

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011923\
 Data File : VL040113.D
 Acq On : 19 Jan 2023 14:58
 Operator : SY/MD
 Sample : 01223-01DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1DL

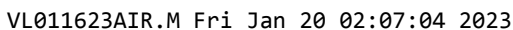
Quant Time: Jan 20 02:06:56 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011623AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Mon Jan 16 14:40:47 2023
 Response via : Initial Calibration

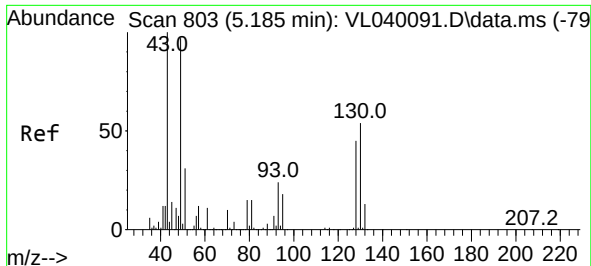
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.192	49	1072636	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.655	114	2881715	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.478	117	2629372	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.790	95	2220849	10.163	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.600%
Target Compounds						
					Qvalue	
5) Vinyl Chloride	2.909	62	2861	0.042	ppbv	98
9) Propene	2.864	41	155411	2.907	ppbv	100
10) Heptane	7.587	43	28418	0.231	ppbv #	27
13) Ethanol	3.250	45	8470	1.722	ppbv	77
15) Acetone	3.481	43	207186	1.611	ppbv	95
16) 1,3-Butadiene	2.957	39	34306	0.572	ppbv #	46
20) Methylene Chloride	3.931	84	46807	0.825	ppbv	96
23) Vinyl Acetate	4.607	43	442102	10.602	ppbv #	4
25) Ethyl Acetate	5.218	43	73314	0.323	ppbv #	79
26) Hexane	5.211	57	98038	0.988	ppbv #	41
30) Cyclohexane	6.607	84	593030	7.521	ppbv	95
34) 2-Butanone	4.803	43	31857	0.234	ppbv #	62
36) Benzene	6.375	78	69152	0.324	ppbv	98
39) 1,2-Dichloropropane	7.327	63	9450	0.113	ppbv #	1
41) Tetrahydrofuran	5.600	42	4625	0.059	ppbv #	58
42) Bromodichloromethane	7.256	83	115491	0.624	ppbv #	25
43) Methyl Methacrylate	7.330	69	375574	4.799	ppbv #	1
44) 2,2,4-Trimethylpentane	7.333	57	5469256	15.422	ppbv #	75
47) 1,1,2-Trichloroethane	8.999	97	67303	0.766	ppbv #	58
50) 4-Methyl-2-Pentanone	8.224	43	47900	0.223	ppbv	92
51) 2-Hexanone	9.542	43	504887	3.108	ppbv #	30
53) Toluene	9.230	91	32530	0.143	ppbv	94
57) Chlorobenzene	11.520	112	6890	0.038	ppbv #	23
58) Ethyl Benzene	12.108	91	14865	0.051	ppbv	99
62) Isopropylbenzene	14.047	105	223270	0.620	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.050	83	3240	0.036	ppbv #	46
64) n-propylbenzene	14.921	120	14478	0.162	ppbv #	1
67) sec-Butylbenzene	16.648	105	73698	0.169	ppbv	97
71) 2-Chlorotoluene	14.931	91	185428	0.669	ppbv #	62

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

Quant Time: Jan 20 02:06:56 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011623AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Mon Jan 16 14:40:47 2023
Response via : Initial Calibration

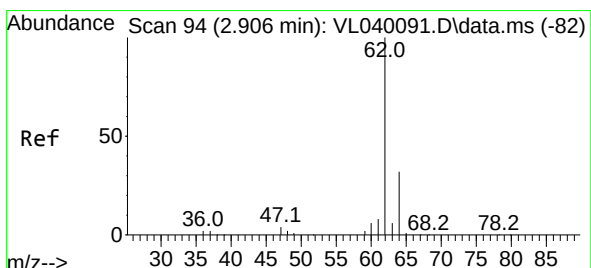
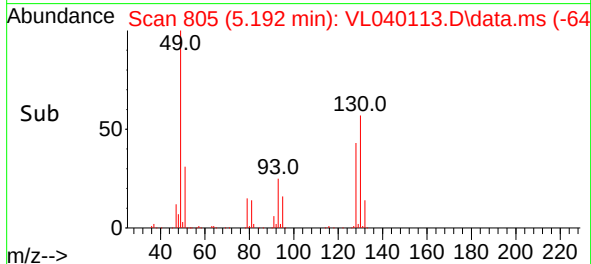
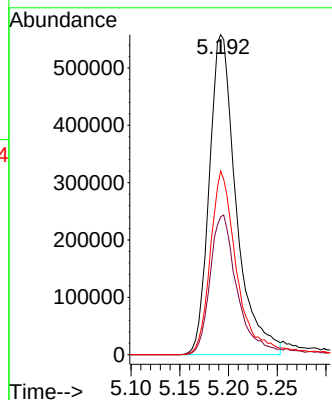
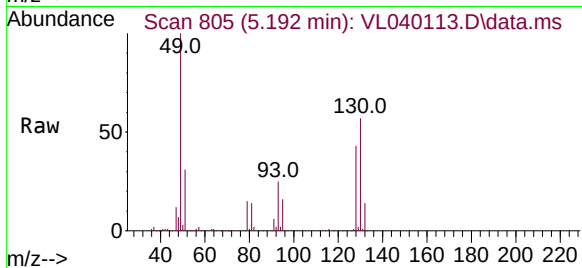




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 80
Delta R.T. 0.007 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

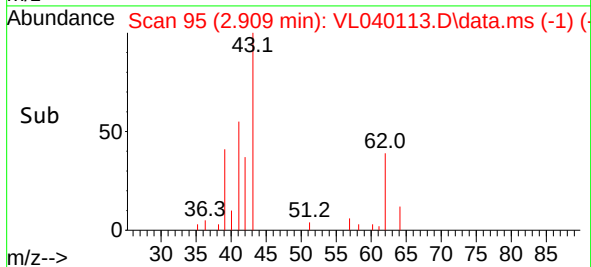
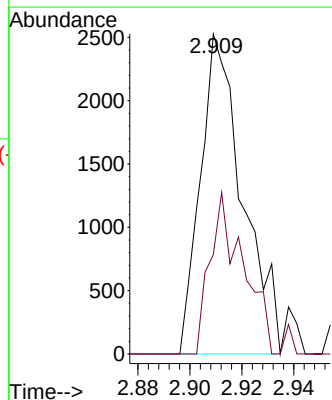
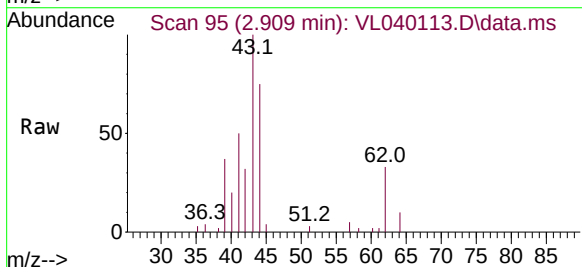
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

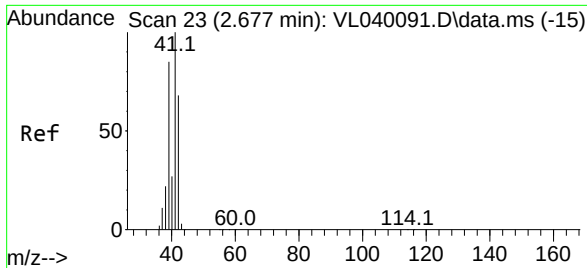
Tgt Ion: 49 Resp: 1072636
Ion Ratio Lower Upper
49 100
128 46.3 23.6 71.0
130 57.6 29.8 89.3



#5
Vinyl Chloride
Concen: 0.042 ppbv
RT: 2.909 min Scan# 95
Delta R.T. 0.003 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 62 Resp: 2861
Ion Ratio Lower Upper
62 100
64 31.1 25.8 38.6





#9

Propene

Concen: 2.907 ppbv

RT: 2.864 min Scan# 81

Delta R.T. 0.187 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Instrument :

MSVOA_L

ClientSampleId :

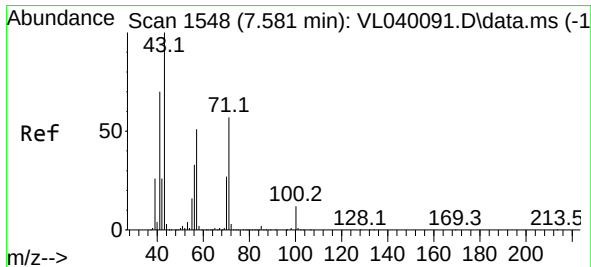
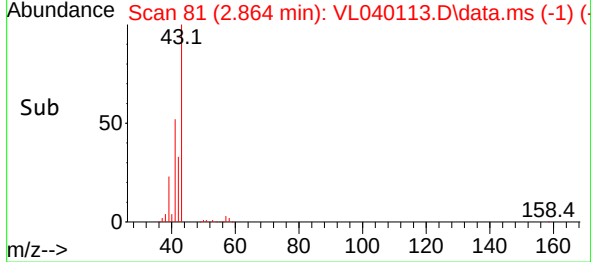
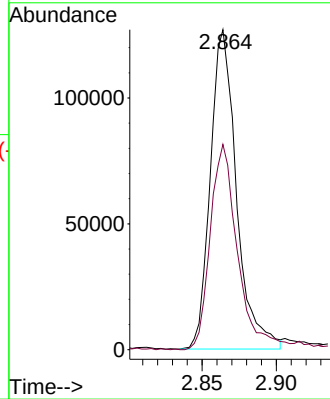
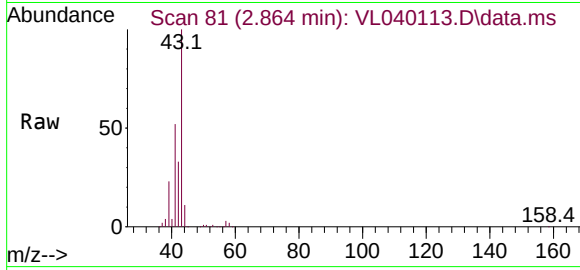
VP-1DL

