

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031725\
 Data File : VL042160.D
 Acq On : 17 Mar 2025 16:29
 Operator : SY/MD
 Sample : Q1586-02DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 557-SG-1DUP

Quant Time: Mar 18 01:27:23 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Feb 26 01:08:36 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.797	49	161300	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	382035	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	319787	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	247756	10.070	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.700%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.502	85	9100	0.543	ppbv	90
3) Chlorodifluoromethane	1.602	51	1094	0.047	ppbv	96
4) Chloromethane	1.534	50	566	0.091	ppbv	92
6) Bromomethane	1.670	94	107	0.038	ppbv #	2
7) Chloroethane	1.709	64	93	0.039	ppbv #	39
9) Propene	1.489	41	4206	0.440	ppbv	98
11) Trichlorofluoromethane	1.884	101	5102	0.304	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.149	101	821	0.061	ppbv #	57
13) Ethanol	1.728	45	31482	51.928	ppbv	96
15) Acetone	1.842	43	118891	8.346	ppbv	95
16) 1,3-Butadiene	1.602	39	3541	0.534	ppbv #	28
17) tert-Butyl alcohol	2.052	59	3500	0.196	ppbv #	72
19) Isopropyl Alcohol	1.894	45	6338	0.775	ppbv #	1
20) Methylene Chloride	2.068	84	2251	0.418	ppbv	91
21) Allyl Chloride	2.088	41	454	0.044	ppbv #	78
23) Vinyl Acetate	2.460	43	3366	0.336	ppbv #	56
25) Ethyl Acetate	2.835	43	5516	0.097	ppbv #	88
26) Hexane	2.835	57	5572	0.242	ppbv #	34
27) Carbon Disulfide	2.159	76	24955	1.597	ppbv #	68
29) Chloroform	2.858	83	23198	0.748	ppbv	98
34) 2-Butanone	2.573	43	18773	0.631	ppbv	97
35) Carbon Tetrachloride	3.780	117	1133	0.043	ppbv #	27
36) Benzene	3.670	78	3942	0.099	ppbv #	91
39) 1,2-Dichloropropane	3.975	63	96485	6.356	ppbv #	23
41) Tetrahydrofuran	3.081	42	969	0.055	ppbv #	71
52) Tetrachloroethene	8.237	164	20390	1.489	ppbv	96
53) Toluene	6.952	91	3089	0.069	ppbv #	73
80) Naphthalene,2-methyl-	14.474	142	578	0.055	ppbv #	69

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031725\
Data File : VL042160.D
Acq On : 17 Mar 2025 16:29
Operator : SY/MD
Sample : Q1586-02DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

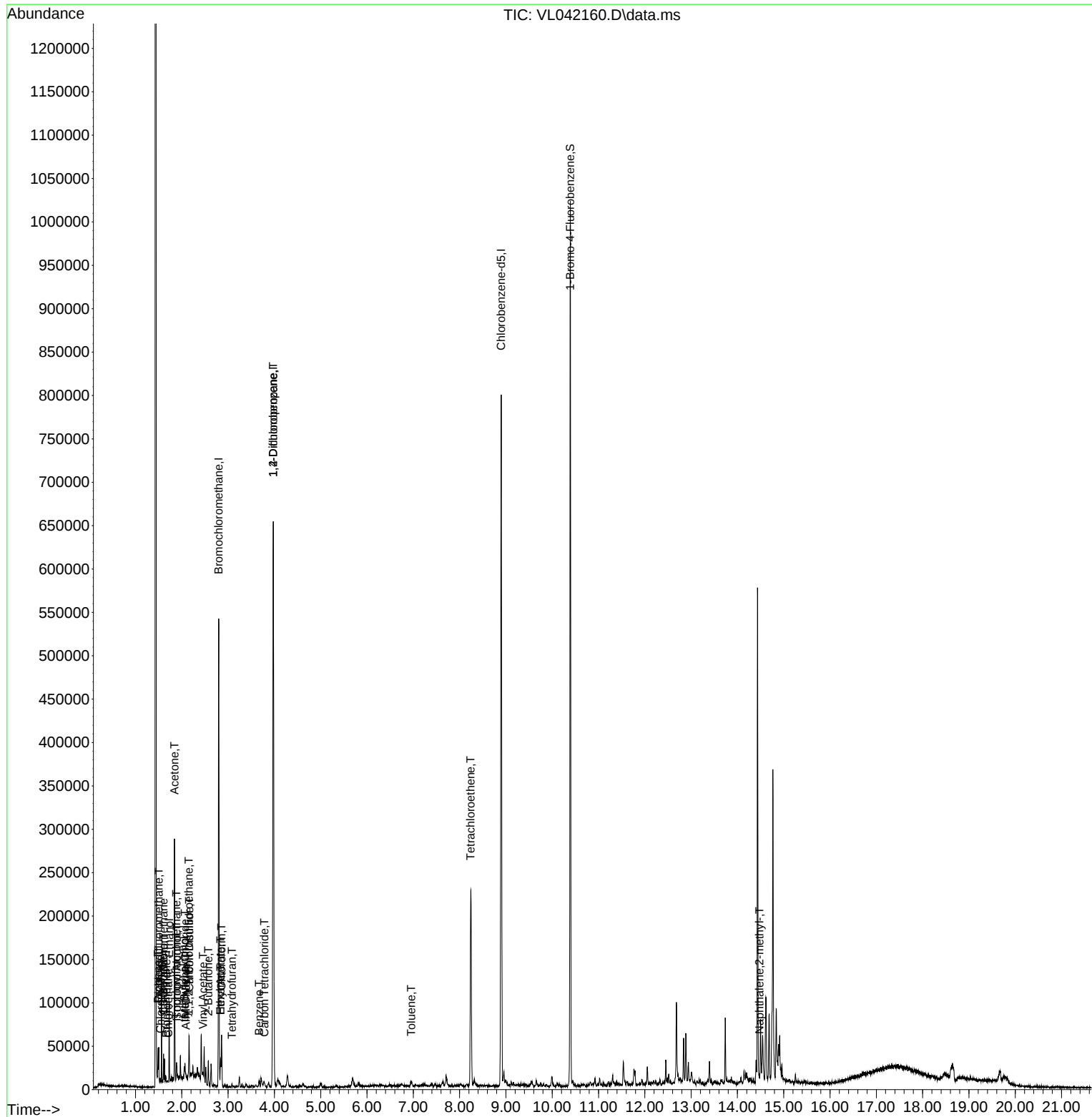
Quant Time: Mar 18 01:27:23 2025

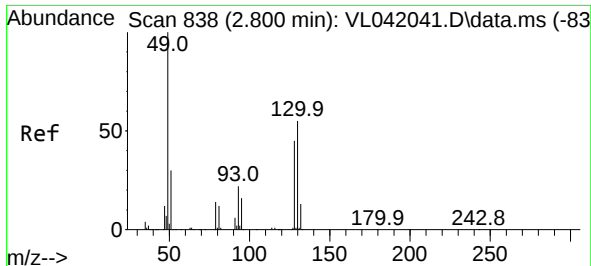
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022

QLast Update : Wed Feb 26 01:08:36 2025

Response via : Initial Calibration

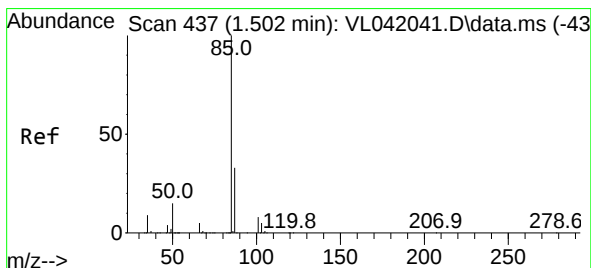
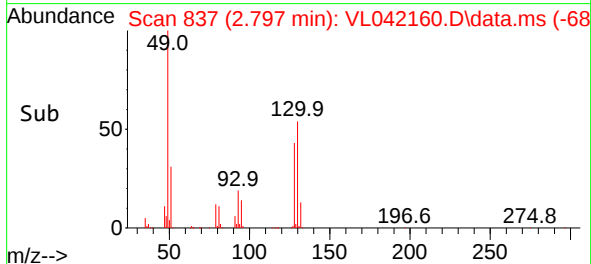
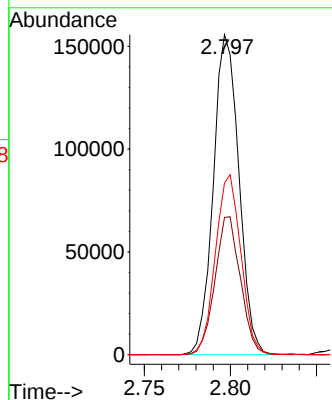
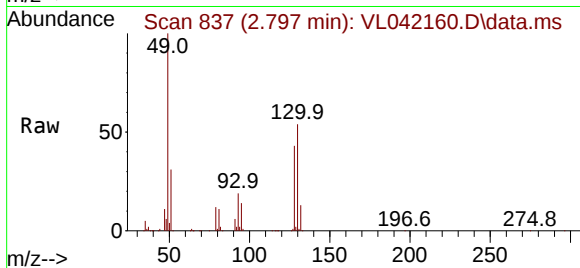




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.797 min Scan# 81
 Delta R.T. -0.003 min
 Lab File: VL042160.D
 Acq: 17 Mar 2025 16:29

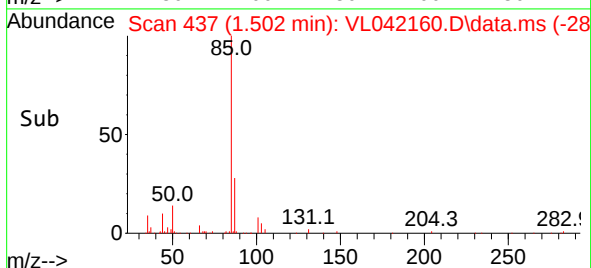
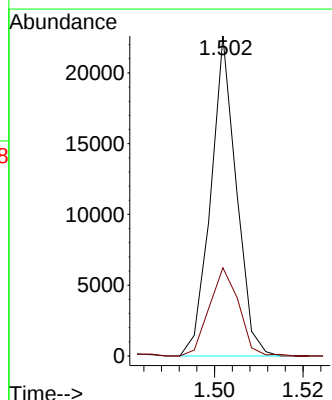
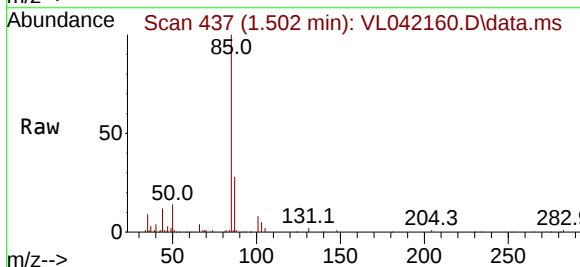
Instrument :
 MSVOA_L
 ClientSampleId :
 557-SG-1DUP

