

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031025\
 Data File : VL042122.D
 Acq On : 10 Mar 2025 13:32
 Operator : SY/MD
 Sample : Q1532-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 1DUP

Quant Time: Mar 11 01:24:26 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 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	2.800	49	163759	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	380274	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.901	117	322839	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	251994	10.146	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.500%

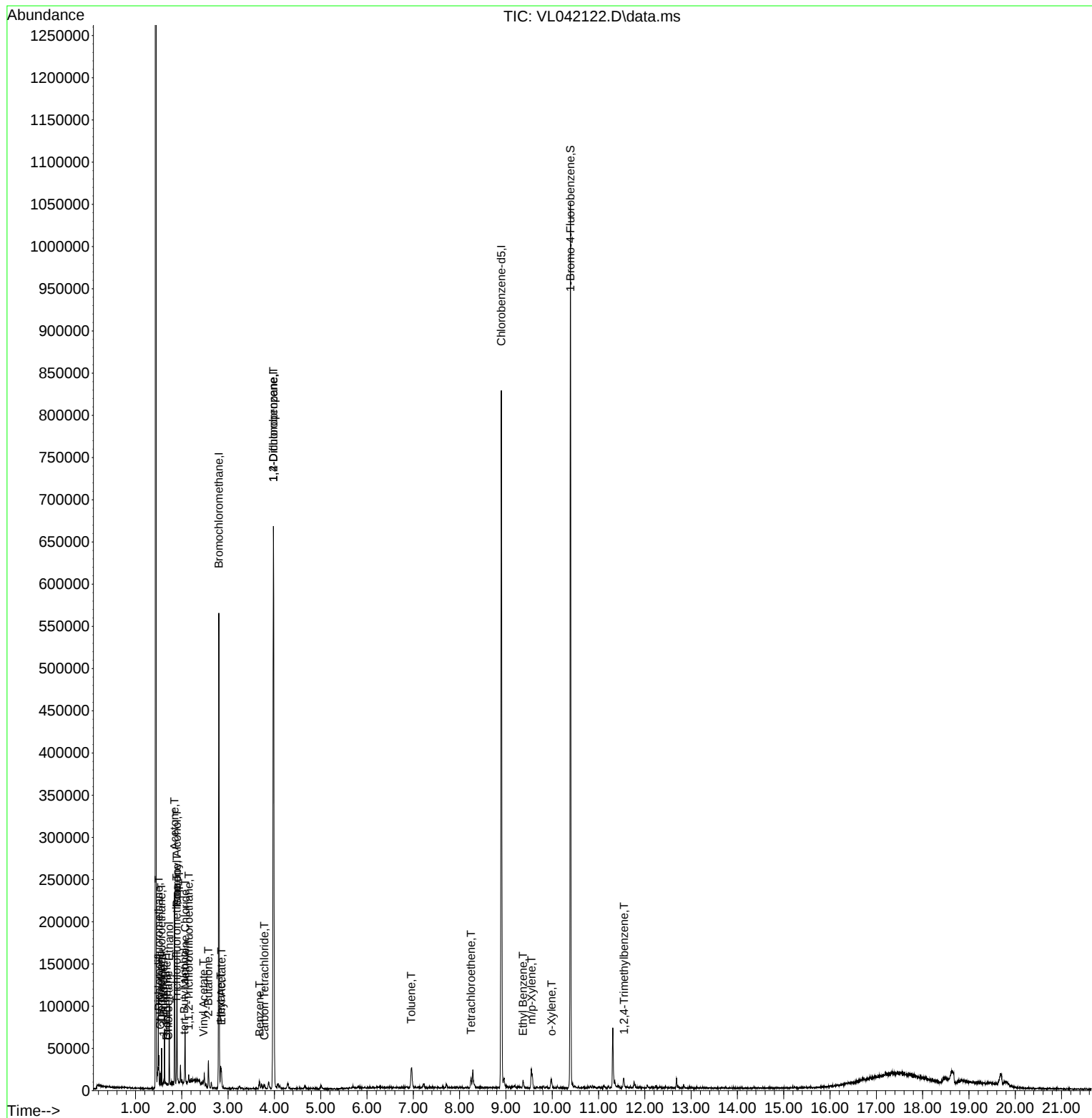
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	8547	0.502	ppbv	95
4) Chloromethane	1.538	50	3449	0.548	ppbv	90
6) Bromomethane	1.674	94	94	0.033	ppbv	88
7) Chloroethane	1.706	64	97	0.040	ppbv #	39
8) Dichlorotetrafluoroethane	1.560	85	560	0.040	ppbv #	16
9) Propene	1.894	41	6606	0.681	ppbv	85
11) Trichlorofluoromethane	1.887	101	4555	0.267	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.149	101	1360	0.100	ppbv #	73
13) Ethanol	1.729	45	30378	49.354	ppbv	89
15) Acetone	1.842	43	101724	7.034	ppbv	99
16) 1,3-Butadiene	1.606	39	605	0.090	ppbv #	25
17) tert-Butyl alcohol	2.055	59	823	0.045	ppbv #	70
19) Isopropyl Alcohol	1.894	45	62582	7.534	ppbv #	35
20) Methylene Chloride	2.072	84	8455	1.546	ppbv	88
23) Vinyl Acetate	2.473	43	768	0.076	ppbv #	44
25) Ethyl Acetate	2.855	43	13851	0.239	ppbv #	93
26) Hexane	2.842	57	4982	0.213	ppbv #	78
34) 2-Butanone	2.573	43	20082	0.678	ppbv	94
35) Carbon Tetrachloride	3.784	117	1254	0.048	ppbv #	43
36) Benzene	3.677	78	4996	0.125	ppbv	97
39) 1,2-Dichloropropane	3.978	63	95966	6.351	ppbv #	24
52) Tetrachloroethene	8.244	164	1104	0.081	ppbv #	70
53) Toluene	6.956	91	8789	0.198	ppbv #	26
58) Ethyl Benzene	9.367	91	4720	0.079	ppbv #	76
59) m/p-Xylene	9.552	91	10254	0.217	ppbv #	100
60) o-Xylene	9.985	91	4159	0.087	ppbv	94
74) 1,2,4-Trimethylbenzene	11.549	105	2738	0.048	ppbv #	59

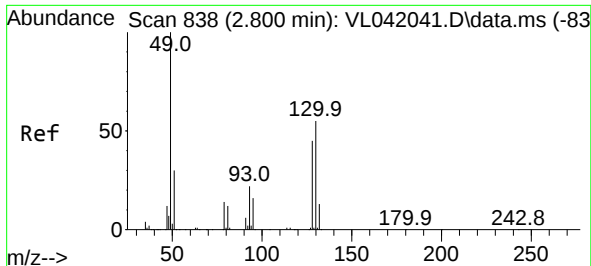
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : VL042122.D
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1DUP

Quant Time: Mar 11 01:24:26 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
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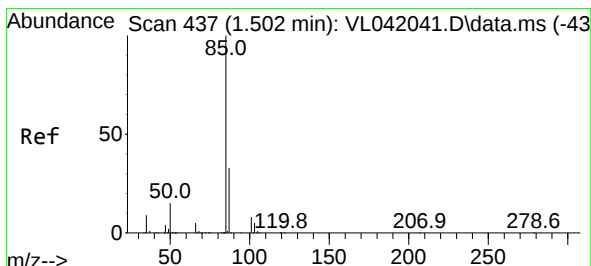
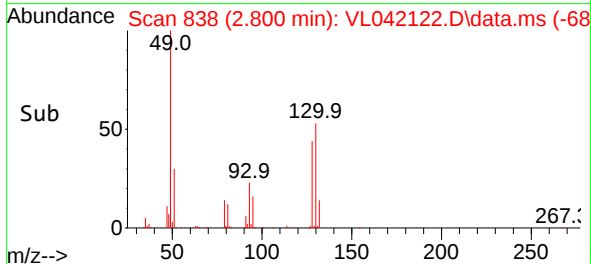
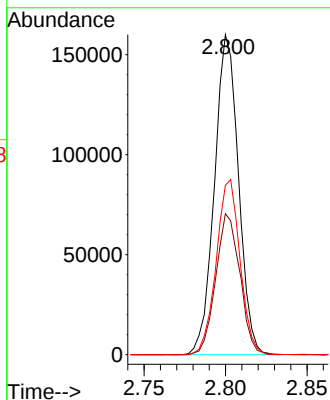
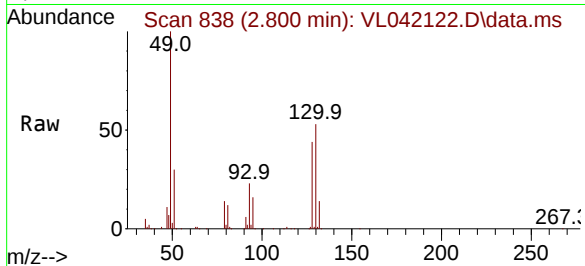




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.800 min Scan# 838
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

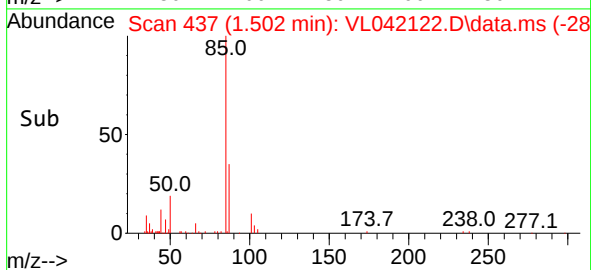
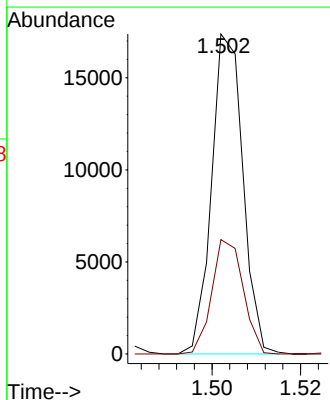
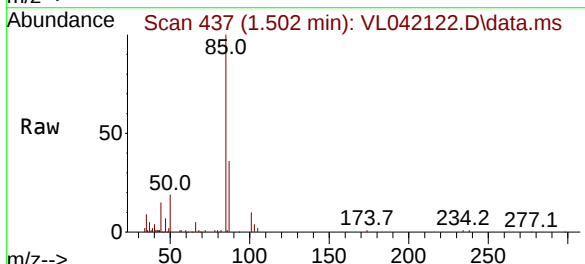
Instrument :
MSVOA_L
ClientSampleId :
1DUP