Tgt Ion: 41 Resp: 155411

Ion Ratio Lower Upper

41 100

42 69.6 55.6 83.4



#10

Heptane

Concen: 0.231 ppbv

RT: 7.587 min Scan# 1550

Delta R.T. 0.006 min

Lab File: VL040113.D

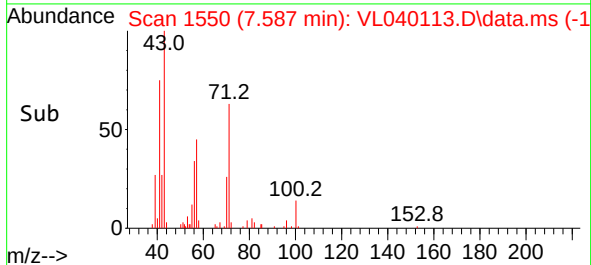
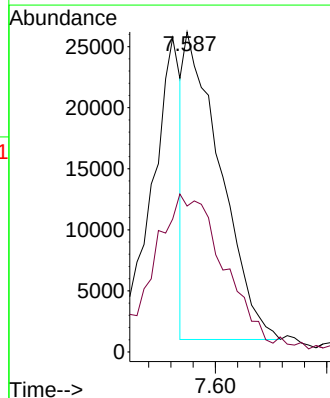
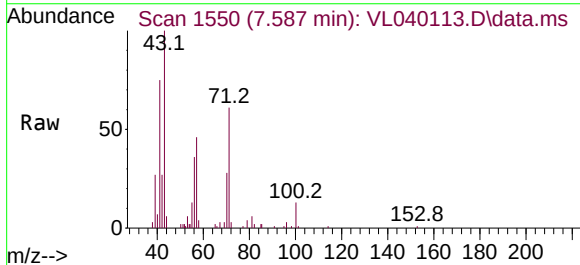
Acq: 19 Jan 2023 14:58

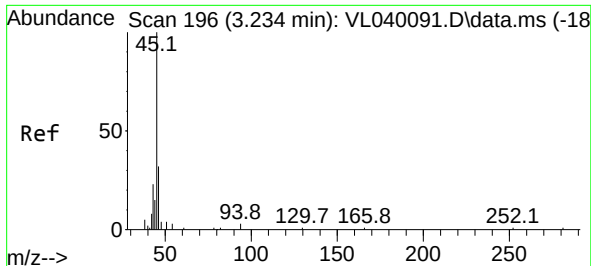
Tgt Ion: 43 Resp: 28418

Ion Ratio Lower Upper

43 100

57 0.0 40.9 61.3#

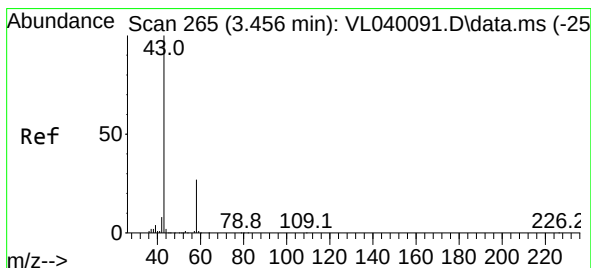
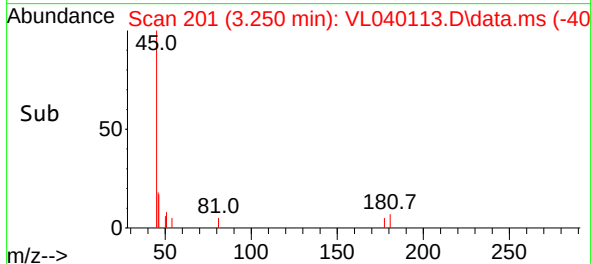
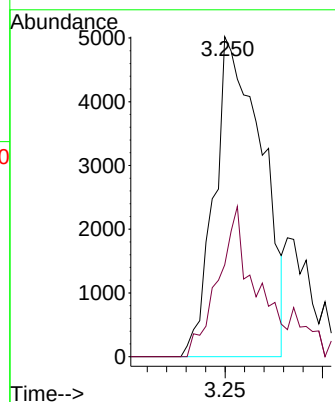
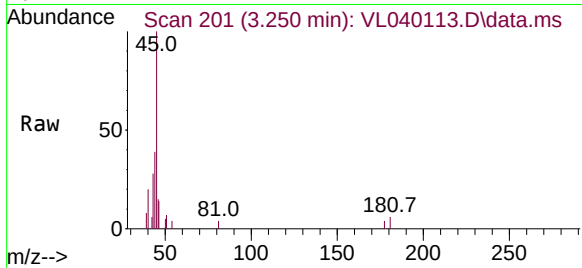




#13
Ethanol
Concen: 1.722 ppbv
RT: 3.250 min Scan# 201
Delta R.T. 0.016 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

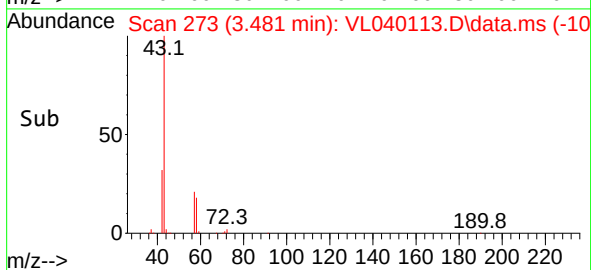
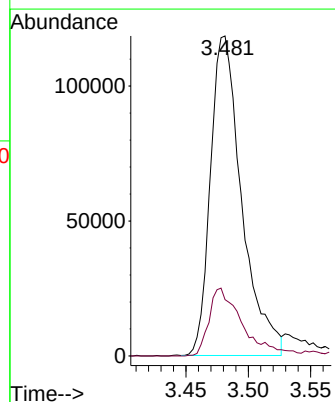
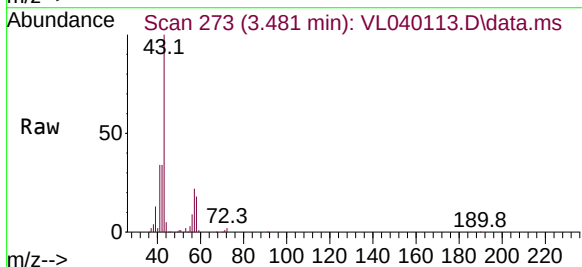
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

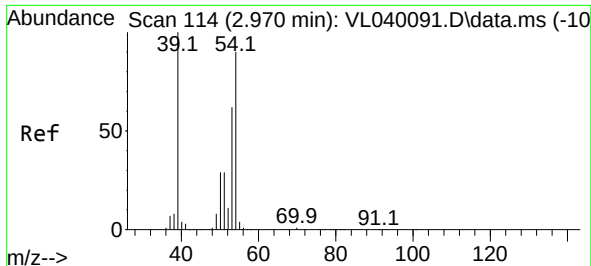
Tgt Ion: 45 Resp: 8470
Ion Ratio Lower Upper
45 100
46 50.8 14.8 59.2



#15
Acetone
Concen: 1.611 ppbv
RT: 3.481 min Scan# 273
Delta R.T. 0.026 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 43 Resp: 207186
Ion Ratio Lower Upper
43 100
58 24.7 21.8 32.8





#16

1,3-Butadiene

Concen: 0.572 ppbv

RT: 2.957 min Scan# 114

Delta R.T. -0.013 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Instrument :

MSVOA_L

ClientSampleId :

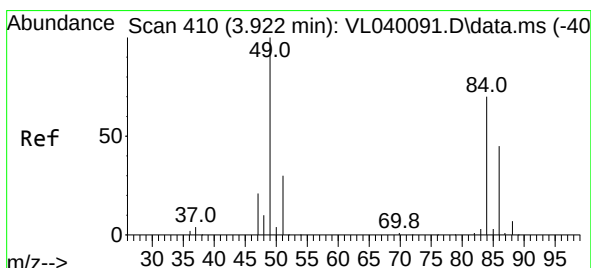
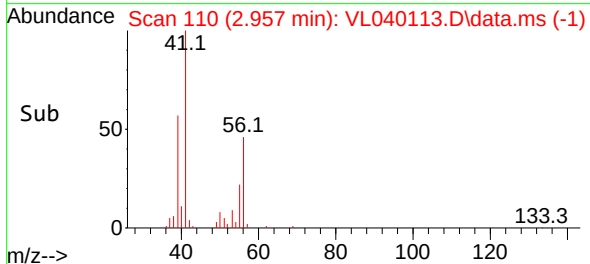
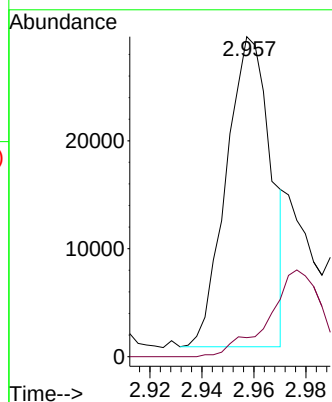
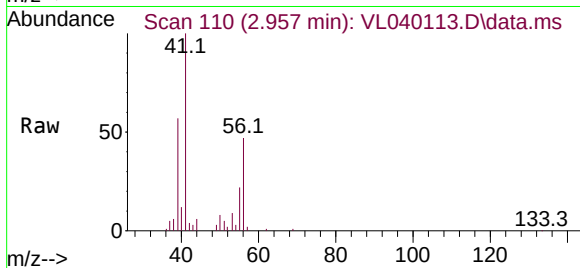
VP-1DL

