichloroethane	8.671	62	73577	18.179	ug/l		97
43) Isopropyl Acetate	8.688	43	115982m	20.051	ug/l		
44) Trichloroethene	9.353	130	49633	19.842	ug/l		97
45) 1,2-Dichloropropane	9.618	63	53997	19.672	ug/l		97
46) Dibromomethane	9.706	93	39110	19.747	ug/l		98
47) Bromodichloromethane	9.888	83	77727	19.263	ug/l		96
48) Methyl methacrylate	9.677	41	47105	18.096	ug/l		89
49) 1,4-Dioxane	9.694	88	19272	439.639	ug/l		94
51) 4-Methyl-2-Pentanone	10.441	43	328830	97.965	ug/l		94
52) Toluene	10.630	92	135369	21.741	ug/l		100
53) t-1,3-Dichloropropene	10.835	75	74675	19.583	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	83030	20.385	ug/l	#	87
55) 1,1,2-Trichloroethane	11.018	97	51534	20.914	ug/l		99
56) Ethyl methacrylate	10.871	69	70589	18.280	ug/l		94
57) 1,3-Dichloropropane	11.159	76	86420	20.170	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.159	63	106039	67.812	ug/l		97
59) 2-Hexanone	11.194	43	238617	101.031	ug/l		93
60) Dibromochloromethane	11.359	129	59256	19.918	ug/l		99
61) 1,2-Dibromoethane	11.465	107	50776	20.701	ug/l		99
64) Tetrachloroethene	11.100	164	45898	21.187	ug/l		97
65) Chlorobenzene	11.888	112	143836	20.663	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.959	131	51716	20.242	ug/l		100
67) Ethyl Benzene	11.965	91	233116	20.561	ug/l		98
68) m/p-Xylenes	12.071	106	181911	43.412	ug/l		98
69) o-Xylene	12.400	106	84365	21.067	ug/l		97
70) Styrene	12.412	104	145039	21.885	ug/l		97
71) Bromoform	12.576	173	38717	21.179	ug/l	#	99
73) Isopropylbenzene	12.694	105	210944	20.793	ug/l		98
74) N-amyl acetate	12.494	43	84808	18.598	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.935	83	75120	20.962	ug/l		100
76) 1,2,3-Trichloropropane	12.988	75	62358m	20.410	ug/l		
77) Bromobenzene	12.976	156	54340	20.501	ug/l		95
78) n-propylbenzene	13.035	91	250899	20.891	ug/l		99
79) 2-Chlorotoluene	13.124	91	158204	20.353	ug/l		98
80) 1,3,5-Trimethylbenzene	13.171	105	178682	21.323	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	24629	21.810	ug/l		90
82) 4-Chlorotoluene	13.218	91	157925	20.405	ug/l		98
83) tert-Butylbenzene	13.435	119	140205	19.923	ug/l		97
84) 1,2,4-Trimethylbenzene	13.482	105	178481	21.370	ug/l		97
85) sec-Butylbenzene	13.612	105	202909	20.804	ug/l		100
86) p-Isopropyltoluene	13.729	119	167070	20.523	ug/l		98
87) 1,3-Dichlorobenzene	13.729	146	97119	19.896	ug/l		99
88) 1,4-Dichlorobenzene	13.812	146	98065	19.382	ug/l		99
89) n-Butylbenzene	14.053	91	130043	18.585	ug/l		98
90) Hexachloroethane	14.329	117	35354	19.041	ug/l		96
91) 1,2-Dichlorobenzene	14.106	146	95513	19.617	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	13567	20.732	ug/l		94
93) 1,2,4-Trichlorobenzene	15.388	180	39645	17.519	ug/l		96
94) Hexachlorobutadiene	15.500	225	20609	17.154	ug/l		98
95) Naphthalene	15.641	128	123413	18.276	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	41163	17.977	ug/l		99

Sample Results: **VN085651.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 05 01:04:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations APPROVED

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020425\
Data File : VN085651.D
Acq On : 04 Feb 2025 14:51
Operator : JC\MD
Sample : VN0204WBS02
Misc : 5.0mL/MSVOA_N/WATER
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Quant Time: Feb 05 01:04:28 2025
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Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations APPROVED

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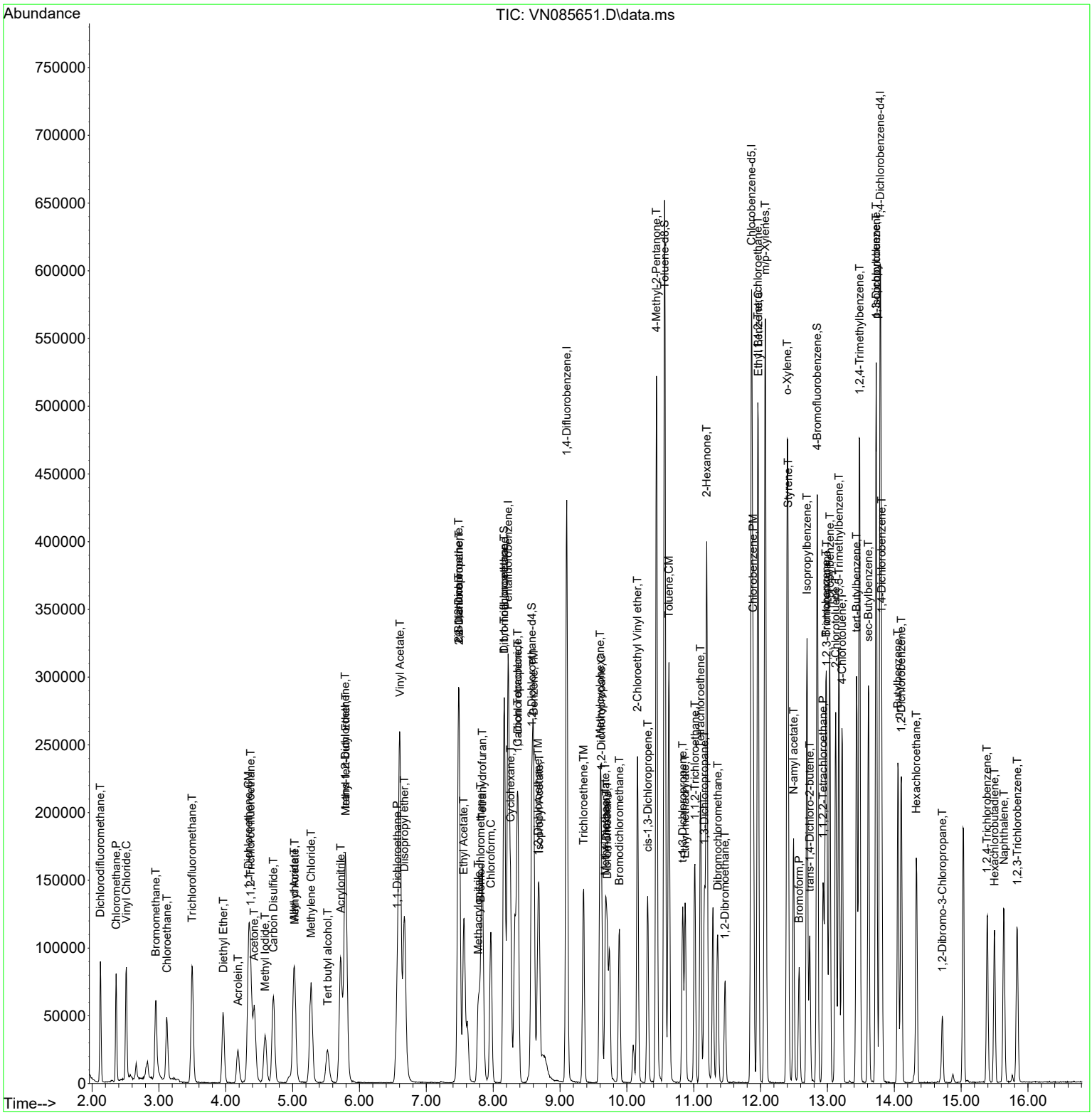
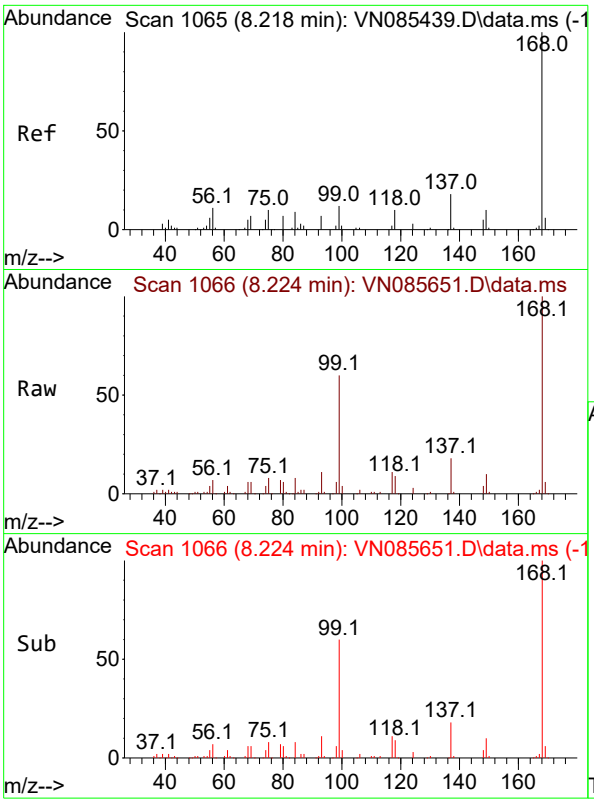
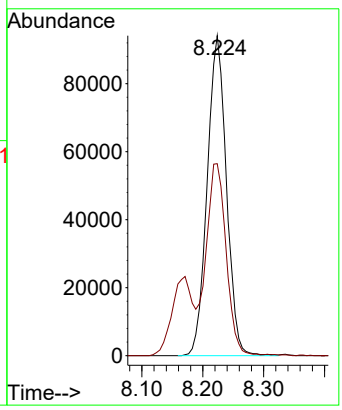




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:168 Resp: 20640

Ion	Ratio	Lower	Upper
168	100		
99	59.8	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/05/2025
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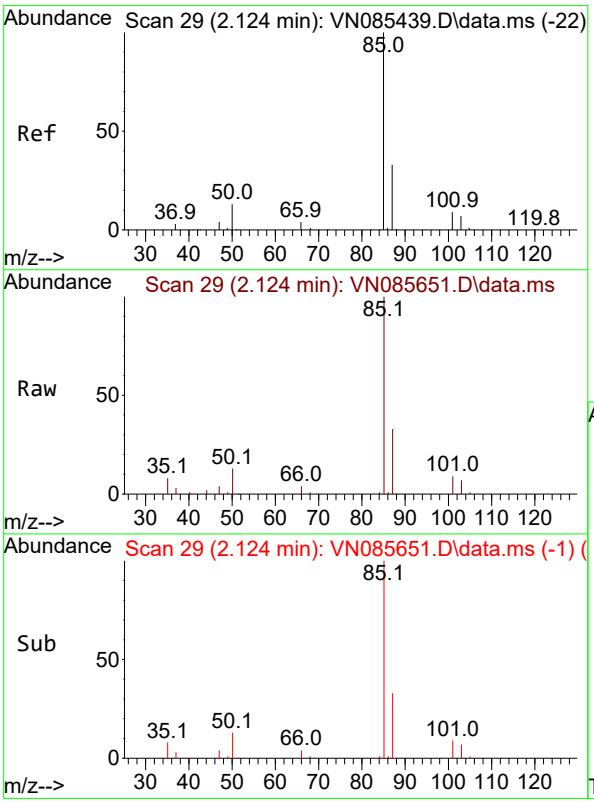
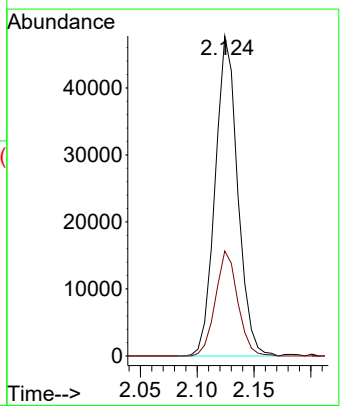
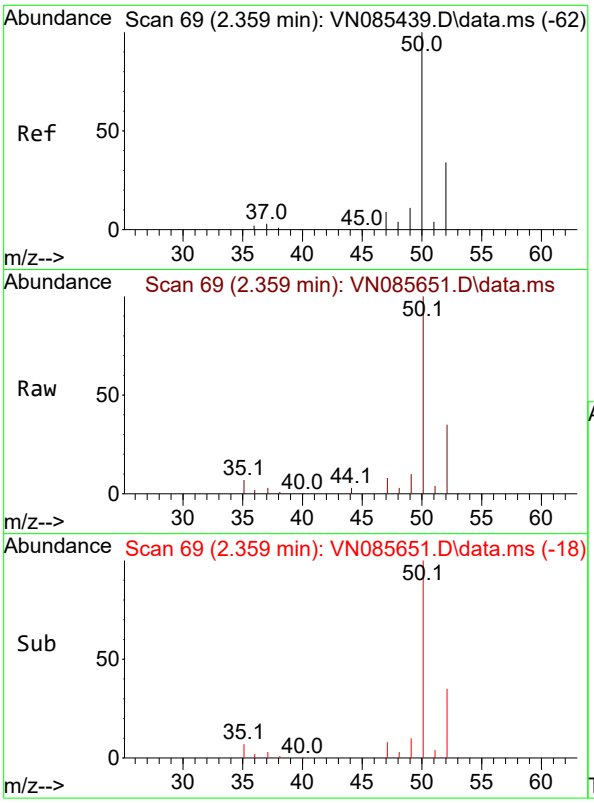


#2
Dichlorodifluoromethane
Concen: 23.616 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 85 Resp: 65996

Ion	Ratio	Lower	Upper
85	100		
87	32.8	16.7	50.1

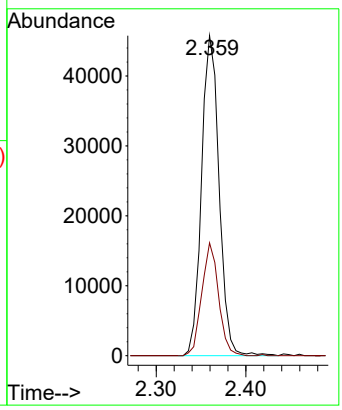




#3
Chloromethane
Concen: 20.580 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 50 Resp: 6227

Ion	Ratio	Lower	Upper
50	100		
52	35.3	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

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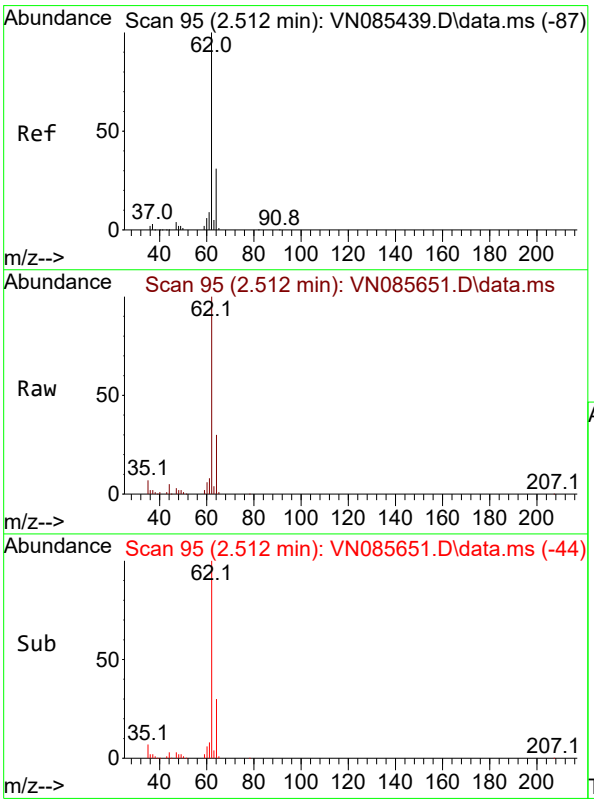
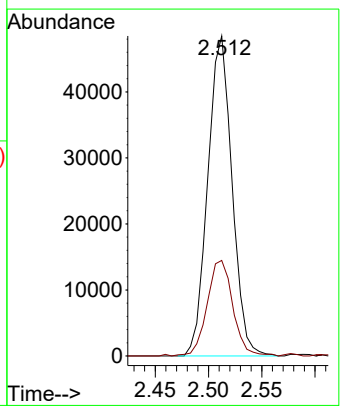
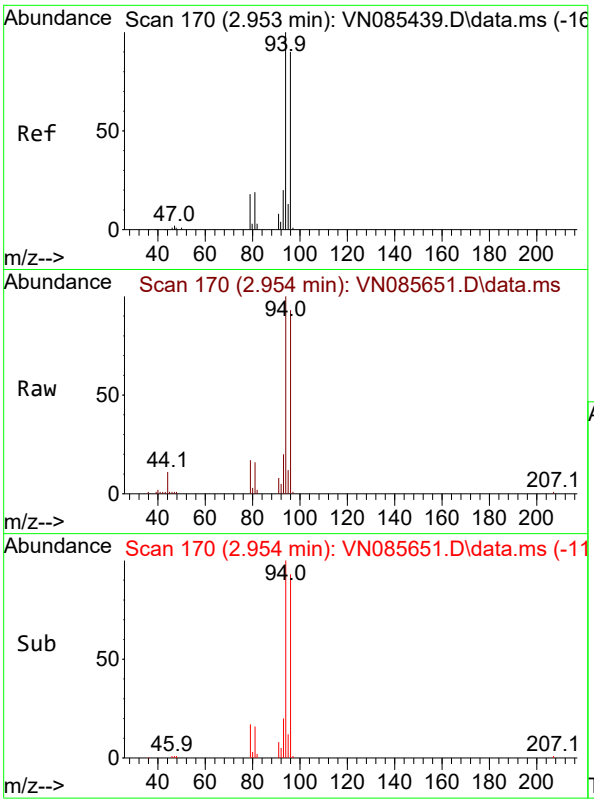


#4
Vinyl Chloride
Concen: 25.222 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 62 Resp: 76709

Ion	Ratio	Lower	Upper
62	100		
64	29.8	24.8	37.2

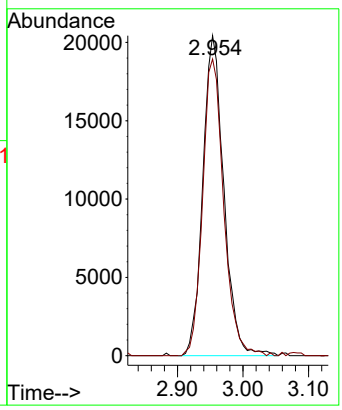




#5
Bromomethane
Concen: 24.786 ug/l
RT: 2.954 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 94 Resp: 4553

Ion	Ratio	Lower	Upper
94	100		
96	92.7	71.8	107.6



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

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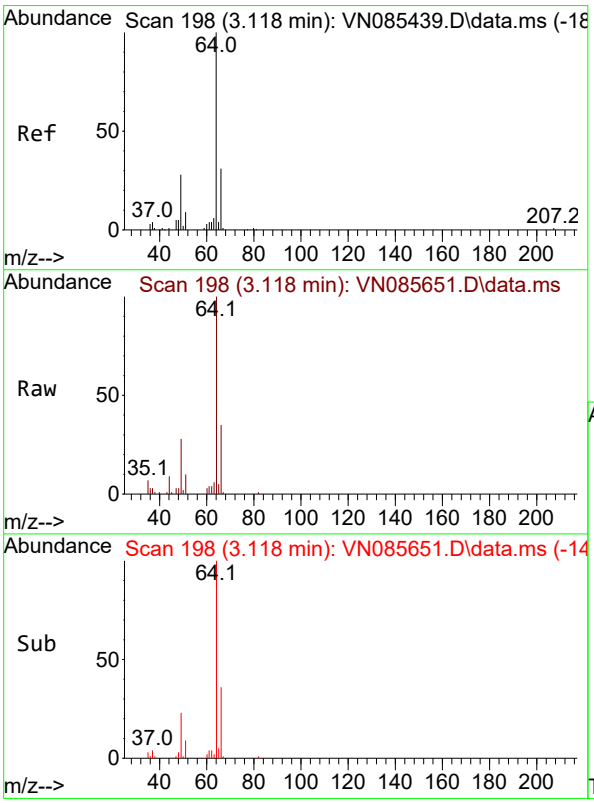
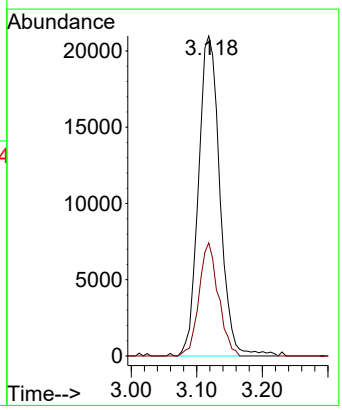
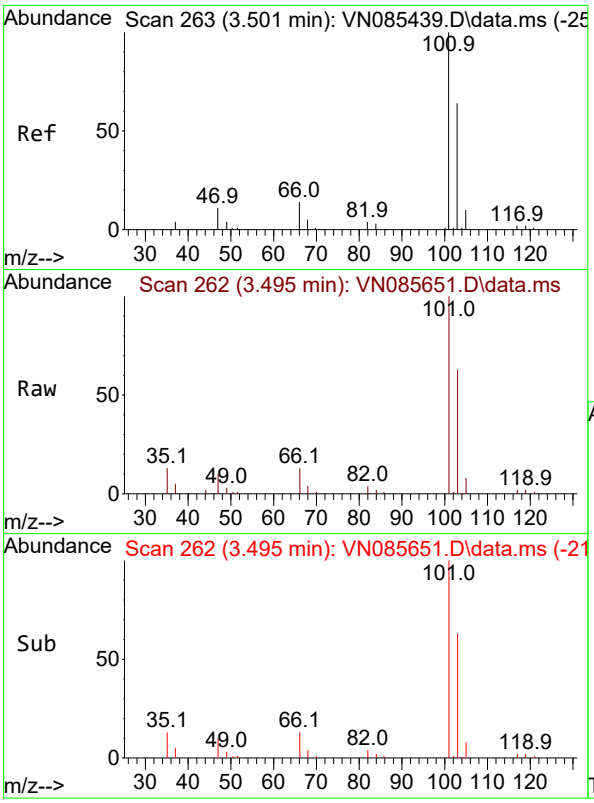


#6
Chloroethane
Concen: 24.698 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 64 Resp: 47623

Ion	Ratio	Lower	Upper
64	100		
66	35.3	24.6	36.8





#7
Trichlorofluoromethane
Concen: 20.577 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

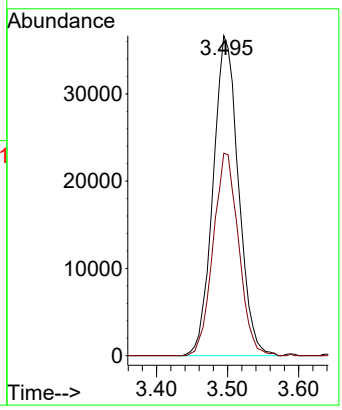
Tgt Ion:101 Resp: 9080

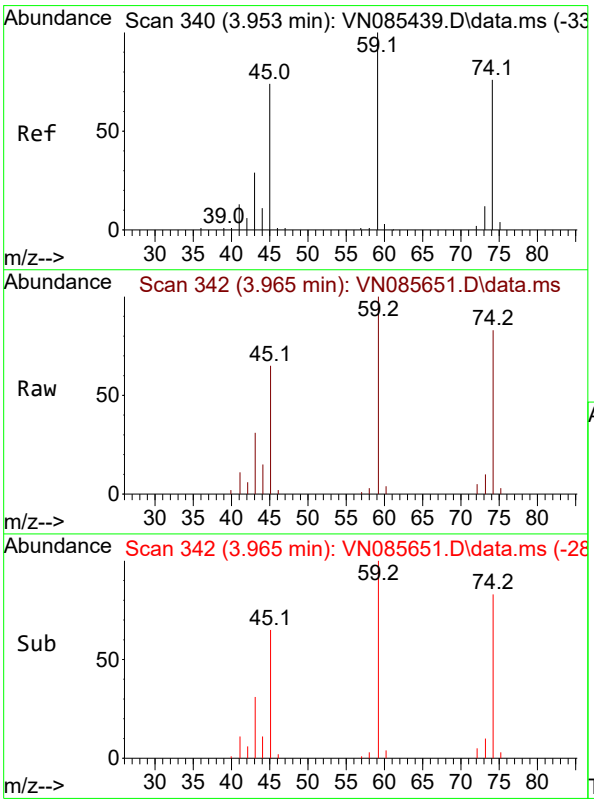
Ion	Ratio	Lower	Upper
101	100		
103	63.2	51.4	77.2

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

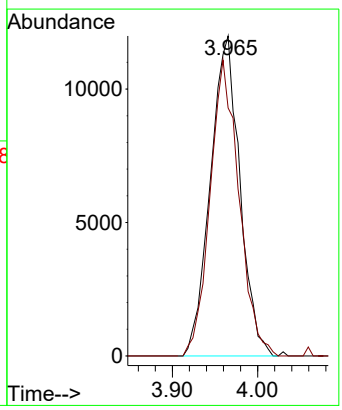


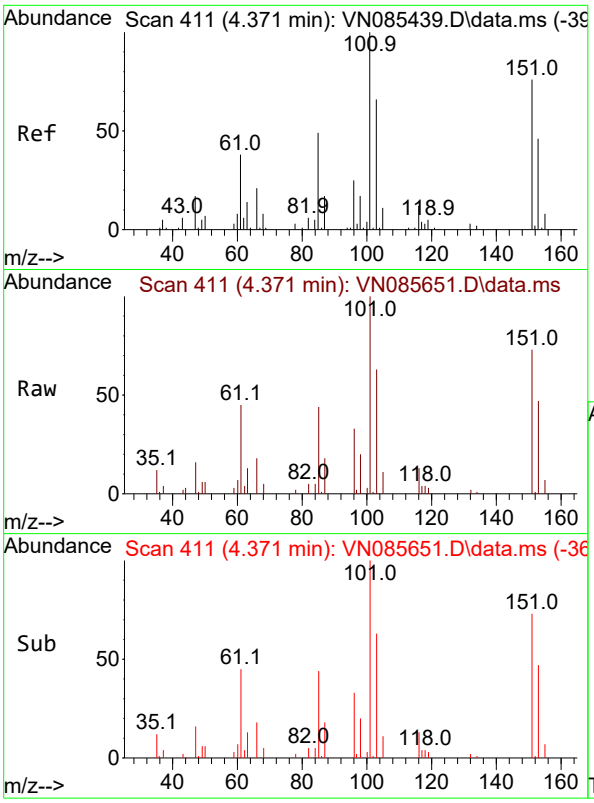


#8
Diethyl Ether
Concen: 18.901 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 74 Resp: 28815

Ion	Ratio	Lower	Upper
74	100		
45	90.7	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 21.535 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Tgt Ion:101 Resp: 5352

Ion	Ratio	Lower	Upper
101	100		
85	44.9	37.8	56.8
151	73.3	58.8	88.2

Manual Integrations
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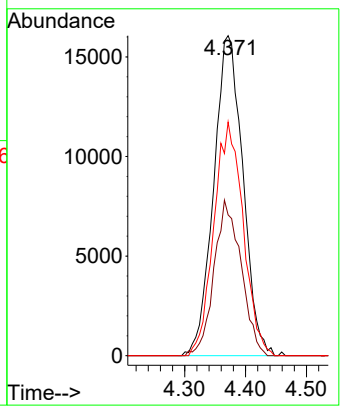
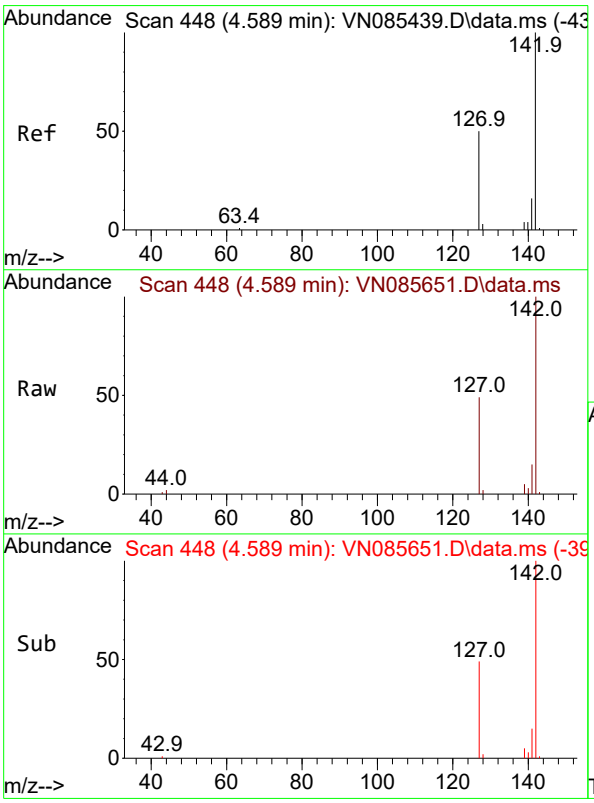
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

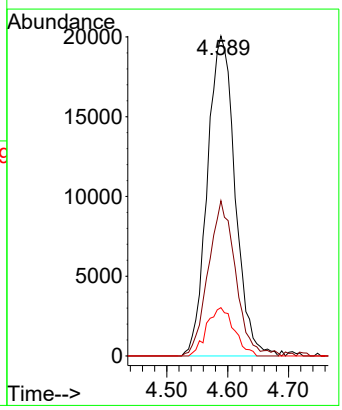


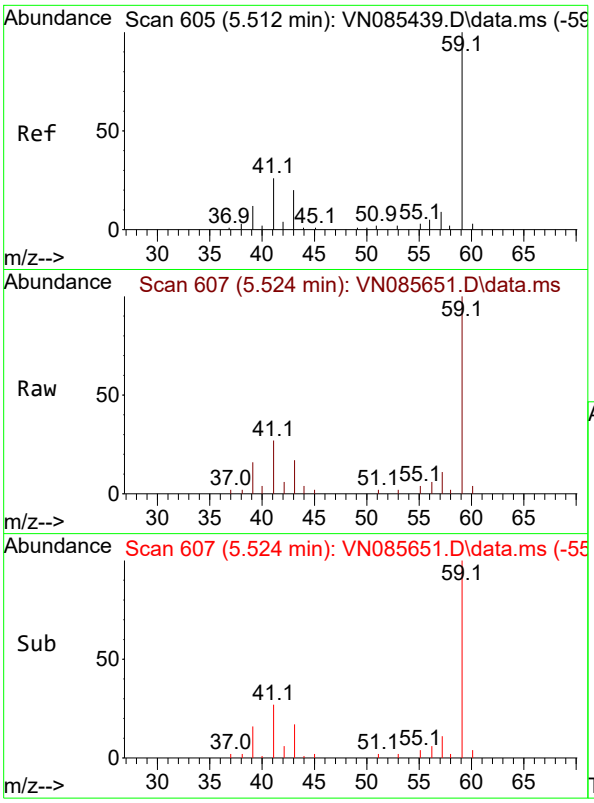


#10
Methyl Iodide
Concen: 22.224 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:142 Resp: 63259

Ion	Ratio	Lower	Upper
142	100		
127	48.5	40.3	60.5
141	15.1	12.8	19.2

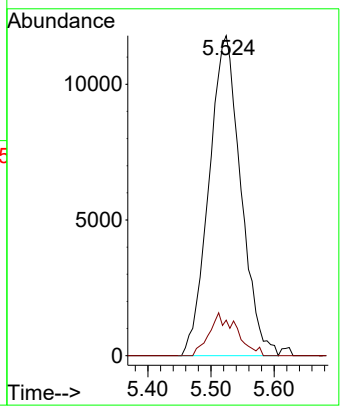




#11
Tert butyl alcohol
Concen: 107.962 ug/l
RT: 5.524 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 59 Resp: 4118

Ion	Ratio	Lower	Upper
59	100		
57	11.6	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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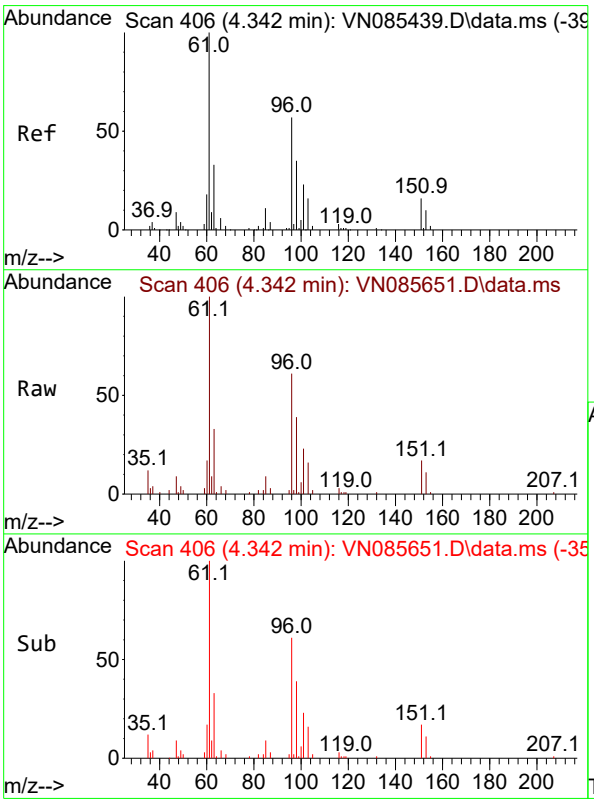
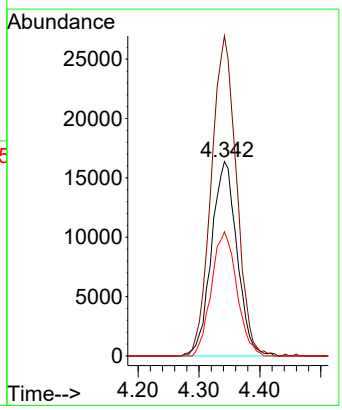
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

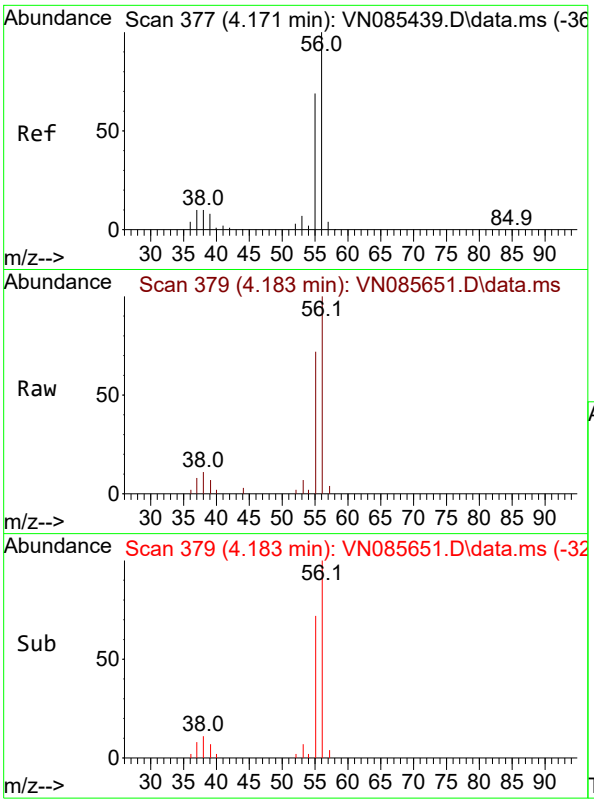


#12
1,1-Dichloroethene
Concen: 21.557 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 96 Resp: 47753

Ion	Ratio	Lower	Upper
96	100		
61	164.6	141.0	211.4
98	63.8	49.0	73.6

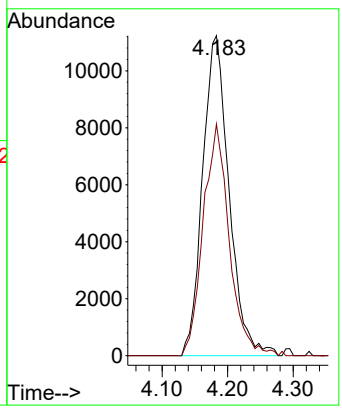




#13
Acrolein
Concen: 60.548 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 56 Resp: 3153

Ion	Ratio	Lower	Upper
56	100		
55	71.3	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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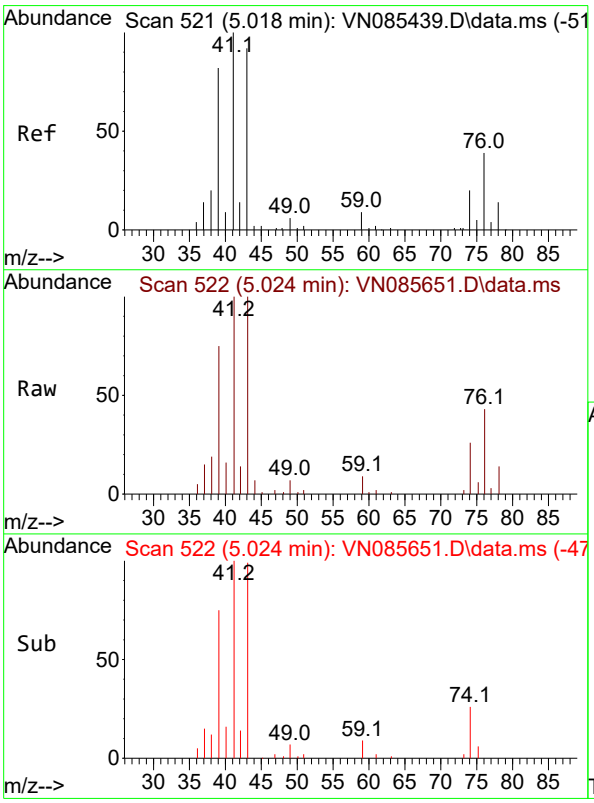
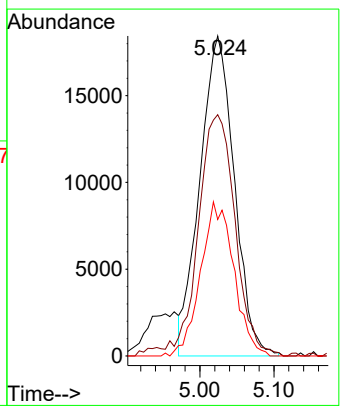
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

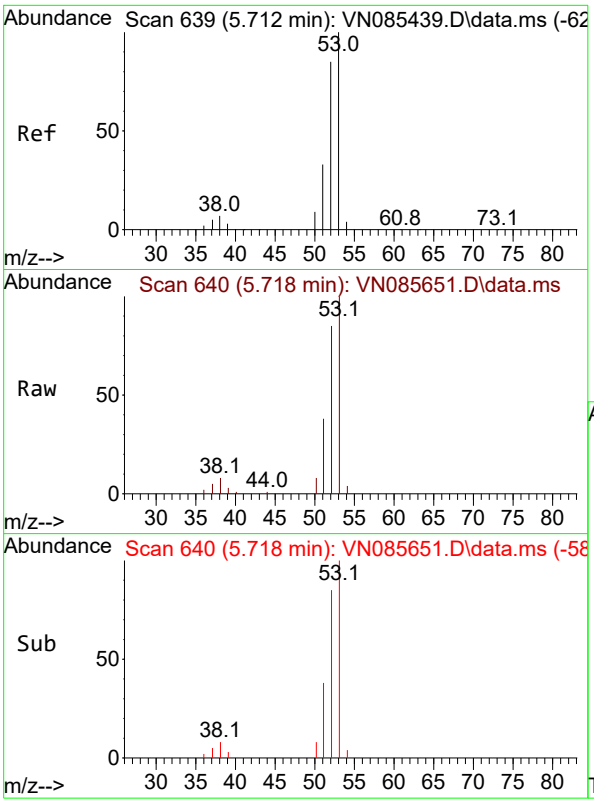


#14
Allyl chloride
Concen: 16.597 ug/l m
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 41 Resp: 59657

Ion	Ratio	Lower	Upper
41	100		
39	81.4	64.4	96.6
76	46.5	30.5	45.7#

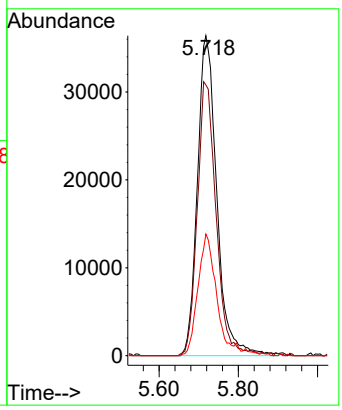




#15
Acrylonitrile
Concen: 102.213 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 53 Resp: 12386

Ion	Ratio	Lower	Upper
53	100		
52	82.8	65.5	98.3
51	36.5	29.8	44.8



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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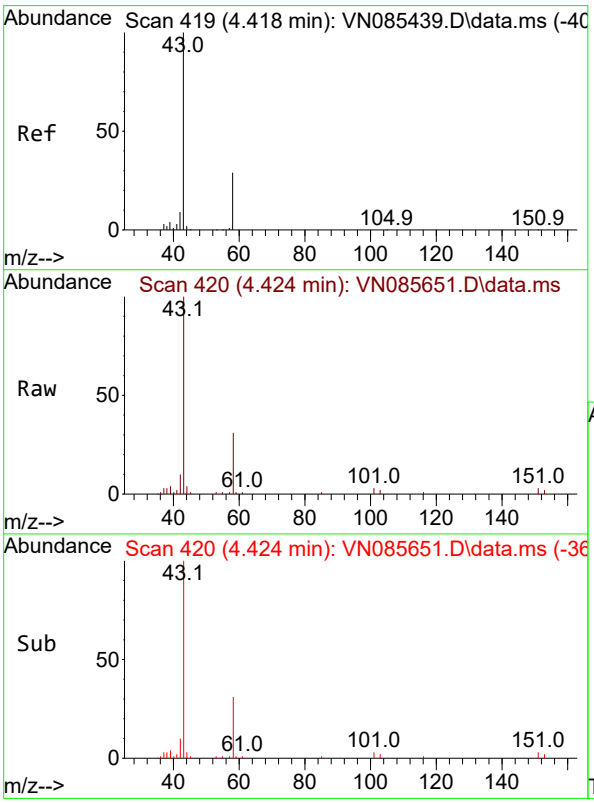
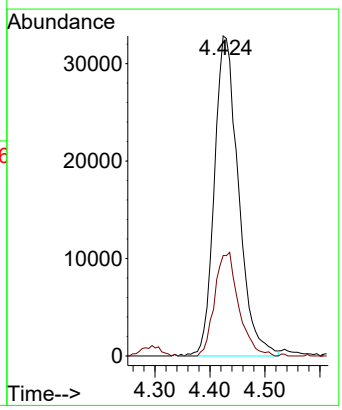
Supervised By :Mahesh Dadoda 02/06/2025

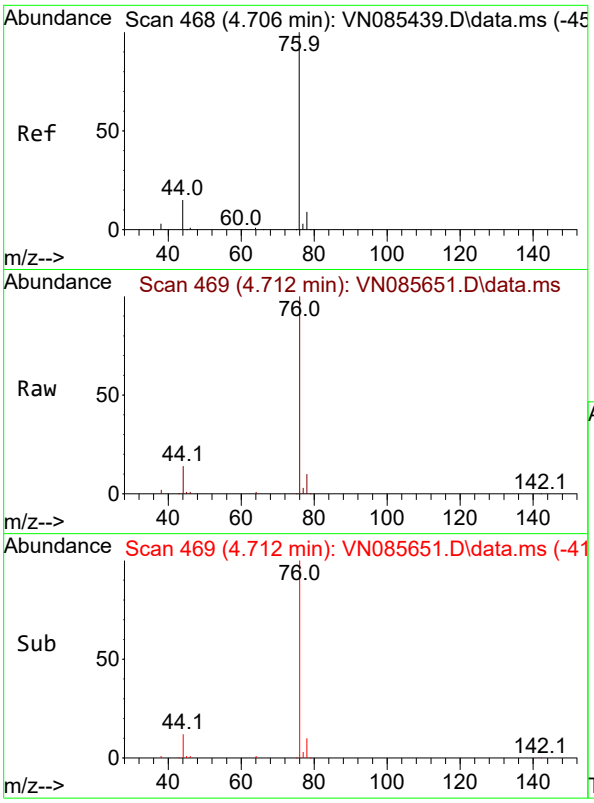


#16
Acetone
Concen: 92.999 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 100115

Ion	Ratio	Lower	Upper
43	100		
58	31.4	23.8	35.6

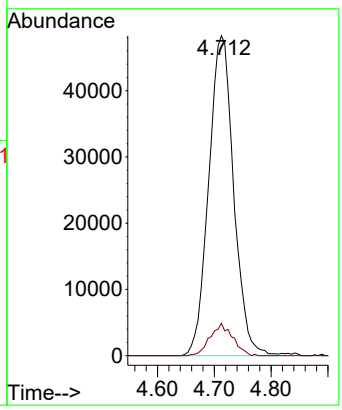




#17
Carbon Disulfide
Concen: 21.613 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 76 Resp: 14741

Ion	Ratio	Lower	Upper
76	100		
78	10.1	6.9	10.3



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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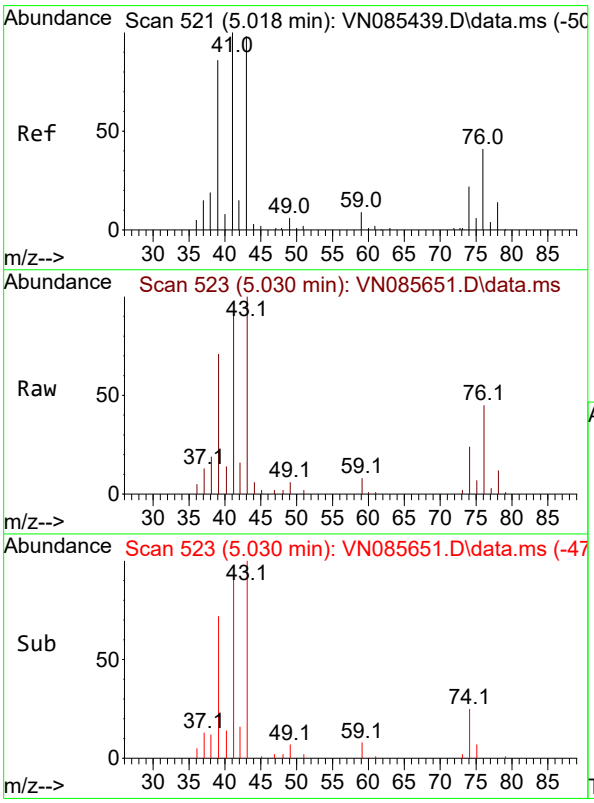
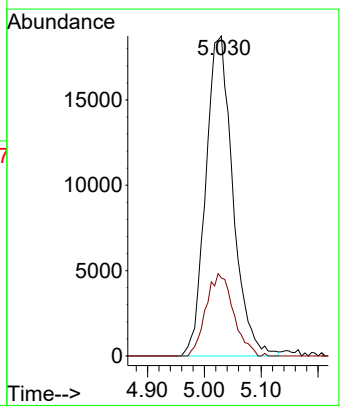
Supervised By :Mahesh Dadoda 02/06/2025

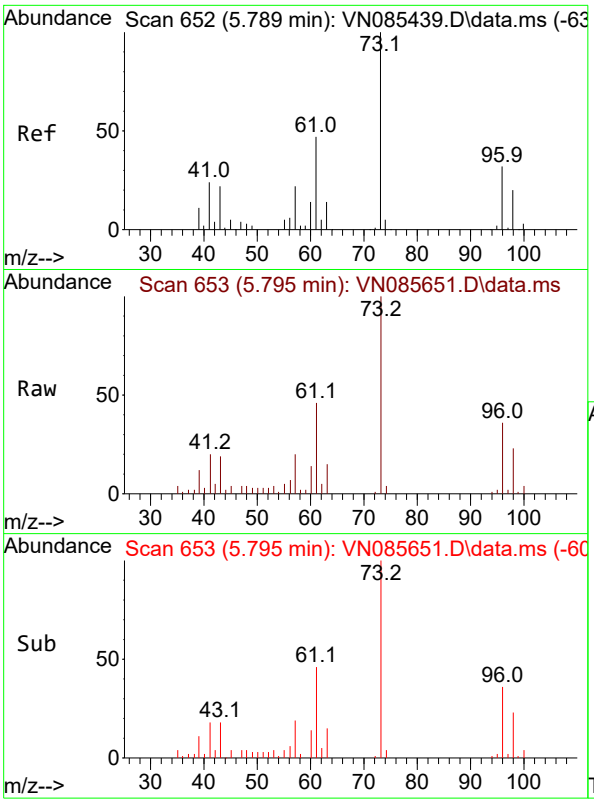


#18
Methyl Acetate
Concen: 18.995 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 62179

Ion	Ratio	Lower	Upper
43	100		
74	26.0	18.6	28.0

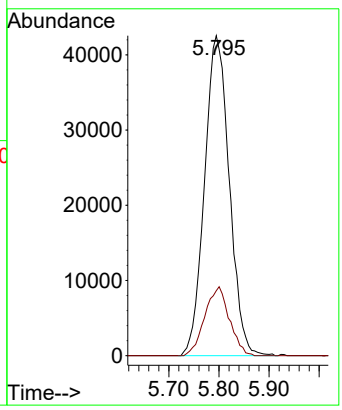




#19
Methyl tert-butyl Ether
Concen: 20.281 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 73 Resp: 14588

Ion	Ratio	Lower	Upper
73	100		
57	20.3	17.8	26.8



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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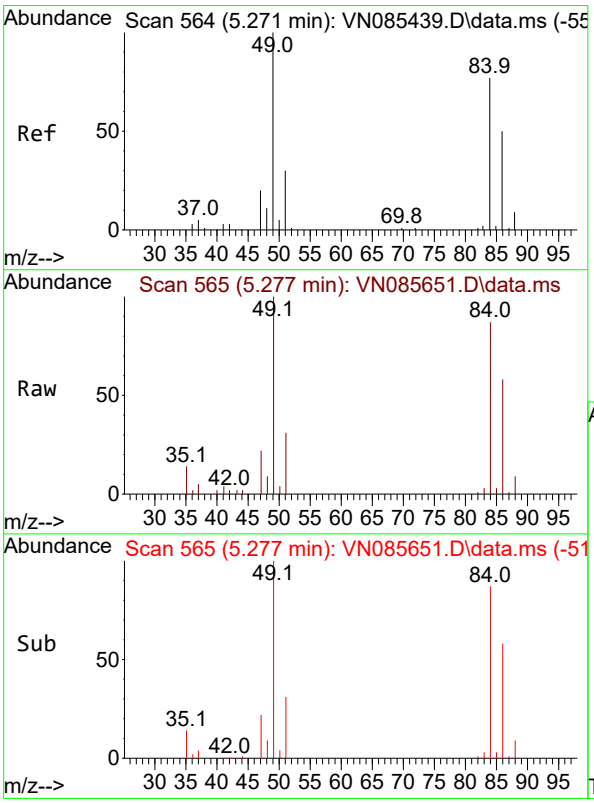
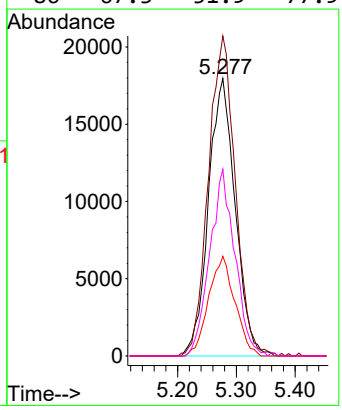
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

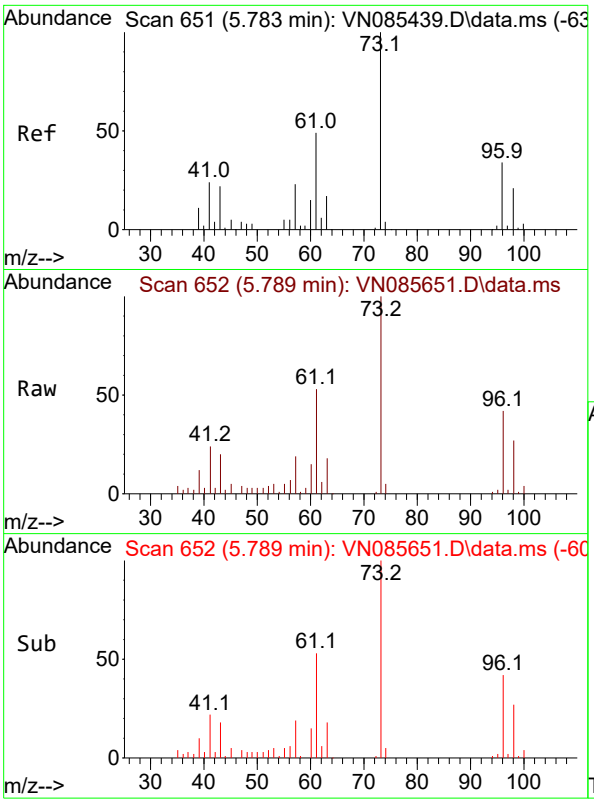


#20
Methylene Chloride
Concen: 21.322 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 84 Resp: 56823

Ion	Ratio	Lower	Upper
84	100		
49	115.3	104.1	156.1
51	36.0	31.0	46.4
86	67.3	51.9	77.9

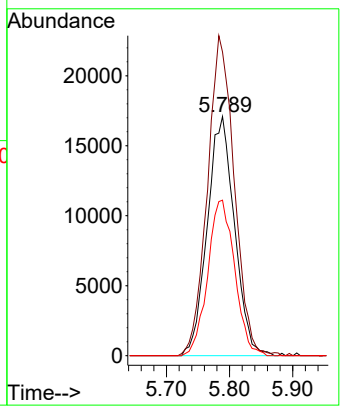




#21
trans-1,2-Dichloroethene
Concen: 21.589 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 96 Resp: 5110

Ion	Ratio	Lower	Upper
96	100		
61	126.9	115.7	173.5
98	65.0	49.8	74.8



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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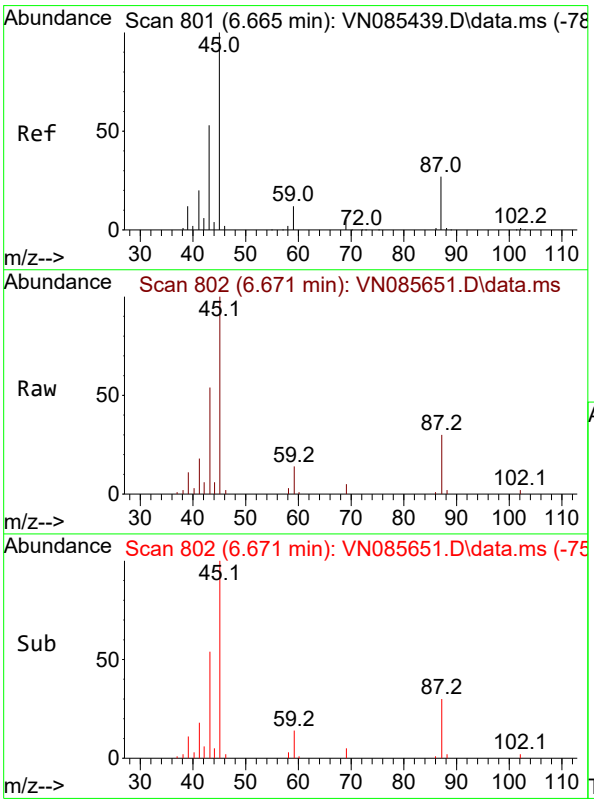
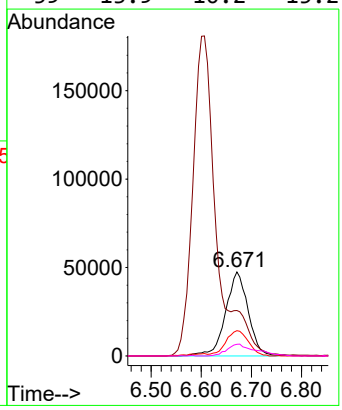
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

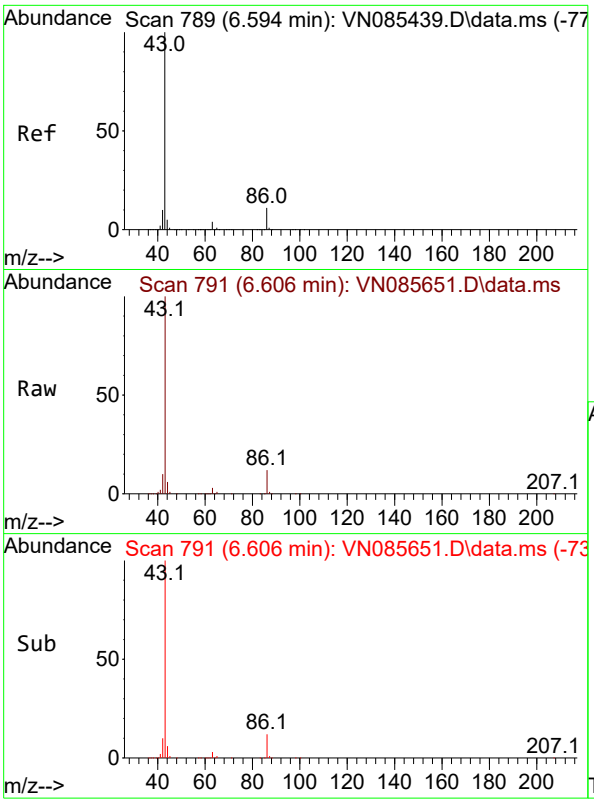


#22
Diisopropyl ether
Concen: 18.571 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 45 Resp: 148162

Ion	Ratio	Lower	Upper
45	100		
43	51.9	45.0	67.6
87	29.7	21.8	32.8
59	13.9	10.2	15.2





#23
Vinyl Acetate
Concen: 95.530 ug/l
RT: 6.606 min Scan# 7
Delta R.T. 0.012 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 53338

Ion	Ratio	Lower	Upper
43	100		
86	12.0	8.4	12.6

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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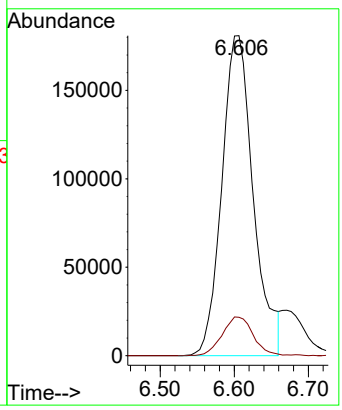
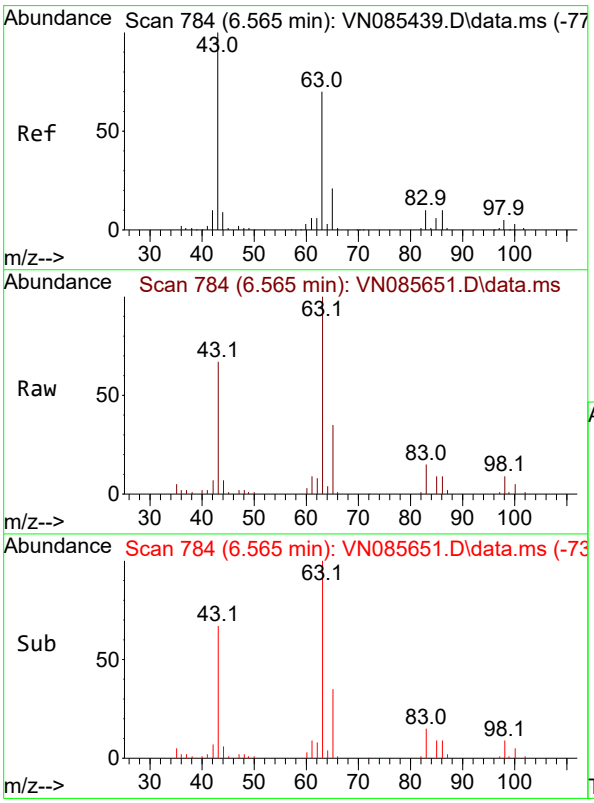
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

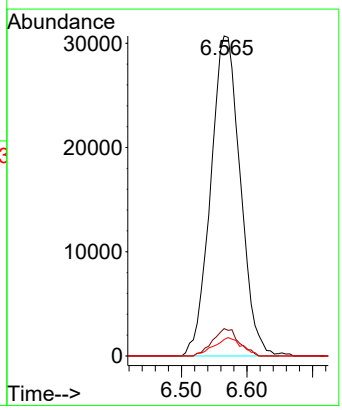


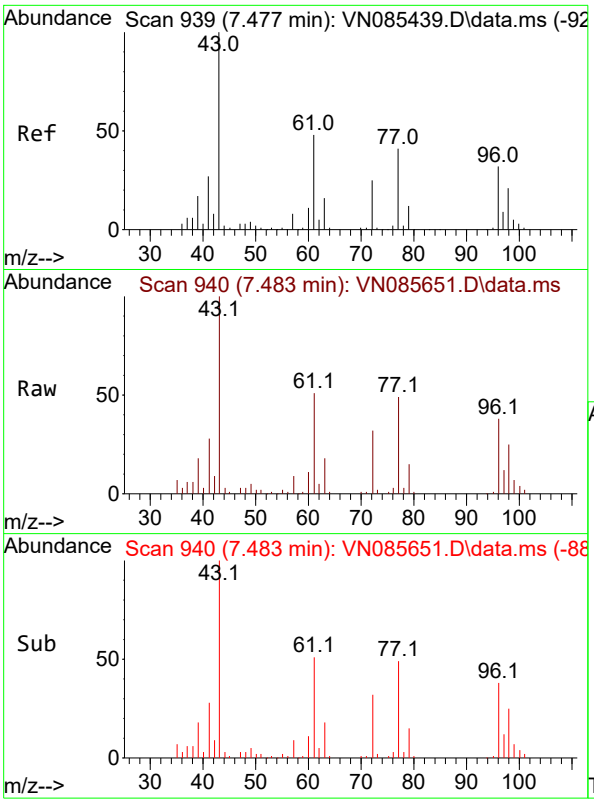


#24
1,1-Dichloroethane
Concen: 19.783 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 63 Resp: 96240

Ion	Ratio	Lower	Upper
63	100		
98	8.5	3.3	9.8
100	5.1	2.0	6.0





#25
2-Butanone
Concen: 99.409 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 15748

Ion	Ratio	Lower	Upper
43	100		
72	31.8	20.2	30.4

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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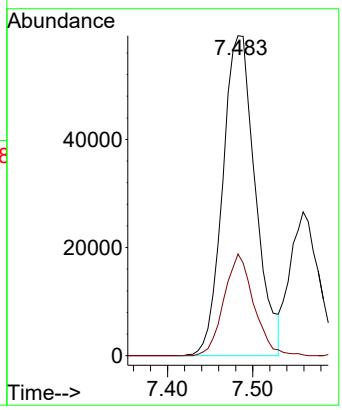
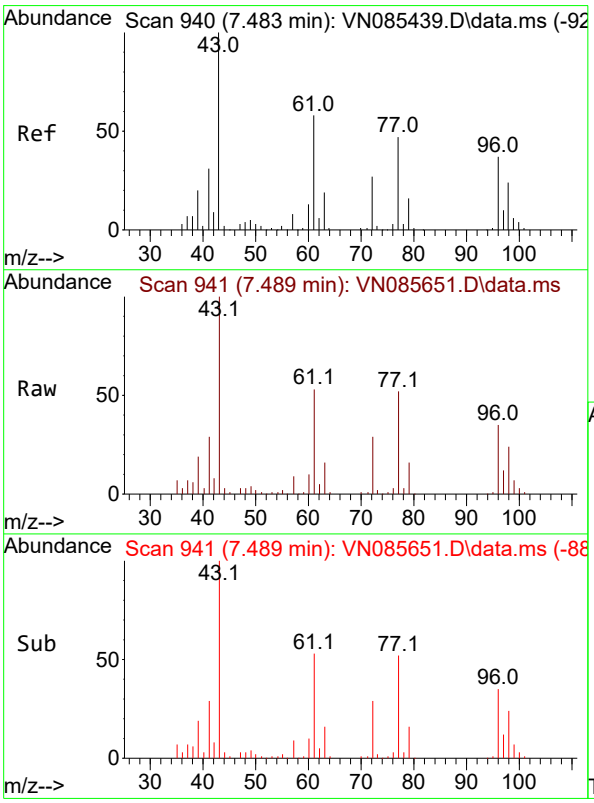
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

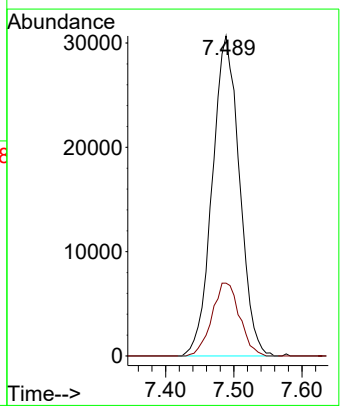


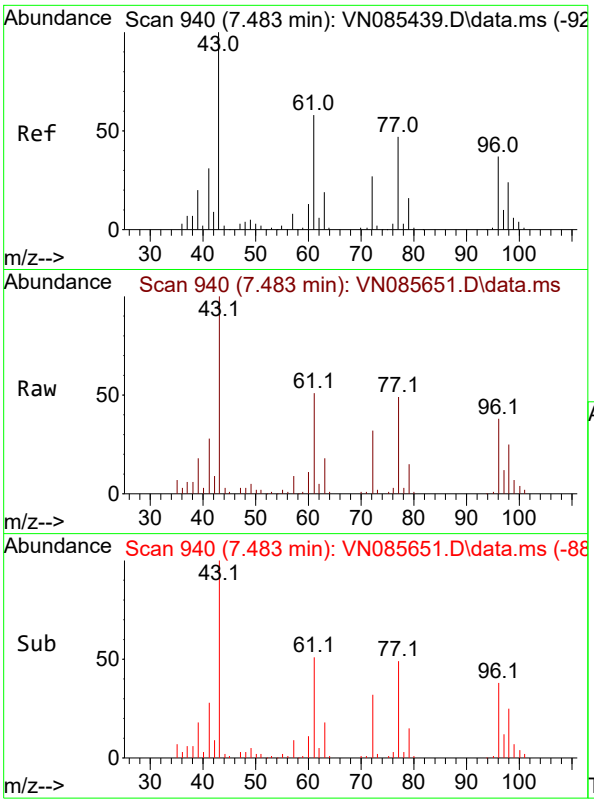


#26
2,2-Dichloropropane
Concen: 21.614 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 77 Resp: 85009

Ion	Ratio	Lower	Upper
77	100		
97	23.2	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 21.035 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 96 Resp: 5865