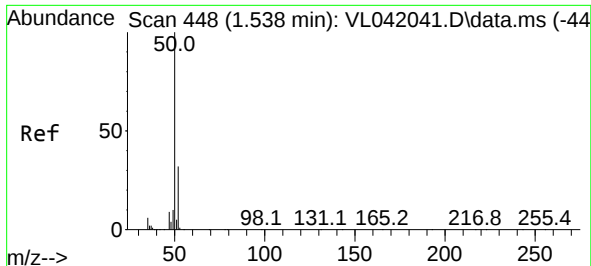
Tgt Ion: 49 Resp: 163759
Ion Ratio Lower Upper
49 100
128 44.2 21.6 64.8
130 54.2 27.8 83.4



#2
Dichlorodifluoromethane
Concen: 0.502 ppbv
RT: 1.502 min Scan# 437
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 85 Resp: 8547
Ion Ratio Lower Upper
85 100
87 35.7 26.4 39.6

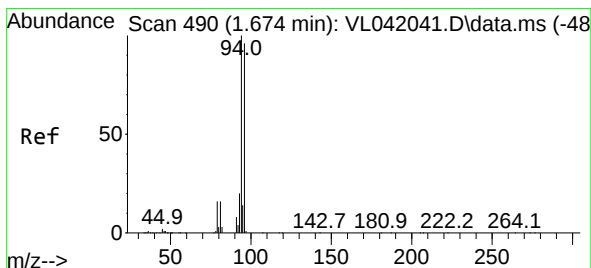
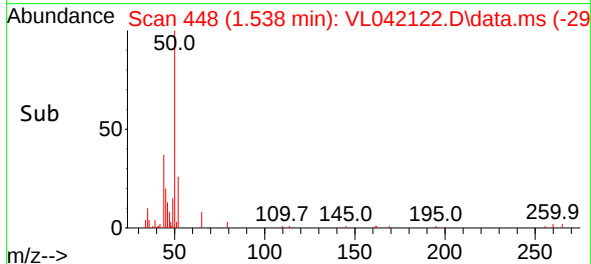
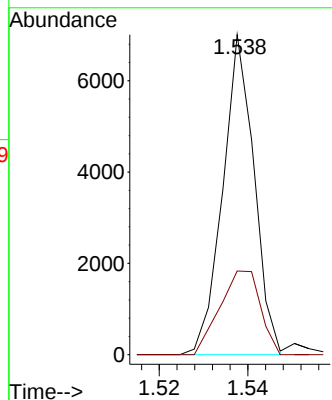
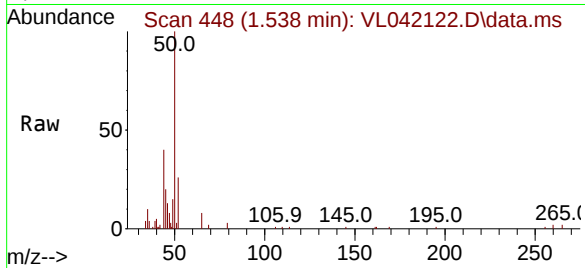




#4
Chloromethane
Concen: 0.548 ppbv
RT: 1.538 min Scan# 448
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

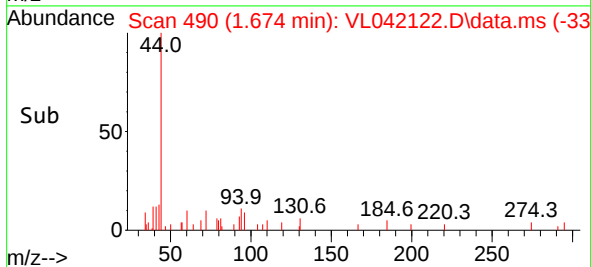
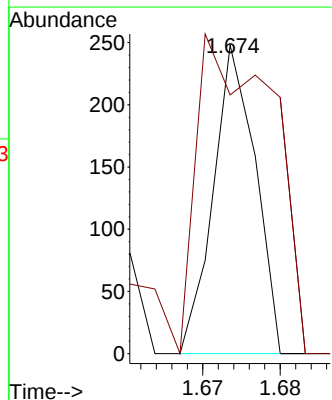
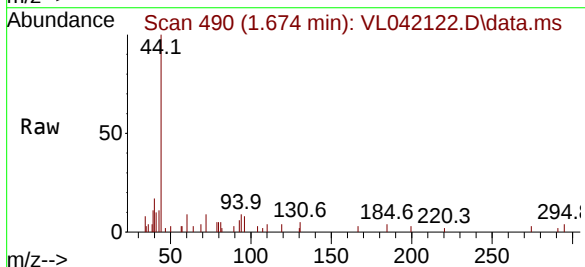
Instrument :
MSVOA_L
ClientSampleId :
1DUP

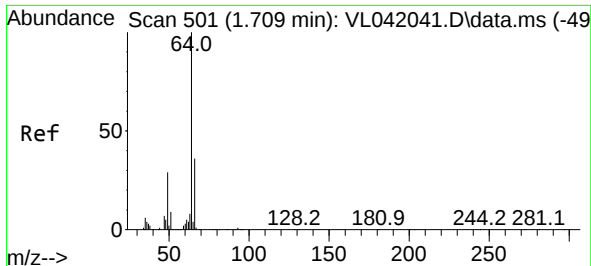
Tgt Ion: 50 Resp: 3449
Ion Ratio Lower Upper
50 100
52 26.1 25.4 38.0



#6
Bromomethane
Concen: 0.033 ppbv
RT: 1.674 min Scan# 490
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 94 Resp: 94
Ion Ratio Lower Upper
94 100
96 83.9 76.5 114.7

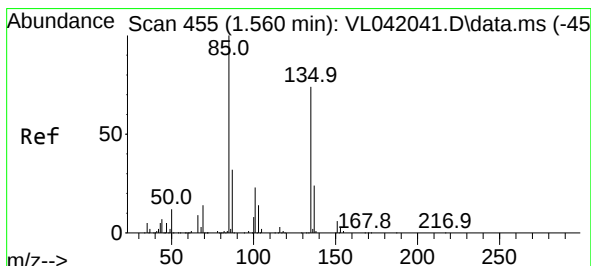
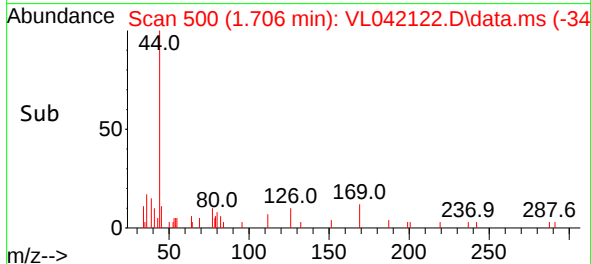
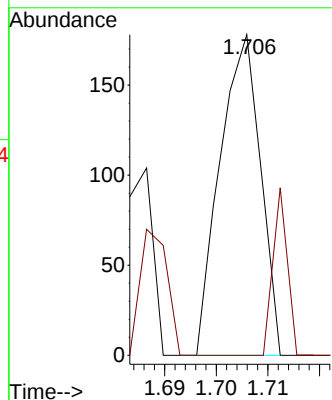
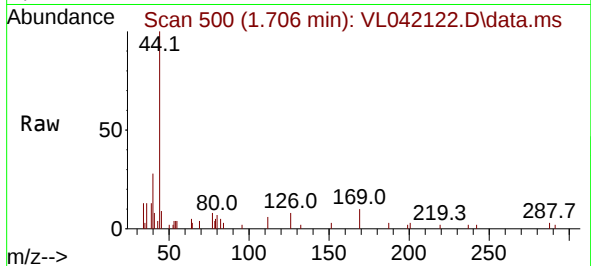




#7
Chloroethane
Concen: 0.040 ppbv
RT: 1.706 min Scan# 501
Delta R.T. -0.003 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

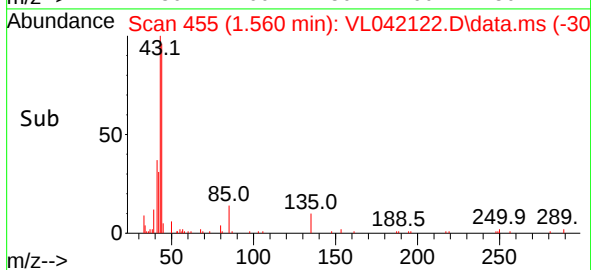
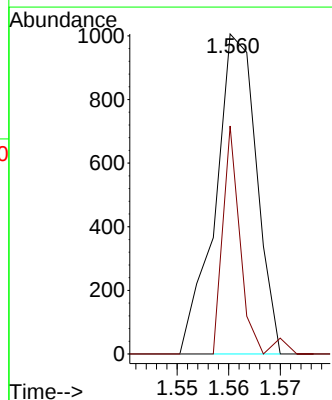
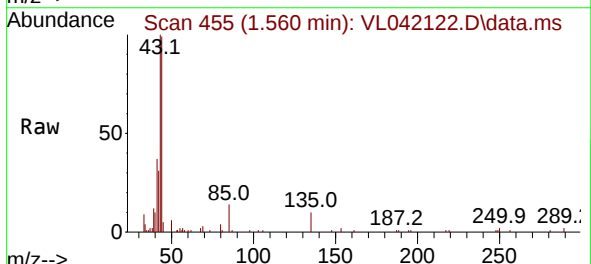
Instrument :
MSVOA_L
ClientSampleId :
1DUP