Tgt Ion: 39 Resp: 34306

Ion Ratio Lower Upper

39 100

54 35.8 67.9 101.9#



#20

Methylene Chloride

Concen: 0.825 ppbv

RT: 3.931 min Scan# 413

Delta R.T. 0.010 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Tgt Ion: 84 Resp: 46807

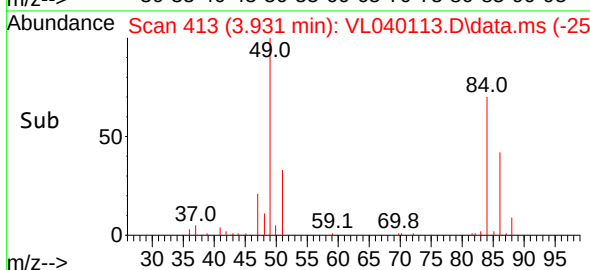
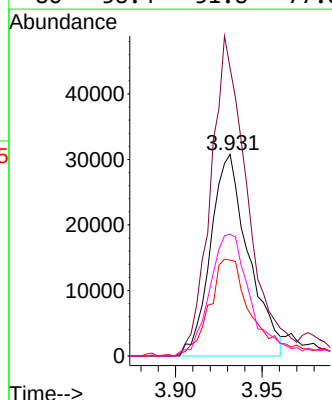
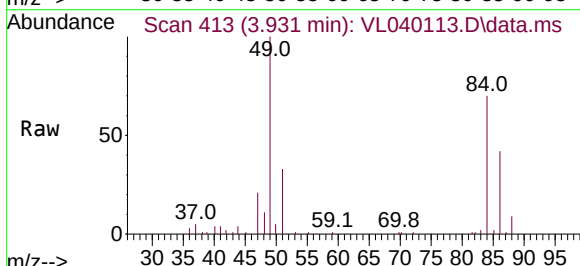
Ion Ratio Lower Upper

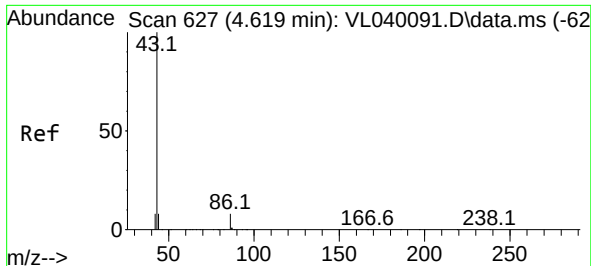
84 100

49 142.0 114.6 171.8

51 46.2 34.3 51.5

86 58.4 51.8 77.8



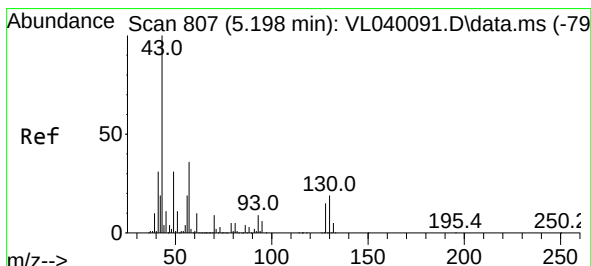
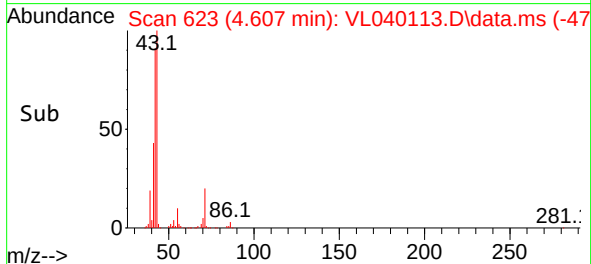
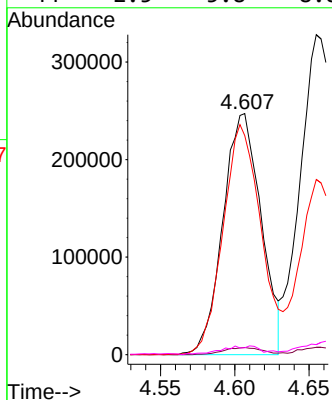
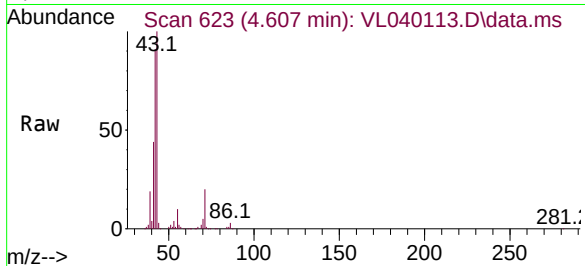


#23
 Vinyl Acetate
 Concen: 10.602 ppbv
 RT: 4.607 min Scan# 61
 Delta R.T. -0.013 min
 Lab File: VL040113.D
 Acq: 19 Jan 2023 14:58

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1DL

Tgt Ion: 43 Resp: 442102

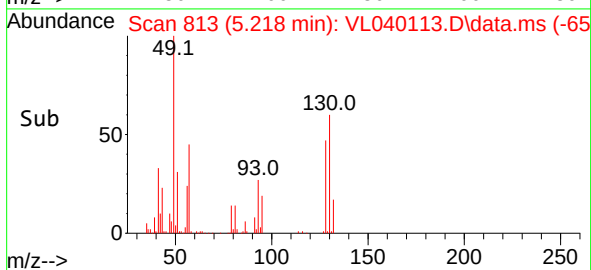
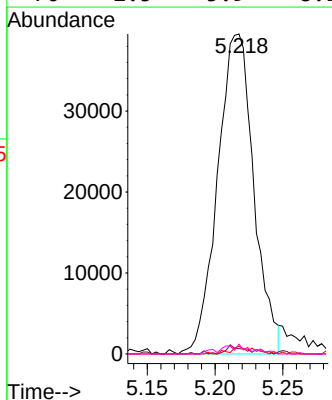
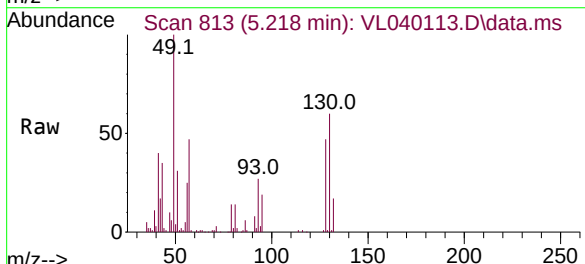
Ion	Ratio	Lower	Upper
43	100		
86	3.0	5.6	8.4#
42	90.7	7.7	11.5#
44	2.5	5.8	8.8#

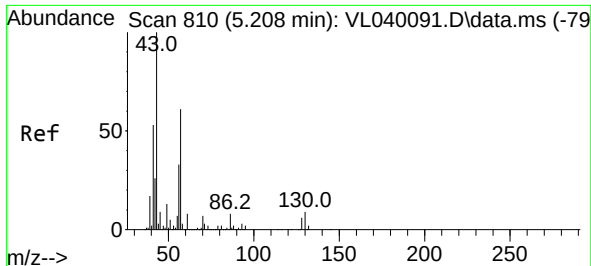


#25
 Ethyl Acetate
 Concen: 0.323 ppbv
 RT: 5.218 min Scan# 813
 Delta R.T. 0.019 min
 Lab File: VL040113.D
 Acq: 19 Jan 2023 14:58

Tgt Ion: 43 Resp: 73314

Ion	Ratio	Lower	Upper
43	100		
45	2.0	8.5	12.7#
61	1.7	8.4	12.6#
70	2.5	5.9	8.9#

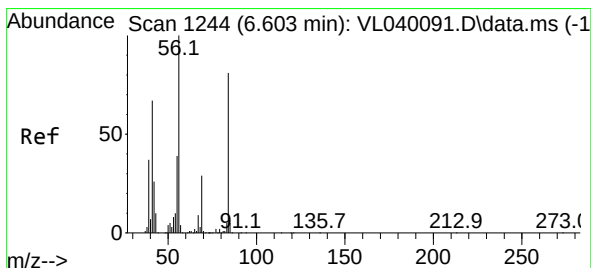
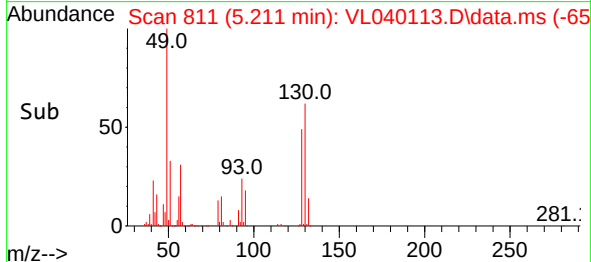
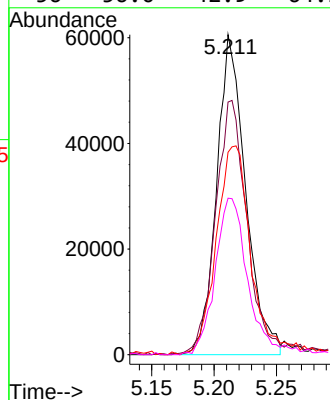
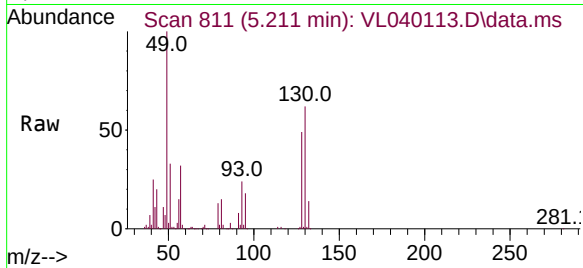