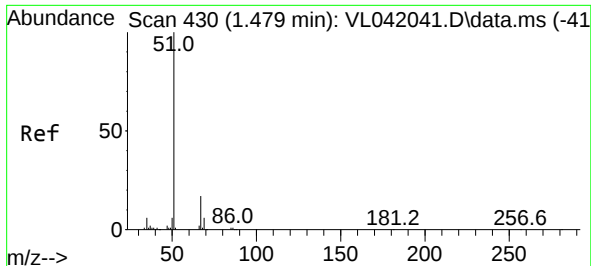
Tgt Ion: 49 Resp: 161300
 Ion Ratio Lower Upper
 49 100
 128 43.0 21.6 64.8
 130 56.1 27.8 83.4



#2
 Dichlorodifluoromethane
 Concen: 0.543 ppbv
 RT: 1.502 min Scan# 437
 Delta R.T. -0.000 min
 Lab File: VL042160.D
 Acq: 17 Mar 2025 16:29

Tgt Ion: 85 Resp: 9100
 Ion Ratio Lower Upper
 85 100
 87 27.5 26.4 39.6

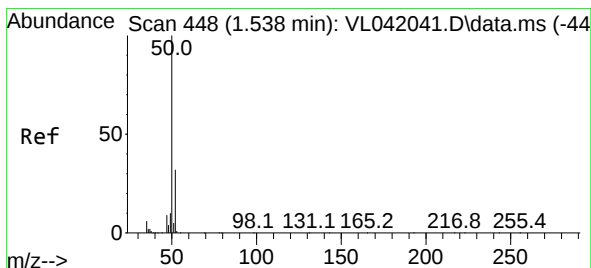
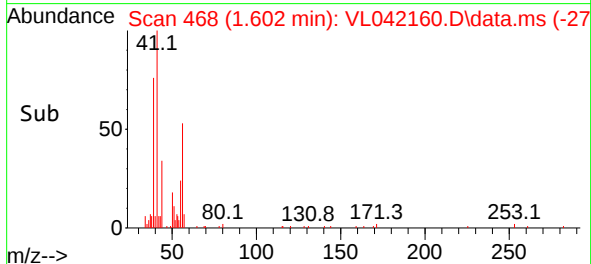
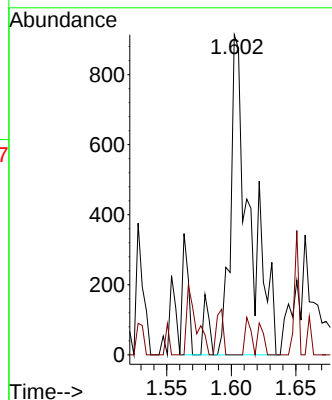
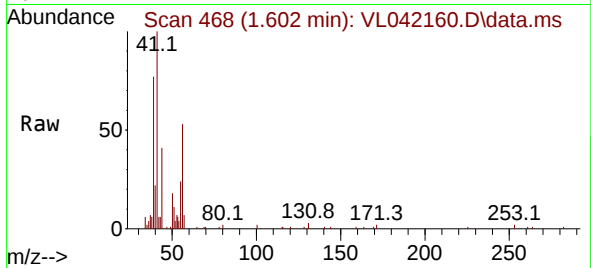




#3
Chlorodifluoromethane
Concen: 0.047 ppbv
RT: 1.602 min Scan# 41
Delta R.T. 0.123 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

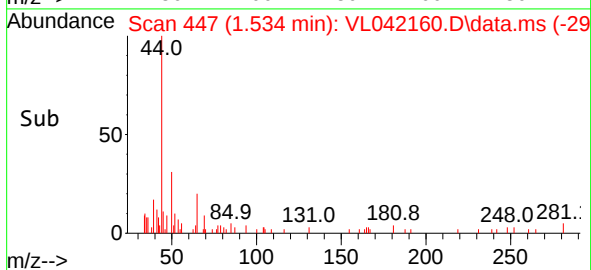
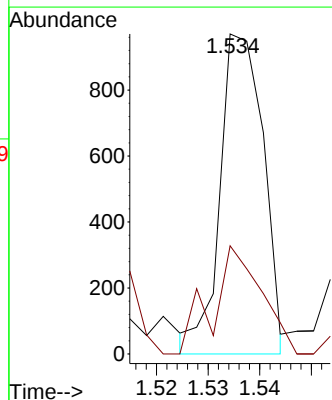
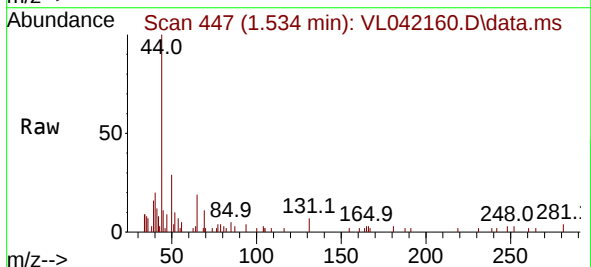
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

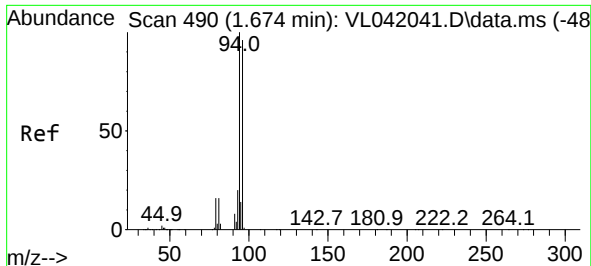
Tgt Ion: 51 Resp: 1094
Ion Ratio Lower Upper
51 100
67 15.4 13.7 20.5



#4
Chloromethane
Concen: 0.091 ppbv
RT: 1.534 min Scan# 447
Delta R.T. -0.004 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion: 50 Resp: 566
Ion Ratio Lower Upper
50 100
52 36.0 25.4 38.0

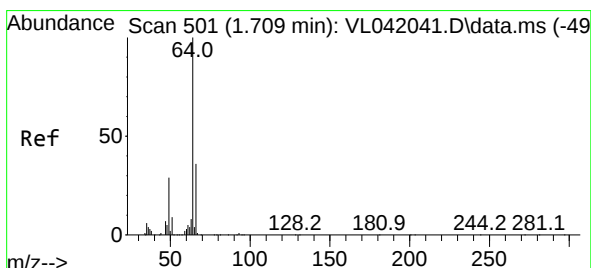
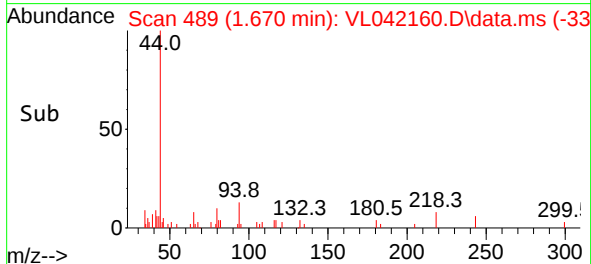
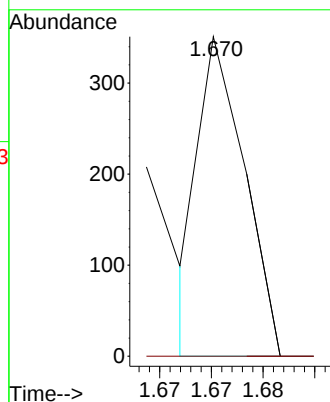
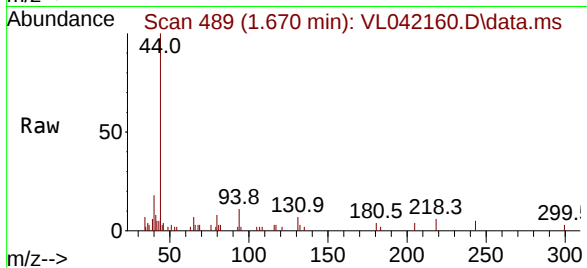




#6
Bromomethane
Concen: 0.038 ppbv
RT: 1.670 min Scan# 41
Delta R.T. -0.004 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

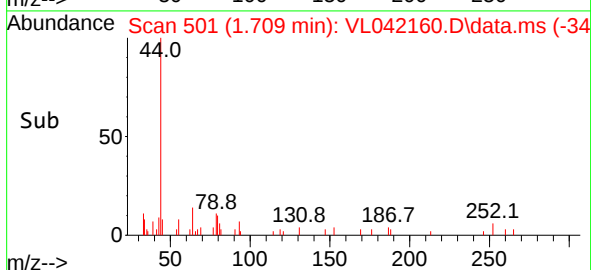
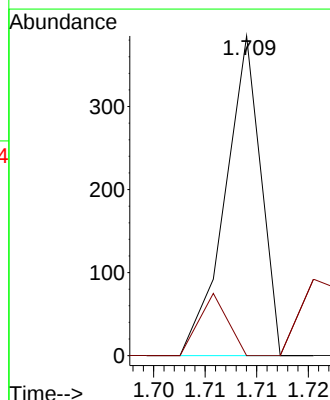
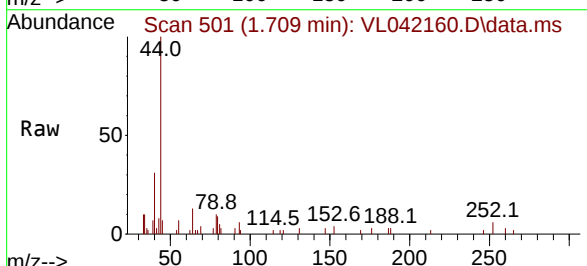
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