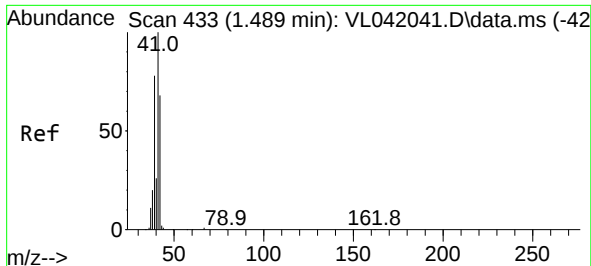
Tgt Ion: 64 Resp: 97
Ion Ratio Lower Upper
64 100
66 0.0 28.4 42.6#



#8
Dichlorotetrafluoroethane
Concen: 0.040 ppbv
RT: 1.560 min Scan# 455
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 85 Resp: 560
Ion Ratio Lower Upper
85 100
135 0.0 54.6 81.8#





#9

Propene

Concen: 0.681 ppbv

RT: 1.894 min Scan# 51

Delta R.T. 0.404 min

Lab File: VL042122.D

Acq: 10 Mar 2025 13:32

Instrument :

MSVOA_L

ClientSampleId :

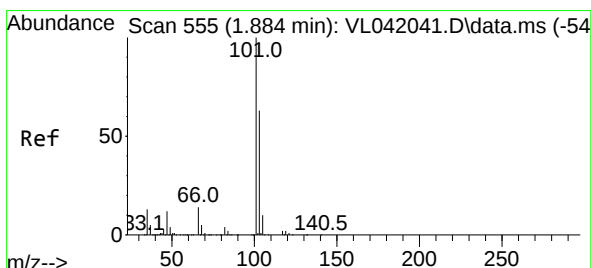
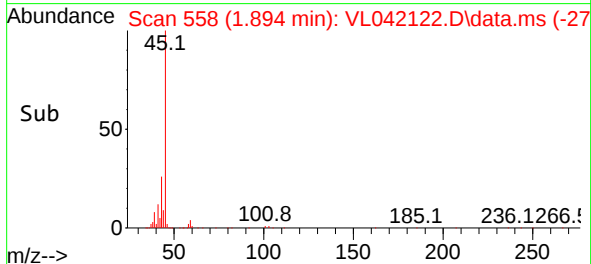
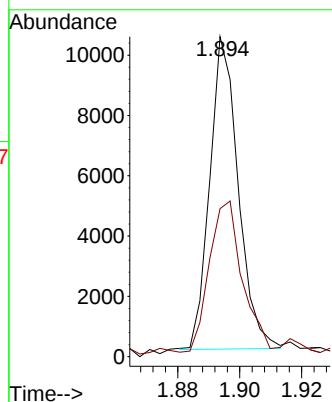
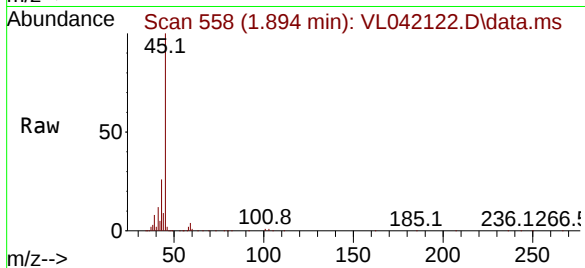
1DUP

Tgt Ion: 41 Resp: 6606

Ion Ratio Lower Upper

41 100

42 57.8 55.8 83.6



#11

Trichlorofluoromethane

Concen: 0.267 ppbv

RT: 1.887 min Scan# 556

Delta R.T. 0.003 min

Lab File: VL042122.D

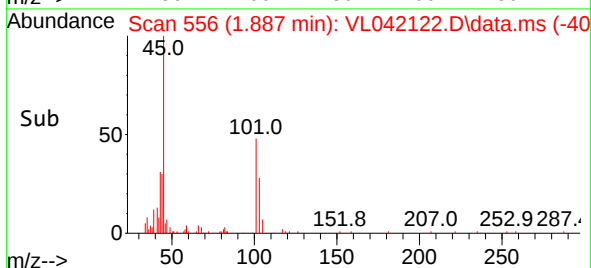
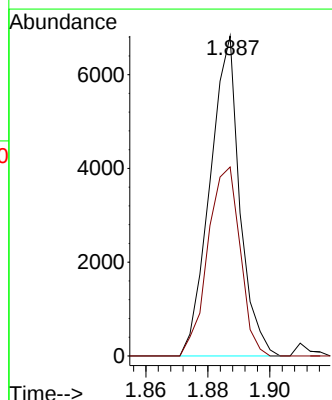
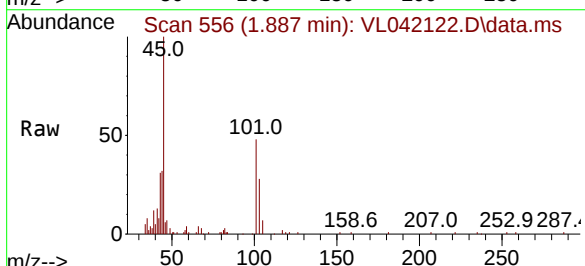
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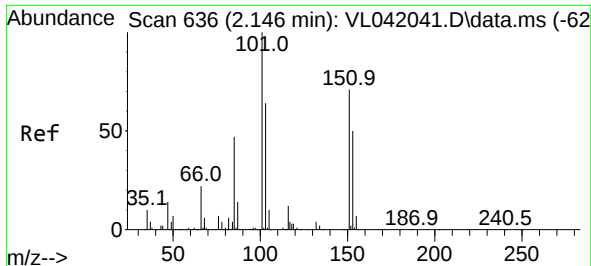
Tgt Ion: 101 Resp: 4555

Ion Ratio Lower Upper

101 100

103 59.0 50.6 75.8

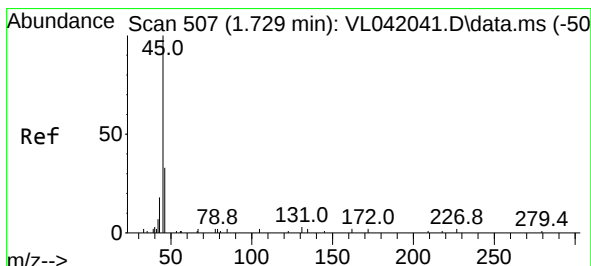
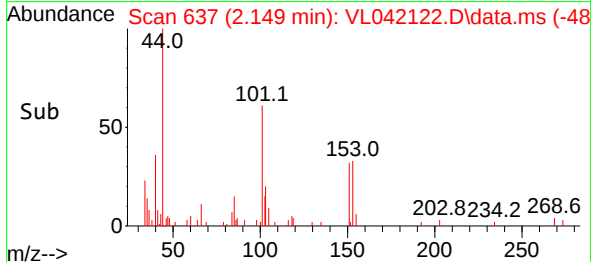
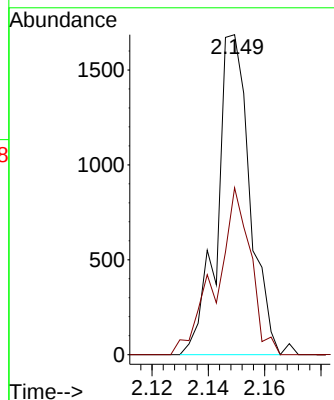
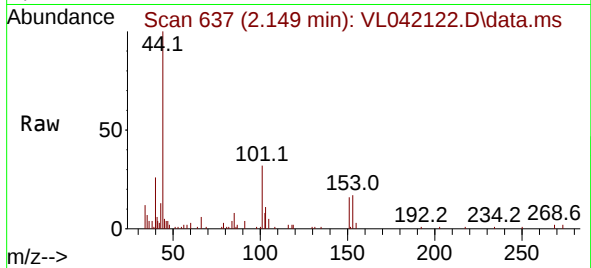




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.100 ppbv
RT: 2.149 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

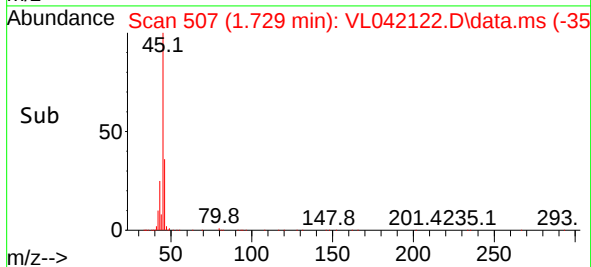
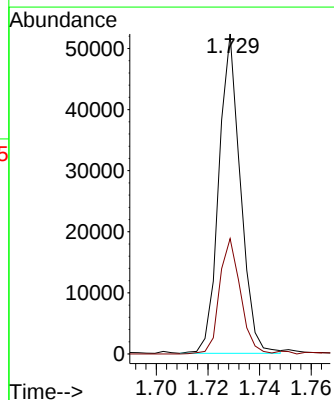
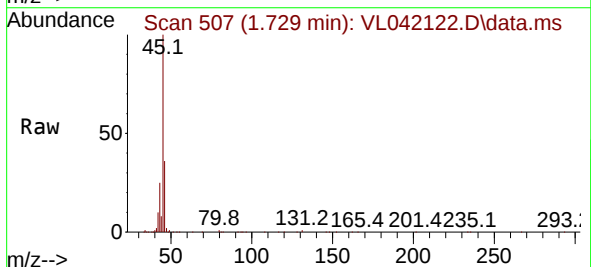
Instrument :
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ClientSampleId :
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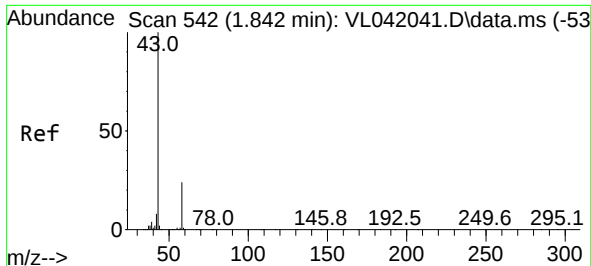
Tgt Ion:101 Resp: 1360
Ion Ratio Lower Upper
101 100
151 54.8 62.6 94.0#



