

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040725\
 Data File : VL042250.D
 Acq On : 08 Apr 2025 01:17
 Operator : SY/MD
 Sample : Q1725-08 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG-B10-2-03312025

Quant Time: Apr 08 04:48:43 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Mar 28 02:00:52 2025
 Response via : Initial Calibration

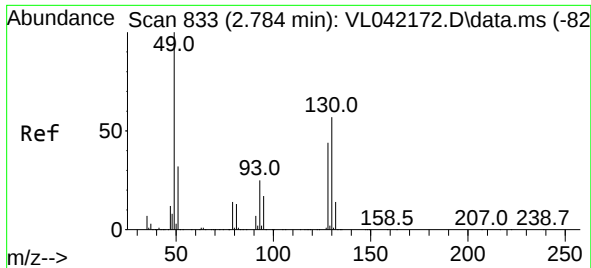
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.800	49	202914	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.981	114	515559	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.904	117	442488	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.396	95	355772	9.791	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.900%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.505	85	3378	0.113	ppbv #	85
4) Chloromethane	1.538	50	1373	0.112	ppbv	93
9) Propene	1.894	41	183663	13.092	ppbv	87
10) Heptane	5.001	43	1340	0.036	ppbv #	28
11) Trichlorofluoromethane	1.887	101	1578	0.054	ppbv	84
13) Ethanol	1.729	45	1061779	800.643	ppbv	86
15) Acetone	1.842	43	997970	35.166	ppbv	98
16) 1,3-Butadiene	1.606	39	2813	0.203	ppbv #	37
17) tert-Butyl alcohol	1.894	59	73586	2.082	ppbv	95
19) Isopropyl Alcohol	1.894	45	1615569	100.898	ppbv #	32
20) Methylene Chloride	2.072	84	2531	0.239	ppbv	97
21) Allyl Chloride	2.052	41	3603	0.180	ppbv #	22
23) Vinyl Acetate	2.467	43	8006	0.652	ppbv #	84
25) Ethyl Acetate	2.855	43	14171	0.192	ppbv #	91
26) Hexane	2.842	57	3600	0.127	ppbv #	35
28) Methyl tert-Butyl Ether	2.573	73	1970	0.111	ppbv #	1
29) Chloroform	2.861	83	15997	0.384	ppbv	90
34) 2-Butanone	2.570	43	204814	5.479	ppbv	98
36) Benzene	3.680	78	2795	0.055	ppbv	94
39) 1,2-Dichloropropane	3.981	63	131688	7.075	ppbv #	22
41) Tetrahydrofuran	3.085	42	1288	0.060	ppbv #	54
52) Tetrachloroethene	8.247	164	15893	0.784	ppbv	96
53) Toluene	6.965	91	10220	0.169	ppbv #	20
58) Ethyl Benzene	9.380	91	3497	0.044	ppbv	99
59) m/p-Xylene	9.555	91	29838	0.475	ppbv	95
60) o-Xylene	9.979	91	13109	0.208	ppbv	98
66) Benzyl Chloride	11.749	91	580	0.063	ppbv #	94
72) 4-Ethyltoluene	11.141	105	3131	0.040	ppbv #	60
73) 1,3,5-Trimethylbenzene	11.222	105	3445	0.050	ppbv	90
74) 1,2,4-Trimethylbenzene	11.552	105	13306	0.169	ppbv #	67

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

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QLast Update : Fri Mar 28 02:00:52 2025
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 2.800 min Scan# 81

Delta R.T. 0.016 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B10-2-03312025

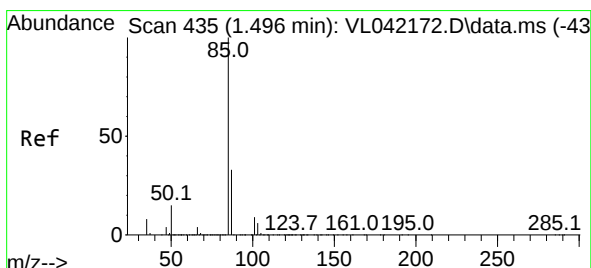
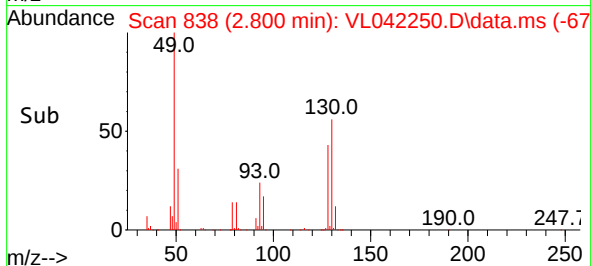
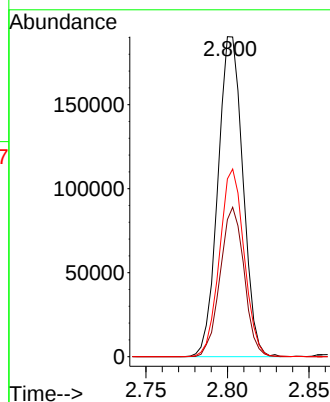
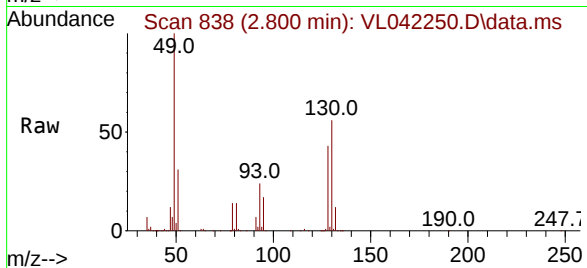
Tgt Ion: 49 Resp: 202914

Ion Ratio Lower Upper

49 100

128 44.7 22.9 68.5

130 57.7 28.8 86.4



#2

Dichlorodifluoromethane

Concen: 0.113 ppbv

RT: 1.505 min Scan# 438

Delta R.T. 0.010 min

Lab File: VL042250.D

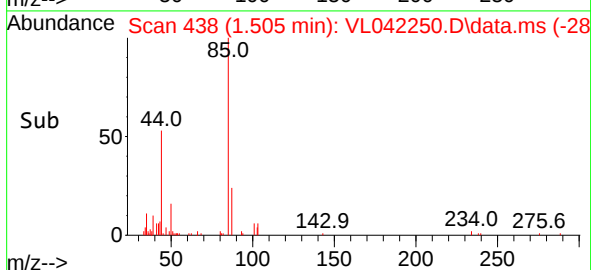
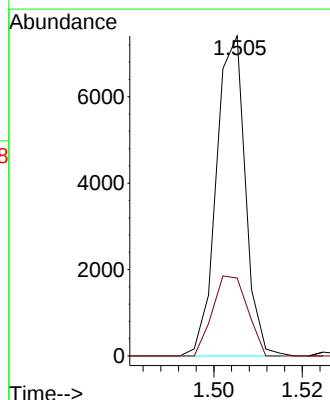
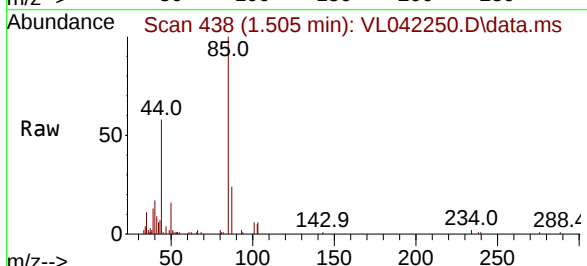
Acq: 08 Apr 2025 01:17

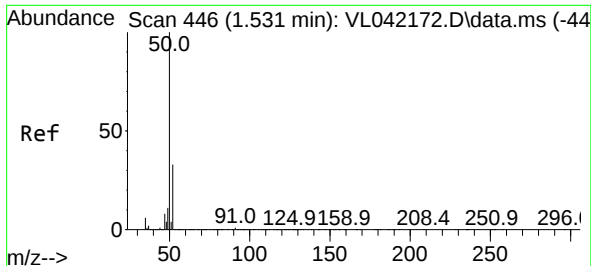
Tgt Ion: 85 Resp: 3378

Ion Ratio Lower Upper

85 100

87 24.4 26.1 39.1#

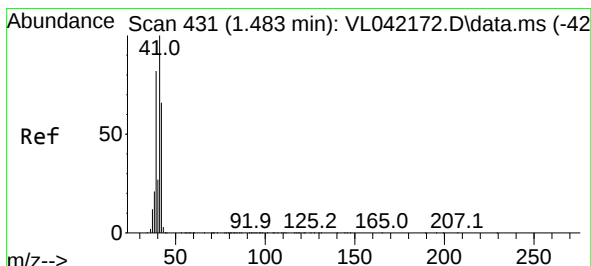
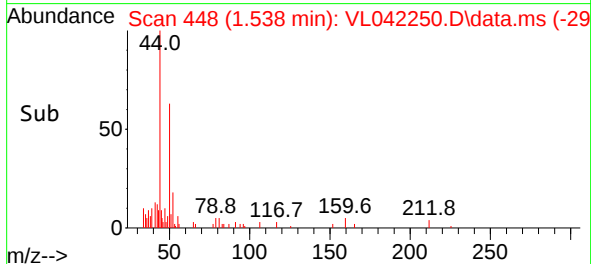
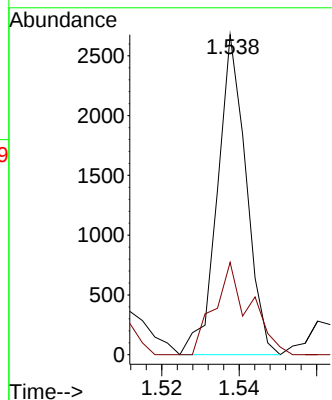
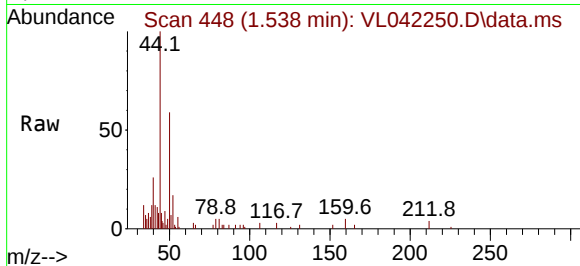




#4
Chloromethane
Concen: 0.112 ppbv
RT: 1.538 min Scan# 446
Delta R.T. 0.006 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