#26
Hexane
Concen: 0.988 ppbv
RT: 5.211 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

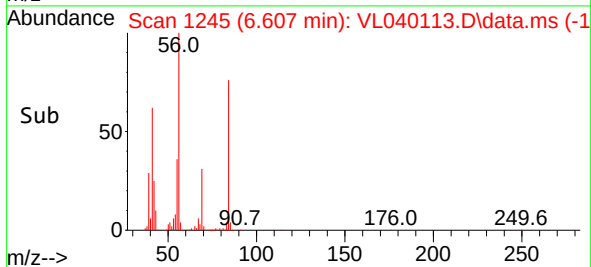
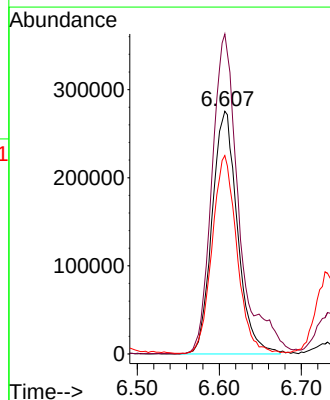
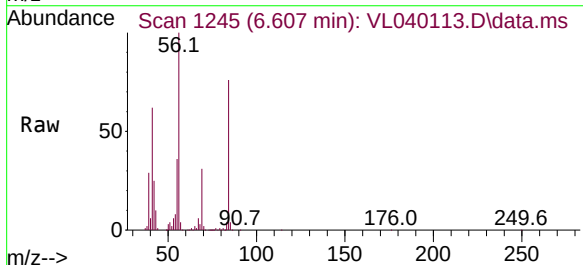
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

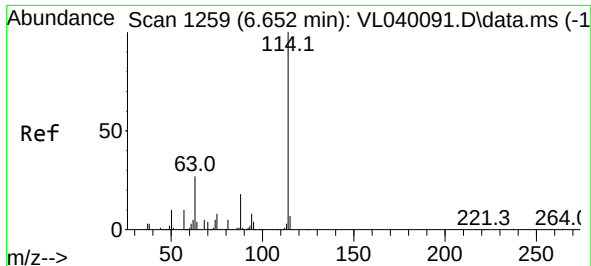
Tgt Ion: 57	Resp: 98038
Ion Ratio	Lower Upper
57 100	
41 88.6	72.2 108.4
43 81.1	192.1 288.1#
56 56.0	42.9 64.3



#30
Cyclohexane
Concen: 7.521 ppbv
RT: 6.607 min Scan# 1245
Delta R.T. 0.003 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 84	Resp: 593030
Ion Ratio	Lower Upper
84 100	
56 141.4	111.5 167.3
41 79.6	71.4 107.0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.655 min Scan# 11

Delta R.T. 0.003 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Instrument :

MSVOA_L

ClientSampleId :

VP-1DL

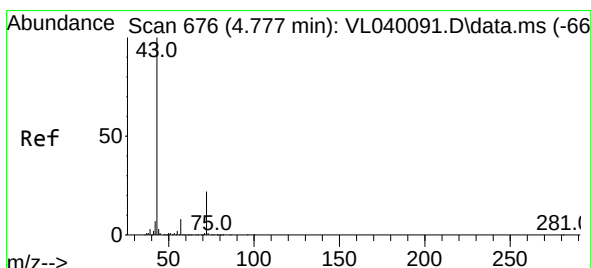
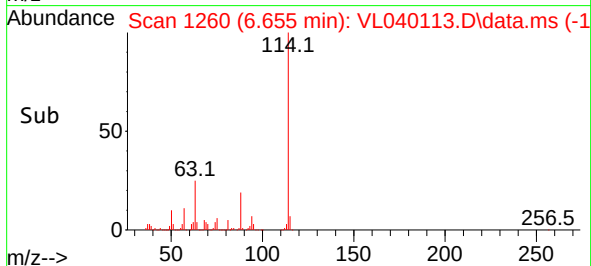
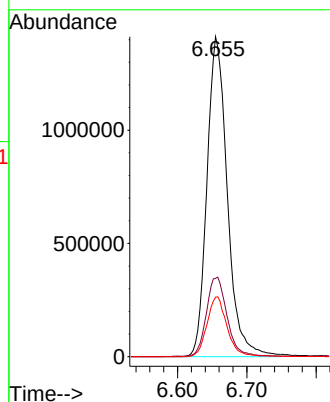
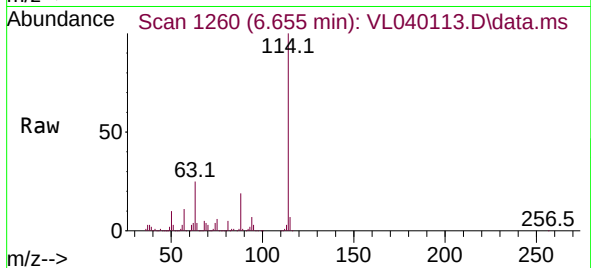
Tgt Ion:114 Resp: 2881715

Ion Ratio Lower Upper

114 100

63 25.6 21.8 32.8

88 18.6 14.8 22.2



#34

2-Butanone

Concen: 0.234 ppbv

RT: 4.803 min Scan# 684

Delta R.T. 0.026 min

Lab File: VL040113.D

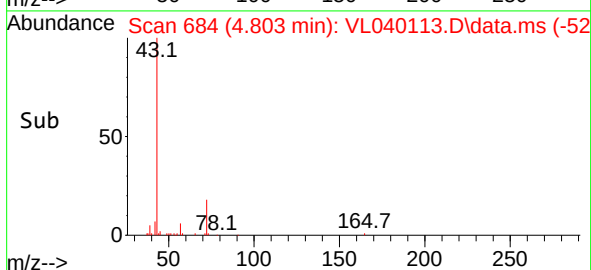
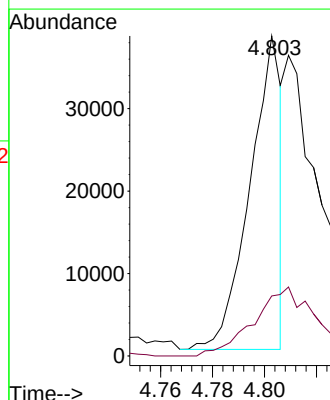
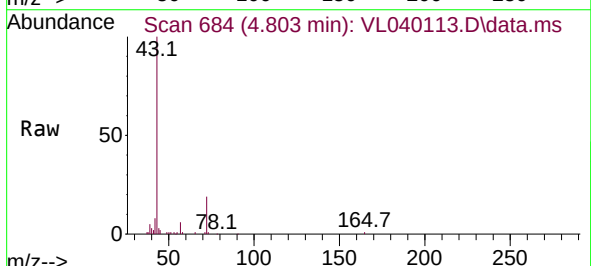
Acq: 19 Jan 2023 14:58

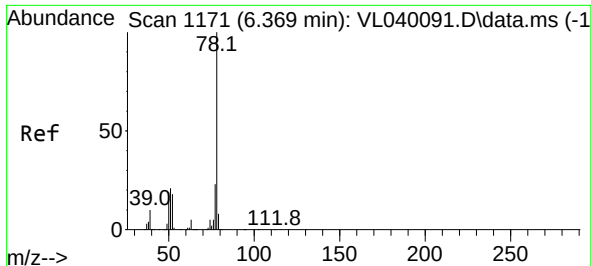
Tgt Ion: 43 Resp: 31857

Ion Ratio Lower Upper

43 100

72 4.4 18.4 27.6#

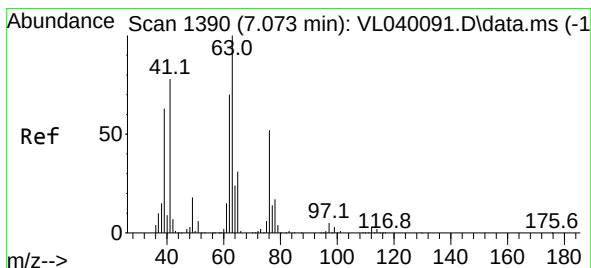
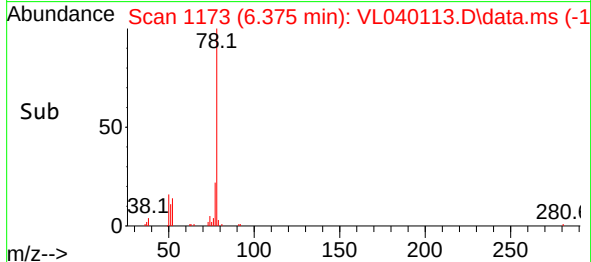
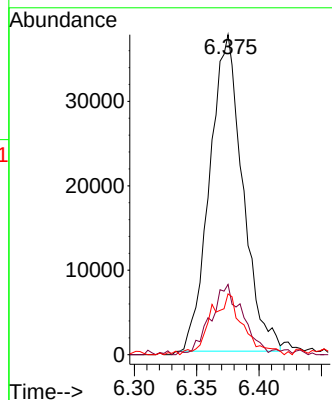
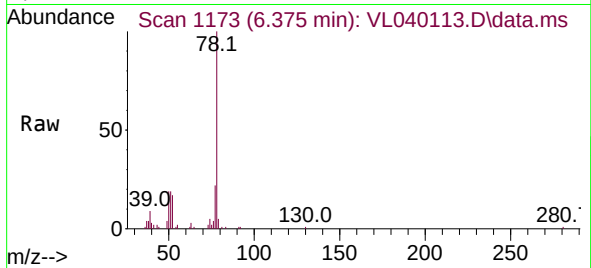