#13
Ethanol
Concen: 49.354 ppbv
RT: 1.729 min Scan# 507
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 45 Resp: 30378
Ion Ratio Lower Upper
45 100
46 35.4 17.1 68.3

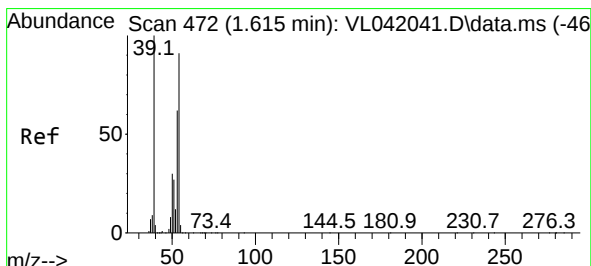
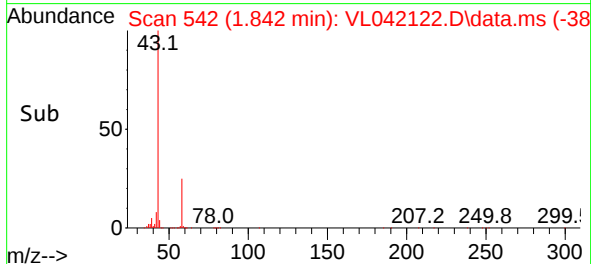
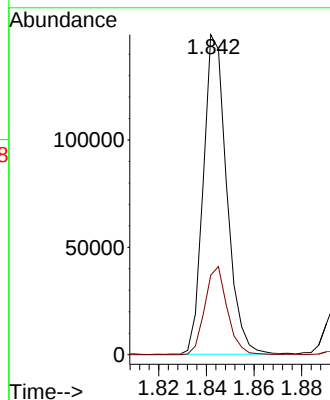
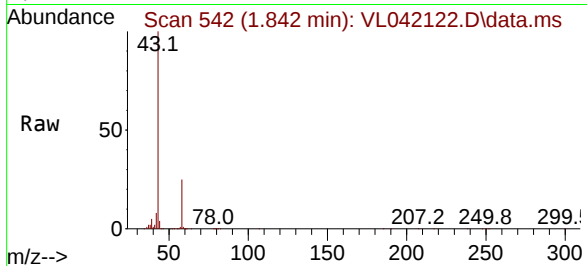




#15
Acetone
Concen: 7.034 ppbv
RT: 1.842 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

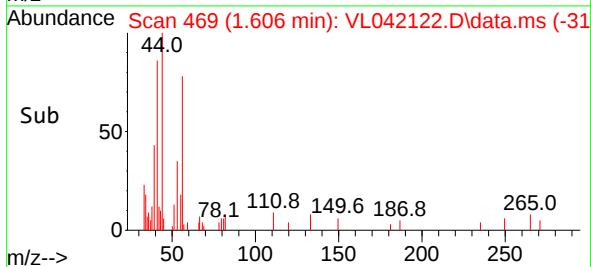
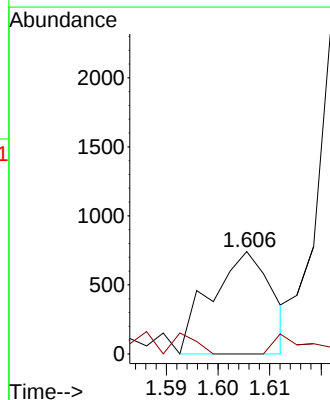
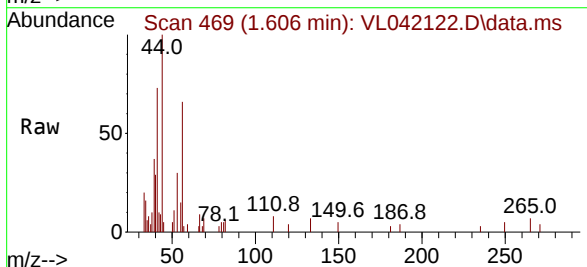
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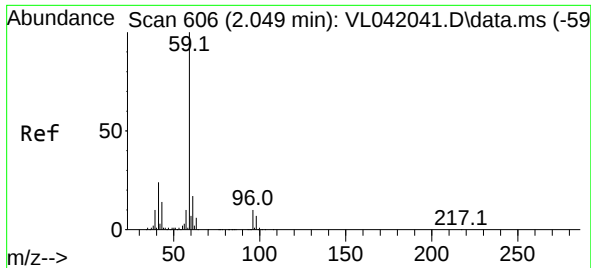
Tgt Ion: 43 Resp: 101724
Ion Ratio Lower Upper
43 100
58 26.4 20.7 31.1



#16
1,3-Butadiene
Concen: 0.090 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.010 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 39 Resp: 605
Ion Ratio Lower Upper
39 100
54 10.7 59.6 89.4#

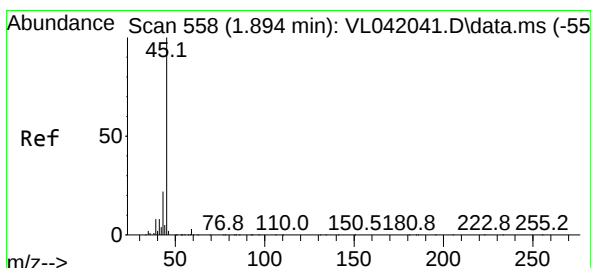
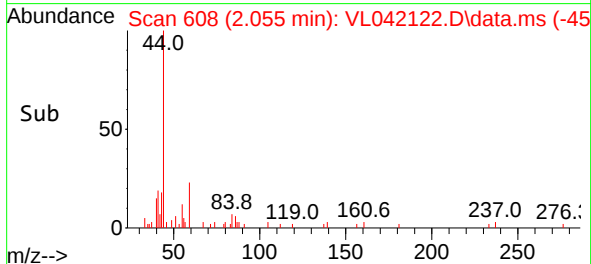
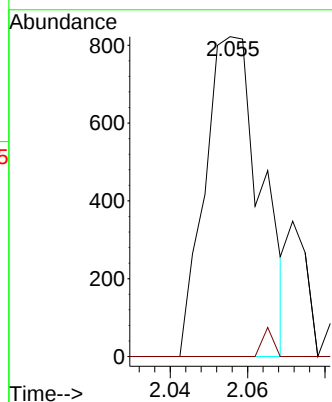
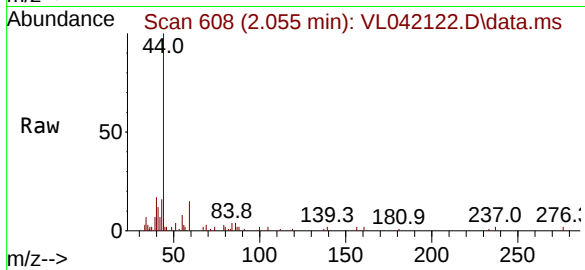




#17
tert-Butyl alcohol
Concen: 0.045 ppbv
RT: 2.055 min Scan# 606
Delta R.T. 0.006 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

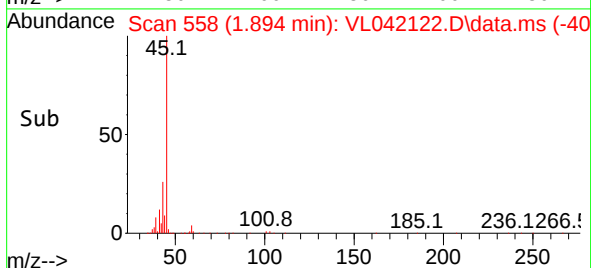
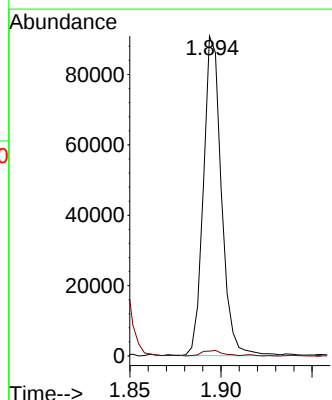
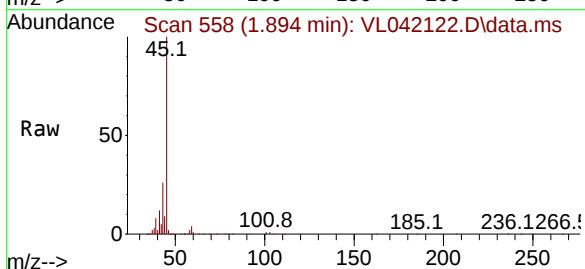
Instrument :
MSVOA_L
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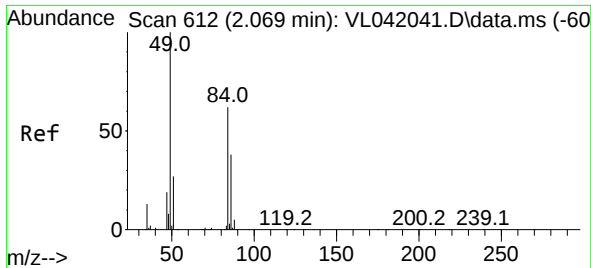
Tgt Ion: 59 Resp: 823
Ion Ratio Lower Upper
59 100
57 0.0 9.3 13.9#



#19
Isopropyl Alcohol
Concen: 7.534 ppbv
RT: 1.894 min Scan# 558
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 45 Resp: 62582
Ion Ratio Lower Upper
45 100
58 2.3 35.3 52.9#