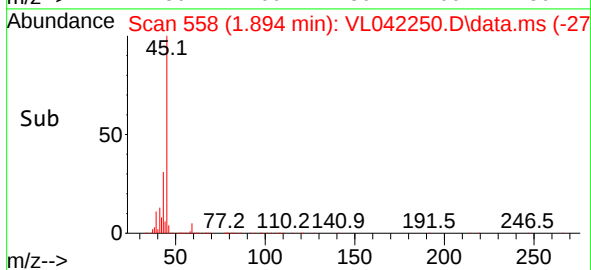
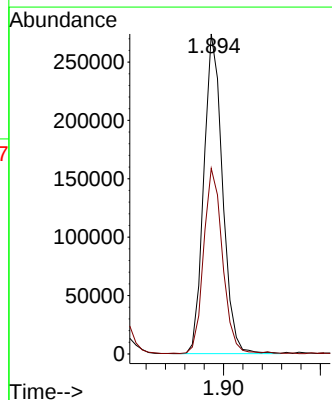
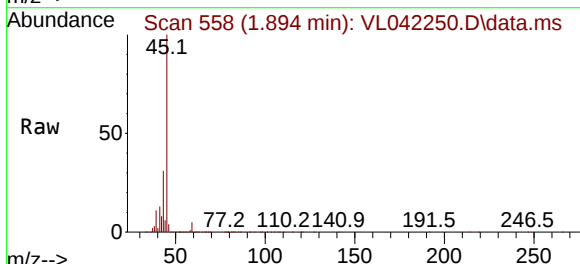
Instrument :
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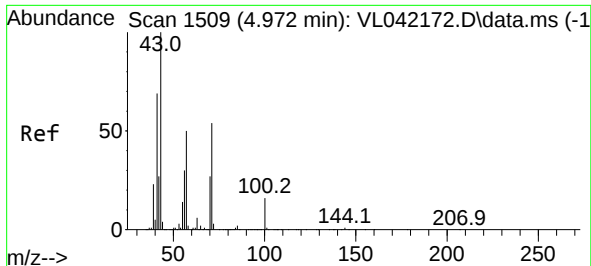
Tgt Ion: 50 Resp: 1373
Ion Ratio Lower Upper
50 100
52 28.8 26.1 39.1



#9
Propene
Concen: 13.092 ppbv
RT: 1.894 min Scan# 558
Delta R.T. 0.411 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 41 Resp: 183663
Ion Ratio Lower Upper
41 100
42 58.7 55.4 83.2

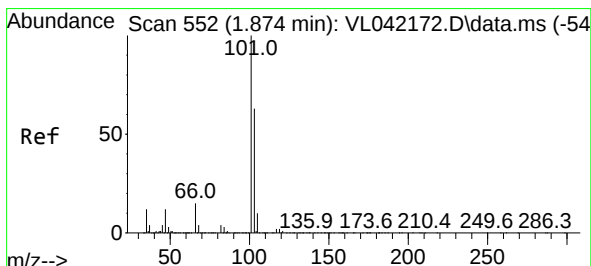
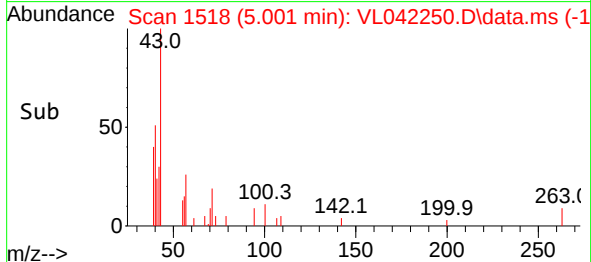
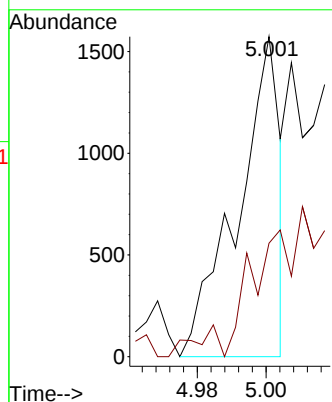
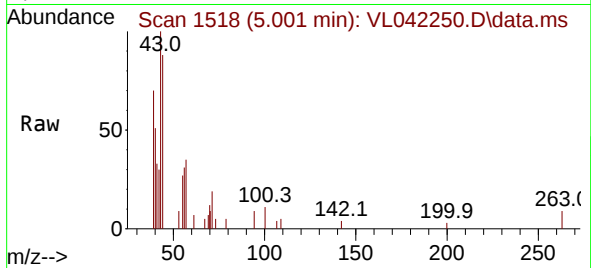




#10
Heptane
Concen: 0.036 ppbv
RT: 5.001 min Scan# 11
Delta R.T. 0.029 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

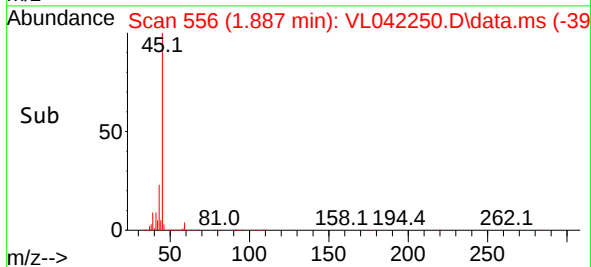
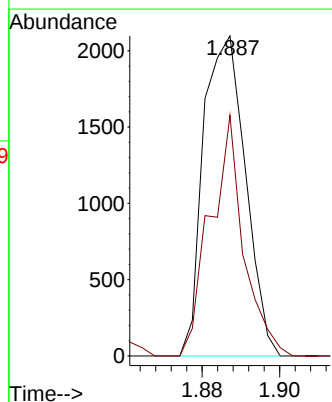
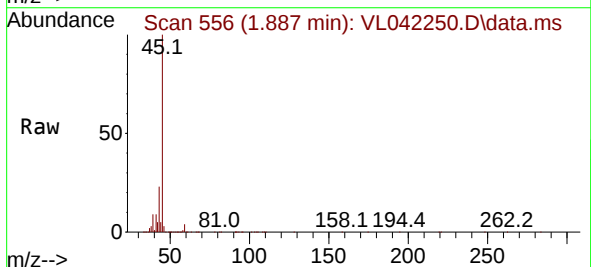
Instrument :
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ClientSampleId :
SSSG-B10-2-03312025

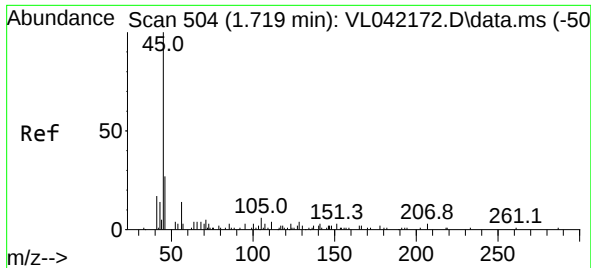
Tgt Ion: 43 Resp: 1340
Ion Ratio Lower Upper
43 100
57 0.0 39.4 59.2#



#11
Trichlorofluoromethane
Concen: 0.054 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.013 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 101 Resp: 1578
Ion Ratio Lower Upper
101 100
103 75.2 50.2 75.2

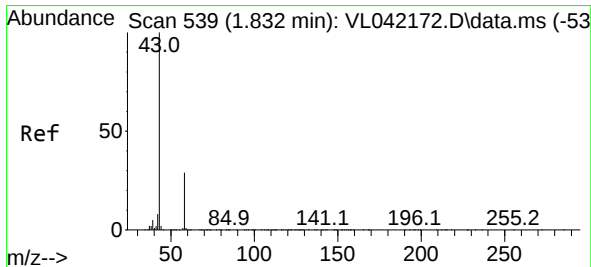
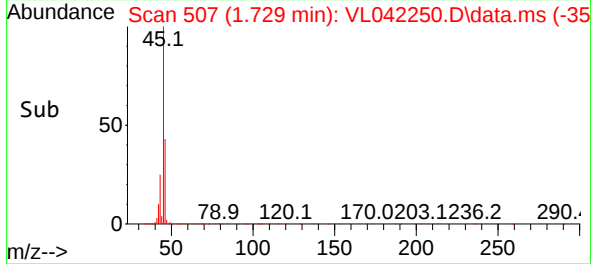
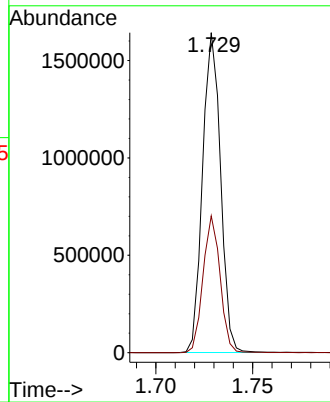
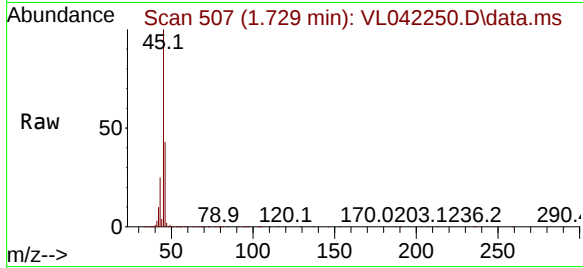




#13
Ethanol
Concen: 800.643 ppbv
RT: 1.729 min Scan# 504
Delta R.T. 0.009 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

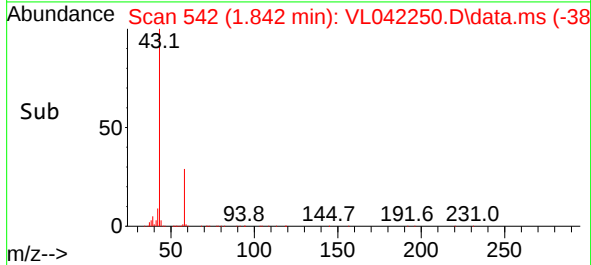
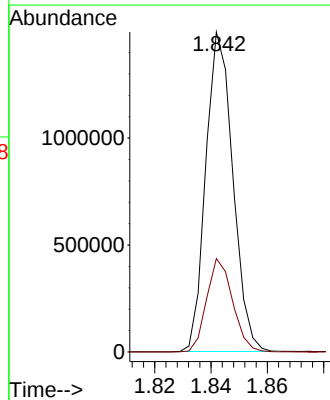
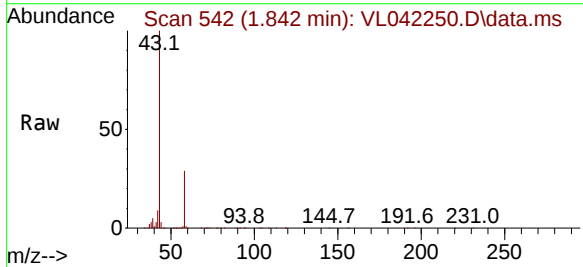
Instrument :
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ClientSampleId :
SSSG-B10-2-03312025