#36
Benzene
Concen: 0.324 ppbv
RT: 6.375 min Scan# 1171
Delta R.T. 0.006 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

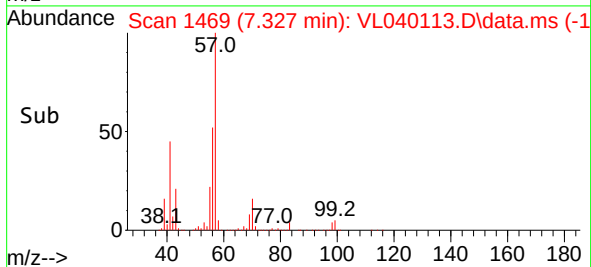
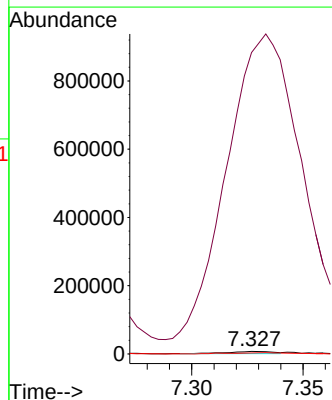
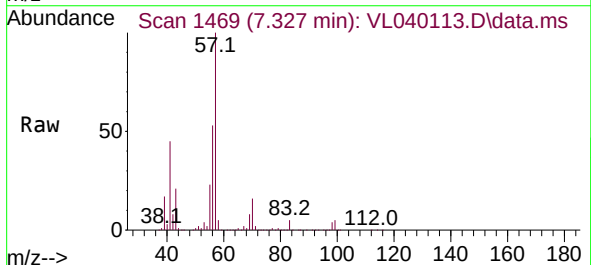
Instrument :
MSVOA_1
ClientSampleId :
VP-1DL

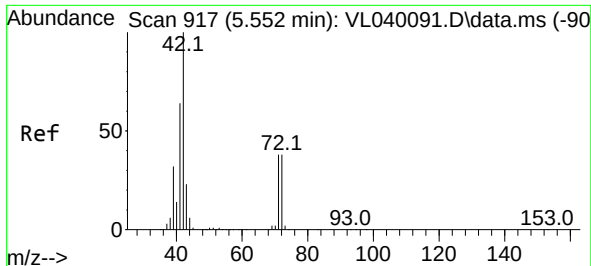
Tgt Ion: 78 Resp: 69152
Ion Ratio Lower Upper
78 100
77 21.1 18.1 27.1
50 19.2 15.6 23.4



#39
1,2-Dichloropropane
Concen: 0.113 ppbv
RT: 7.327 min Scan# 1469
Delta R.T. 0.254 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 63 Resp: 9450
Ion Ratio Lower Upper
63 100
41 11688.1 62.2 93.4#
62 30.7 55.8 83.8#

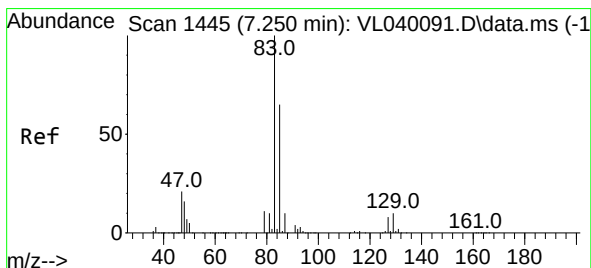
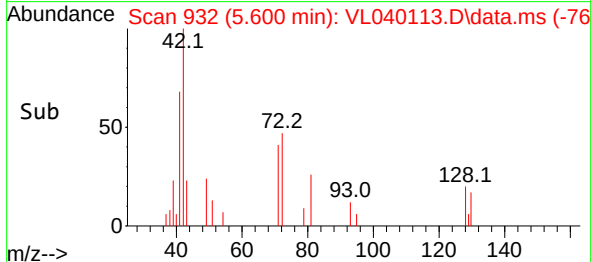
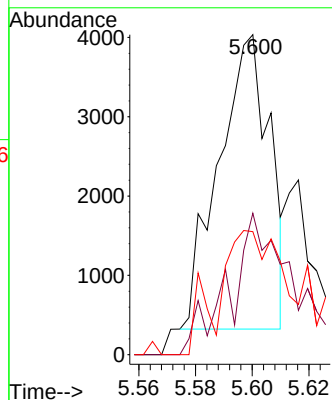
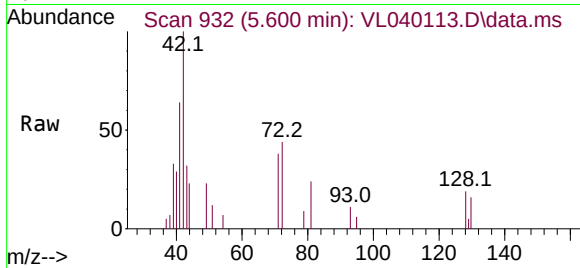




#41
Tetrahydrofuran
Concen: 0.059 ppbv
RT: 5.600 min Scan# 917
Delta R.T. 0.048 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

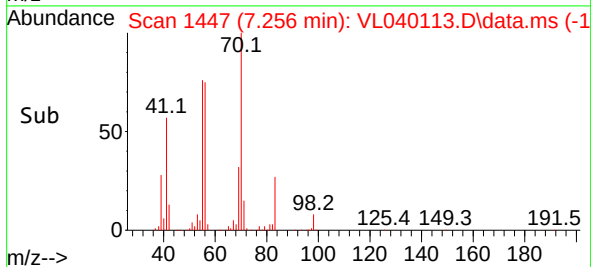
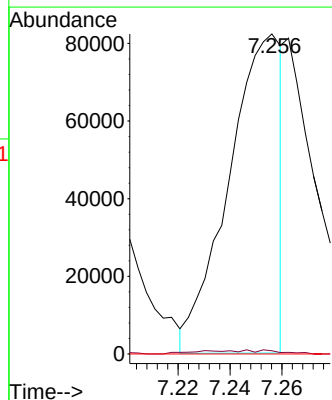
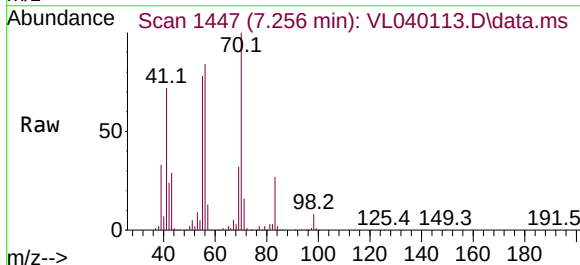
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

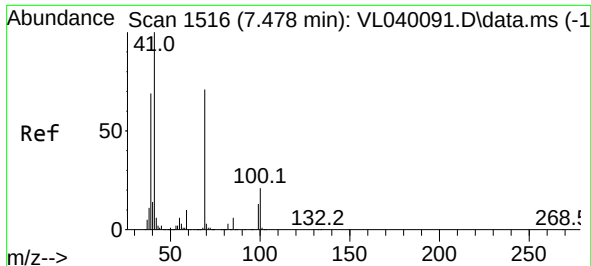
Tgt Ion: 42 Resp: 4625
Ion Ratio Lower Upper
42 100
72 63.1 31.9 47.9#
71 67.4 31.4 47.2#



#42
Bromodichloromethane
Concen: 0.624 ppbv
RT: 7.256 min Scan# 1447
Delta R.T. 0.006 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 83 Resp: 115491
Ion Ratio Lower Upper
83 100
85 0.6 51.7 77.5#
127 0.0 6.2 9.2#

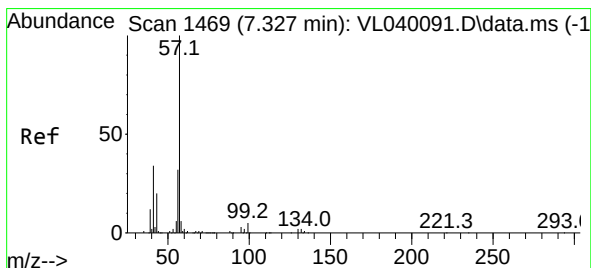
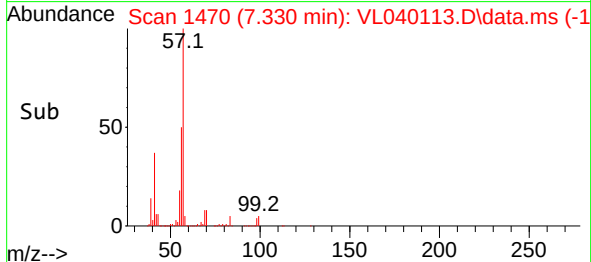
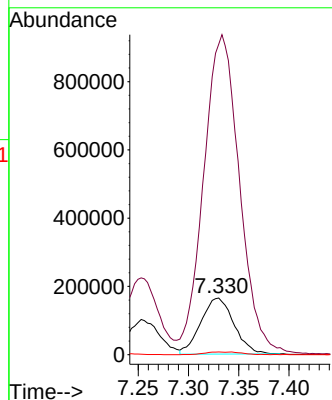
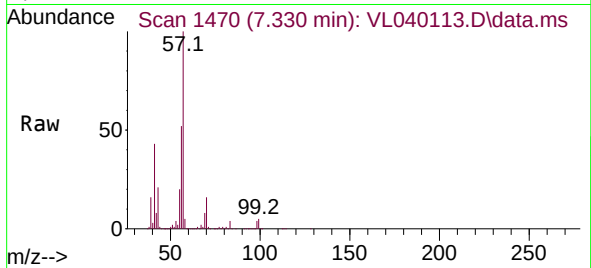