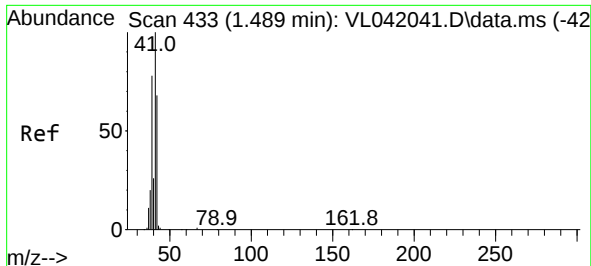
Tgt Ion: 94 Resp: 107
Ion Ratio Lower Upper
94 100
96 0.0 76.5 114.7#



#7
Chloroethane
Concen: 0.039 ppbv
RT: 1.709 min Scan# 501
Delta R.T. -0.000 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion: 64 Resp: 93
Ion Ratio Lower Upper
64 100
66 0.0 28.4 42.6#





#9

Propene

Concen: 0.440 ppbv

RT: 1.489 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL042160.D

Acq: 17 Mar 2025 16:29

Instrument :

MSVOA_L

ClientSampleId :

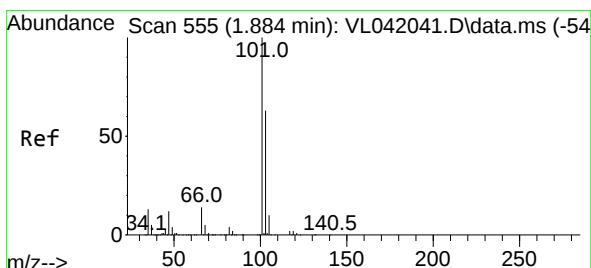
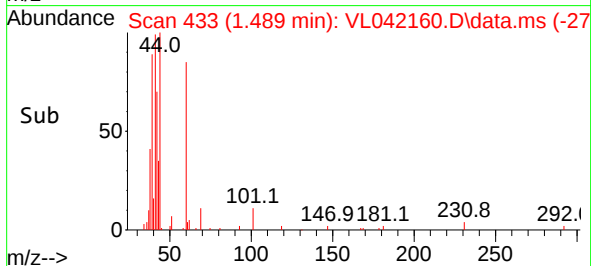
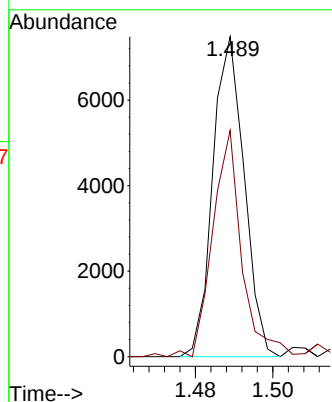
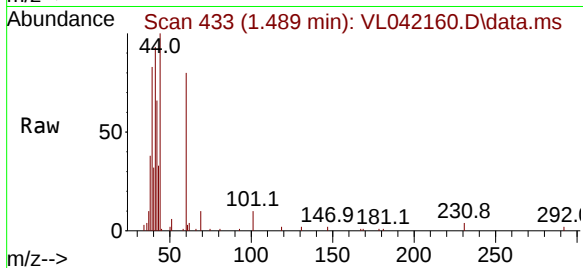
557-SG-1DUP

Tgt Ion: 41 Resp: 4206

Ion Ratio Lower Upper

41 100

42 71.4 55.8 83.6



#11

Trichlorofluoromethane

Concen: 0.304 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL042160.D

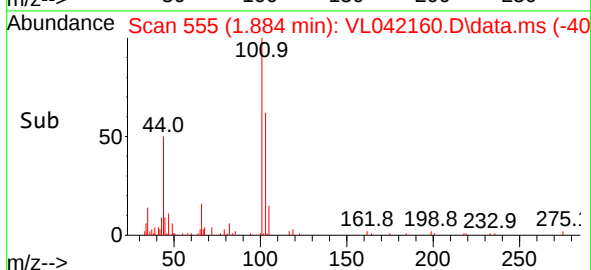
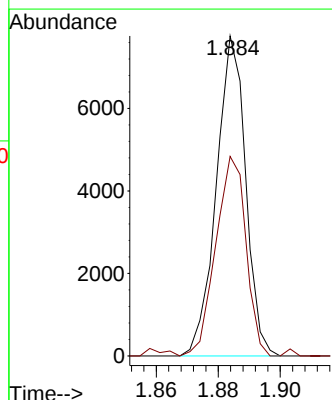
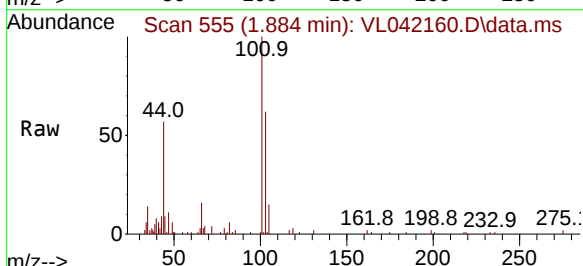
Acq: 17 Mar 2025 16:29

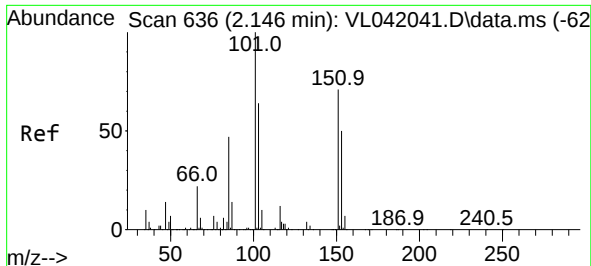
Tgt Ion: 101 Resp: 5102

Ion Ratio Lower Upper

101 100

103 62.3 50.6 75.8

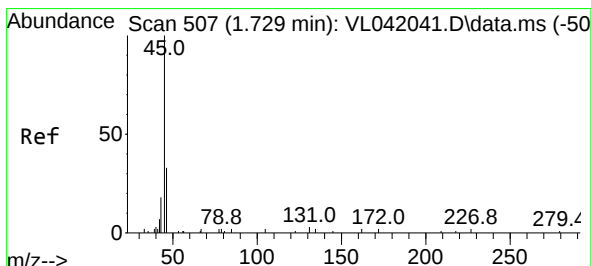
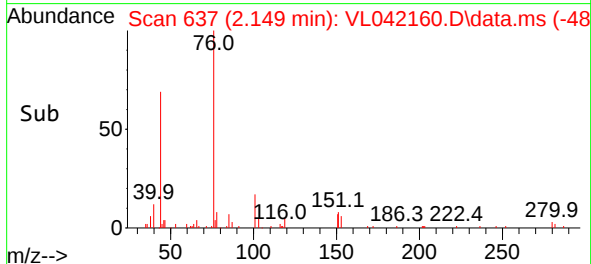
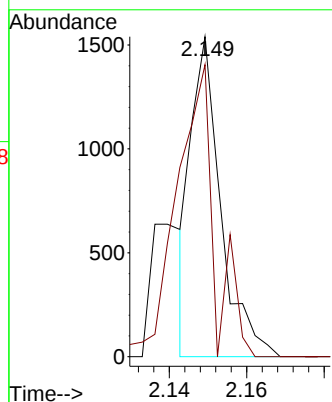
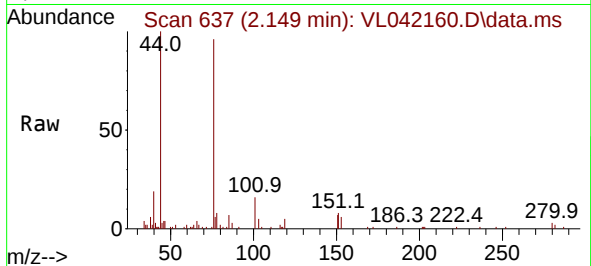




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.061 ppbv
RT: 2.149 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

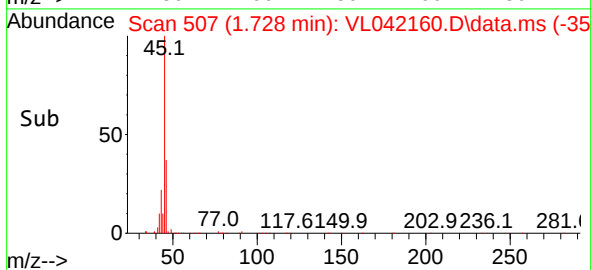
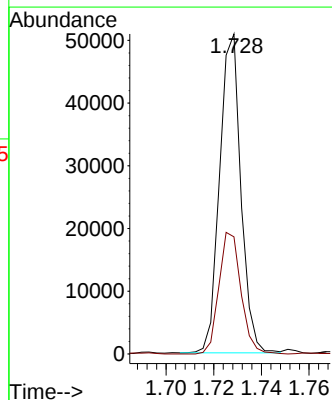
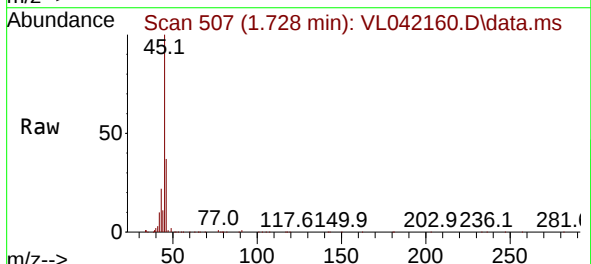
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

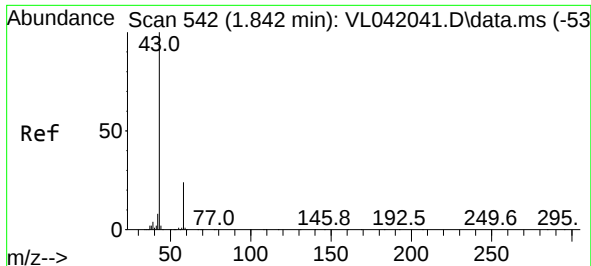
Tgt Ion:101 Resp: 821
Ion Ratio Lower Upper
101 100
151 116.1 62.6 94.0#