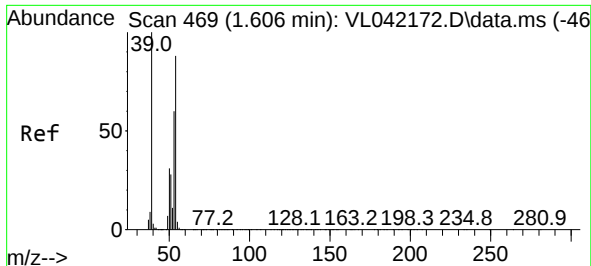
Tgt Ion: 45 Resp: 1061779
Ion Ratio Lower Upper
45 100
46 40.7 20.2 80.8



#15
Acetone
Concen: 35.166 ppbv
RT: 1.842 min Scan# 542
Delta R.T. 0.010 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 43 Resp: 997970
Ion Ratio Lower Upper
43 100
58 28.1 23.2 34.8

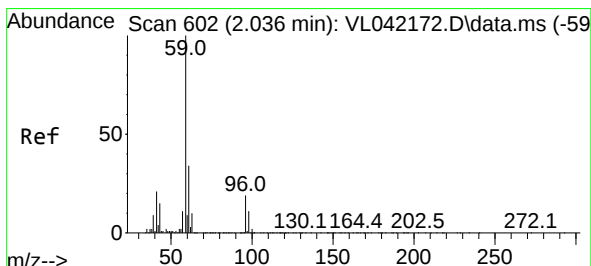
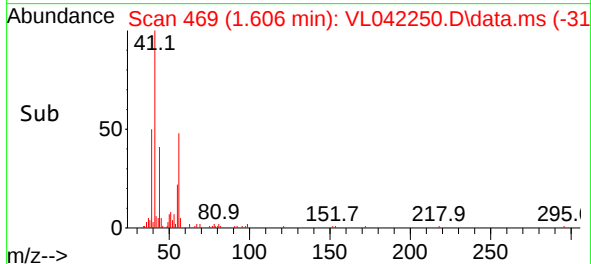
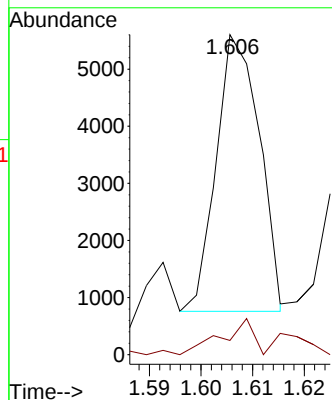
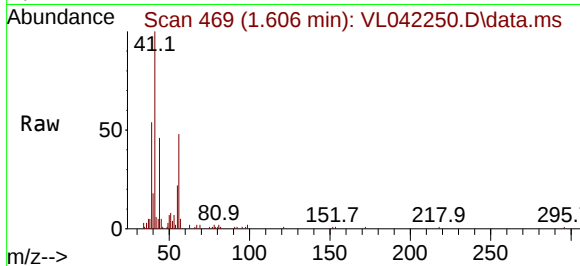




#16
1,3-Butadiene
Concen: 0.203 ppbv
RT: 1.606 min Scan# 413
Delta R.T. -0.000 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

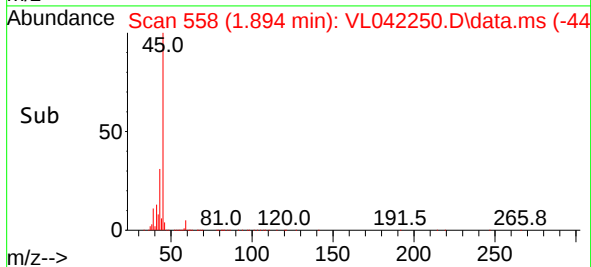
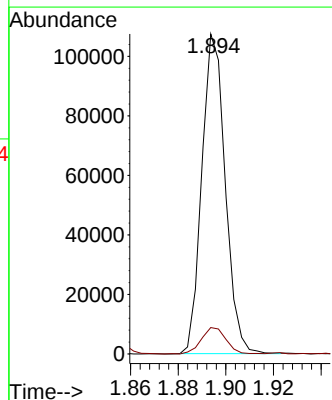
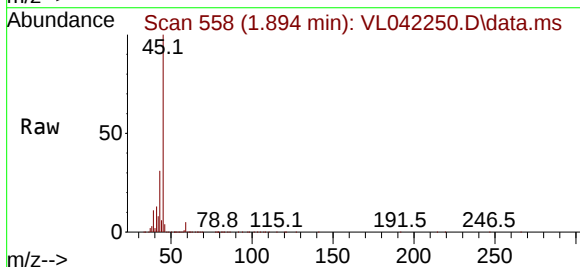
Instrument :
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ClientSampleId :
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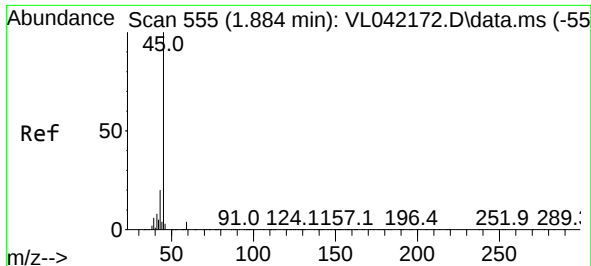
Tgt Ion: 39 Resp: 2813
Ion Ratio Lower Upper
39 100
54 21.9 60.7 91.1#



#17
tert-Butyl alcohol
Concen: 2.082 ppbv
RT: 1.894 min Scan# 558
Delta R.T. -0.143 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 59 Resp: 73586
Ion Ratio Lower Upper
59 100
57 9.2 8.9 13.3

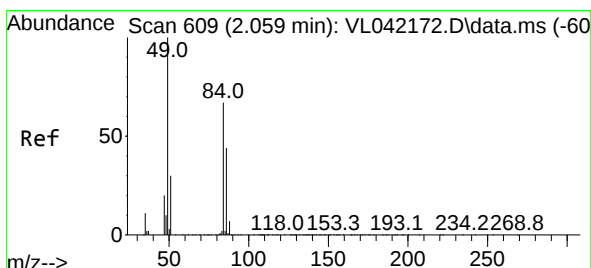
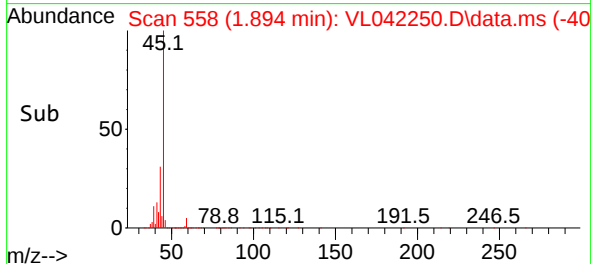
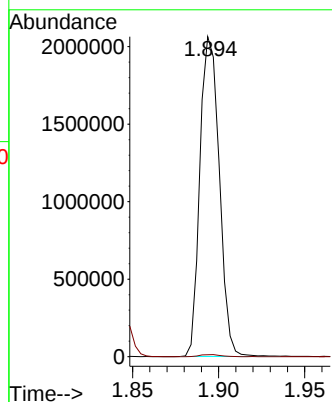
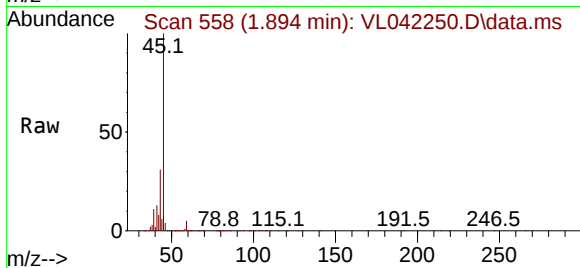




#19
Isopropyl Alcohol
Concen: 100.898 ppbv
RT: 1.894 min Scan# 51
Delta R.T. 0.009 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

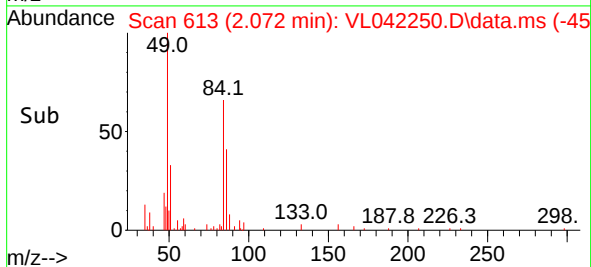
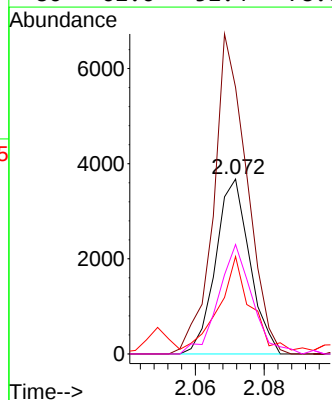
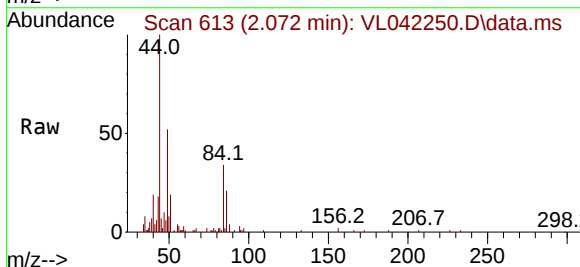
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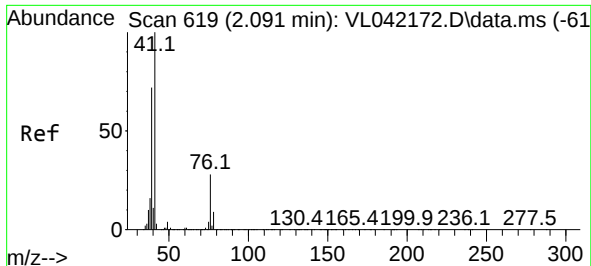
Tgt Ion: 45 Resp: 1615569
Ion Ratio Lower Upper
45 100
58 0.8 36.9 55.3#