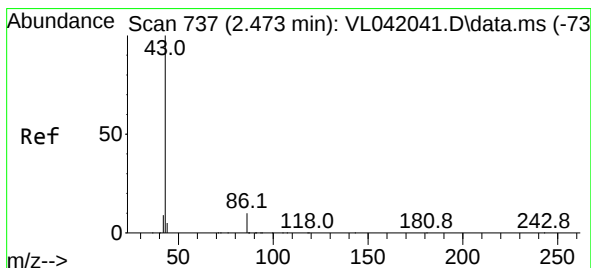
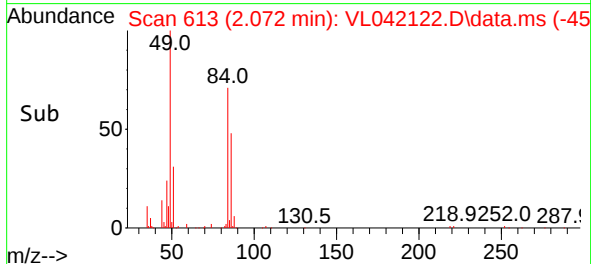
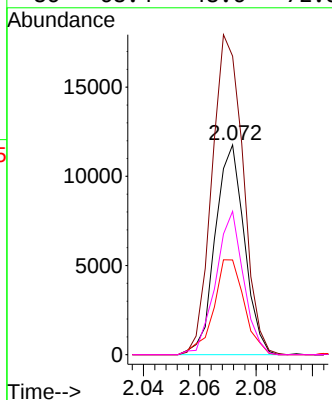
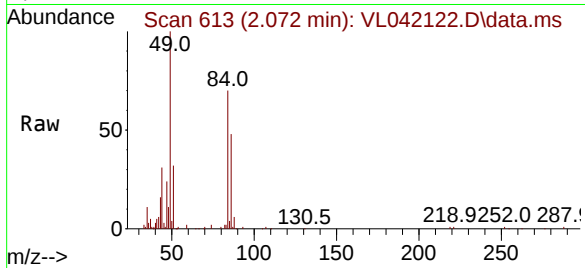




#20
Methylene Chloride
Concen: 1.546 ppbv
RT: 2.072 min Scan# 612
Delta R.T. 0.003 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

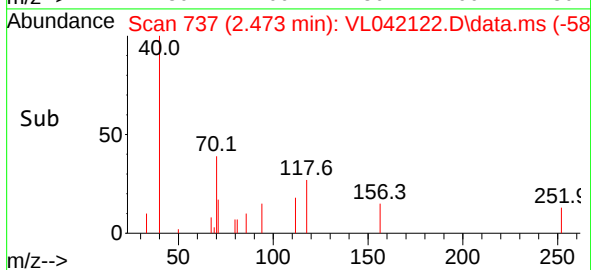
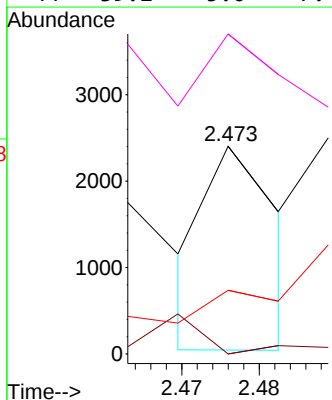
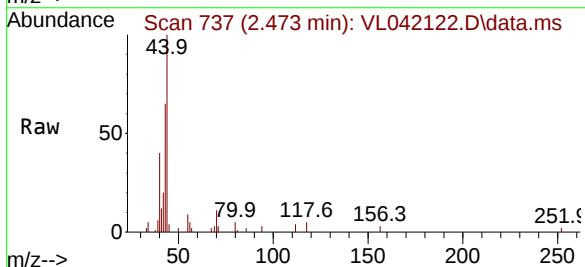
Instrument :
MSVOA_L
ClientSampleId :
1DUP

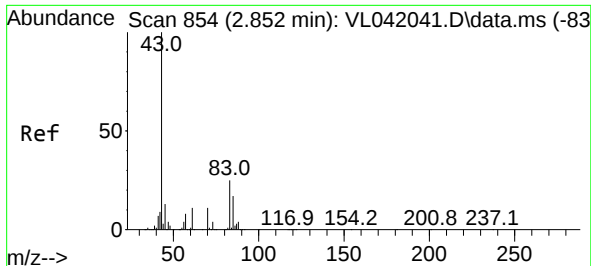
Tgt Ion: 84 Resp: 8455
Ion Ratio Lower Upper
84 100
49 142.3 130.0 195.0
51 45.2 37.4 56.0
86 68.4 48.6 72.8



#23
Vinyl Acetate
Concen: 0.076 ppbv
RT: 2.473 min Scan# 737
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 43 Resp: 768
Ion Ratio Lower Upper
43 100
86 0.0 7.0 10.4#
42 30.5 7.6 11.4#
44 39.2 5.0 7.4#





#25

Ethyl Acetate

Concen: 0.239 ppbv

RT: 2.855 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL042122.D

Acq: 10 Mar 2025 13:32

Instrument :

MSVOA_L

ClientSampleId :

1DUP

Tgt Ion: 43 Resp: 13851

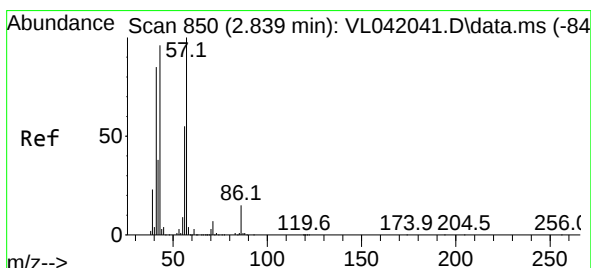
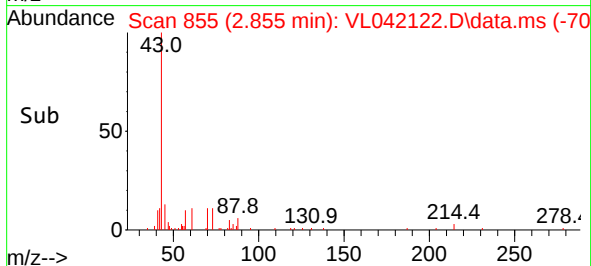
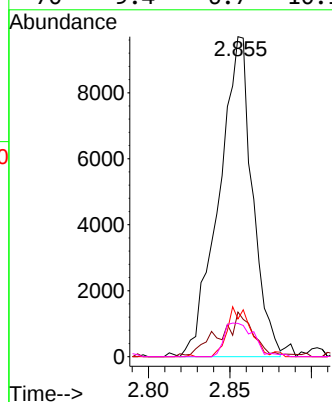
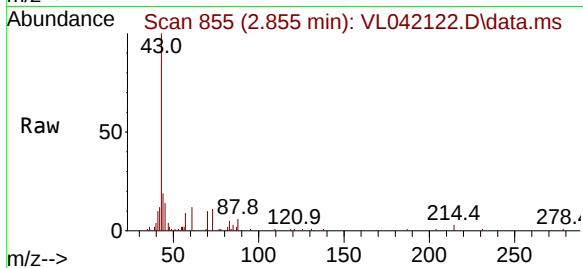
Ion Ratio Lower Upper

43 100

45 14.4 8.1 12.1#

61 11.1 7.2 10.8#

70 9.4 6.7 10.1



#26

Hexane

Concen: 0.213 ppbv

RT: 2.842 min Scan# 851

Delta R.T. 0.003 min

Lab File: VL042122.D

Acq: 10 Mar 2025 13:32

Tgt Ion: 57 Resp: 4982

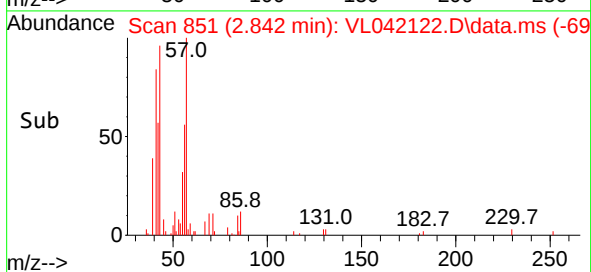
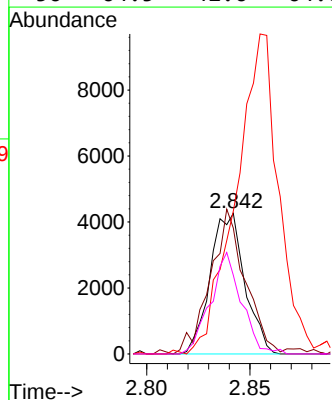
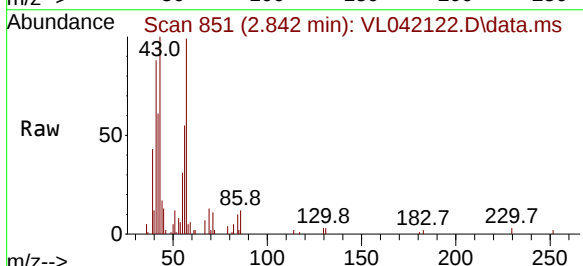
Ion Ratio Lower Upper

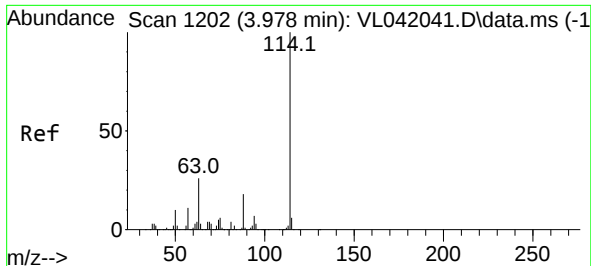
57 100

41 106.3 70.6 106.0#

43 291.5 199.4 299.0

56 64.5 42.6 64.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.978 min Scan# 11

Delta R.T. -0.000 min

Lab File: VL042122.D

Acq: 10 Mar 2025 13:32

Instrument :

MSVOA_L

ClientSampleId :