#13
Ethanol
Concen: 51.928 ppbv
RT: 1.728 min Scan# 507
Delta R.T. -0.000 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion: 45 Resp: 31482
Ion Ratio Lower Upper
45 100
46 40.3 17.1 68.3

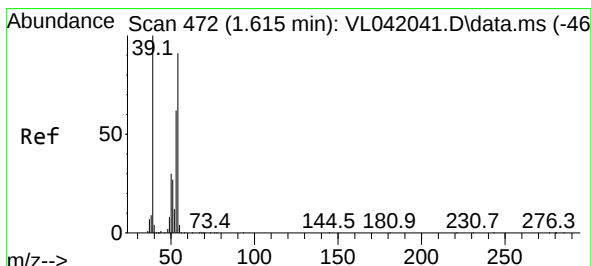
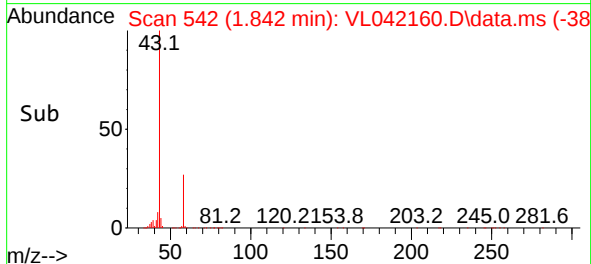
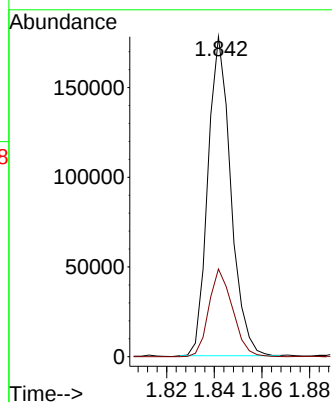
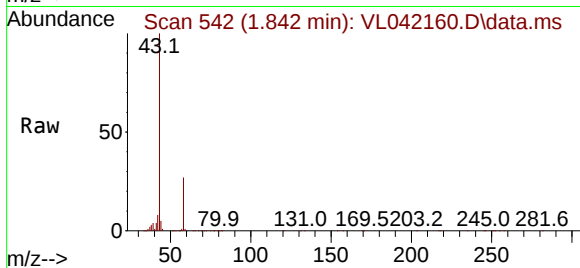




#15
Acetone
Concen: 8.346 ppbv
RT: 1.842 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

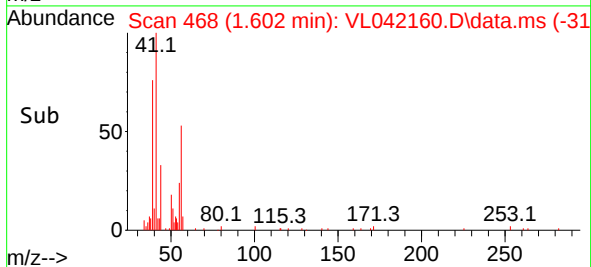
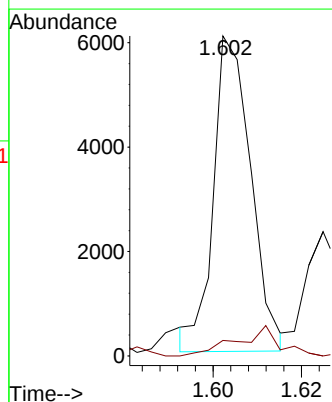
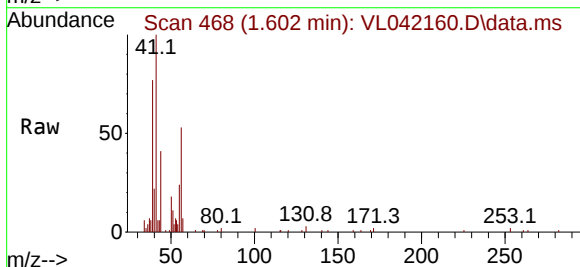
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

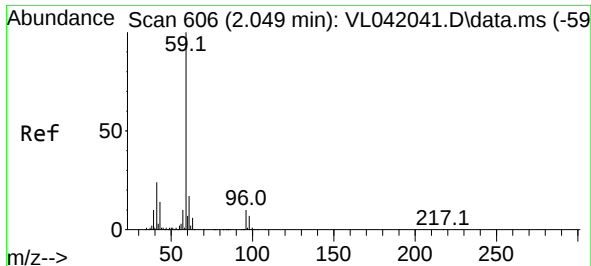
Tgt Ion: 43 Resp: 118891
Ion Ratio Lower Upper
43 100
58 28.4 20.7 31.1



#16
1,3-Butadiene
Concen: 0.534 ppbv
RT: 1.602 min Scan# 468
Delta R.T. -0.013 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion: 39 Resp: 3541
Ion Ratio Lower Upper
39 100
54 13.0 59.6 89.4#

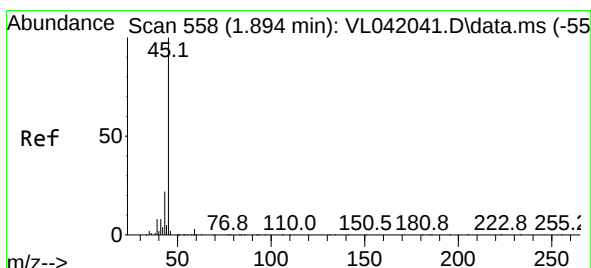
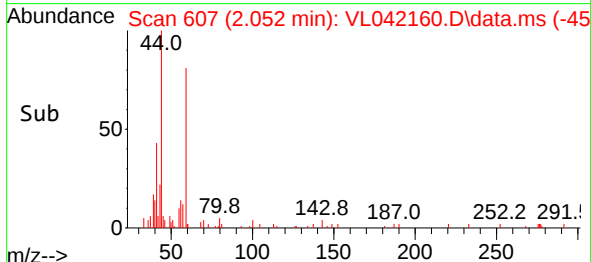
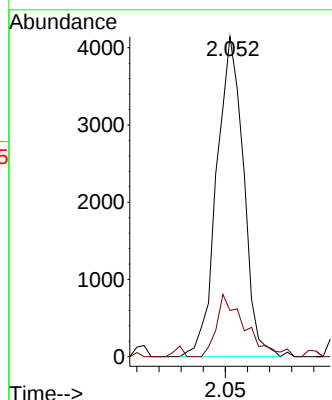
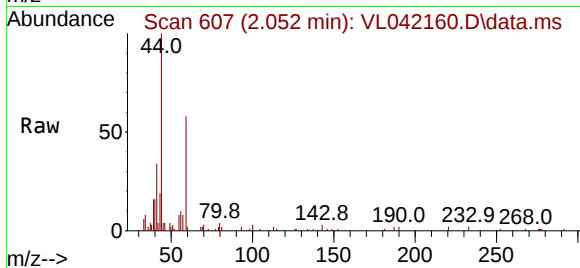




#17
tert-Butyl alcohol
Concen: 0.196 ppbv
RT: 2.052 min Scan# 606
Delta R.T. 0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

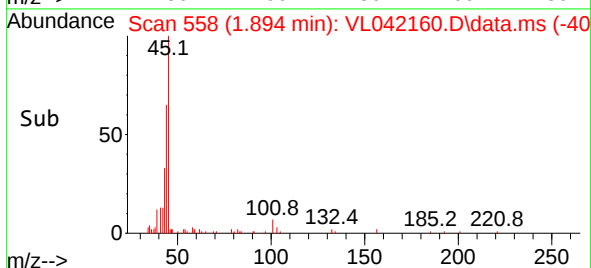
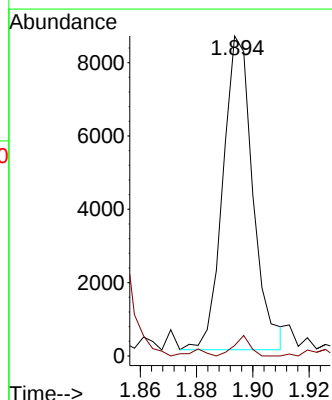
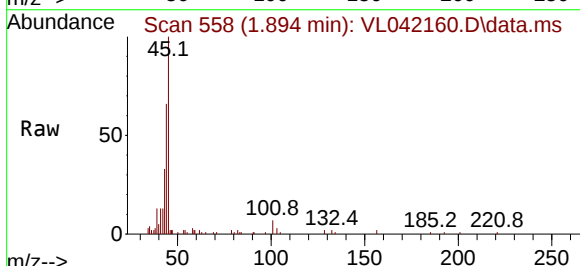
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

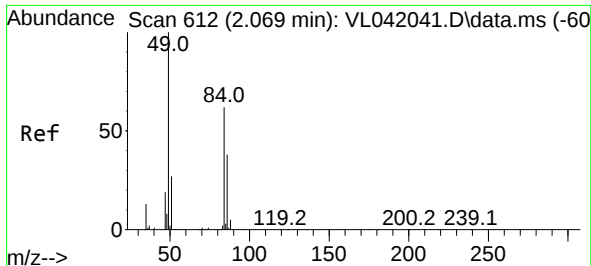
Tgt Ion: 59 Resp: 3500
Ion Ratio Lower Upper
59 100
57 22.4 9.3 13.9#



#19
Isopropyl Alcohol
Concen: 0.775 ppbv
RT: 1.894 min Scan# 558
Delta R.T. -0.000 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion: 45 Resp: 6338
Ion Ratio Lower Upper
45 100
58 533.0 35.3 52.9#





#20

Methylene Chloride

Concen: 0.418 ppbv

RT: 2.068 min Scan# 612

Delta R.T. -0.000 min

Lab File: VL042160.D

Acq: 17 Mar 2025 16:29

Instrument :

MSVOA_L

ClientSampleId :