Ion	Ratio	Lower	Upper
96	100		
61	143.5	0.0	311.8
98	64.7	0.0	126.0

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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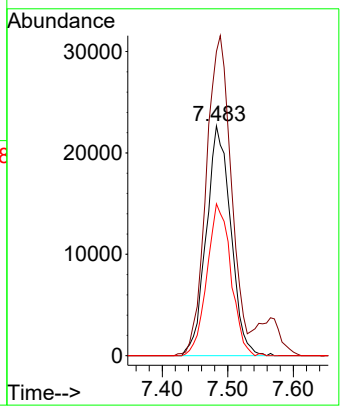
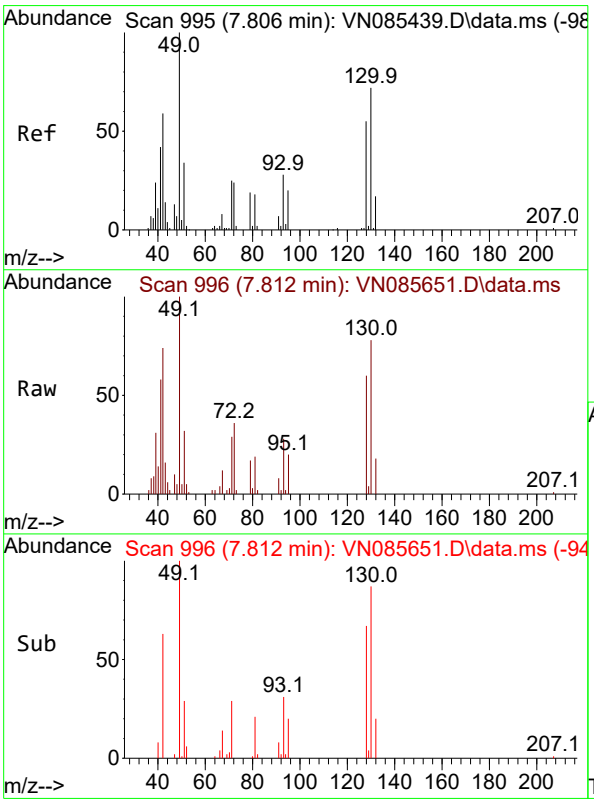
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

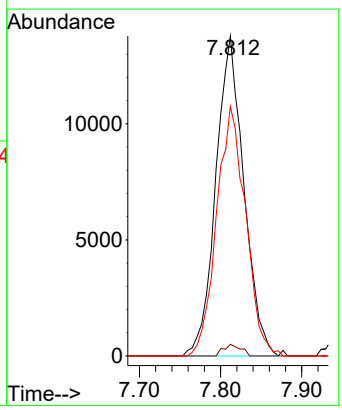


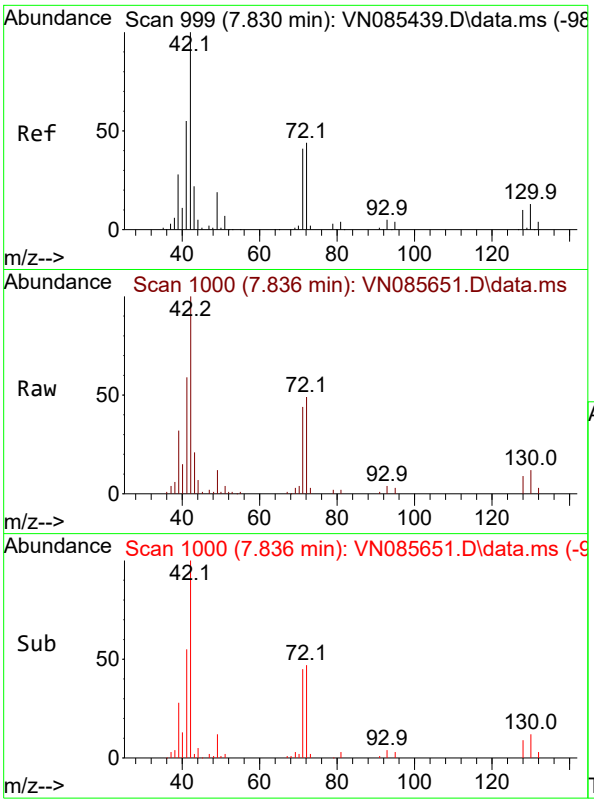


#28
Bromochloromethane
Concen: 14.596 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 49 Resp: 33036

Ion	Ratio	Lower	Upper
49	100		
129	2.2	0.0	4.4
130	80.8	55.0	82.4

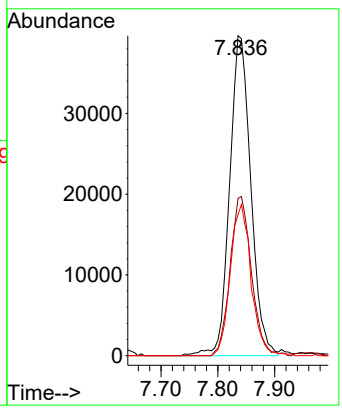




#29
Tetrahydrofuran
Concen: 102.187 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 42 Resp: 10263

Ion	Ratio	Lower	Upper
42	100		
72	50.0	34.2	51.2
71	46.2	32.5	48.7



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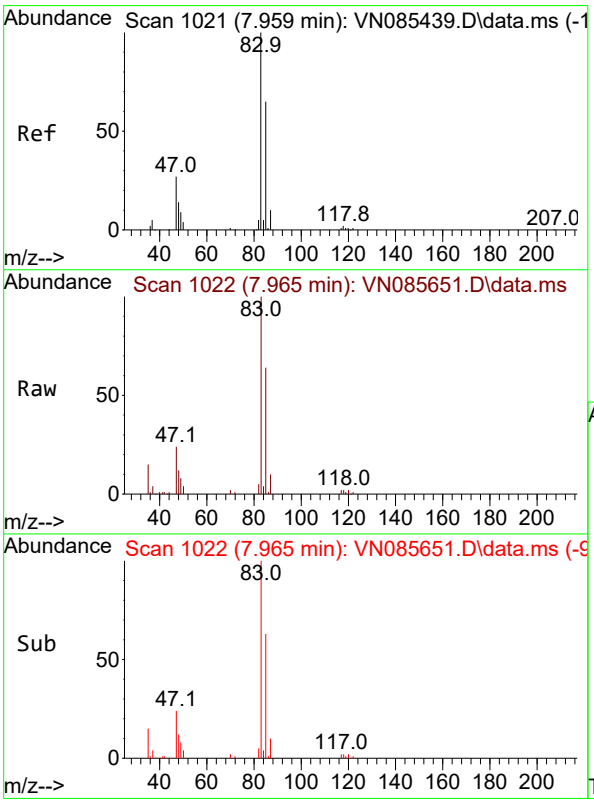
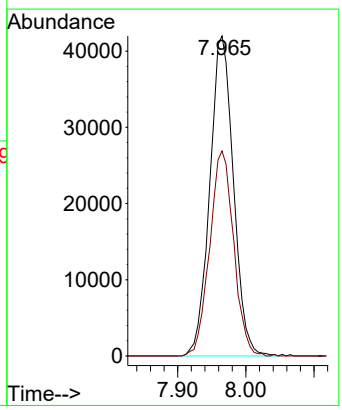
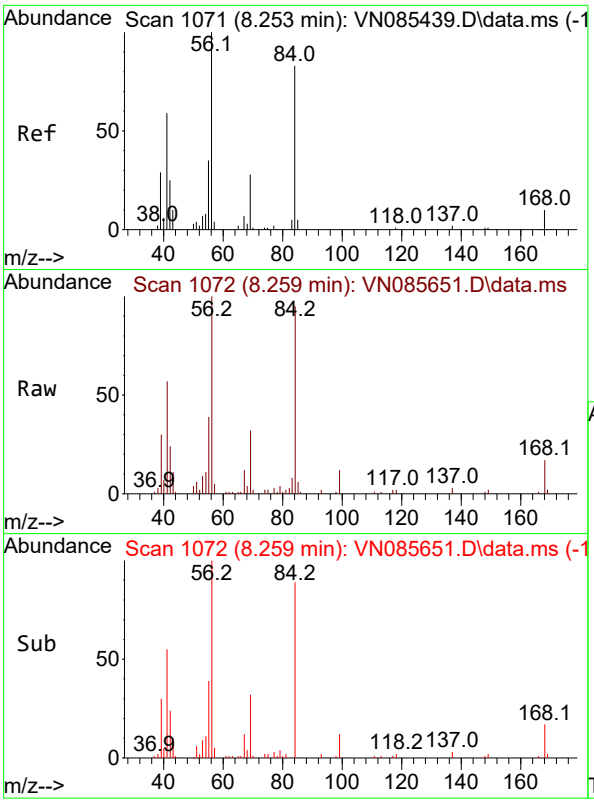


#30
Chloroform
Concen: 20.142 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 101271

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.8	77.6

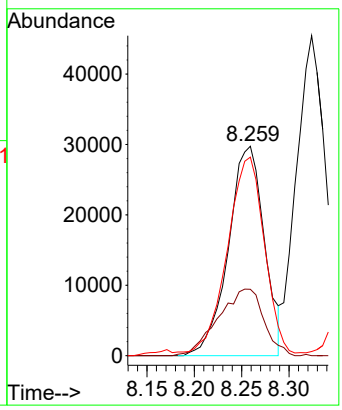




#31
Cyclohexane
Concen: 18.606 ug/l
RT: 8.259 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 56 Resp: 7867

Ion	Ratio	Lower	Upper
56	100		
69	31.0	22.2	33.4
84	93.0	66.4	99.6



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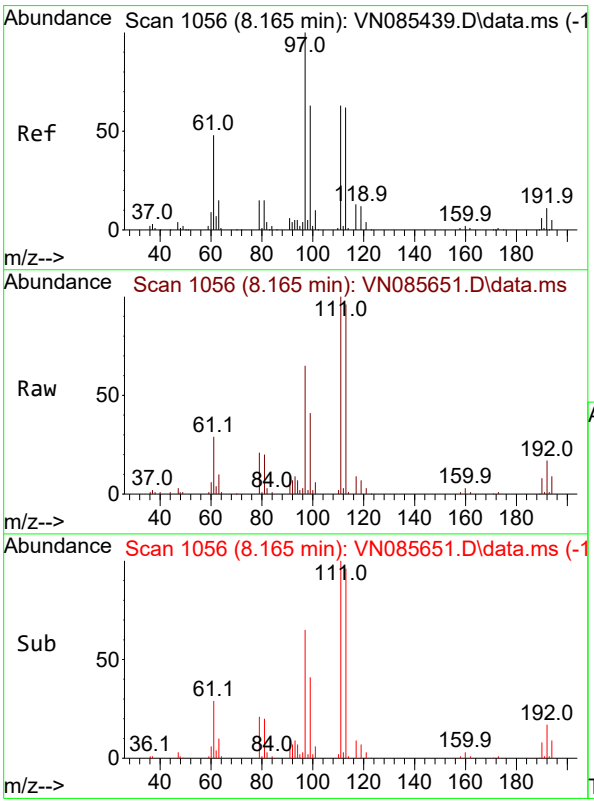
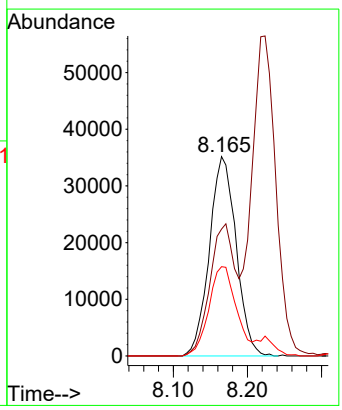
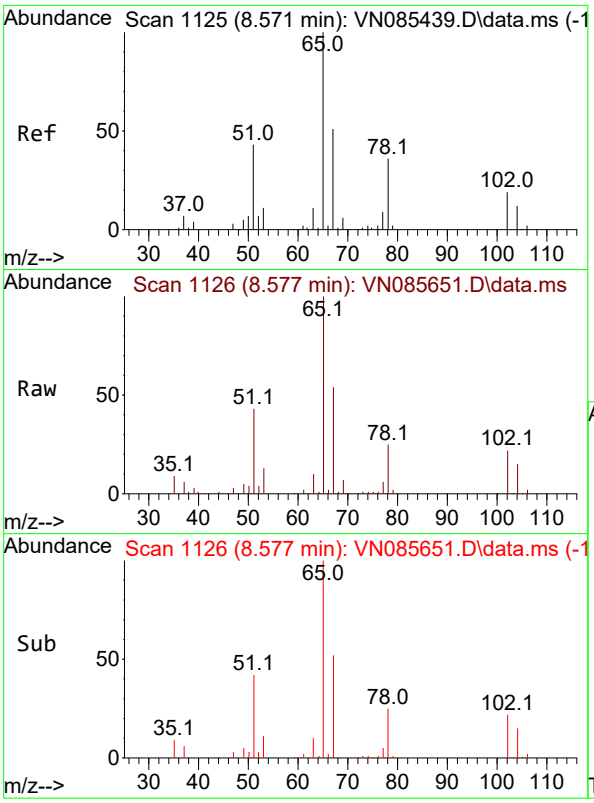


#32
1,1,1-Trichloroethane
Concen: 19.996 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 97 Resp: 88190

Ion	Ratio	Lower	Upper
97	100		
99	62.7	49.8	74.6
61	46.1	41.4	62.2

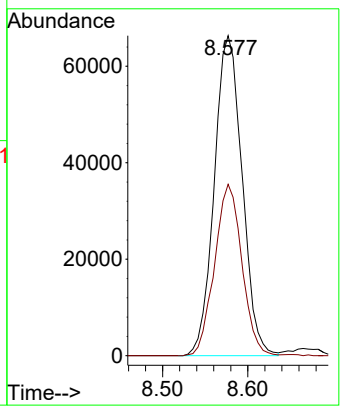




#33
1,2-Dichloroethane-d4
Concen: 45.172 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 65 Resp: 15050

Ion	Ratio	Lower	Upper
65	100		
67	52.5	0.0	101.6



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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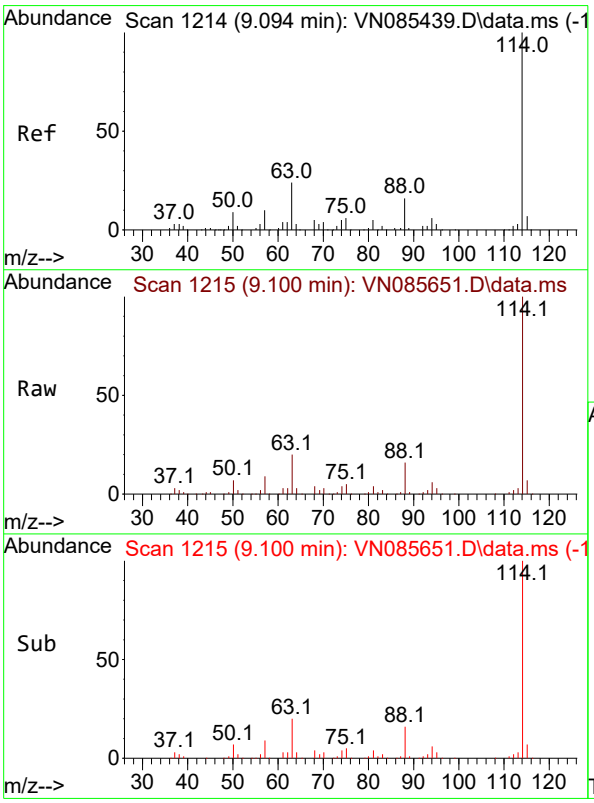
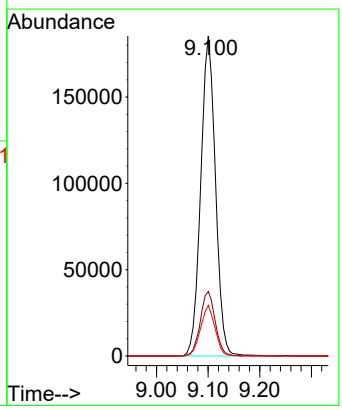
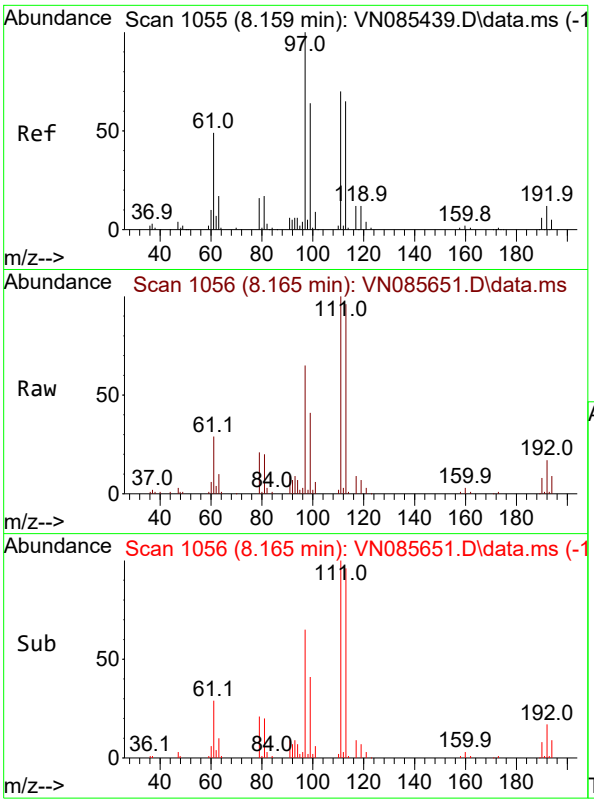


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:114 Resp: 367320

Ion	Ratio	Lower	Upper
114	100		
63	20.2	0.0	47.6
88	15.8	0.0	32.6

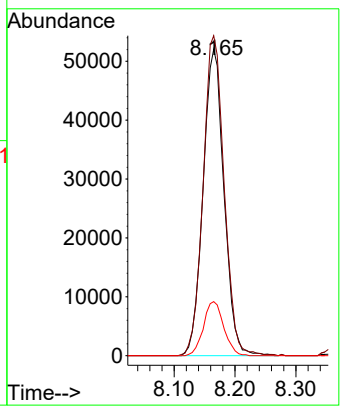




#35
Dibromofluoromethane
Concen: 48.743 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:113 Resp: 12421

Ion	Ratio	Lower	Upper
113	100		
111	104.9	82.7	124.1
192	17.1	14.3	21.5



Instrument :
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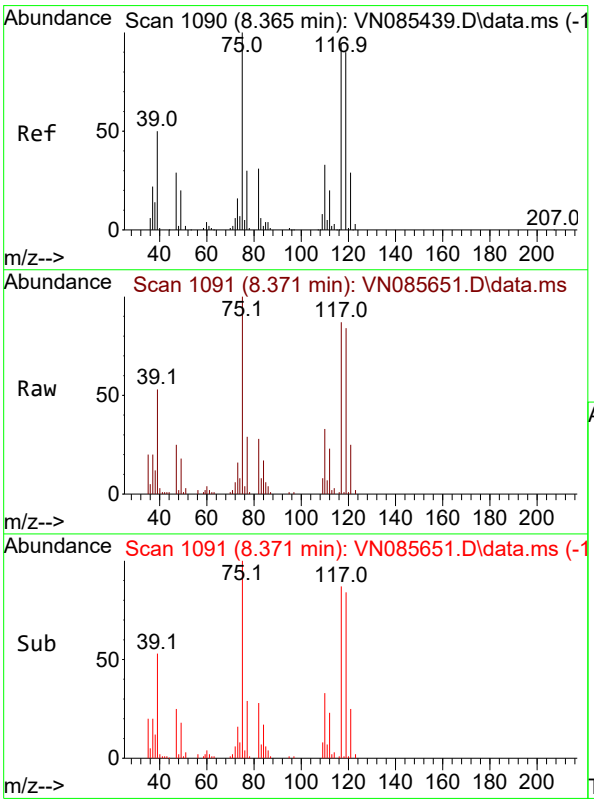
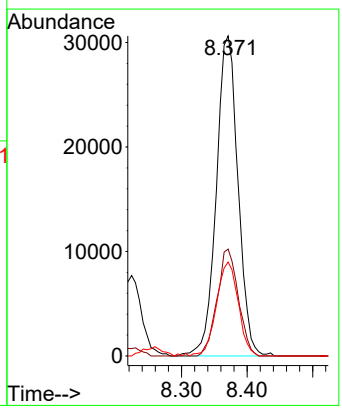
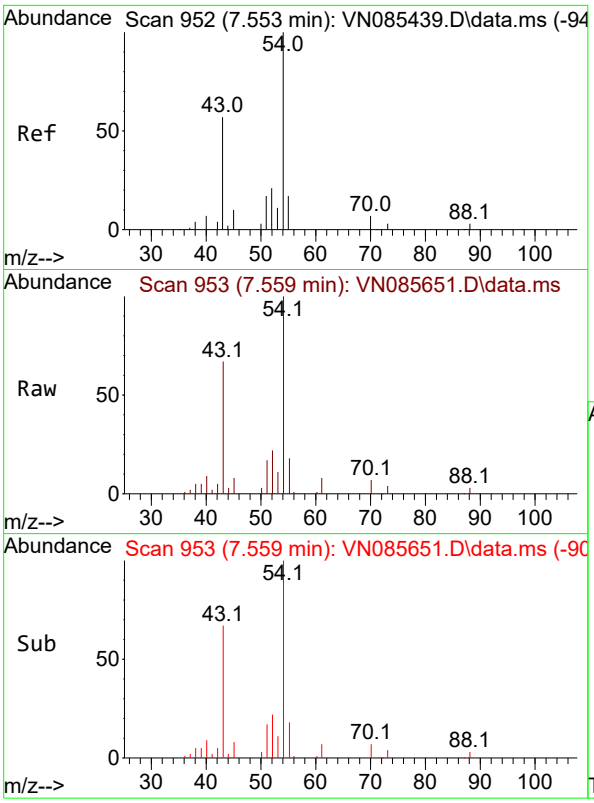


#36
1,1-Dichloropropene
Concen: 19.652 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 70286

Ion	Ratio	Lower	Upper
75	100		
110	32.6	16.5	49.5
77	29.5	24.4	36.6

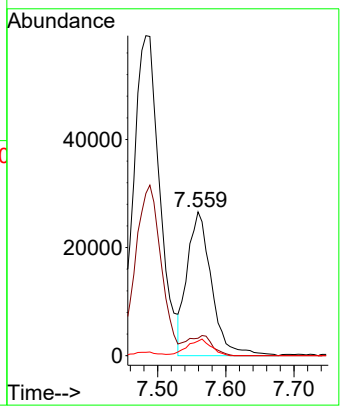




#37
Ethyl Acetate
Concen: 18.275 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 6597

Ion	Ratio	Lower	Upper
43	100		
61	13.7	10.9	16.3
70	11.3	7.5	11.3



Instrument :
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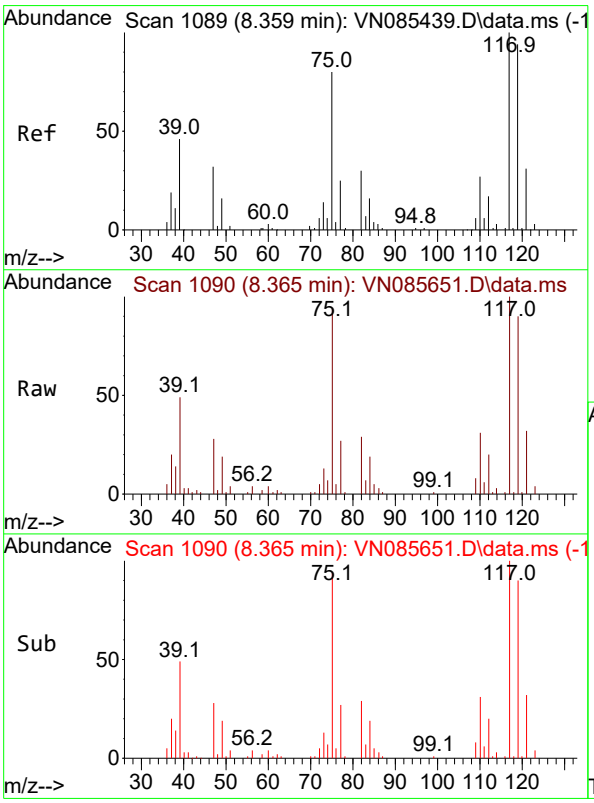
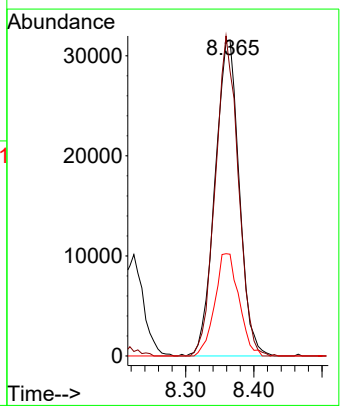
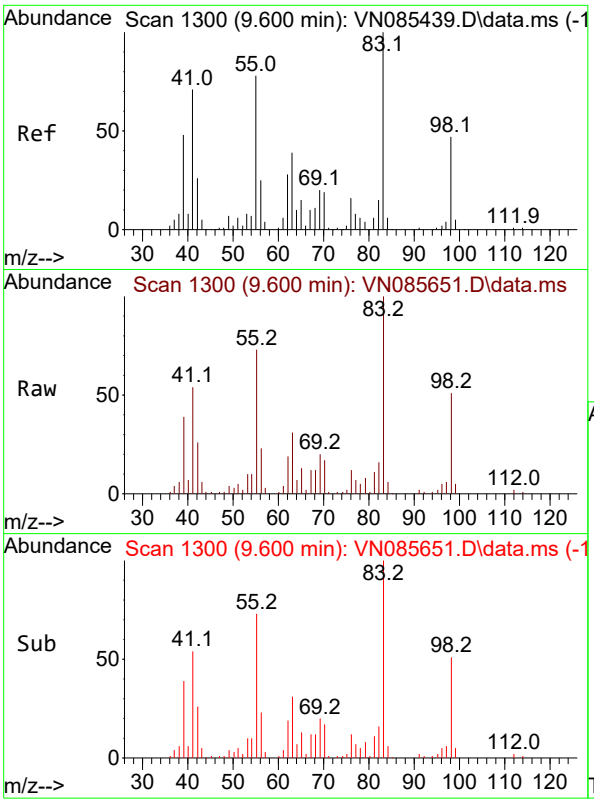


#38
Carbon Tetrachloride
Concen: 19.076 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:117 Resp: 78107

Ion	Ratio	Lower	Upper
117	100		
119	90.2	75.4	113.2
121	32.2	24.6	37.0

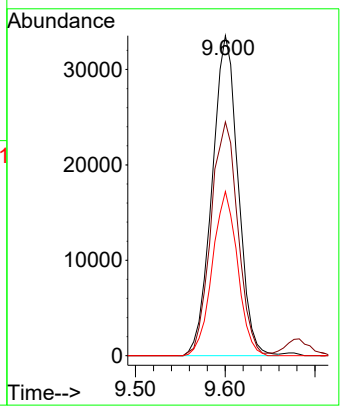




#39
Methylcyclohexane
Concen: 20.082 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 6749

Ion	Ratio	Lower	Upper
83	100		
55	73.1	62.6	94.0
98	51.3	37.7	56.5



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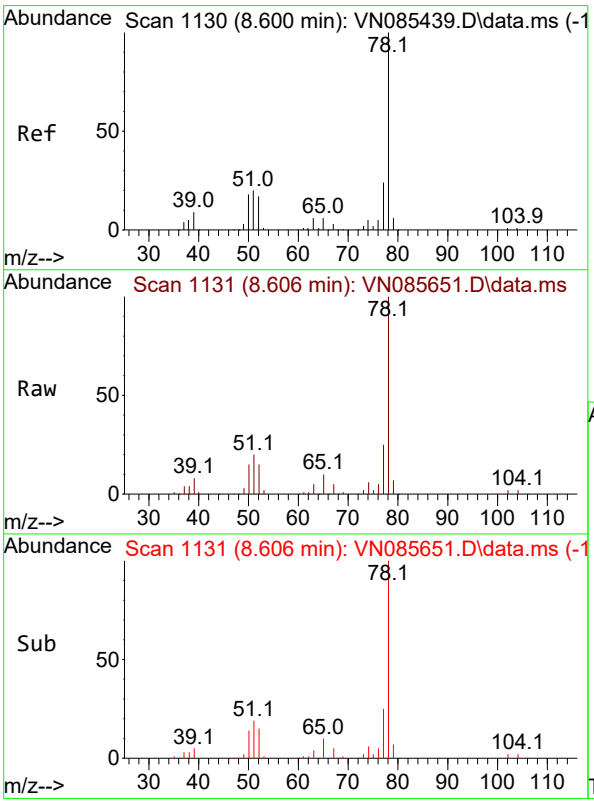
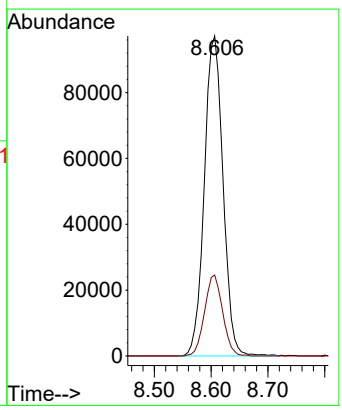
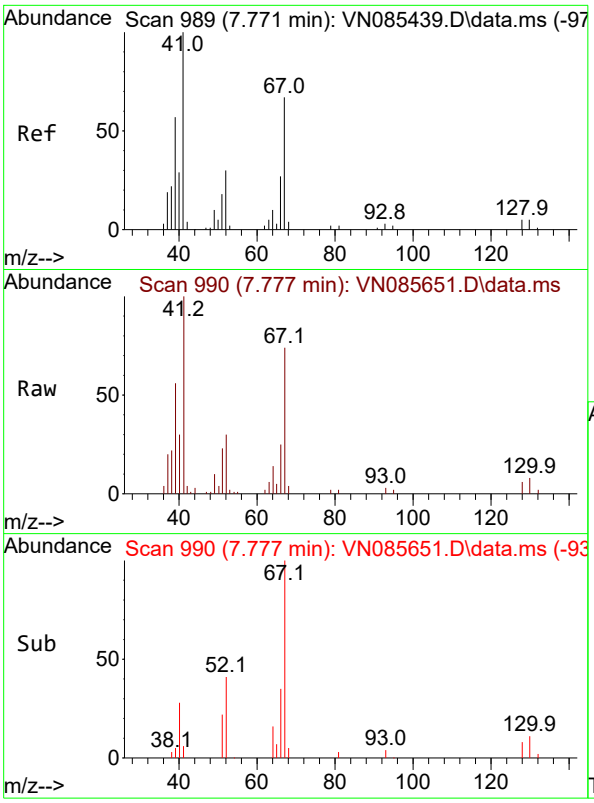


#40
Benzene
Concen: 20.639 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 78 Resp: 221792

Ion	Ratio	Lower	Upper
78	100		
77	25.3	19.0	28.6

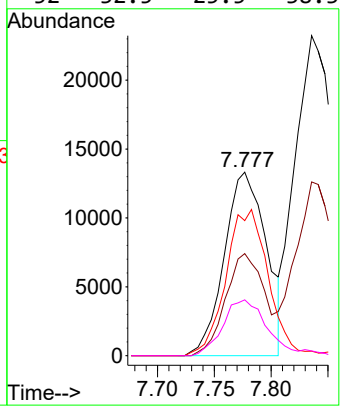




#41
Methacrylonitrile
Concen: 18.274 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 41 Resp: 3432

Ion	Ratio	Lower	Upper
41	100		
39	50.0	46.0	69.0
67	80.2	57.4	86.2
52	32.5	25.5	38.3



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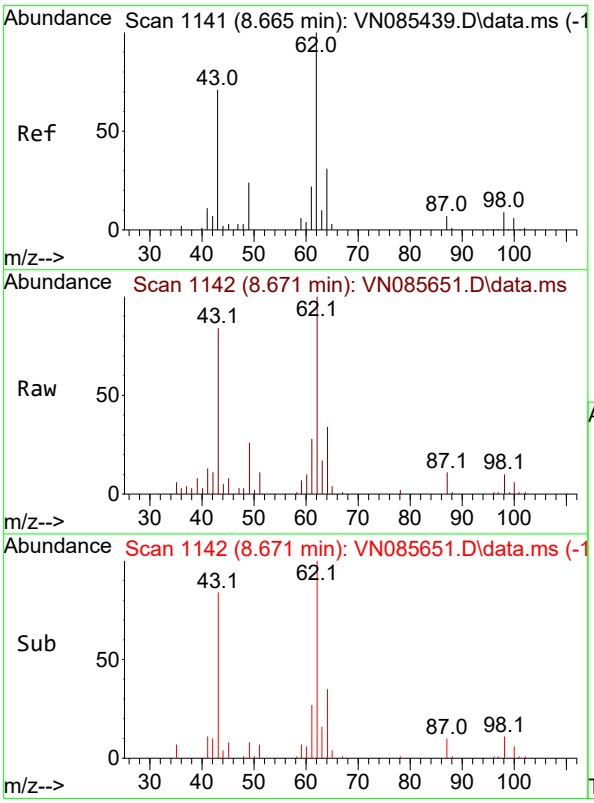
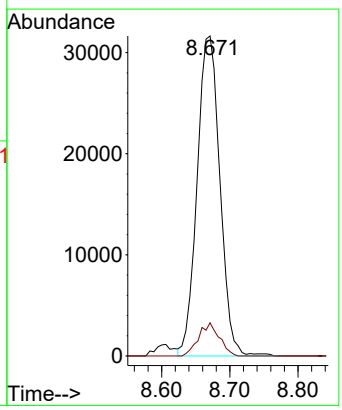
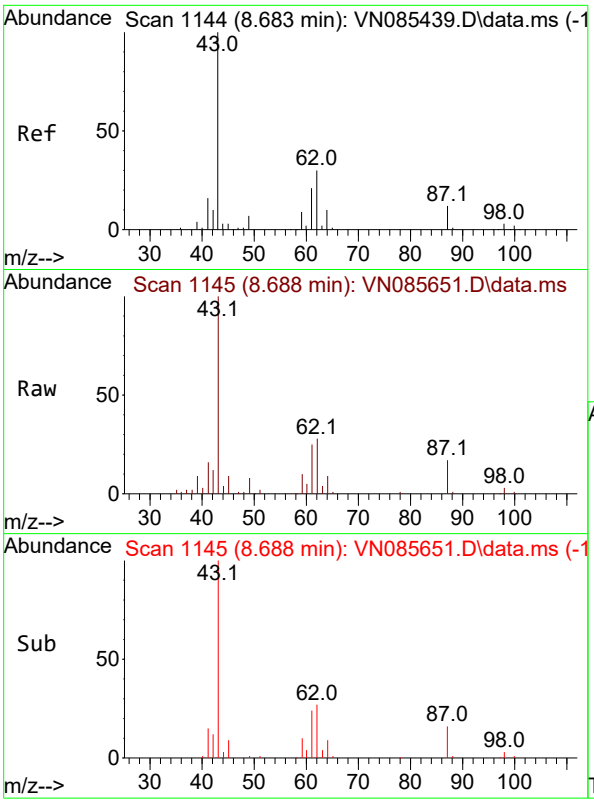


#42
1,2-Dichloroethane
Concen: 18.179 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 62 Resp: 73577

Ion	Ratio	Lower	Upper
62	100		
98	9.4	0.0	17.0

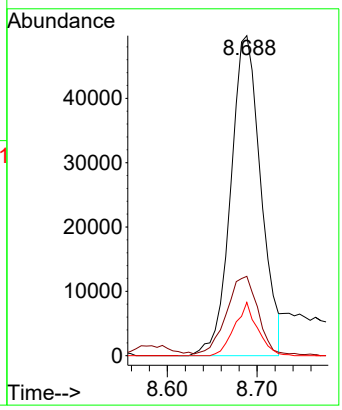




#43
Isopropyl Acetate
Concen: 20.051 ug/l m
RT: 8.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 11598

Ion	Ratio	Lower	Upper
43	100		
61	26.6	20.7	31.1
87	12.7	9.8	14.8



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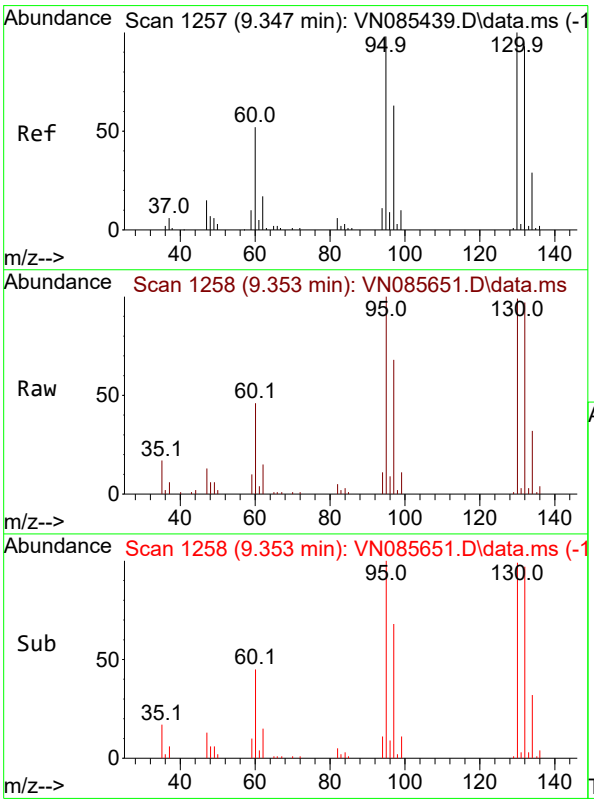
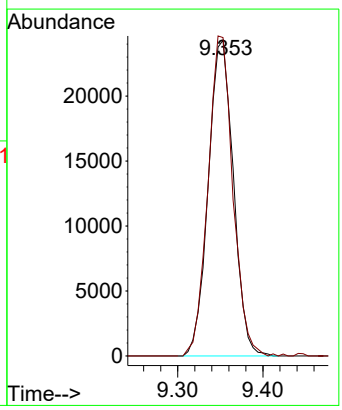
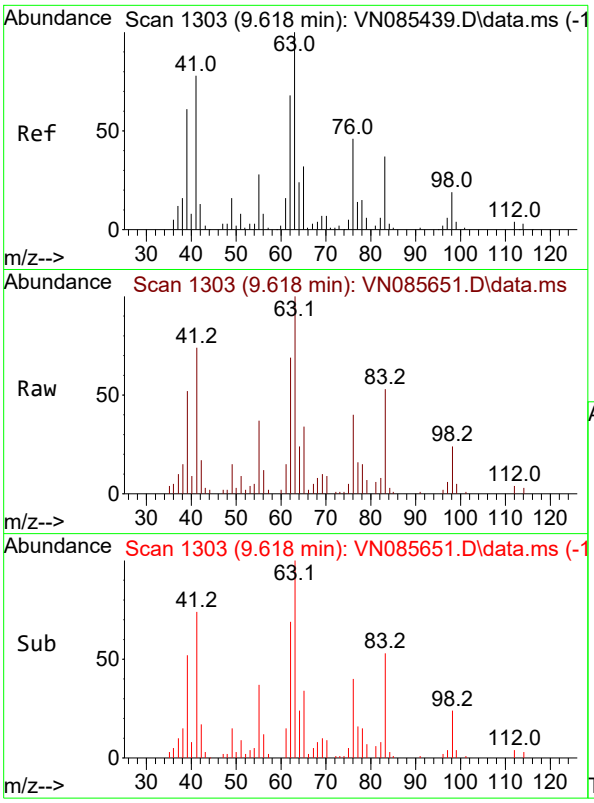


#44
Trichloroethene
Concen: 19.842 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:130 Resp: 49633

Ion	Ratio	Lower	Upper
130	100		
95	100.9	0.0	195.8

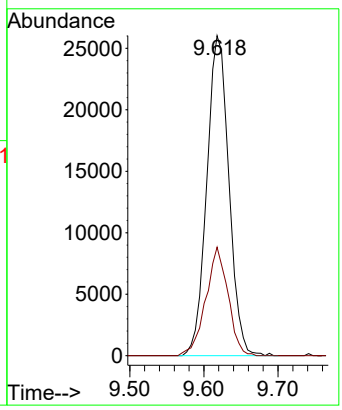




#45
1,2-Dichloropropane
Concen: 19.672 ug/l
RT: 9.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 63 Resp: 5399

Ion	Ratio	Lower	Upper
63	100		
65	33.9	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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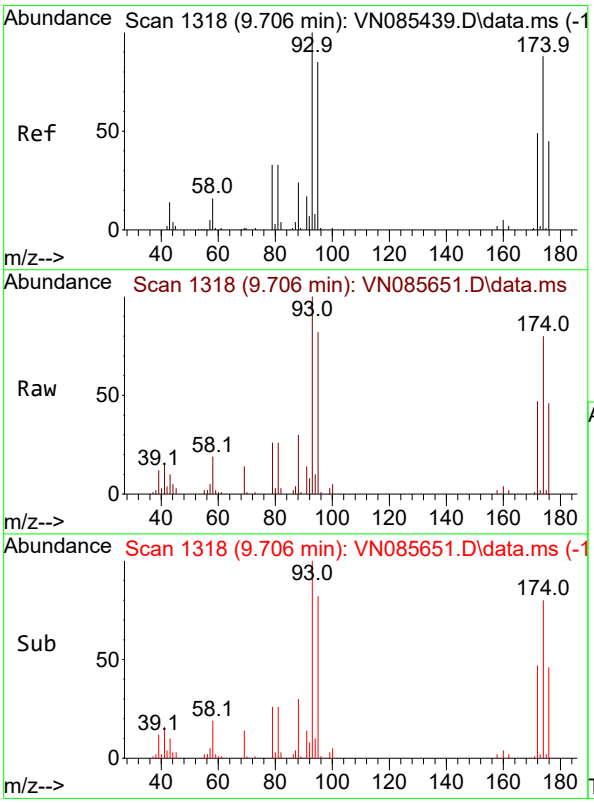
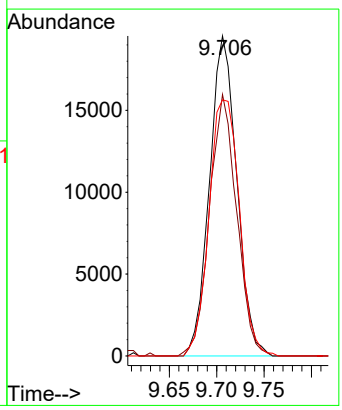
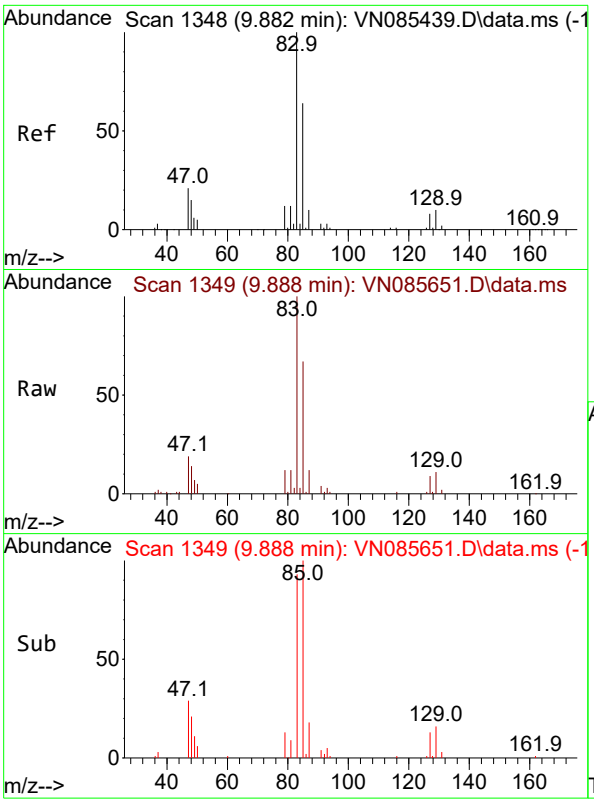


#46
Dibromomethane
Concen: 19.747 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 93 Resp: 39110

Ion	Ratio	Lower	Upper
93	100		
95	81.4	64.7	97.1
174	89.0	69.0	103.4

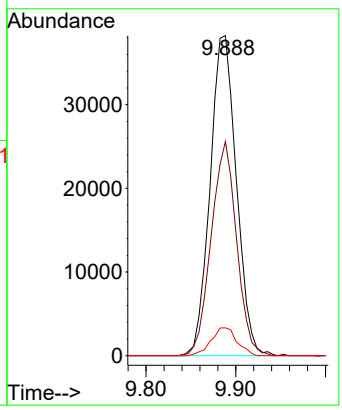




#47
Bromodichloromethane
Concen: 19.263 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 7772

Ion	Ratio	Lower	Upper
83	100		
85	67.0	51.2	76.8
127	8.7	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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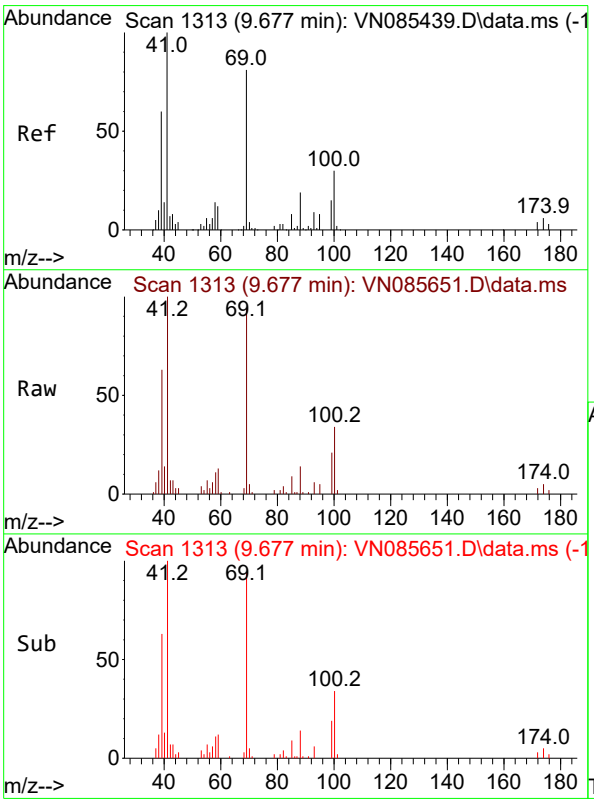
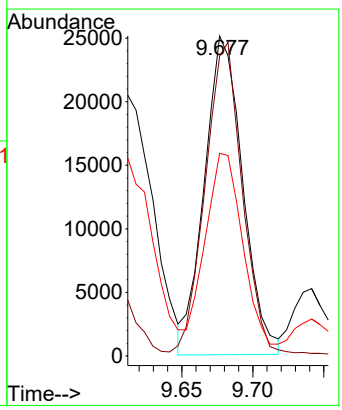
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

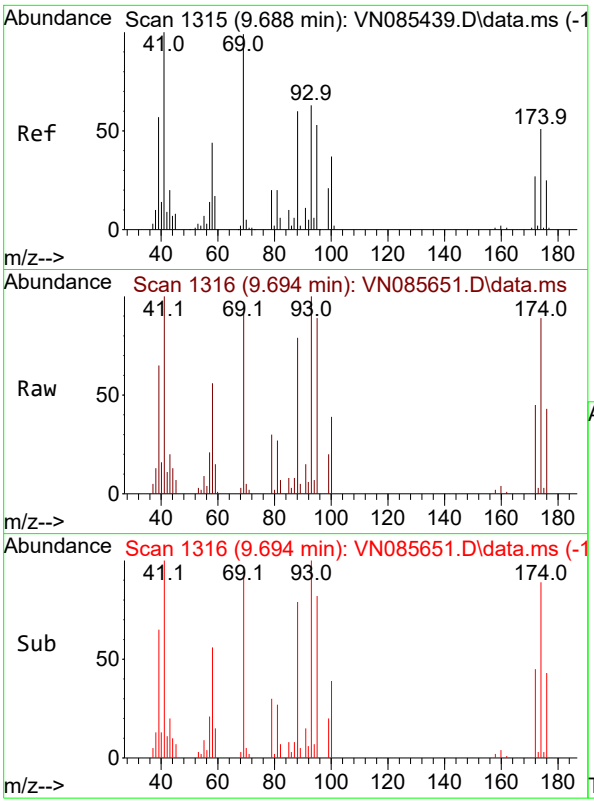


#48
Methyl methacrylate
Concen: 18.096 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 41 Resp: 47105

Ion	Ratio	Lower	Upper
41	100		
69	96.3	64.7	97.1
39	63.8	49.0	73.6





#49
1,4-Dioxane
Concen: 439.639 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 88 Resp: 1927

Ion	Ratio	Lower	Upper
88	100		
43	27.7	26.6	39.8
58	70.7	59.5	89.3

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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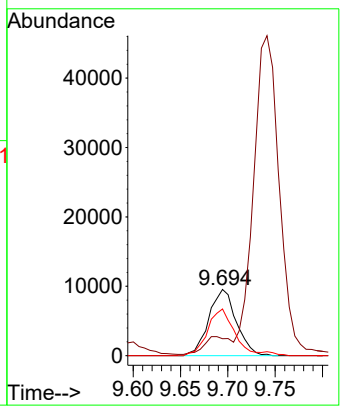
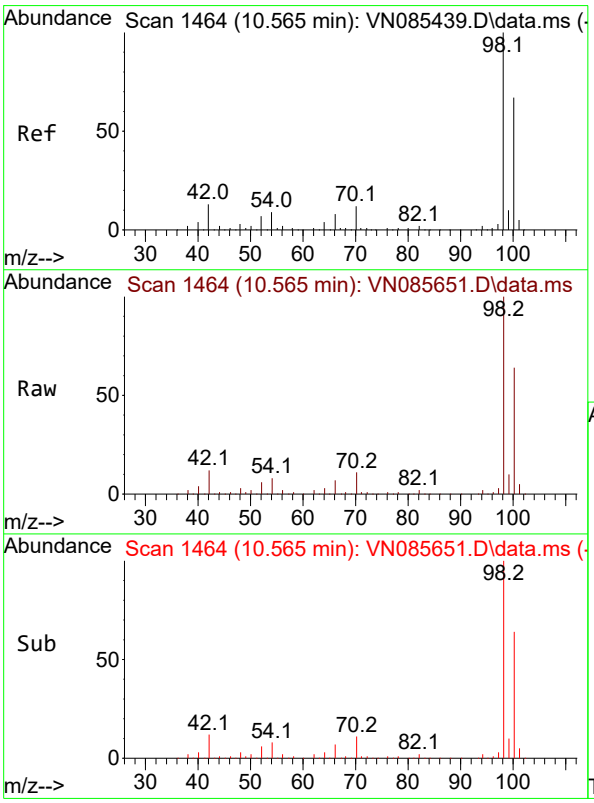
Supervised By :Mahesh Dadoda 02/06/2025

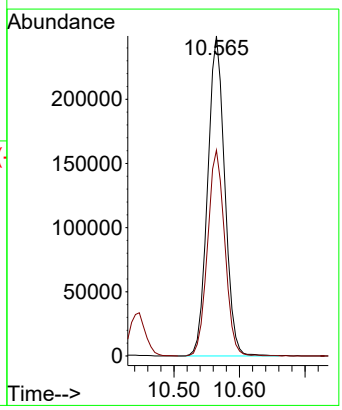


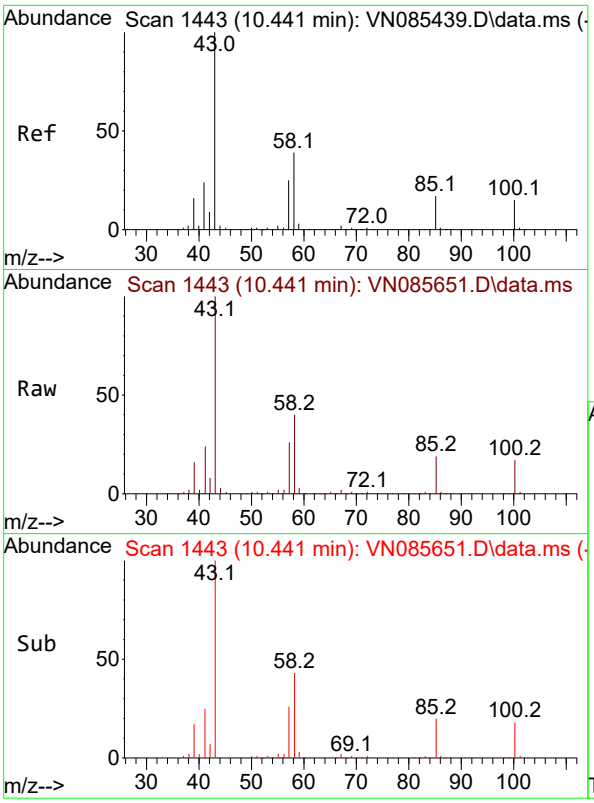


#50
Toluene-d8
Concen: 49.771 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 98 Resp: 450633

Ion	Ratio	Lower	Upper
98	100		
100	64.9	52.2	78.4

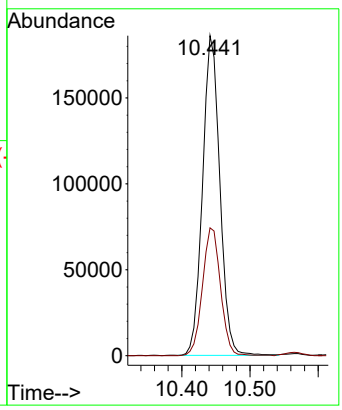




#51
4-Methyl-2-Pentanone
Concen: 97.965 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 32883

Ion	Ratio	Lower	Upper
43	100		
58	41.7	30.5	45.7



Instrument :
MSVOA_N
ClientSampleId :
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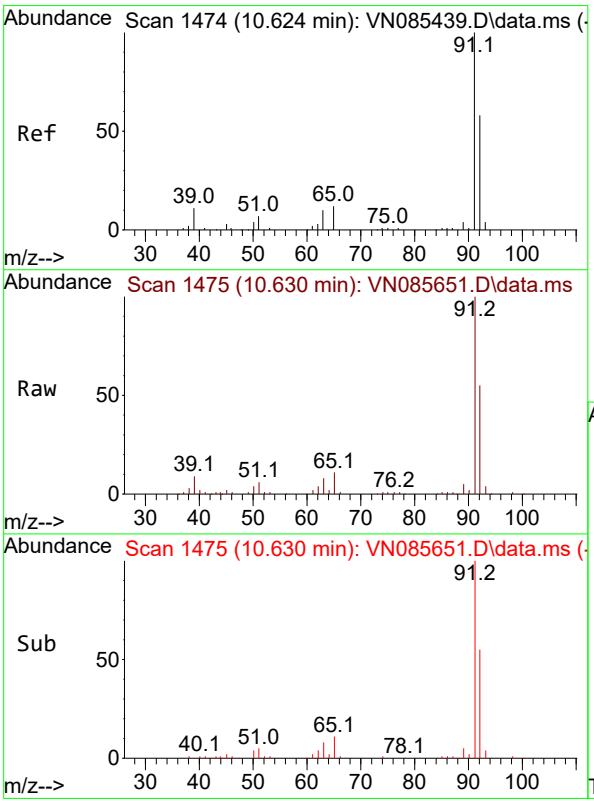
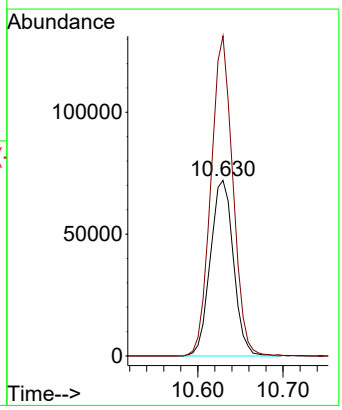
Supervised By :Mahesh Dadoda 02/06/2025

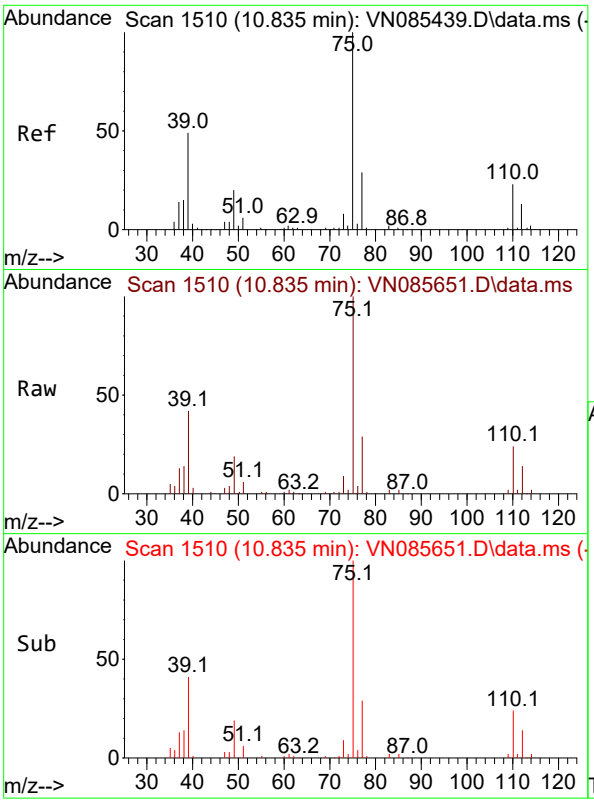


#52
Toluene
Concen: 21.741 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 92 Resp: 135369

Ion	Ratio	Lower	Upper
92	100		
91	173.5	139.2	208.8

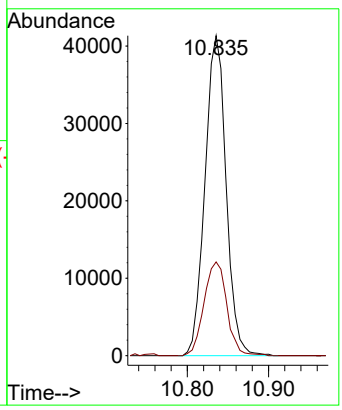




#53
t-1,3-Dichloropropene
Concen: 19.583 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 7467

Ion	Ratio	Lower	Upper
75	100		
77	29.3	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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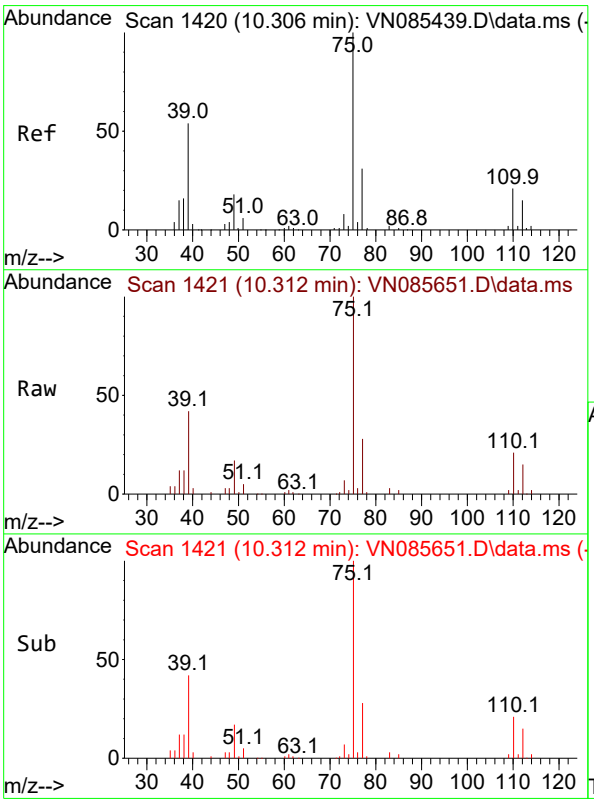
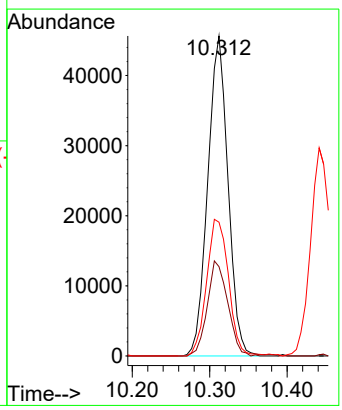
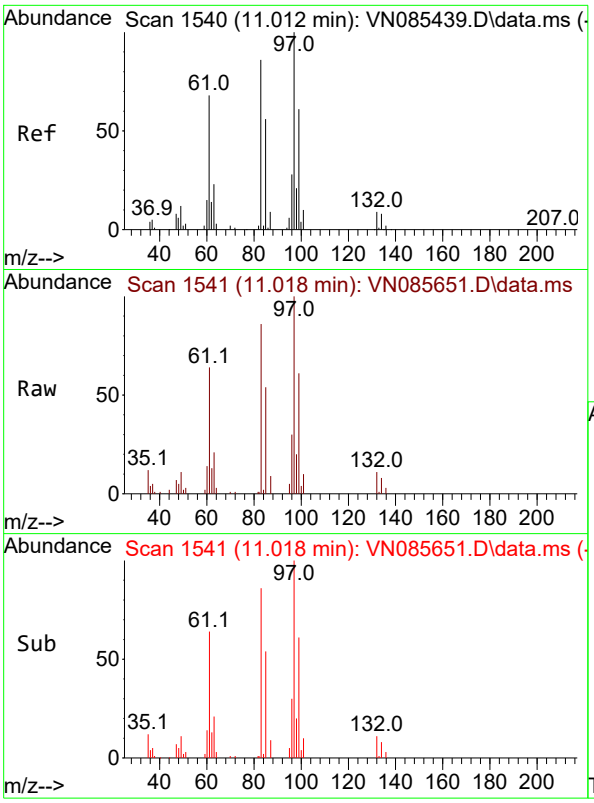


#54
cis-1,3-Dichloropropene
Concen: 20.385 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 83030

Ion	Ratio	Lower	Upper
75	100		
77	27.9	25.0	37.4
39	41.8	43.1	64.7#

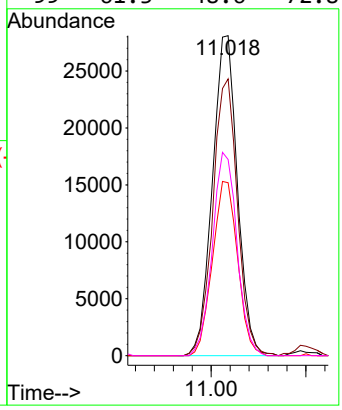




#55
1,1,2-Trichloroethane
Concen: 20.914 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 97 Resp: 5153

Ion	Ratio	Lower	Upper
97	100		
83	86.5	69.0	103.6
85	54.0	44.6	66.8
99	61.3	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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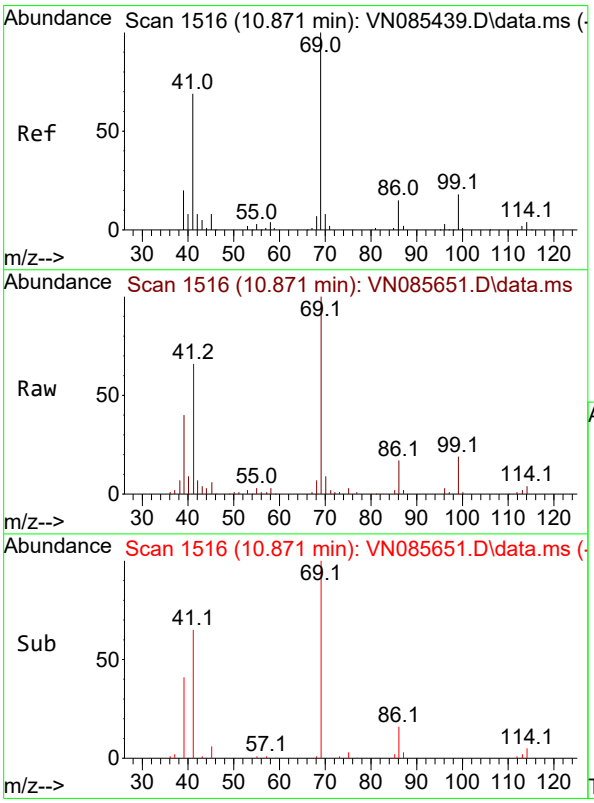
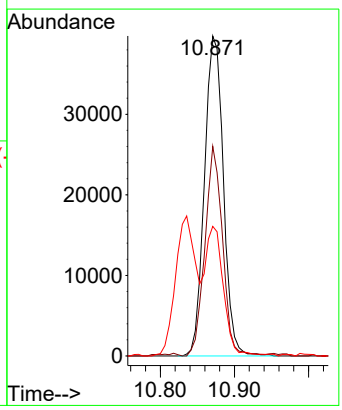
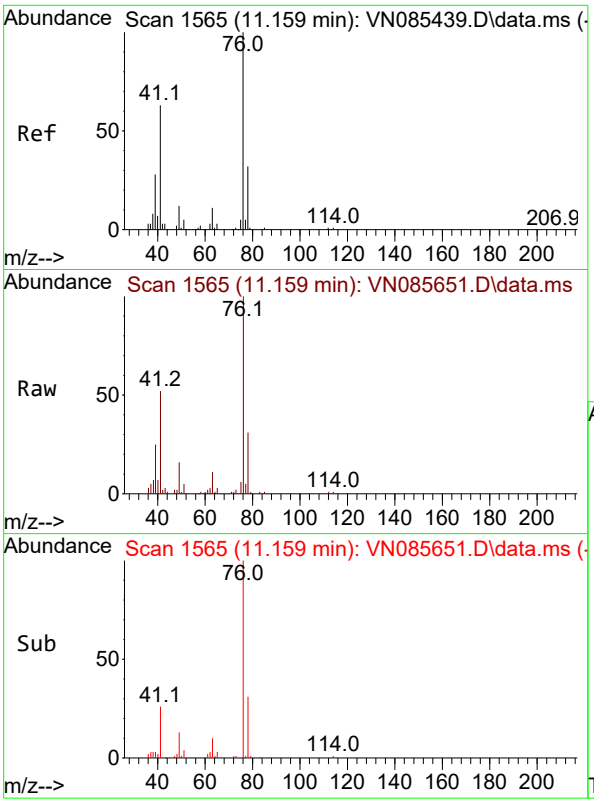


#56
Ethyl methacrylate
Concen: 18.280 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 69 Resp: 70589

Ion	Ratio	Lower	Upper
69	100		
41	60.9	54.6	82.0
39	39.6	32.4	48.6

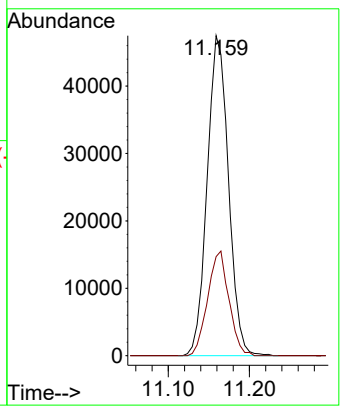




#57
1,3-Dichloropropane
Concen: 20.170 ug/l
RT: 11.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 76 Resp: 8642