1DUP

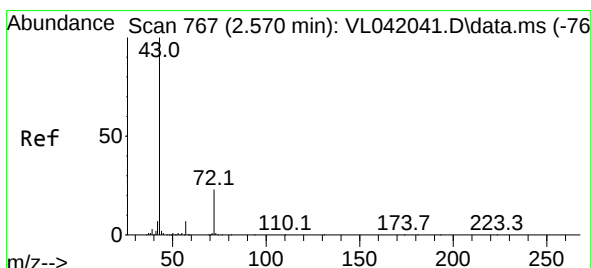
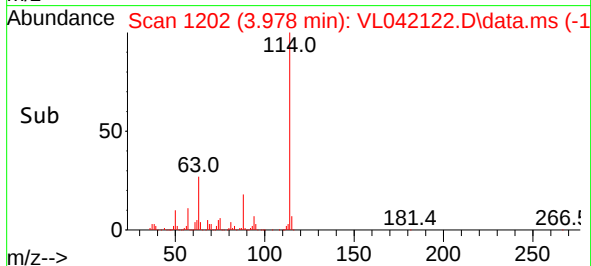
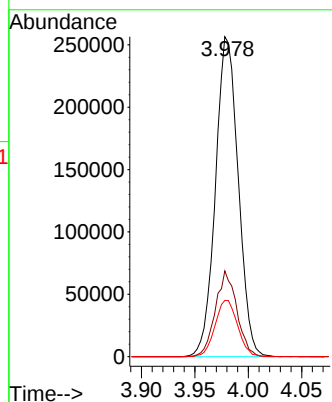
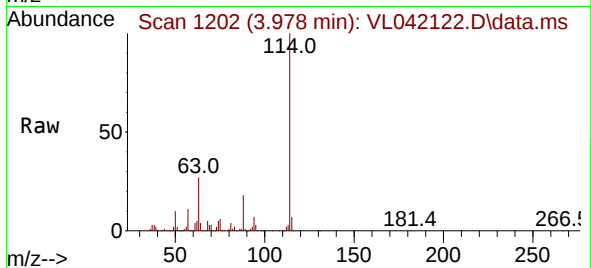
Tgt Ion:114 Resp: 380274

Ion Ratio Lower Upper

114 100

63 25.3 20.1 30.1

88 17.5 14.3 21.5



#34

2-Butanone

Concen: 0.678 ppbv

RT: 2.573 min Scan# 768

Delta R.T. 0.003 min

Lab File: VL042122.D

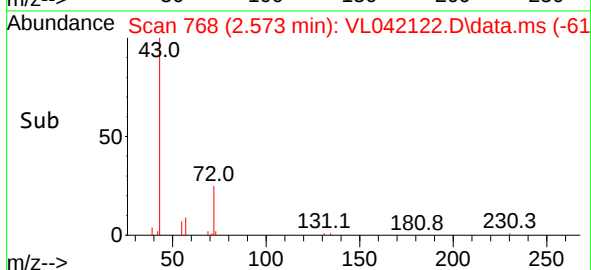
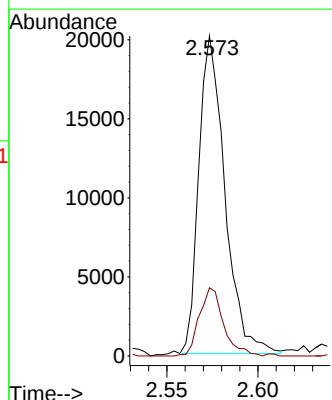
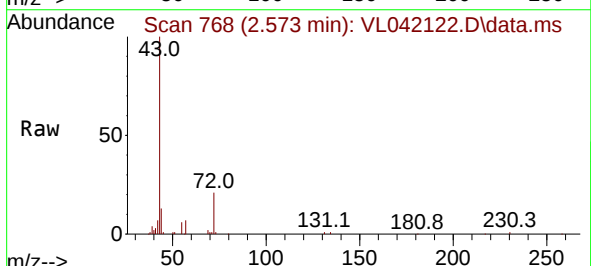
Acq: 10 Mar 2025 13:32

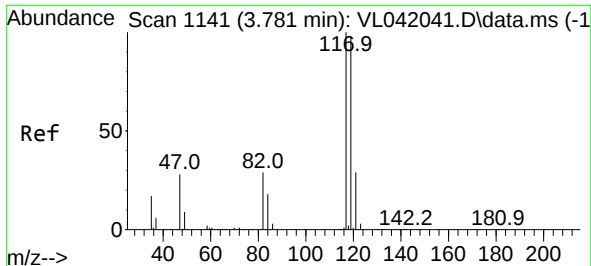
Tgt Ion: 43 Resp: 20082

Ion Ratio Lower Upper

43 100

72 20.1 18.5 27.7

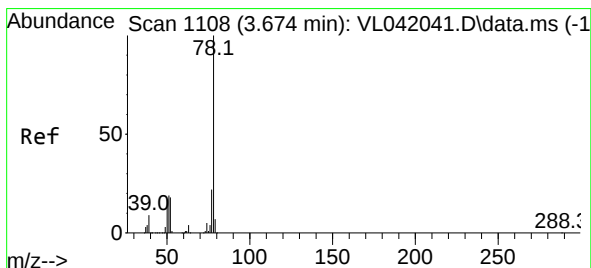
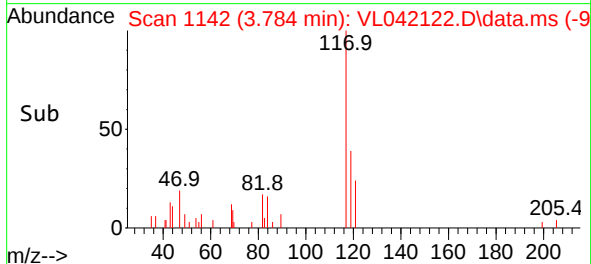
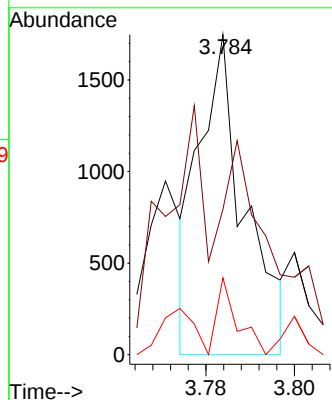
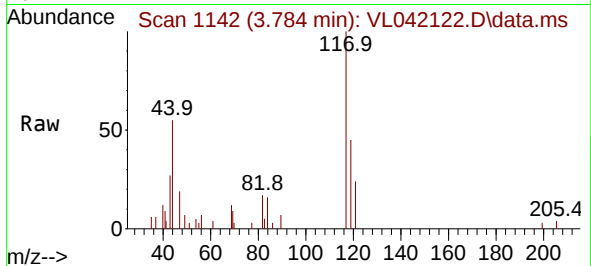




#35
Carbon Tetrachloride
Concen: 0.048 ppbv
RT: 3.784 min Scan# 1141
Delta R.T. 0.003 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

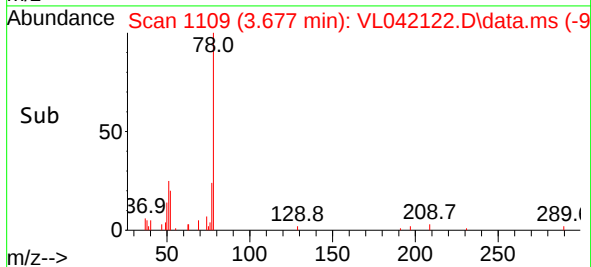
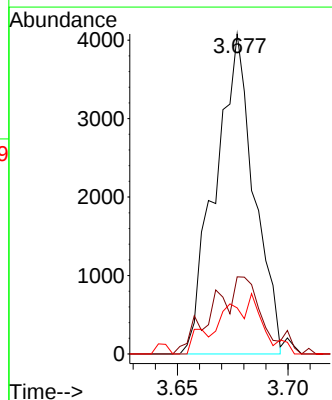
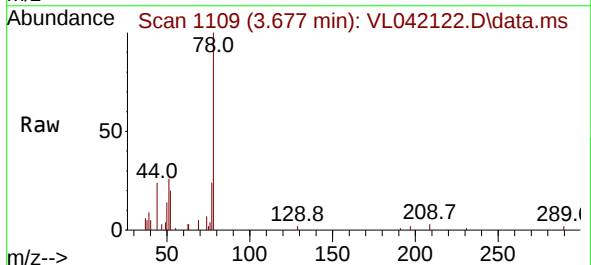
Instrument :
MSVOA_L
ClientSampleId :
1DUP

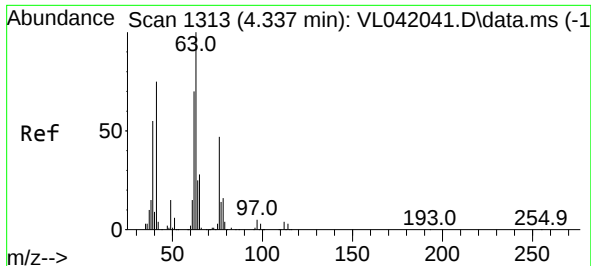
Tgt Ion: 117 Resp: 1254
Ion Ratio Lower Upper
117 100
119 26.7 77.8 116.8#
121 24.9 23.4 35.0



#36
Benzene
Concen: 0.125 ppbv
RT: 3.677 min Scan# 1109
Delta R.T. 0.003 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 78 Resp: 4996
Ion Ratio Lower Upper
78 100
77 21.7 17.7 26.5
50 14.4 13.9 20.9





#39

1,2-Dichloropropane

Concen: 6.351 ppbv

RT: 3.978 min Scan# 11

Delta R.T. -0.359 min

Lab File: VL042122.D

Acq: 10 Mar 2025 13:32

Instrument :

MSVOA_L

ClientSampleId :