557-SG-1DUP

Tgt Ion: 84 Resp: 2251

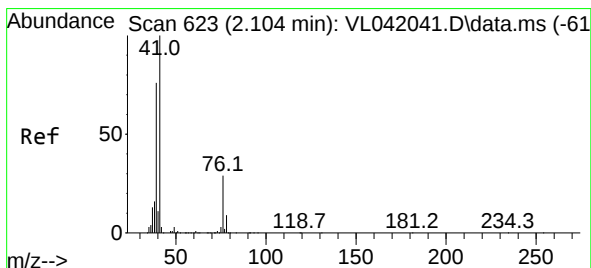
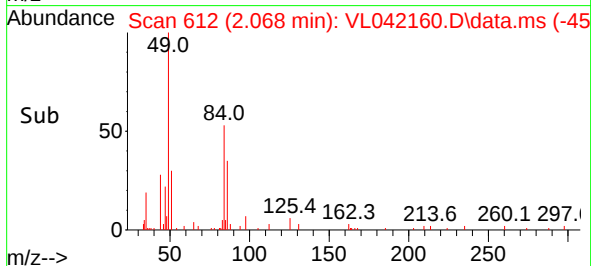
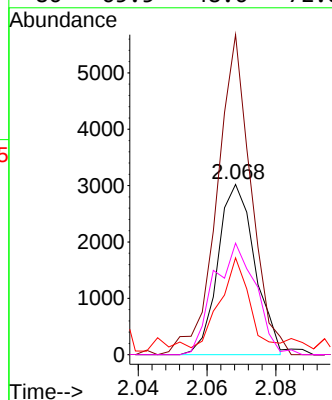
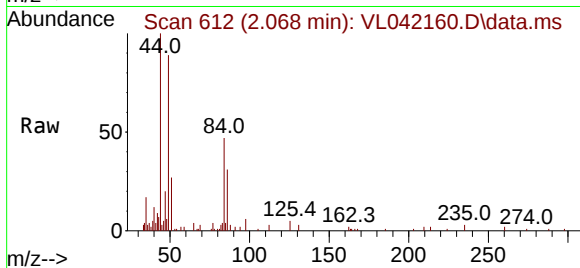
Ion Ratio Lower Upper

84 100

49 177.4 130.0 195.0

51 50.0 37.4 56.0

86 65.5 48.6 72.8



#21

Allyl Chloride

Concen: 0.044 ppbv

RT: 2.088 min Scan# 618

Delta R.T. -0.016 min

Lab File: VL042160.D

Acq: 17 Mar 2025 16:29

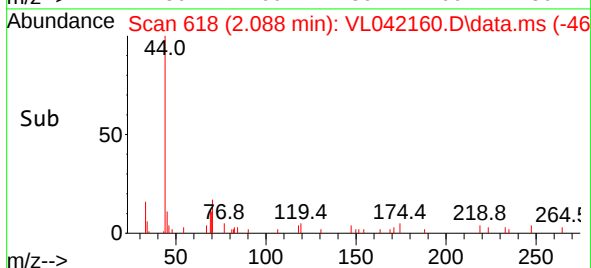
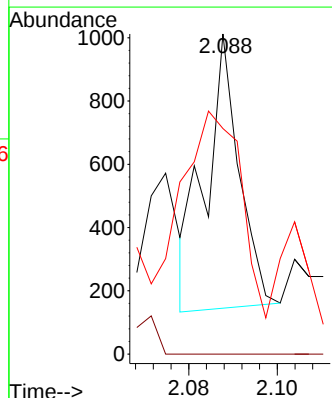
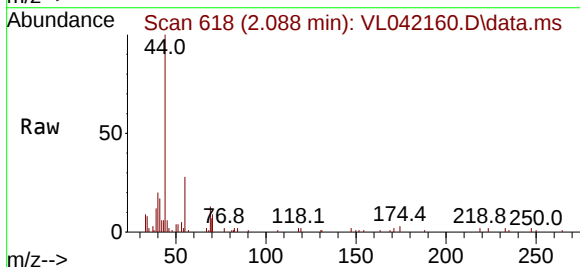
Tgt Ion: 41 Resp: 454

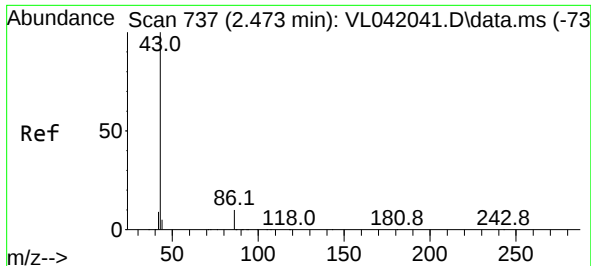
Ion Ratio Lower Upper

41 100

76 0.0 23.8 35.6

39 88.1 63.8 95.6

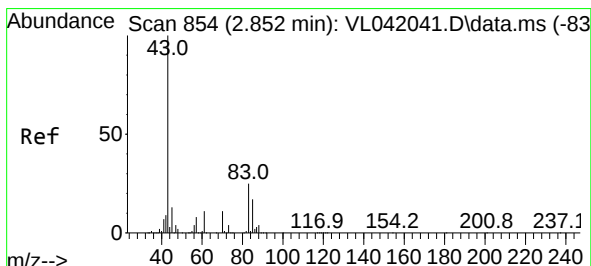
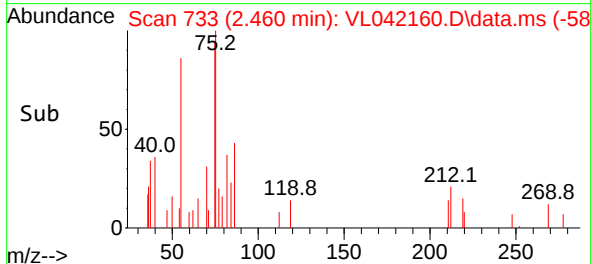
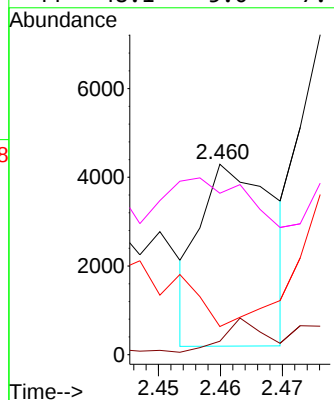
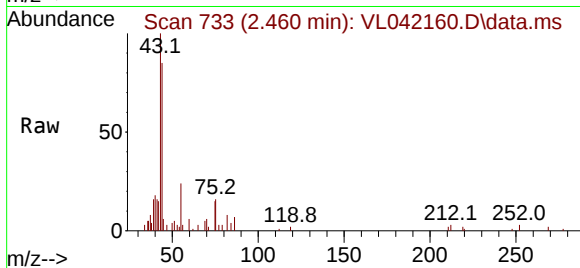




#23
 Vinyl Acetate
 Concen: 0.336 ppbv
 RT: 2.460 min Scan# 71
 Delta R.T. -0.013 min
 Lab File: VL042160.D
 Acq: 17 Mar 2025 16:29

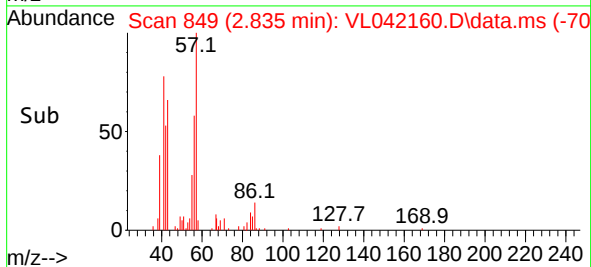
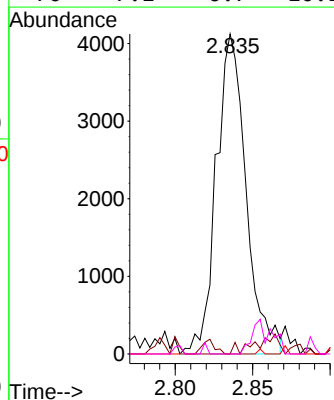
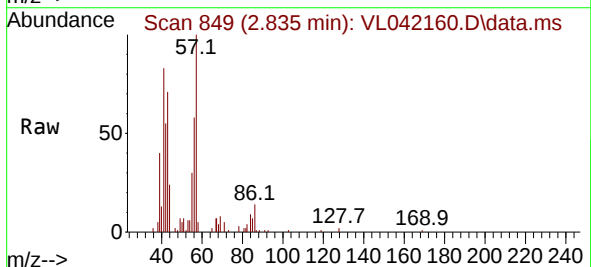
Instrument :
 MSVOA_1
 ClientSampleId :
 557-SG-1DUP

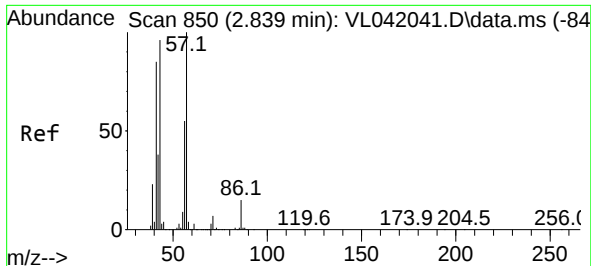
Tgt Ion: 43	Resp:	3366	
Ion	Ratio	Lower	Upper
43	100		
86	11.4	7.0	10.4#
42	0.0	7.6	11.4#
44	48.1	5.0	7.4#



#25
 Ethyl Acetate
 Concen: 0.097 ppbv
 RT: 2.835 min Scan# 849
 Delta R.T. -0.016 min
 Lab File: VL042160.D
 Acq: 17 Mar 2025 16:29

Tgt	Ion: 43	Resp:	5516
Ion	Ratio	Lower	Upper
43	100		
45	7.7	8.1	12.1#
61	0.0	7.2	10.8#
70	7.1	6.7	10.1