Ion	Ratio	Lower	Upper
76	100		
78	32.6	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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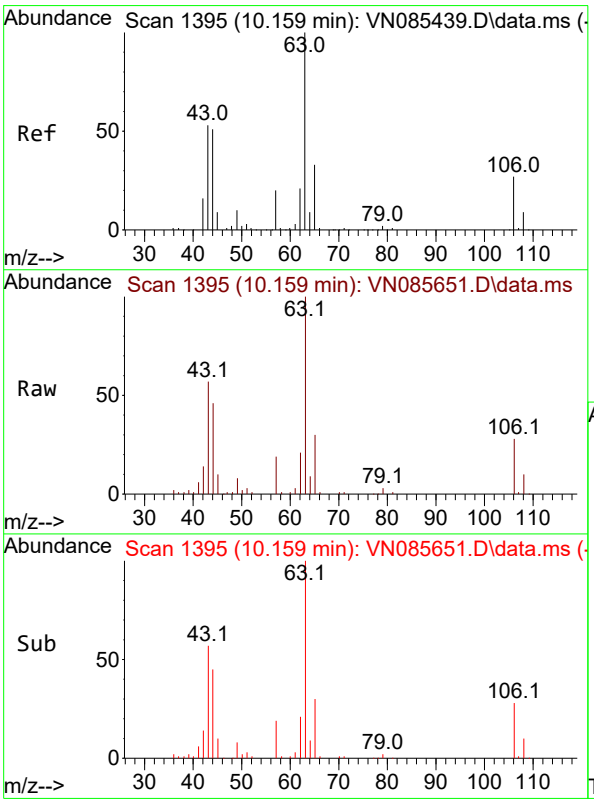
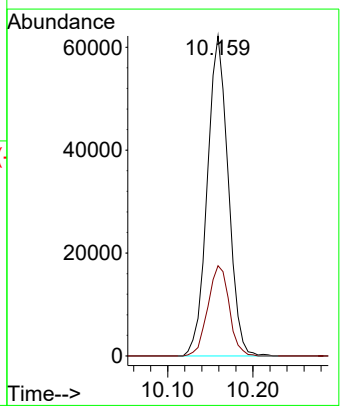
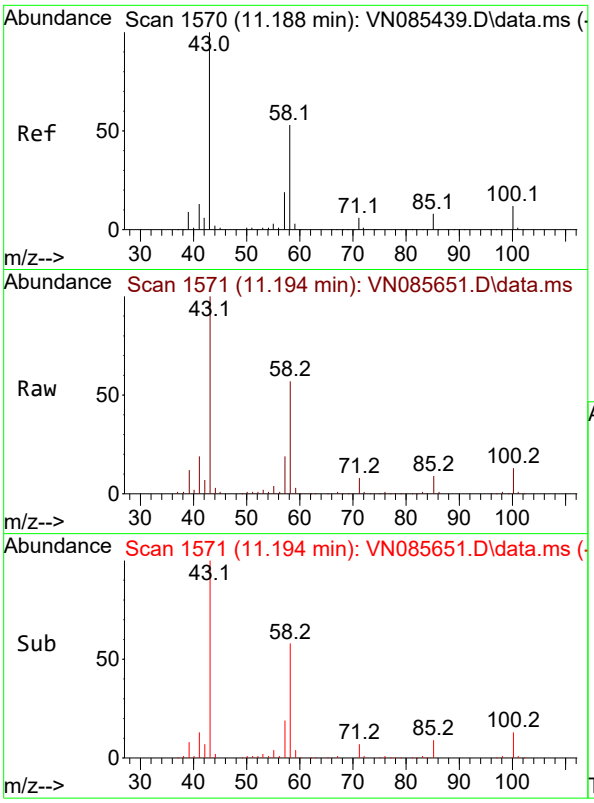


#58
2-Chloroethyl Vinyl ether
Concen: 67.812 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 63 Resp: 106039

Ion	Ratio	Lower	Upper
63	100		
106	28.7	21.6	32.4





#59
2-Hexanone
Concen: 101.031 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 23861

Ion	Ratio	Lower	Upper
43	100		
58	57.1	26.2	78.6

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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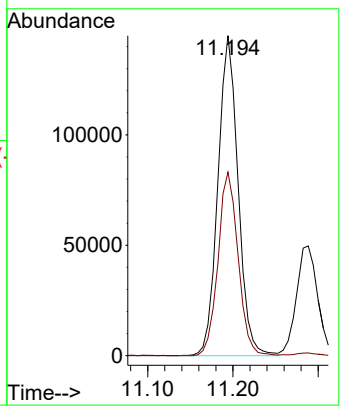
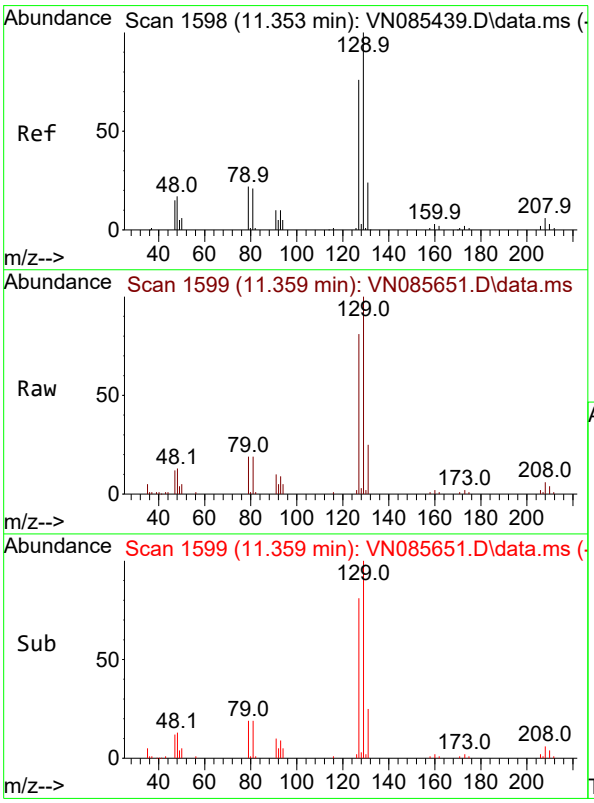
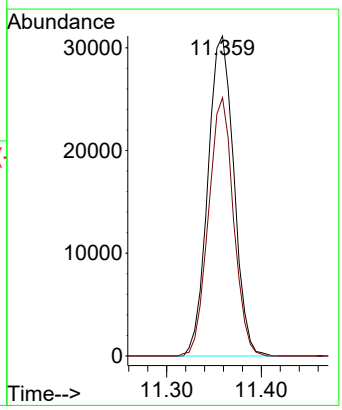


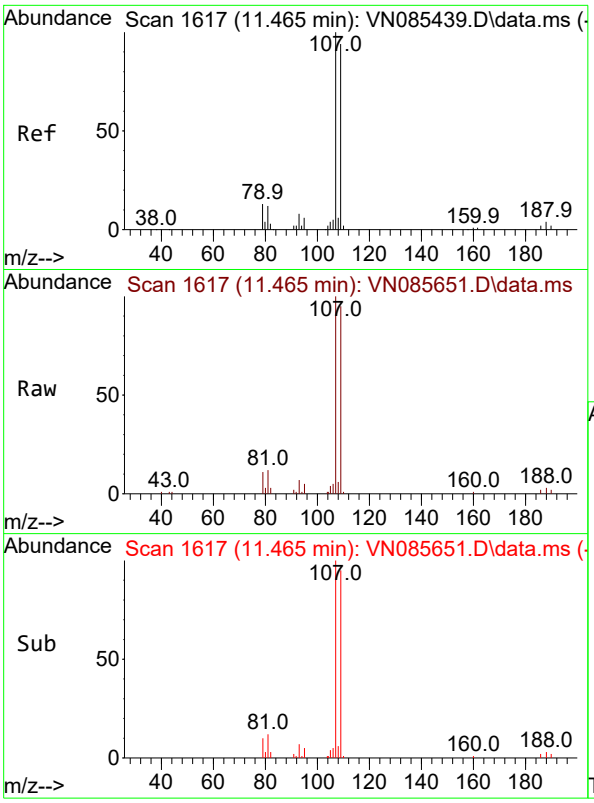


#60
Dibromochloromethane
Concen: 19.918 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:129 Resp: 59256

Ion	Ratio	Lower	Upper
129	100		
127	77.8	38.6	115.8





#61
1,2-Dibromoethane
Concen: 20.701 ug/l
RT: 11.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:107 Resp: 5077

Ion	Ratio	Lower	Upper
107	100		
109	95.4	75.9	113.9

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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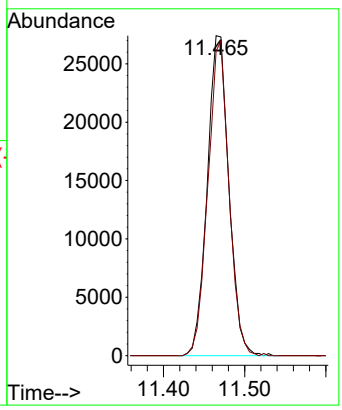
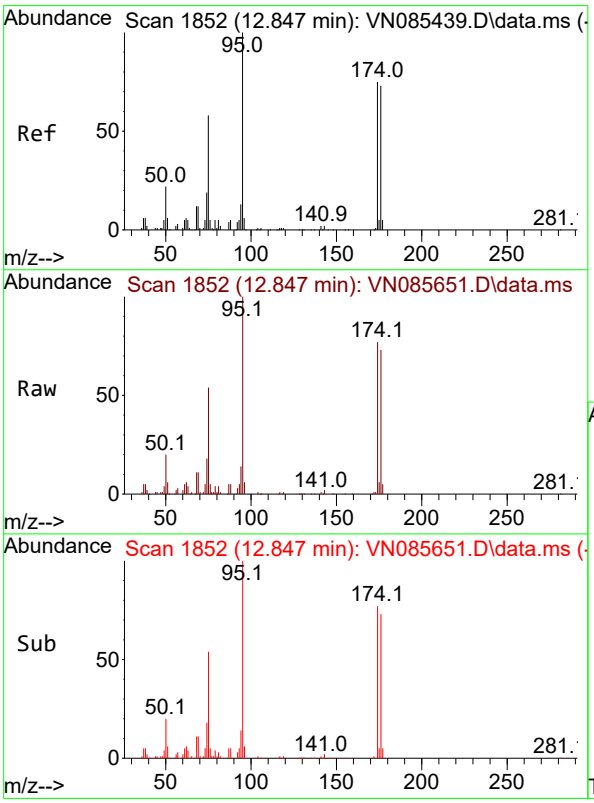
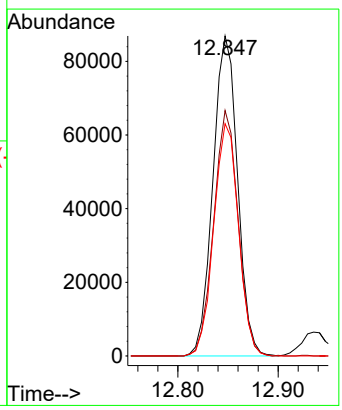


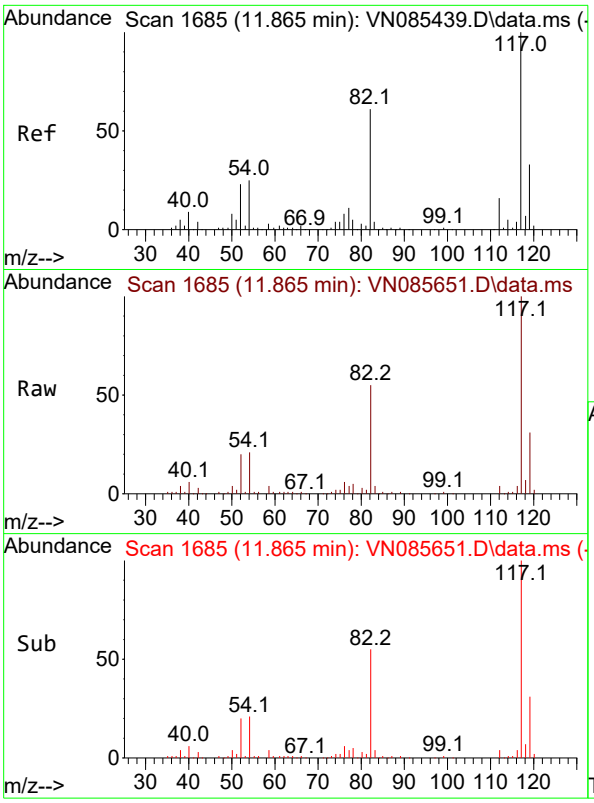


#62
4-Bromofluorobenzene
Concen: 47.844 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 95 Resp: 148181

Ion	Ratio	Lower	Upper
95	100		
174	76.0	0.0	145.0
176	72.9	0.0	142.4

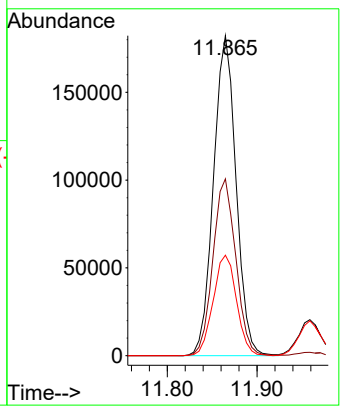




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:117 Resp: 31776

Ion	Ratio	Lower	Upper
117	100		
82	55.3	48.6	72.8
119	31.4	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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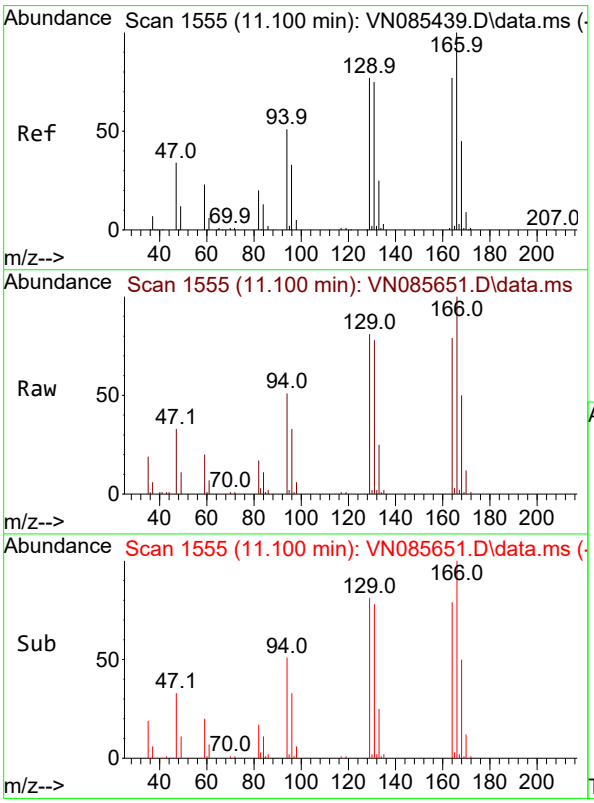
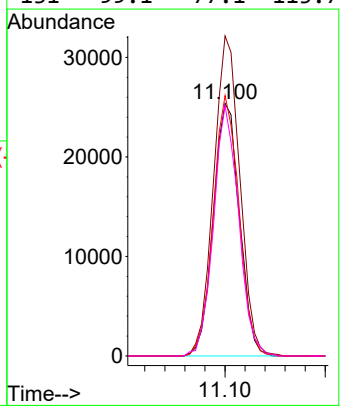
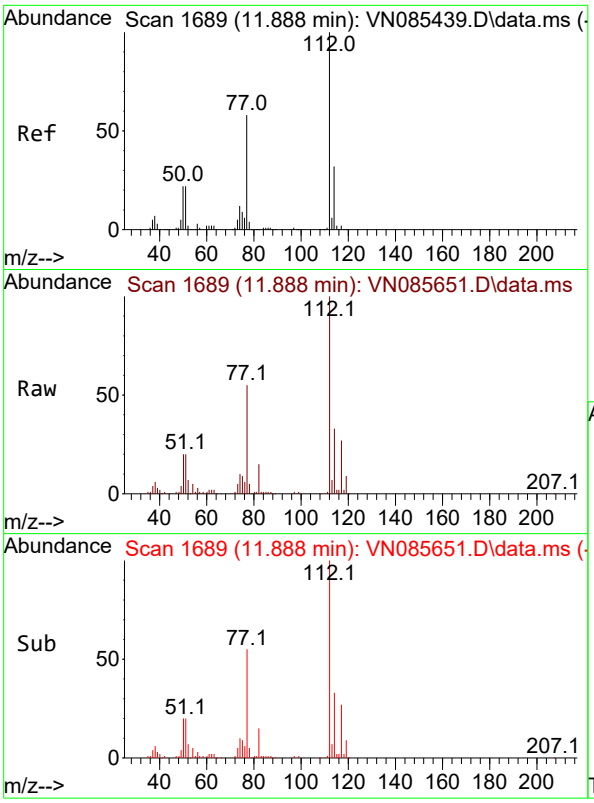


#64
Tetrachloroethene
Concen: 21.187 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:164 Resp: 45898

Ion	Ratio	Lower	Upper
164	100		
166	126.8	103.4	155.2
129	103.2	79.2	118.8
131	99.1	77.1	115.7

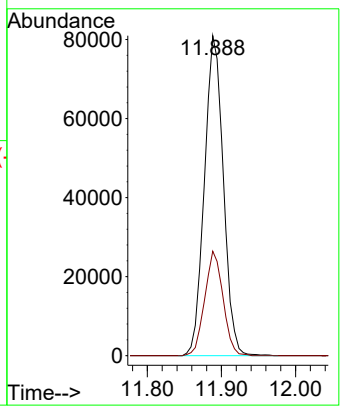




#65
Chlorobenzene
Concen: 20.663 ug/l
RT: 11.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:112 Resp: 14383

Ion	Ratio	Lower	Upper
112	100		
114	32.6	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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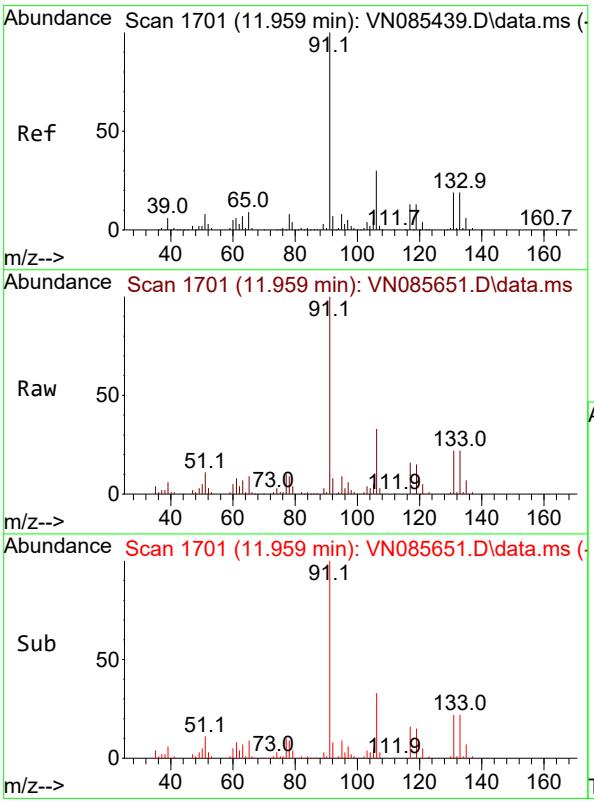
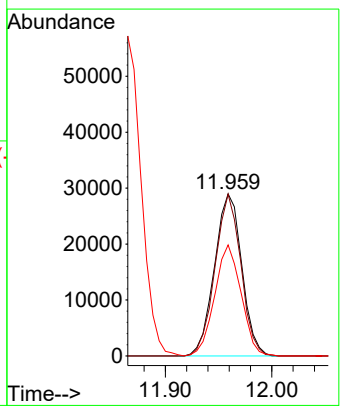
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

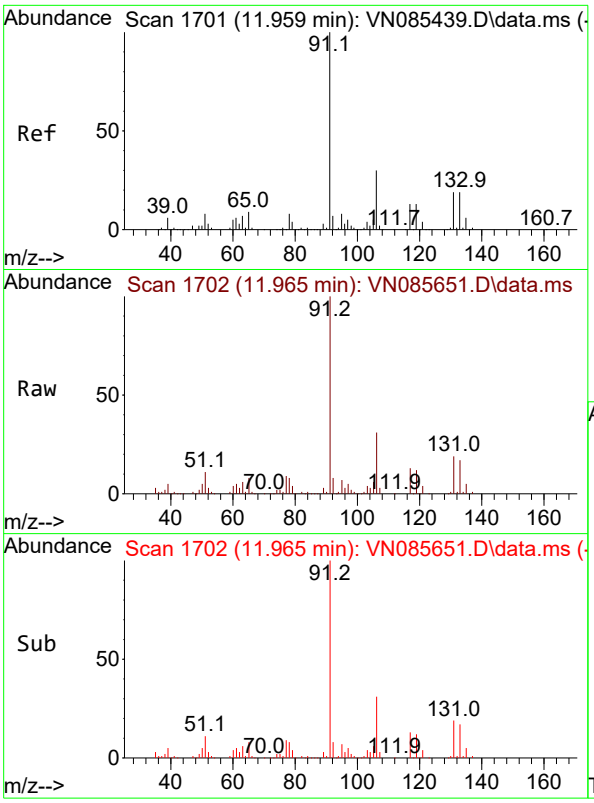


#66
1,1,1,2-Tetrachloroethane
Concen: 20.242 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:131 Resp: 51716

Ion	Ratio	Lower	Upper
131	100		
133	94.2	47.4	142.3
119	66.3	33.1	99.5

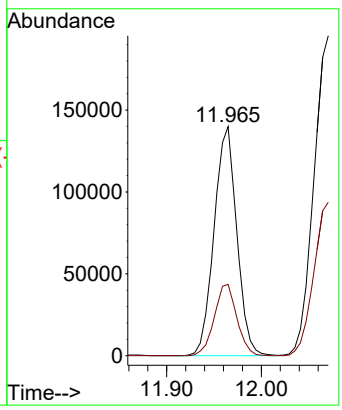




#67
Ethyl Benzene
Concen: 20.561 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 23311

Ion	Ratio	Lower	Upper
91	100		
106	31.1	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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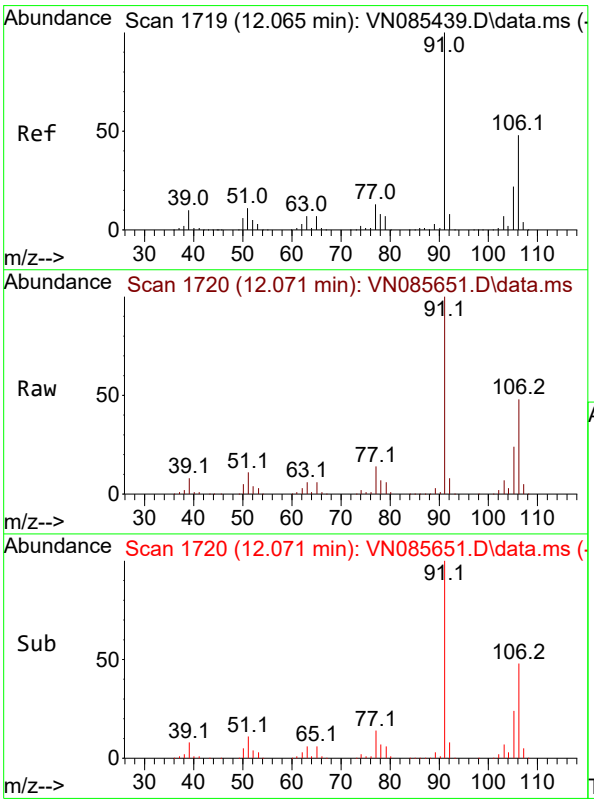
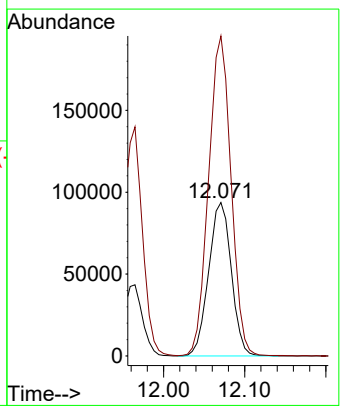
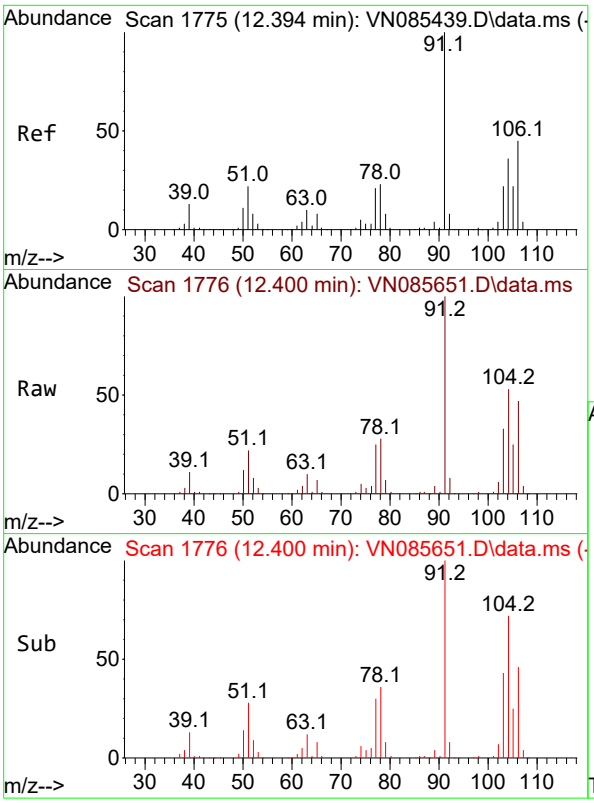


#68
m/p-Xylenes
Concen: 43.412 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:106 Resp: 181911

Ion	Ratio	Lower	Upper
106	100		
91	206.7	167.7	251.5

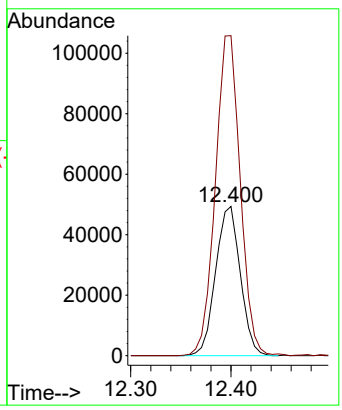




#69
o-Xylene
Concen: 21.067 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:106 Resp: 8436

Ion	Ratio	Lower	Upper
106	100		
91	216.2	110.4	331.2



Instrument :
MSVOA_N
ClientSampleId :
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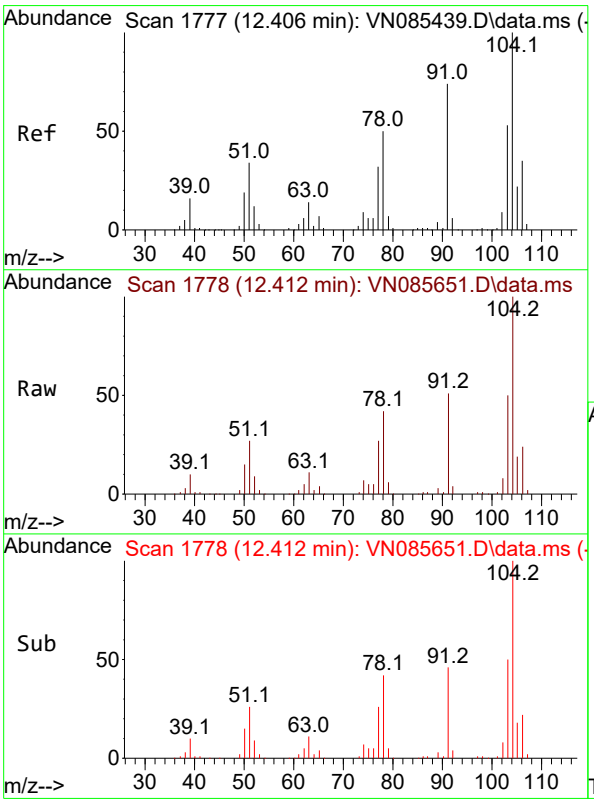
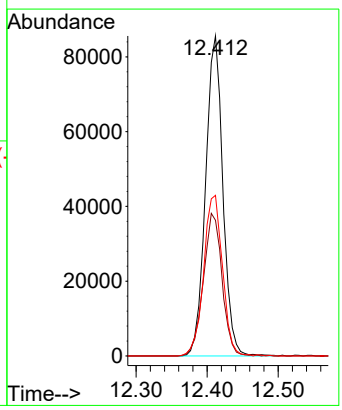
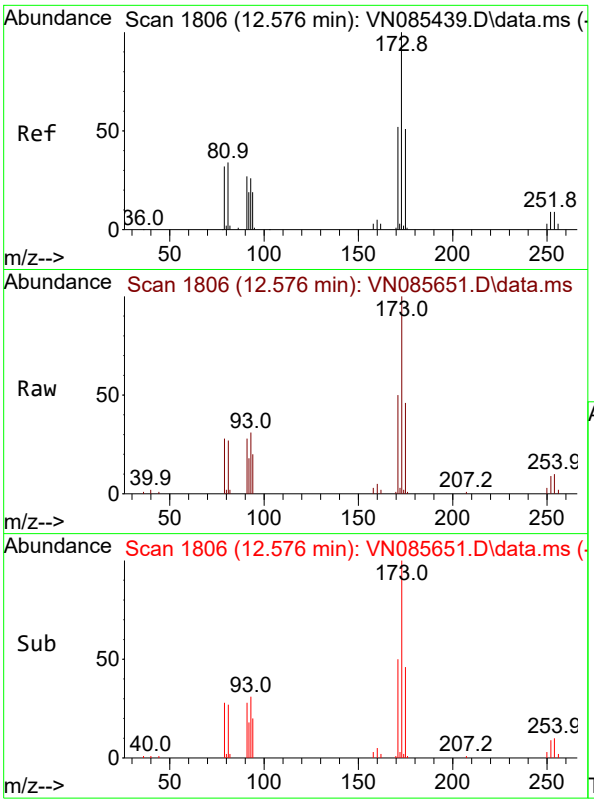


#70
Styrene
Concen: 21.885 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:104 Resp: 145039

Ion	Ratio	Lower	Upper
104	100		
78	48.2	42.5	63.7
103	54.7	43.8	65.8

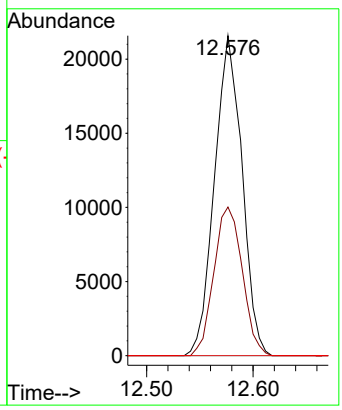




#71
Bromoform
Concen: 21.179 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:173 Resp: 3871

Ion	Ratio	Lower	Upper
173	100		
175	48.0	24.4	73.2
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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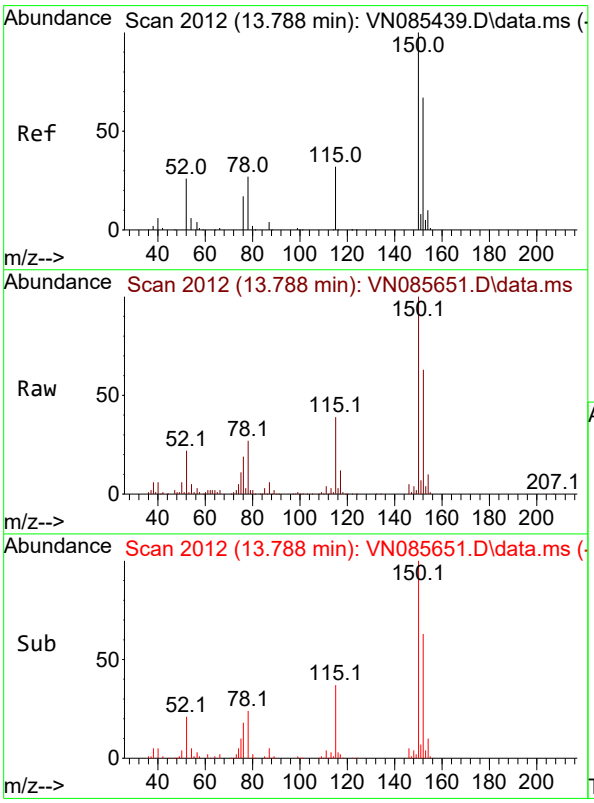
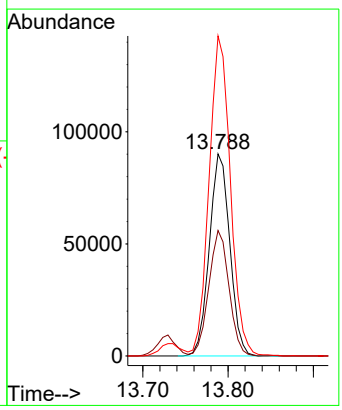
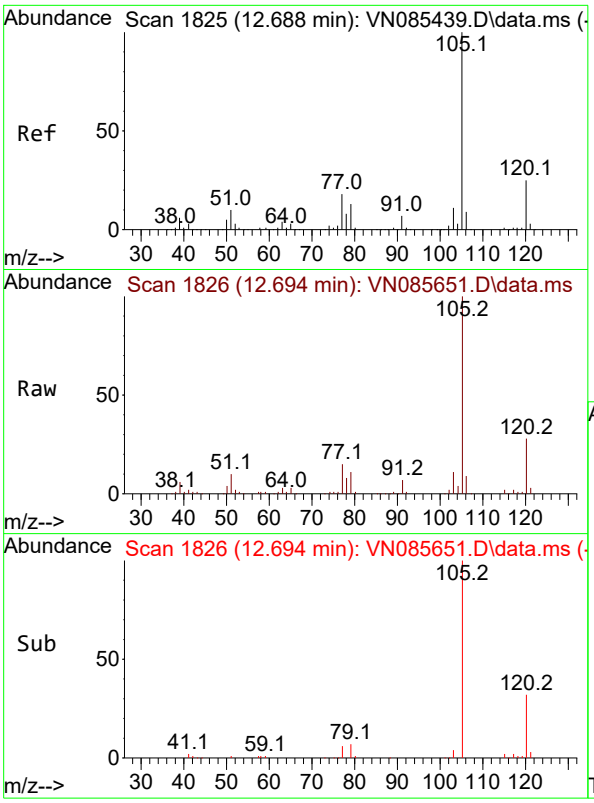


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:152 Resp: 150317

Ion	Ratio	Lower	Upper
152	100		
115	61.4	31.1	93.3
150	164.9	0.0	343.6

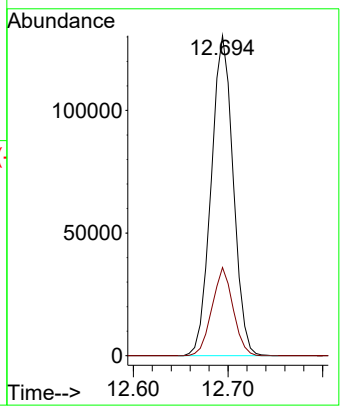




#73
Isopropylbenzene
Concen: 20.793 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 21094

Ion	Ratio	Lower	Upper
105	100		
120	26.3	12.8	38.3



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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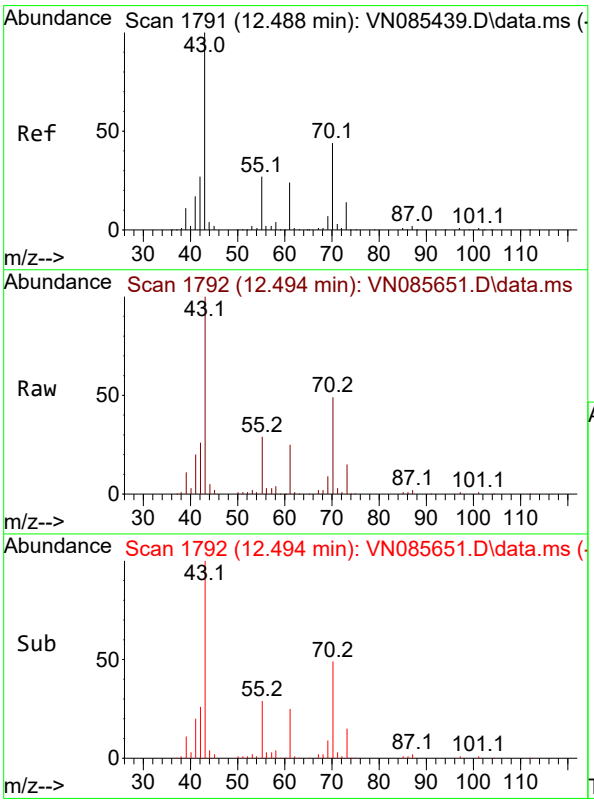
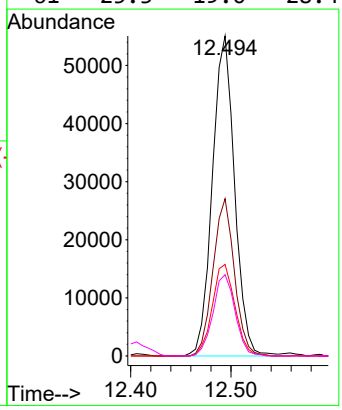
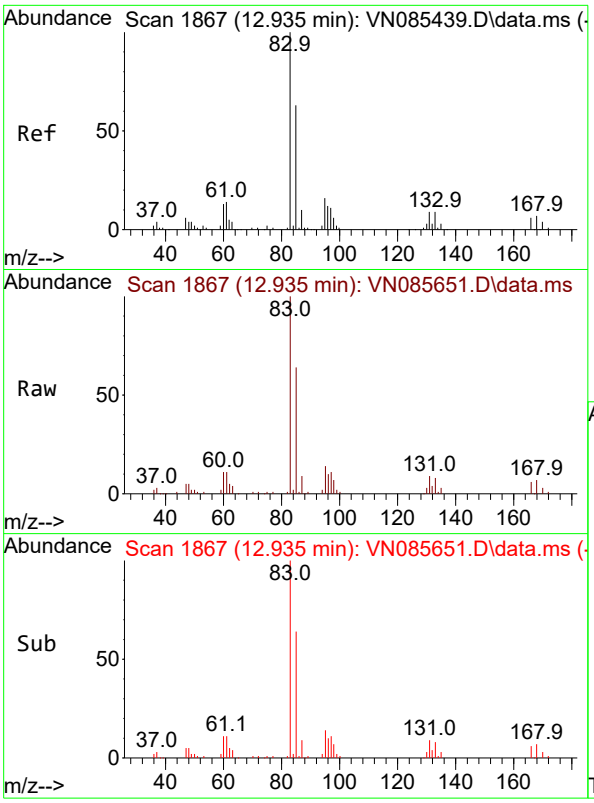


#74
N-amyl acetate
Concen: 18.598 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 43 Resp: 84808

Ion	Ratio	Lower	Upper
43	100		
70	47.3	34.0	51.0
55	29.2	21.4	32.2
61	25.3	19.0	28.4





#75
1,1,2,2-Tetrachloroethane
Concen: 20.962 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 83 Resp: 7512

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.6	32.2	96.6

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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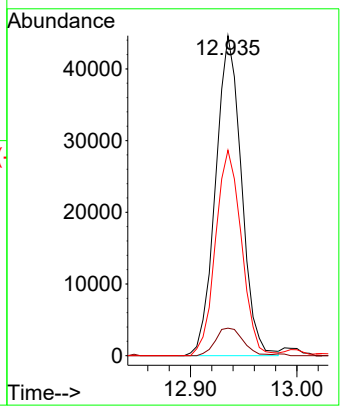
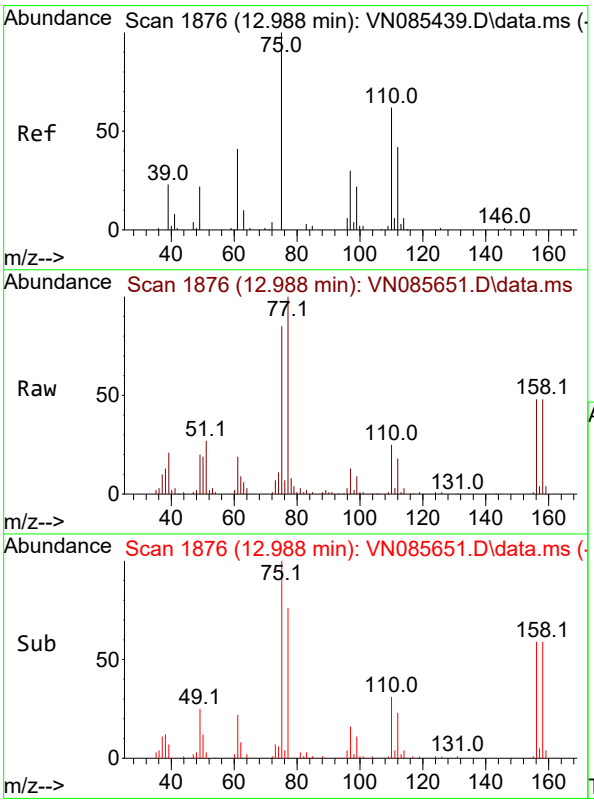
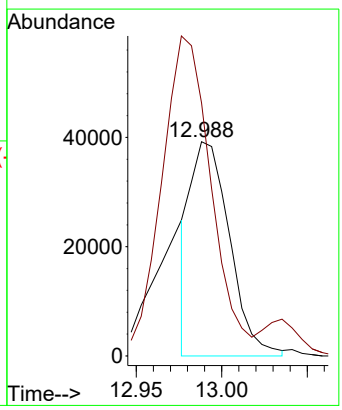


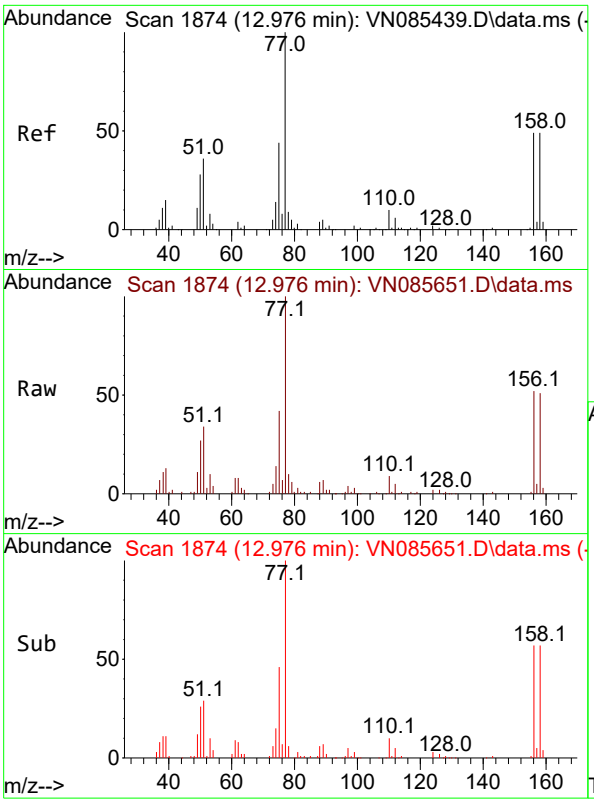


#76
1,2,3-Trichloropropane
Concen: 20.410 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 62358

Ion	Ratio	Lower	Upper
75	100		
77	189.0	109.7	329.2

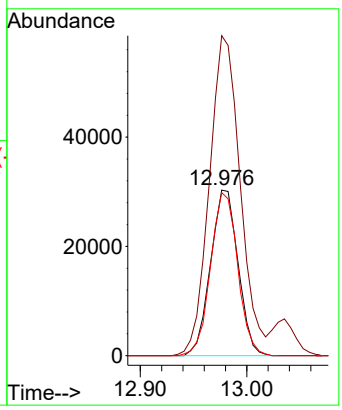




#77
Bromobenzene
Concen: 20.501 ug/l
RT: 12.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:156 Resp: 5434

Ion	Ratio	Lower	Upper
156	100		
77	216.9	114.1	342.4
158	96.9	48.9	146.8



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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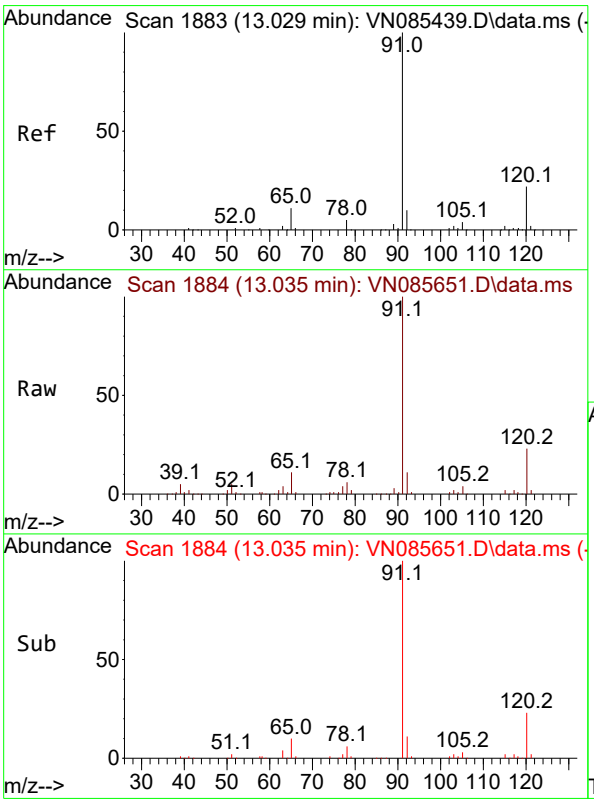
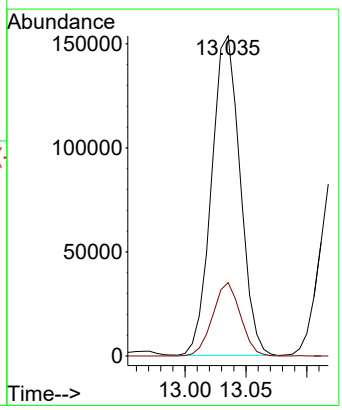
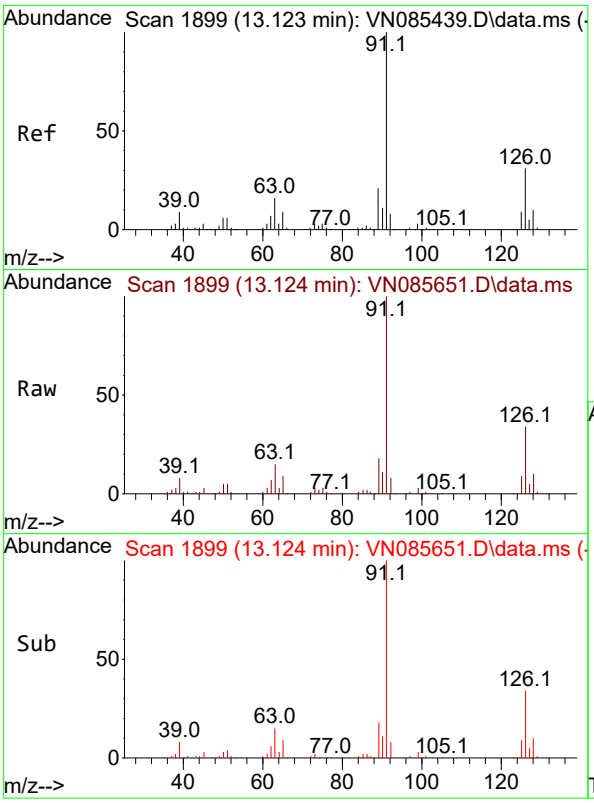


#78
n-propylbenzene
Concen: 20.891 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 250899

Ion	Ratio	Lower	Upper
91	100		
120	22.2	10.9	32.6





#79
2-Chlorotoluene
Concen: 20.353 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 15820

Ion	Ratio	Lower	Upper
91	100		
126	32.7	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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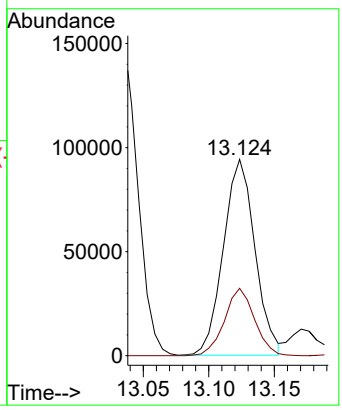
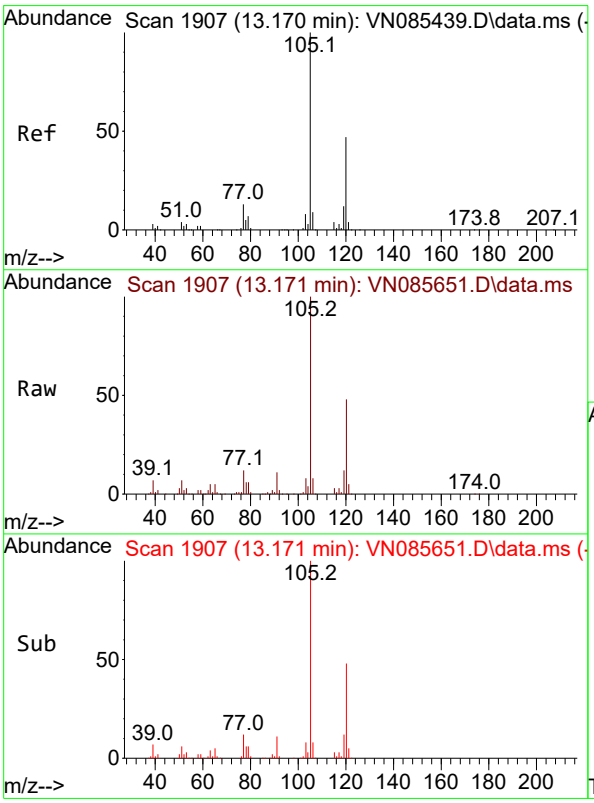
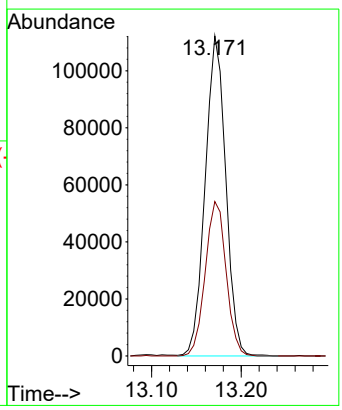


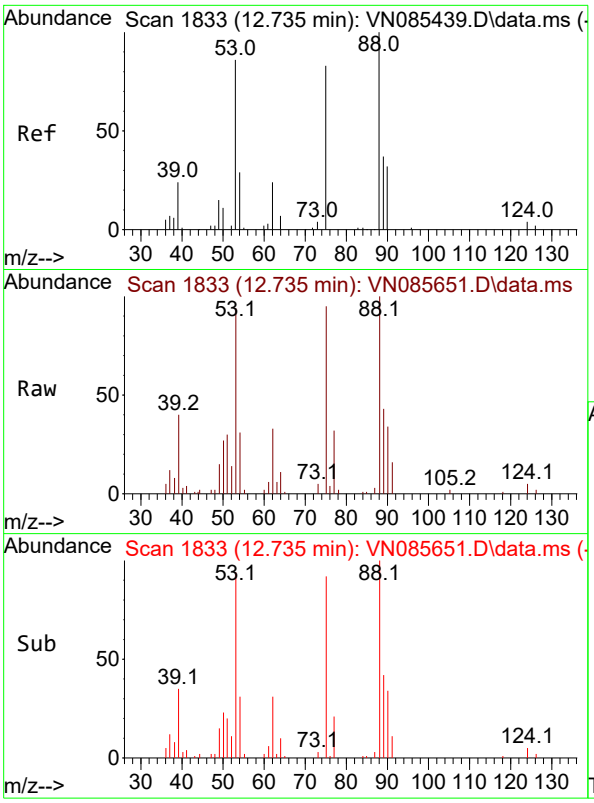


#80
1,3,5-Trimethylbenzene
Concen: 21.323 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 178682

Ion	Ratio	Lower	Upper
105	100		
120	48.8	23.9	71.7





#81
trans-1,4-Dichloro-2-butene
Concen: 21.810 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 2462

Ion	Ratio	Lower	Upper
75	100		
53	105.9	95.6	143.4
89	43.5	37.0	55.6

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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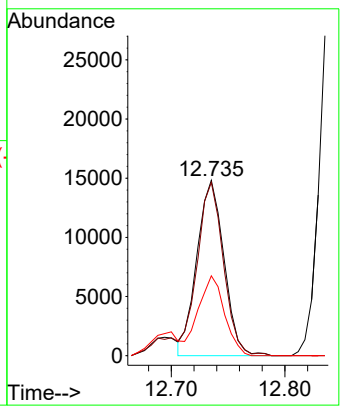
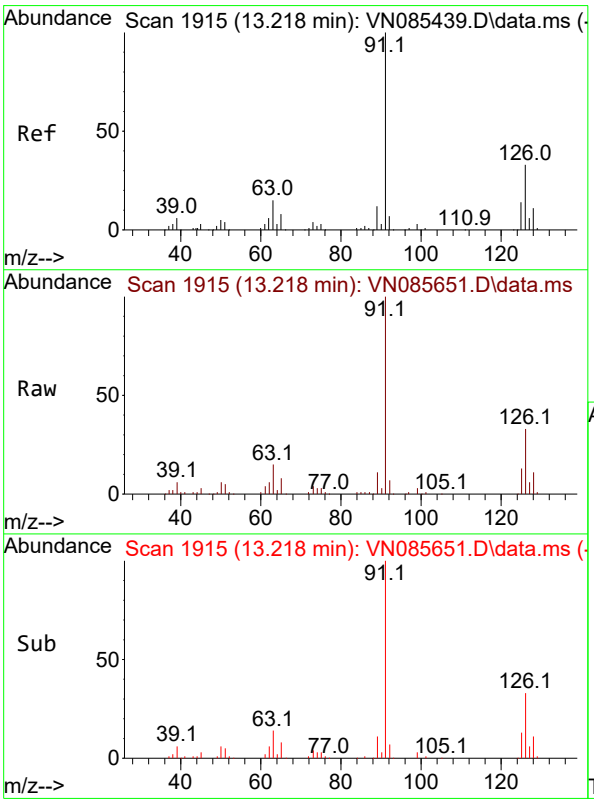
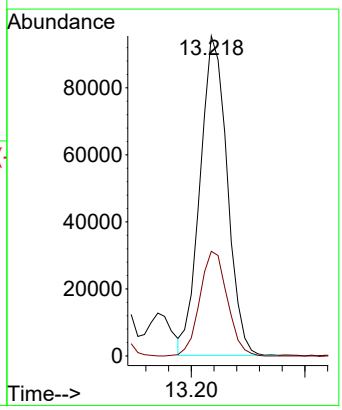


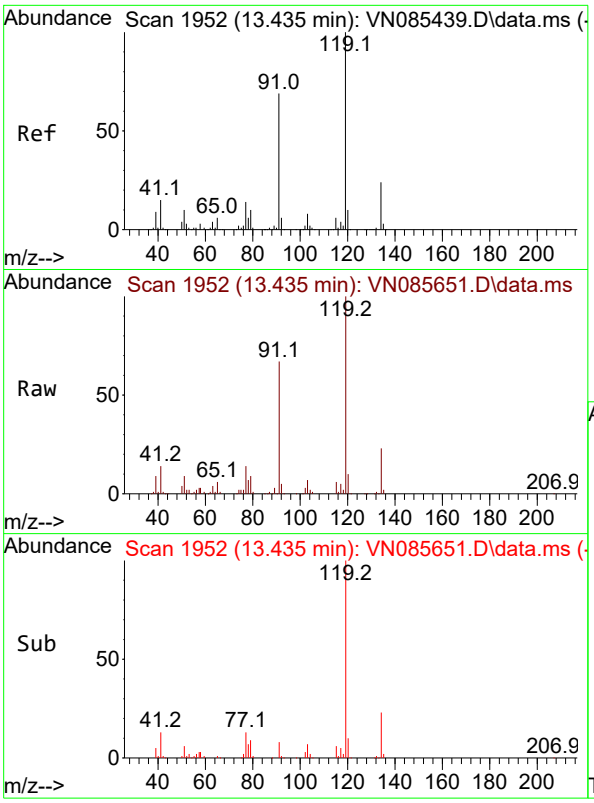


#82
4-Chlorotoluene
Concen: 20.405 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 157925

Ion	Ratio	Lower	Upper
91	100		
126	33.2	15.9	47.7





#83
tert-Butylbenzene
Concen: 19.923 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:119 Resp: 14020

Ion	Ratio	Lower	Upper
119	100		
91	67.3	35.1	105.3
134	24.3	12.0	36.1

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

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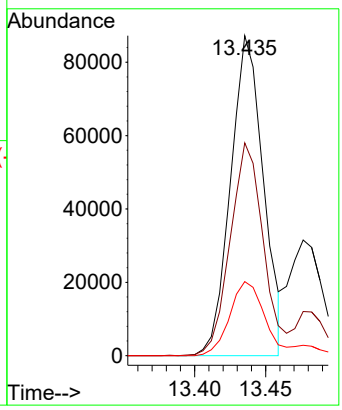
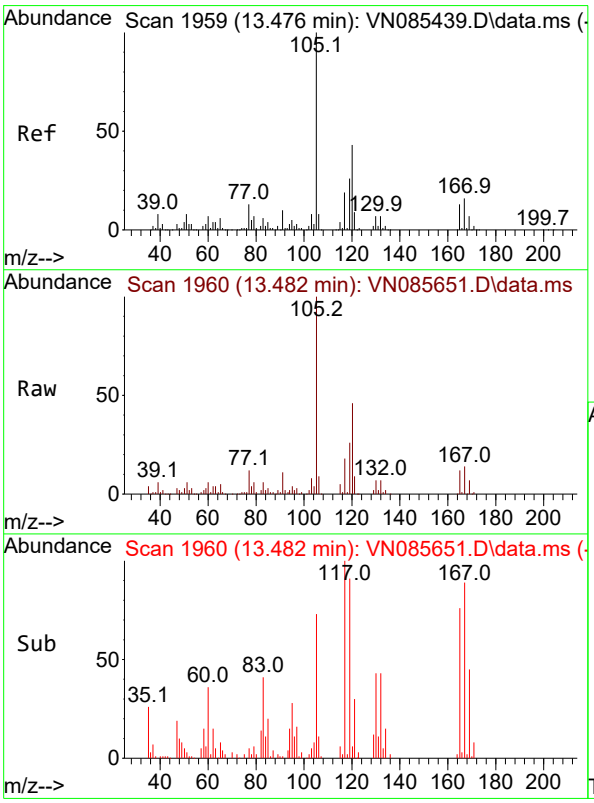
Supervised By :Mahesh Dadoda 02/06/2025

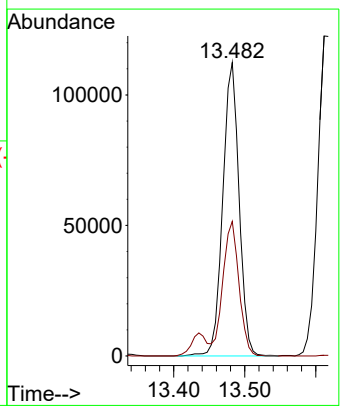


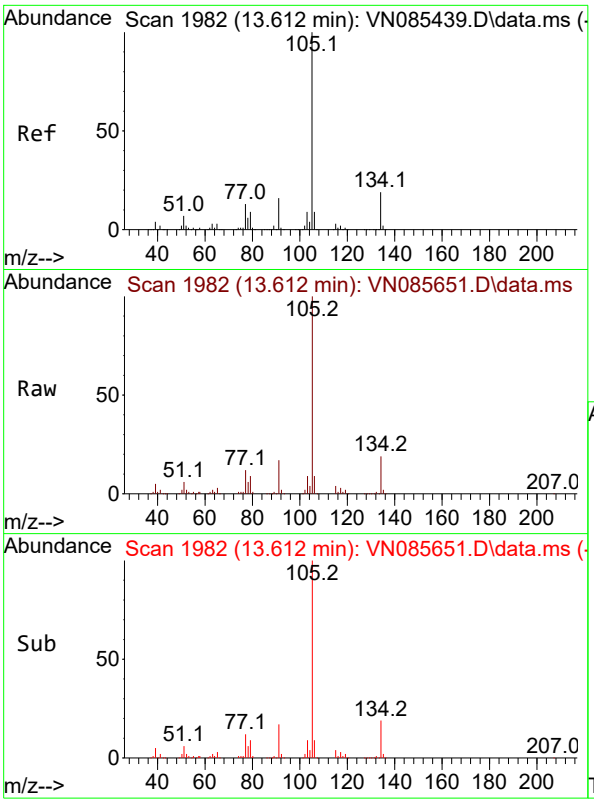


#84
1,2,4-Trimethylbenzene
Concen: 21.370 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 178481

Ion	Ratio	Lower	Upper
105	100		
120	45.3	21.6	65.0

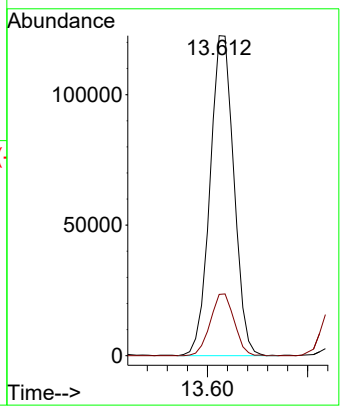




#85
sec-Butylbenzene
Concen: 20.804 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:105 Resp: 20290

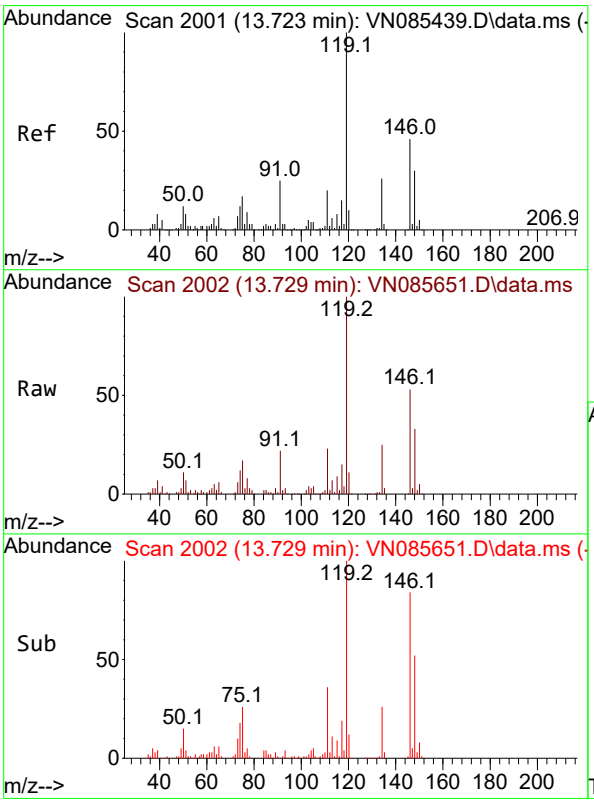
Ion	Ratio	Lower	Upper
105	100		
134	19.3	9.7	28.9



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

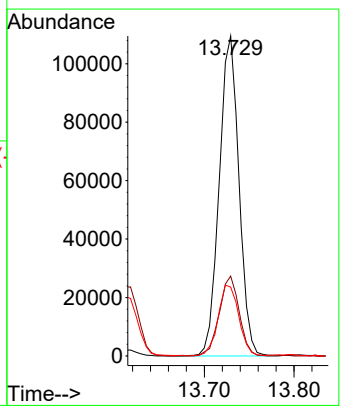
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

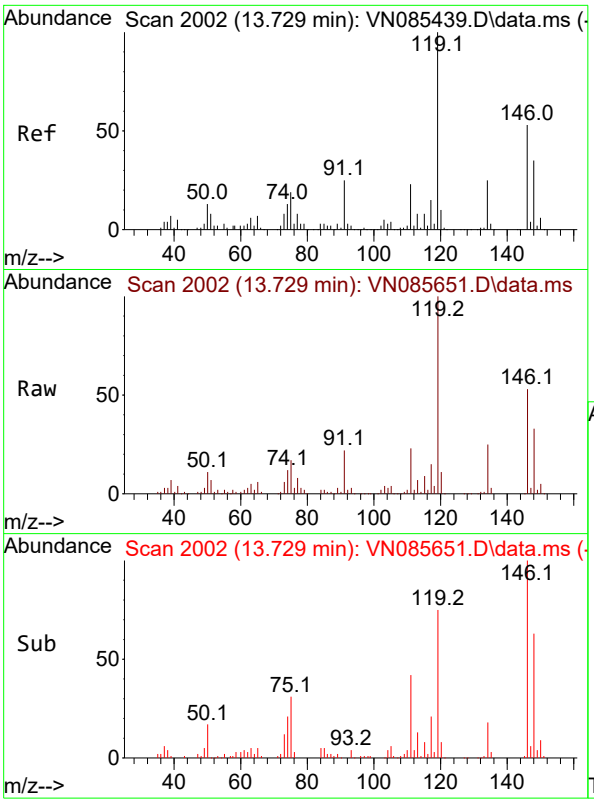


#86
p-Isopropyltoluene
Concen: 20.523 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:119 Resp: 167070

Ion	Ratio	Lower	Upper
119	100		
134	25.2	12.7	38.0
91	23.4	12.7	38.1

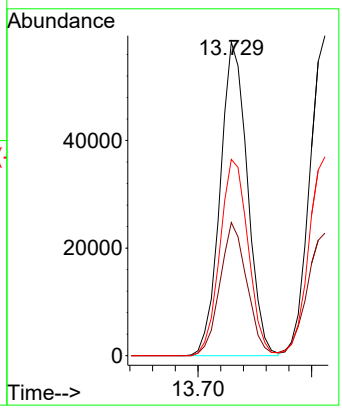




#87
1,3-Dichlorobenzene
Concen: 19.896 ug/l
RT: 13.729 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:146 Resp: 9711