1DUP

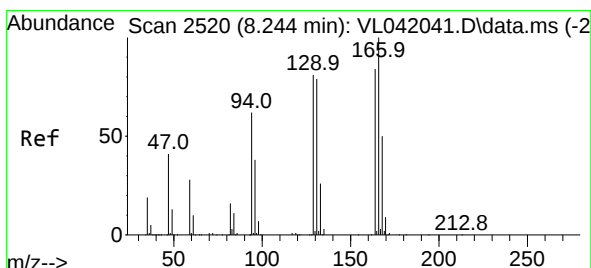
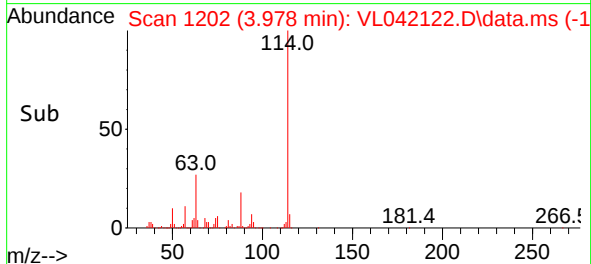
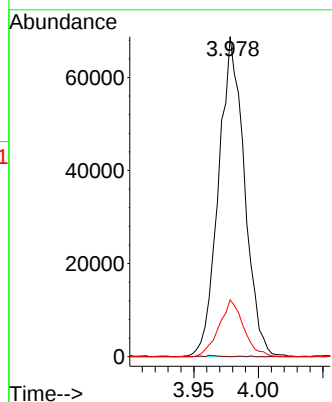
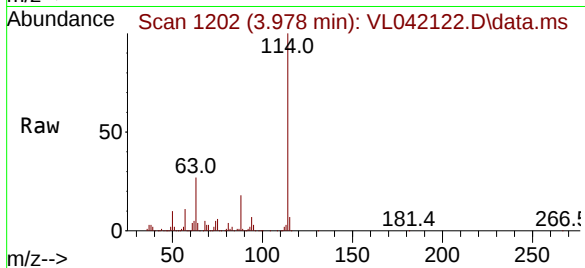
Tgt Ion: 63 Resp: 95966

Ion Ratio Lower Upper

63 100

41 0.0 60.1 90.1#

62 17.6 55.8 83.8#



#52

Tetrachloroethene

Concen: 0.081 ppbv

RT: 8.244 min Scan# 2520

Delta R.T. -0.000 min

Lab File: VL042122.D

Acq: 10 Mar 2025 13:32

Tgt Ion: 164 Resp: 1104

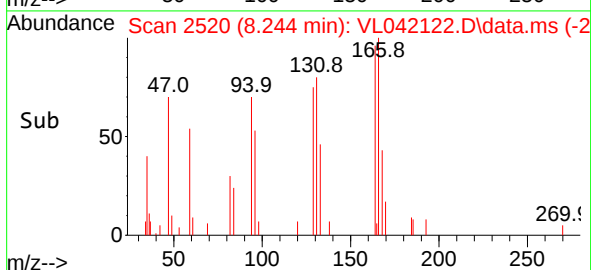
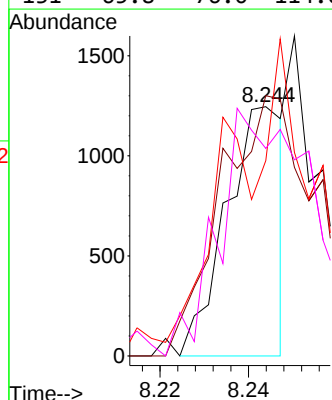
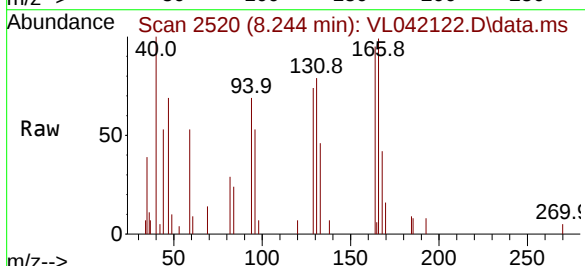
Ion Ratio Lower Upper

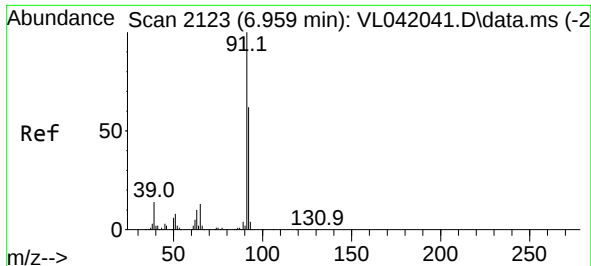
164 100

166 90.4 95.7 143.5#

129 62.2 77.1 115.7#

131 65.8 76.0 114.0#

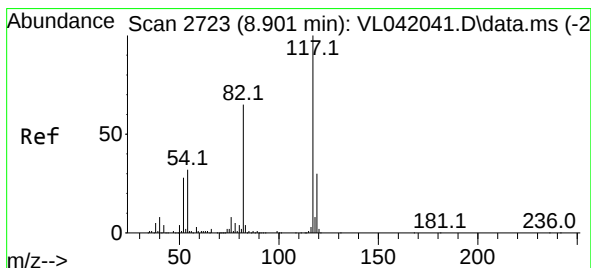
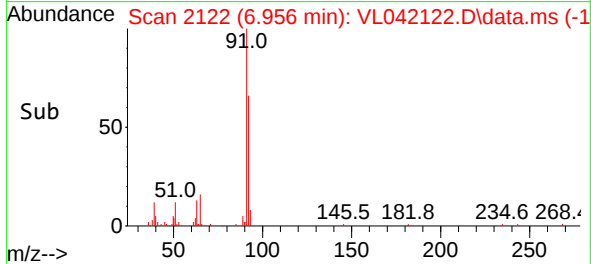
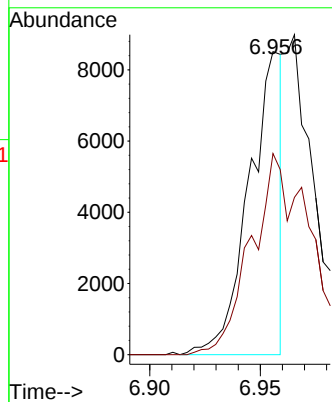
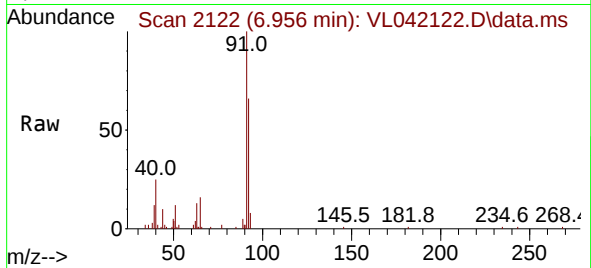




#53
Toluene
Concen: 0.198 ppbv
RT: 6.956 min Scan# 2123
Delta R.T. -0.003 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

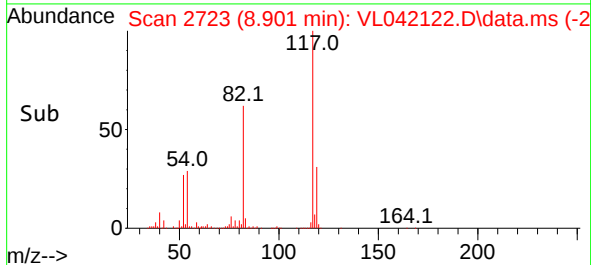
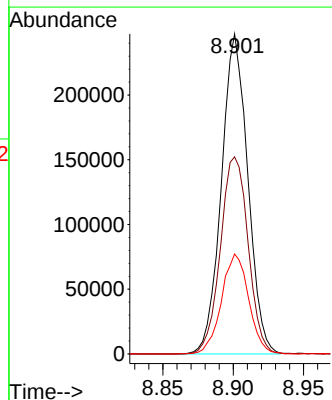
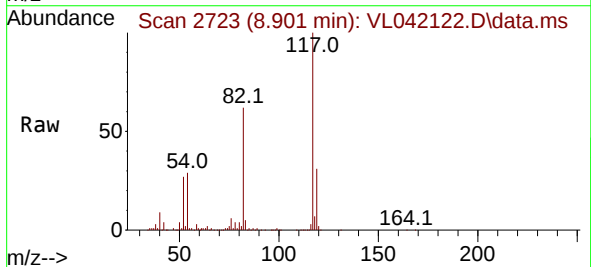
Instrument :
MSVOA_L
ClientSampleId :
1DUP

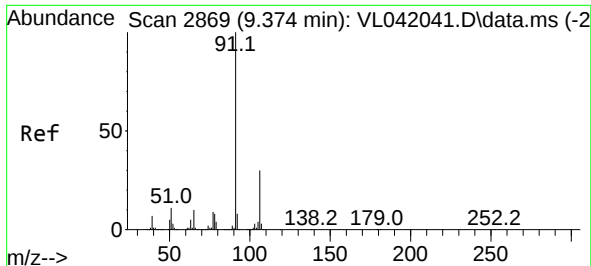
Tgt Ion: 91 Resp: 8789
Ion Ratio Lower Upper
91 100
92 117.9 49.0 73.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.901 min Scan# 2723
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 117 Resp: 322839
Ion Ratio Lower Upper
117 100
82 65.0 55.0 82.6
119 32.4 25.9 38.9