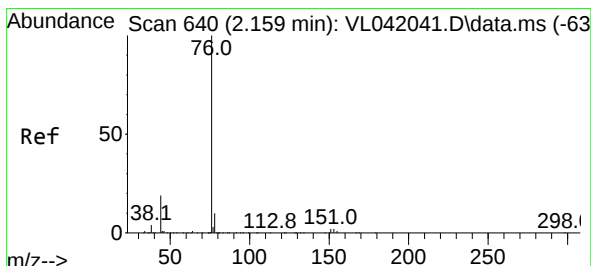
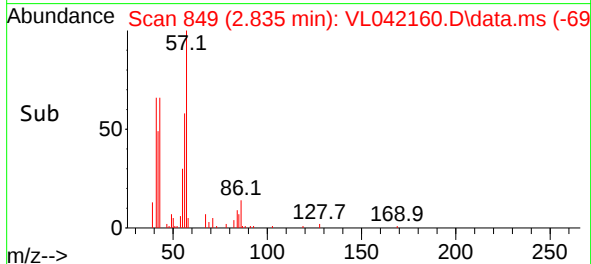
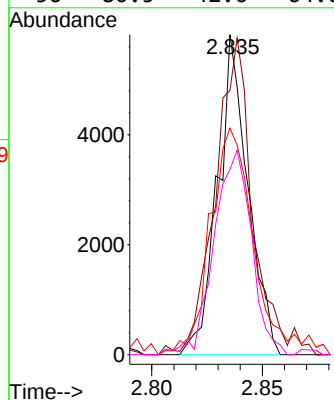
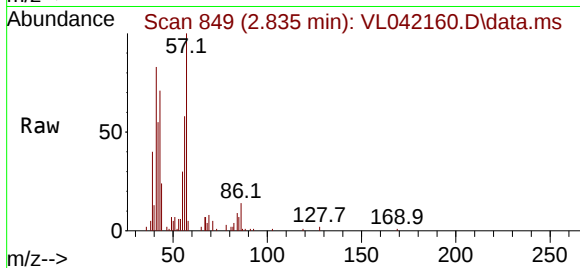




#26
Hexane
Concen: 0.242 ppbv
RT: 2.835 min Scan# 849
Delta R.T. -0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

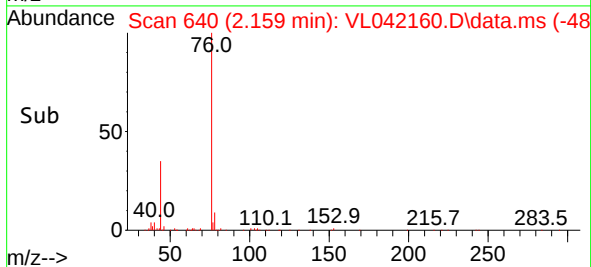
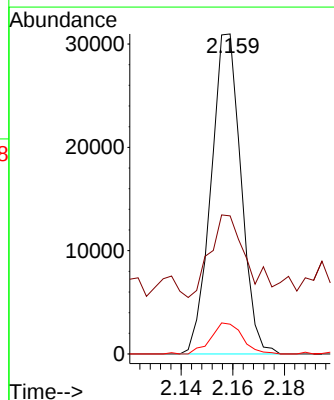
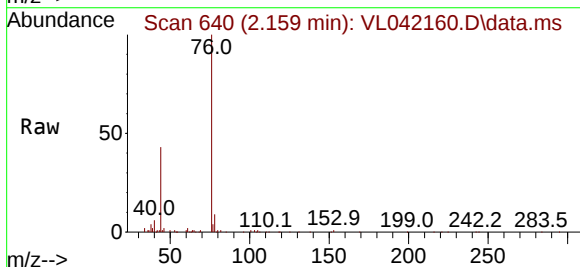
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

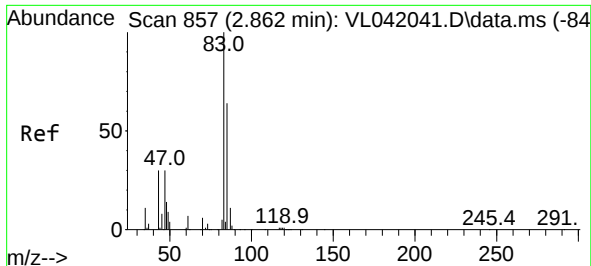
Tgt Ion:	57	Resp:	5572
Ion	Ratio	Lower	Upper
57	100		
41	121.6	70.6	106.0#
43	105.0	199.4	299.0#
56	80.5	42.6	64.0#



#27
Carbon Disulfide
Concen: 1.597 ppbv
RT: 2.159 min Scan# 640
Delta R.T. -0.000 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion:	76	Resp:	24955
Ion	Ratio	Lower	Upper
76	100		
44	42.3	16.2	24.2#
78	10.4	9.4	14.0





#29

Chloroform

Concen: 0.748 ppbv

RT: 2.858 min Scan# 81

Delta R.T. -0.004 min

Lab File: VL042160.D

Acq: 17 Mar 2025 16:29

Instrument :

MSVOA_L

ClientSampleId :

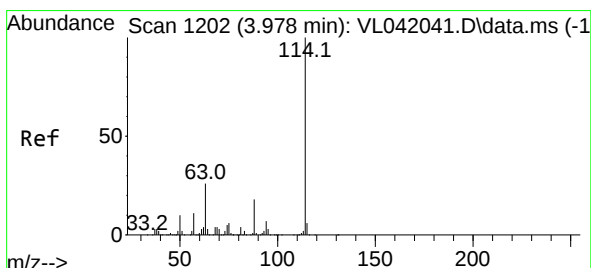
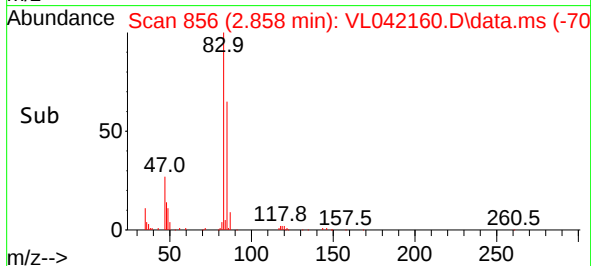
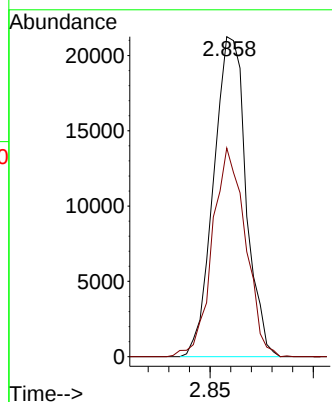
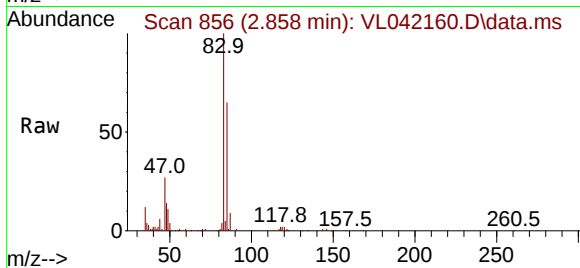
557-SG-1DUP

Tgt Ion: 83 Resp: 23198

Ion Ratio Lower Upper

83 100

85 65.2 51.2 76.8



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.975 min Scan# 1201

Delta R.T. -0.003 min

Lab File: VL042160.D

Acq: 17 Mar 2025 16:29

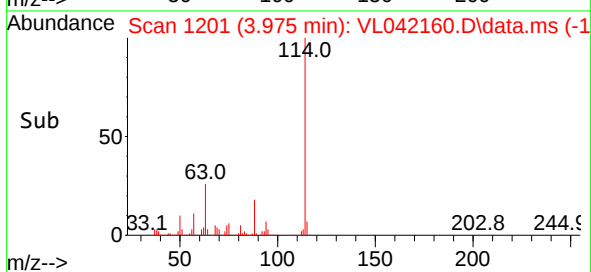
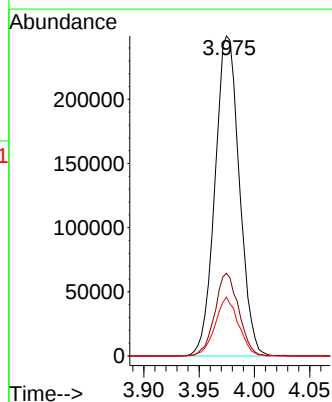
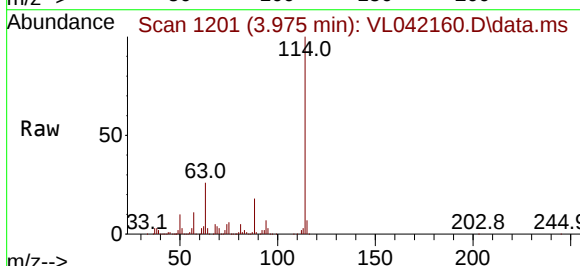
Tgt Ion: 114 Resp: 382035

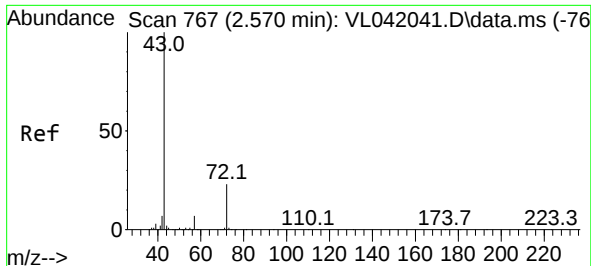
Ion Ratio Lower Upper

114 100

63 25.4 20.1 30.1

88 17.5 14.3 21.5

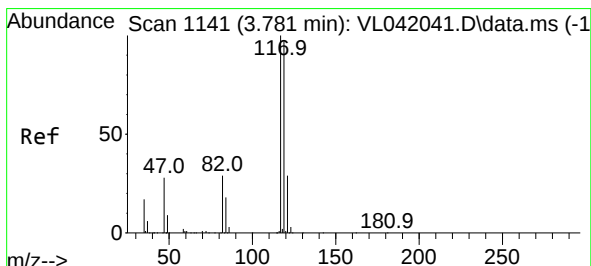
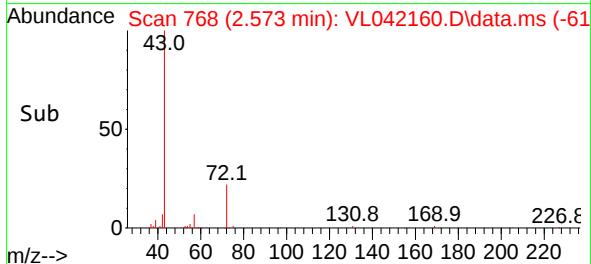
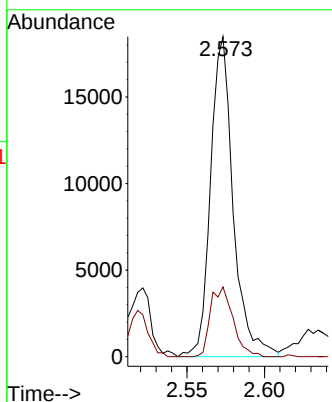
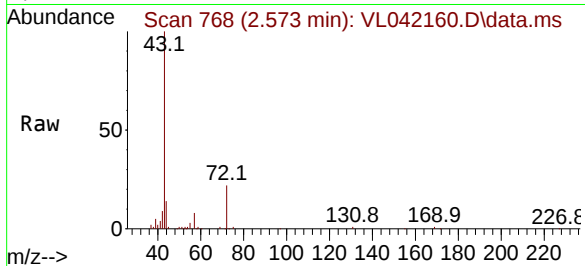