Ion	Ratio	Lower	Upper
146	100		
111	42.1	21.4	64.3
148	64.8	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/05/2025
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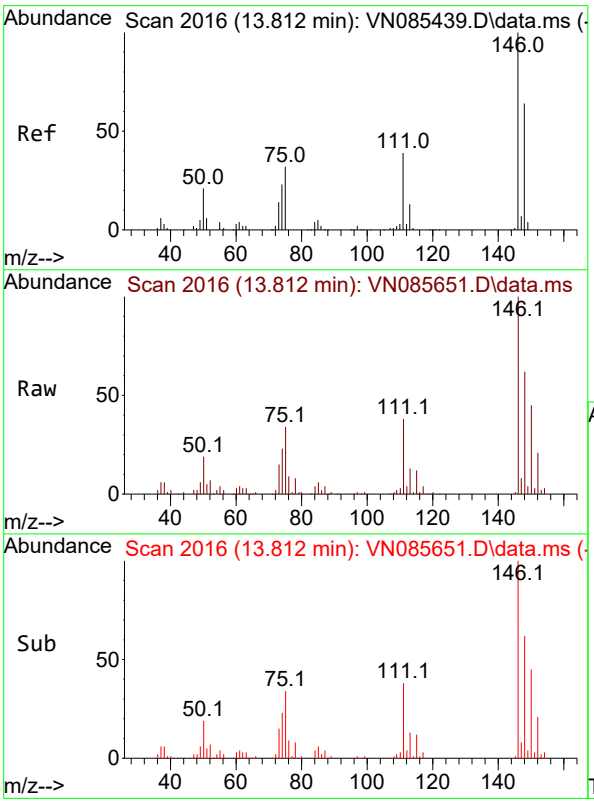
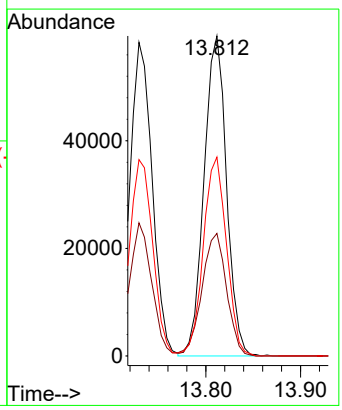
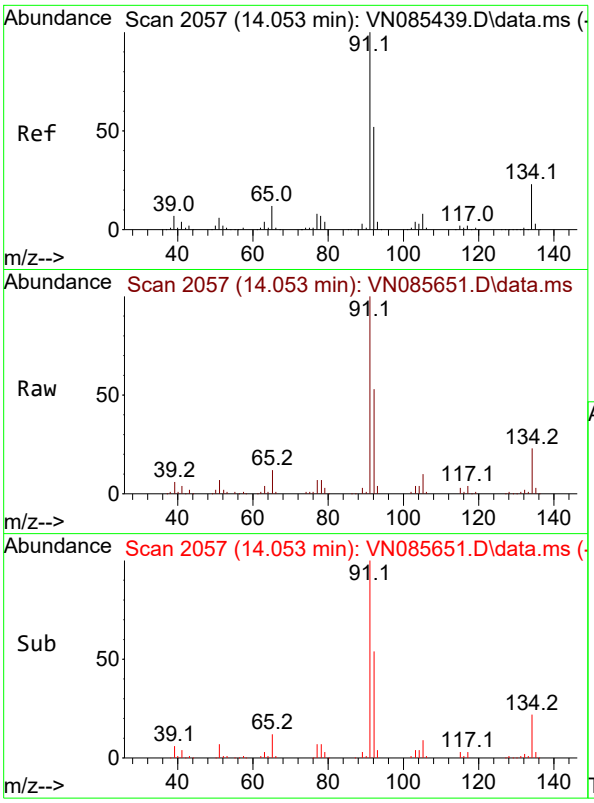


#88
1,4-Dichlorobenzene
Concen: 19.382 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:146 Resp: 98065

Ion	Ratio	Lower	Upper
146	100		
111	42.0	21.3	63.7
148	64.1	32.4	97.0





#89
n-Butylbenzene
Concen: 18.585 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 91 Resp: 13004

Ion	Ratio	Lower	Upper
91	100		
92	52.6	25.8	77.3
134	24.1	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/05/2025
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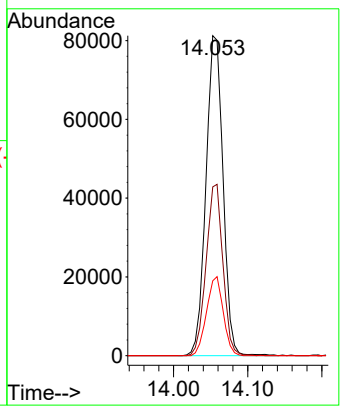
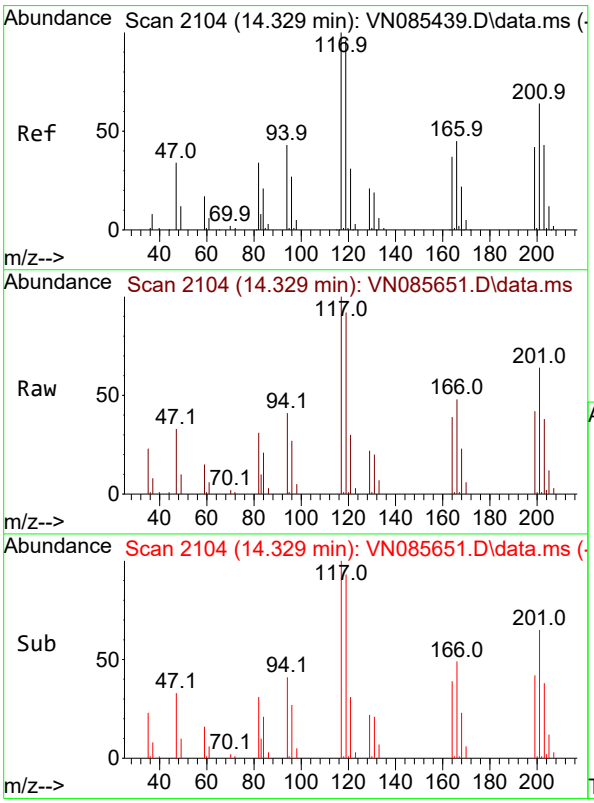
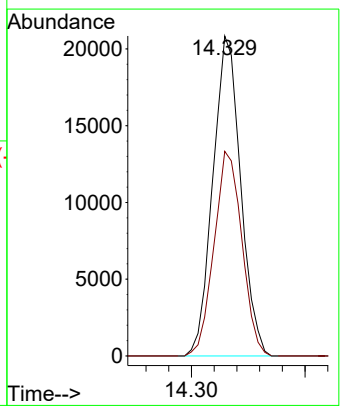


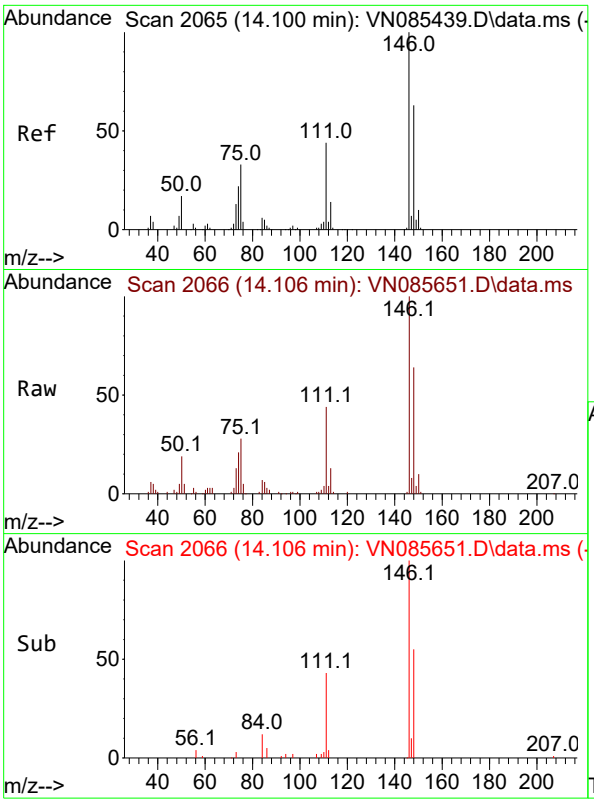


#90
Hexachloroethane
Concen: 19.041 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:117 Resp: 35354

Ion	Ratio	Lower	Upper
117	100		
201	64.2	33.7	101.0

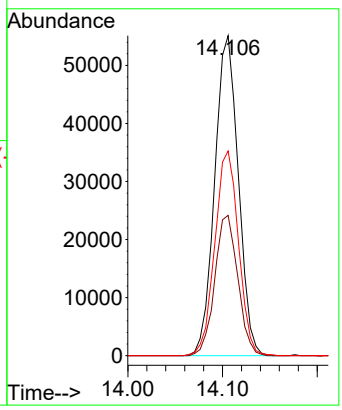




#91
1,2-Dichlorobenzene
Concen: 19.617 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:146 Resp: 9551

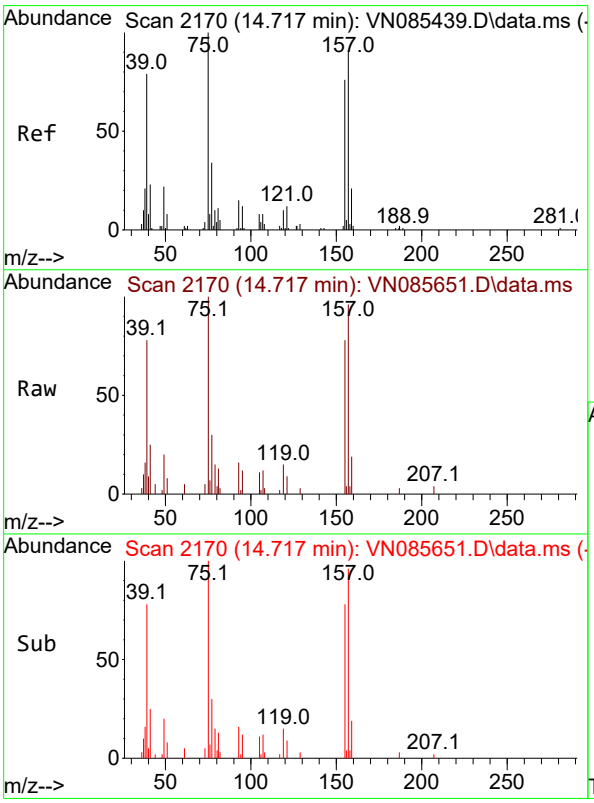
Ion	Ratio	Lower	Upper
146	100		
111	42.8	21.7	65.1
148	64.1	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
APPROVED

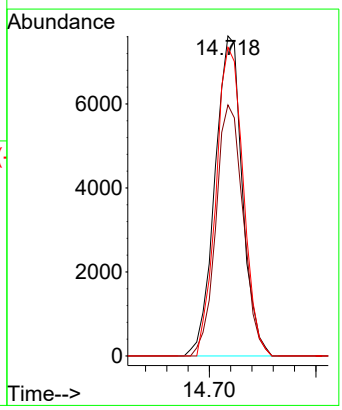
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025

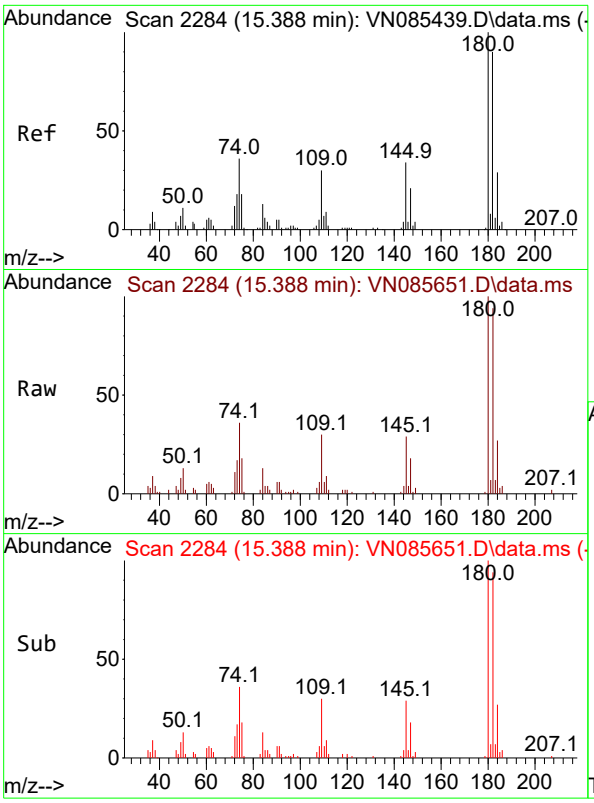


#92
1,2-Dibromo-3-Chloropropane
Concen: 20.732 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion: 75 Resp: 13567

Ion	Ratio	Lower	Upper
75	100		
155	78.3	36.4	109.2
157	95.9	45.4	136.1

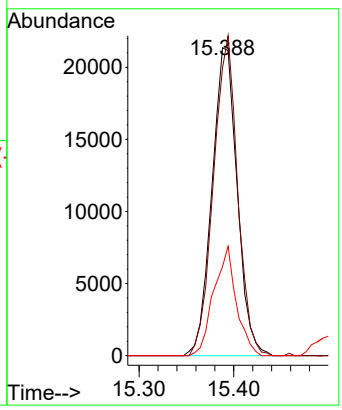




#93
1,2,4-Trichlorobenzene
Concen: 17.519 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:180 Resp: 3964

Ion	Ratio	Lower	Upper
180	100		
182	98.7	46.8	140.3
145	31.6	16.0	48.0



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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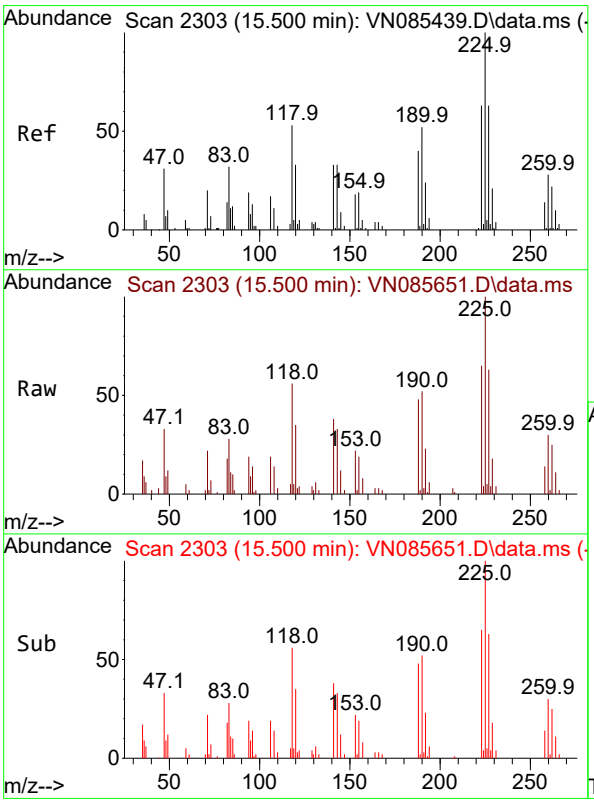
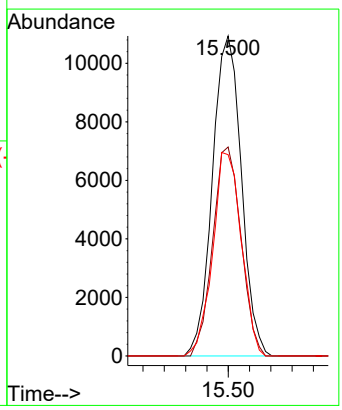
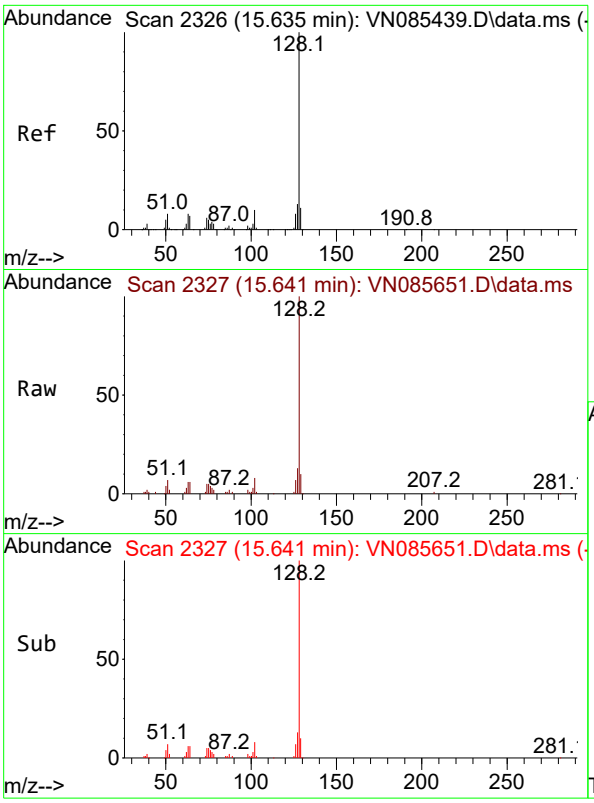


#94
Hexachlorobutadiene
Concen: 17.154 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:225 Resp: 20609

Ion	Ratio	Lower	Upper
225	100		
223	63.9	30.7	92.1
227	62.6	30.9	92.5

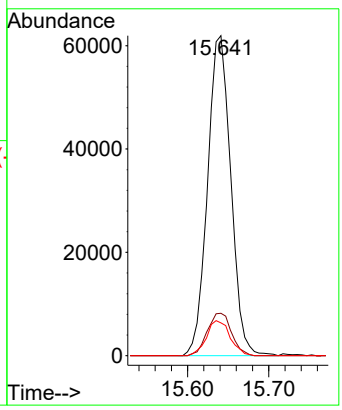




#95
Naphthalene
Concen: 18.276 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:128 Resp: 12341

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.6	16.0
129	11.1	8.8	13.2



Instrument :
MSVOA_N
ClientSampleId :
VN0204WBS02

Manual Integrations
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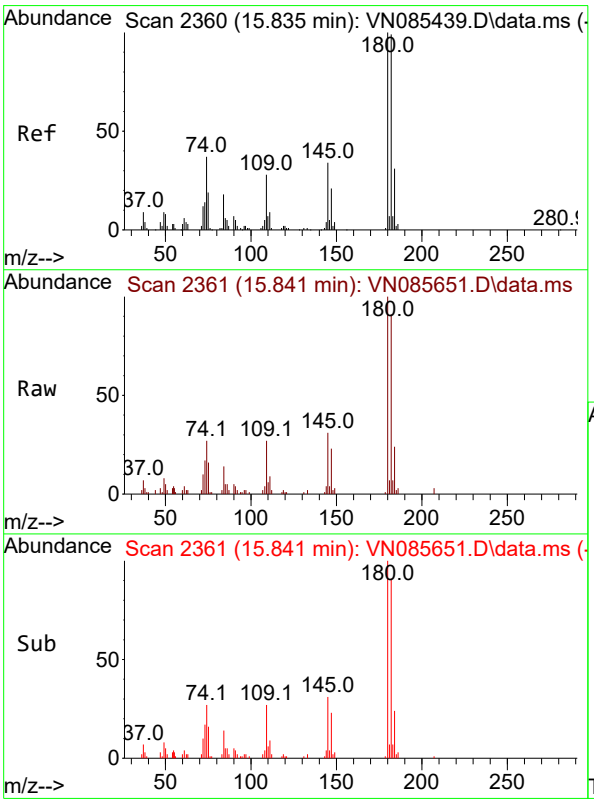
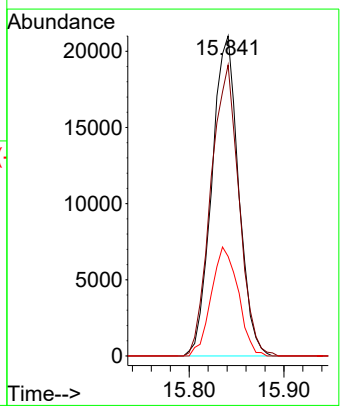
Reviewed By :John Carlone 02/05/2025
Supervised By :Mahesh Dadoda 02/06/2025



#96
1,2,3-Trichlorobenzene
Concen: 17.977 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN085651.D
Acq: 04 Feb 2025 14:51

Tgt Ion:180 Resp: 41163

Ion	Ratio	Lower	Upper
180	100		
182	95.5	47.4	142.2
145	34.3	16.9	50.7



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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0203WBSD01	SDG No.:	Q1241
Lab Sample ID:	VN0203WBSD01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085620.D	1		02/03/25 14:22	VN020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	18.9		0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	18.1		0.26	5.00	ug/L
78-93-3	2-Butanone	94.6		1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	17.8		0.25	5.00	ug/L
67-66-3	Chloroform	19.8		0.26	5.00	ug/L
71-43-2	Benzene	18.8		0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	17.5		0.24	5.00	ug/L
79-01-6	Trichloroethene	18.2		0.32	5.00	ug/L
127-18-4	Tetrachloroethene	19.1		0.25	5.00	ug/L
108-90-7	Chlorobenzene	19.6		0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.0		74 - 125	96%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		75 - 124	102%	SPK: 50
2037-26-5	Toluene-d8	51.7		86 - 113	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.8		77 - 121	98%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	177000	8.224			
540-36-3	1,4-Difluorobenzene	317000	9.1			
3114-55-4	Chlorobenzene-d5	278000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	132000	13.788			

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	177381	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	316818	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	277592	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	132351	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	137375	47.978	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 95.960%			
35) Dibromofluoromethane	8.165	113	112154	51.027	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.060%			
50) Toluene-d8	10.565	98	403865	51.716	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 103.440%			
62) 4-Bromofluorobenzene	12.847	95	130381	48.807	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 97.620%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	36725	15.291	ug/l	96
3) Chloromethane	2.359	50	37630	14.471	ug/l	98
4) Vinyl Chloride	2.512	62	49451	18.920	ug/l	93
5) Bromomethane	2.959	94	32239	20.420	ug/l	96
6) Chloroethane	3.124	64	33310	20.102	ug/l	100
7) Trichlorofluoromethane	3.500	101	68134	17.966	ug/l	98
8) Diethyl Ether	3.965	74	23505	17.941	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.371	101	41678	19.512	ug/l	98
10) Methyl Iodide	4.594	142	46834	19.146	ug/l	95
11) Tert butyl alcohol	5.512	59	33754	102.951	ug/l	98
12) 1,1-Dichloroethene	4.347	96	34518	18.132	ug/l	83
13) Acrolein	4.183	56	22257	49.729	ug/l	96
14) Allyl chloride	5.024	41	51626	16.712	ug/l	92
15) Acrylonitrile	5.724	53	103456	99.342	ug/l	99
16) Acetone	4.424	43	83180	89.909	ug/l	94
17) Carbon Disulfide	4.712	76	82042	13.997	ug/l	98
18) Methyl Acetate	5.018	43	59280	21.072	ug/l	91
19) Methyl tert-butyl Ether	5.794	73	123329	19.951	ug/l	99
20) Methylene Chloride	5.271	84	44642	19.492	ug/l	91
21) trans-1,2-Dichloroethene	5.789	96	37520	18.442	ug/l	94
22) Diisopropyl ether	6.665	45	123987	18.083	ug/l	98
23) Vinyl Acetate	6.600	43	413834	86.245	ug/l	95
24) 1,1-Dichloroethane	6.565	63	79023	18.901	ug/l	97
25) 2-Butanone	7.482	43	128769	94.582	ug/l	95
26) 2,2-Dichloropropane	7.488	77	67615	20.004	ug/l	96
27) cis-1,2-Dichloroethene	7.488	96	47023	19.623	ug/l	93
28) Bromochloromethane	7.812	49	36218	18.620	ug/l	89
29) Tetrahydrofuran	7.841	42	81866	94.844	ug/l	91
30) Chloroform	7.965	83	85403	19.765	ug/l	97
31) Cyclohexane	8.253	56	56062	15.428	ug/l #	82
32) 1,1,1-Trichloroethane	8.165	97	71876	18.963	ug/l	97
36) 1,1-Dichloropropene	8.371	75	51010	16.536	ug/l	99
37) Ethyl Acetate	7.559	43	51943	16.682	ug/l #	97
38) Carbon Tetrachloride	8.359	117	62929	17.819	ug/l	99
39) Methylcyclohexane	9.594	83	47049	16.231	ug/l	97
40) Benzene	8.600	78	174408	18.817	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	26968	16.648	ug/l	#	88
42) 1,2-Dichloroethane	8.665	62	61132	17.512	ug/l		97
43) Isopropyl Acetate	8.682	43	91136	18.267	ug/l		97
44) Trichloroethene	9.353	130	39267	18.200	ug/l		99
45) 1,2-Dichloropropane	9.618	63	44301	18.712	ug/l		98
46) Dibromomethane	9.706	93	32808	19.205	ug/l		99
47) Bromodichloromethane	9.882	83	67537	19.406	ug/l		99
48) Methyl methacrylate	9.676	41	36989	16.475	ug/l	#	87
49) 1,4-Dioxane	9.688	88	16068	424.978	ug/l		91
51) 4-Methyl-2-Pentanone	10.441	43	276729	95.585	ug/l		95
52) Toluene	10.629	92	107257	19.972	ug/l		97
53) t-1,3-Dichloropropene	10.835	75	63248	19.230	ug/l		96
54) cis-1,3-Dichloropropene	10.312	75	65503	18.645	ug/l		94
55) 1,1,2-Trichloroethane	11.012	97	44024	20.714	ug/l		97
56) Ethyl methacrylate	10.871	69	58187	17.556	ug/l		91
57) 1,3-Dichloropropane	11.159	76	74646	20.199	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.159	63	106559	79.007	ug/l		98
59) 2-Hexanone	11.194	43	196651	96.535	ug/l		95
60) Dibromochloromethane	11.359	129	51933	20.240	ug/l		98
61) 1,2-Dibromoethane	11.465	107	42700	20.183	ug/l		99
64) Tetrachloroethene	11.100	164	36100	19.076	ug/l		95
65) Chlorobenzene	11.888	112	119360	19.628	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	45386	20.335	ug/l		98
67) Ethyl Benzene	11.959	91	189154	19.098	ug/l		100
68) m/p-Xylenes	12.070	106	148722	40.628	ug/l		95
69) o-Xylene	12.394	106	68283	19.519	ug/l		96
70) Styrene	12.412	104	117567	20.307	ug/l		96
71) Bromoform	12.576	173	34300	21.478	ug/l	#	97
73) Isopropylbenzene	12.694	105	172454	19.306	ug/l		99
74) N-amyl acetate	12.494	43	67688	16.859	ug/l		92
75) 1,1,2,2-Tetrachloroethane	12.935	83	66716	21.144	ug/l		100
76) 1,2,3-Trichloropropane	12.994	75	59990m	22.301	ug/l		
77) Bromobenzene	12.976	156	45507	19.499	ug/l		95
78) n-propylbenzene	13.035	91	208681	19.734	ug/l		99
79) 2-Chlorotoluene	13.123	91	132631	19.380	ug/l		97
80) 1,3,5-Trimethylbenzene	13.170	105	147177	19.947	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	20135	20.251	ug/l		90
82) 4-Chlorotoluene	13.217	91	131384	19.280	ug/l		98
83) tert-Butylbenzene	13.435	119	119331	19.259	ug/l		97
84) 1,2,4-Trimethylbenzene	13.482	105	146712	19.950	ug/l		98
85) sec-Butylbenzene	13.612	105	172226	20.055	ug/l		99
86) p-Isopropyltoluene	13.729	119	137244	19.216	ug/l		99
87) 1,3-Dichlorobenzene	13.729	146	83838	19.507	ug/l		99
88) 1,4-Dichlorobenzene	13.806	146	83412	18.724	ug/l		100
89) n-Butylbenzene	14.053	91	112690	18.291	ug/l		100
90) Hexachloroethane	14.335	117	31482	19.257	ug/l		98
91) 1,2-Dichlorobenzene	14.106	146	81715	19.061	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.717	75	11390	19.768	ug/l		94
93) 1,2,4-Trichlorobenzene	15.388	180	35819	17.977	ug/l		99
94) Hexachlorobutadiene	15.500	225	18661	17.641	ug/l		99
95) Naphthalene	15.641	128	107097	18.013	ug/l		99
96) 1,2,3-Trichlorobenzene	15.835	180	36123	17.917	ug/l		98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020325\
Data File : VN085620.D
Acq On : 03 Feb 2025 14:22
Operator : JC\MD
Sample : VN0203WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 00:58:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations APPROVED

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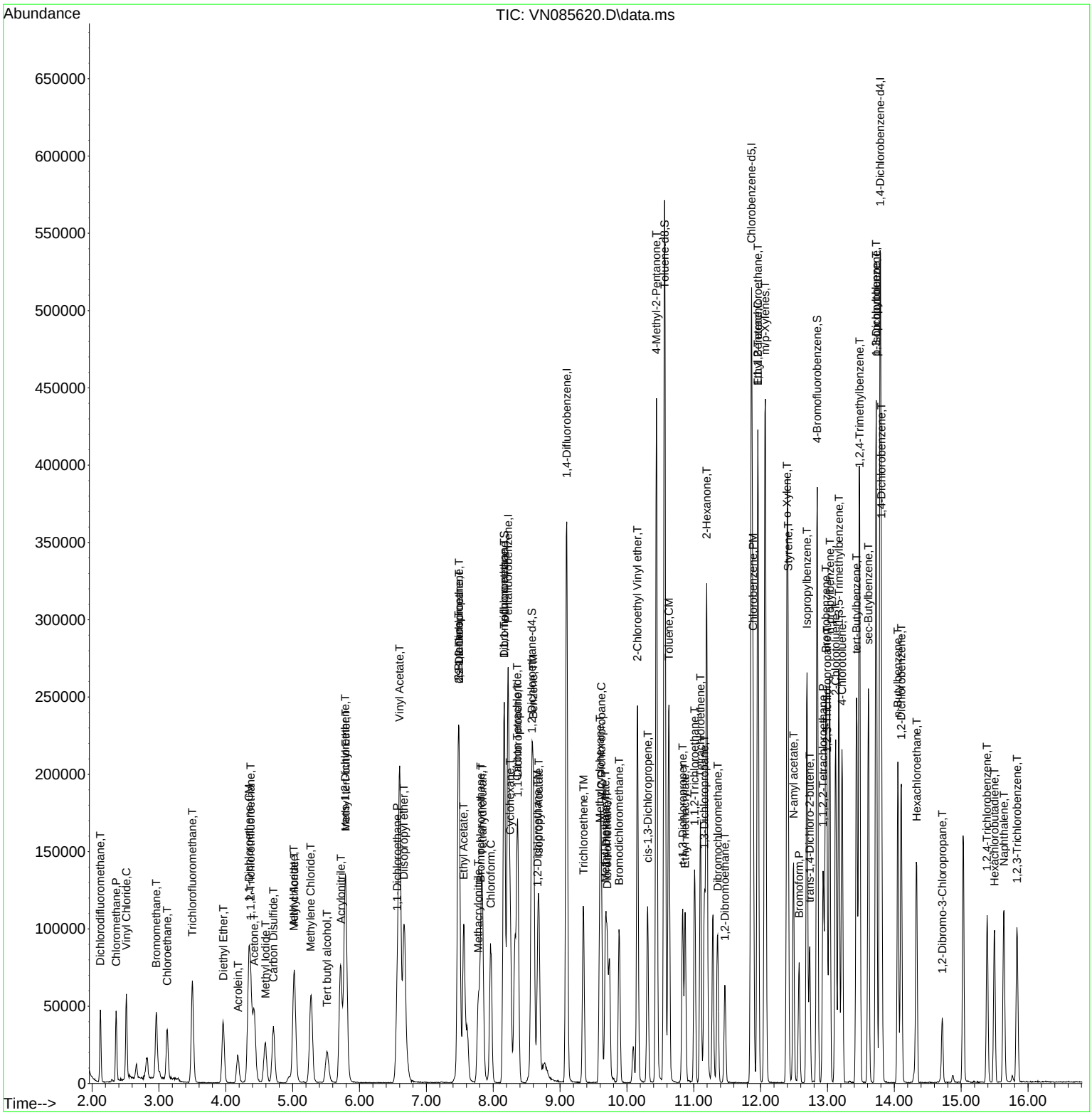
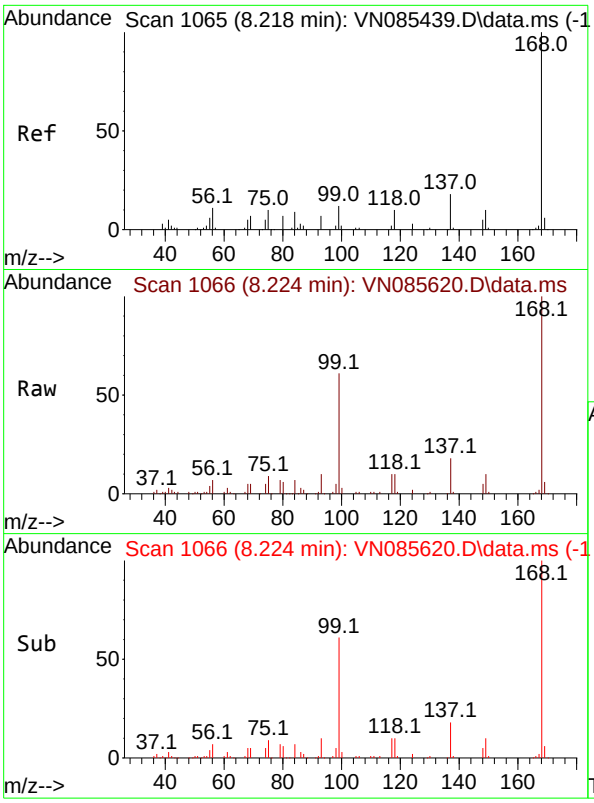
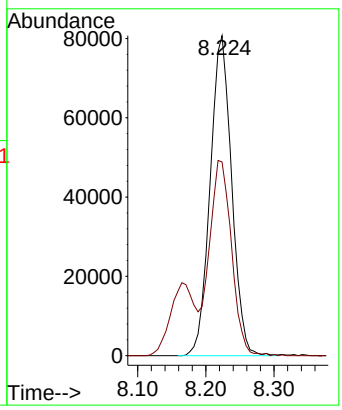




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:168 Resp: 17738

Ion	Ratio	Lower	Upper
168	100		
99	60.6	53.6	80.4



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

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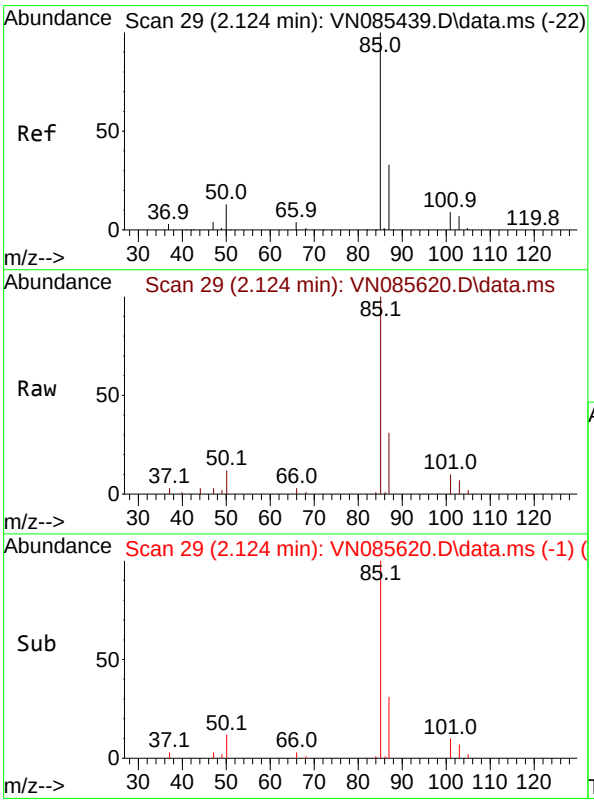
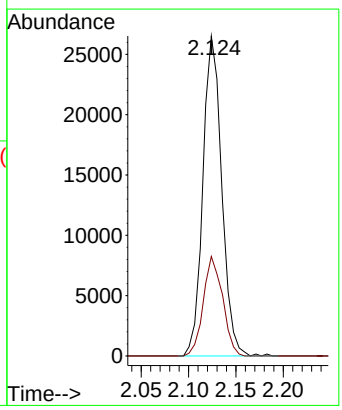
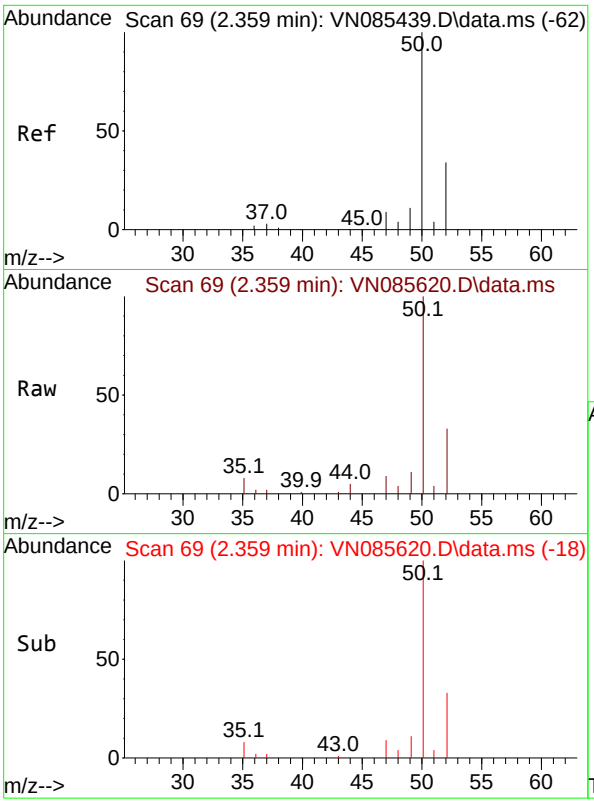


#2
Dichlorodifluoromethane
Concen: 15.291 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 85 Resp: 36725

Ion	Ratio	Lower	Upper
85	100		
87	31.1	16.7	50.1

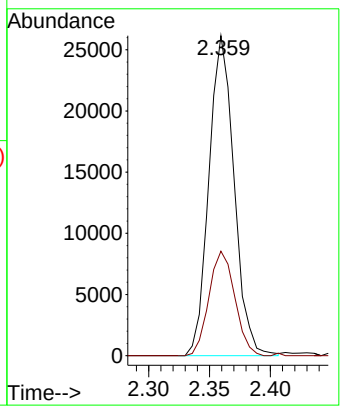




#3
Chloromethane
Concen: 14.471 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 50 Resp: 3763

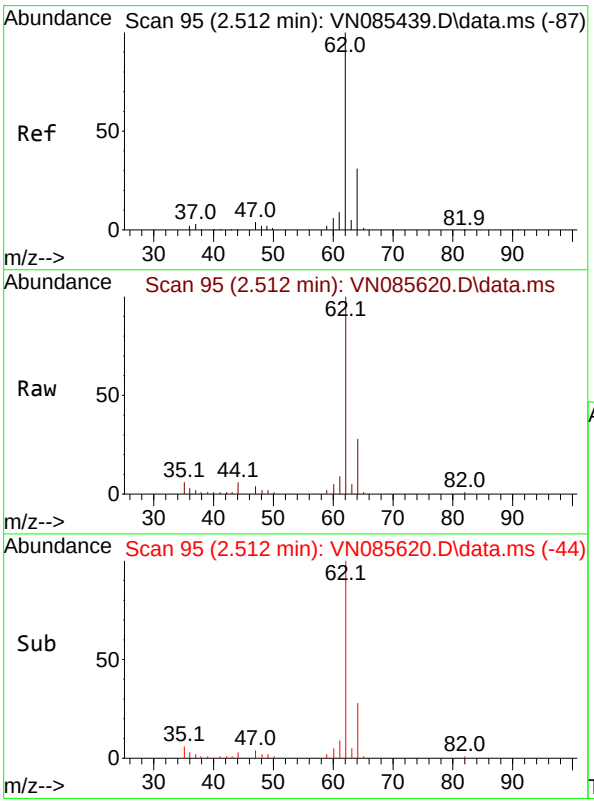
Ion	Ratio	Lower	Upper
50	100		
52	32.7	27.0	40.6



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

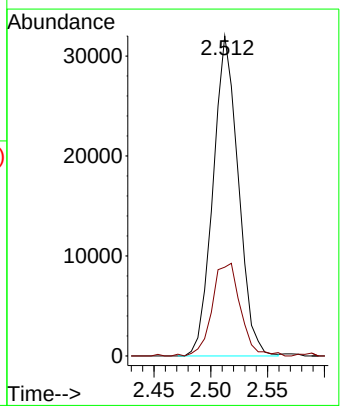
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

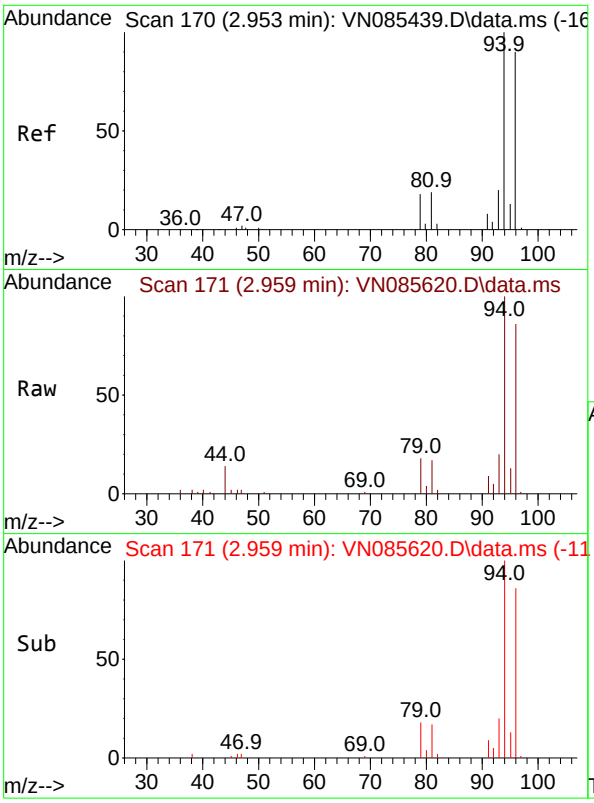


#4
Vinyl Chloride
Concen: 18.920 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 62 Resp: 49451

Ion	Ratio	Lower	Upper
62	100		
64	27.2	24.8	37.2





#5
Bromomethane
Concen: 20.420 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

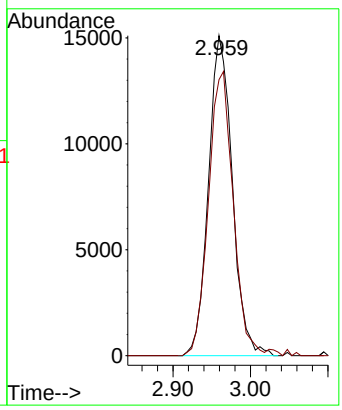
Tgt Ion: 94 Resp: 3223

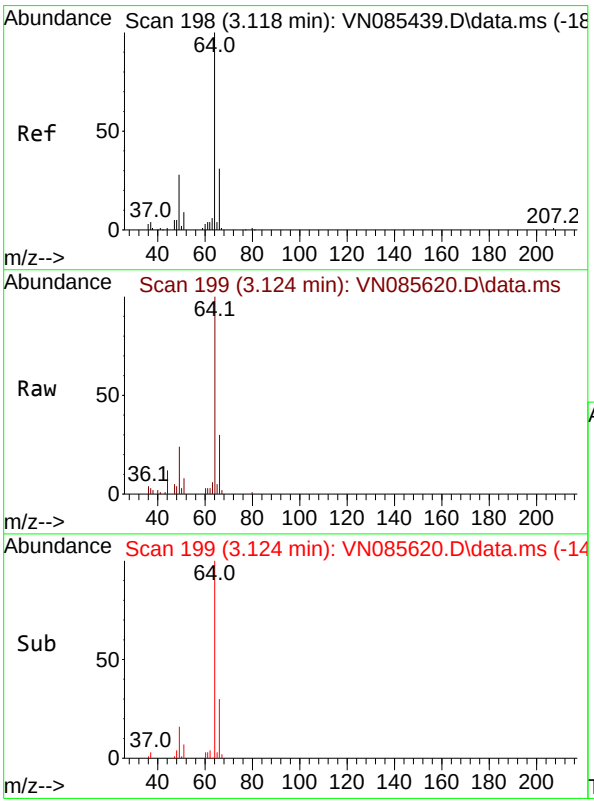
Ion	Ratio	Lower	Upper
94	100		
96	86.3	71.8	107.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

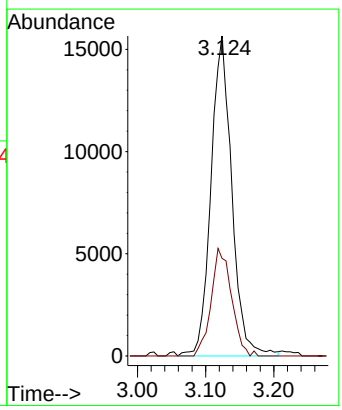


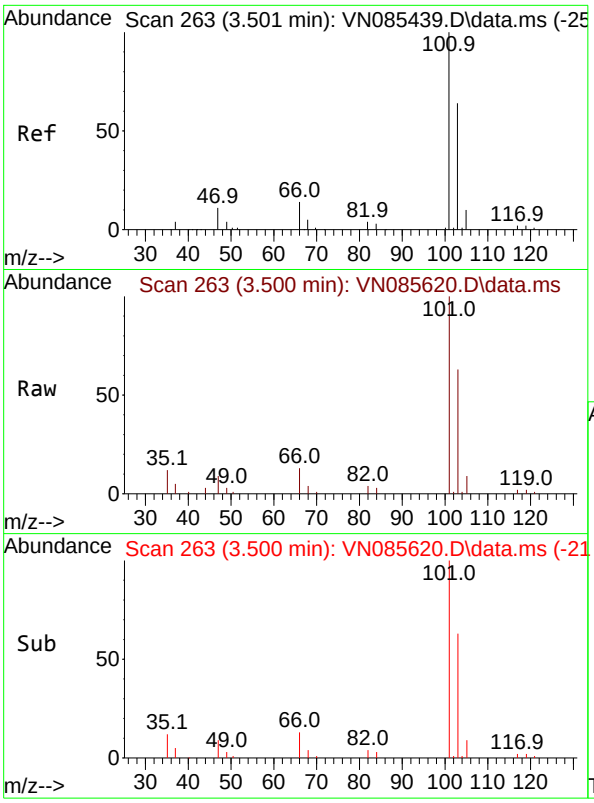


#6
Chloroethane
Concen: 20.102 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 64 Resp: 33310

Ion	Ratio	Lower	Upper
64	100		
66	30.5	24.6	36.8





#7
Trichlorofluoromethane
Concen: 17.966 ug/l
RT: 3.500 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:101 Resp: 6813

Ion	Ratio	Lower	Upper
101	100		
103	62.5	51.4	77.2

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

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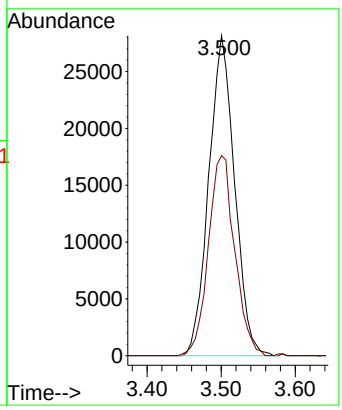
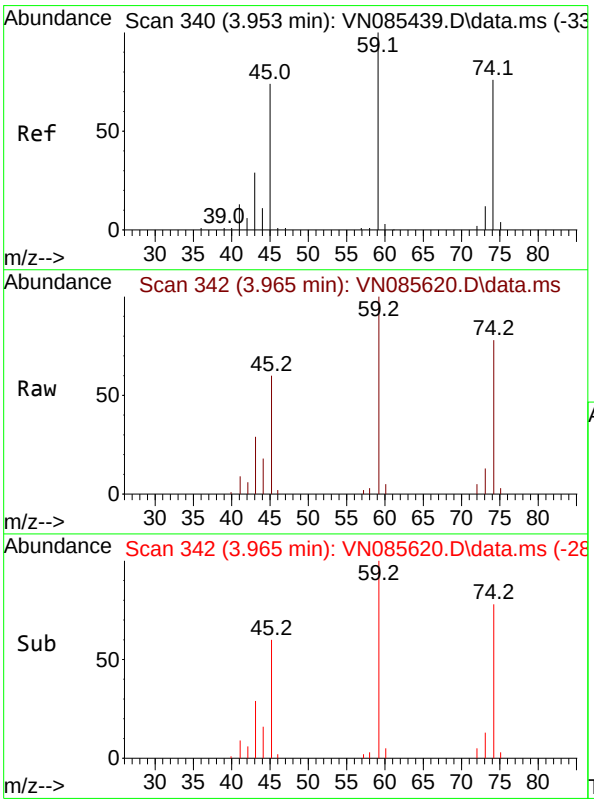
Supervised By :Mahesh Dadoda 02/04/2025

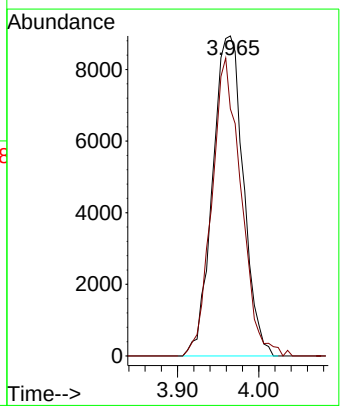


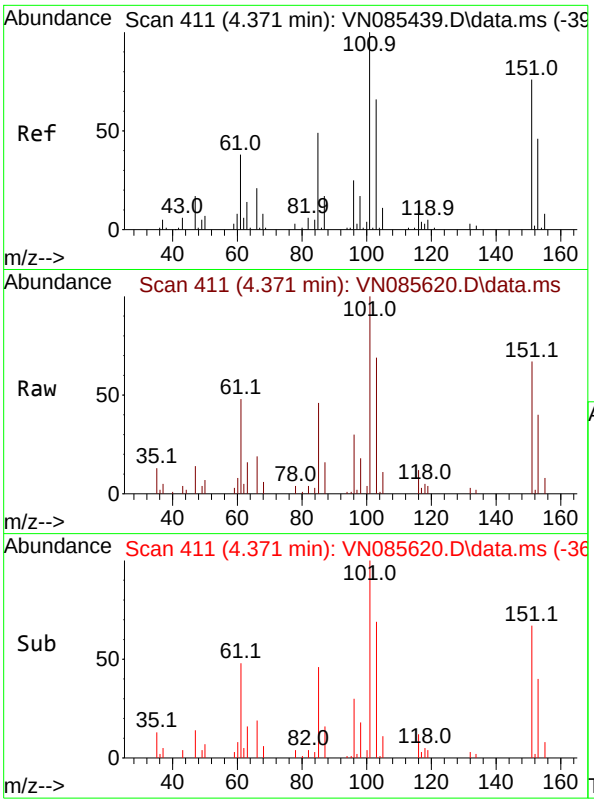


#8
Diethyl Ether
Concen: 17.941 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 74 Resp: 23505

Ion	Ratio	Lower	Upper
74	100		
45	88.6	49.7	149.1





#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.512 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:101 Resp: 4167

Ion	Ratio	Lower	Upper
101	100		
85	45.5	37.8	56.8
151	74.3	58.8	88.2

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
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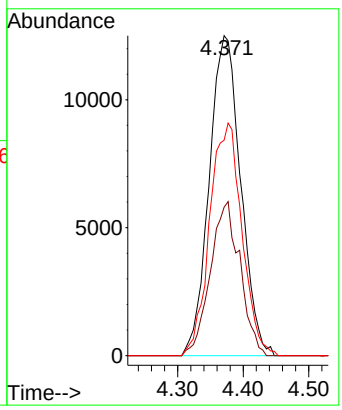
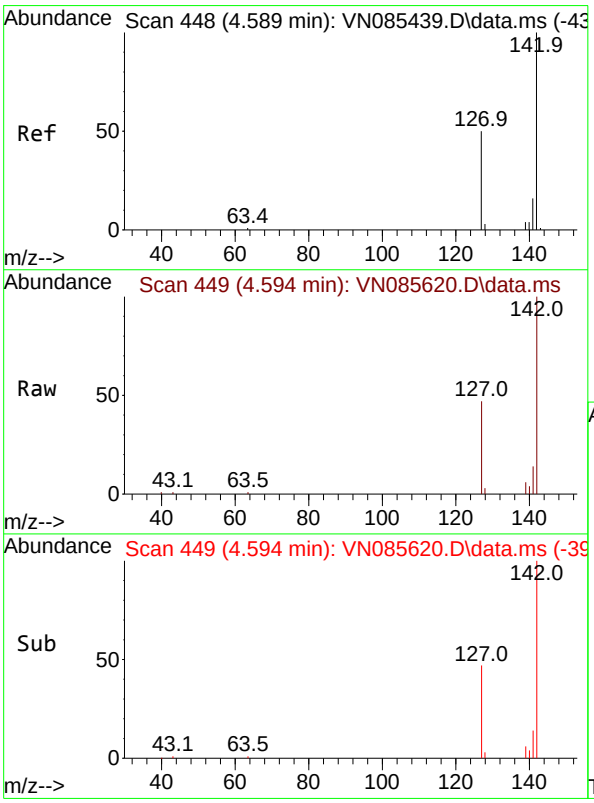
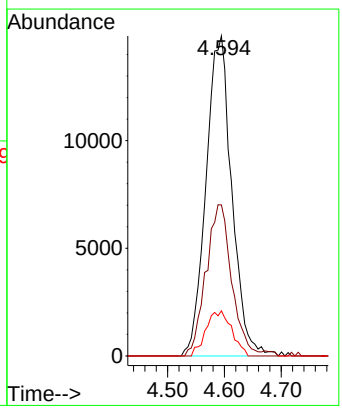


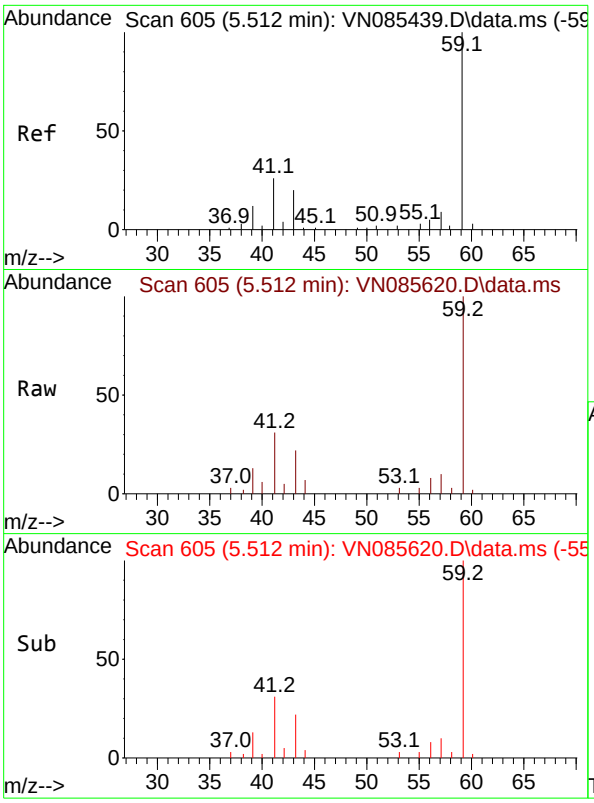


#10
Methyl Iodide
Concen: 19.146 ug/l
RT: 4.594 min Scan# 449
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:142 Resp: 46834

Ion	Ratio	Lower	Upper
142	100		
127	47.2	40.3	60.5
141	14.1	12.8	19.2





#11
Tert butyl alcohol
Concen: 102.951 ug/l
RT: 5.512 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 59 Resp: 3375

Ion	Ratio	Lower	Upper
59	100		
57	11.5	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

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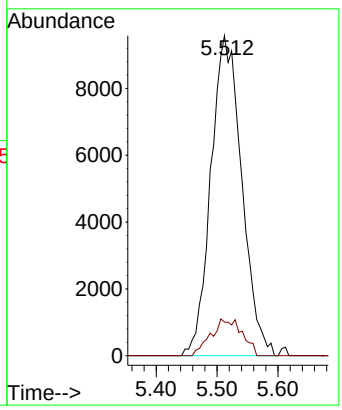
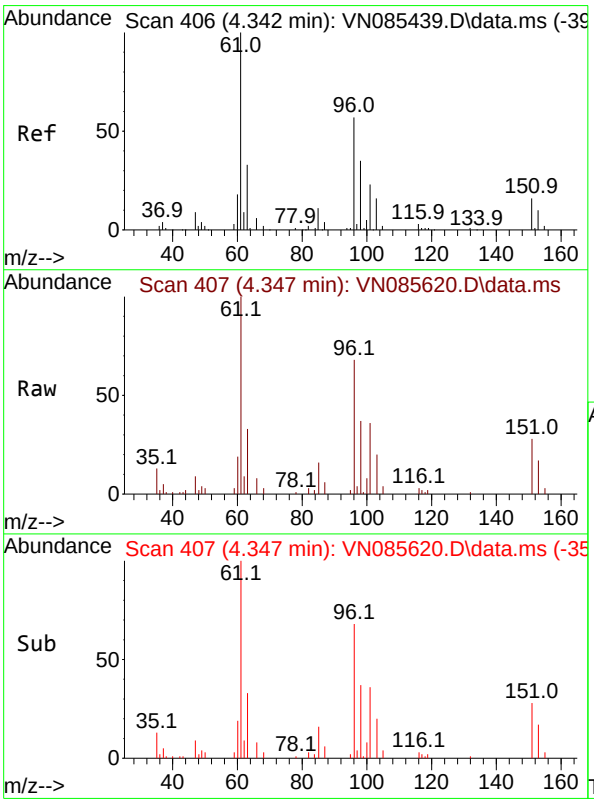
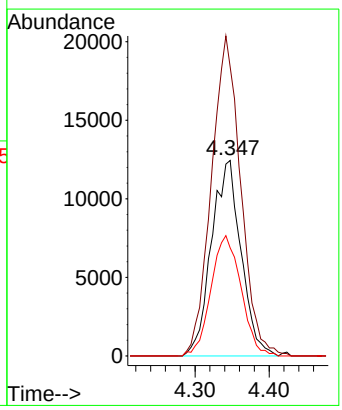


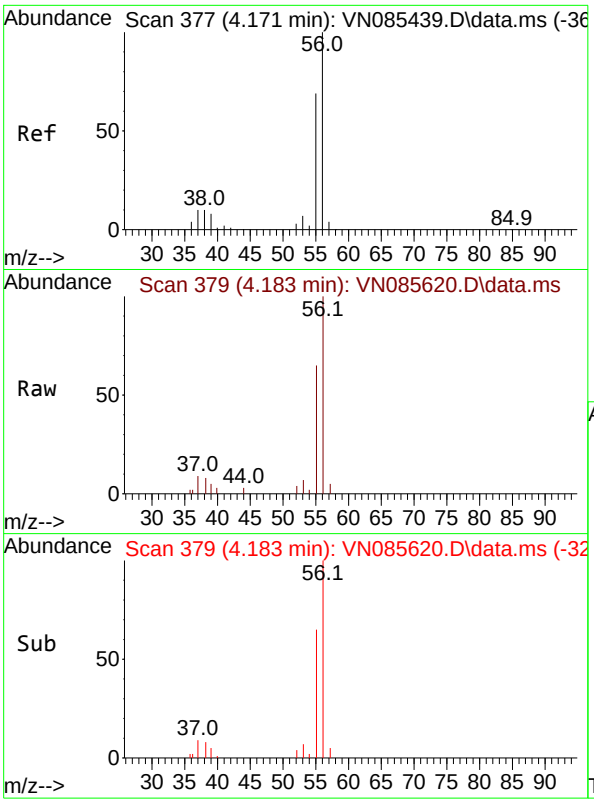


#12
1,1-Dichloroethene
Concen: 18.132 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 96 Resp: 34518

Ion	Ratio	Lower	Upper
96	100		
61	147.7	141.0	211.4
98	55.3	49.0	73.6

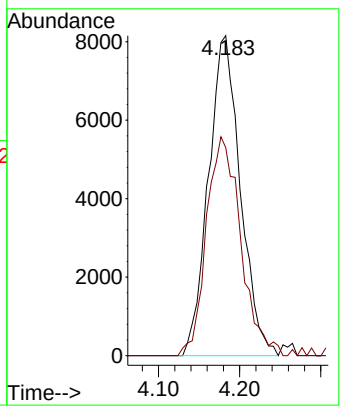




#13
Acrolein
Concen: 49.729 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 56 Resp: 2225

Ion	Ratio	Lower	Upper
56	100		
55	73.5	56.3	84.5



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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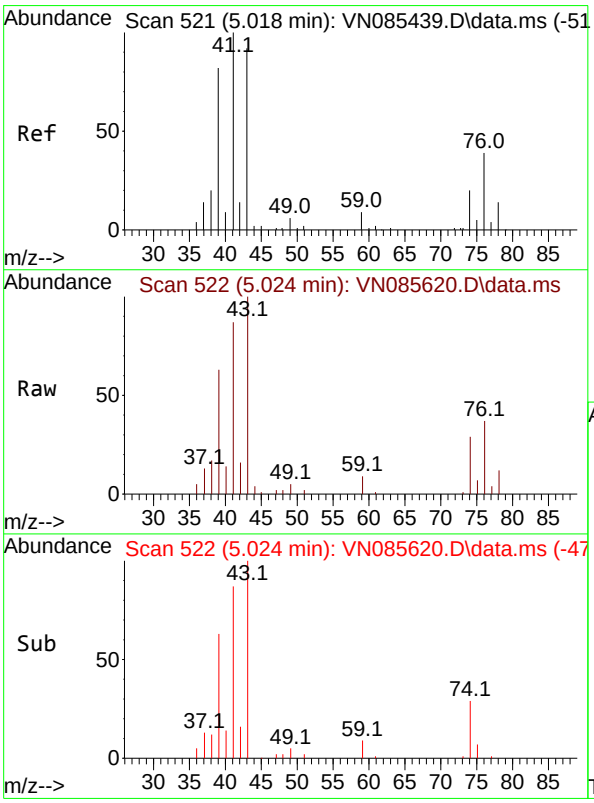
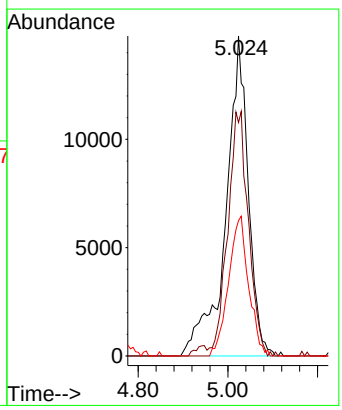
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

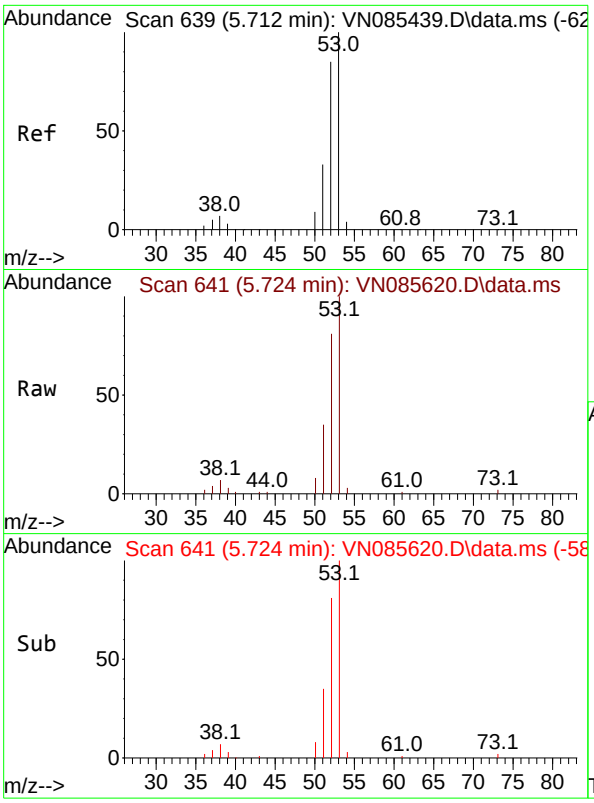


#14
Allyl chloride
Concen: 16.712 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 41 Resp: 51626

Ion	Ratio	Lower	Upper
41	100		
39	70.1	64.4	96.6
76	38.9	30.5	45.7





#15
Acrylonitrile
Concen: 99.342 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 53 Resp: 10345

Ion	Ratio	Lower	Upper
53	100		
52	82.1	65.5	98.3
51	36.7	29.8	44.8

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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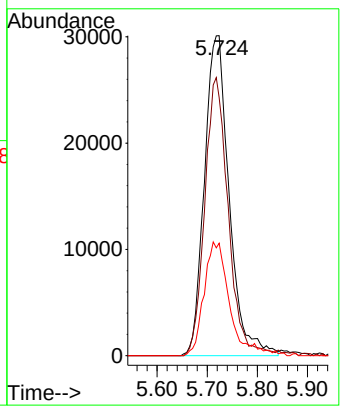
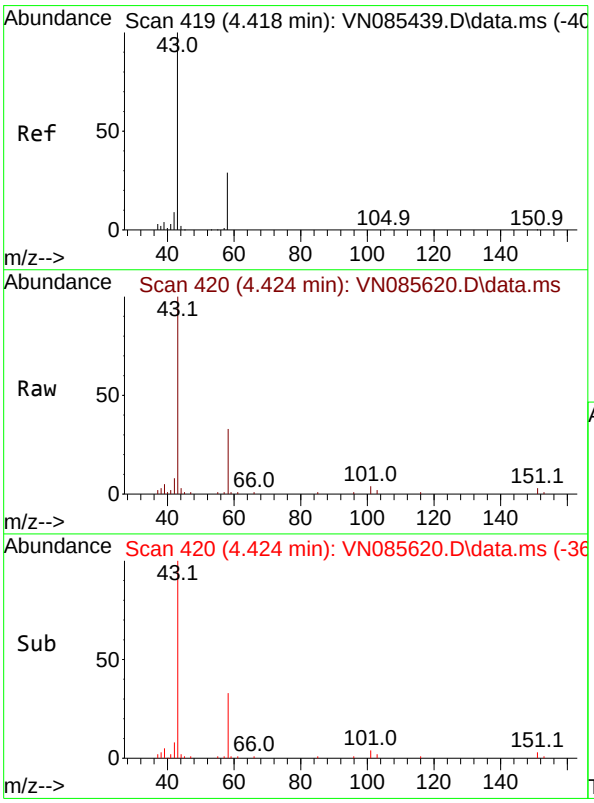
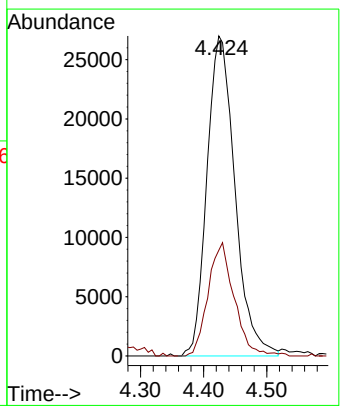


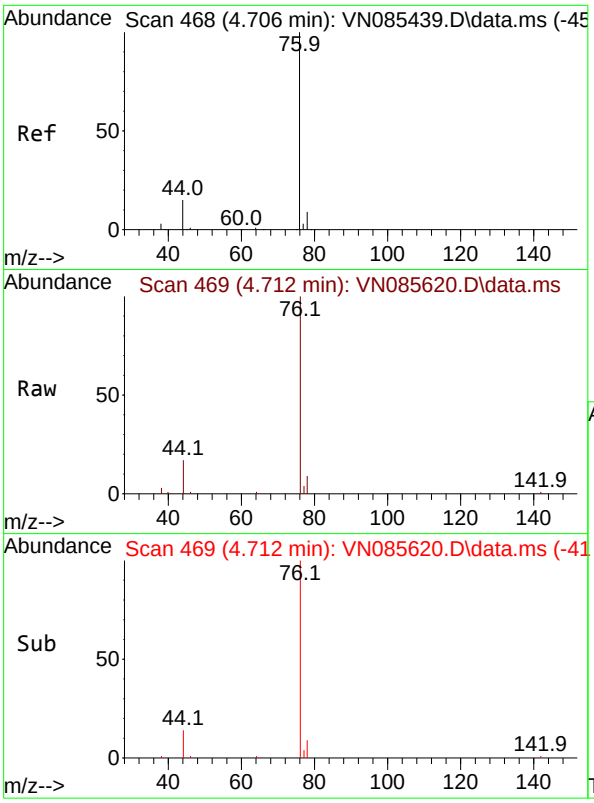


#16
Acetone
Concen: 89.909 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 83180