#43
Methyl Methacrylate
Concen: 4.799 ppbv
RT: 7.330 min Scan# 1470
Delta R.T. -0.148 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

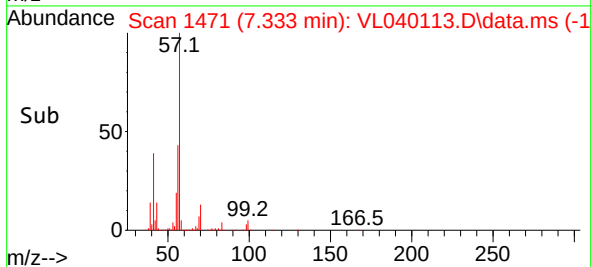
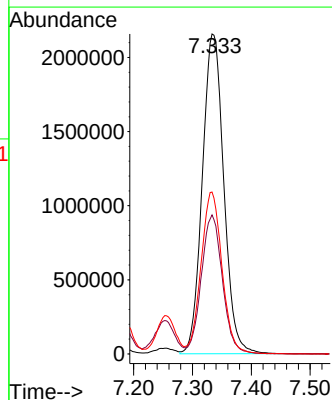
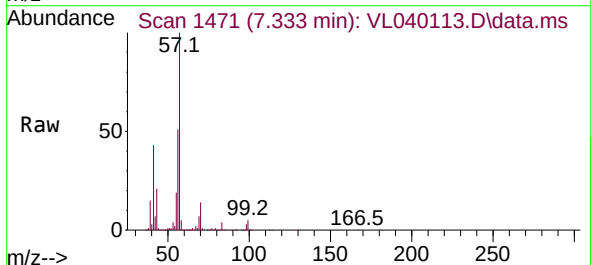
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

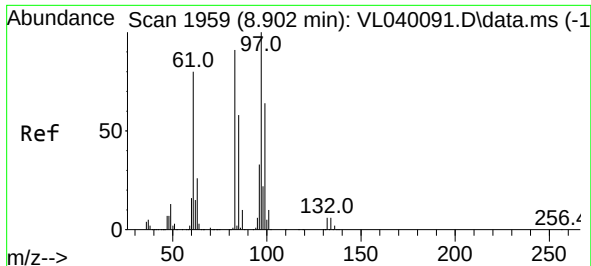
Tgt Ion: 69 Resp: 375574
Ion Ratio Lower Upper
69 100
41 620.6 118.2 177.2#
100 5.5 24.2 36.4#



#44
2,2,4-Trimethylpentane
Concen: 15.422 ppbv
RT: 7.333 min Scan# 1471
Delta R.T. 0.006 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 57 Resp: 5469256
Ion Ratio Lower Upper
57 100
41 43.0 27.1 40.7#
56 49.9 25.0 37.4#





#47

1,1,2-Trichloroethane

Concen: 0.766 ppbv

RT: 8.999 min Scan# 1959

Delta R.T. 0.097 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Instrument :

MSVOA_L

ClientSampleId :

VP-1DL

Tgt Ion: 97 Resp: 67303

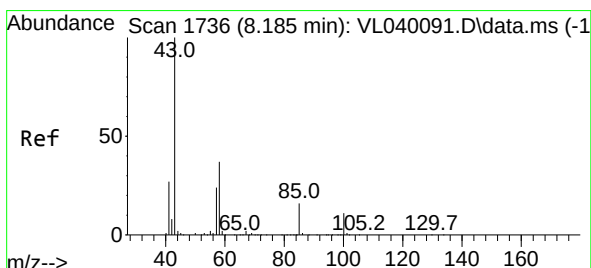
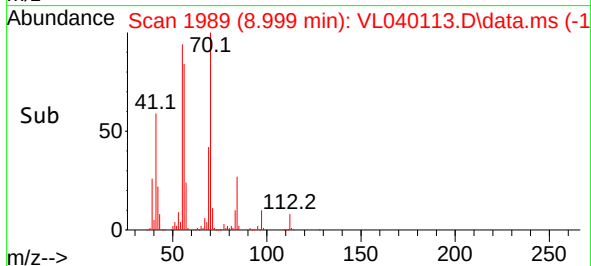
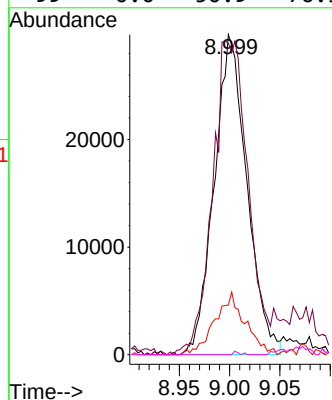
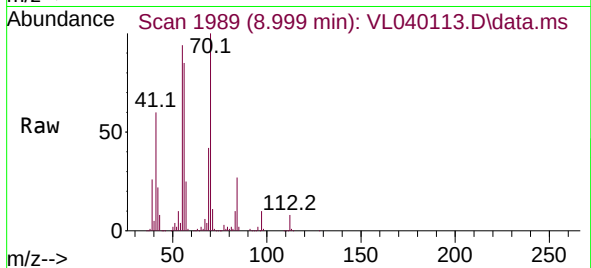
Ion Ratio Lower Upper

97 100

83 95.7 72.9 109.3

85 15.5 46.0 69.0#

99 0.0 50.9 76.3#



#50

4-Methyl-2-Pentanone

Concen: 0.223 ppbv

RT: 8.224 min Scan# 1748

Delta R.T. 0.039 min

Lab File: VL040113.D

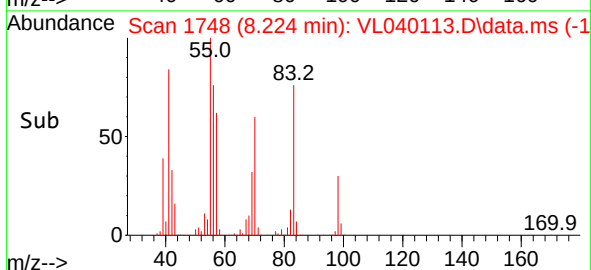
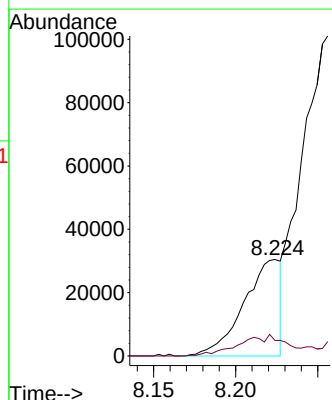
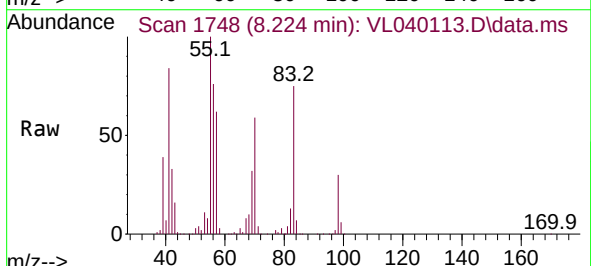
Acq: 19 Jan 2023 14:58

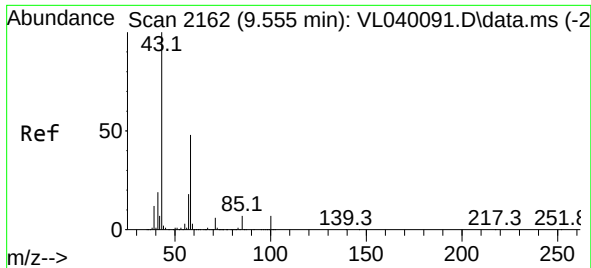
Tgt Ion: 43 Resp: 47900

Ion Ratio Lower Upper

43 100

58 31.1 28.8 43.2

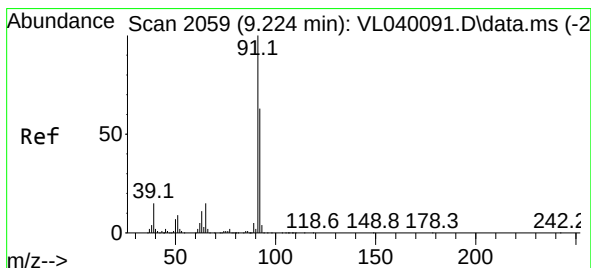
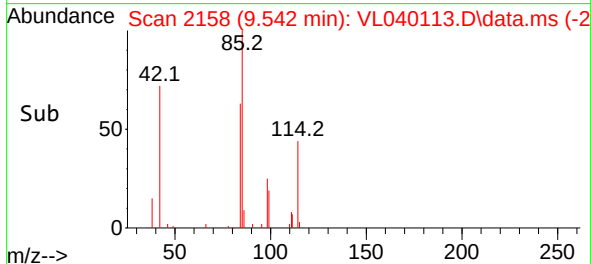
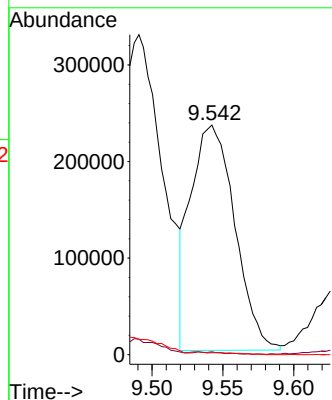
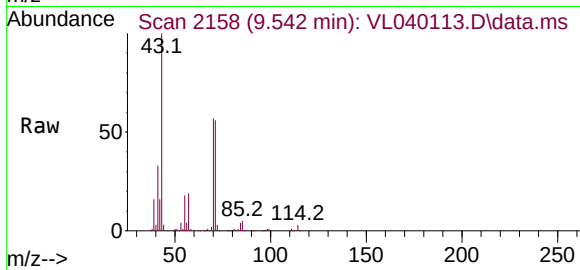