#34
2-Butanone
Concen: 0.631 ppbv
RT: 2.573 min Scan# 767
Delta R.T. 0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

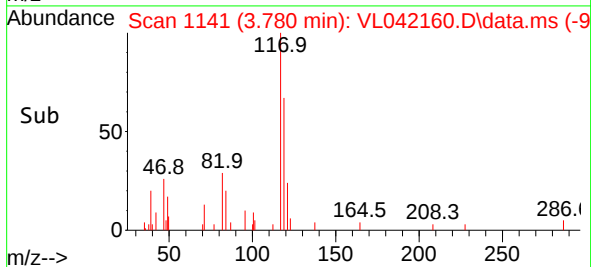
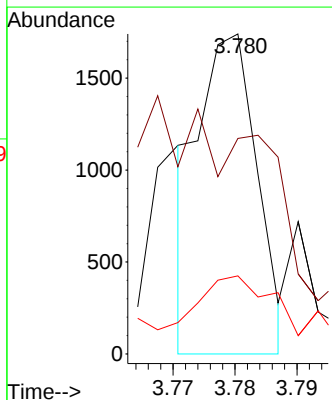
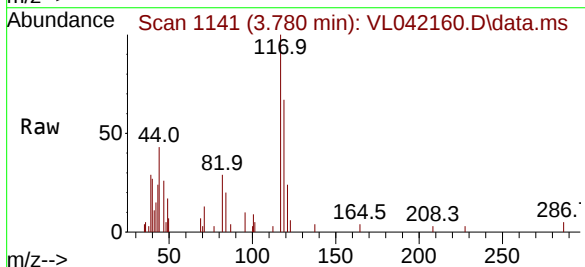
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

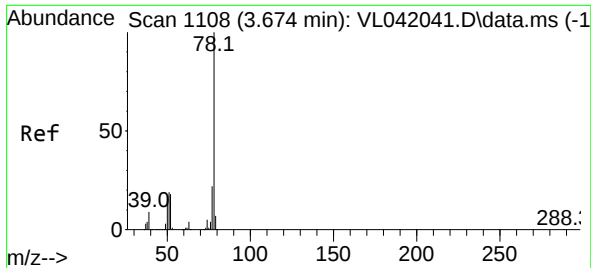
Tgt Ion: 43 Resp: 18773
Ion Ratio Lower Upper
43 100
72 21.8 18.5 27.7



#35
Carbon Tetrachloride
Concen: 0.043 ppbv
RT: 3.780 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion: 117 Resp: 1133
Ion Ratio Lower Upper
117 100
119 10.5 77.8 116.8#
121 17.3 23.4 35.0#

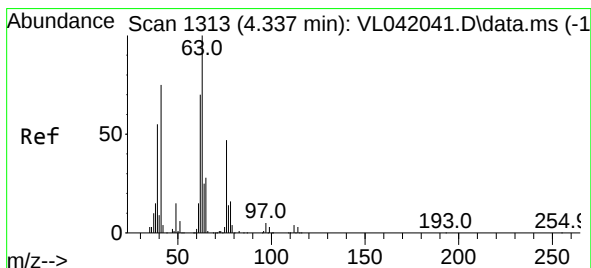
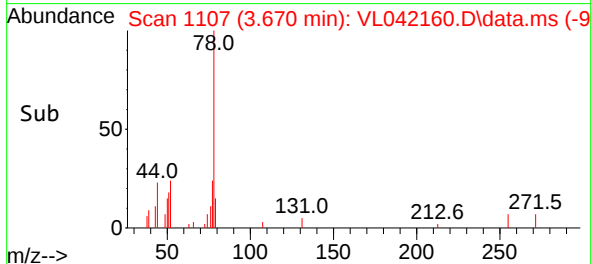
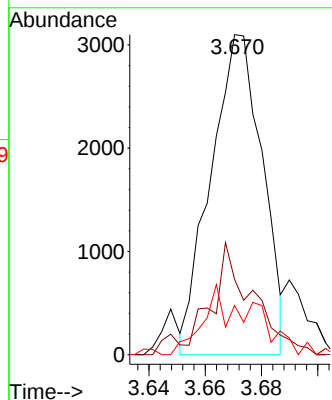
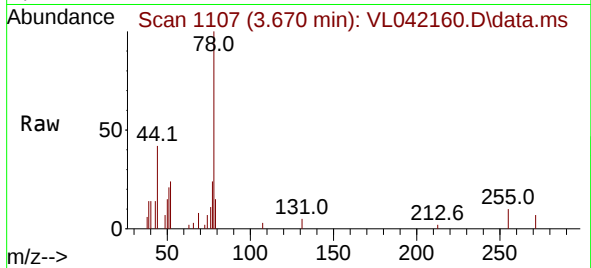




#36
Benzene
Concen: 0.099 ppbv
RT: 3.670 min Scan# 1108
Delta R.T. -0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

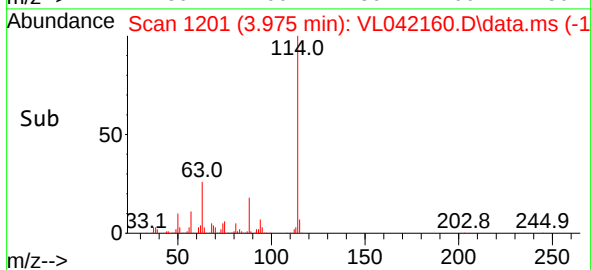
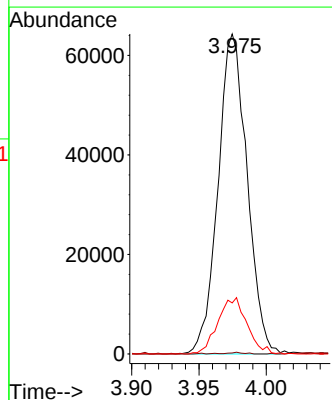
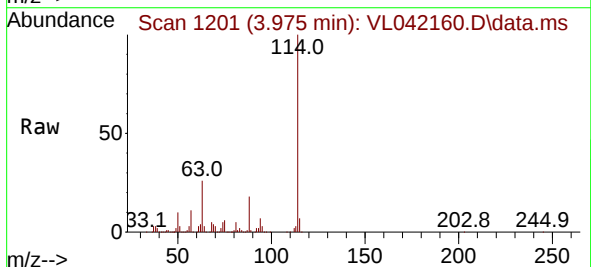
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

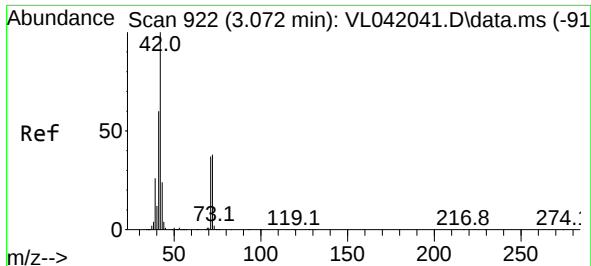
Tgt Ion	78	77	50
Ratio	100	18.6	12.2
Lower		17.7	13.9
Upper		26.5	20.9



#39
1,2-Dichloropropane
Concen: 6.356 ppbv
RT: 3.975 min Scan# 1201
Delta R.T. -0.363 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion	63	41	62
Ratio	100	0.3	16.0
Lower		60.1	55.8
Upper		90.1	83.8

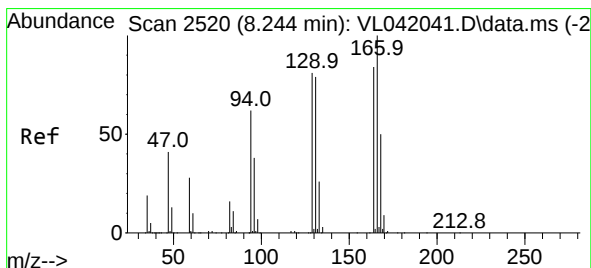
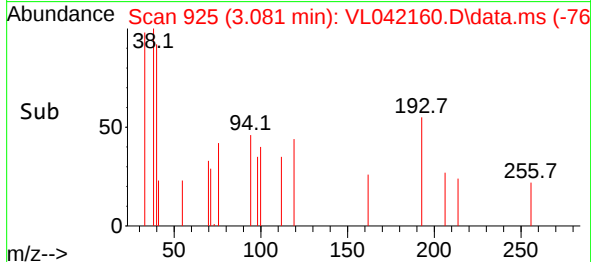
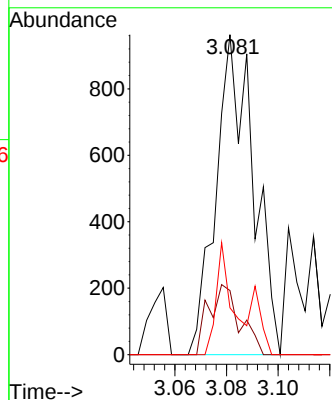
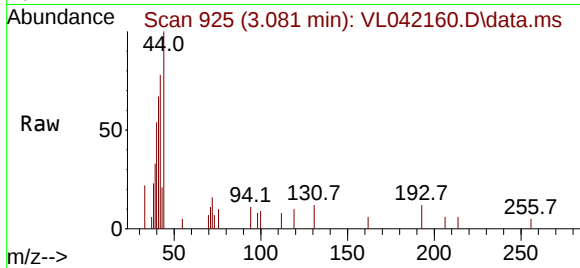