Ion	Ratio	Lower	Upper
43	100		
58	33.0	23.8	35.6

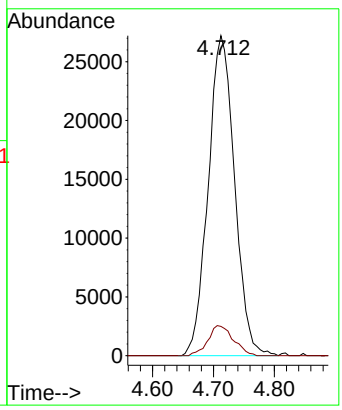




#17
Carbon Disulfide
Concen: 13.997 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 76 Resp: 8204

Ion	Ratio	Lower	Upper
76	100		
78	9.2	6.9	10.3



Instrument :
MSVOA_N
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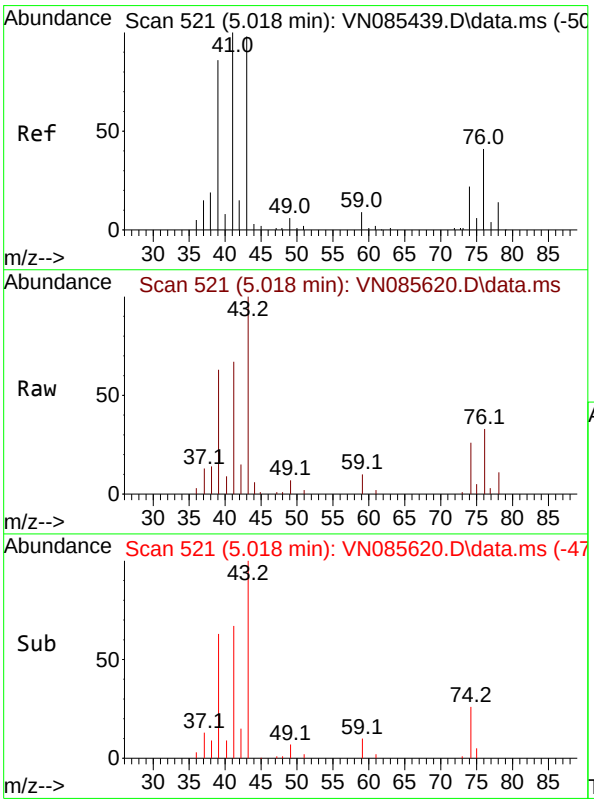
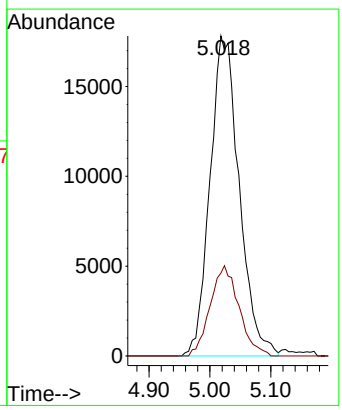
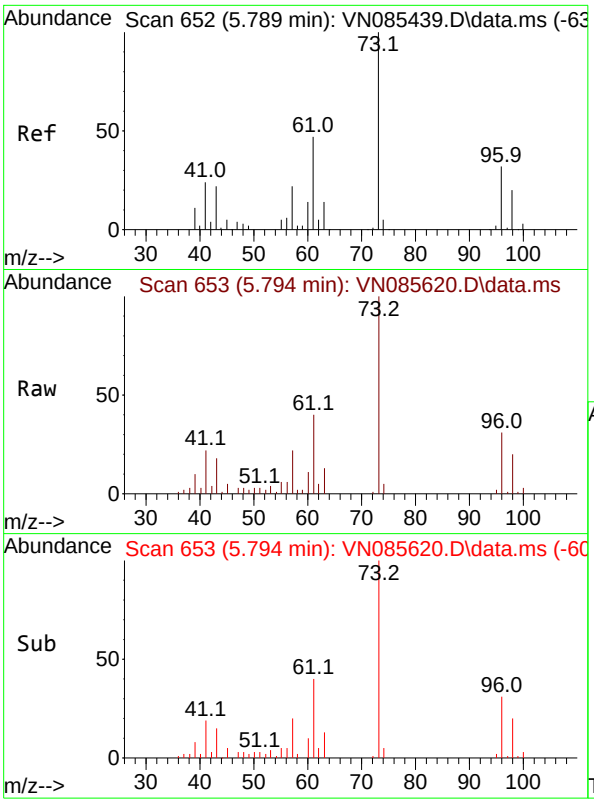


#18
Methyl Acetate
Concen: 21.072 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 59280

Ion	Ratio	Lower	Upper
43	100		
74	27.8	18.6	28.0





#19
Methyl tert-butyl Ether
Concen: 19.951 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 73 Resp: 12332

Ion	Ratio	Lower	Upper
73	100		
57	21.6	17.8	26.8

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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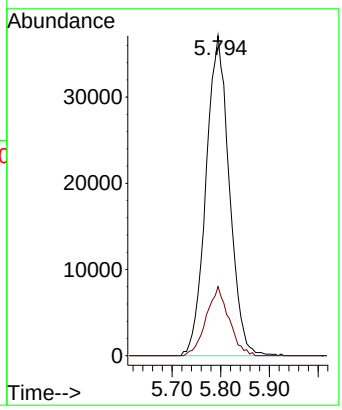
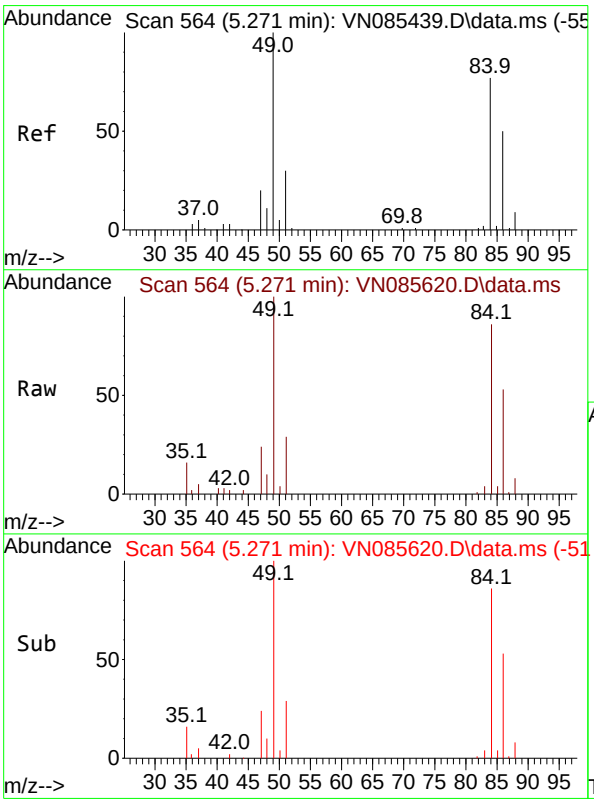
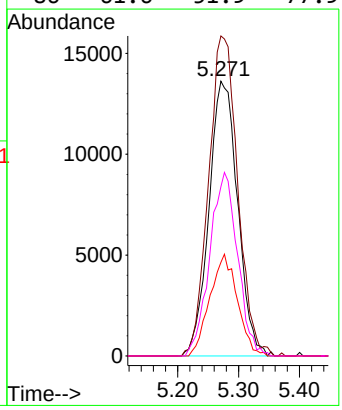


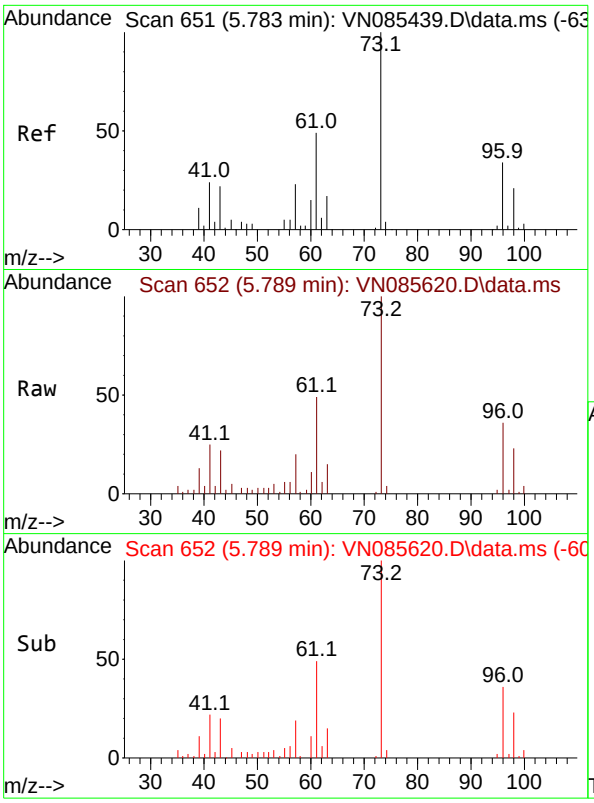


#20
Methylene Chloride
Concen: 19.492 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 84 Resp: 44642

Ion	Ratio	Lower	Upper
84	100		
49	116.5	104.1	156.1
51	34.1	31.0	46.4
86	61.6	51.9	77.9

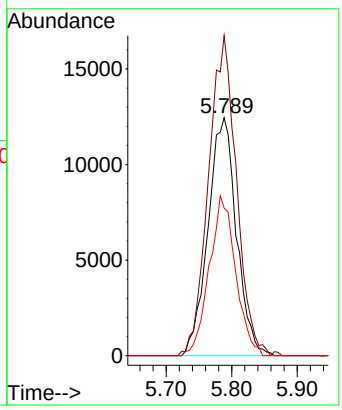




#21
trans-1,2-Dichloroethene
Concen: 18.442 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 96 Resp: 3752

Ion	Ratio	Lower	Upper
96	100		
61	134.5	115.7	173.5
98	62.1	49.8	74.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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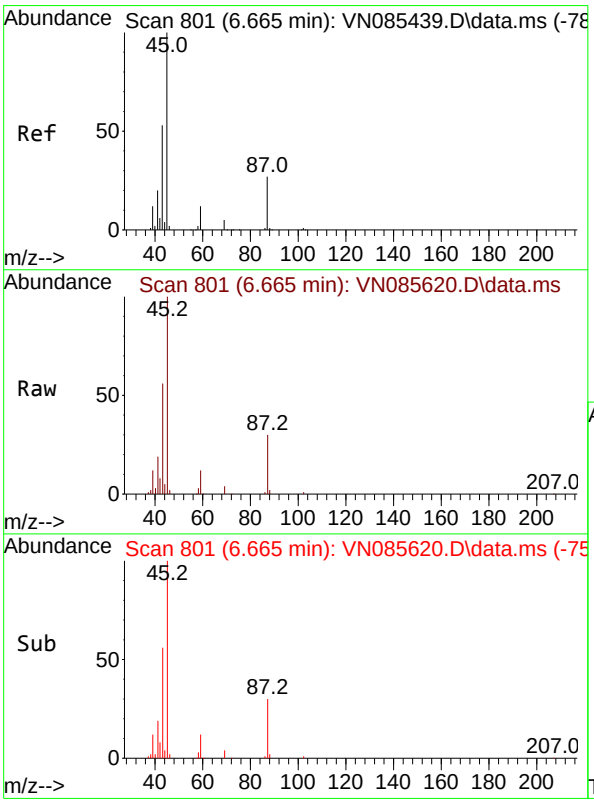
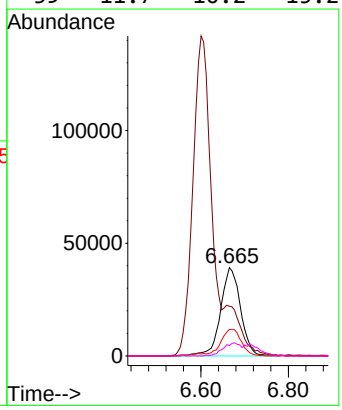
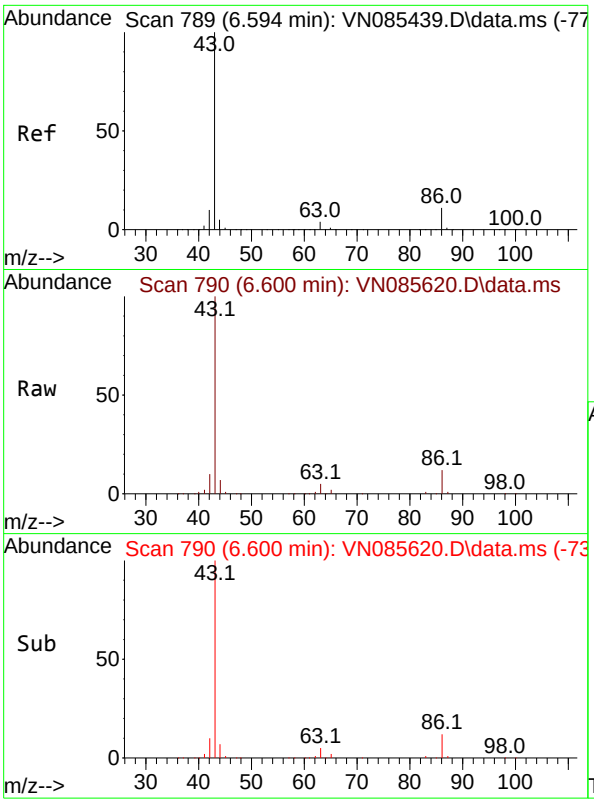


#22
Diisopropyl ether
Concen: 18.083 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 45 Resp: 123987

Ion	Ratio	Lower	Upper
45	100		
43	55.6	45.0	67.6
87	30.1	21.8	32.8
59	11.7	10.2	15.2





#23
Vinyl Acetate
Concen: 86.245 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 41383

Ion	Ratio	Lower	Upper
43	100		
86	12.2	8.4	12.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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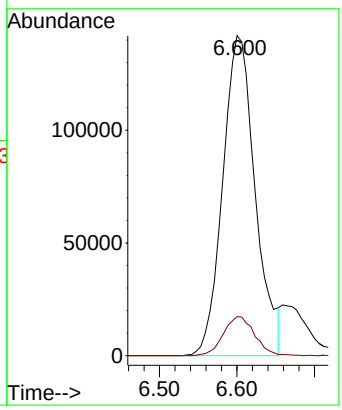
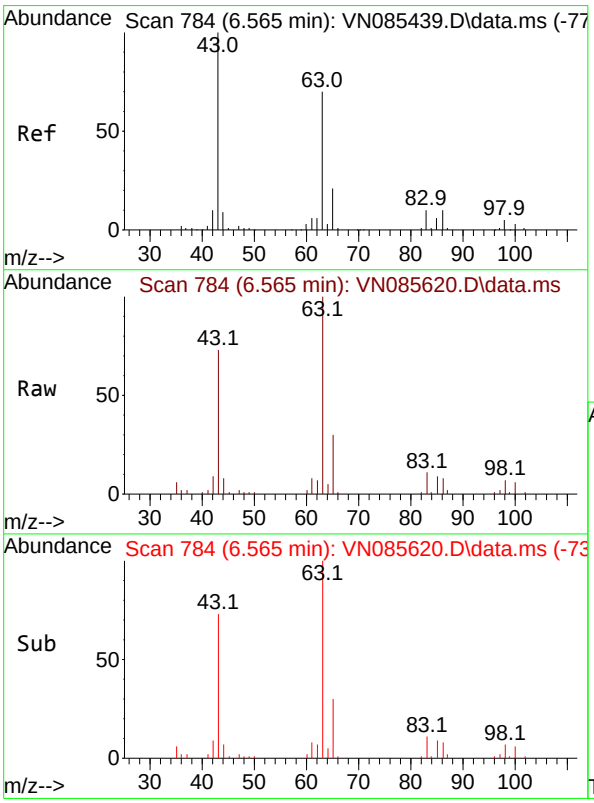
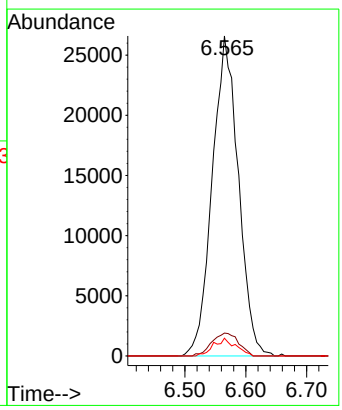


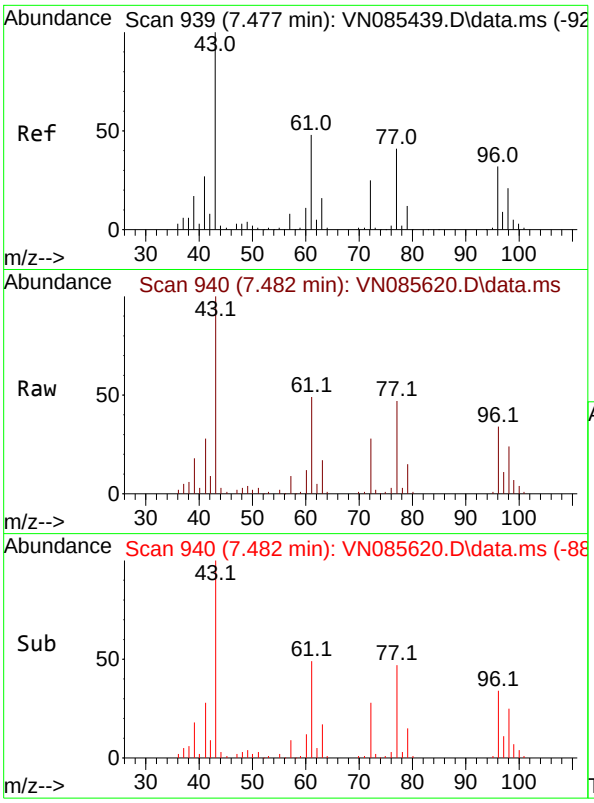


#24
1,1-Dichloroethane
Concen: 18.901 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 63 Resp: 79023

Ion	Ratio	Lower	Upper
63	100		
98	7.2	3.3	9.8
100	5.6	2.0	6.0





#25
2-Butanone
Concen: 94.582 ug/l
RT: 7.482 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 12876

Ion	Ratio	Lower	Upper
43	100		
72	27.6	20.2	30.4

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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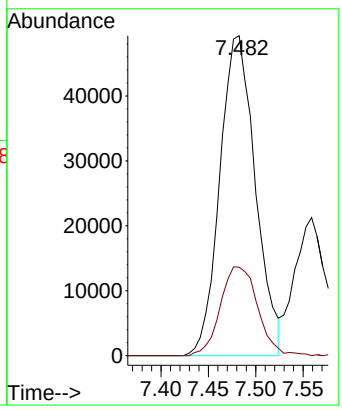
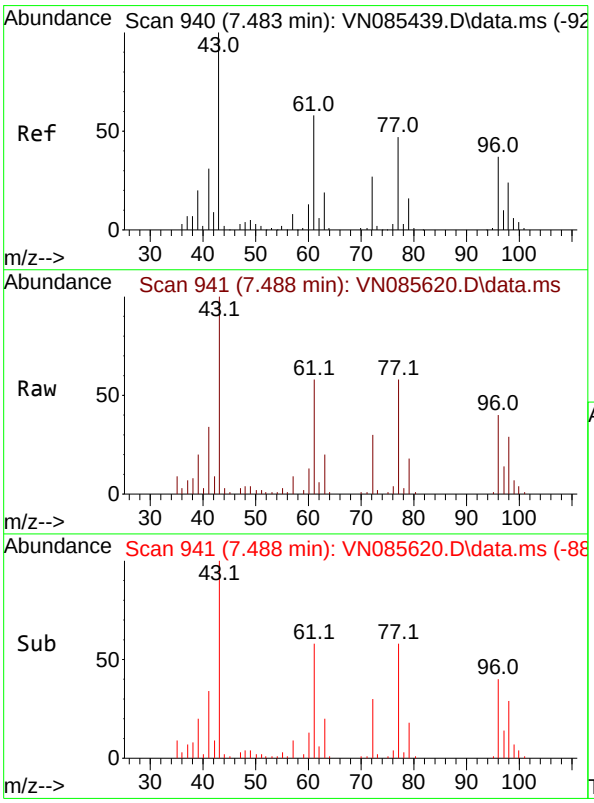
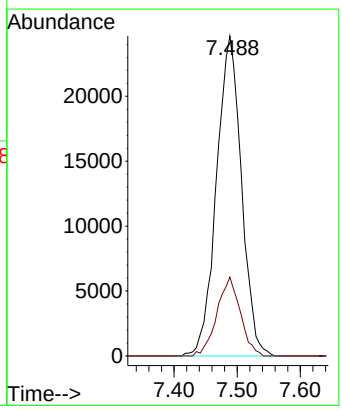


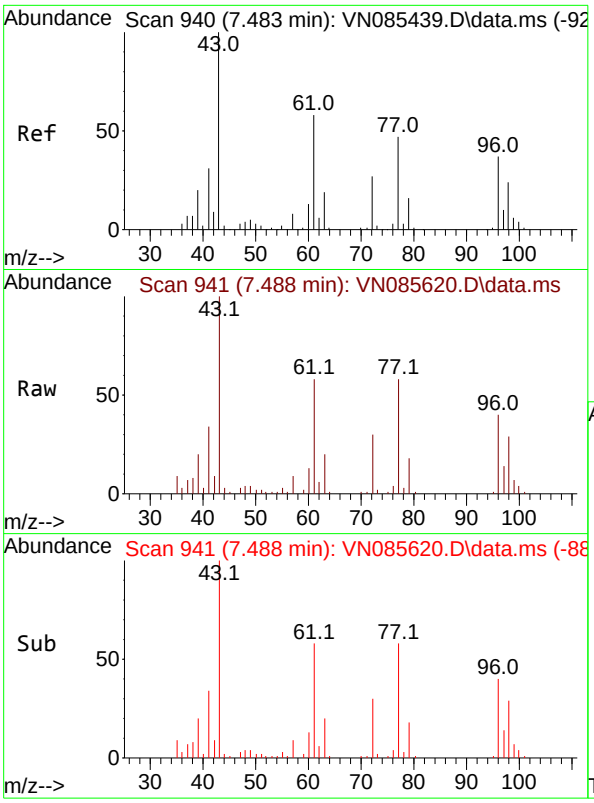


#26
2,2-Dichloropropane
Concen: 20.004 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 77 Resp: 67615

Ion	Ratio	Lower	Upper
77	100		
97	23.1	10.7	32.1





#27
cis-1,2-Dichloroethene
Concen: 19.623 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 96 Resp: 4702

Ion	Ratio	Lower	Upper
96	100		
61	144.2	0.0	311.8
98	65.0	0.0	126.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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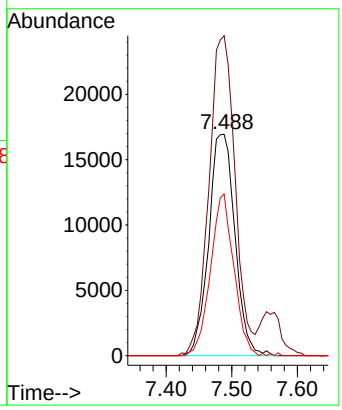
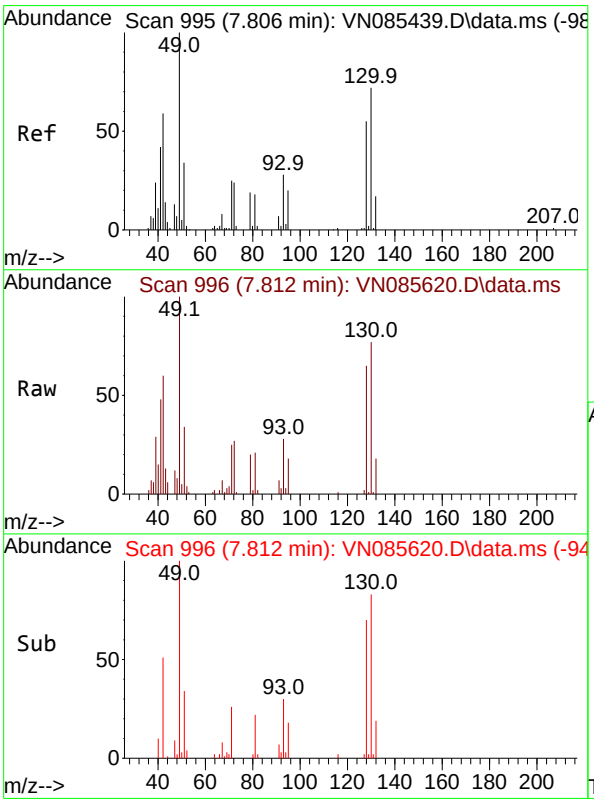
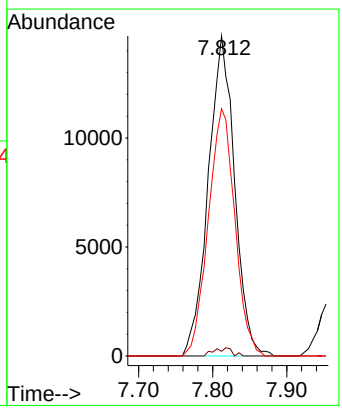


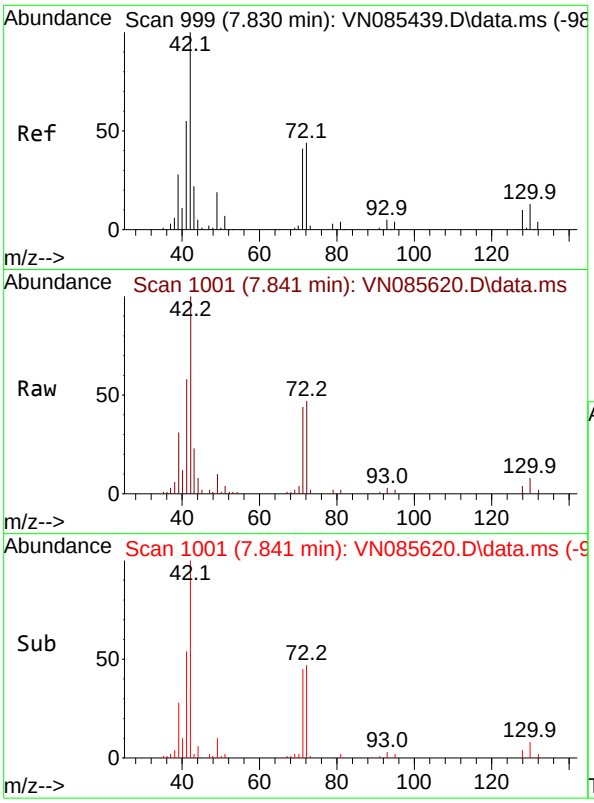


#28
Bromochloromethane
Concen: 18.620 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 49 Resp: 36218

Ion	Ratio	Lower	Upper
49	100		
129	1.7	0.0	4.4
130	78.1	55.0	82.4

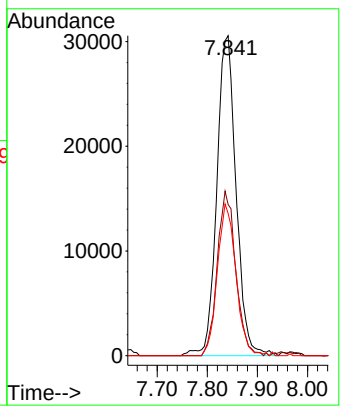




#29
Tetrahydrofuran
Concen: 94.844 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 42 Resp: 8186

Ion	Ratio	Lower	Upper
42	100		
72	49.1	34.2	51.2
71	45.7	32.5	48.7



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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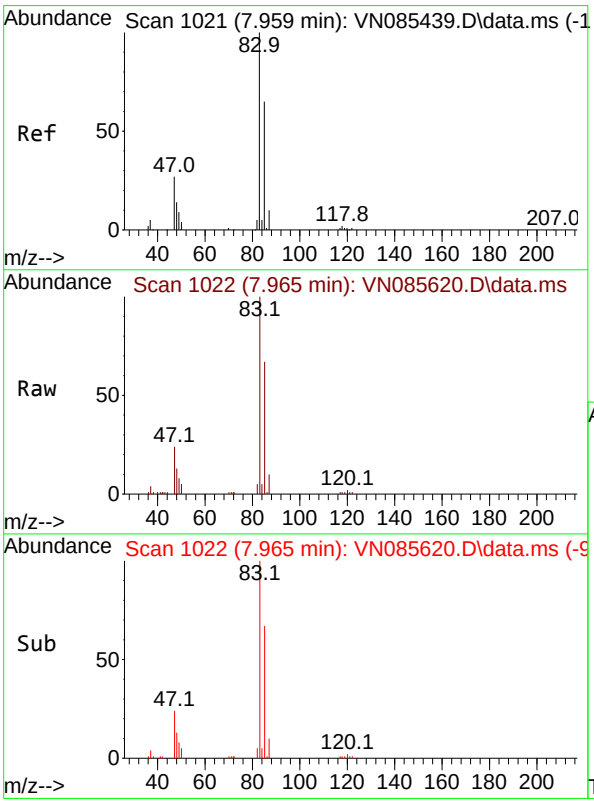
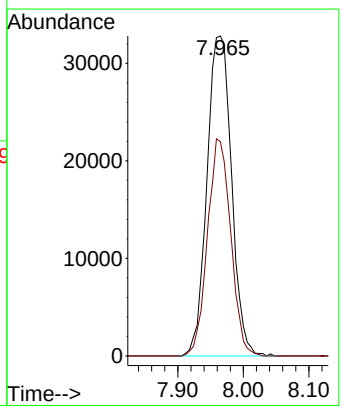
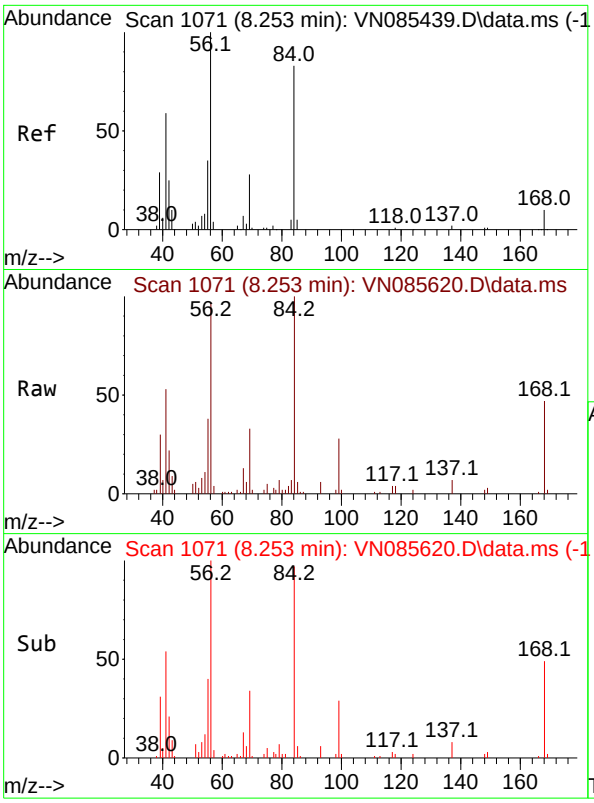


#30
Chloroform
Concen: 19.765 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 83 Resp: 85403

Ion	Ratio	Lower	Upper
83	100		
85	67.0	51.8	77.6

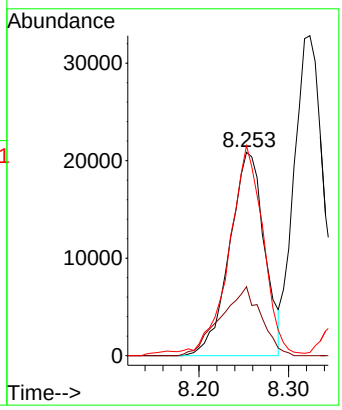




#31
Cyclohexane
Concen: 15.428 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 56 Resp: 5606

Ion	Ratio	Lower	Upper
56	100		
69	33.9	22.2	33.4
84	101.3	66.4	99.6



Instrument :
MSVOA_N
ClientSampleId :
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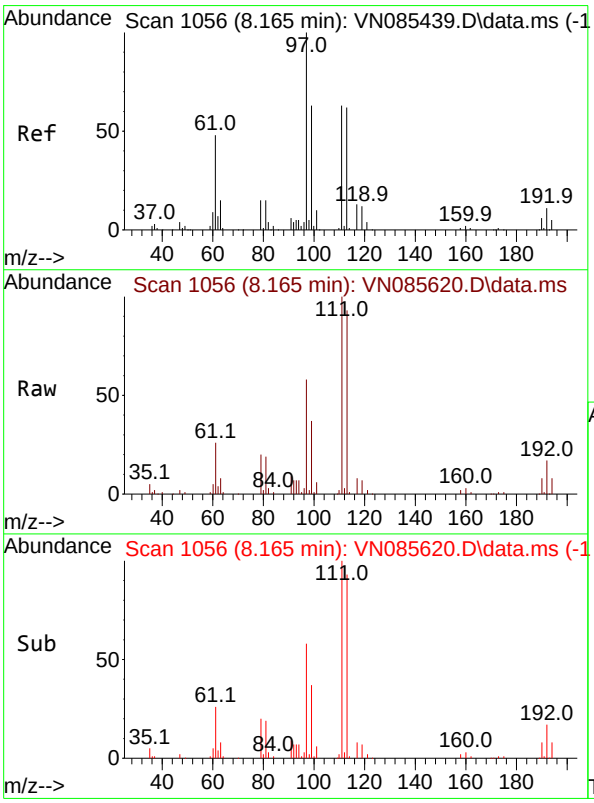
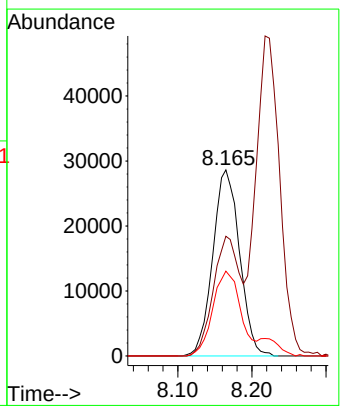
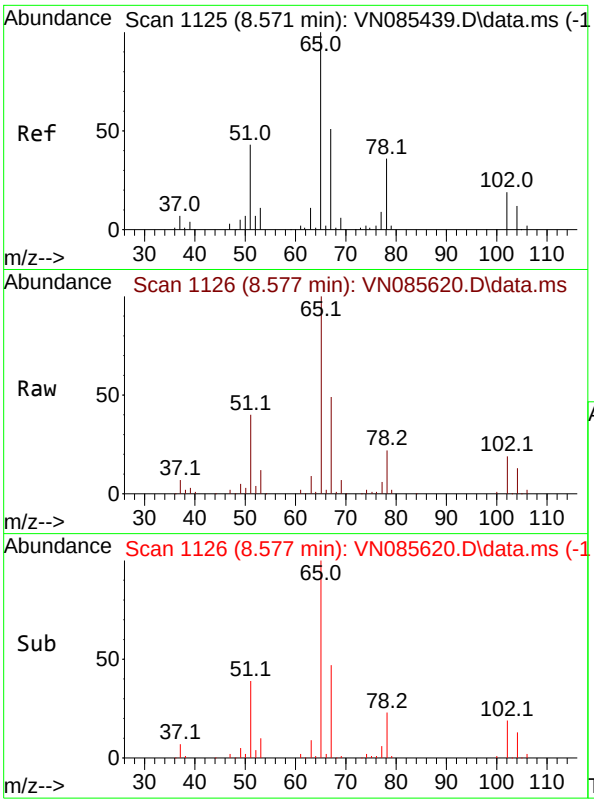


#32
1,1,1-Trichloroethane
Concen: 18.963 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 97 Resp: 71876

Ion	Ratio	Lower	Upper
97	100		
99	62.9	49.8	74.6
61	47.5	41.4	62.2

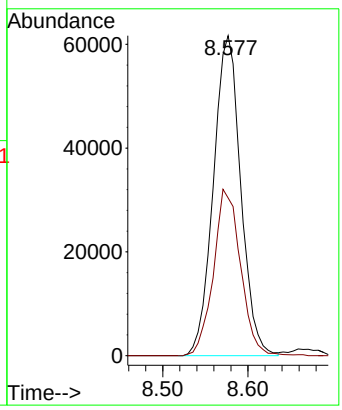




#33
1,2-Dichloroethane-d4
Concen: 47.978 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 65 Resp: 13737

Ion	Ratio	Lower	Upper
65	100		
67	51.6	0.0	101.6



Instrument :
MSVOA_N
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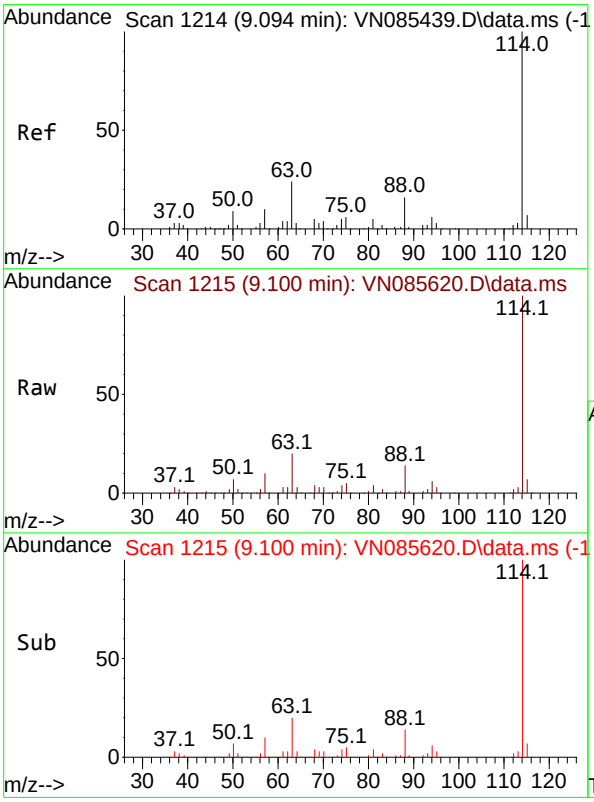
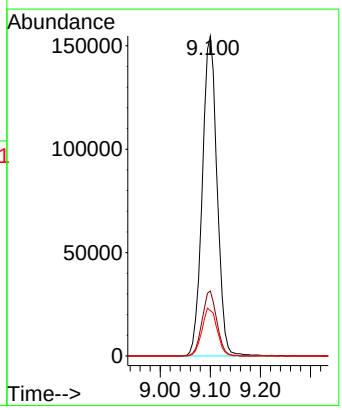
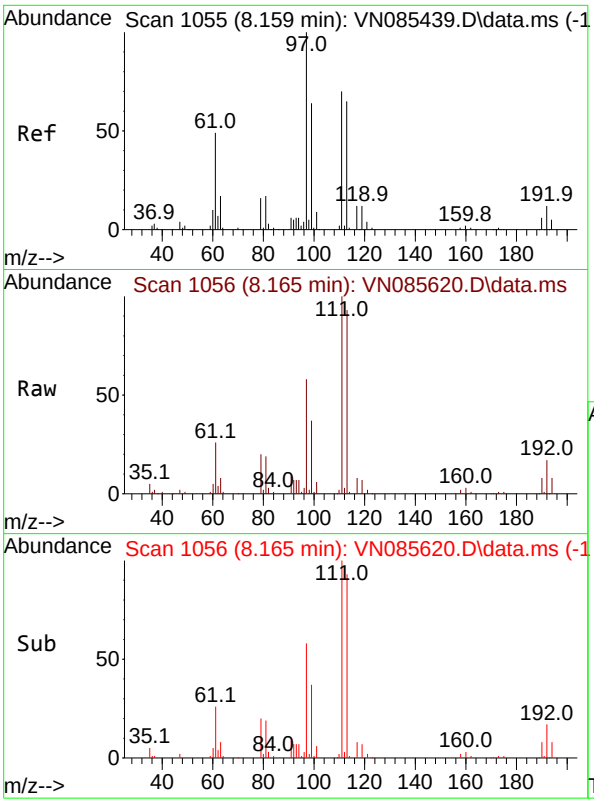


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:114 Resp: 316818

Ion	Ratio	Lower	Upper
114	100		
63	20.3	0.0	47.6
88	14.2	0.0	32.6





#35
Dibromofluoromethane
Concen: 51.027 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Tgt Ion:113 Resp: 11215

Ion	Ratio	Lower	Upper
113	100		
111	102.3	82.7	124.1
192	17.5	14.3	21.5

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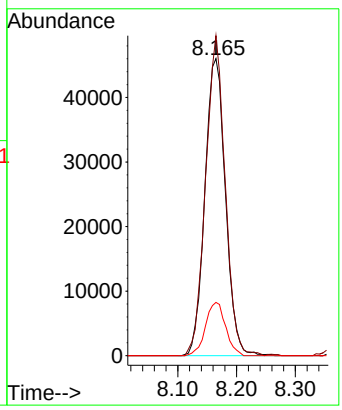
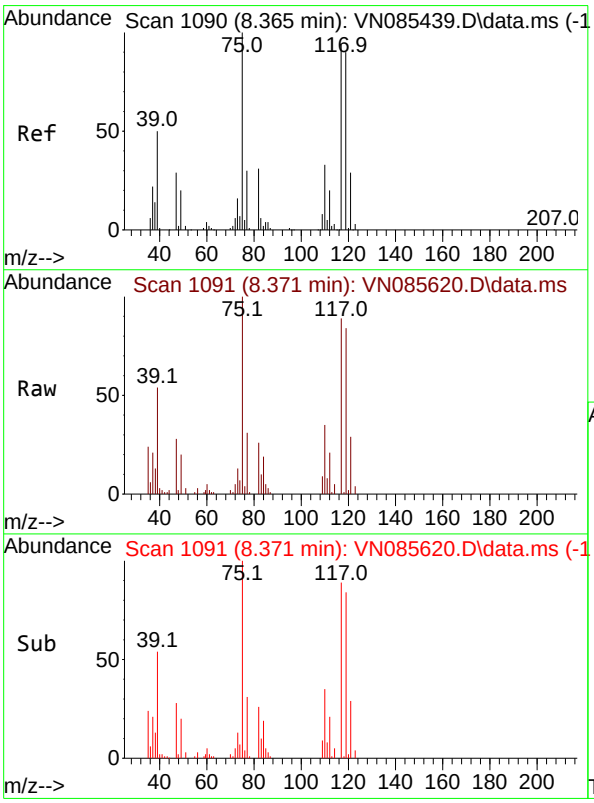
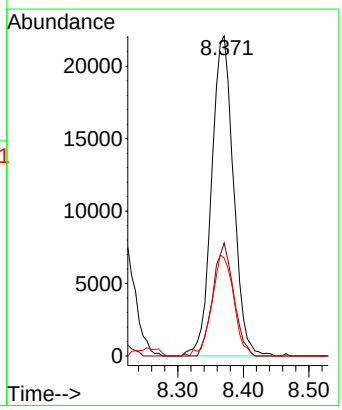


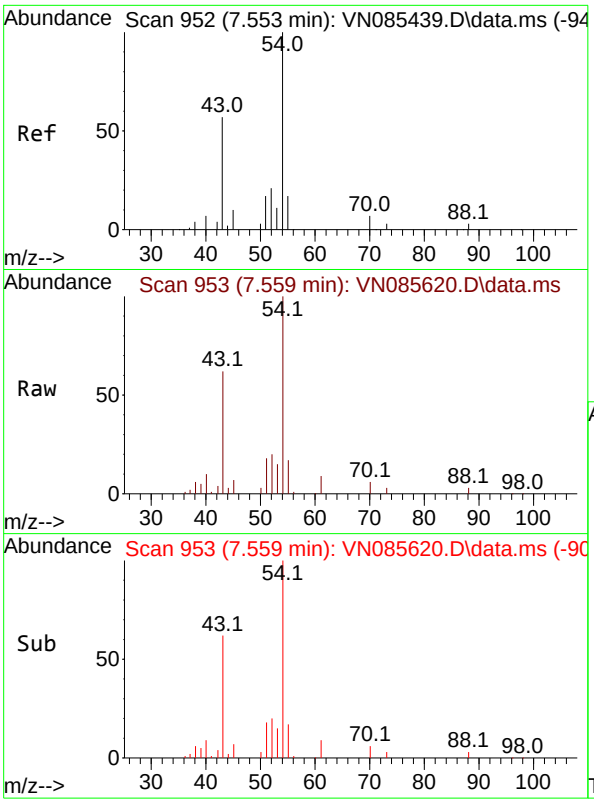


#36
1,1-Dichloropropene
Concen: 16.536 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 51010

Ion	Ratio	Lower	Upper
75	100		
110	33.6	16.5	49.5
77	31.5	24.4	36.6





#37
Ethyl Acetate
Concen: 16.682 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 5194

Ion	Ratio	Lower	Upper
43	100		
61	14.4	10.9	16.3
70	11.3	7.5	11.3#

Instrument :
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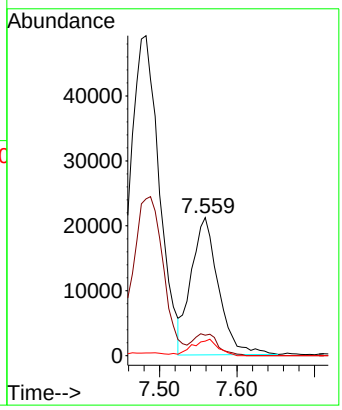
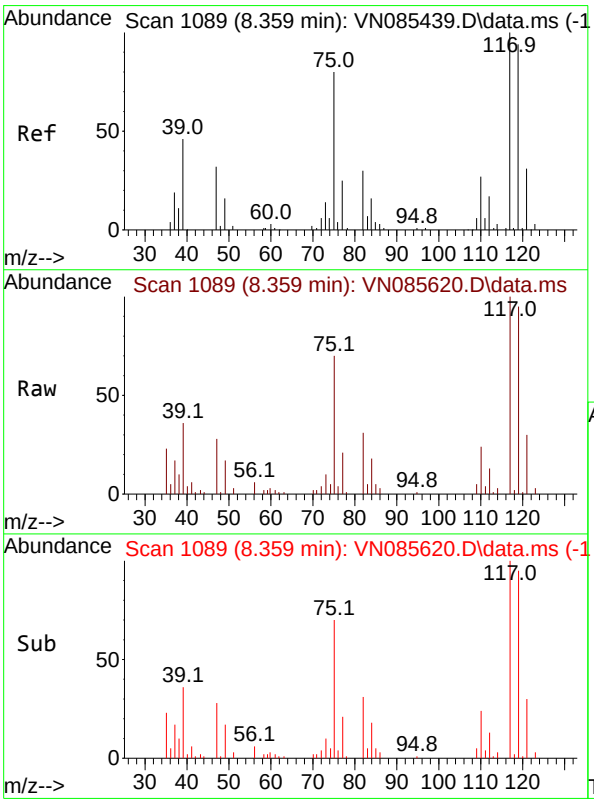
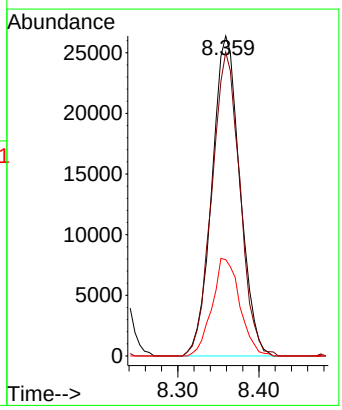


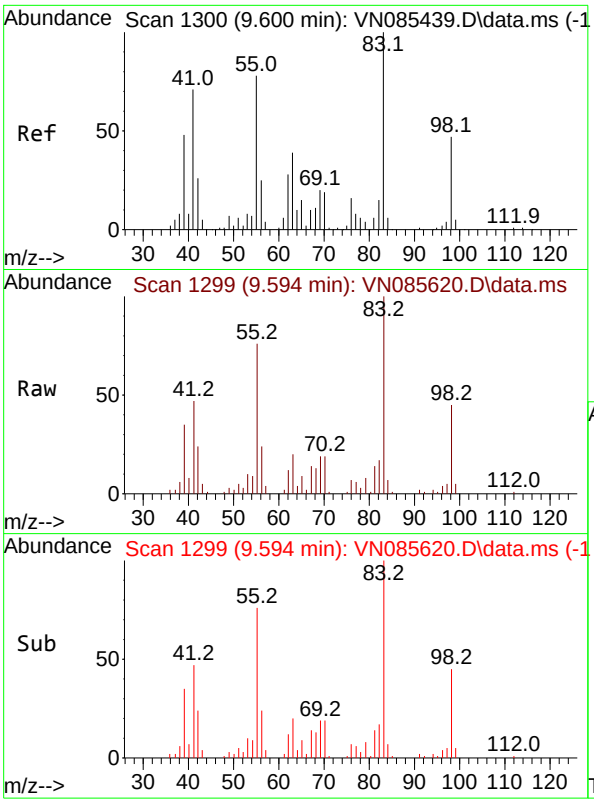


#38
Carbon Tetrachloride
Concen: 17.819 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:117 Resp: 62929

Ion	Ratio	Lower	Upper
117	100		
119	94.9	75.4	113.2
121	30.1	24.6	37.0

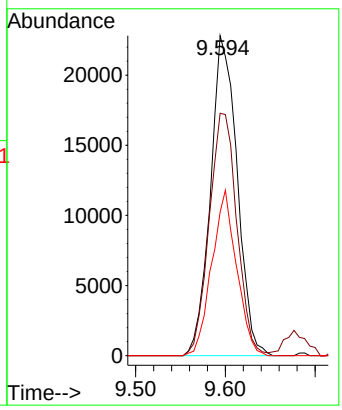




#39
Methylcyclohexane
Concen: 16.231 ug/l
RT: 9.594 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 83 Resp: 4704

Ion	Ratio	Lower	Upper
83	100		
55	75.7	62.6	94.0
98	44.8	37.7	56.5



Instrument :
MSVOA_N
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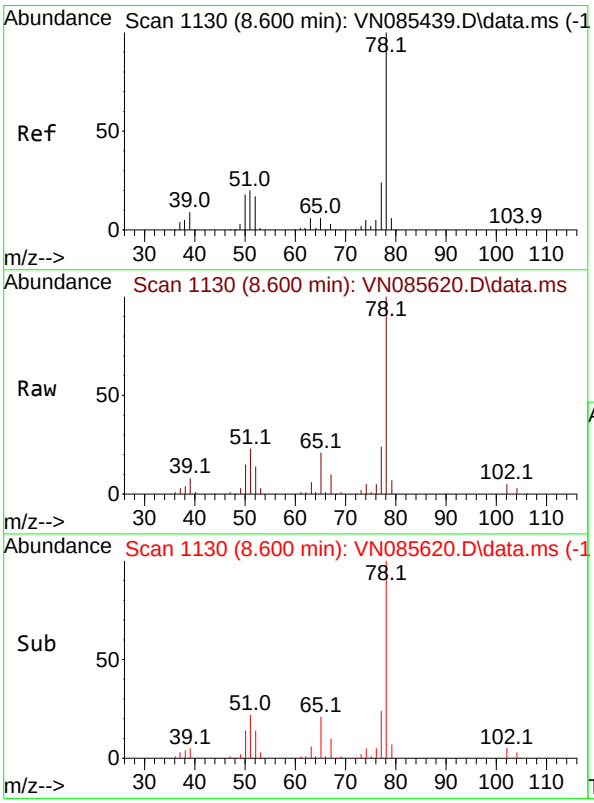
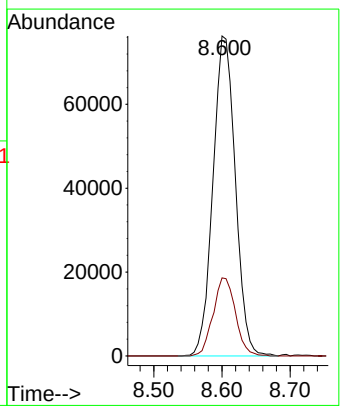
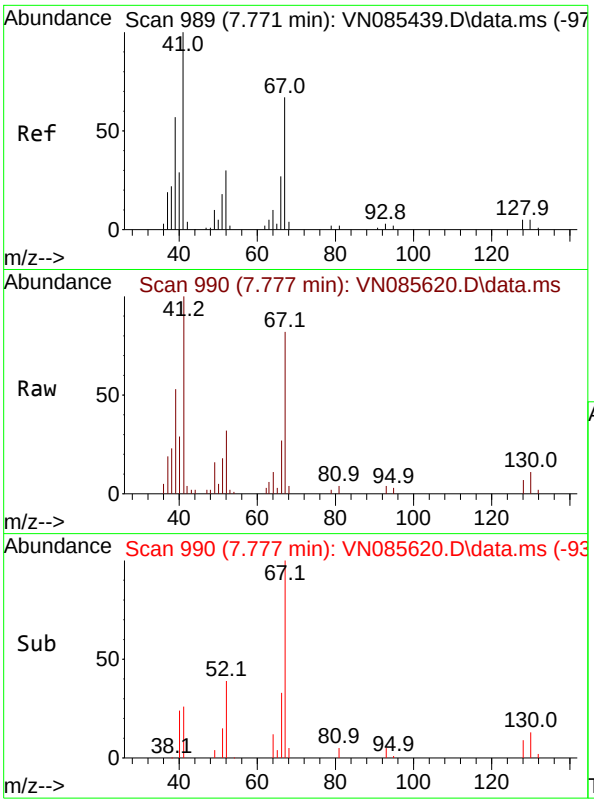


#40
Benzene
Concen: 18.817 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 78 Resp: 174408

Ion	Ratio	Lower	Upper
78	100		
77	24.4	19.0	28.6

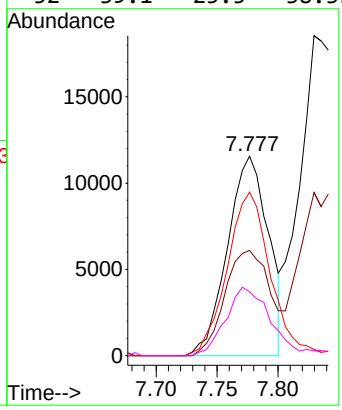




#41
Methacrylonitrile
Concen: 16.648 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 41 Resp: 2696

Ion	Ratio	Lower	Upper
41	100		
39	60.7	46.0	69.0
67	86.5	57.4	86.2#
52	39.1	25.5	38.3#



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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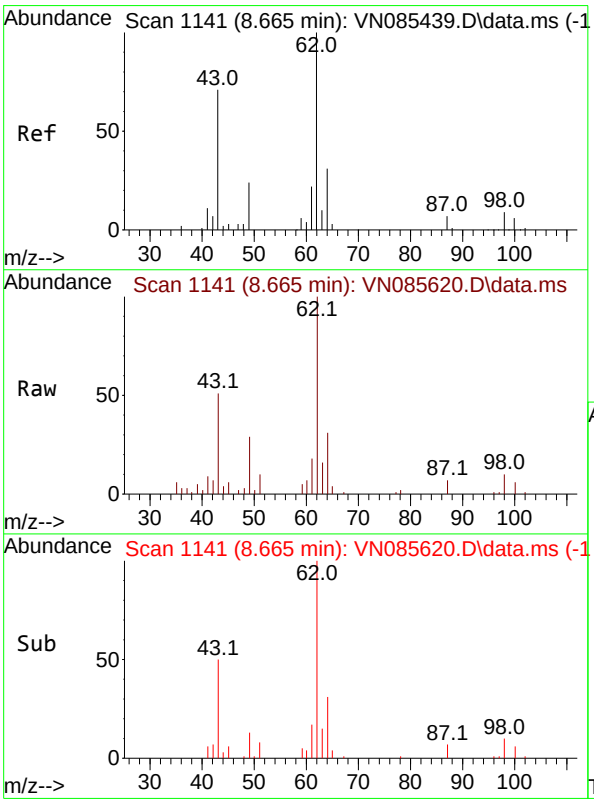
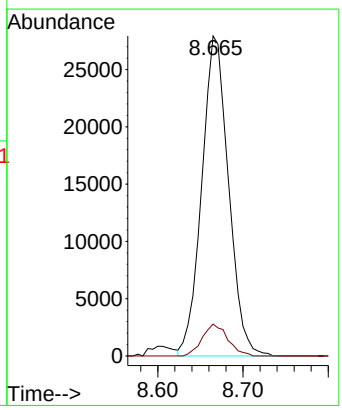
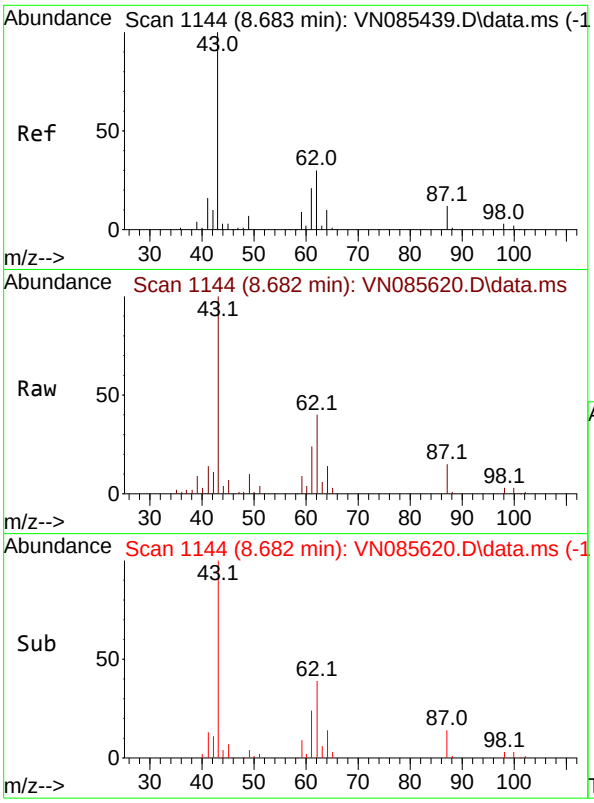


#42
1,2-Dichloroethane
Concen: 17.512 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 62 Resp: 61132

Ion	Ratio	Lower	Upper
62	100		
98	9.5	0.0	17.0

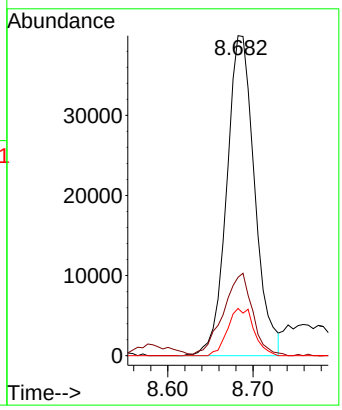




#43
Isopropyl Acetate
Concen: 18.267 ug/l
RT: 8.682 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 9113

Ion	Ratio	Lower	Upper
43	100		
61	27.0	20.7	31.1
87	14.0	9.8	14.8



Instrument :
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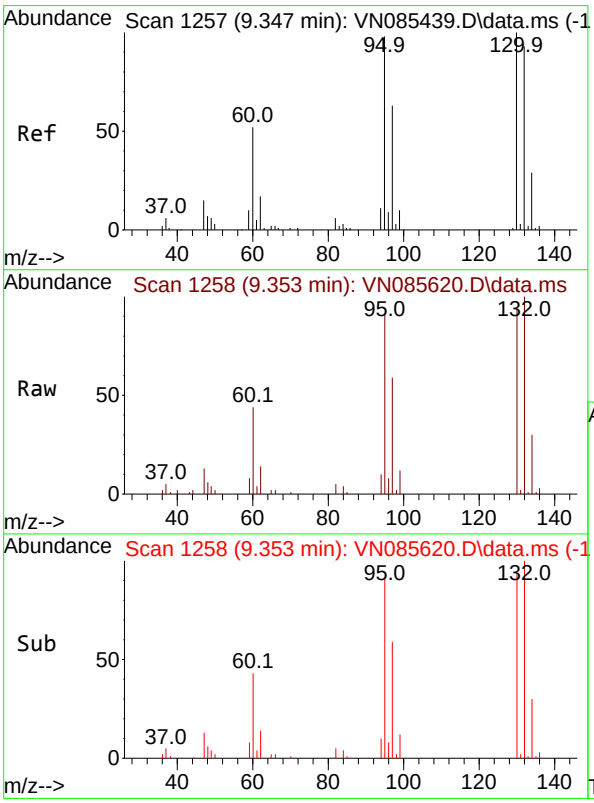
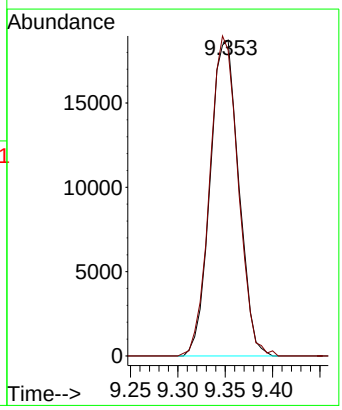
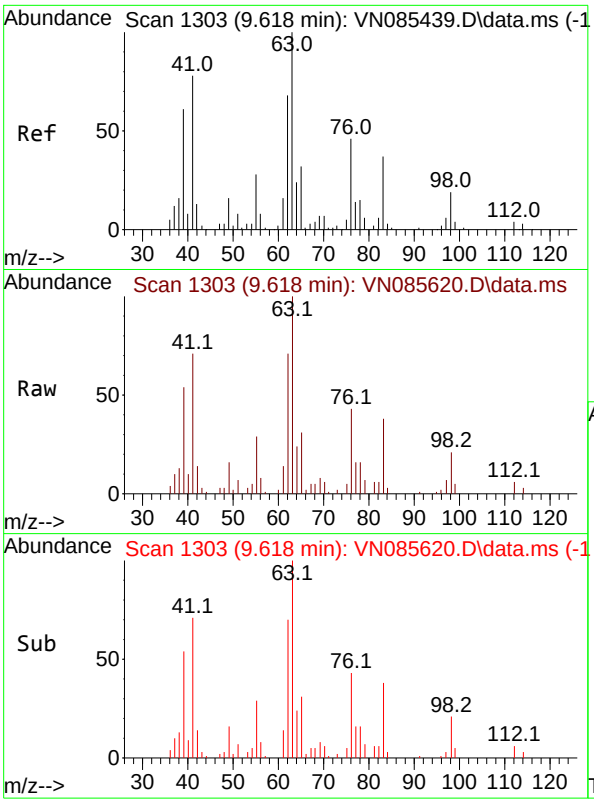


#44
Trichloroethene
Concen: 18.200 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:130 Resp: 39267

Ion	Ratio	Lower	Upper
130	100		
95	96.9	0.0	195.8

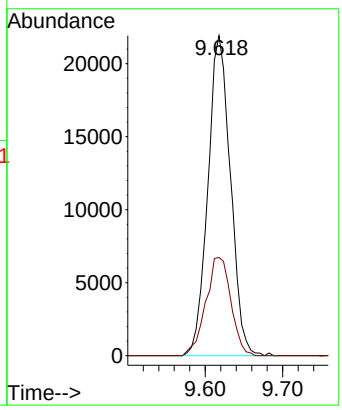




#45
1,2-Dichloropropane
Concen: 18.712 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 63 Resp: 4430

Ion	Ratio	Lower	Upper
63	100		
65	30.7	25.6	38.4



Instrument :
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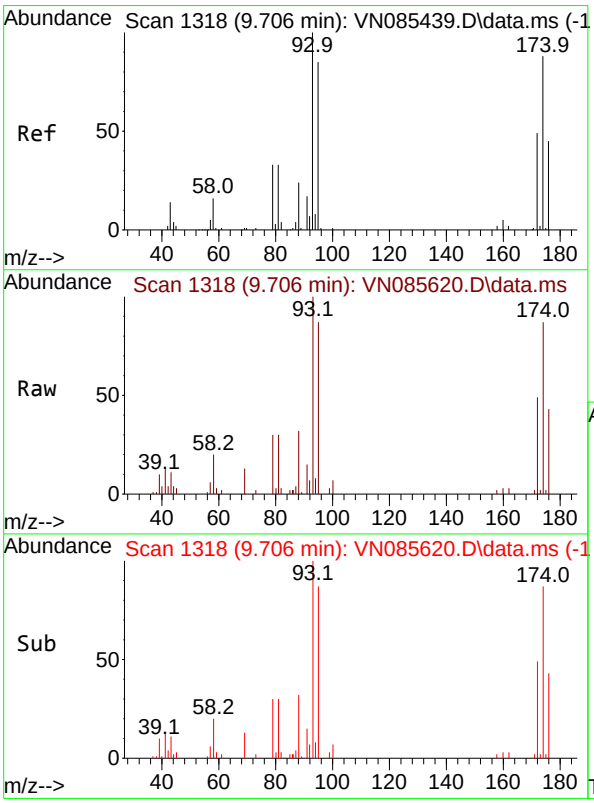
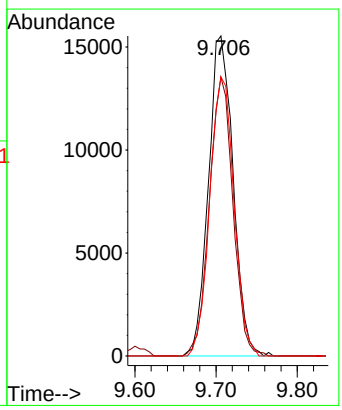
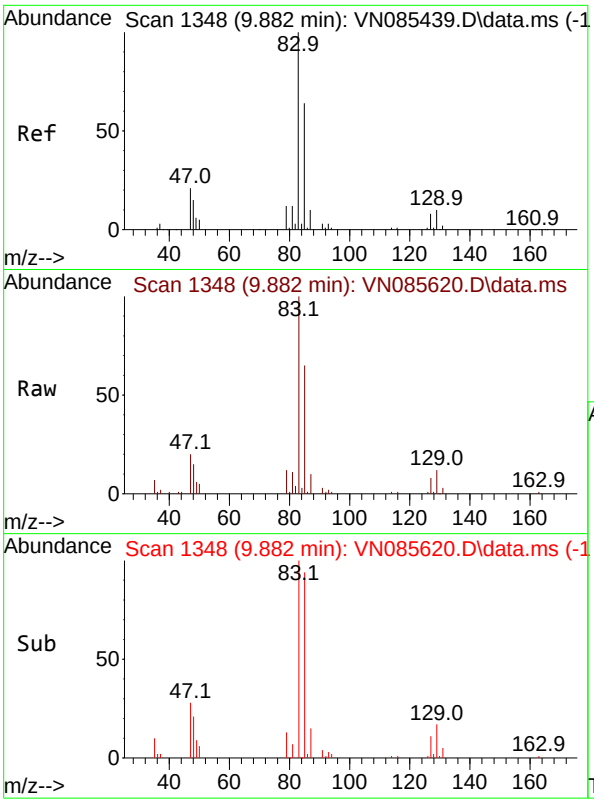