#51
2-Hexanone
Concen: 3.108 ppbv
RT: 9.542 min Scan# 2162
Delta R.T. -0.013 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

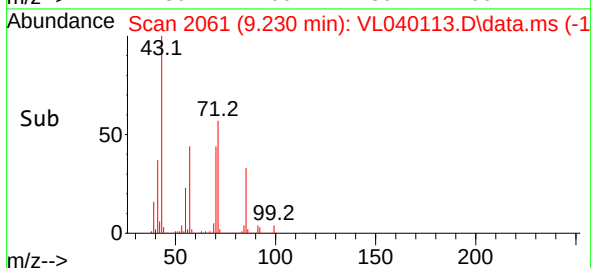
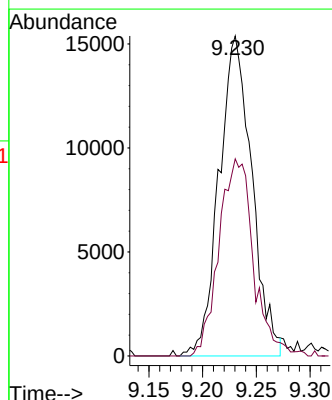
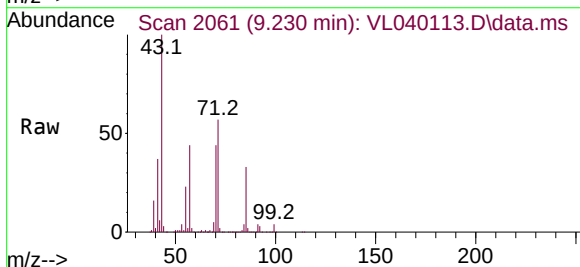
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

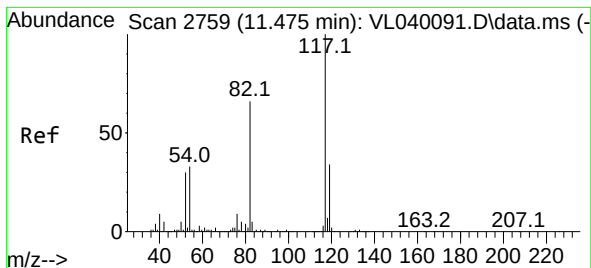
Tgt Ion: 43 Resp: 504887
Ion Ratio Lower Upper
43 100
58 0.0 37.5 56.3#
98 0.0 0.4 0.6#



#53
Toluene
Concen: 0.143 ppbv
RT: 9.230 min Scan# 2061
Delta R.T. 0.006 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 91 Resp: 32530
Ion Ratio Lower Upper
91 100
92 65.2 48.3 72.5





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.478 min Scan# 21

Delta R.T. 0.003 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Instrument :

MSVOA_1

ClientSampleId :

VP-1DL

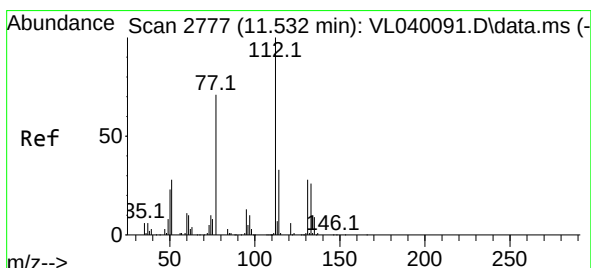
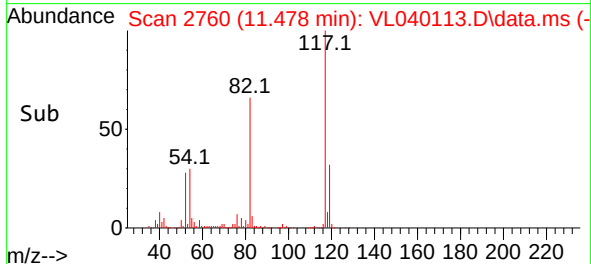
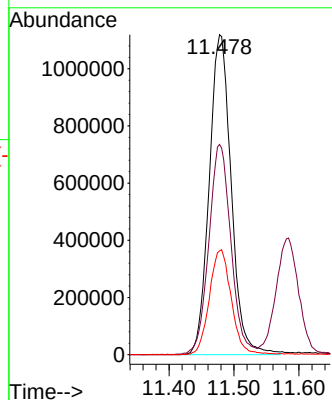
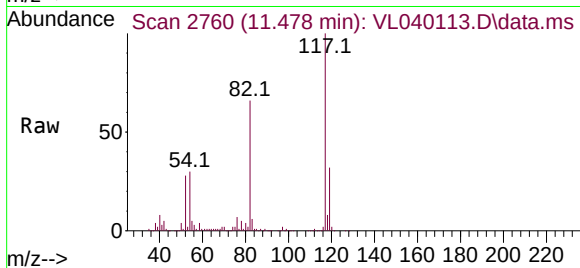
Tgt Ion:117 Resp: 2629372

Ion Ratio Lower Upper

117 100

82 65.9 54.4 81.6

119 33.2 26.8 40.2



#57

Chlorobenzene

Concen: 0.038 ppbv

RT: 11.520 min Scan# 2773

Delta R.T. -0.013 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

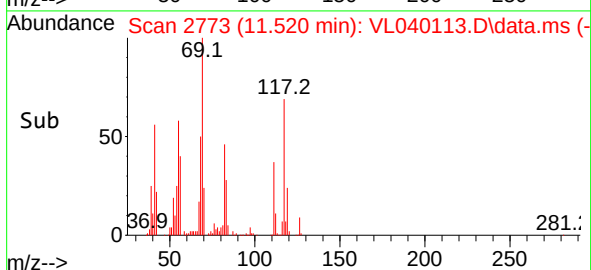
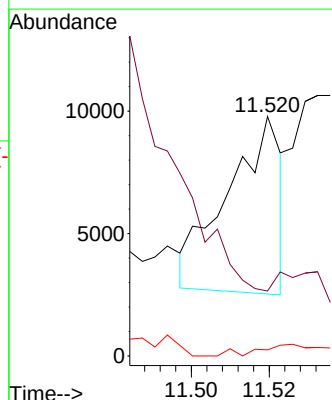
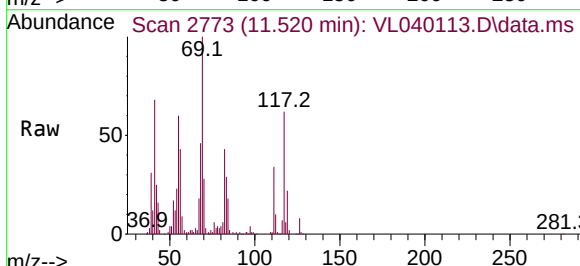
Tgt Ion:112 Resp: 6890

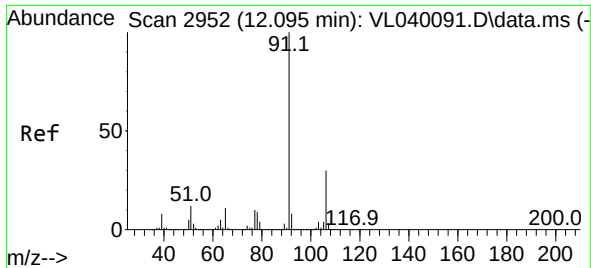
Ion Ratio Lower Upper

112 100

77 0.0 57.3 85.9#

114 0.0 29.6 36.2#

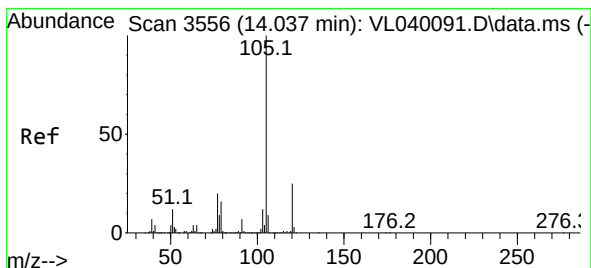
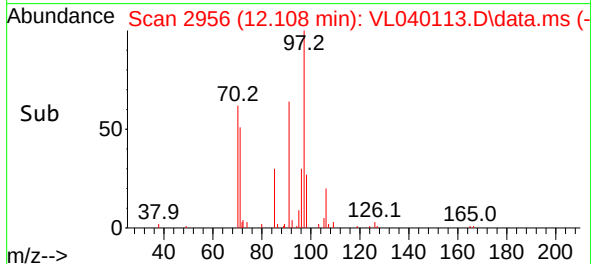
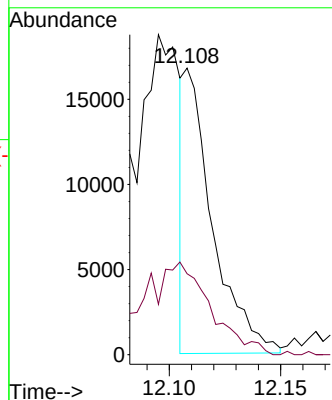
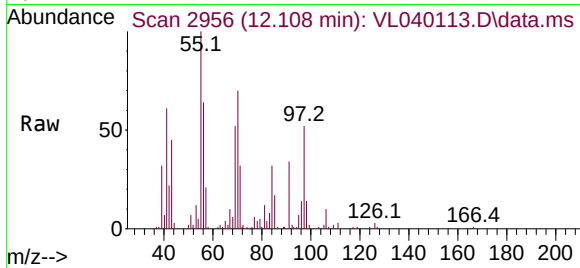