#20
Methylene Chloride
Concen: 0.239 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.013 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 84 Resp: 2531
Ion Ratio Lower Upper
84 100
49 149.9 120.2 180.4
51 53.1 37.4 56.0
86 62.6 52.4 78.6

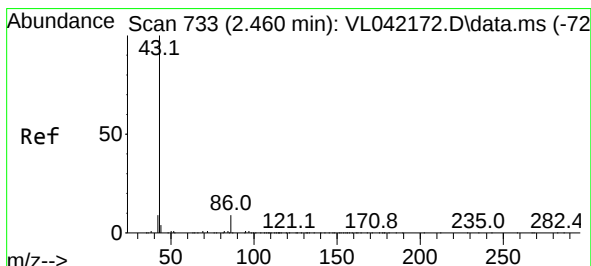
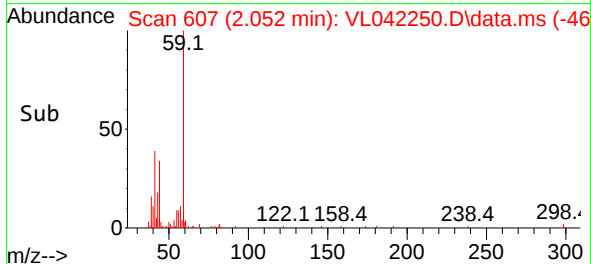
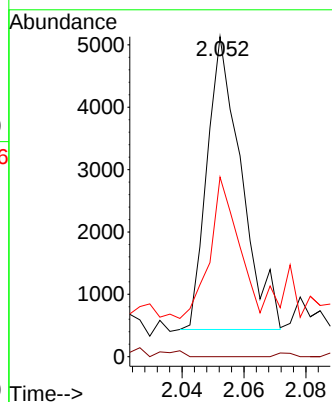
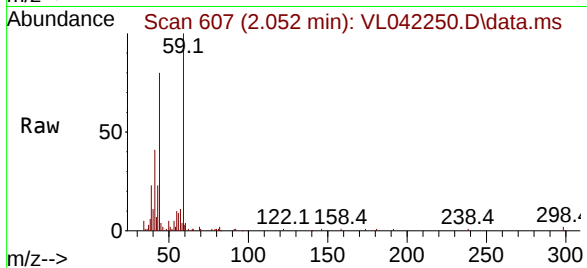




#21
 Allyl Chloride
 Concen: 0.180 ppbv
 RT: 2.052 min Scan# 607
 Delta R.T. -0.039 min
 Lab File: VL042250.D
 Acq: 08 Apr 2025 01:17

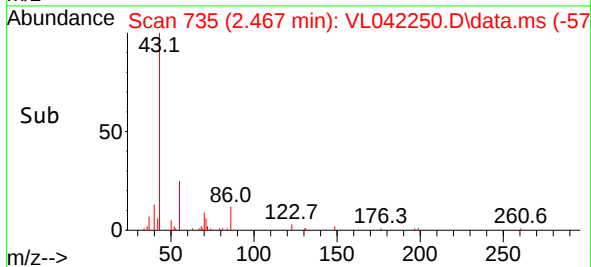
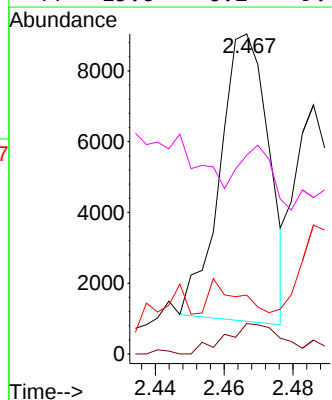
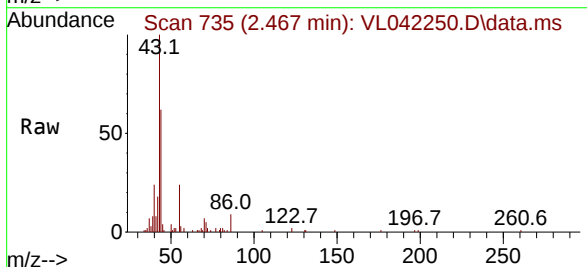
Instrument :
 MSVOA_1
 ClientSampleId :
 SSSG-B10-2-03312025

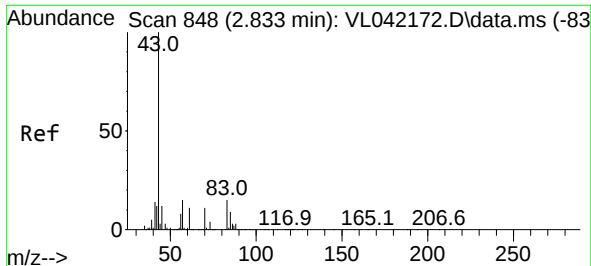
Tgt Ion: 41 Resp: 3603
 Ion Ratio Lower Upper
 41 100
 76 2.9 24.1 36.1#
 39 0.0 61.1 91.7#



#23
 Vinyl Acetate
 Concen: 0.652 ppbv
 RT: 2.467 min Scan# 735
 Delta R.T. 0.006 min
 Lab File: VL042250.D
 Acq: 08 Apr 2025 01:17

Tgt Ion: 43 Resp: 8006
 Ion Ratio Lower Upper
 43 100
 86 10.8 5.5 8.3#
 42 5.0 8.6 13.0#
 44 15.6 6.2 9.4#





#25

Ethyl Acetate

Concen: 0.192 ppbv

RT: 2.855 min Scan# 81

Delta R.T. 0.022 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B10-2-03312025

Tgt Ion: 43 Resp: 14171

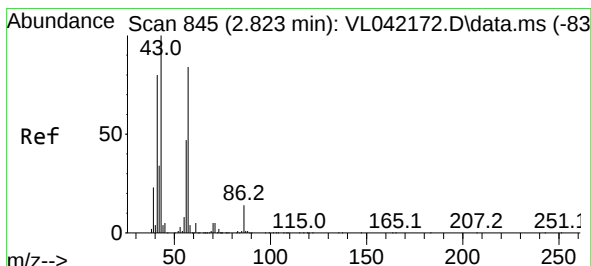
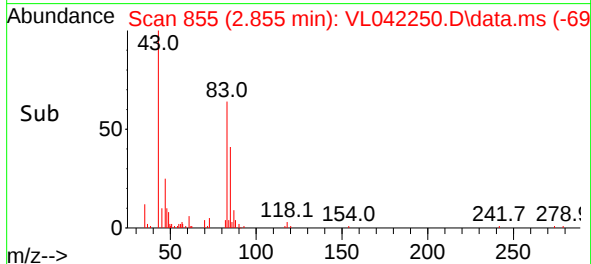
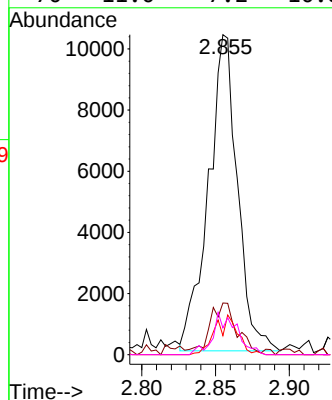
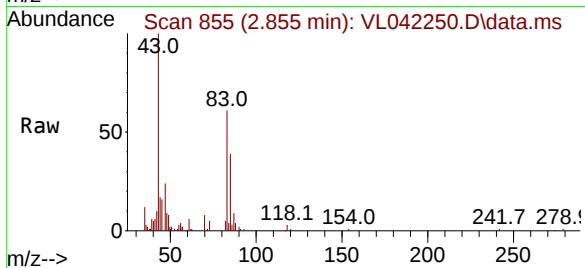
Ion Ratio Lower Upper

43 100

45 17.5 8.2 12.2#

61 9.9 7.3 10.9

70 11.0 7.2 10.8#



#26

Hexane

Concen: 0.127 ppbv

RT: 2.842 min Scan# 851

Delta R.T. 0.019 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Tgt Ion: 57 Resp: 3600

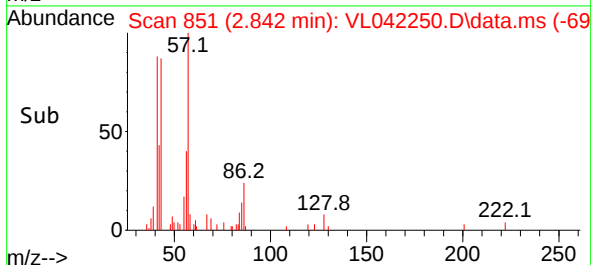
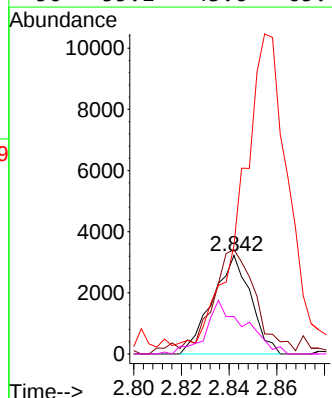
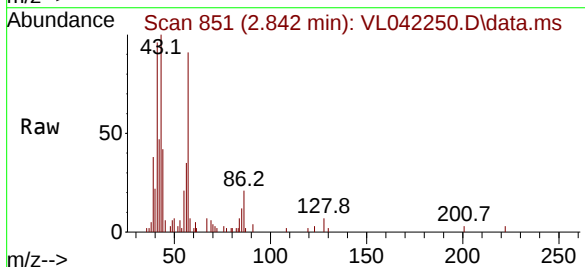
Ion Ratio Lower Upper