#46
Dibromomethane
Concen: 19.205 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 93 Resp: 32808

Ion	Ratio	Lower	Upper
93	100		
95	83.2	64.7	97.1
174	85.8	69.0	103.4

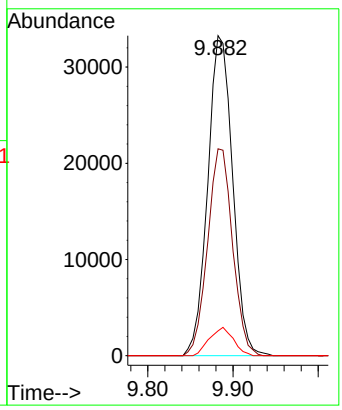




#47
Bromodichloromethane
Concen: 19.406 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 83 Resp: 6753

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.2	76.8
127	7.8	6.5	9.7



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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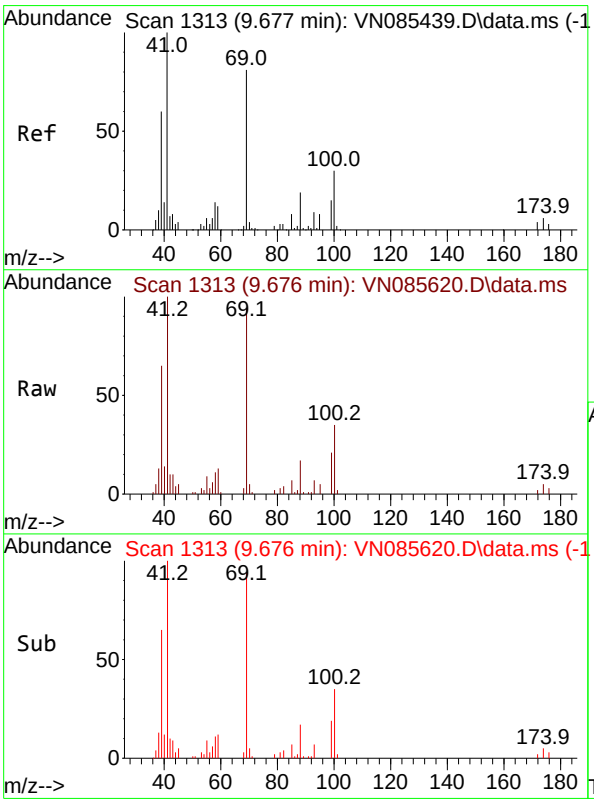
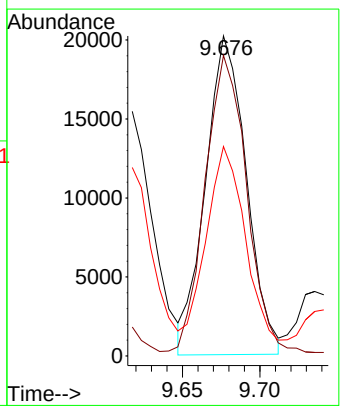
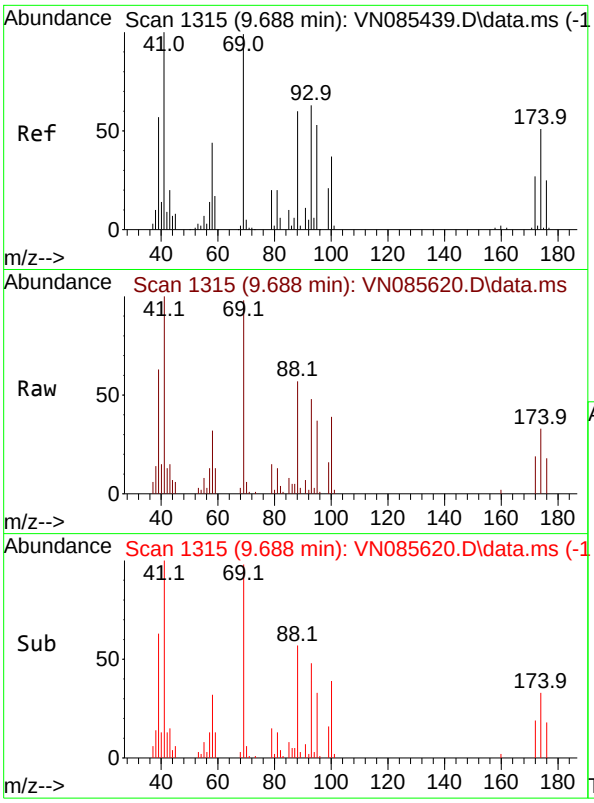


#48
Methyl methacrylate
Concen: 16.475 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.001 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 41 Resp: 36989

Ion	Ratio	Lower	Upper
41	100		
69	98.2	64.7	97.1#
39	65.0	49.0	73.6

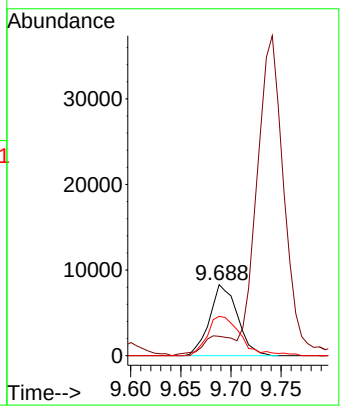




#49
1,4-Dioxane
Concen: 424.978 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 88 Resp: 1606

Ion	Ratio	Lower	Upper
88	100		
43	28.5	26.6	39.8
58	66.3	59.5	89.3



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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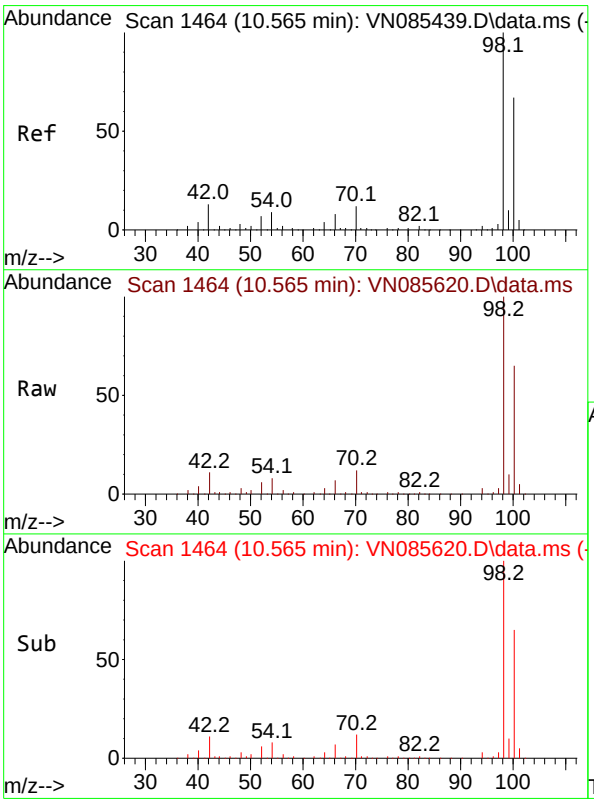
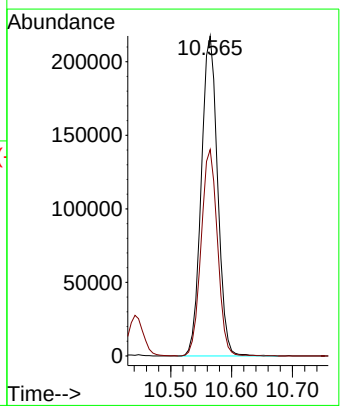
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

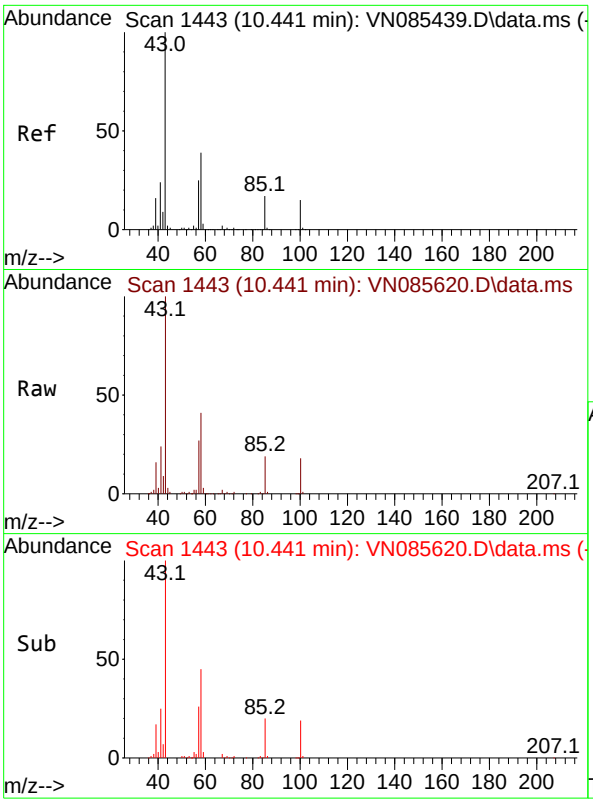


#50
Toluene-d8
Concen: 51.716 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 98 Resp: 403865

Ion	Ratio	Lower	Upper
98	100		
100	64.6	52.2	78.4





#51
4-Methyl-2-Pentanone
Concen: 95.585 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 27672

Ion	Ratio	Lower	Upper
43	100		
58	40.9	30.5	45.7

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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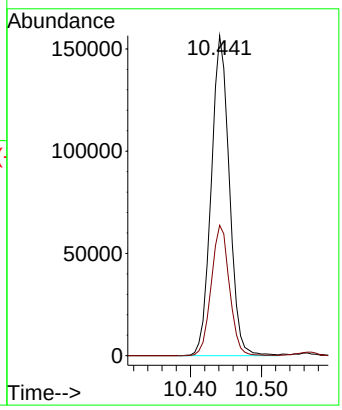
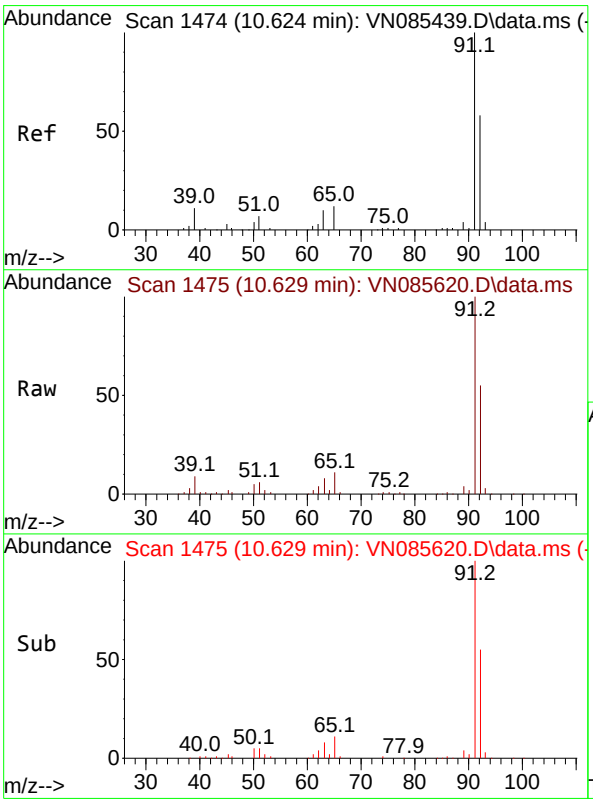
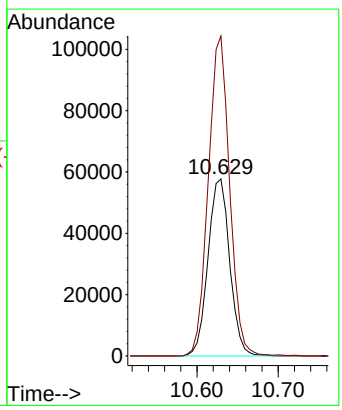


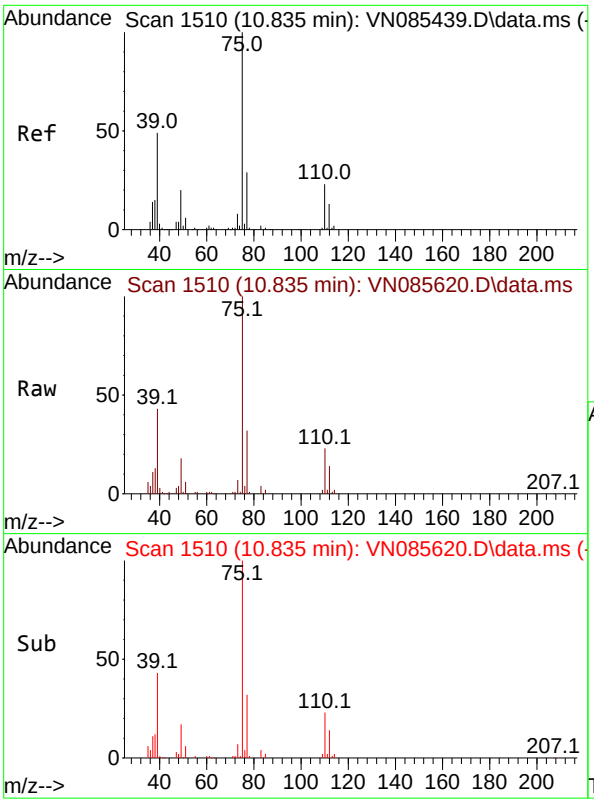


#52
Toluene
Concen: 19.972 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 92 Resp: 107257

Ion	Ratio	Lower	Upper
92	100		
91	177.6	139.2	208.8

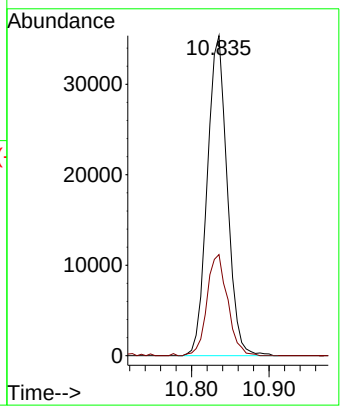




#53
t-1,3-Dichloropropene
Concen: 19.230 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 6324

Ion	Ratio	Lower	Upper
75	100		
77	31.6	23.5	35.3



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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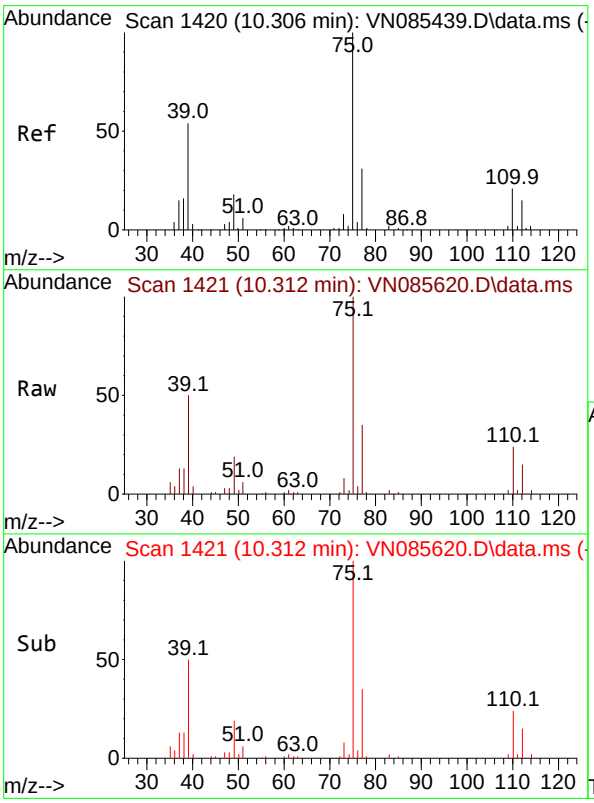
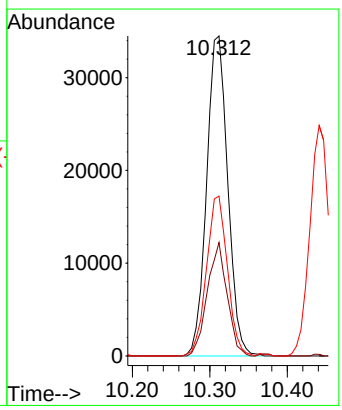
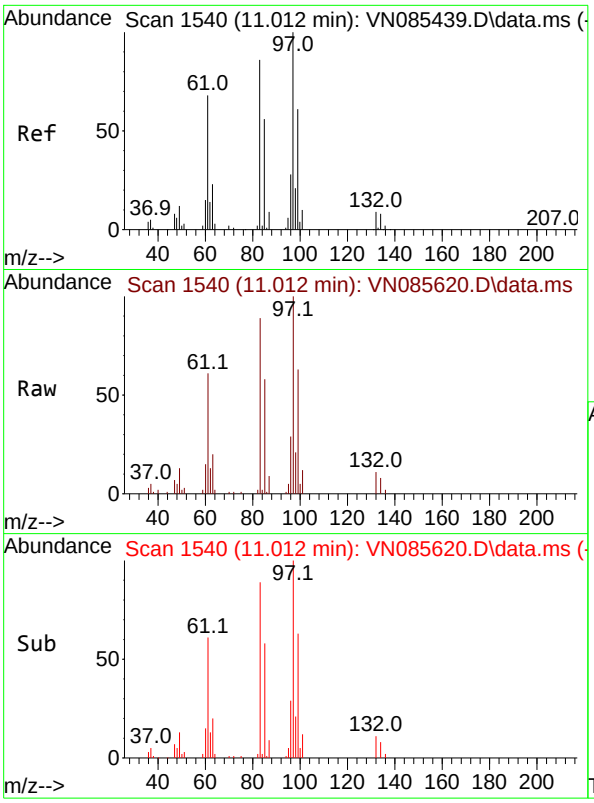


#54
cis-1,3-Dichloropropene
Concen: 18.645 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 65503

Ion	Ratio	Lower	Upper
75	100		
77	35.5	25.0	37.4
39	49.9	43.1	64.7

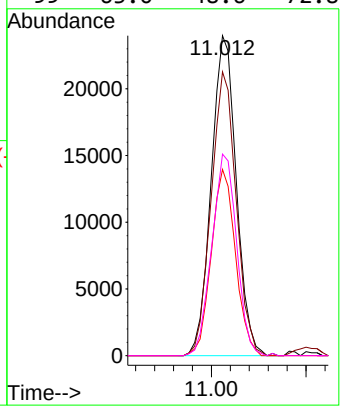




#55
1,1,2-Trichloroethane
Concen: 20.714 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 97 Resp: 4402

Ion	Ratio	Lower	Upper
97	100		
83	88.7	69.0	103.6
85	58.2	44.6	66.8
99	63.0	48.6	72.8



Instrument :
MSVOA_N
ClientSampleId :
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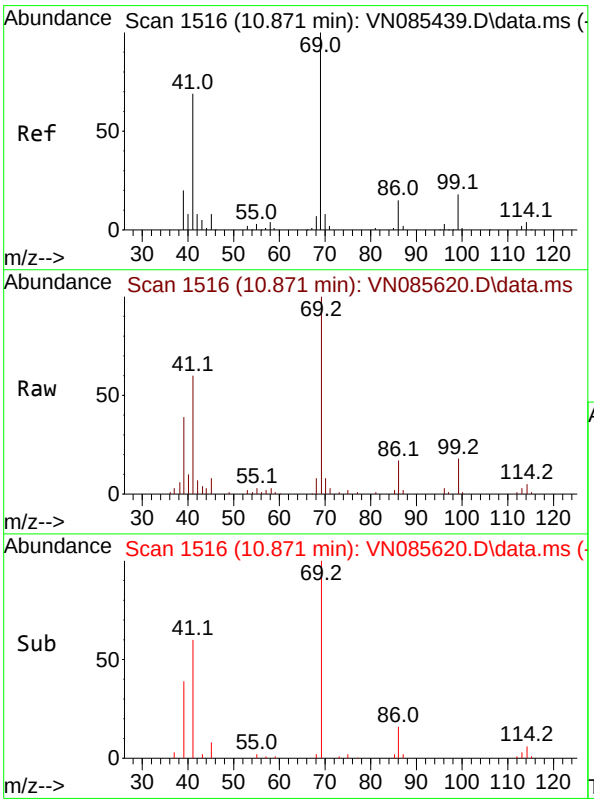
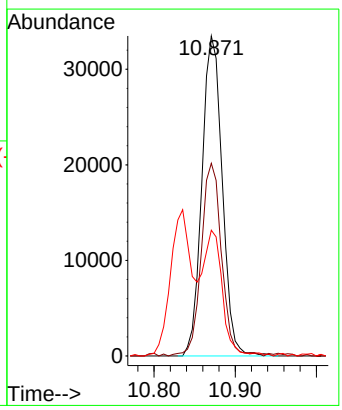
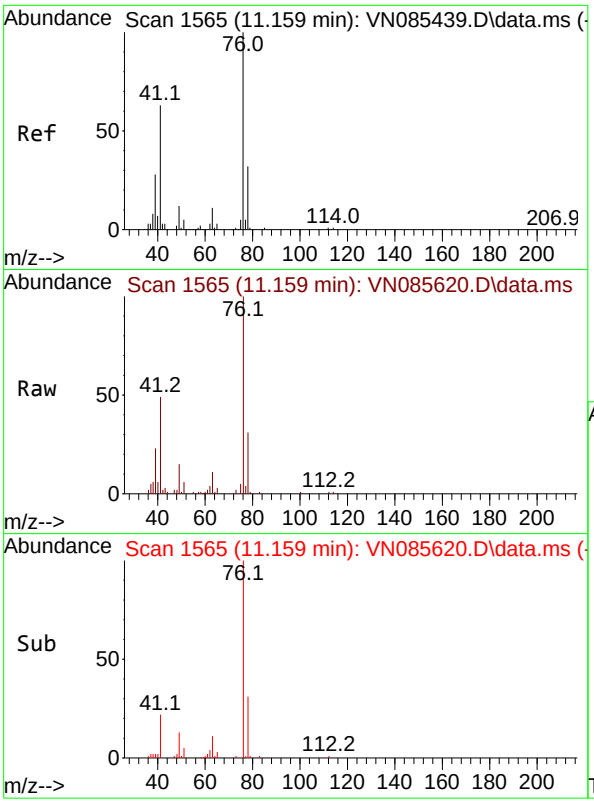


#56
Ethyl methacrylate
Concen: 17.556 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 69 Resp: 58187

Ion	Ratio	Lower	Upper
69	100		
41	60.2	54.6	82.0
39	35.6	32.4	48.6

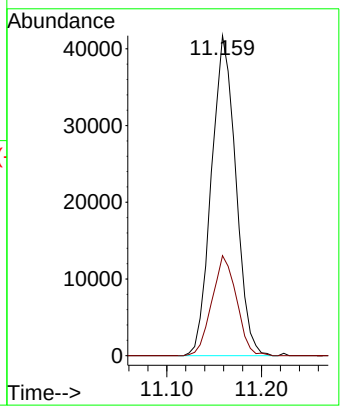




#57
1,3-Dichloropropane
Concen: 20.199 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 76 Resp: 7464

Ion	Ratio	Lower	Upper
76	100		
78	31.5	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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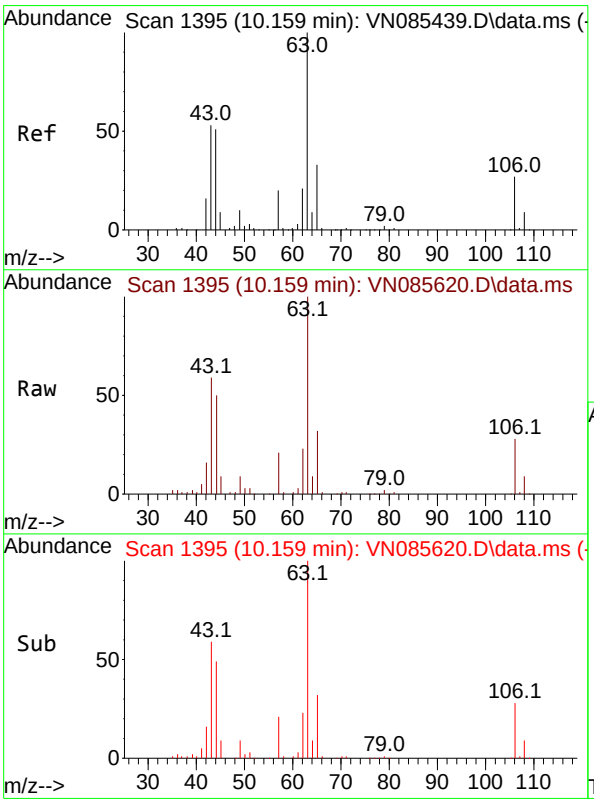
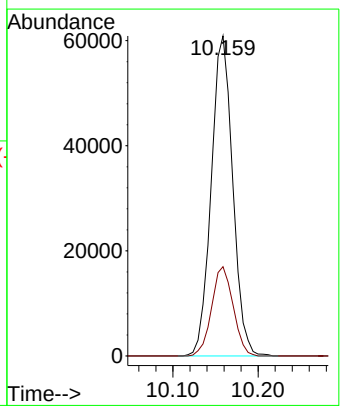
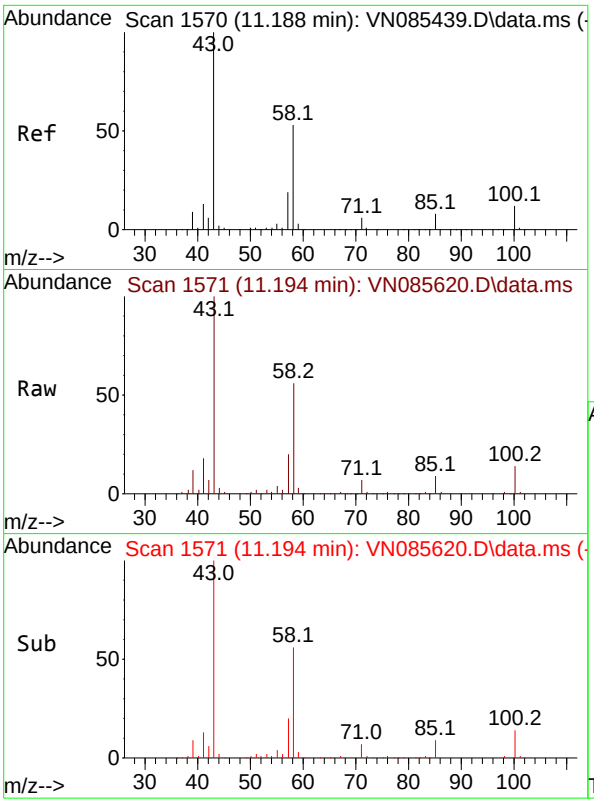


#58
2-Chloroethyl Vinyl ether
Concen: 79.007 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 63 Resp: 106559

Ion	Ratio	Lower	Upper
63	100		
106	28.0	21.6	32.4





#59
2-Hexanone
Concen: 96.535 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 19665

Ion	Ratio	Lower	Upper
43	100		
58	56.2	26.2	78.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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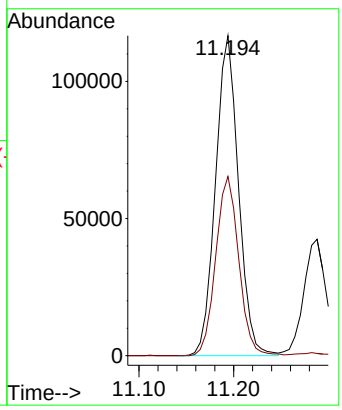
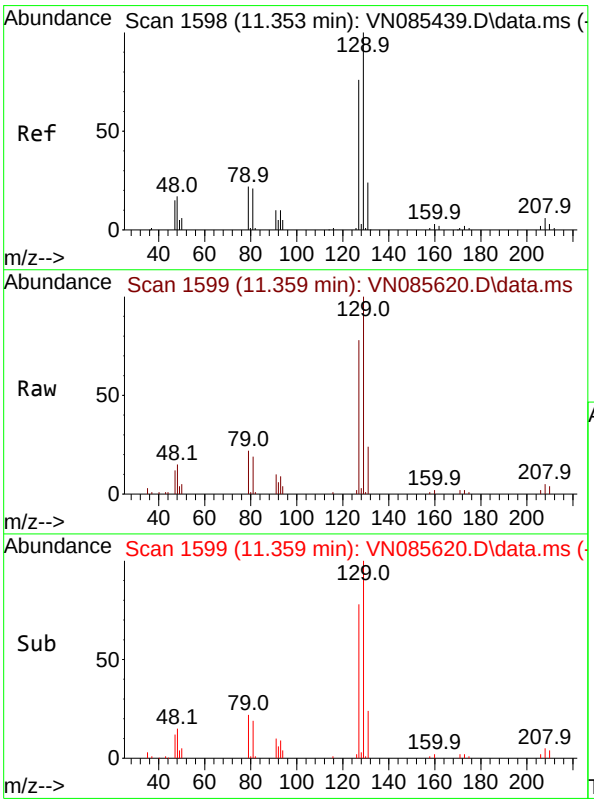
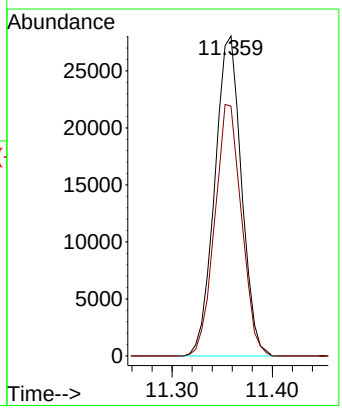


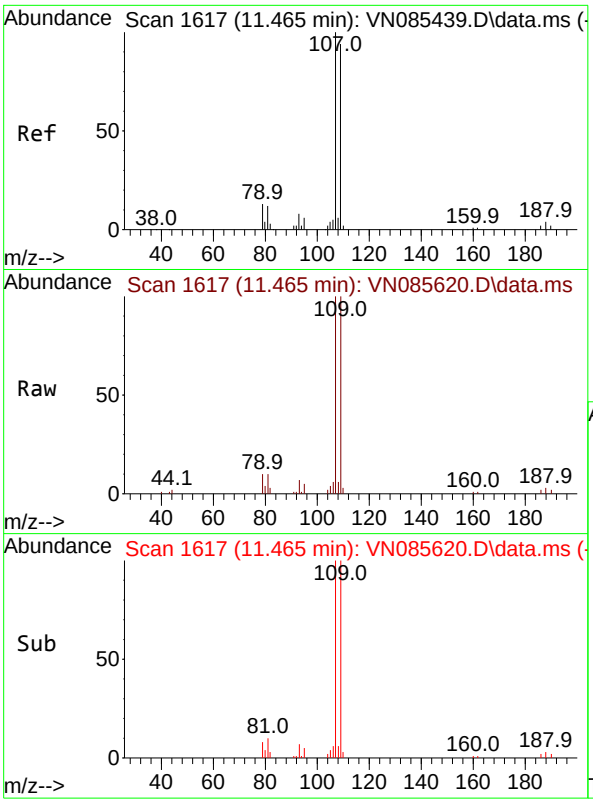


#60
Dibromochloromethane
Concen: 20.240 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:129 Resp: 51933

Ion	Ratio	Lower	Upper
129	100		
127	78.6	38.6	115.8





#61
1,2-Dibromoethane
Concen: 20.183 ug/l
RT: 11.465 min Scan# 1(
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:107 Resp: 4270(

Ion	Ratio	Lower	Upper
107	100		
109	93.7	75.9	113.9

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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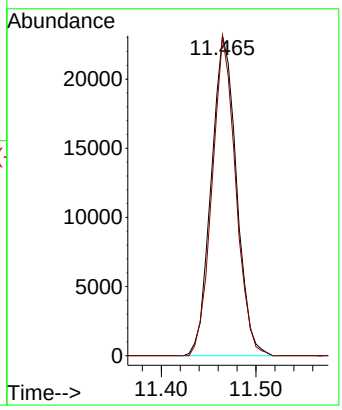
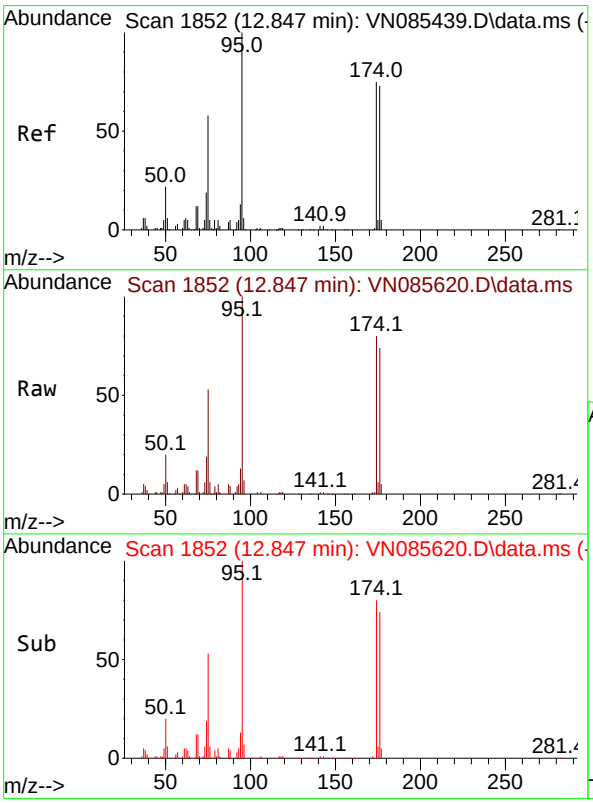
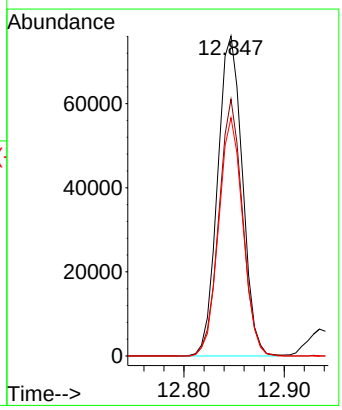


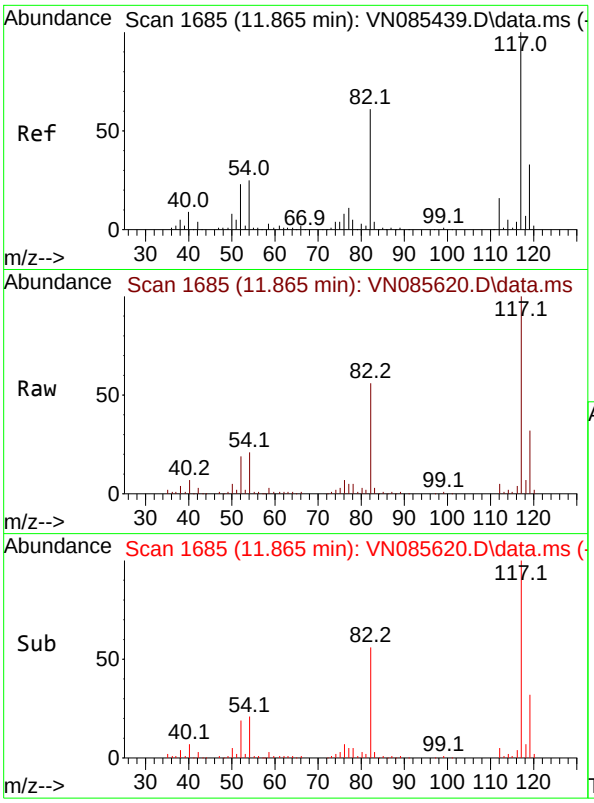


#62
4-Bromofluorobenzene
Concen: 48.807 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 95 Resp: 130381

Ion	Ratio	Lower	Upper
95	100		
174	76.8	0.0	145.0
176	72.7	0.0	142.4





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:117 Resp: 27759

Ion	Ratio	Lower	Upper
117	100		
82	55.7	48.6	72.8
119	32.4	26.6	39.8

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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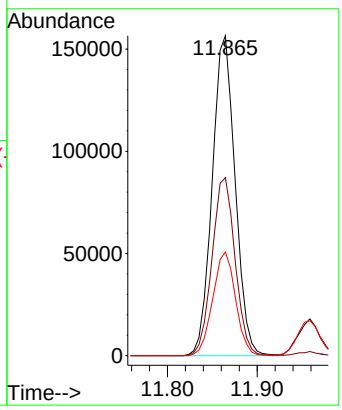
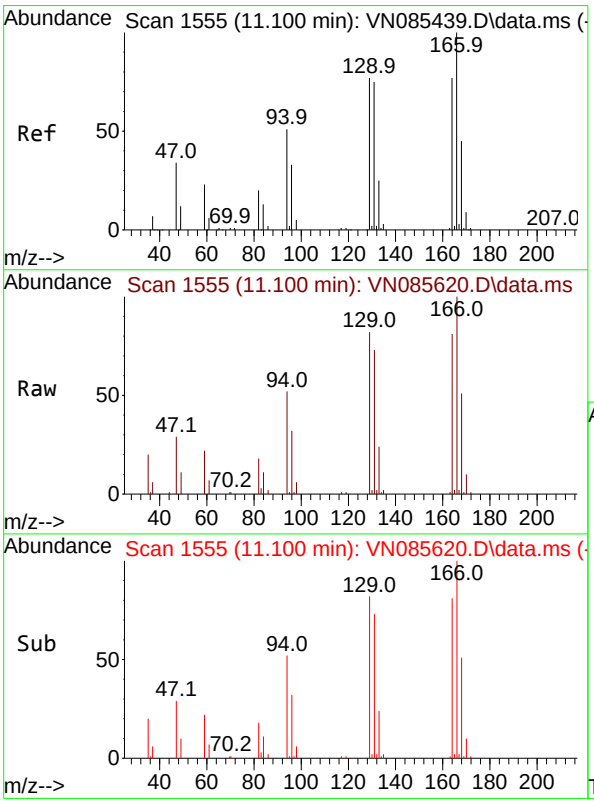
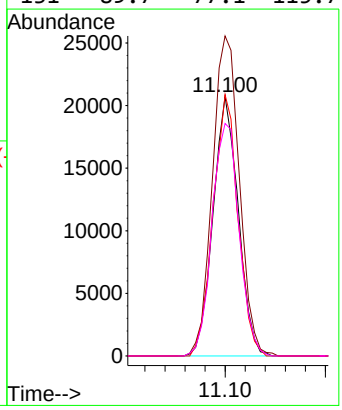


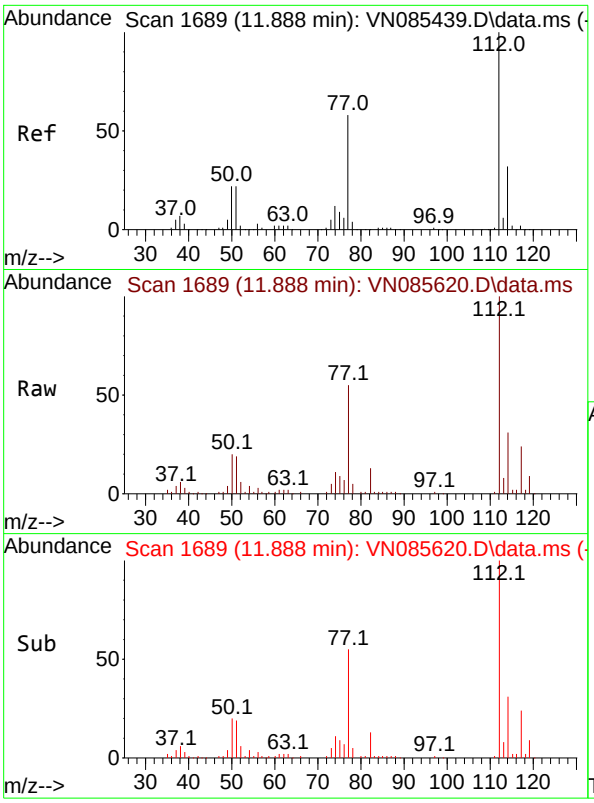


#64
Tetrachloroethene
Concen: 19.076 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:164 Resp: 36100

Ion	Ratio	Lower	Upper
164	100		
166	123.4	103.4	155.2
129	100.7	79.2	118.8
131	89.7	77.1	115.7

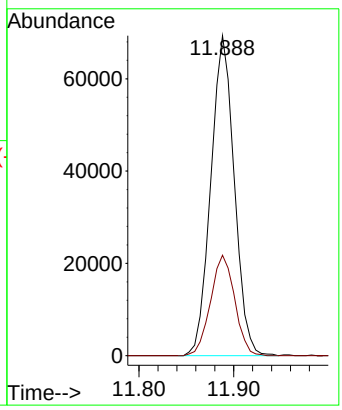




#65
Chlorobenzene
Concen: 19.628 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:112 Resp: 11936

Ion	Ratio	Lower	Upper
112	100		
114	31.4	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
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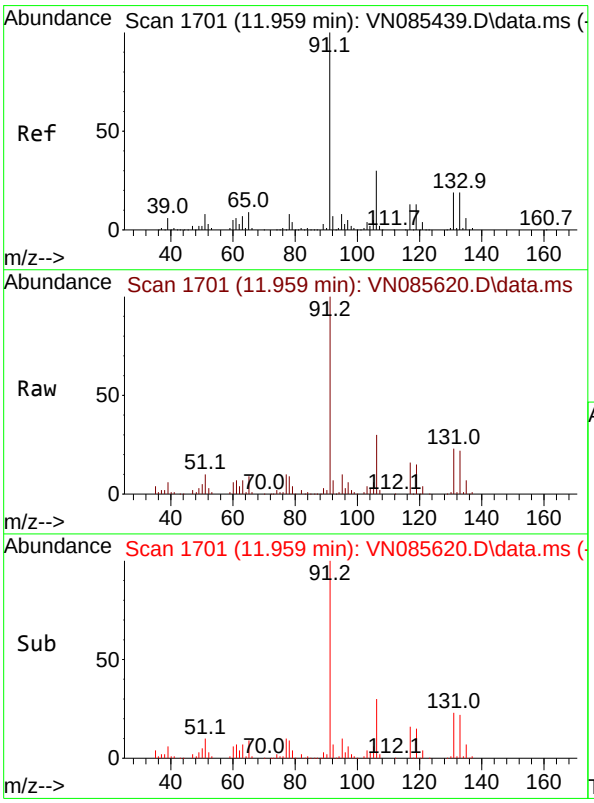
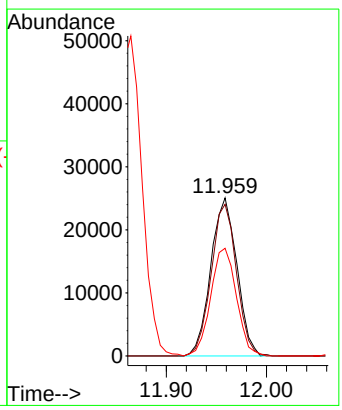
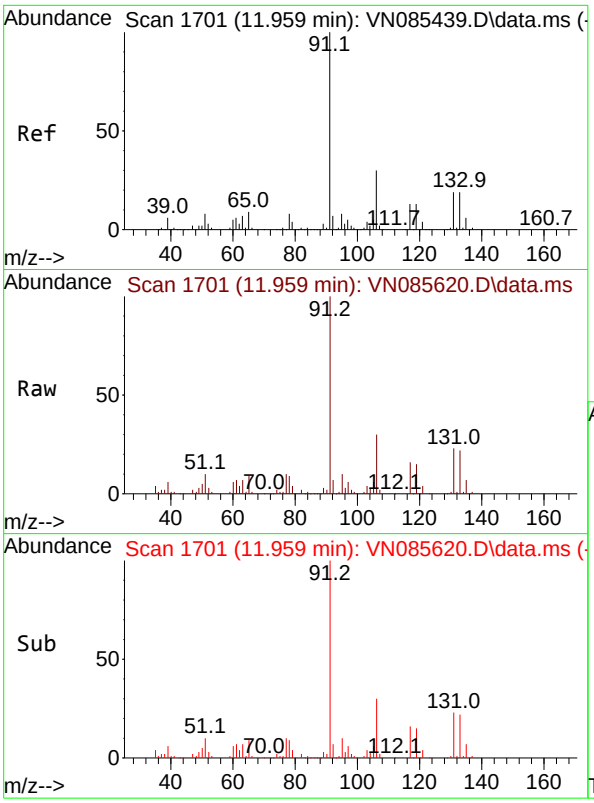


#66
1,1,1,2-Tetrachloroethane
Concen: 20.335 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:131 Resp: 45386

Ion	Ratio	Lower	Upper
131	100		
133	93.1	47.4	142.3
119	67.1	33.1	99.5

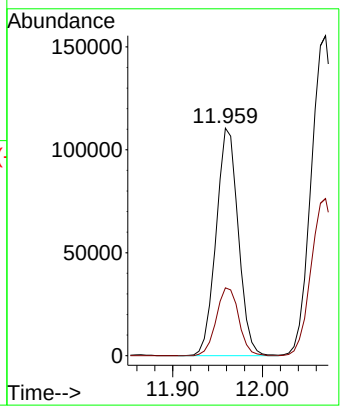




#67
Ethyl Benzene
Concen: 19.098 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 91 Resp: 18915

Ion	Ratio	Lower	Upper
91	100		
106	29.8	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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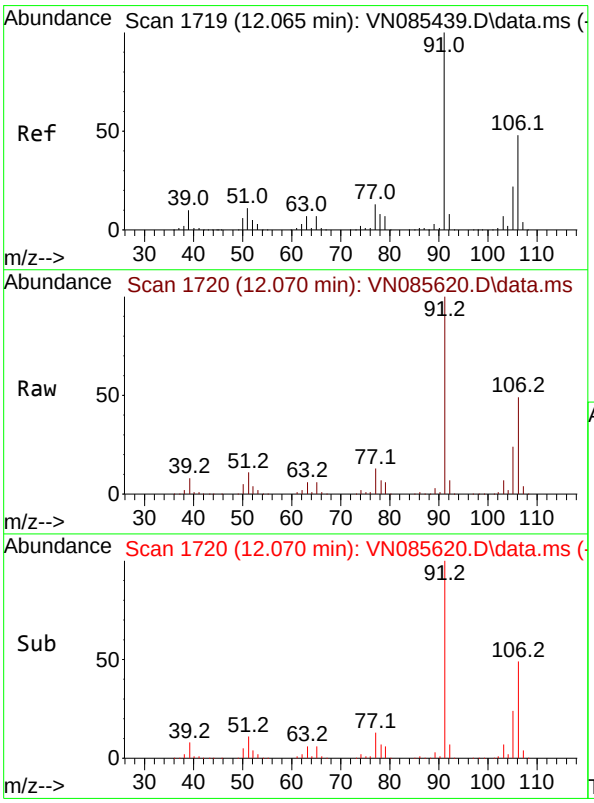
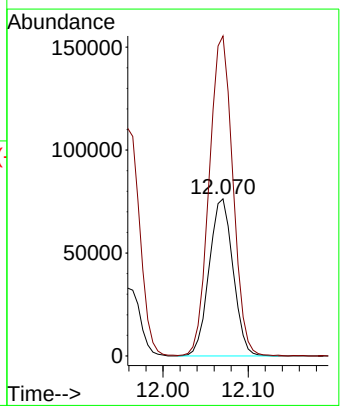
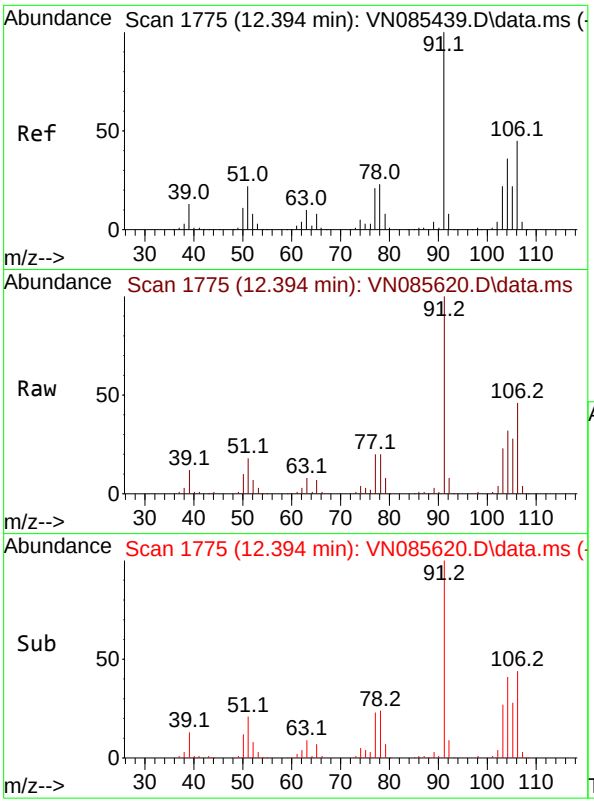


#68
m/p-Xylenes
Concen: 40.628 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:106 Resp: 148722

Ion	Ratio	Lower	Upper
106	100		
91	201.7	167.7	251.5

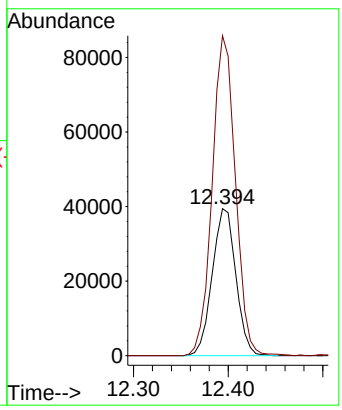




#69
o-Xylene
Concen: 19.519 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:106 Resp: 6828

Ion	Ratio	Lower	Upper
106	100		
91	214.1	110.4	331.2



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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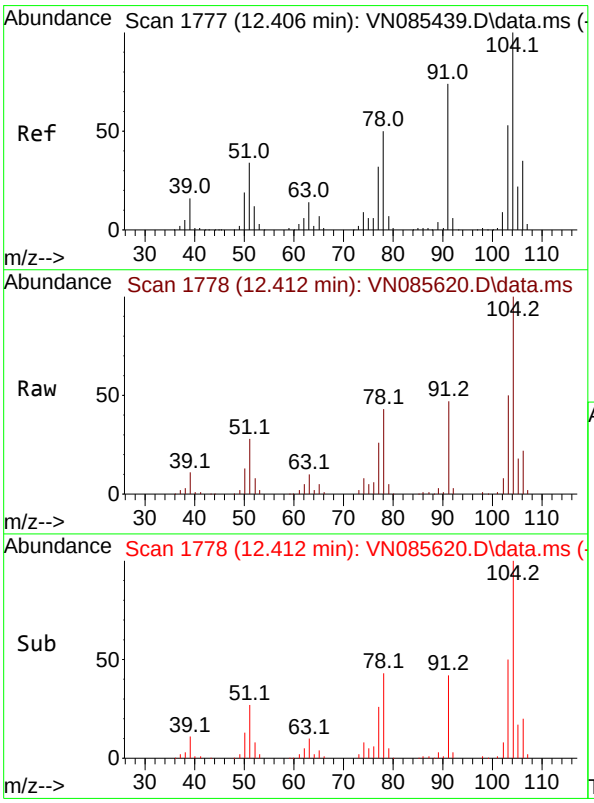
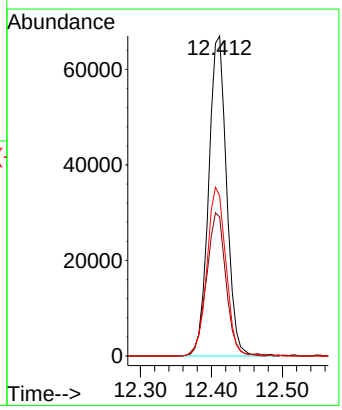
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

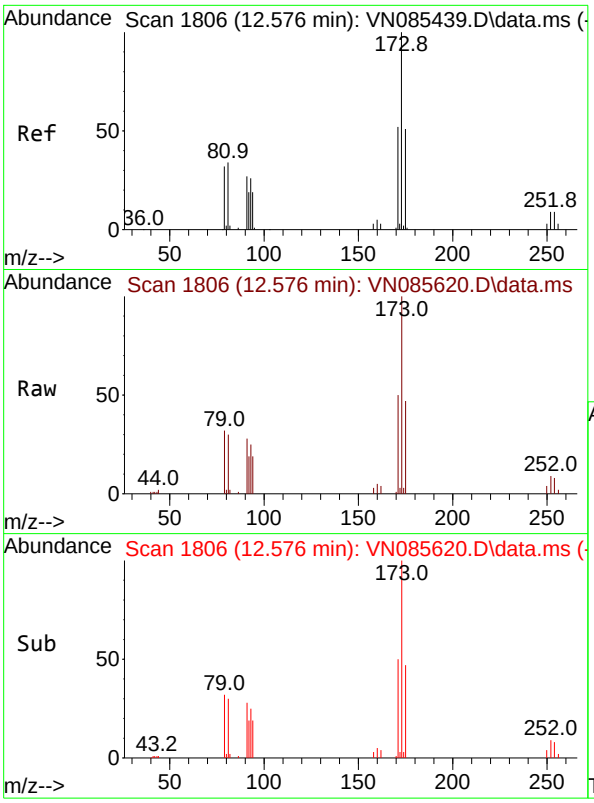


#70
Styrene
Concen: 20.307 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:104 Resp: 117567

Ion	Ratio	Lower	Upper
104	100		
78	48.5	42.5	63.7
103	55.8	43.8	65.8





#71
Bromoform
Concen: 21.478 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:173 Resp: 3430

Ion	Ratio	Lower	Upper
173	100		
175	46.9	24.4	73.2
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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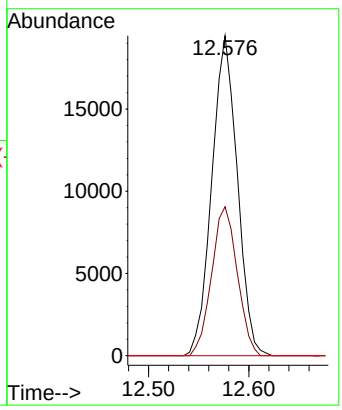
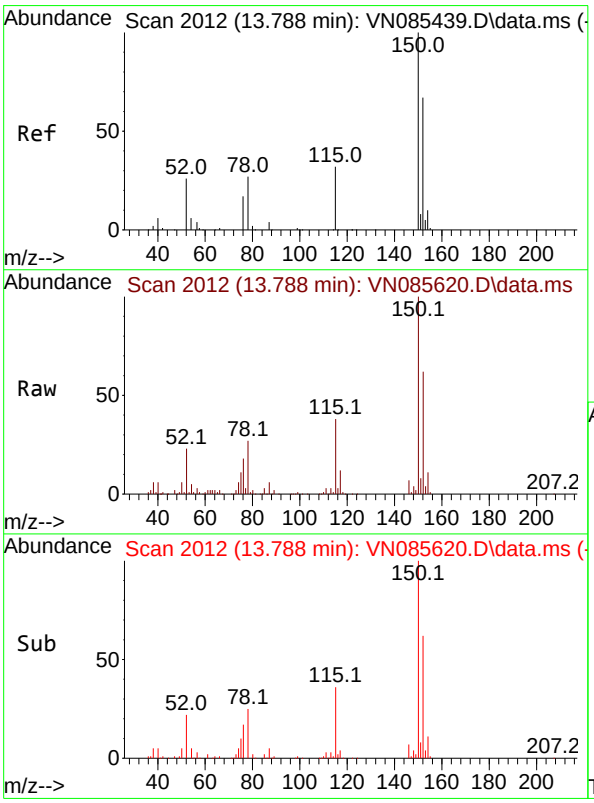
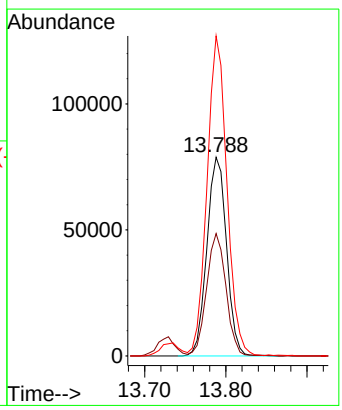


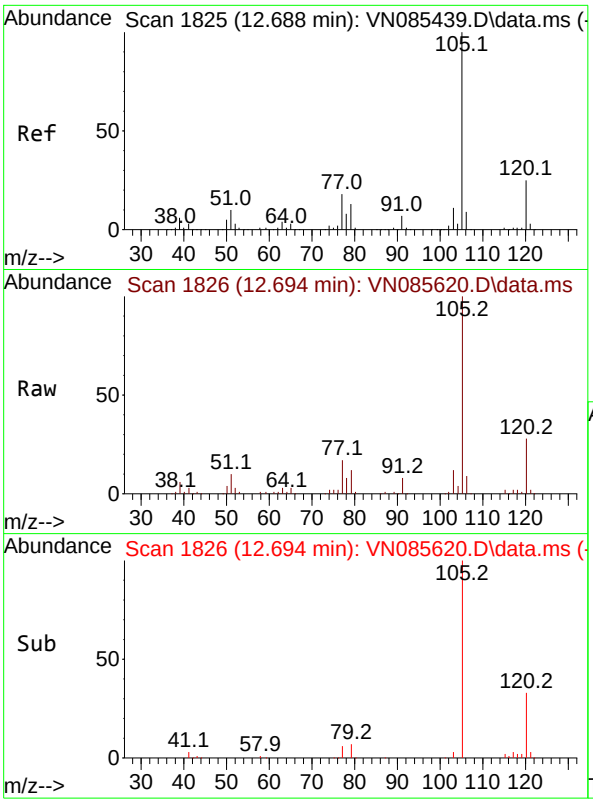


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:152 Resp: 132351

Ion	Ratio	Lower	Upper
152	100		
115	61.0	31.1	93.3
150	162.5	0.0	343.6

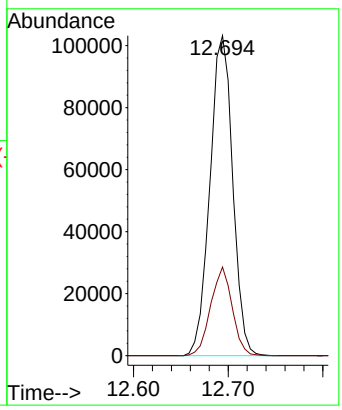




#73
Isopropylbenzene
Concen: 19.306 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:105 Resp: 17245

Ion	Ratio	Lower	Upper
105	100		
120	26.2	12.8	38.3



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

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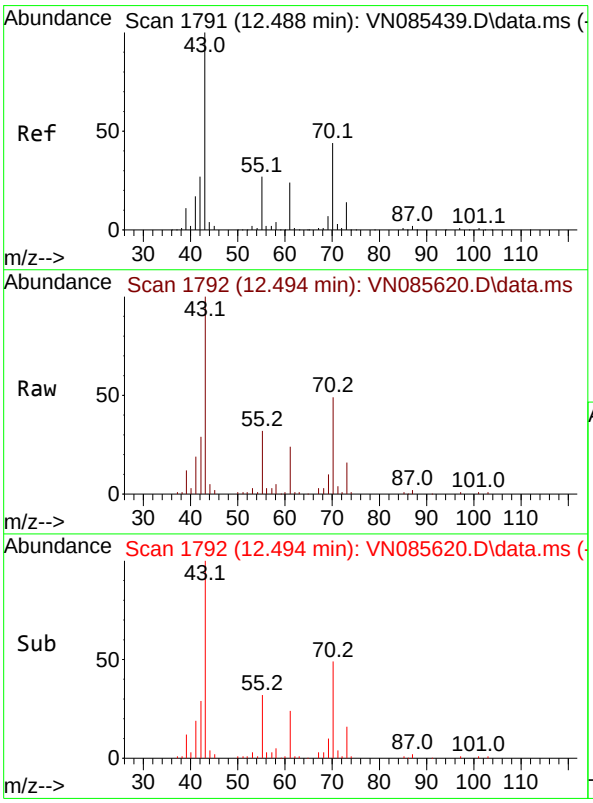
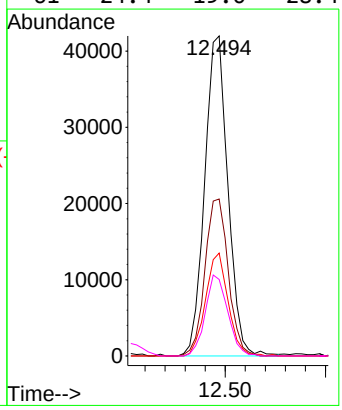
Supervised By :Mahesh Dadoda 02/04/2025

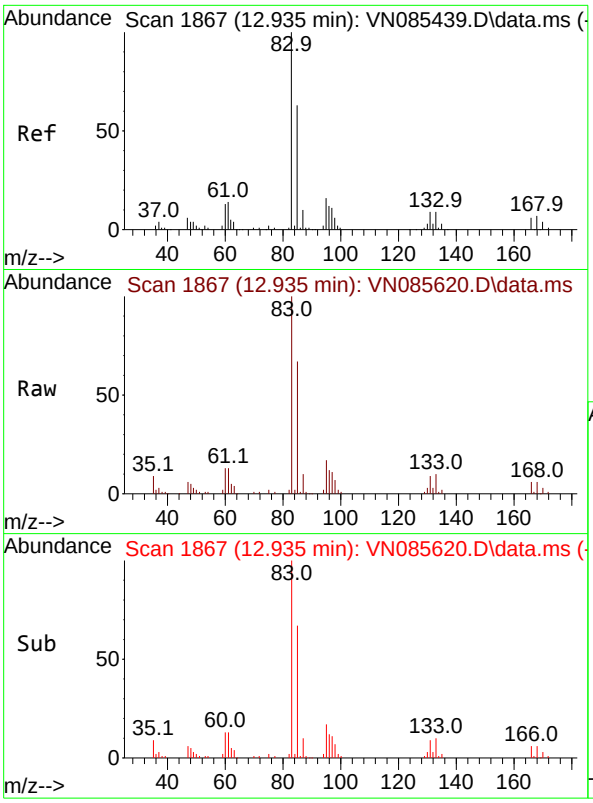


#74
N-amyl acetate
Concen: 16.859 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 43 Resp: 67688

Ion	Ratio	Lower	Upper
43	100		
70	49.3	34.0	51.0
55	31.4	21.4	32.2
61	24.4	19.0	28.4





#75
1,1,2,2-Tetrachloroethane
Concen: 21.144 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 83 Resp: 6671

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.1	32.2	96.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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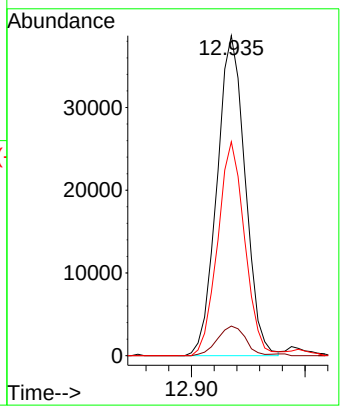
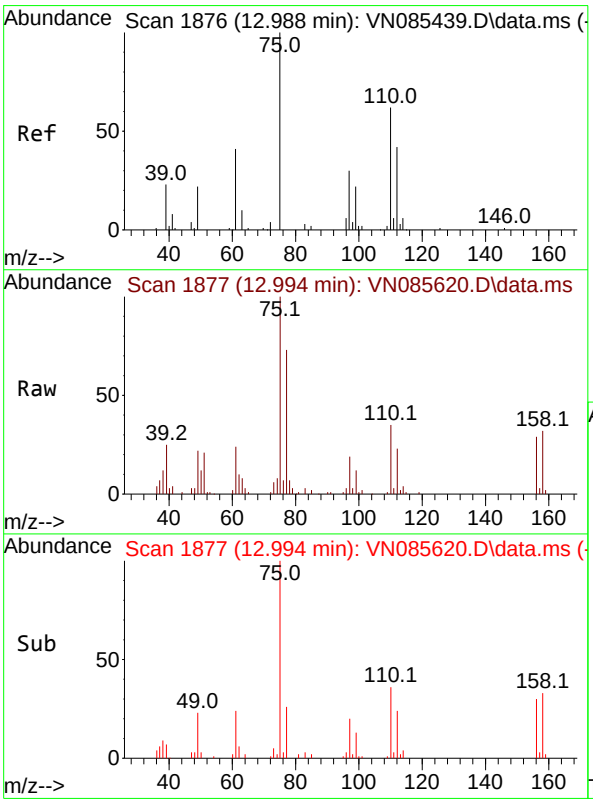
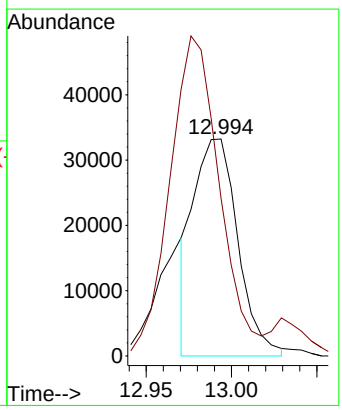


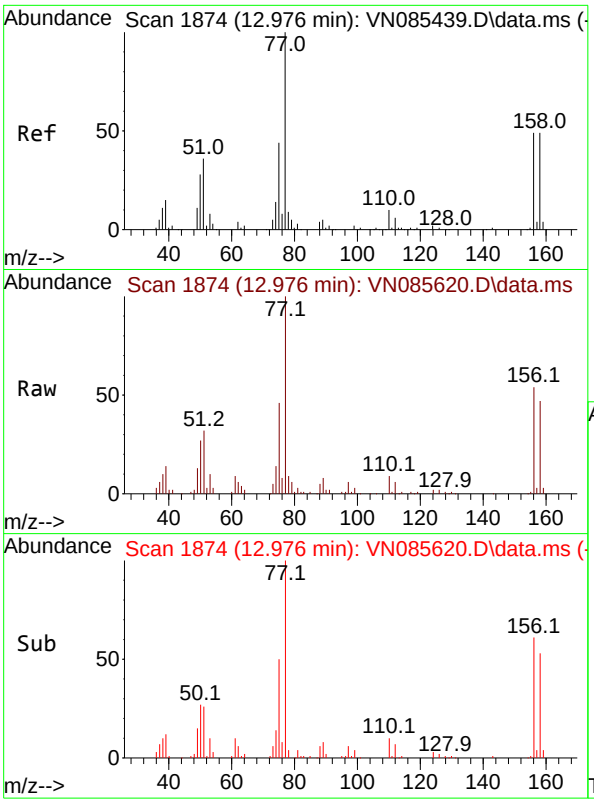


#76
1,2,3-Trichloropropane
Concen: 22.301 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 59990

Ion	Ratio	Lower	Upper
75	100		
77	165.1	109.7	329.2

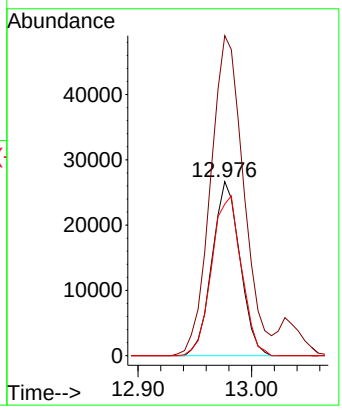




#77
Bromobenzene
Concen: 19.499 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:156 Resp: 4550