#41
Tetrahydrofuran
Concen: 0.055 ppbv
RT: 3.081 min Scan# 91
Delta R.T. 0.009 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

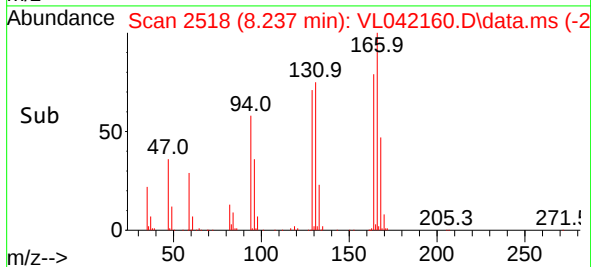
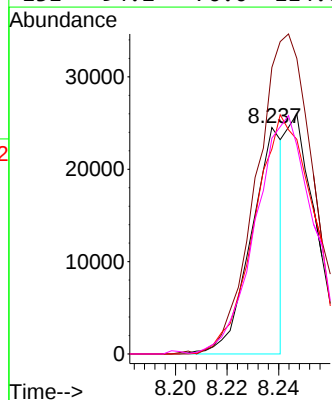
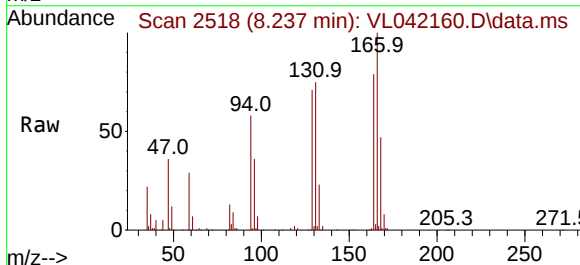
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

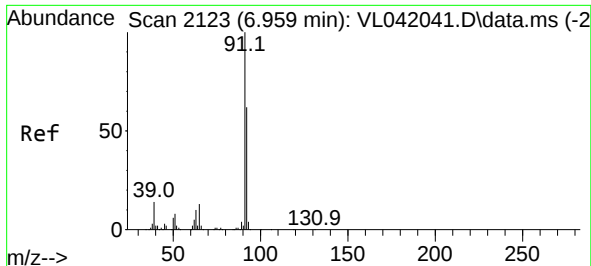
Tgt Ion: 42 Resp: 969
Ion Ratio Lower Upper
42 100
72 18.2 30.2 45.2#
71 20.9 28.2 42.4#



#52
Tetrachloroethene
Concen: 1.489 ppbv
RT: 8.237 min Scan# 2518
Delta R.T. -0.007 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion:164 Resp: 20390
Ion Ratio Lower Upper
164 100
166 125.9 95.7 143.5
129 90.4 77.1 115.7
131 94.2 76.0 114.0

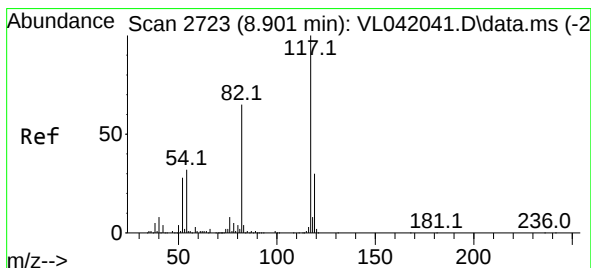
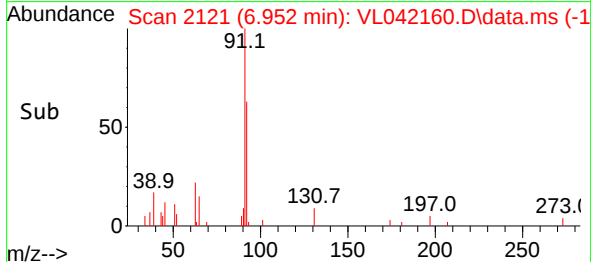
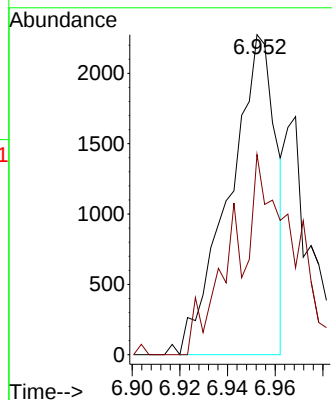
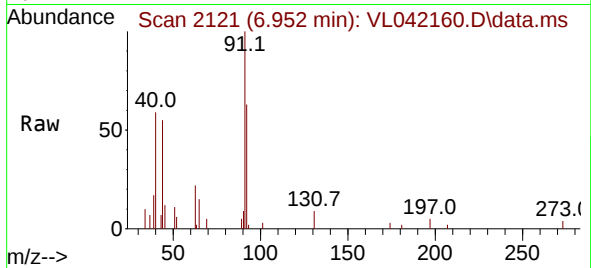




#53
Toluene
Concen: 0.069 ppbv
RT: 6.952 min Scan# 2121
Delta R.T. -0.007 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

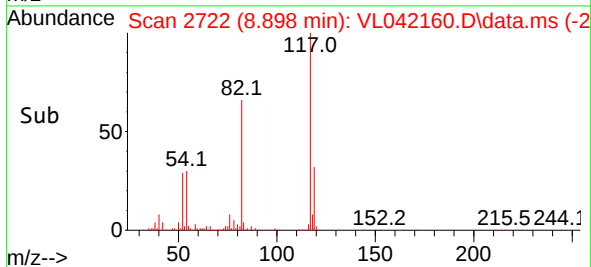
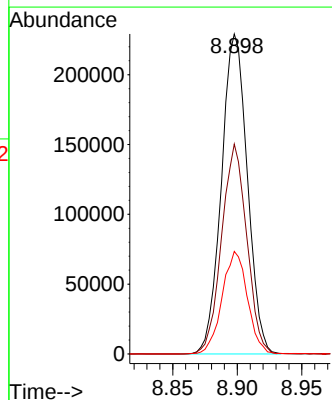
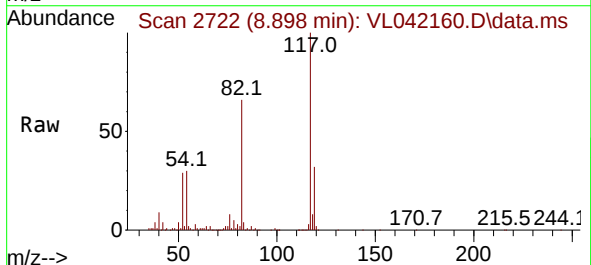
Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

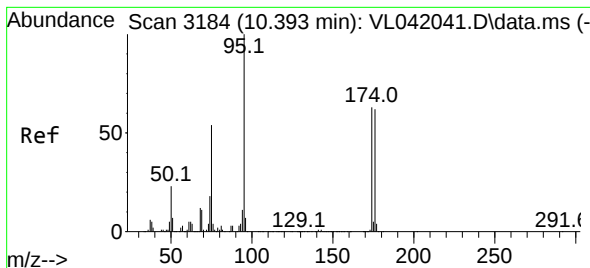
Tgt Ion: 91 Resp: 3089
Ion Ratio Lower Upper
91 100
92 82.0 49.0 73.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.898 min Scan# 2722
Delta R.T. -0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion: 117 Resp: 319787
Ion Ratio Lower Upper
117 100
82 63.8 55.0 82.6
119 31.5 25.9 38.9

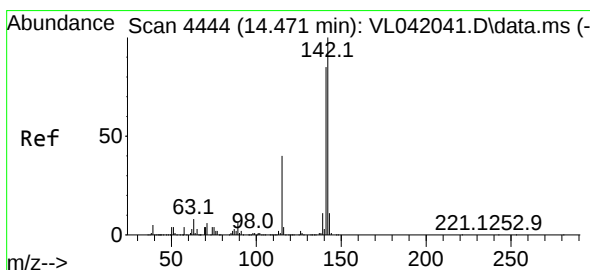
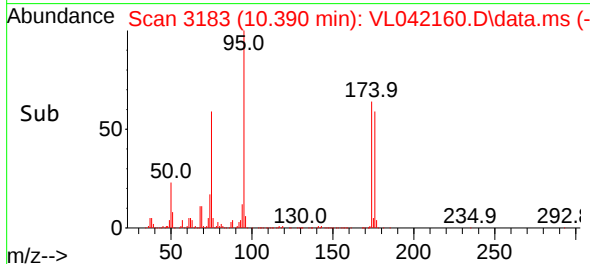
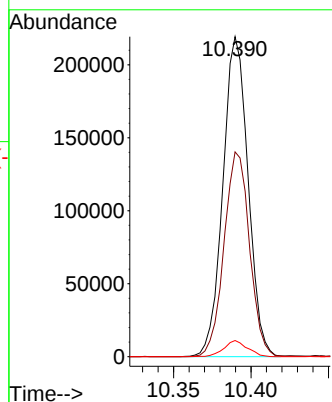
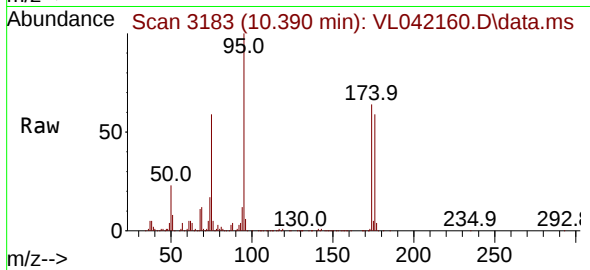




#68
1-Bromo-4-Fluorobenzene
Concen: 10.070 ppbv
RT: 10.390 min Scan# 3184
Delta R.T. -0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Instrument :
MSVOA_L
ClientSampleId :
557-SG-1DUP

Tgt Ion: 95 Resp: 247756
Ion Ratio Lower Upper
95 100
174 64.8 51.8 77.6
175 4.7 3.9 5.9



#80
Naphthalene,2-methyl-
Concen: 0.055 ppbv
RT: 14.474 min Scan# 4445
Delta R.T. 0.003 min
Lab File: VL042160.D
Acq: 17 Mar 2025 16:29

Tgt Ion:142 Resp: 578
Ion Ratio Lower Upper
142 100
141 44.8 65.8 98.6#
115 41.3 29.5 44.3