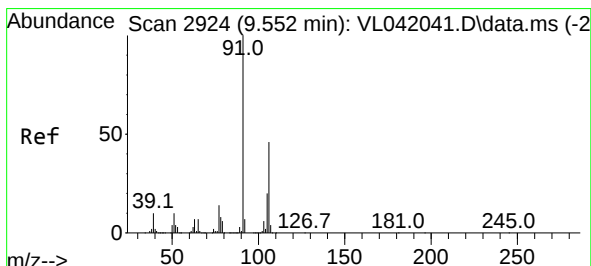
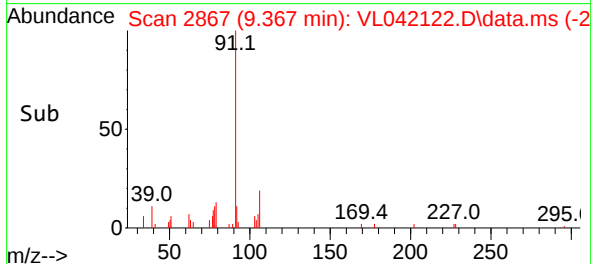
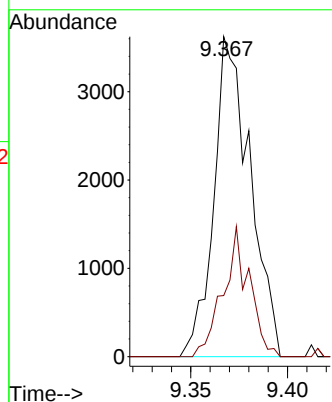
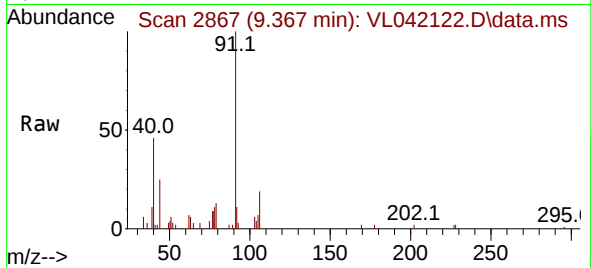




#58
Ethyl Benzene
Concen: 0.079 ppbv
RT: 9.367 min Scan# 2867
Delta R.T. -0.007 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

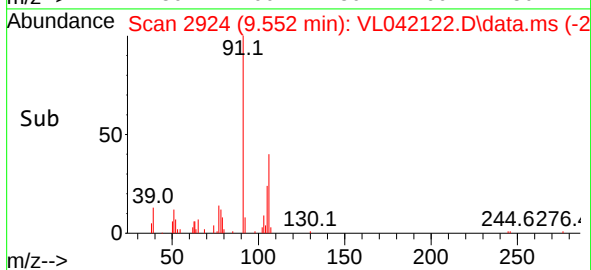
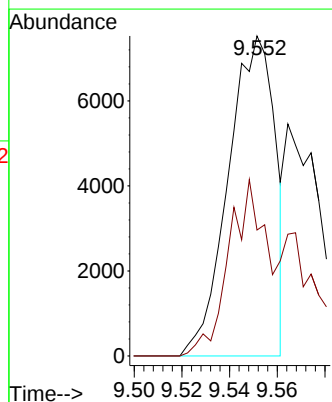
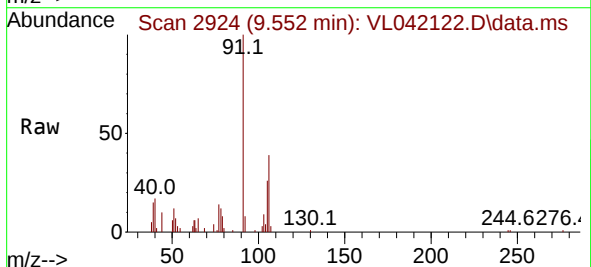
Instrument :
MSVOA_L
ClientSampleId :
1DUP

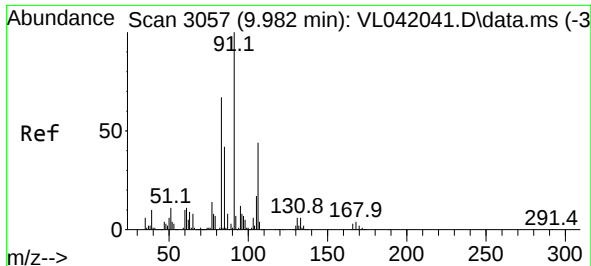
Tgt Ion: 91 Resp: 4720
Ion Ratio Lower Upper
91 100
106 17.2 24.2 36.2#



#59
m/p-Xylene
Concen: 0.217 ppbv
RT: 9.552 min Scan# 2924
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

Tgt Ion: 91 Resp: 10254
Ion Ratio Lower Upper
91 100
106 73.5 0.0 0.0#

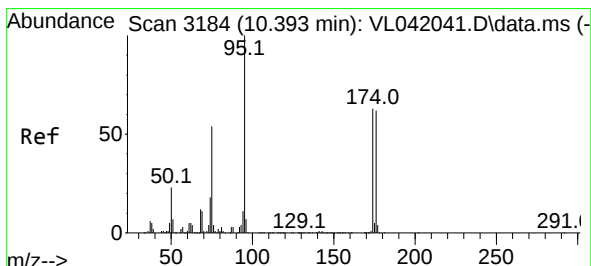
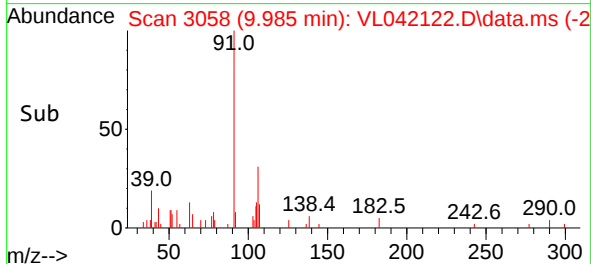
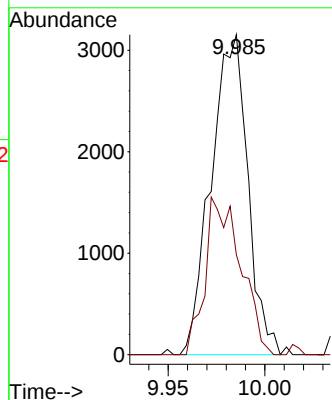
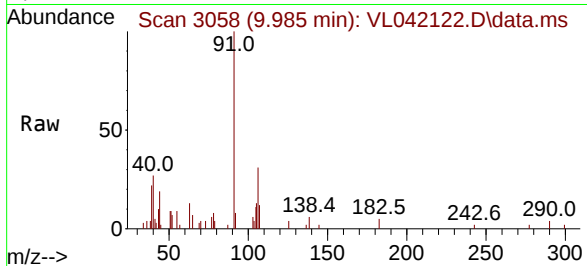




#60
o-Xylene
Concen: 0.087 ppbv
RT: 9.985 min Scan# 3057
Delta R.T. 0.003 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

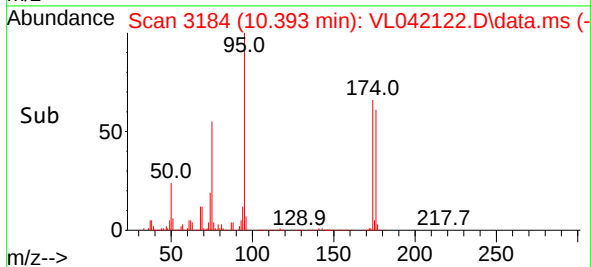
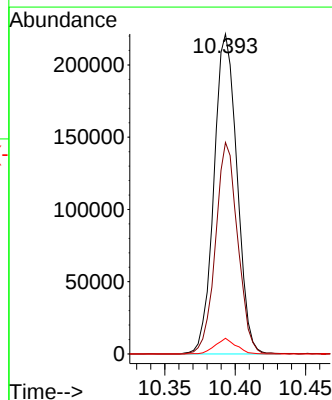
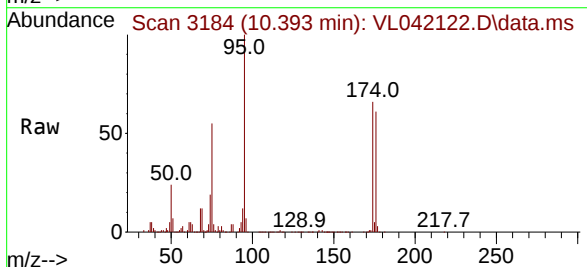
Instrument :
MSVOA_L
ClientSampleId :
1DUP

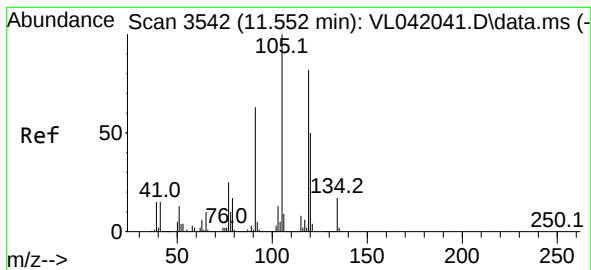
Tgt Ion: 91 Resp: 4159
Ion Ratio Lower Upper
91 100
106 48.5 22.3 66.8



#68
1-Bromo-4-Fluorobenzene
Concen: 10.146 ppbv
RT: 10.393 min Scan# 3184
Delta R.T. -0.000 min
Lab File: VL042122.D
Acq: 10 Mar 2025 13:32

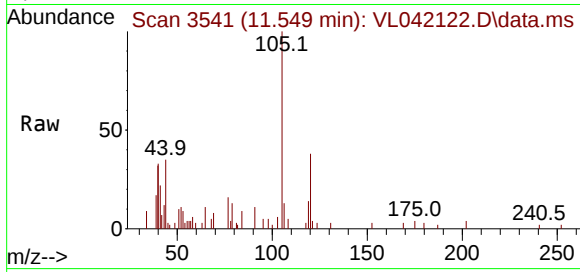
Tgt Ion: 95 Resp: 251994
Ion Ratio Lower Upper
95 100
174 64.1 51.8 77.6
175 4.5 3.9 5.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.048 ppbv
 RT: 11.549 min Scan# 31
 Delta R.T. -0.003 min
 Lab File: VL042122.D
 Acq: 10 Mar 2025 13:32

Instrument :
 MSVOA_L
 ClientSampleId :
 1DUP



Tgt Ion:	105	Resp:	2738
Ion	Ratio	Lower	Upper
105	100		
120	38.0	40.2	60.2#
91	10.8	51.4	77.2#
77	16.4	20.1	30.1#