Ion	Ratio	Lower	Upper
156	100		
77	217.6	114.1	342.4
158	97.8	48.9	146.8



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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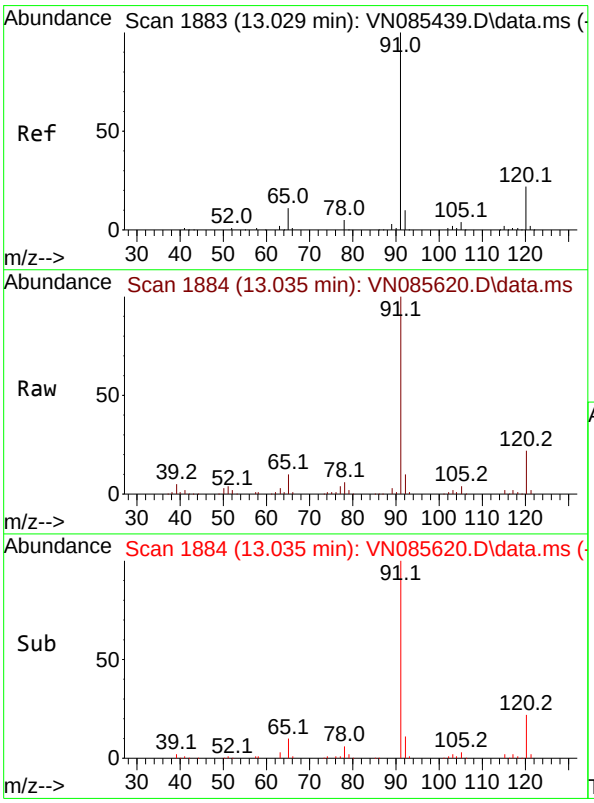
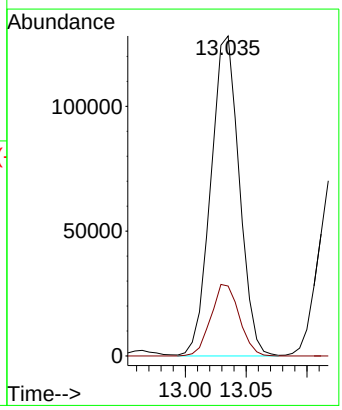
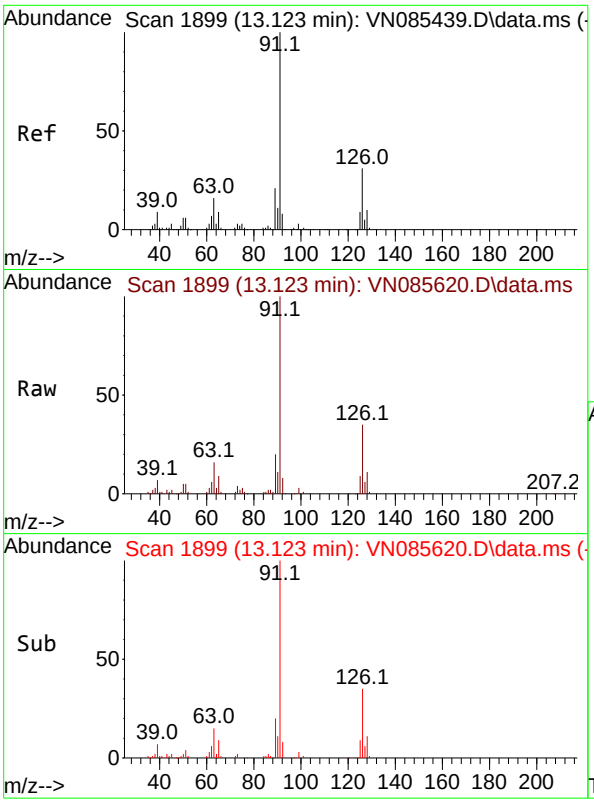


#78
n-propylbenzene
Concen: 19.734 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 91 Resp: 208681

Ion	Ratio	Lower	Upper
91	100		
120	22.2	10.9	32.6





#79
2-Chlorotoluene
Concen: 19.380 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 91 Resp: 13263

Ion	Ratio	Lower	Upper
91	100		
126	33.0	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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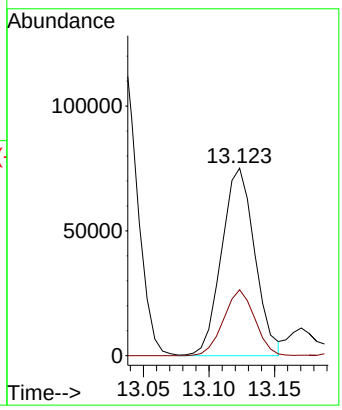
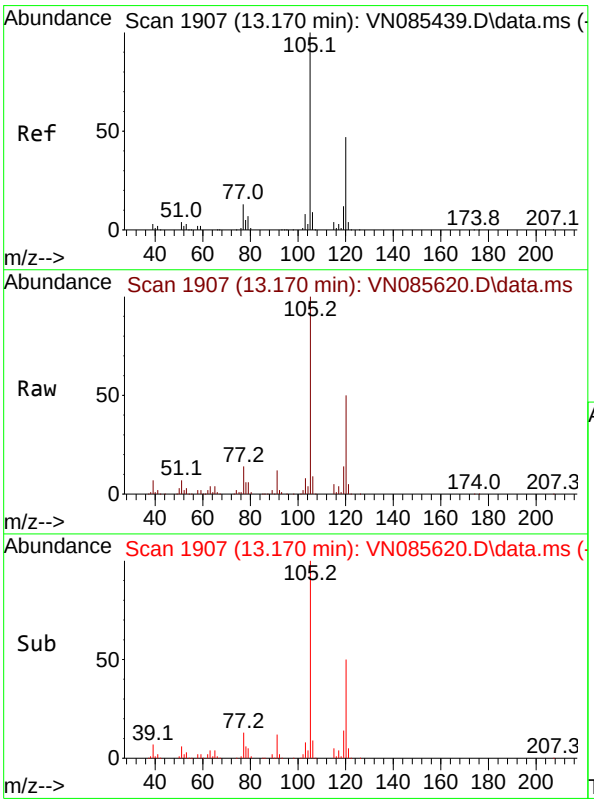
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

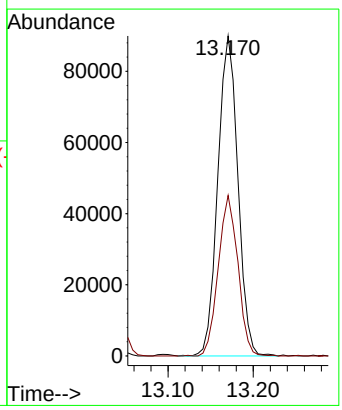


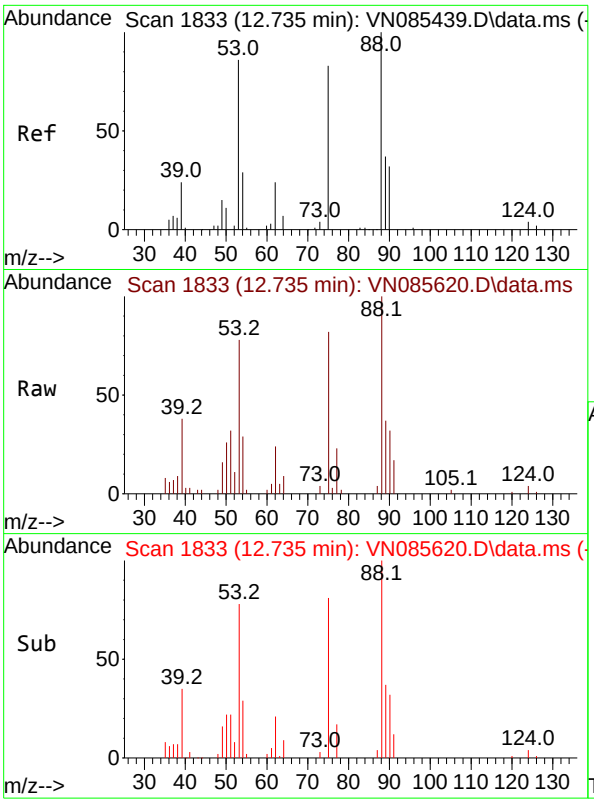


#80
1,3,5-Trimethylbenzene
Concen: 19.947 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:105 Resp: 147177

Ion	Ratio	Lower	Upper
105	100		
120	49.0	23.9	71.7





#81
trans-1,4-Dichloro-2-butene
Concen: 20.251 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 2013

Ion	Ratio	Lower	Upper
75	100		
53	103.9	95.6	143.4
89	46.2	37.0	55.6

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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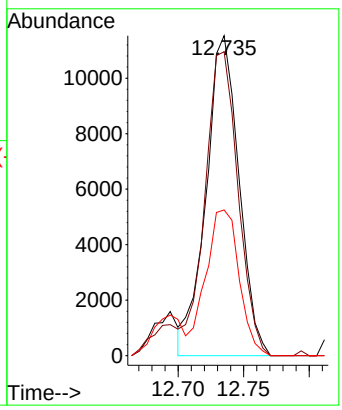
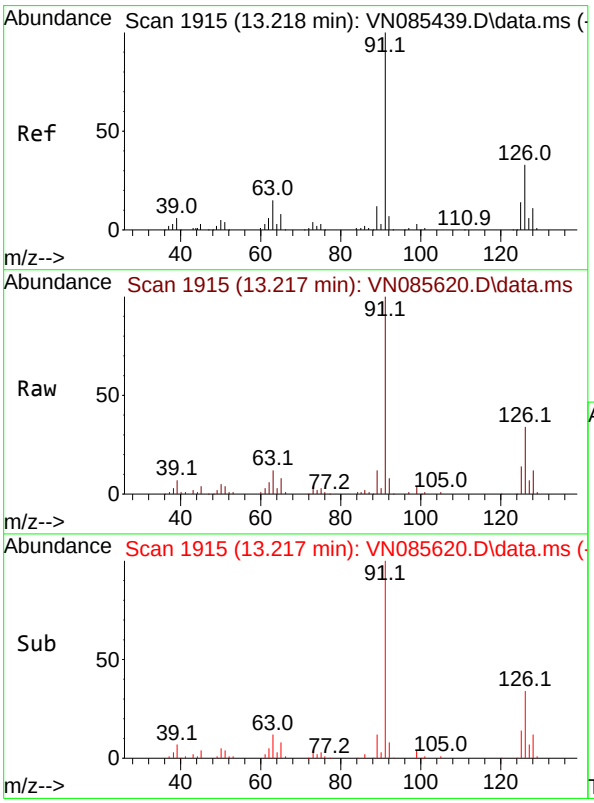
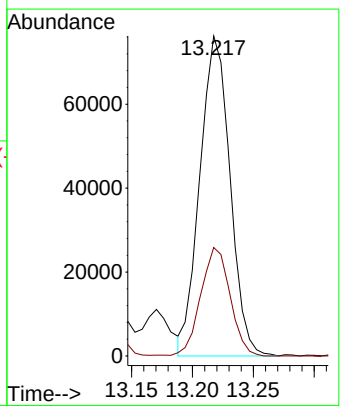


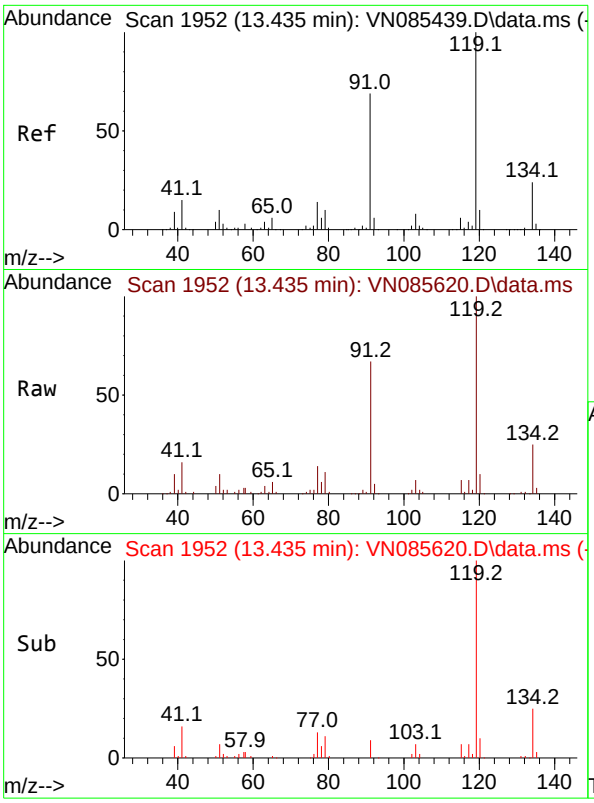


#82
4-Chlorotoluene
Concen: 19.280 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 91 Resp: 131384

Ion	Ratio	Lower	Upper
91	100		
126	33.1	15.9	47.7





#83
tert-Butylbenzene
Concen: 19.259 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:119 Resp: 11933

Ion	Ratio	Lower	Upper
119	100		
91	67.0	35.1	105.3
134	24.7	12.0	36.1

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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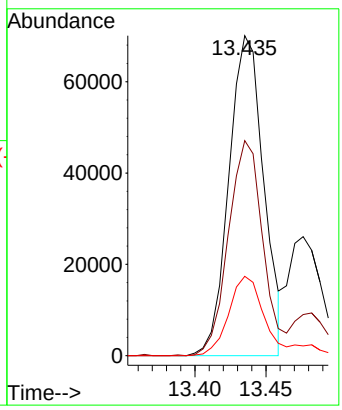
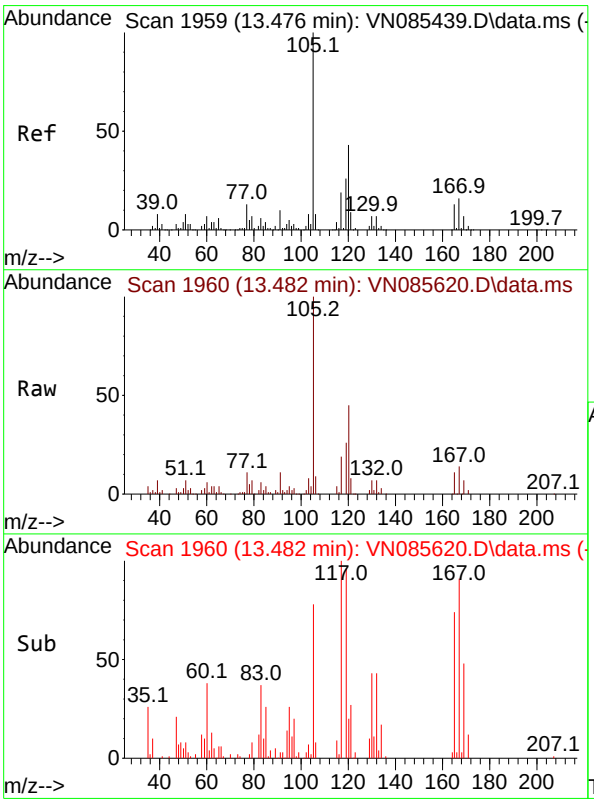
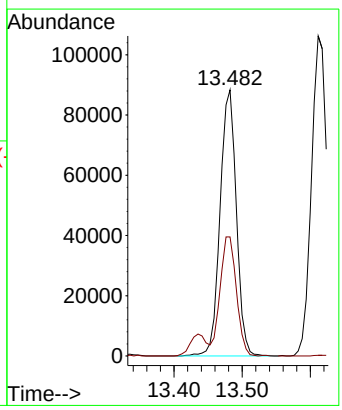


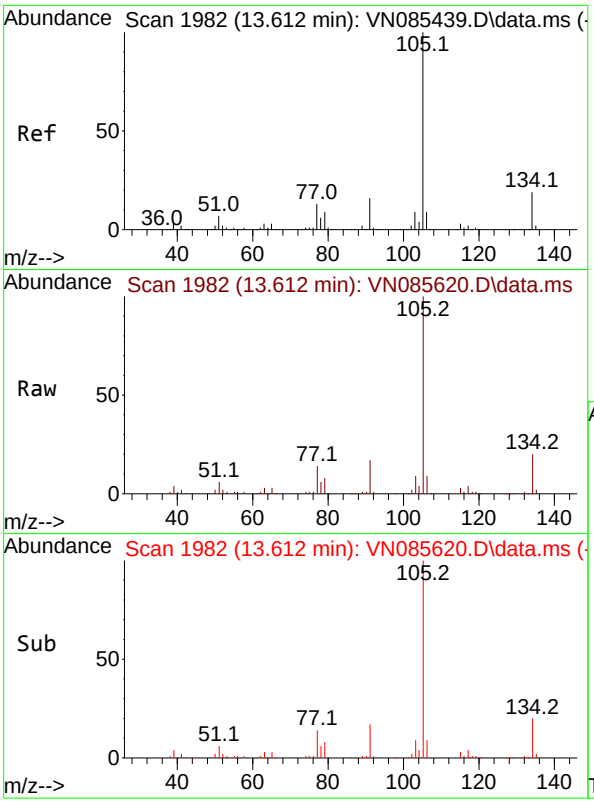


#84
1,2,4-Trimethylbenzene
Concen: 19.950 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:105 Resp: 146712

Ion	Ratio	Lower	Upper
105	100		
120	44.8	21.6	65.0





#85
sec-Butylbenzene
Concen: 20.055 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:105 Resp: 17222

Ion	Ratio	Lower	Upper
105	100		
134	19.6	9.7	28.9

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
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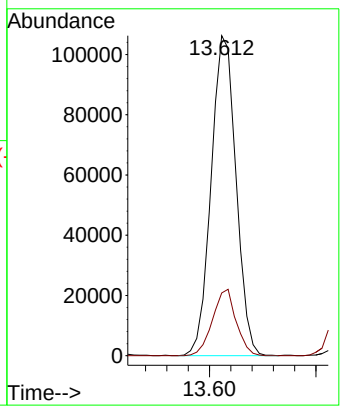
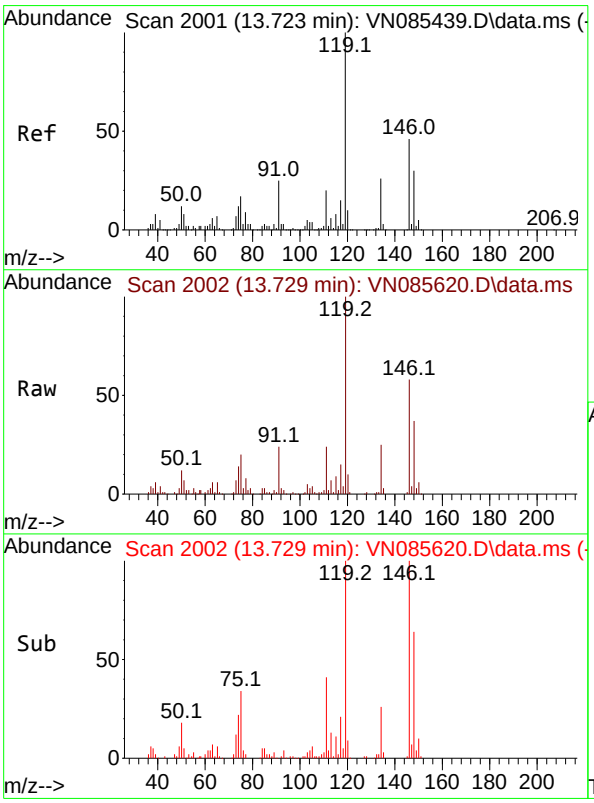
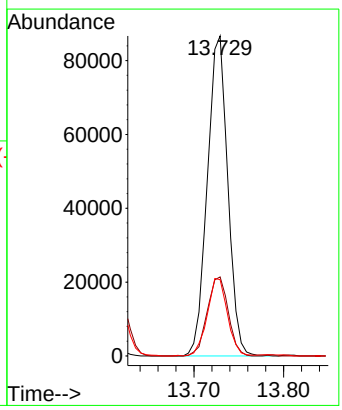


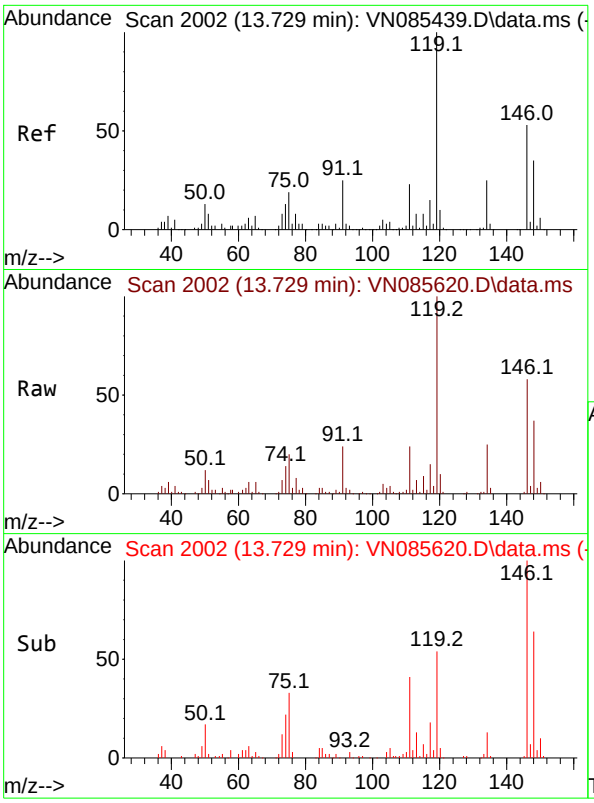


#86
p-Isopropyltoluene
Concen: 19.216 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:119 Resp: 137244

Ion	Ratio	Lower	Upper
119	100		
134	25.3	12.7	38.0
91	24.0	12.7	38.1

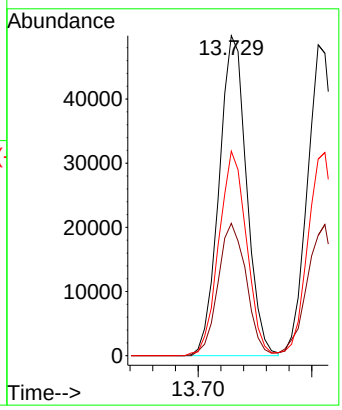




#87
1,3-Dichlorobenzene
Concen: 19.507 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:146 Resp: 8383

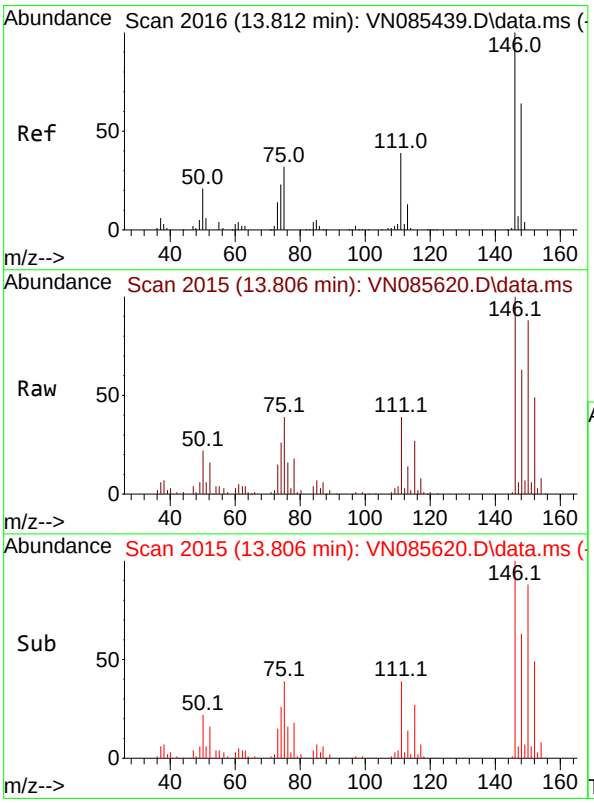
Ion	Ratio	Lower	Upper
146	100		
111	42.4	21.4	64.3
148	64.4	32.3	96.9



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

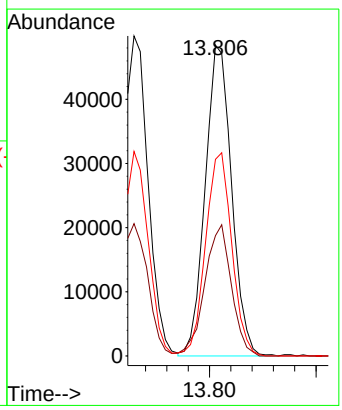
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

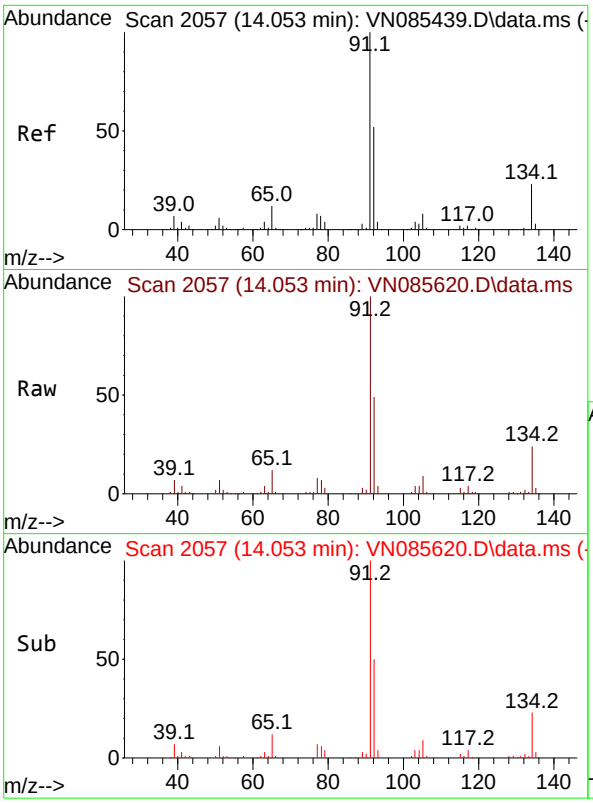


#88
1,4-Dichlorobenzene
Concen: 18.724 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:146 Resp: 83412

Ion	Ratio	Lower	Upper
146	100		
111	42.7	21.3	63.7
148	64.9	32.4	97.0





#89
n-Butylbenzene
Concen: 18.291 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

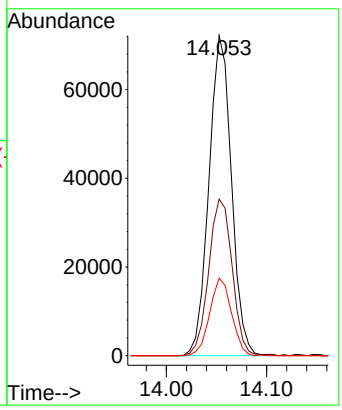
Tgt Ion: 91 Resp: 11269

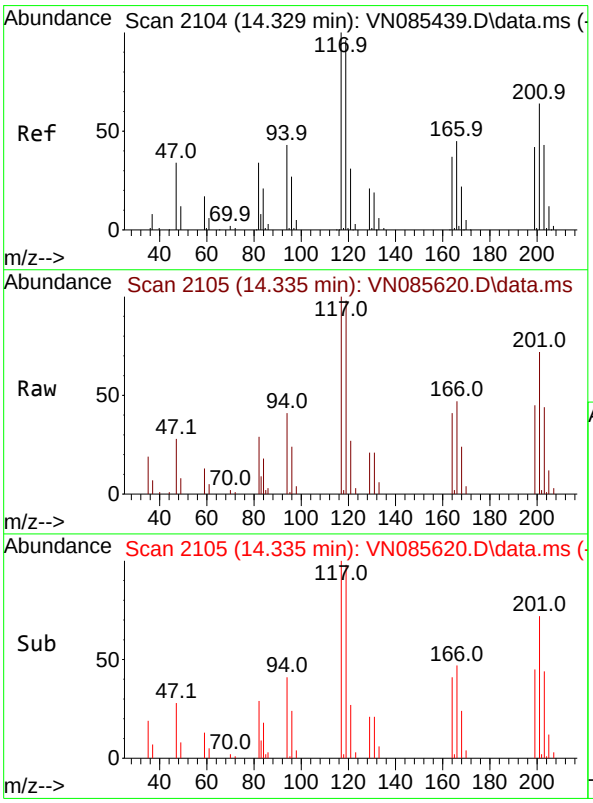
Ion	Ratio	Lower	Upper
91	100		
92	51.1	25.8	77.3
134	23.5	11.7	35.1

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

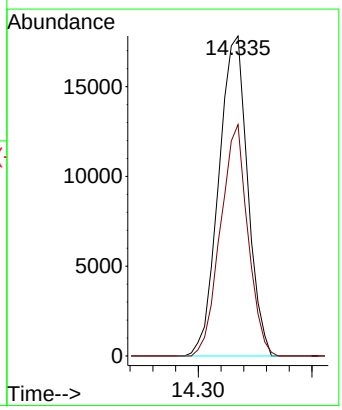


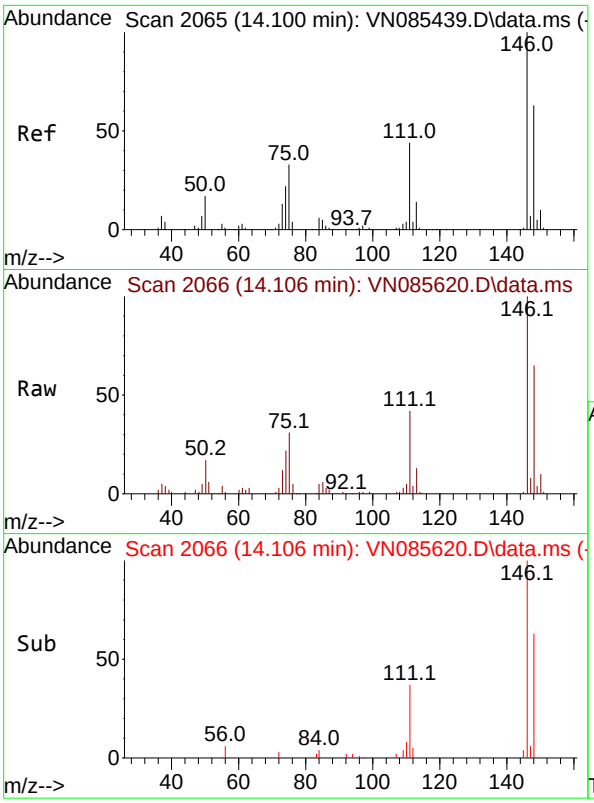


#90
Hexachloroethane
Concen: 19.257 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:117 Resp: 31482

Ion	Ratio	Lower	Upper
117	100		
201	68.6	33.7	101.0

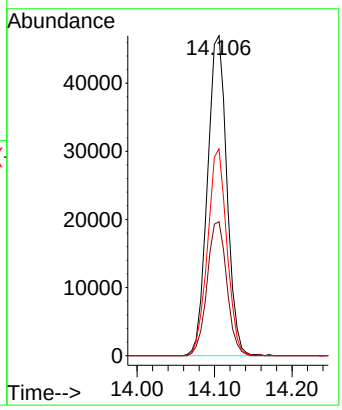




#91
1,2-Dichlorobenzene
Concen: 19.061 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:146 Resp: 8171

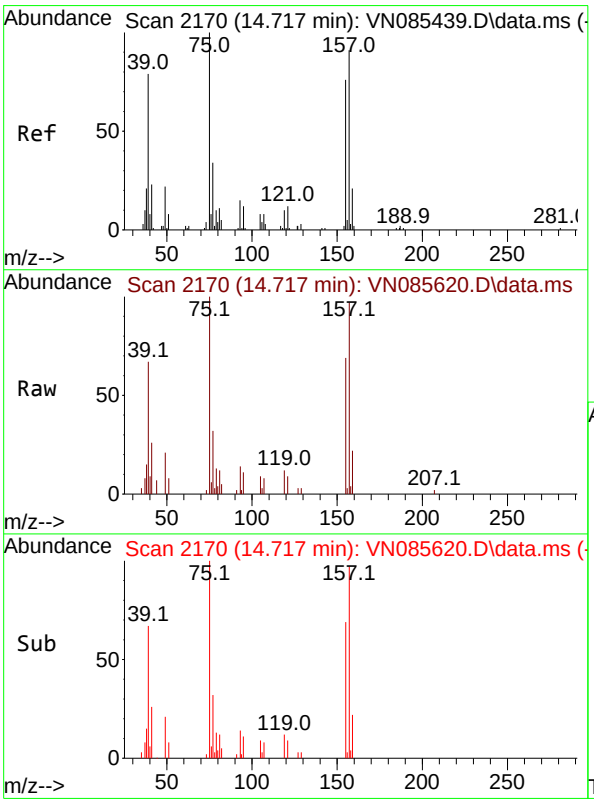
Ion	Ratio	Lower	Upper
146	100		
111	42.4	21.7	65.1
148	64.1	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

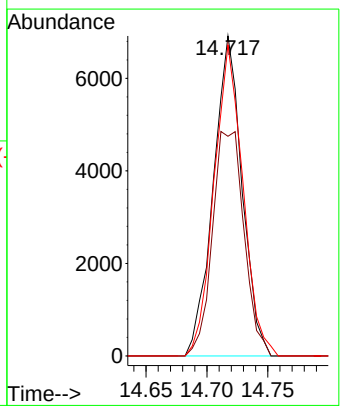
Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

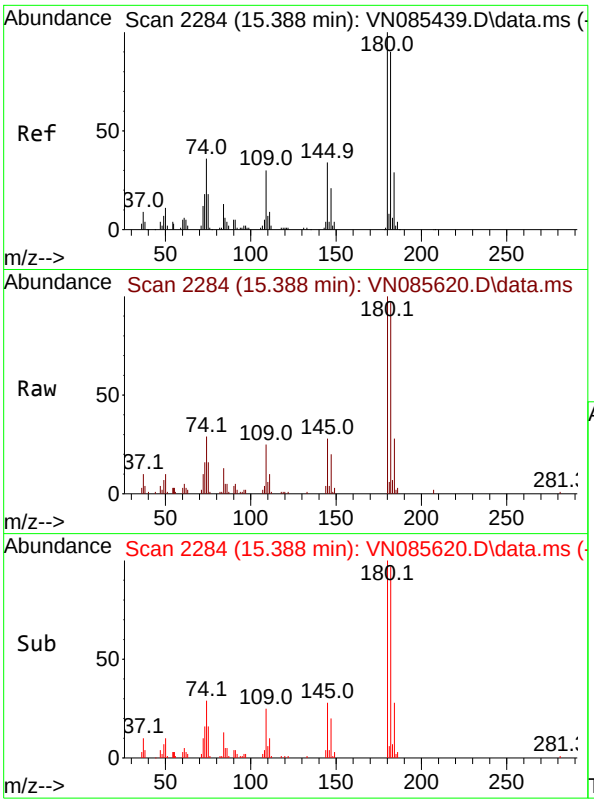


#92
1,2-Dibromo-3-Chloropropane
Concen: 19.768 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion: 75 Resp: 11390

Ion	Ratio	Lower	Upper
75	100		
155	77.0	36.4	109.2
157	97.3	45.4	136.1





#93
1,2,4-Trichlorobenzene
Concen: 17.977 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

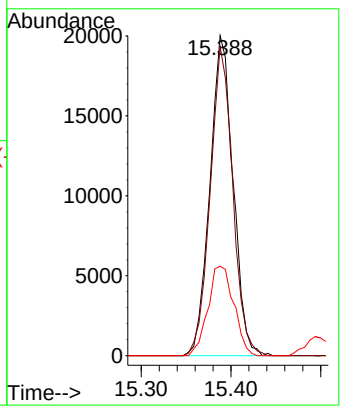
Tgt Ion:180 Resp: 3581

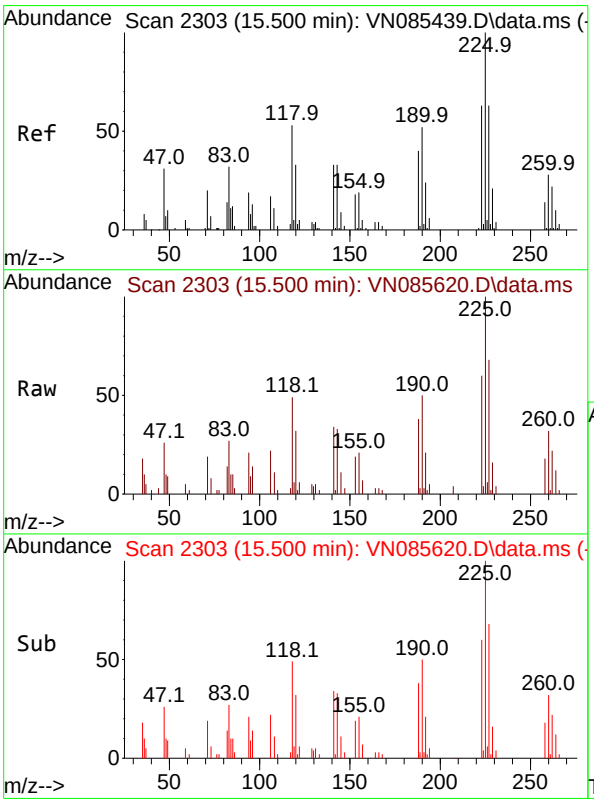
Ion	Ratio	Lower	Upper
180	100		
182	94.1	46.8	140.3
145	31.3	16.0	48.0

Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

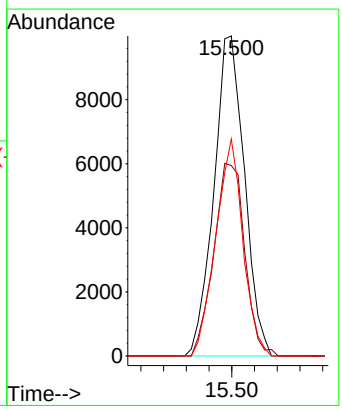


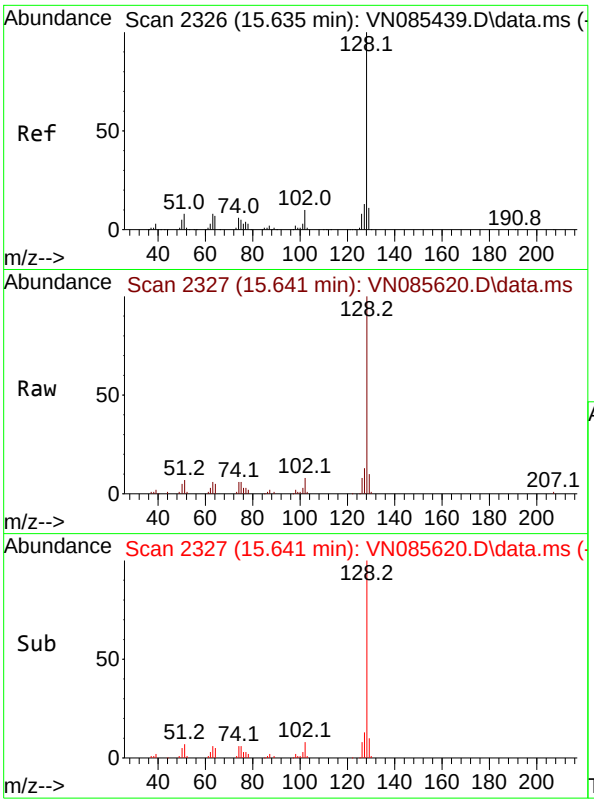


#94
Hexachlorobutadiene
Concen: 17.641 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:225 Resp: 18661

Ion	Ratio	Lower	Upper
225	100		
223	60.9	30.7	92.1
227	60.3	30.9	92.5





#95
Naphthalene
Concen: 18.013 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

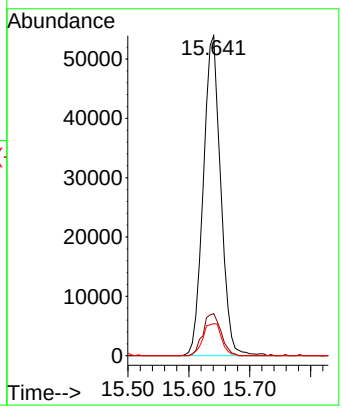
Instrument :
MSVOA_N
ClientSampleId :
VN0203WBSD01

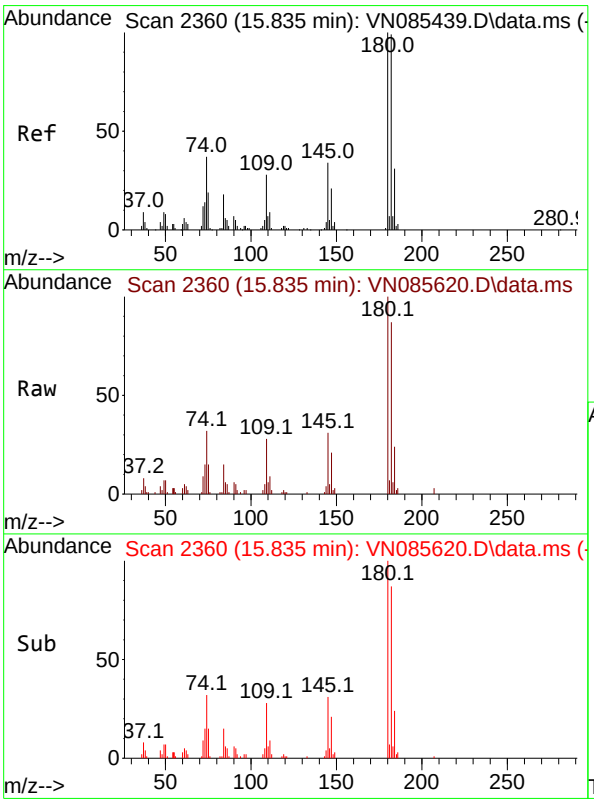
Tgt Ion:128 Resp: 10709

Ion	Ratio	Lower	Upper
128	100		
127	13.7	10.6	16.0
129	10.8	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

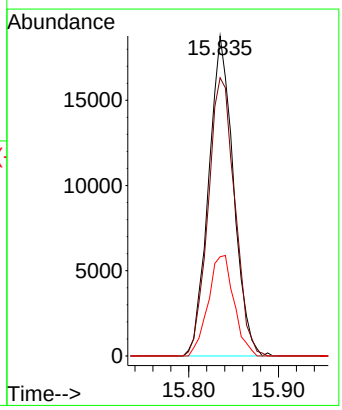




#96
1,2,3-Trichlorobenzene
Concen: 17.917 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN085620.D
Acq: 03 Feb 2025 14:22

Tgt Ion:180 Resp: 36123

Ion	Ratio	Lower	Upper
180	100		
182	92.8	47.4	142.2
145	32.5	16.9	50.7



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

Manual Integration Report

Sequence:	VN011425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN085438.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:09 AM	MMDadoda	1/15/2025 12:55:19 PM	Peak Integrated by Software
VSTDICCC050	VN085439.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:14 AM	MMDadoda	1/15/2025 12:55:22 PM	Peak Integrated by Software
VSTDICC020	VN085440.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:19 AM	MMDadoda	1/15/2025 12:55:25 PM	Peak Integrated by Software
VSTDICC020	VN085440.D	trans-1,4-Dichloro-2-but ene	JOHN	1/15/2025 9:31:19 AM	MMDadoda	1/15/2025 12:55:25 PM	Peak Integrated by Software
VSTDICC020	VN085440.D	Vinyl Acetate	JOHN	1/15/2025 9:31:19 AM	MMDadoda	1/15/2025 12:55:25 PM	Peak Integrated by Software
VSTDICC010	VN085441.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:23 AM	MMDadoda	1/15/2025 12:55:29 PM	Peak Integrated by Software
VSTDICC005	VN085442.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:28 AM	MMDadoda	1/15/2025 12:55:34 PM	Peak Integrated by Software
VSTDICC005	VN085442.D	Ethyl Acetate	JOHN	1/15/2025 9:31:28 AM	MMDadoda	1/15/2025 12:55:34 PM	Peak Integrated by Software
VSTDICC005	VN085442.D	Vinyl Acetate	JOHN	1/15/2025 9:31:28 AM	MMDadoda	1/15/2025 12:55:34 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,1,2-Trichlorotrifluoroet hane	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,1-Dichloroethane	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,4-Dichlorobenzene	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN011425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN085443.D	2-Butanone	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	Ethyl Acetate	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	Vinyl Acetate	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICV050	VN085445.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:37 AM	MMDadoda	1/15/2025 12:55:43 PM	Peak Integrated by Software
VSTDICV050	VN085445.D	trans-1,4-Dichloro-2-but ene	JOHN	1/15/2025 9:31:37 AM	MMDadoda	1/15/2025 12:55:43 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN020325	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN085617.D	1,2,3-Trichloropropane	JOHN	2/4/2025 9:51:42 AM	MMDadoda	2/4/2025 3:45:56 PM	Peak Integrated by Software
VN0203WBS01	VN085619.D	1,2,3-Trichloropropane	JOHN	2/4/2025 9:51:46 AM	MMDadoda	2/4/2025 3:45:58 PM	Peak Integrated by Software
VN0203WBSD01	VN085620.D	1,2,3-Trichloropropane	JOHN	2/4/2025 9:51:50 AM	MMDadoda	2/4/2025 3:46:00 PM	Peak Integrated by Software
VSTDCCC050	VN085643.D	1,2,3-Trichloropropane	JOHN	2/4/2025 9:52:10 AM	MMDadoda	2/4/2025 3:46:03 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN020425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN085645.D	1,2,3-Trichloropropane	JOHN	2/5/2025 9:38:29 AM	MMDadoda	2/6/2025 11:04:41 AM	Peak Integrated by Software
VN0204WBS02	VN085651.D	1,2,3-Trichloropropane	JOHN	2/5/2025 9:38:42 AM	MMDadoda	2/6/2025 11:04:44 AM	Peak Integrated by Software
VN0204WBS02	VN085651.D	Allyl chloride	JOHN	2/5/2025 9:38:42 AM	MMDadoda	2/6/2025 11:04:44 AM	Peak Integrated by Software
VN0204WBS02	VN085651.D	Isopropyl Acetate	JOHN	2/5/2025 9:38:42 AM	MMDadoda	2/6/2025 11:04:44 AM	Peak Integrated by Software
VSTDCCC050	VN085664.D	1,2,3-Trichloropropane	JOHN	2/5/2025 9:39:19 AM	MMDadoda	2/6/2025 11:04:52 AM	Peak Integrated by Software

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN011425

Review By	John Carlone	Review On	1/15/2025 9:31:51 AM				
Supervise By	Mahesh Dadoda	Supervise On	1/15/2025 12:55:51 PM				
SubDirectory	VN011425	HP Acquire Method	MSVOA_N		HP Processing Method	82N011425W.M	

STD. NAME	STD REF.#
Tune/Reschk	VP132529
Initial Calibration Stds	VP132530,VP132531,VP132532,VP132533,VP132534,VP132535
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP132544
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085437.D	14 Jan 2025 14:22	JC\MD	Ok
2	VSTDICC100	VN085438.D	14 Jan 2025 14:56	JC\MD	Ok,M
3	VSTDICCC050	VN085439.D	14 Jan 2025 15:19	JC\MD	Ok,M
4	VSTDICC020	VN085440.D	14 Jan 2025 15:43	JC\MD	Ok,M
5	VSTDICC010	VN085441.D	14 Jan 2025 16:07	JC\MD	Ok,M
6	VSTDICC005	VN085442.D	14 Jan 2025 16:31	JC\MD	Ok,M
7	VSTDICC001	VN085443.D	14 Jan 2025 17:19	JC\MD	Ok,M
8	IBLK	VN085444.D	14 Jan 2025 17:42	JC\MD	Ok
9	VSTDICV050	VN085445.D	14 Jan 2025 18:06	JC\MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

Review By	John Carlone	Review On	2/4/2025 9:54:13 AM		
Supervise By	Mahesh Dadoda	Supervise On	2/4/2025 3:46:08 PM		
SubDirectory	VN020325	HP Acquire Method		HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132834
Initial Calibration Stds	
CCC	VP132835,VP132836
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085616.D	03 Feb 2025 12:23	JC\MD	Ok
2	VSTDCCC050	VN085617.D	03 Feb 2025 12:56	JC\MD	Ok,M
3	VN0203WBL01	VN085618.D	03 Feb 2025 13:34	JC\MD	Ok
4	VN0203WBS01	VN085619.D	03 Feb 2025 13:58	JC\MD	Ok,M
5	VN0203WBSD01	VN085620.D	03 Feb 2025 14:22	JC\MD	Ok,M
6	PB166424TB	VN085621.D	03 Feb 2025 14:48	JC\MD	Ok
7	PB166424ZHE#01	VN085622.D	03 Feb 2025 15:12	JC\MD	Ok
8	PB166424ZHE#02	VN085623.D	03 Feb 2025 15:36	JC\MD	Ok
9	PB166424ZHE#03	VN085624.D	03 Feb 2025 16:00	JC\MD	Ok
10	PB166424ZHE#04	VN085625.D	03 Feb 2025 16:24	JC\MD	Ok
11	PB166424ZHE#05	VN085626.D	03 Feb 2025 16:49	JC\MD	Ok
12	PB166424ZHE#06	VN085627.D	03 Feb 2025 17:13	JC\MD	Ok
13	PB166424ZHE#07	VN085628.D	03 Feb 2025 17:37	JC\MD	Ok
14	PB166424ZHE#08	VN085629.D	03 Feb 2025 18:01	JC\MD	Ok
15	PB166424ZHE#09	VN085630.D	03 Feb 2025 18:25	JC\MD	Ok
16	PB166424ZHE#10	VN085631.D	03 Feb 2025 18:49	JC\MD	Ok
17	Q1221-02	VN085632.D	03 Feb 2025 19:13	JC\MD	Not Ok
18	Q1232-02	VN085633.D	03 Feb 2025 19:37	JC\MD	Ok
19	Q1241-02	VN085634.D	03 Feb 2025 20:02	JC\MD	Not Ok
20	Q1216-18	VN085635.D	03 Feb 2025 20:25	JC\MD	Ok
21	Q1241-06	VN085636.D	03 Feb 2025 20:49	JC\MD	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

Review By	John Carlone	Review On	2/4/2025 9:54:13 AM		
Supervise By	Mahesh Dadoda	Supervise On	2/4/2025 3:46:08 PM		
SubDirectory	VN020325	HP Acquire Method		HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132834
Initial Calibration Stds	
CCC	VP132835,VP132836
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1241-10	VN085637.D	03 Feb 2025 21:13	JC\MD	Ok
23	Q1241-14	VN085638.D	03 Feb 2025 21:37	JC\MD	Ok
24	Q1241-18	VN085639.D	03 Feb 2025 22:01	JC\MD	Ok
25	Q1242-02	VN085640.D	03 Feb 2025 22:25	JC\MD	Ok
26	Q1219-02	VN085641.D	03 Feb 2025 22:49	JC\MD	Ok
27	Q1232-10	VN085642.D	03 Feb 2025 23:14	JC\MD	Ok
28	VSTDCCC050	VN085643.D	03 Feb 2025 23:37	JC\MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN020425

Review By	John Carlone	Review On	2/5/2025 9:55:08 AM		
Supervise By	Mahesh Dadoda	Supervise On	2/6/2025 11:05:00 AM		
SubDirectory	VN020425	HP Acquire Method		HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132858
Initial Calibration Stds	
CCC	VP132859,VP132860
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085644.D	04 Feb 2025 09:55	JC\MD	Ok
2	VSTDCCC050	VN085645.D	04 Feb 2025 11:05	JC\MD	Ok,M
3	VN0204MBL01	VN085646.D	04 Feb 2025 12:07	JC\MD	Ok
4	VN0204WBL01	VN085647.D	04 Feb 2025 12:31	JC\MD	Ok
5	VN0204WBS01	VN085648.D	04 Feb 2025 13:38	JC\MD	Not Ok
6	Q1234-06	VN085649.D	04 Feb 2025 14:02	JC\MD	Ok
7	Q1241-02	VN085650.D	04 Feb 2025 14:27	JC\MD	Ok
8	VN0204WBS02	VN085651.D	04 Feb 2025 14:51	JC\MD	Ok,M
9	VN0204MBS01	VN085652.D	04 Feb 2025 15:24	JC\MD	Ok,M
10	Q1218-01ME	VN085653.D	04 Feb 2025 15:49	JC\MD	Not Ok
11	Q1219-01	VN085654.D	04 Feb 2025 16:13	JC\MD	Ok,M
12	VN0204WBSD02	VN085655.D	04 Feb 2025 16:37	JC\MD	Ok,M
13	IBLK	VN085656.D	04 Feb 2025 17:01	JC\MD	Ok
14	Q1268-01	VN085657.D	04 Feb 2025 17:25	JC\MD	ReRun
15	Q1268-02	VN085658.D	04 Feb 2025 17:50	JC\MD	ReRun
16	Q1268-03	VN085659.D	04 Feb 2025 18:14	JC\MD	ReRun
17	Q1268-04	VN085660.D	04 Feb 2025 18:38	JC\MD	ReRun
18	Q1249-01	VN085661.D	04 Feb 2025 19:02	JC\MD	Ok
19	IBLK	VN085662.D	04 Feb 2025 19:27	JC\MD	Ok
20	Q1282-01	VN085663.D	04 Feb 2025 19:51	JC\MD	Ok
21	VSTDCCC050	VN085664.D	04 Feb 2025 20:15	JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN011425

Review By	John Carlone	Review On	1/15/2025 9:31:51 AM		
Supervise By	Mahesh Dadoda	Supervise On	1/15/2025 12:55:51 PM		
SubDirectory	VN011425	HP Acquire Method	MSVOA_N	HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132529
Initial Calibration Stds	VP132530,VP132531,VP132532,VP132533,VP132534,VP132535
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP132544
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085437.D	14 Jan 2025 14:22		JC\MD	Ok
2	VSTDICC100	VSTDICC100	VN085438.D	14 Jan 2025 14:56		JC\MD	Ok,M
3	VSTDICCC050	VSTDICCC050	VN085439.D	14 Jan 2025 15:19	Comp.#56 is on Linear Regression	JC\MD	Ok,M
4	VSTDICC020	VSTDICC020	VN085440.D	14 Jan 2025 15:43	Comp.#86 is on Quadratic Regression	JC\MD	Ok,M
5	VSTDICC010	VSTDICC010	VN085441.D	14 Jan 2025 16:07		JC\MD	Ok,M
6	VSTDICC005	VSTDICC005	VN085442.D	14 Jan 2025 16:31		JC\MD	Ok,M
7	VSTDICC001	VSTDICC001	VN085443.D	14 Jan 2025 17:19		JC\MD	Ok,M
8	IBLK	IBLK	VN085444.D	14 Jan 2025 17:42		JC\MD	Ok
9	VSTDICV050	ICVVN011425	VN085445.D	14 Jan 2025 18:06		JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

Review By	John Carlone	Review On	2/4/2025 9:54:13 AM		
Supervise By	Mahesh Dadoda	Supervise On	2/4/2025 3:46:08 PM		
SubDirectory	VN020325	HP Acquire Method		HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132834
Initial Calibration Stds	
CCC	VP132835,VP132836
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085616.D	03 Feb 2025 12:23		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN085617.D	03 Feb 2025 12:56	V13516	JC\MD	Ok,M
3	VN0203WBL01	VN0203WBL01	VN085618.D	03 Feb 2025 13:34		JC\MD	Ok
4	VN0203WBS01	VN0203WBS01	VN085619.D	03 Feb 2025 13:58		JC\MD	Ok,M
5	VN0203WBSD01	VN0203WBSD01	VN085620.D	03 Feb 2025 14:22		JC\MD	Ok,M
6	PB166424TB	PB166424TB	VN085621.D	03 Feb 2025 14:48		JC\MD	Ok
7	PB166424ZHE#01	PB166424ZHE#01	VN085622.D	03 Feb 2025 15:12		JC\MD	Ok
8	PB166424ZHE#02	PB166424ZHE#02	VN085623.D	03 Feb 2025 15:36		JC\MD	Ok
9	PB166424ZHE#03	PB166424ZHE#03	VN085624.D	03 Feb 2025 16:00		JC\MD	Ok
10	PB166424ZHE#04	PB166424ZHE#04	VN085625.D	03 Feb 2025 16:24		JC\MD	Ok
11	PB166424ZHE#05	PB166424ZHE#05	VN085626.D	03 Feb 2025 16:49		JC\MD	Ok
12	PB166424ZHE#06	PB166424ZHE#06	VN085627.D	03 Feb 2025 17:13		JC\MD	Ok
13	PB166424ZHE#07	PB166424ZHE#07	VN085628.D	03 Feb 2025 17:37		JC\MD	Ok
14	PB166424ZHE#08	PB166424ZHE#08	VN085629.D	03 Feb 2025 18:01		JC\MD	Ok
15	PB166424ZHE#09	PB166424ZHE#09	VN085630.D	03 Feb 2025 18:25		JC\MD	Ok
16	PB166424ZHE#10	PB166424ZHE#10	VN085631.D	03 Feb 2025 18:49		JC\MD	Ok
17	Q1221-02	CHESTNUT-CONCRET	VN085632.D	03 Feb 2025 19:13	Surrogate Fail;Already analyzed	JC\MD	Not Ok
18	Q1232-02	JPP-46.2-012925	VN085633.D	03 Feb 2025 19:37	vial A pH#5.0	JC\MD	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN020325

Review By	John Carlone	Review On	2/4/2025 9:54:13 AM		
Supervise By	Mahesh Dadoda	Supervise On	2/4/2025 3:46:08 PM		
SubDirectory	VN020325	HP Acquire Method		HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132834
Initial Calibration Stds	
CCC	VP132835,VP132836
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1241-02	JPP-3.5-013025	VN085634.D	03 Feb 2025 20:02	RT shifted	JC\MD	Not Ok
20	Q1216-18	JPP-26.2-012825	VN085635.D	03 Feb 2025 20:25	vial A pH#5.0	JC\MD	Ok
21	Q1241-06	JPP-5.3-013025	VN085636.D	03 Feb 2025 20:49	vial A pH#5.0	JC\MD	Ok
22	Q1241-10	JPP-5.2-013025	VN085637.D	03 Feb 2025 21:13	vial A pH#5.0	JC\MD	Ok
23	Q1241-14	JPP-5.4-013025	VN085638.D	03 Feb 2025 21:37	vial A pH#5.0	JC\MD	Ok
24	Q1241-18	JPP-51.4-013025	VN085639.D	03 Feb 2025 22:01	vial A pH#5.0	JC\MD	Ok
25	Q1242-02	JPP-6.2-013025	VN085640.D	03 Feb 2025 22:25	vial A pH#5.0	JC\MD	Ok
26	Q1219-02	LAW-25-0015	VN085641.D	03 Feb 2025 22:49	vial A pH#5.0	JC\MD	Ok
27	Q1232-10	JPP-42.1-012925	VN085642.D	03 Feb 2025 23:14	vial A pH#5.0	JC\MD	Ok
28	VSTDCCC050	VSTDCCC050EC	VN085643.D	03 Feb 2025 23:37		JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN020425

Review By	John Carlone	Review On	2/5/2025 9:55:08 AM		
Supervise By	Mahesh Dadoda	Supervise On	2/6/2025 11:05:00 AM		
SubDirectory	VN020425	HP Acquire Method		HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132858
Initial Calibration Stds	
CCC	VP132859,VP132860
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085644.D	04 Feb 2025 09:55		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN085645.D	04 Feb 2025 11:05	CCAL failed high for comp. #68,69 and low for comp.#13	JC\MD	Ok,M
3	VN0204MBL01	VN0204MBL01	VN085646.D	04 Feb 2025 12:07		JC\MD	Ok
4	VN0204WBL01	VN0204WBL01	VN085647.D	04 Feb 2025 12:31		JC\MD	Ok
5	VN0204WBS01	VN0204WBS01	VN085648.D	04 Feb 2025 13:38	Surrogate Fail	JC\MD	Not Ok
6	Q1234-06	50605	VN085649.D	04 Feb 2025 14:02	vial A pH<2	JC\MD	Ok
7	Q1241-02	JPP-3.5-013025	VN085650.D	04 Feb 2025 14:27	vial A pH#5.0	JC\MD	Ok
8	VN0204WBS02	VN0204WBS02	VN085651.D	04 Feb 2025 14:51	BS failed low for comp. #58	JC\MD	Ok,M
9	VN0204MBS01	VN0204MBS01	VN085652.D	04 Feb 2025 15:24	BS failed low for comp. #28	JC\MD	Ok,M
10	Q1218-01ME	BELL-25-002ME	VN085653.D	04 Feb 2025 15:49	Already analyzed	JC\MD	Not Ok
11	Q1219-01	LAW-25-0015	VN085654.D	04 Feb 2025 16:13		JC\MD	Ok,M
12	VN0204WBSD02	VN0204WBSD02	VN085655.D	04 Feb 2025 16:37	BSD failed low for comp. #58	JC\MD	Ok,M
13	IBLK	IBLK	VN085656.D	04 Feb 2025 17:01		JC\MD	Ok
14	Q1268-01	Storage-Blank-SOIL-RE	VN085657.D	04 Feb 2025 17:25	vial A pH<2	JC\MD	ReRun
15	Q1268-02	Storage-Blank-WATER-	VN085658.D	04 Feb 2025 17:50	vial A pH<2	JC\MD	ReRun
16	Q1268-03	Storage-Blank-WATER-	VN085659.D	04 Feb 2025 18:14	vial A pH<2	JC\MD	ReRun
17	Q1268-04	Storage-Blank-SAMPLE	VN085660.D	04 Feb 2025 18:38	vial A pH<2	JC\MD	ReRun

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN020425

Review By	John Carlone	Review On	2/5/2025 9:55:08 AM		
Supervise By	Mahesh Dadoda	Supervise On	2/6/2025 11:05:00 AM		
SubDirectory	VN020425	HP Acquire Method		HP Processing Method	82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132858
Initial Calibration Stds	
CCC	VP132859,VP132860
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

18	Q1249-01	BP-VPB-192-GW-460-4	VN085661.D	04 Feb 2025 19:02	vial A pH<2	JC\MD	Ok
19	IBLK	IBLK	VN085662.D	04 Feb 2025 19:27		JC\MD	Ok
20	Q1282-01	SW-WTS-02	VN085663.D	04 Feb 2025 19:51	vial A pH<2	JC\MD	Ok
21	VSTDCCC050	VSTDCCC050EC	VN085664.D	04 Feb 2025 20:15		JC\MD	Ok,M

M : Manual Integration

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166424

SOP ID : M1311-TCLP-15

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : ZHE-1 / ZHE-2

TCLP Filter ID : 114771

Start Prep Date : 01/31/2025 **Time :** 14:10

End Prep Date : 02/01/2025 **Time :** 07:35

Combination Ratio : 20

ZHE Cleaning Batch : ~~N/A~~ 28 VN020325,

Initial Room Temperature: 23 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : JP

Supervisor By : 12

Standared Name	MLS USED	STD REF. # FROM LOG
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP110801
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
40ml VOA Vials	23237	N/A

Extraction Conformance/Non-Conformance Comments:

ALL ZHE samples are extracted and given as vial A & B. Leak checked after 10 mintues of tumbling. TUMBLER ZHE-1 /ZHE-2 checked.30 rpm.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02/03/25 08:30	JP / TCLP Room	MD / VOC Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166424

Sample ID	ClientID	ZHE Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB166424TB	LEB424	11	N/A	500	N/A	N/A	N/A	4.93	N/A	ZHE-2
Q1239-02	286	01	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1239-05	348	02	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1239-08	RBR22266	03	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1239-11	357	04	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1241-02	JPP-3.5-013025	05	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1241-06	JPP-5.3-013025	06	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1241-10	JPP-5.2-013025	07	25.04	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1241-14	JPP-5.4-013025	08	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1241-18	JPP-51.4-013025	09	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1242-02	JPP-6.2-013025	10	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1

Alliance TECHNICAL GROUP

TCLP Solid Determination

PB166424

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB166424TB	LEB424	N/A	N/A	N/A	N/A	N/A	N/A
Q1239-02	286	N/A	N/A	N/A	N/A	100	N/A
Q1239-05	348	N/A	N/A	N/A	N/A	100	N/A
Q1239-08	RBR22266	N/A	N/A	N/A	N/A	100	N/A
Q1239-11	357	N/A	N/A	N/A	N/A	100	N/A
Q1241-02	JPP-3.5-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-06	JPP-5.3-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-10	JPP-5.2-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-14	JPP-5.4-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-18	JPP-51.4-013025	N/A	N/A	N/A	N/A	100	N/A
Q1242-02	JPP-6.2-013025	N/A	N/A	N/A	N/A	100	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TCLP ZHE Q1242 **WorkList ID :** 187350 **Department :** TCLP Extraction **Date :** 01-31-2025 10:27:01

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1239-02	286	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311 ZHE
Q1239-05	348	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311 ZHE
Q1239-08	RBR22266	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311 ZHE
Q1239-11	357	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311 ZHE
Q1241-02	JPP-3.5-013025	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311 ZHE
Q1241-06	JPP-5.3-013025	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311 ZHE
Q1241-10	JPP-5.2-013025	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311 ZHE
Q1241-14	JPP-5.4-013025	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311 ZHE
Q1241-18	JPP-51.4-013025	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311 ZHE
Q1242-02	JPP-6.2-013025	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311 ZHE

Date/Time 01/31/25 12:00

Raw Sample Received by: JP (WC)

Raw Sample Relinquished by: RJ (EXT-lab)

Date/Time 01/31/25 17:00

Raw Sample Received by: RJ (EXT-lab)

Raw Sample Relinquished by: JP (WC)

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Prep Standard - Chemical Standard Summary

Order ID : Q1241

Test : TCLP VOA

Prepbatch ID :

Sequence ID/Qc Batch ID: VN020325,VN020425,

Standard ID :
VP130430,VP131746,VP131767,VP132035,VP132096,VP132468,VP132613,VP132834,VP132835,VP132836,VP132858,VP132859,VP132860,

Chemical ID :
V13391,V13446,V13457,V13460,V13465,V13466,V13707,V14145,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14614,V14624,V14627,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14754,V14756,V14801,V14814,V14830,V14831,V14832,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
617	8260 Surrogate, 400PPM	VP130430	09/20/2024	02/28/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/26/2024

FROM 0.40000ml of V13707 + 24.60000ml of V14145 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP131746	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/23/2024

FROM 0.50000ml of V14289 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP131767	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/27/2024

FROM 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1810	8260 Working Std(2-CVE)-800ppm	VP132035	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/12/2024

FROM 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final Quantity: 50.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
719	8260 Working STD (BCM)-First source, 400PPM	VP132096	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/19/2024

FROM 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP132468	01/08/2025	02/07/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 01/17/2025

FROM 1.00000ml of V14832 + 1.50000ml of V14830 + 1.50000ml of V14831 + 21.00000ml of V14627 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP132613	01/20/2025	02/28/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 01/29/2025