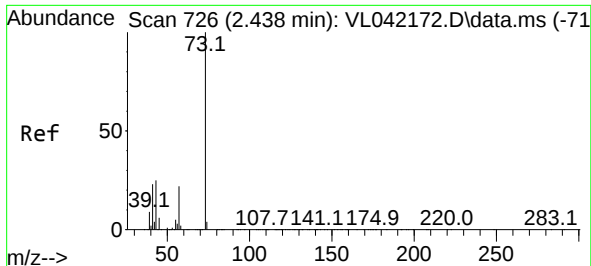
57 100

41 134.7 76.6 114.8#

43 415.9 207.8 311.8#

56 55.1 43.6 65.4

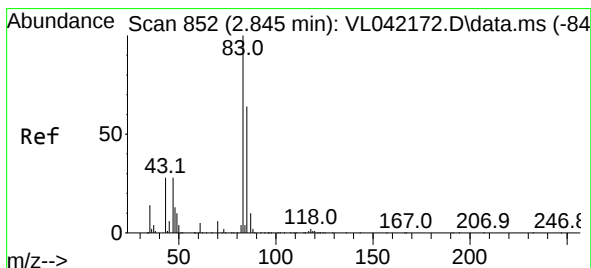
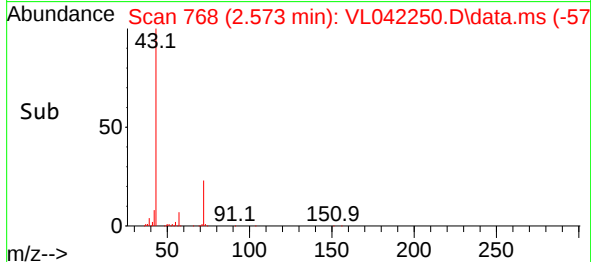
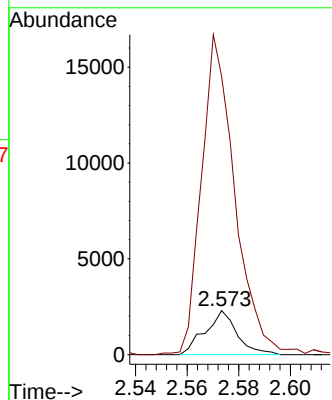
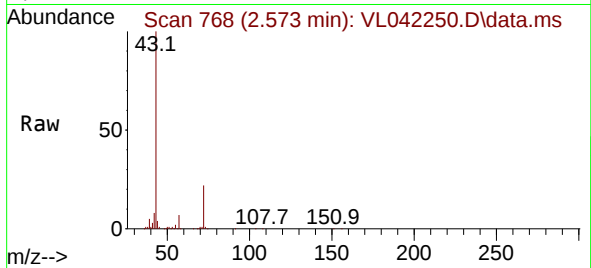




#28
Methyl tert-Butyl Ether
Concen: 0.111 ppbv
RT: 2.573 min Scan# 71
Delta R.T. 0.136 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

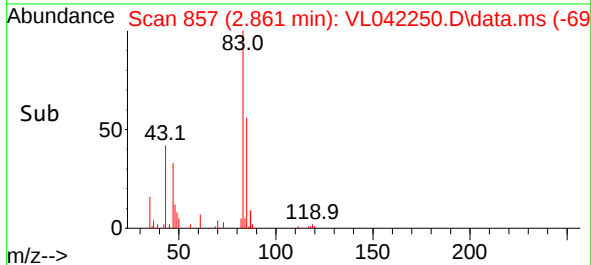
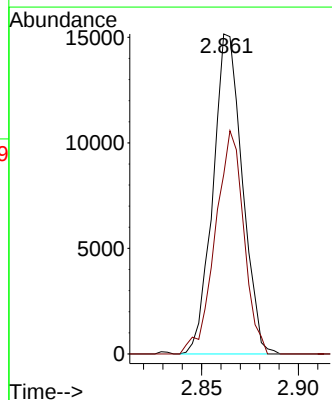
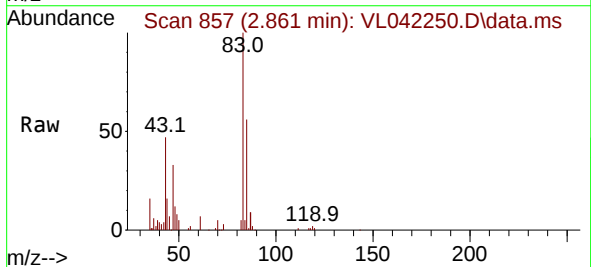
Instrument :
MSVOA_1
ClientSampleId :
SSSG-B10-2-03312025

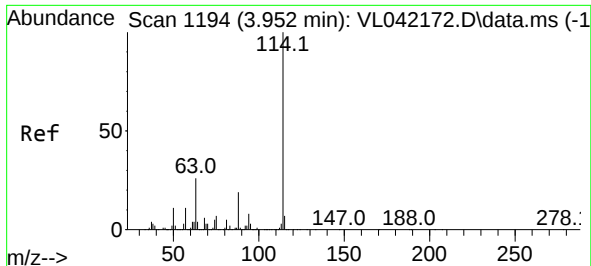
Tgt Ion: 73 Resp: 1970
Ion Ratio Lower Upper
73 100
57 763.5 20.5 30.7#



#29
Chloroform
Concen: 0.384 ppbv
RT: 2.861 min Scan# 857
Delta R.T. 0.016 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 83 Resp: 15997
Ion Ratio Lower Upper
83 100
85 56.1 51.4 77.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.981 min Scan# 1194

Delta R.T. 0.029 min

Lab File: VL042250.D

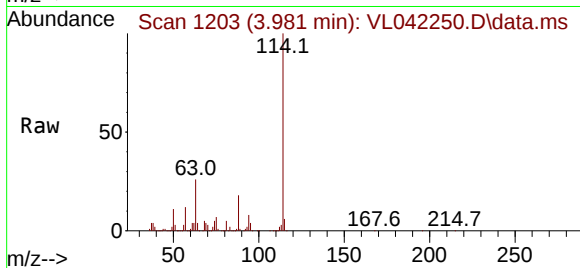
Acq: 08 Apr 2025 01:17

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B10-2-03312025



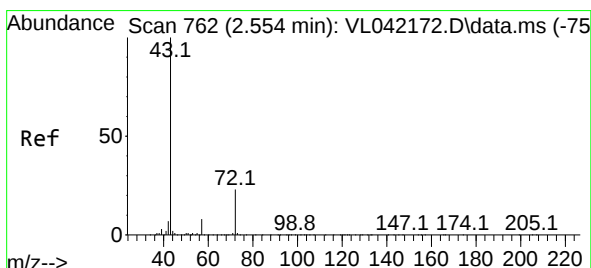
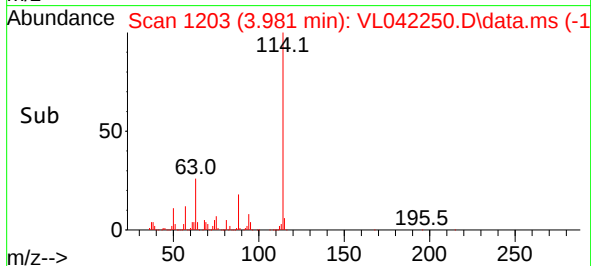
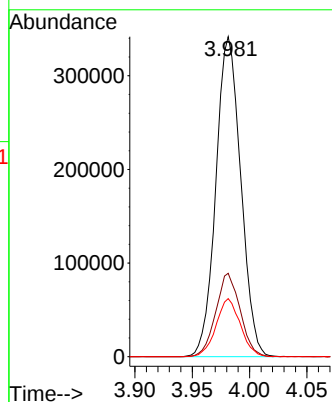
Tgt Ion:114 Resp: 515559

Ion Ratio Lower Upper

114 100

63 25.6 20.7 31.1

88 17.7 15.0 22.4



#34

2-Butanone

Concen: 5.479 ppbv

RT: 2.570 min Scan# 767

Delta R.T. 0.016 min

Lab File: VL042250.D

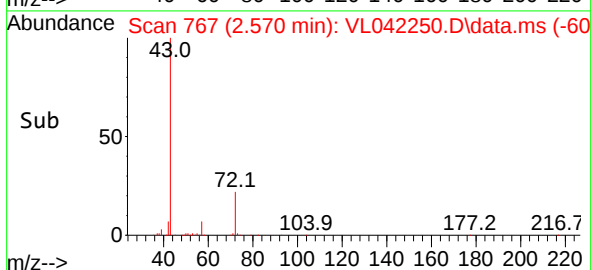
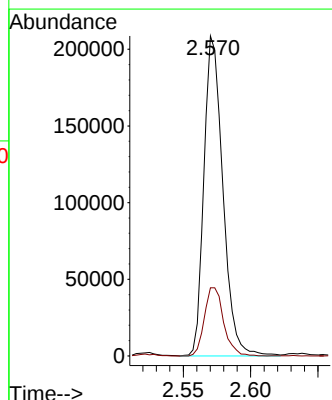
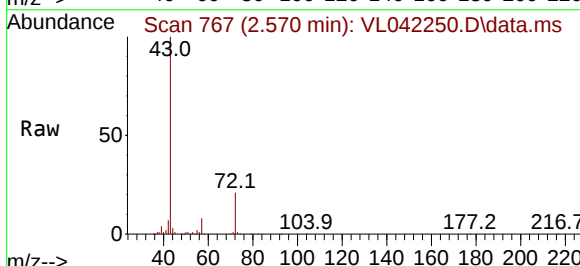
Acq: 08 Apr 2025 01:17

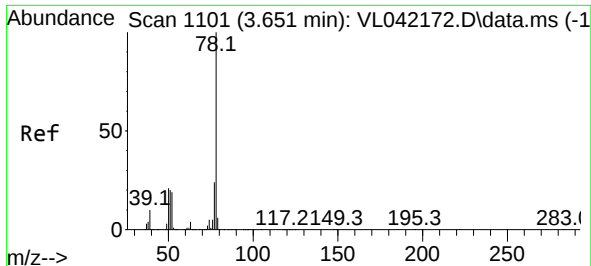
Tgt Ion: 43 Resp: 204814

Ion Ratio Lower Upper

43 100

72 21.6 18.2 27.2

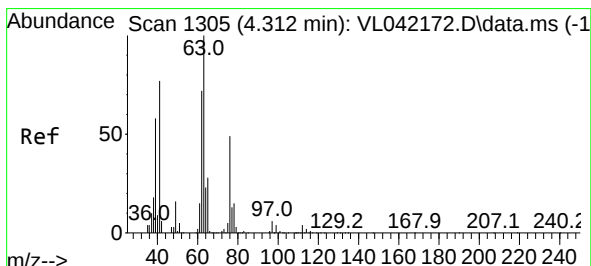
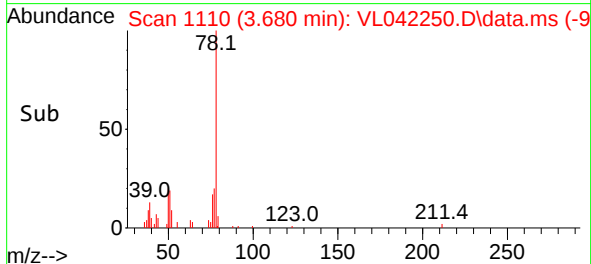
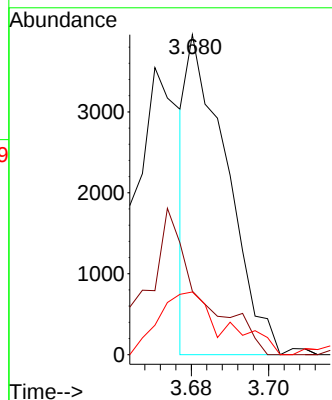
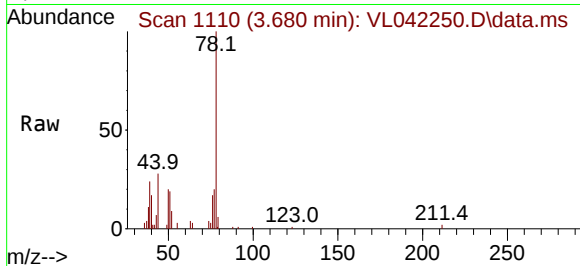




#36
Benzene
Concen: 0.055 ppbv
RT: 3.680 min Scan# 1101
Delta R.T. 0.029 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

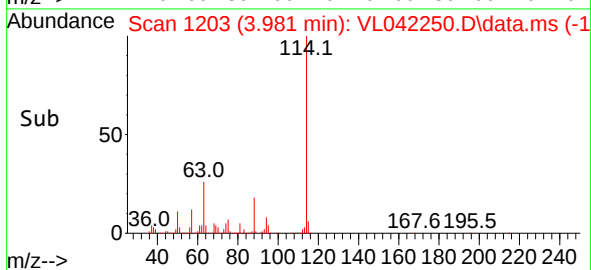
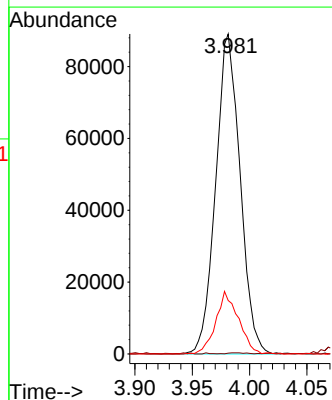
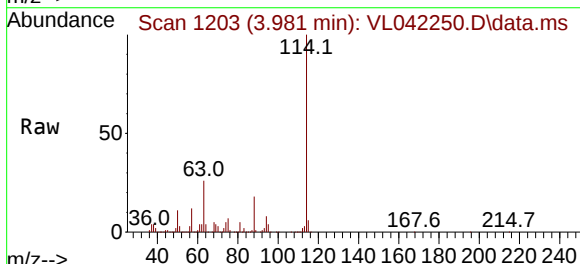
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B10-2-03312025

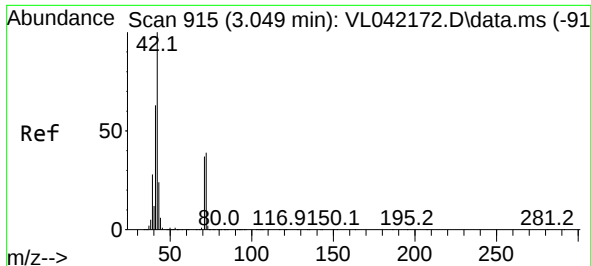
Tgt Ion: 78 Resp: 2795
Ion Ratio Lower Upper
78 100
77 19.9 19.1 28.7
50 19.6 16.6 24.8



#39
1,2-Dichloropropane
Concen: 7.075 ppbv
RT: 3.981 min Scan# 1203
Delta R.T. -0.330 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 63 Resp: 131688
Ion Ratio Lower Upper
63 100
41 0.1 61.7 92.5#
62 16.7 57.6 86.4#





#41

Tetrahydrofuran

Concen: 0.060 ppbv

RT: 3.085 min Scan# 915

Delta R.T. 0.035 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B10-2-03312025

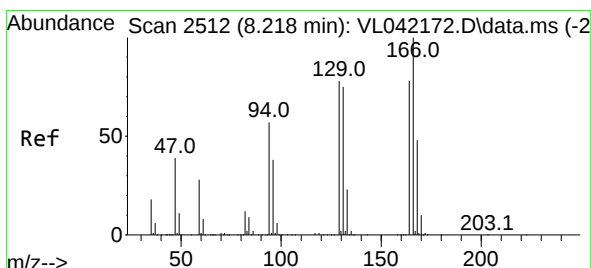
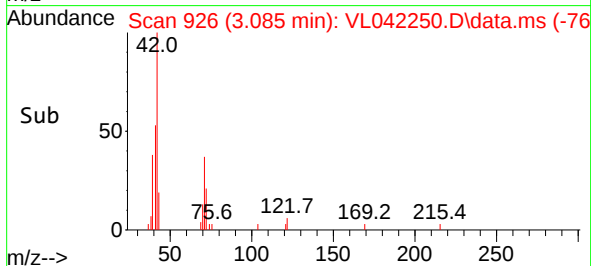
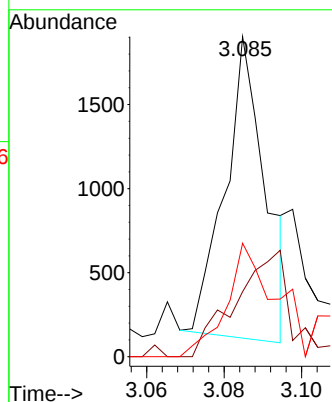
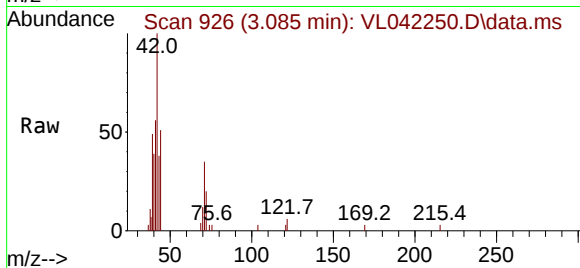
Tgt Ion: 42 Resp: 1288

Ion Ratio Lower Upper

42 100

72 0.0 31.4 47.0#

71 54.3 30.2 45.4#



#52

Tetrachloroethene

Concen: 0.784 ppbv

RT: 8.247 min Scan# 2521

Delta R.T. 0.029 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Tgt Ion:164 Resp: 15893

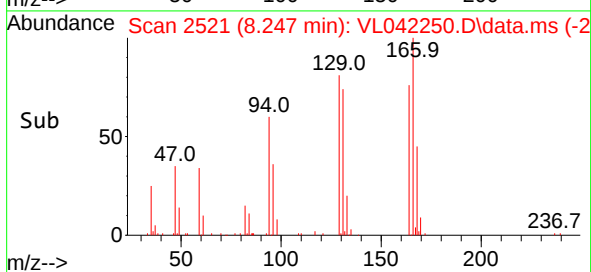
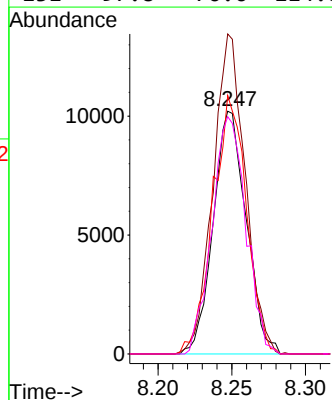
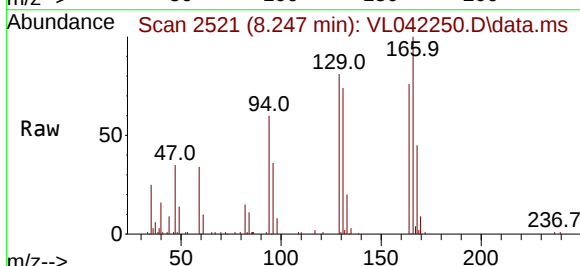
Ion Ratio Lower Upper

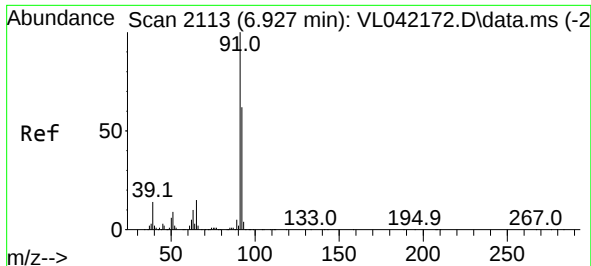
164 100

166 131.8 102.5 153.7

129 106.5 79.8 119.8

131 97.8 76.6 114.8





#53

Toluene

Concen: 0.169 ppbv

RT: 6.965 min Scan# 2113

Delta R.T. 0.039 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Instrument :

MSVOA_L

ClientSampleId :

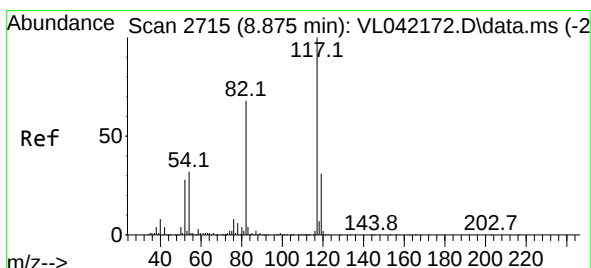
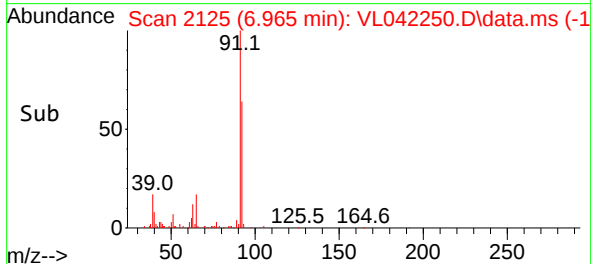
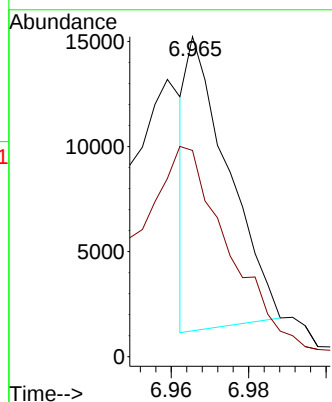
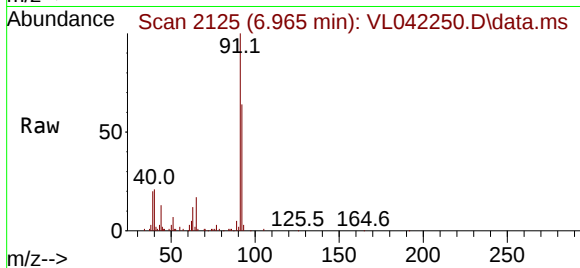
SSSG-B10-2-03312025