FROM 0.40000ml of V13446 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 + 1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14722 + 1.00000ml of V14754 + 1.00000ml of V14756 + 1.00000ml of V14801 + 1.00000ml of V14814 + 1.50000ml of V14723 + 1.50000ml of V14724 + 10.60000ml of V14624 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP132834	02/03/2025	02/04/2025	John Carlone	None	None	Semsettin Yesilyurt 02/05/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP132835	02/03/2025	02/04/2025	John Carlone	None	None	Semsettin Yesilyurt 02/05/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP132836	02/03/2025	02/04/2025	John Carlone	None	None	Semsettin Yesilyurt 02/05/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP132858	02/04/2025	02/05/2025	John Carlone	None	None	Semsettin Yesilyurt 02/06/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP132859	02/04/2025	02/05/2025	John Carlone	None	None	Semsettin Yesilyurt 02/06/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP132860	02/04/2025	02/05/2025	John Carlone	None	None	Semsettin Yesilyurt 02/06/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0181905	02/28/2025	01/10/2025 / SAM	01/23/2023 / SAM	V13446

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13457

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13460

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13466

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0196865	06/10/2025	06/10/2024 / SAM	04/12/2023 / SAM	V13707

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	02/28/2025	08/29/2024 / SAM	02/06/2024 / SAM	V14145

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	05/18/2025	11/18/2024 / pedro	02/06/2024 / SAM	V14154

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14175

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14176

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	11/22/2025	11/22/2024 / SAM	04/15/2024 / SAM	V14289

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14433

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14439

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14521

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14522

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	07/13/2025	01/13/2025 / SAM	11/26/2024 / SAM	V14624

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	07/06/2025	01/06/2025 / SAM	11/26/2024 / SAM	V14627

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14630

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14631

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14632

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14633

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14722

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14723

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14724

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	05/31/2031	01/10/2025 / SAM	12/17/2024 / SAM	V14754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14756

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220563	06/30/2026	01/10/2025 / SAM	01/08/2025 / SAM	V14801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14814

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	010725	02/07/2025	01/08/2025 / SAM	01/08/2025 / SAM	V14830

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	010725	02/07/2025	01/08/2025 / SAM	01/08/2025 / SAM	V14831

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	010725	02/07/2025	01/08/2025 / SAM	01/08/2025 / SAM	V14832

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Bottles

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier

Jamie Ethier
Vice President Global Quality

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Dec 01/08/25

5 vial

V14823-to V14827 V14829

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 010725
Description: Acrolein

Expiration Date: 020725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water **Lot#** 072324Q

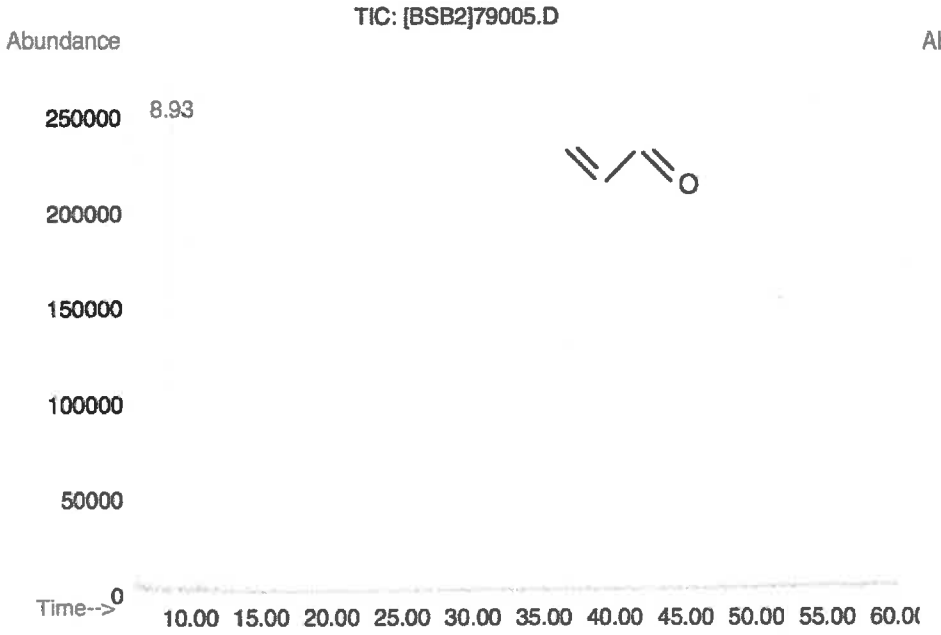
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

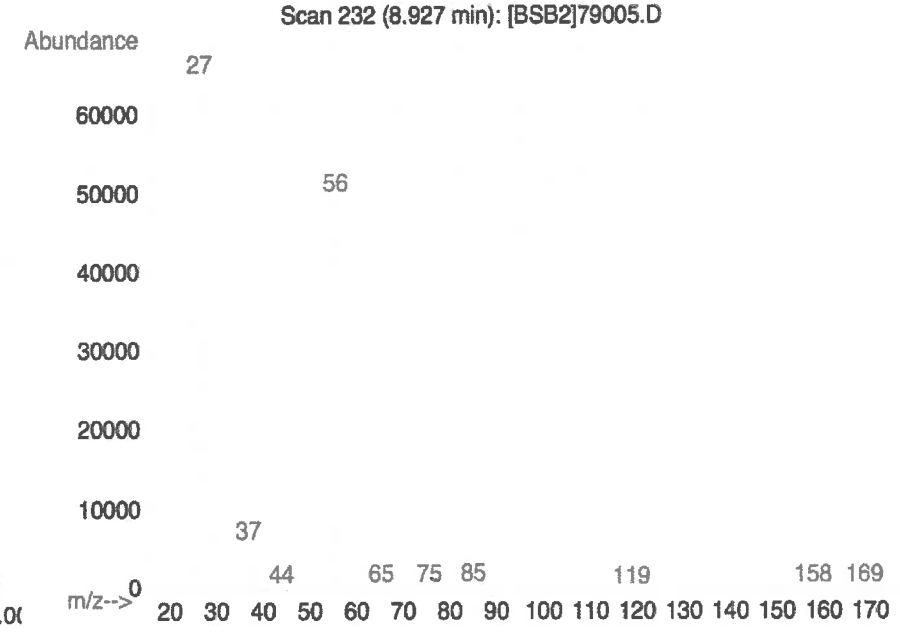
Weight(s) shown below were combined and diluted to (mL): 10.0

	010725
Formulated By: Anthony Mahoney	DATE
	010725
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05178	5011.8	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

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.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Dec 01/08/25

5 vial

V14823-to V14827 V14829

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 010725
Description: Acrolein

Expiration Date: 020725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water **Lot#** 072324Q

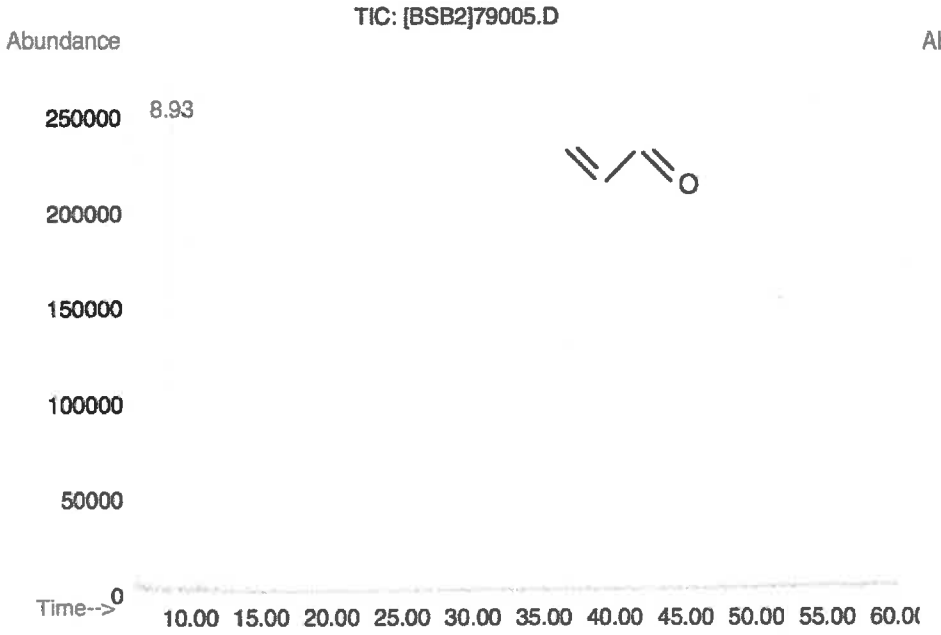
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

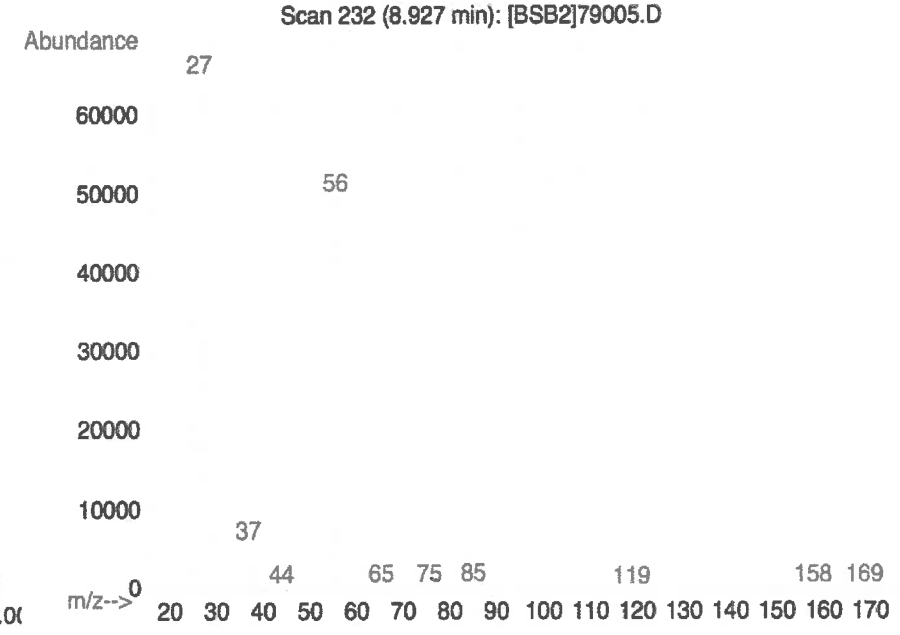
Weight(s) shown below were combined and diluted to (mL): 10.0

	010725
Formulated By: Anthony Mahoney	DATE
	010725
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05178	5011.8	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

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

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
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Dec 01/08/25

5 vial

V14823-to V14827 V14829

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 010725
Description: Acrolein

Expiration Date: 020725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water **Lot#** 072324Q

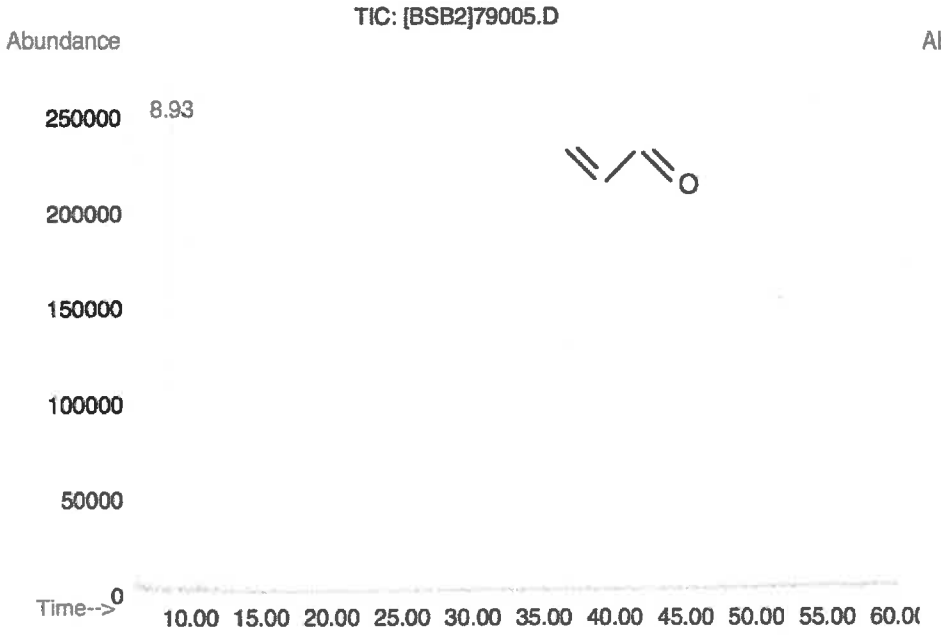
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

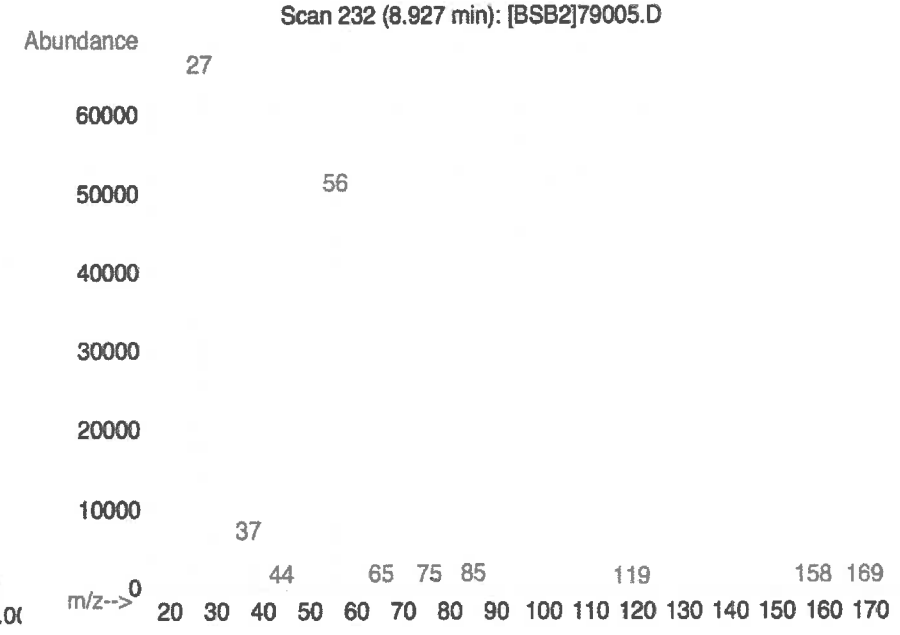
Weight(s) shown below were combined and diluted to (mL): 10.0

	010725
Formulated By: Anthony Mahoney	DATE
	010725
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05178	5011.8	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
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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	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

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.

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CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL):	100.0	0.021	Flask Uncertainty
		5E-05	Balance Uncertainty

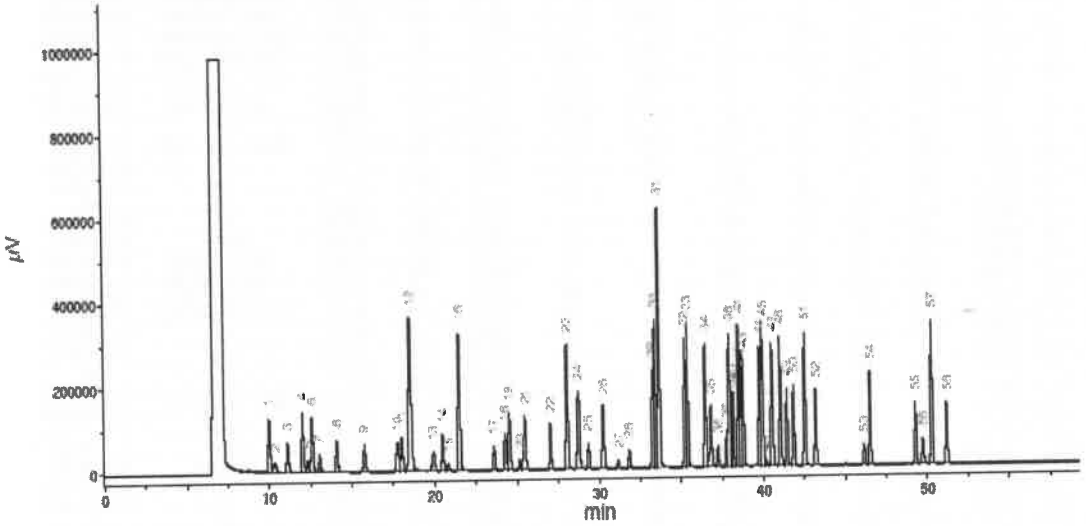
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(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)	IK18CAS000(	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0361)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (46mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 6040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethene	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.88
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
35	cis-1,4-Dichloro-2-Butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2023

Section II - Hazards Identification

GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL):	100.0	0.021	Flask Uncertainty
		5E-05	Balance Uncertainty

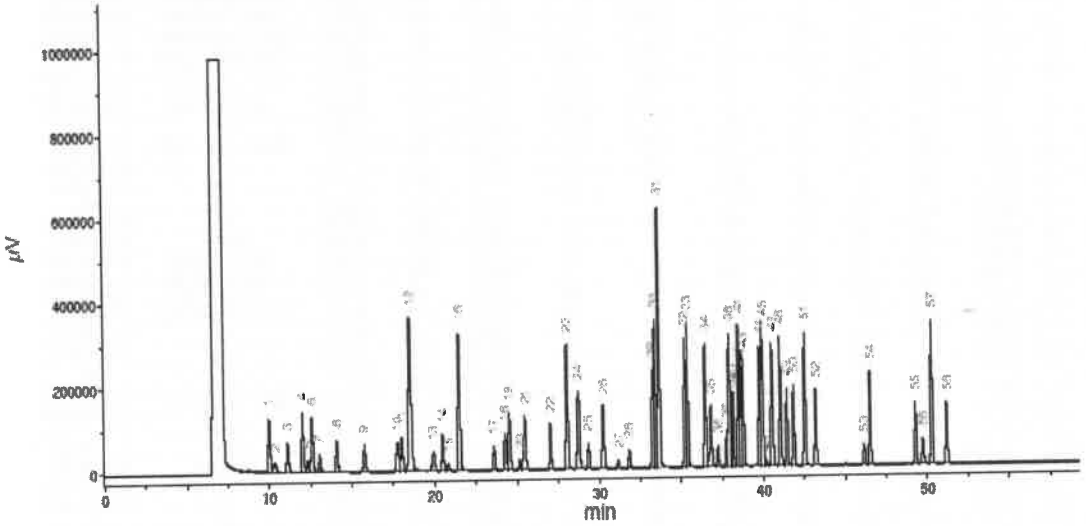
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(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)	IK18CAS000(	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0361)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (46mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 6040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethene	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.88
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
35	cis-1,4-Dichloro-2-Butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.
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Hamden, CT 06518-0585
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Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2023

Section II - Hazards Identification

GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

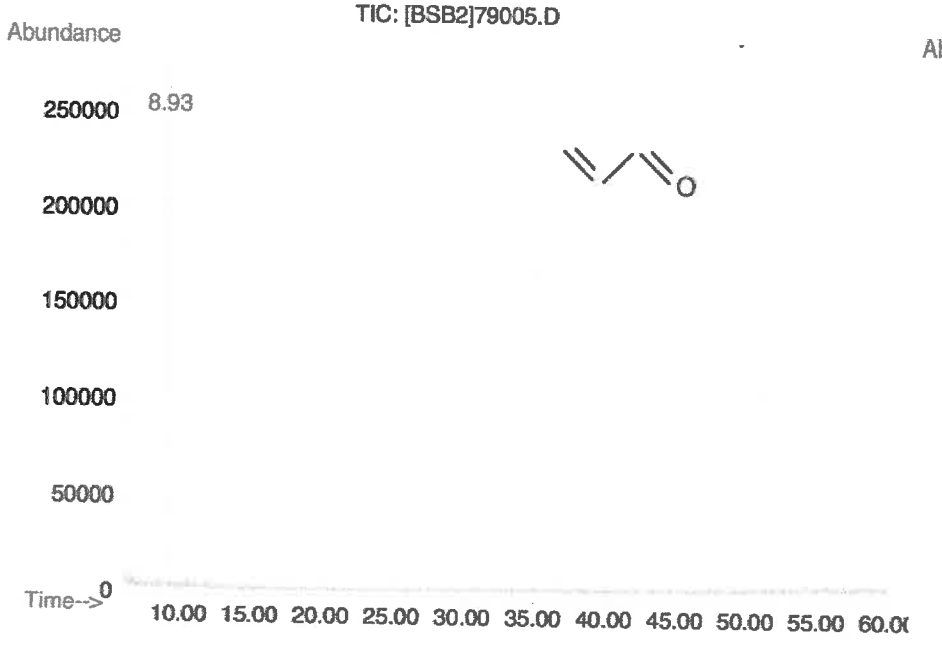
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

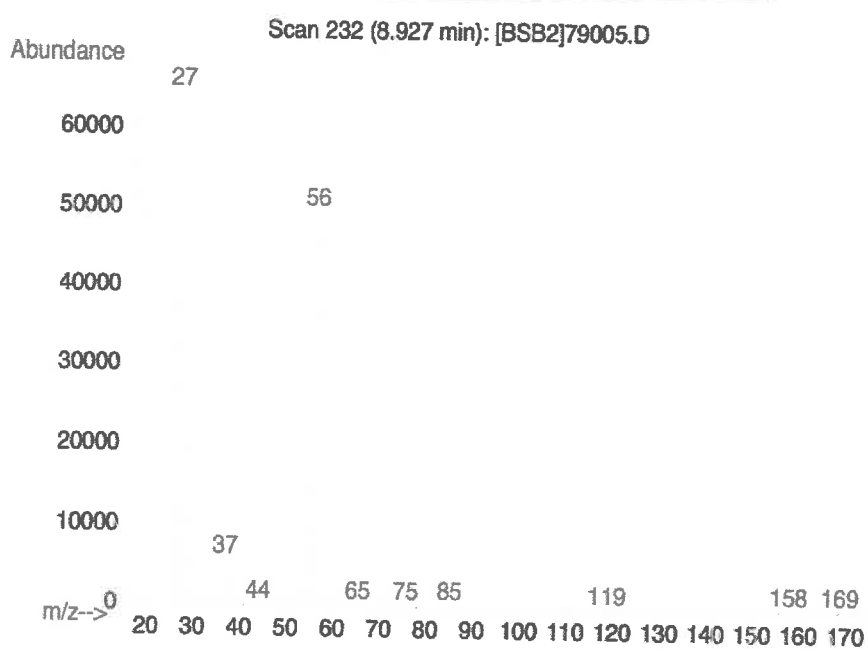
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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Rec 09/16/24 2 Vials

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CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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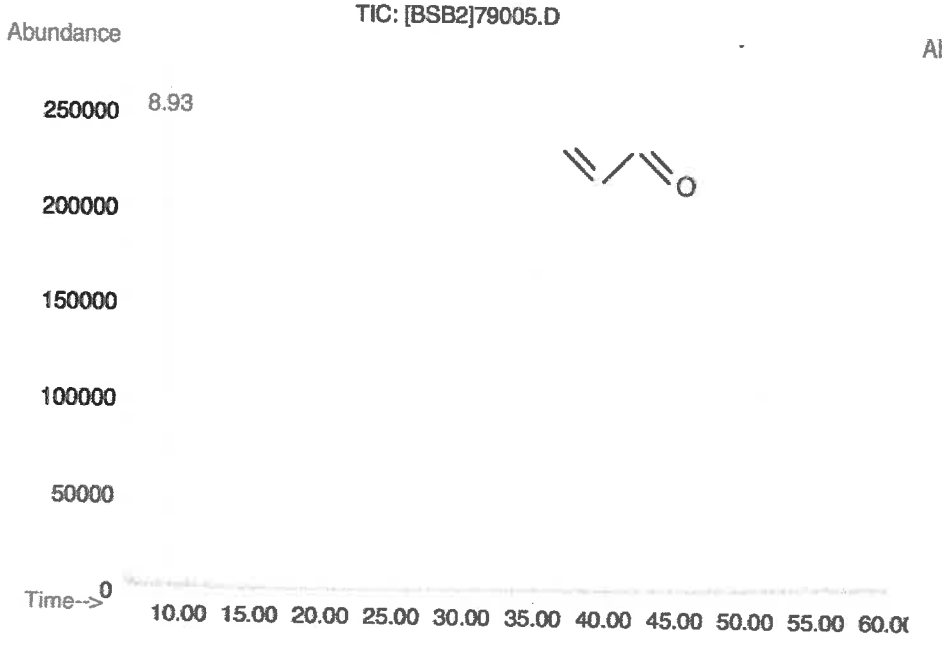

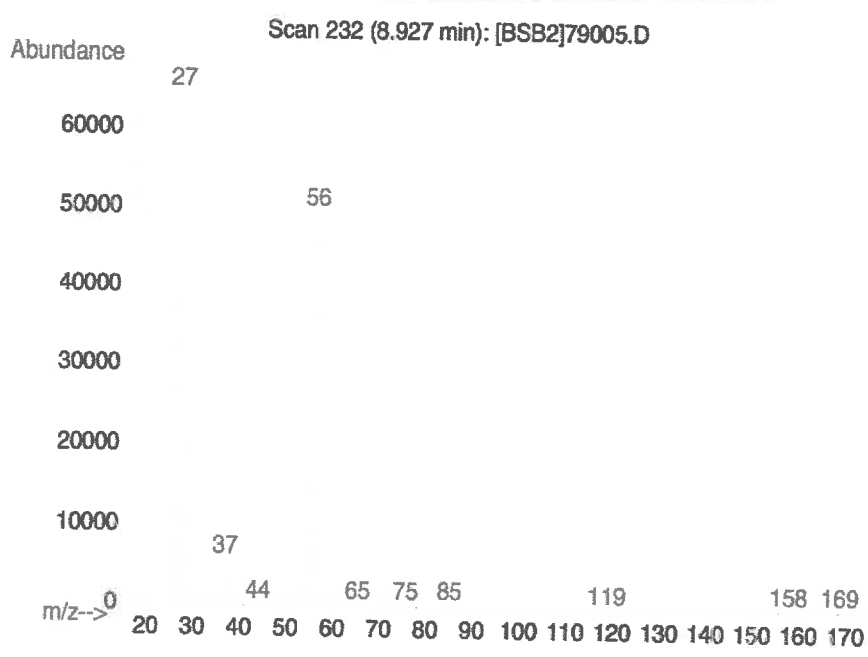

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Certified Reference Material CRM

Rec 12/6/24
20 vial

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CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

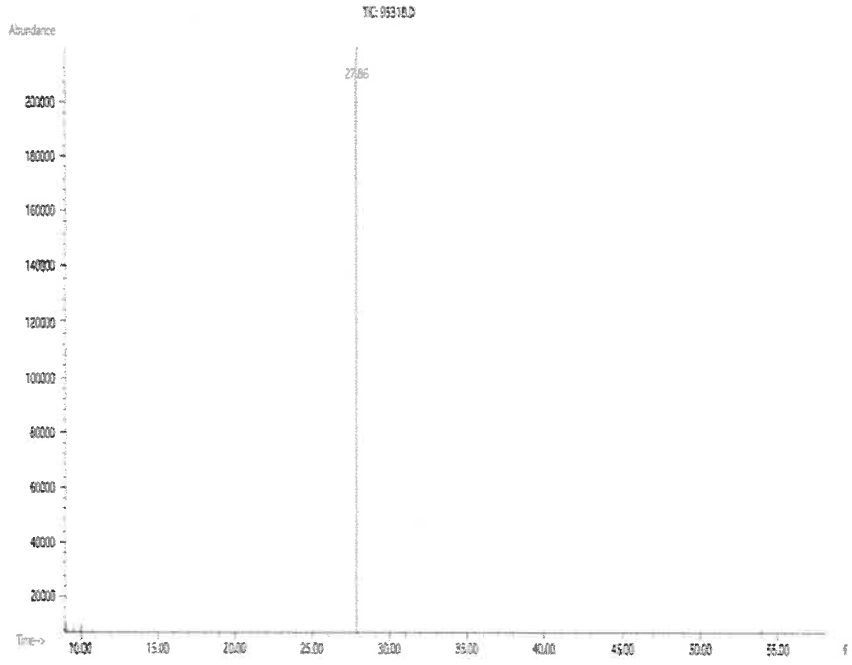
V14630 to V14649

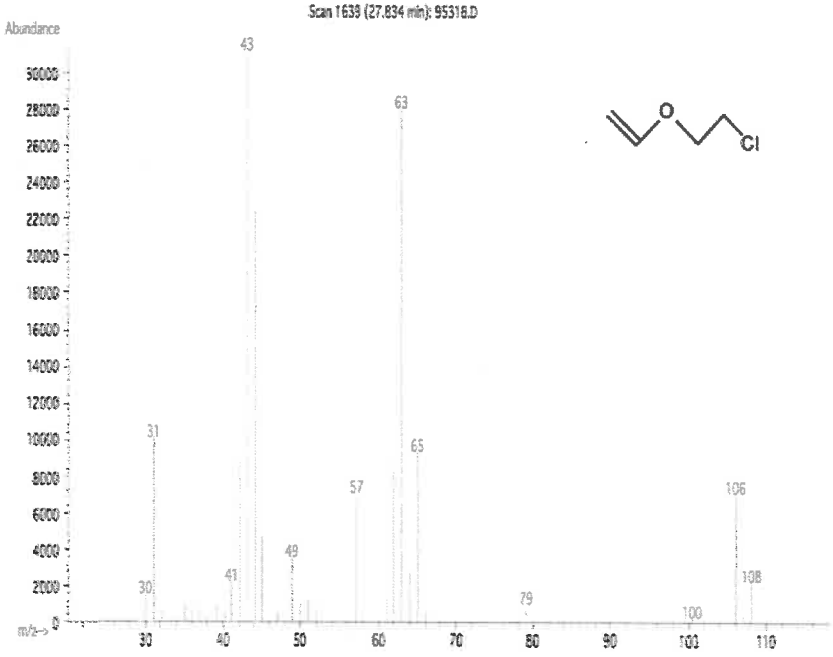
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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20 vial

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CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

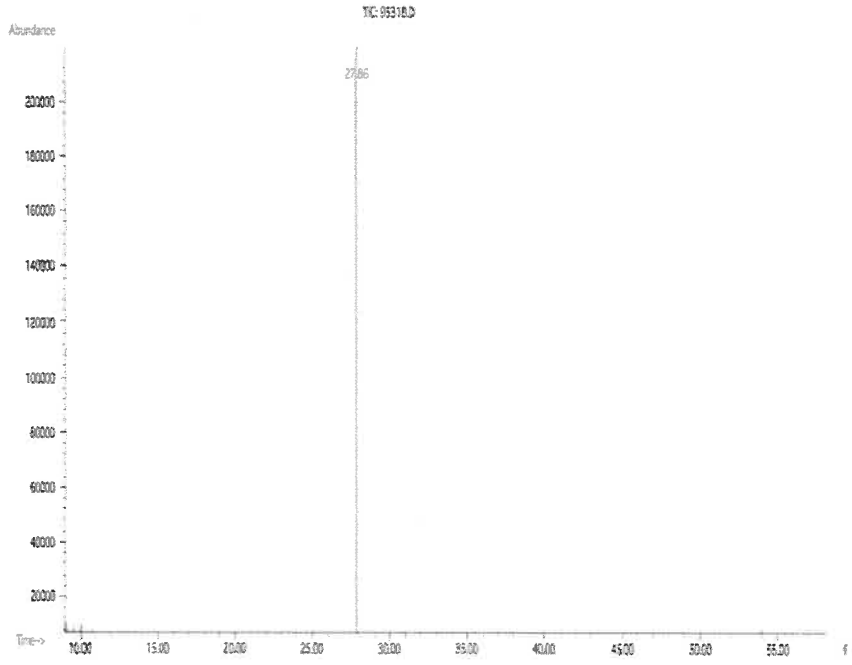
V14630 to V14649

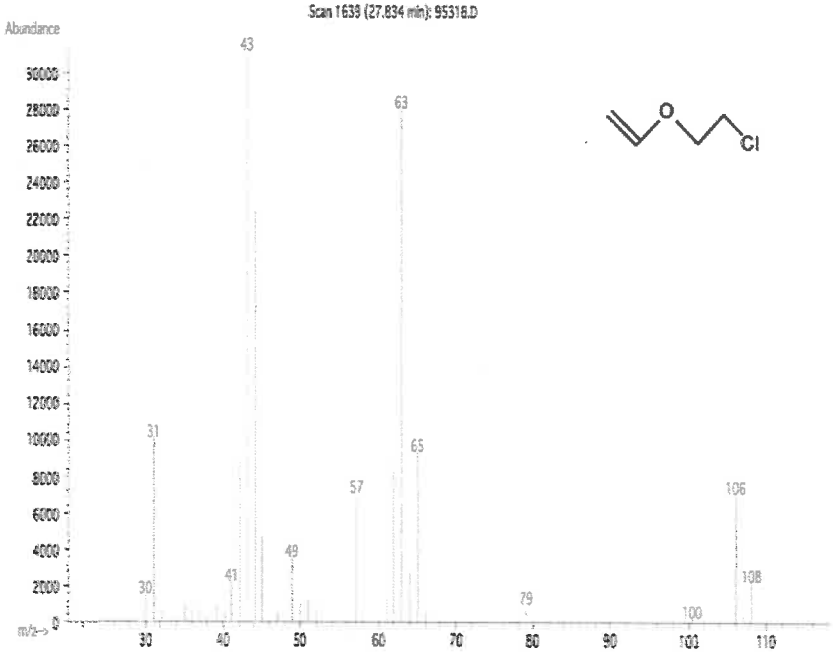
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

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General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
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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.
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Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
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Solubility in Water COMPLETE

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Chemical stability Stable under recommended storage conditions.
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Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
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CERTIFIED WEIGHT REPORT

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Lot Number: 120524
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Expiration Date: 120527
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Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

V14630 to V14649

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Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
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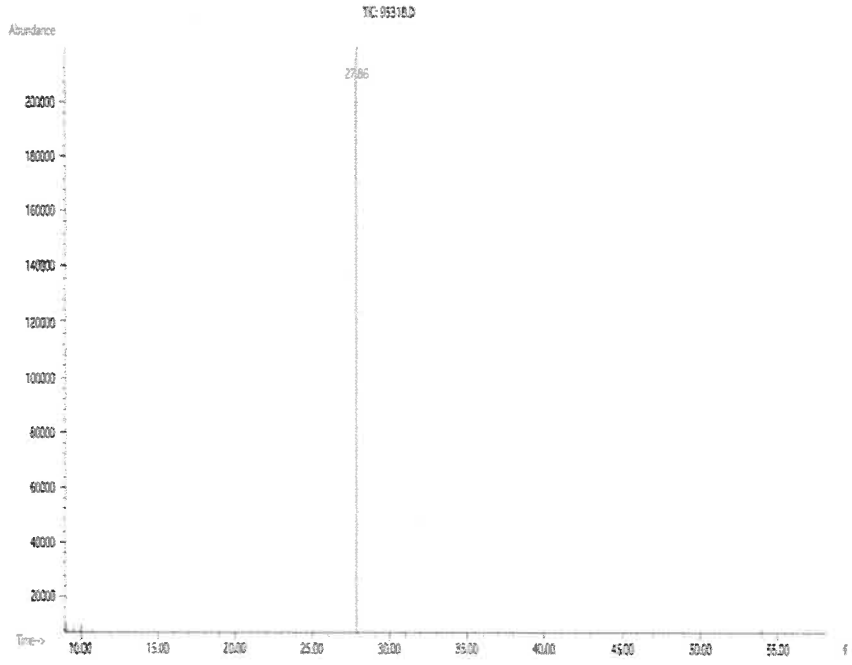
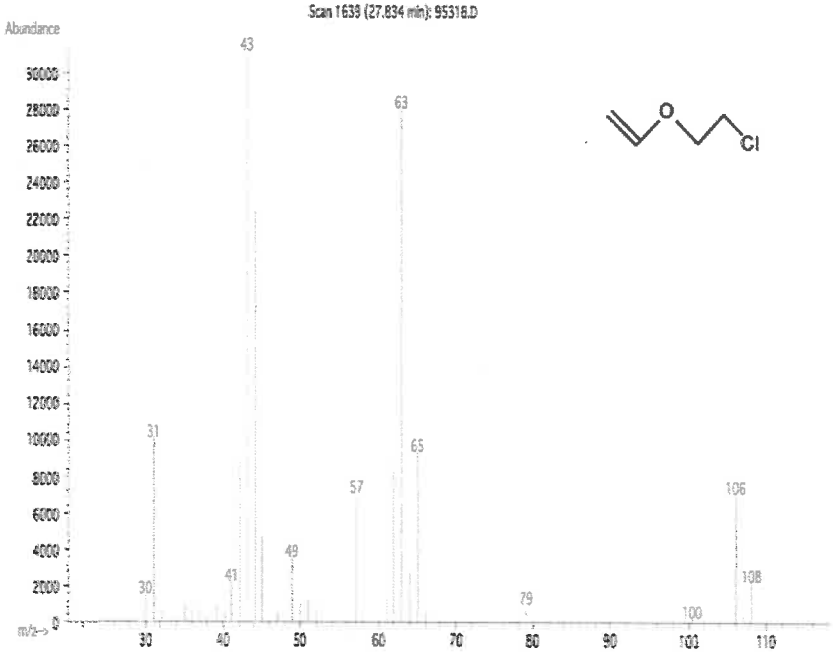
Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

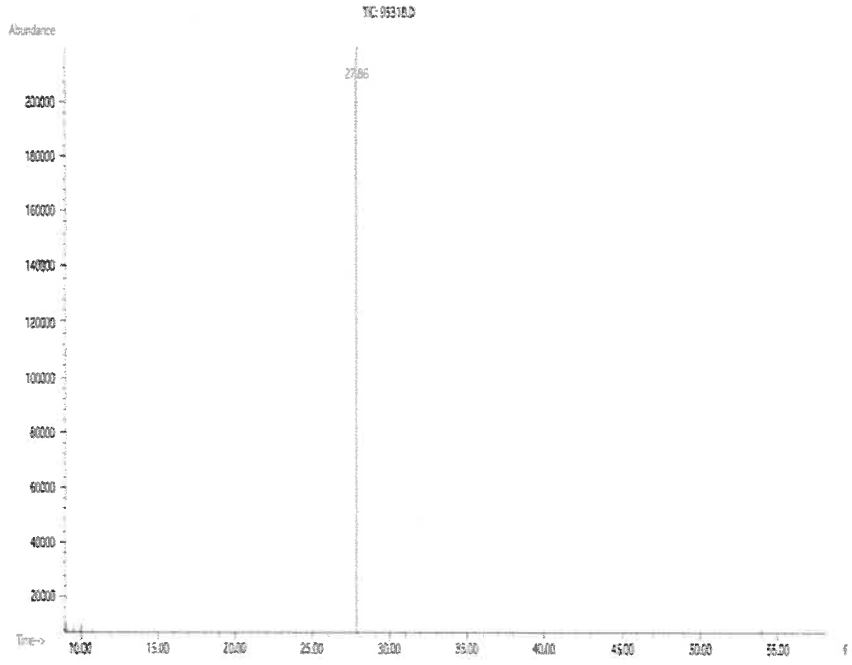
V14630 to V14649

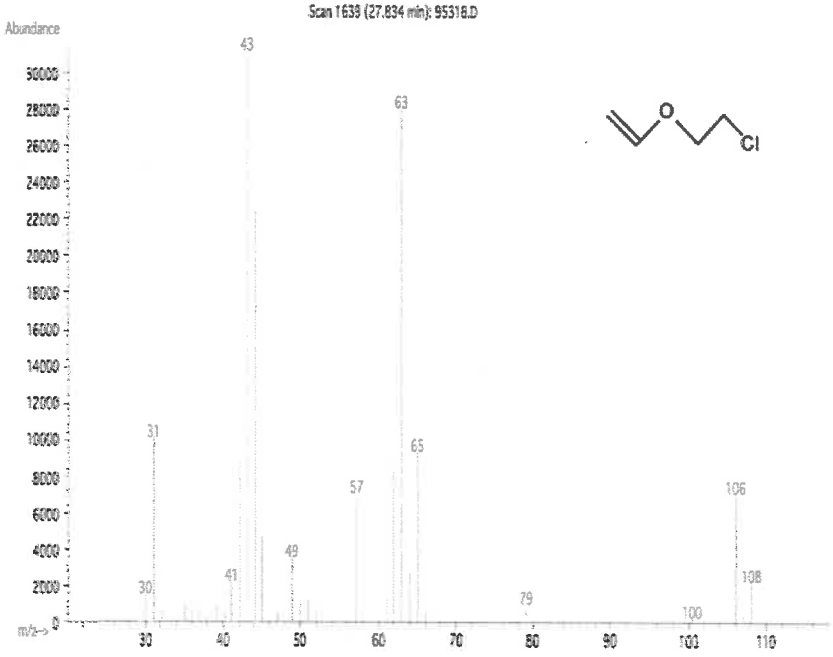
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Signal Word: DANGER

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Components (Specific Chemical Identity; Common Name(s))			% (optional)
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Proper shipping name: Methanol

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UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0181905

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butanol (TBA)	50,126.0 µg/mL	+/- 293.4988 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBM7694)		+/- 1,073.7654 µg/mL	Unstressed
	Purity 99%		+/- 1,104.9494 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

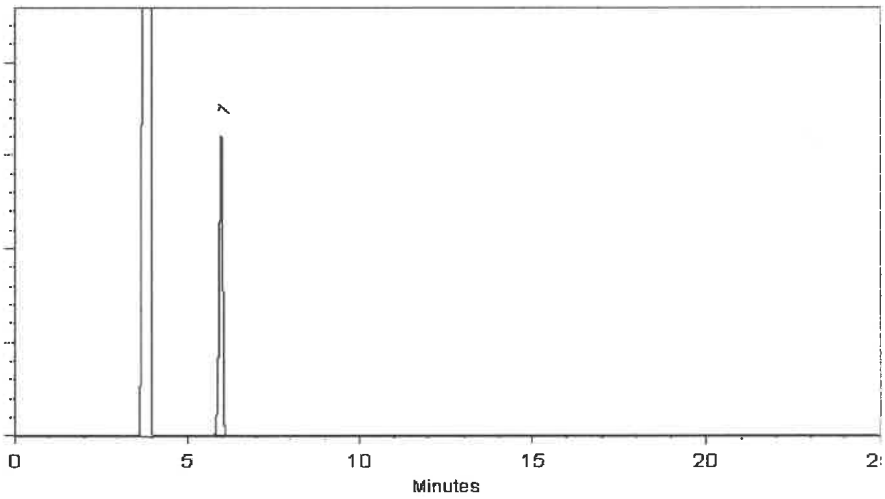
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

John Friedline - Operations Technician I

Date Mixed: 16-Feb-2022 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 21-Feb-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0191805

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,483.9 µg/mL	+/- 139.5488

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

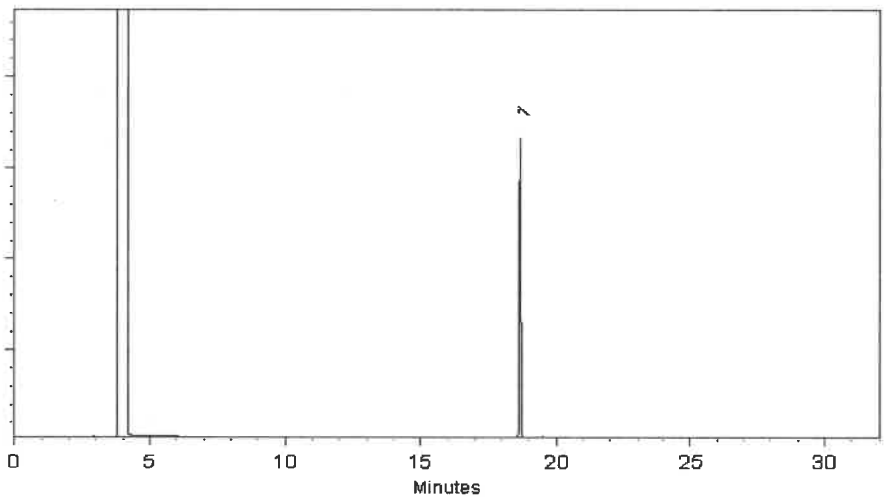
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alicia Leathers - Operation Technician I **Date Mixed:** 17-Nov-2022 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Nov-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

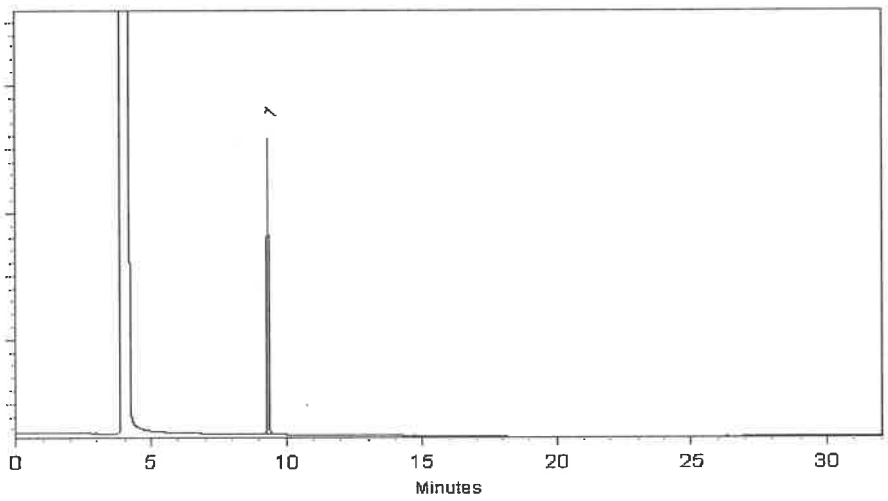
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

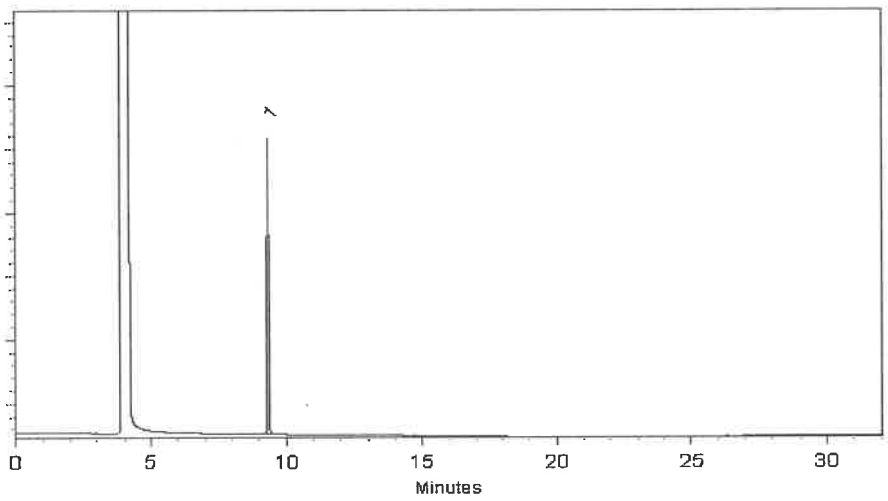
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Catalog No. : 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:
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Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

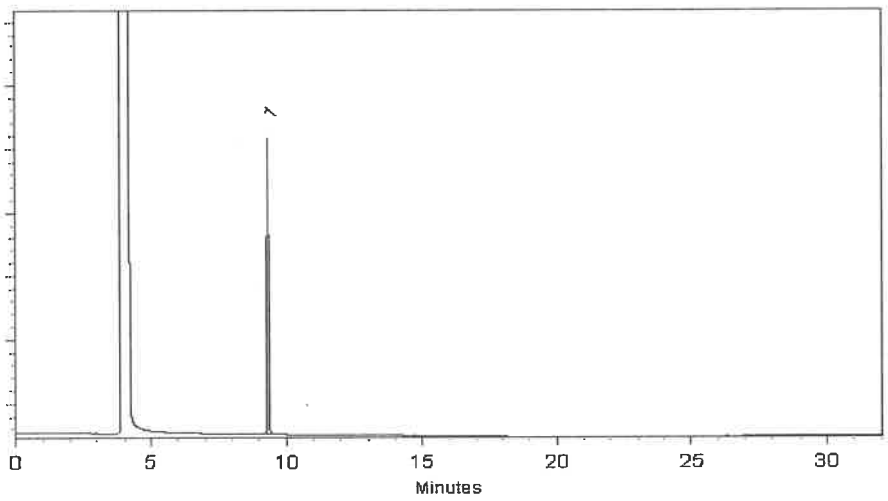
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

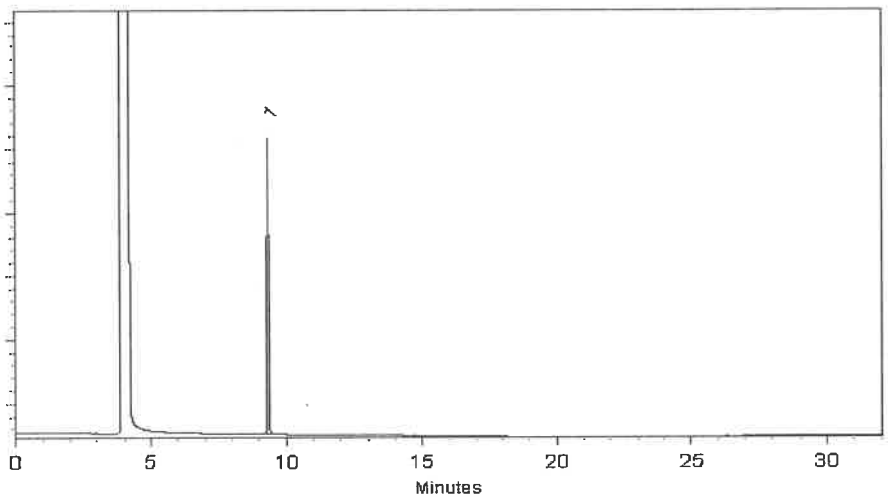
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 555582 **Lot No.:** A0196865

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

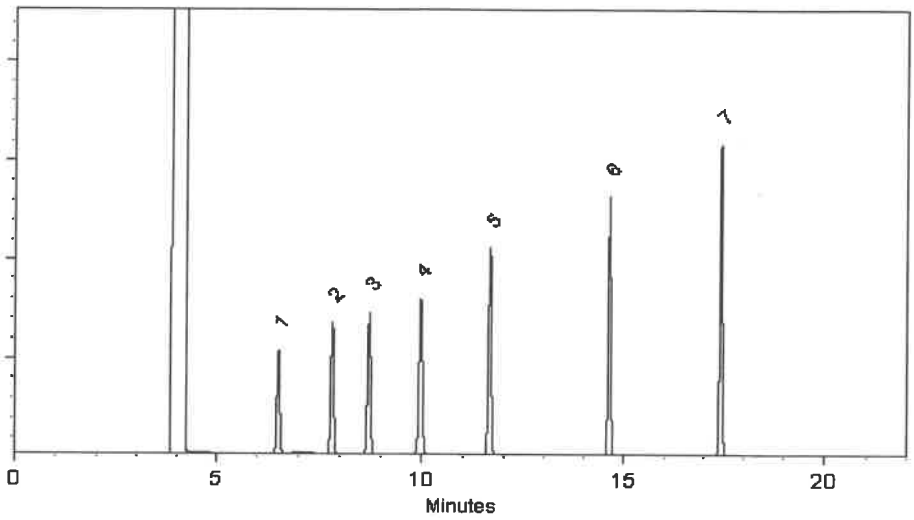
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

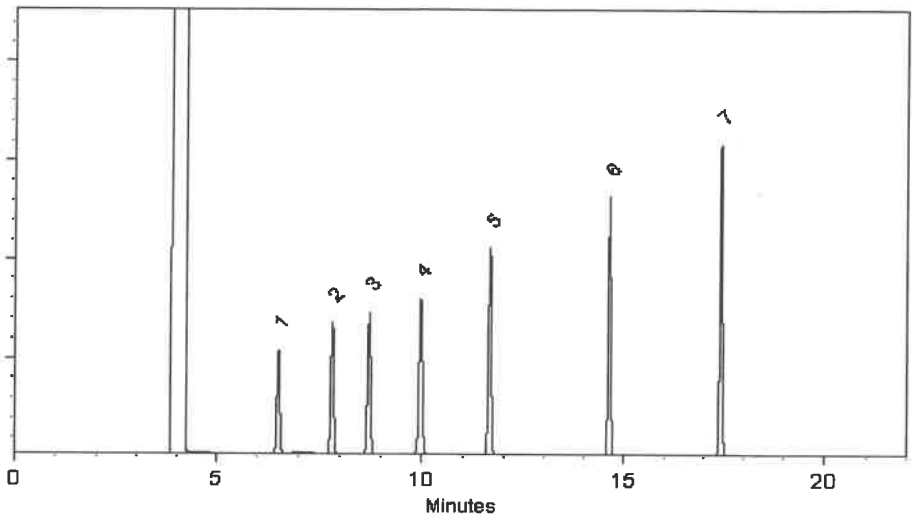
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

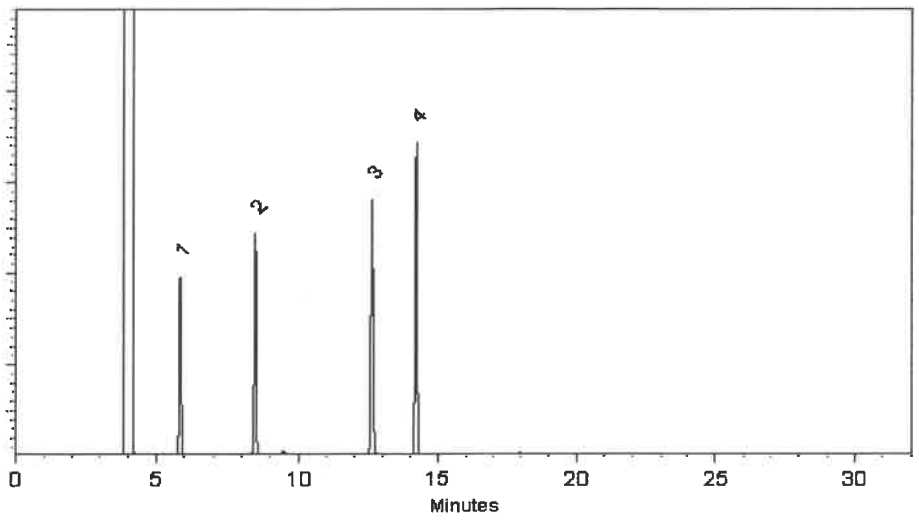
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

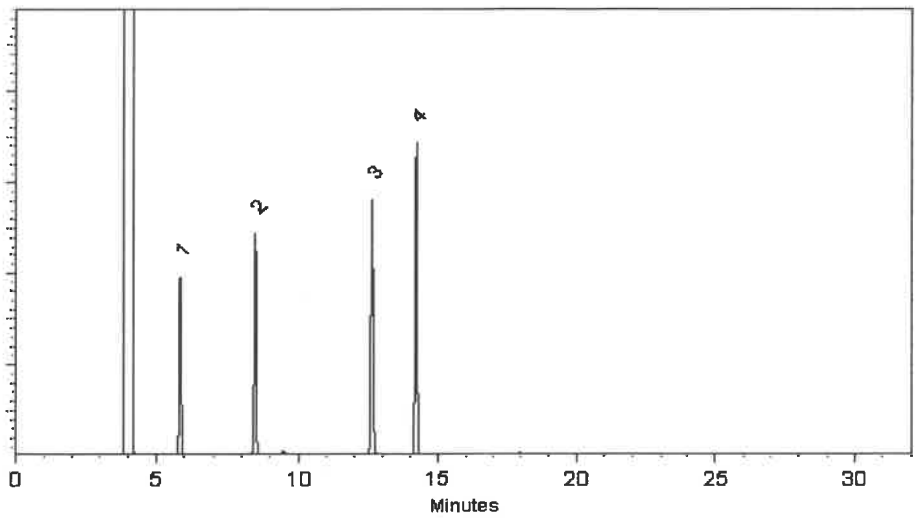
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* 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:
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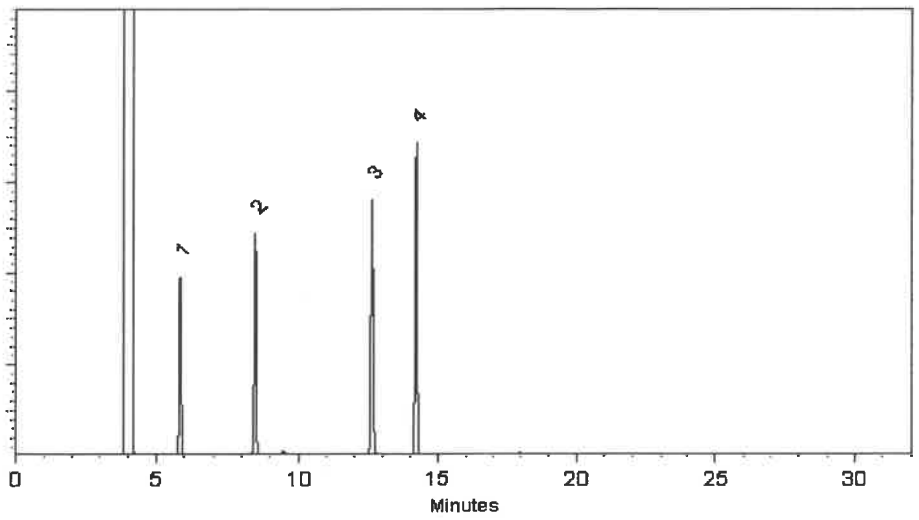
Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 Vial

Certificate of Analysis

chromatographic plus

V14727 to
V14756

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

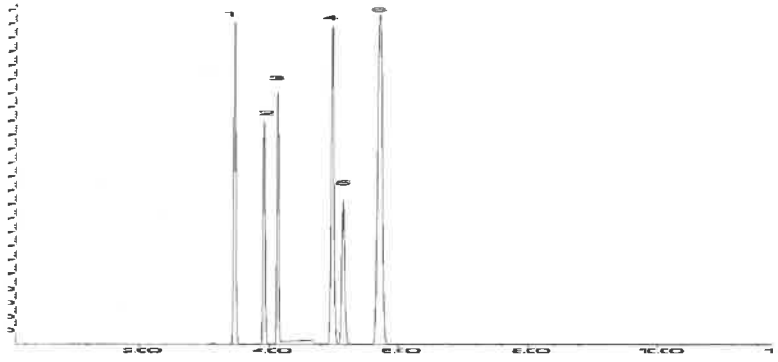
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Fax: 1-814-353-1309

www.restek.com

Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 Vial

Certificate of Analysis

chromatographic plus

V14727 to
V14756

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

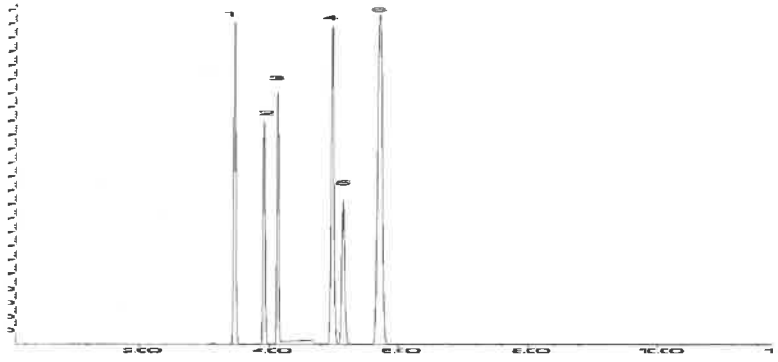
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Zoviny Rec 01/08/21

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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

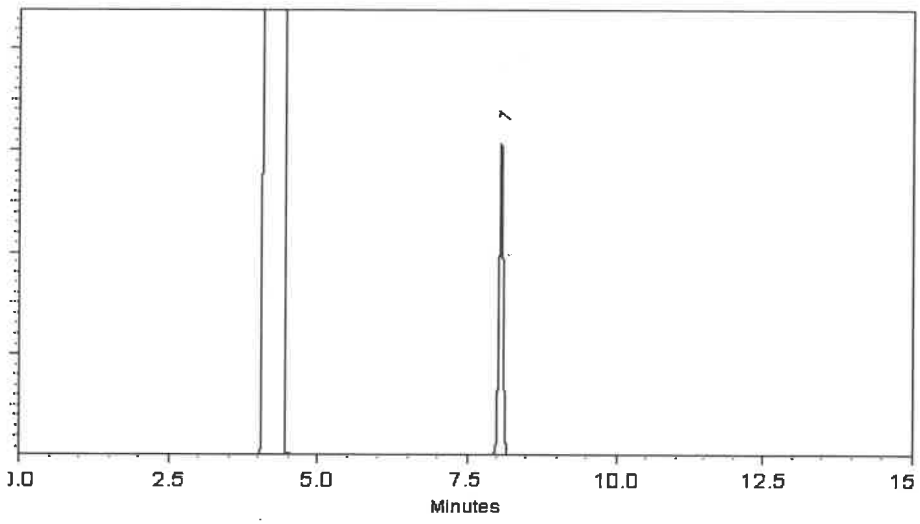
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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10 vial Rec 01/08/25

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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic

V14793 to 14802

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-FL **Lot No.:** A0220563

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,060.0 µg/mL	+/- 278.5905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

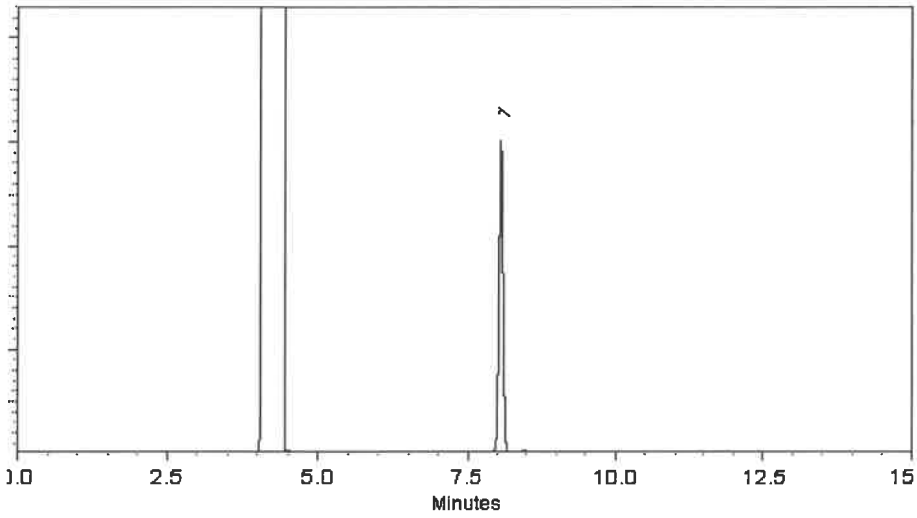
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 30-Dec-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. Q1241
QUOTE NO.
COC Number 2041692

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: RU2 Engineering LLC
ADDRESS: 2 Melinda Drive
Monroe Twp, NJ 08831
CITY ZIP:
ATTENTION: Rutu Manani
PHONE: 609-409-4564 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: SANDTWOBR BMCR Project
PROJECT NO.: LOCATION: Brooklyn, NYC
PROJECT MANAGER: Rutu Manani
e-mail: Rmanani@Ru2eng.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Same as company address PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard 10 days DAYS*
HARDCOPY (DATA PACKAGE): Standard 10 days DAYS*
EDD: Standard 10 days DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ EDD FORMAT
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced
- ☐ NYS ASP A
- ☒ NYS ASP B
- ☐ Other

ANALYSIS

1 TCL VOCs TICs MTBE, TBA
2 TCLP VOCs
3 TPH GRO-DRO
4 TCL SVOCs + TICs
5 XAL Metals
6 Pesticides, PCBs
7 RCRA characteristics
8 Paint filter
9 full TCLP

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9	COMMENTS
1.	JPP-3.5-013025	Soil		G	1/30/25	8:11	3	X	X	X	RA						
2.	JPP-3.5-013025	Soil	C		1/30/25	8:20	8			X	X	X	X	X	X	X	
3.	JPP-5.3-013025	Soil		G	1/30/25	8:52	3	X	X	X							
4.	JPP-5.3-013025	Soil	C		1/30/25	9:00	8			X	X	X	X	X	X	X	
5.	JPP-5.2-013025	Soil		G	1/30/25	9:46	3	X	X	X							
6.	JPP-5.2-013025	Soil	C		1/30/25	9:54	8			X	X	X	X	X	X	X	
7.	JPP-5.4-013025	Soil		G	1/30/25	10:43	3	X	X	X							
8.	JPP-5.4-013025	Soil	C		1/30/25	10:51	8			X	X	X	X	X	X	X	
9.	JPP-51.4-013025	Soil		G	1/30/25	11:48	3	X	X	X							
10.	JPP-51.4-013025	Soil	C		1/30/25	11:56	8			X	X	X	X	X	X	X	

PRESERVATIVES

← Specify Preservatives
A-HCl D-NaOH
B-HNO3 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. RA	1-30-25 1453	1. [signature]
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.1 °C
Comments: Preserve extra sample jar if additional analysis is required.
IR-Gun #1

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

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WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1241 RUTW01
Client Name : RU2 Engineering, LLC
Client Contact : Rutu Manani
Invoice Name : RU2 Engineering, LLC
Invoice Contact : Rutu Manani

Order Date : 1/30/2025 2:58:00 PM
Project Name : NYCDDC SANTWOBR Bı
Receive DateTime : 1/30/2025 2:53:00 PM
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : Excel NY
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1241-01	JPP-3.5-013025	Solid	01/30/2025	08:11					
					VOCMS Group1		8260D		10 Bus. Days
Q1241-05	JPP-5.3-013025	Solid	01/30/2025	08:52					
					VOCMS Group1		8260D		10 Bus. Days
Q1241-09	JPP-5.2-013025	Solid	01/30/2025	09:46					
					VOCMS Group1		8260D		10 Bus. Days
Q1241-13	JPP-5.4-013025	Solid	01/30/2025	10:43					
					VOCMS Group1		8260D		10 Bus. Days
Q1241-17	JPP-51.4-013025	Solid	01/30/2025	11:48					
					VOCMS Group1		8260D		10 Bus. Days

Relinguished By : _____
Date / Time : 1-30-25 1550

Received By : JC
Date / Time : 1/30/25 1580

Storage Area : VOA Refridgerator Room

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

LOGIN REPORT/SAMPLE TRANSFER

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LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1241-01	JPP-3.5-013025	Solid	01/30/2025	08:11					
					Gasoline Range Organics		8015D		10 Bus. Days
Q1241-05	JPP-5.3-013025	Solid	01/30/2025	08:52					
					Gasoline Range Organics		8015D		10 Bus. Days
Q1241-09	JPP-5.2-013025	Solid	01/30/2025	09:46					
					Gasoline Range Organics		8015D		10 Bus. Days
Q1241-13	JPP-5.4-013025	Solid	01/30/2025	10:43					
					Gasoline Range Organics		8015D		10 Bus. Days
Q1241-17	JPP-51.4-013025	Solid	01/30/2025	11:48					
					Gasoline Range Organics		8015D		10 Bus. Days

Relinguished By : cl
Date / Time : 1-30-25 1550

Received By : JC
Date / Time : 1/30/25 1550

Storage Area : VOA Refridgerator Room