Tgt Ion: 91 Resp: 10220

Ion Ratio Lower Upper

91 100

92 0.0 48.4 72.6#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.904 min Scan# 2724

Delta R.T. 0.029 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

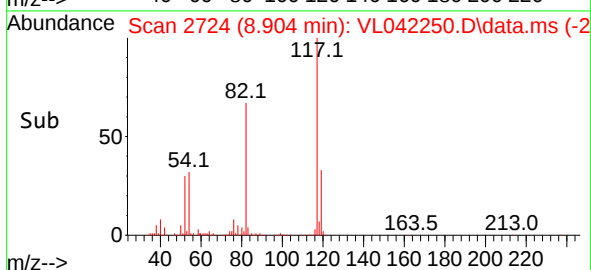
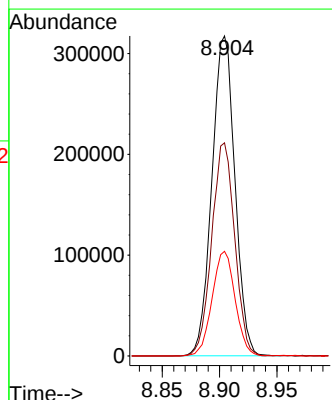
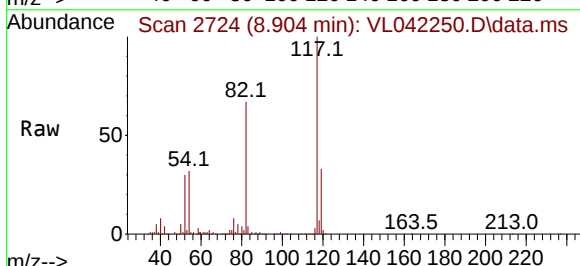
Tgt Ion: 117 Resp: 442488

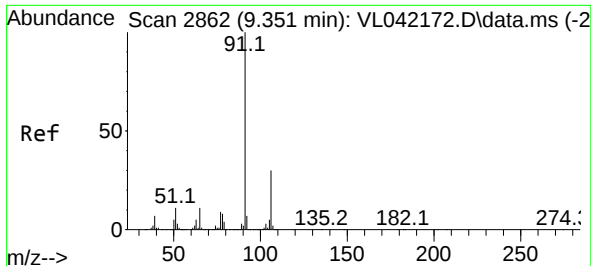
Ion Ratio Lower Upper

117 100

82 66.7 55.8 83.6

119 32.9 25.5 38.3

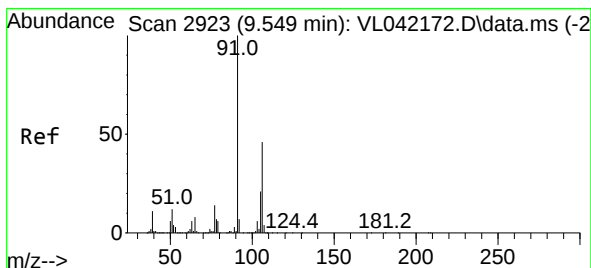
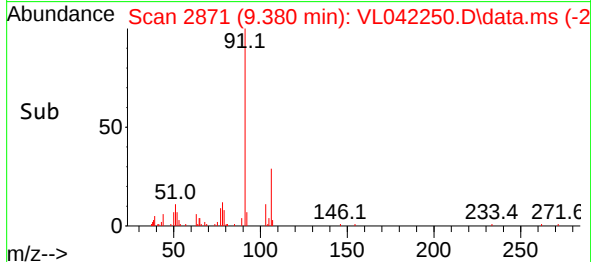
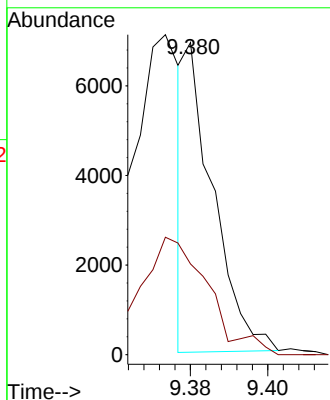
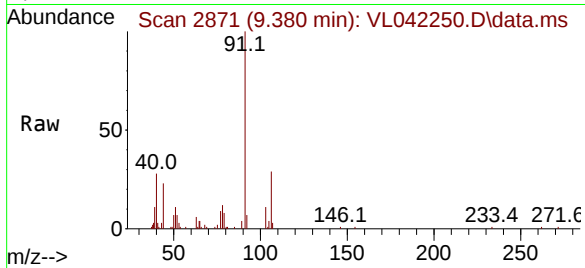




#58
Ethyl Benzene
Concen: 0.044 ppbv
RT: 9.380 min Scan# 2871
Delta R.T. 0.029 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

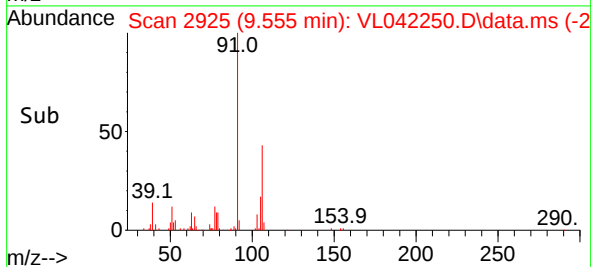
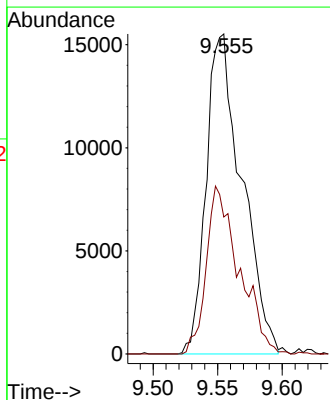
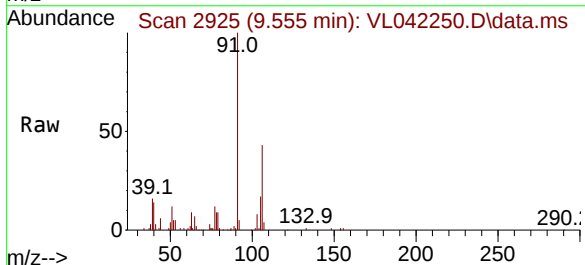
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B10-2-03312025

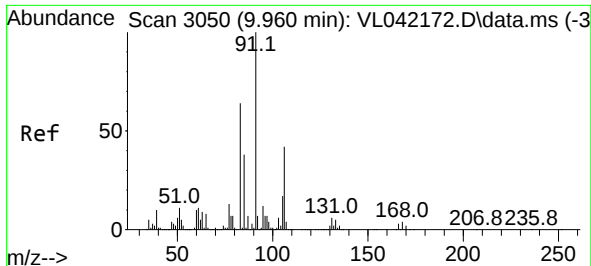
Tgt Ion: 91 Resp: 3497
Ion Ratio Lower Upper
91 100
106 29.5 24.2 36.2



#59
m/p-Xylene
Concen: 0.475 ppbv
RT: 9.555 min Scan# 2925
Delta R.T. 0.006 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 91 Resp: 29838
Ion Ratio Lower Upper
91 100
106 48.5 36.4 54.6

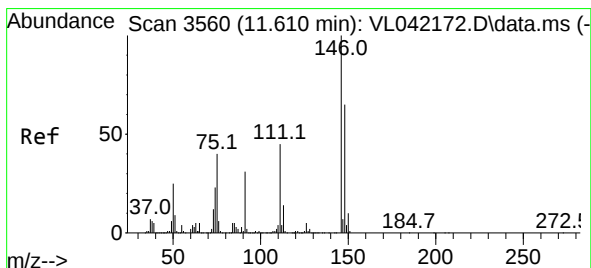
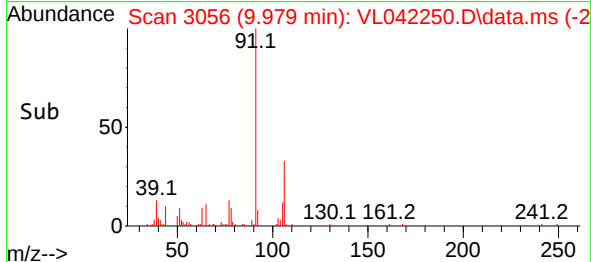
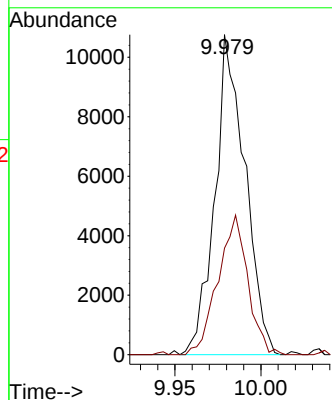
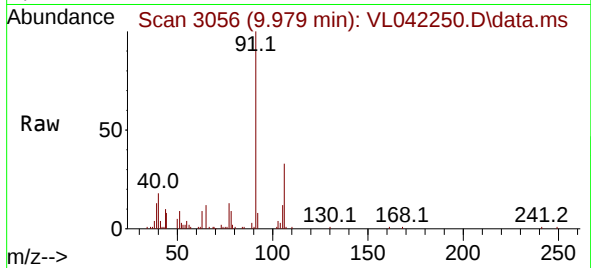




#60
o-Xylene
Concen: 0.208 ppbv
RT: 9.979 min Scan# 3050
Delta R.T. 0.019 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

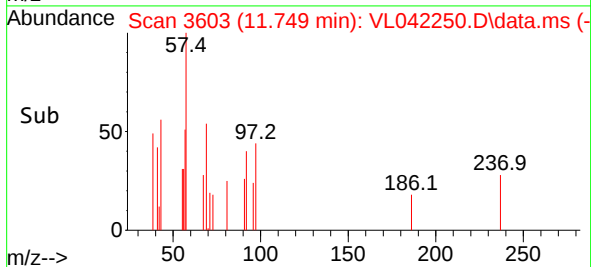
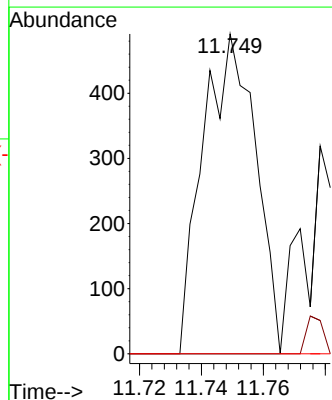
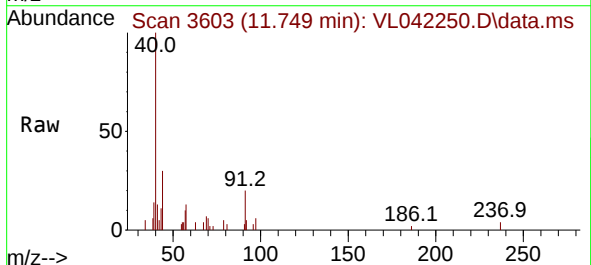
Instrument :
MSVOA_1
ClientSampleId :
SSSG-B10-2-03312025

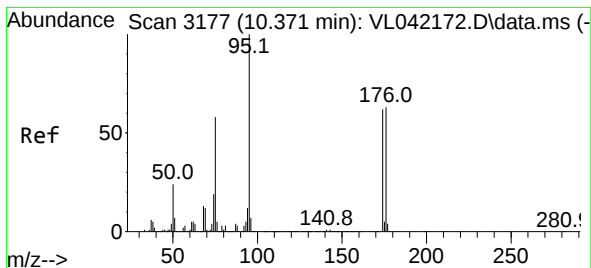
Tgt Ion: 91 Resp: 13109
Ion Ratio Lower Upper
91 100
106 43.1 20.8 62.5



#66
Benzyl Chloride
Concen: 0.063 ppbv
RT: 11.749 min Scan# 3603
Delta R.T. 0.139 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 91 Resp: 580
Ion Ratio Lower Upper
91 100
126 18.4 13.8 20.6
128 0.0 4.5 6.7#

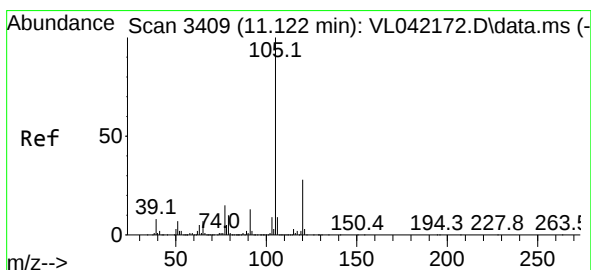
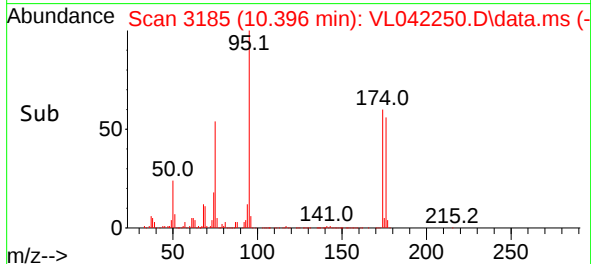
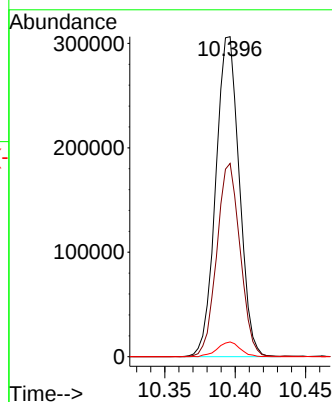
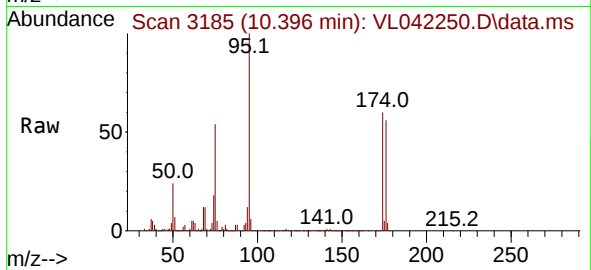




#68
1-Bromo-4-Fluorobenzene
Concen: 9.791 ppbv
RT: 10.396 min Scan# 3177
Delta R.T. 0.026 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

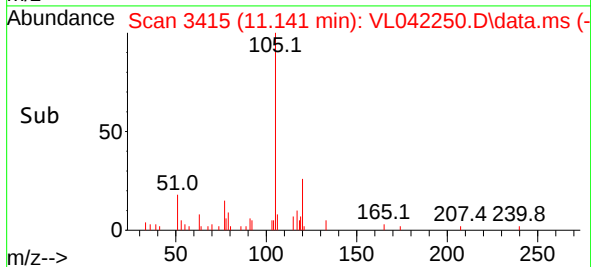
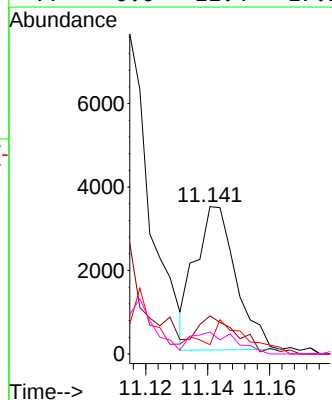
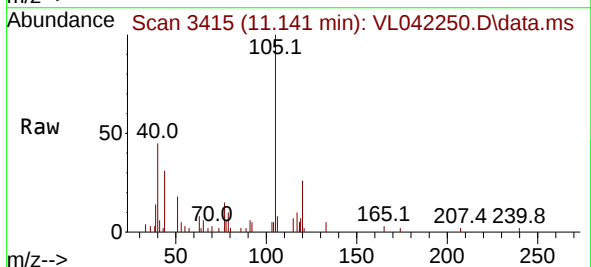
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B10-2-03312025

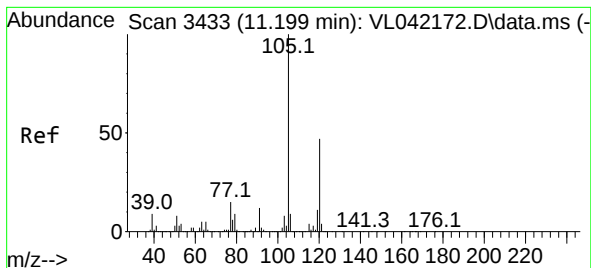
Tgt Ion: 95 Resp: 355772
Ion Ratio Lower Upper
95 100
174 60.1 50.6 76.0
175 4.5 3.8 5.6



#72
4-Ethyltoluene
Concen: 0.040 ppbv
RT: 11.141 min Scan# 3415
Delta R.T. 0.019 min
Lab File: VL042250.D
Acq: 08 Apr 2025 01:17

Tgt Ion: 105 Resp: 3131
Ion Ratio Lower Upper
105 100
120 0.0 23.4 35.0#
91 17.8 10.3 15.5#
77 0.0 11.4 17.2#





#73

1,3,5-Trimethylbenzene

Concen: 0.050 ppbv

RT: 11.222 min Scan# 3440

Delta R.T. 0.022 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Instrument :

MSVOA_L

ClientSampleId :

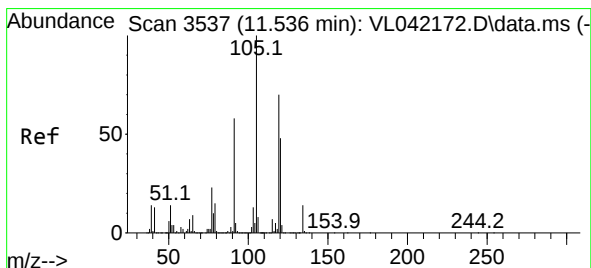
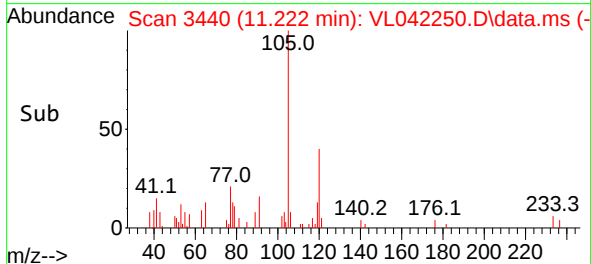
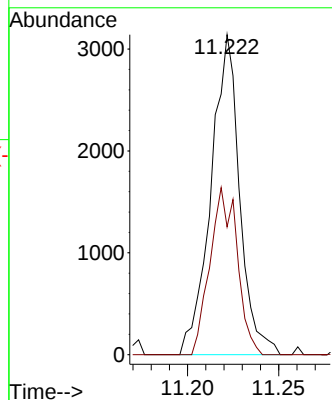
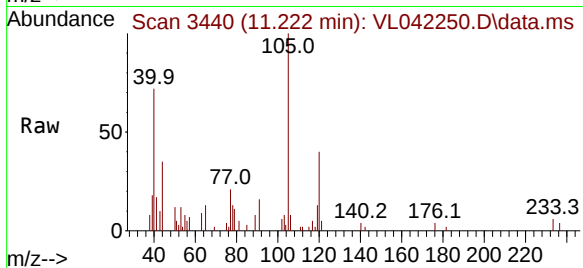
SSSG-B10-2-03312025

Tgt Ion:105 Resp: 3445

Ion Ratio Lower Upper

105 100

120 40.0 37.4 56.0



#74

1,2,4-Trimethylbenzene

Concen: 0.169 ppbv

RT: 11.552 min Scan# 3542

Delta R.T. 0.016 min

Lab File: VL042250.D

Acq: 08 Apr 2025 01:17

Tgt Ion:105 Resp: 13306

Ion Ratio Lower Upper

105 100

120 39.2 38.6 58.0

91 13.6 46.2 69.2#

77 19.1 18.6 27.8