#58
Ethyl Benzene
Concen: 0.051 ppbv
RT: 12.108 min Scan# 2956
Delta R.T. 0.013 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

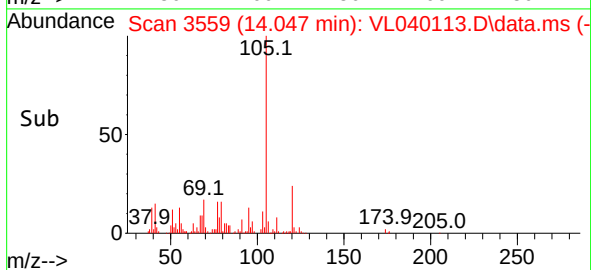
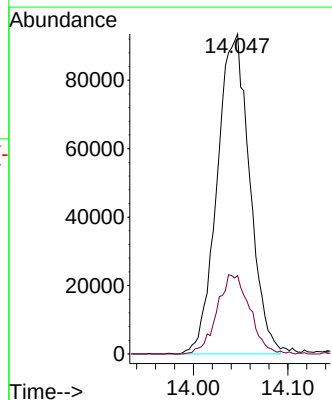
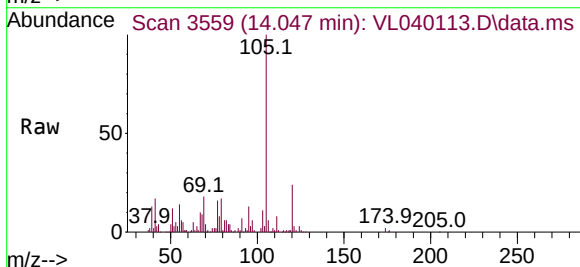
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

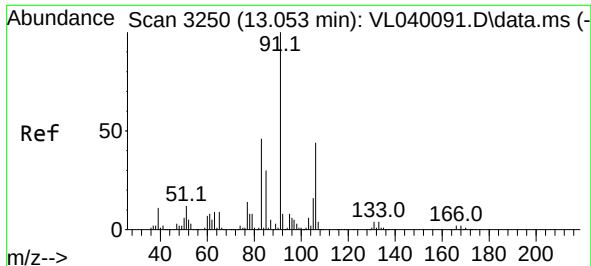
Tgt Ion: 91 Resp: 14865
Ion Ratio Lower Upper
91 100
106 29.0 23.7 35.5



#62
Isopropylbenzene
Concen: 0.620 ppbv
RT: 14.047 min Scan# 3559
Delta R.T. 0.010 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 105 Resp: 223270
Ion Ratio Lower Upper
105 100
120 25.1 20.2 30.2

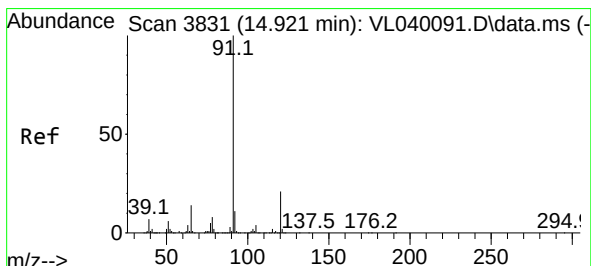
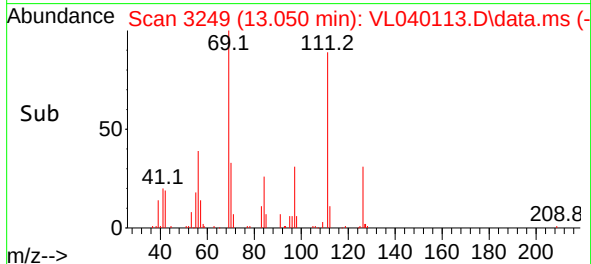
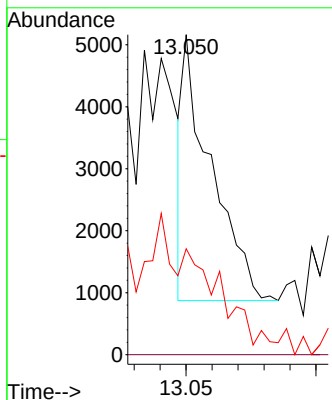
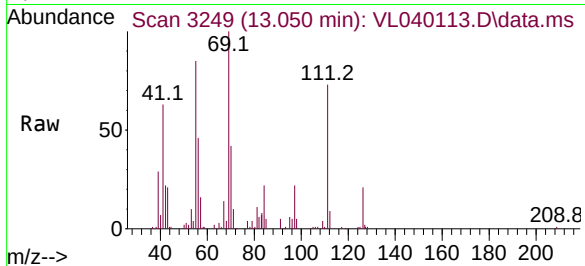




#63
1,1,2,2-Tetrachloroethane
Concen: 0.036 ppbv
RT: 13.050 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

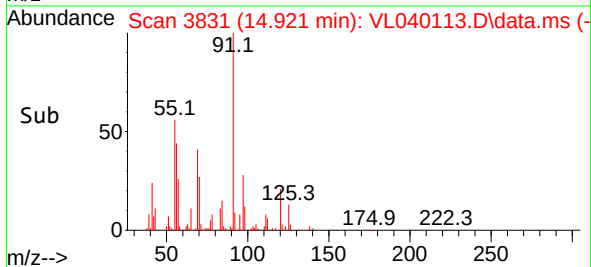
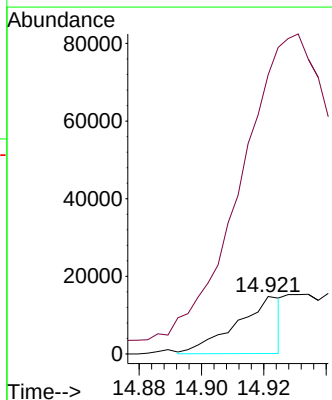
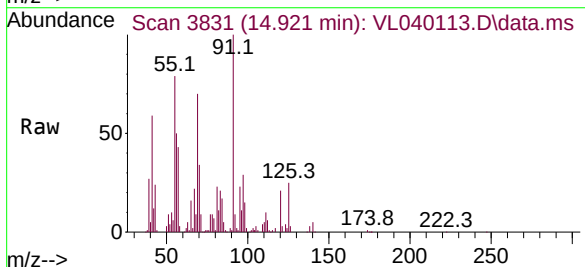
Instrument :
MSVOA_L
ClientSampleId :
VP-1DL

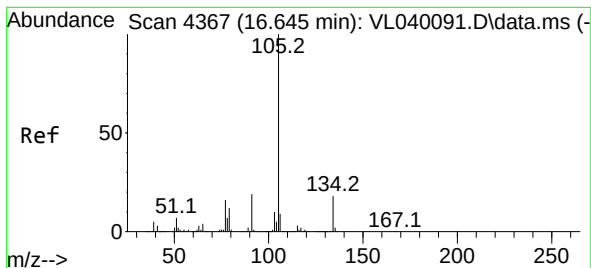
Tgt Ion: 83 Resp: 3240
Ion Ratio Lower Upper
83 100
131 0.0 4.3 13.1#
85 110.8 32.5 97.5#



#64
n-propylbenzene
Concen: 0.162 ppbv
RT: 14.921 min Scan# 3831
Delta R.T. 0.000 min
Lab File: VL040113.D
Acq: 19 Jan 2023 14:58

Tgt Ion: 120 Resp: 14478
Ion Ratio Lower Upper
120 100
91 0.0 397.0 595.4#





#67

sec-Butylbenzene

Concen: 0.169 ppbv

RT: 16.648 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Instrument :

MSVOA_L

ClientSampleId :

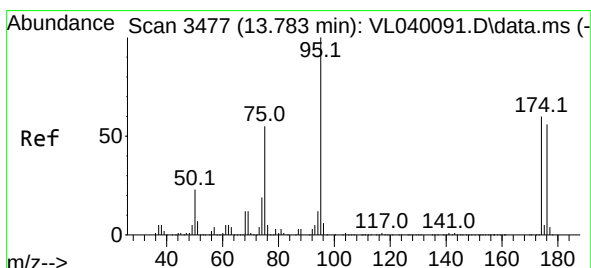
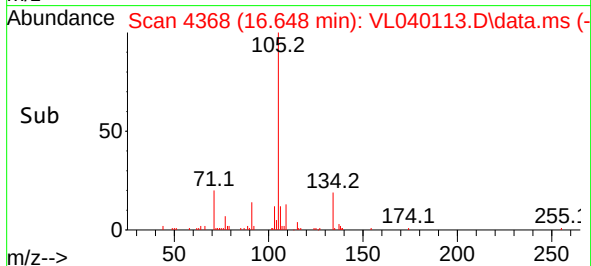
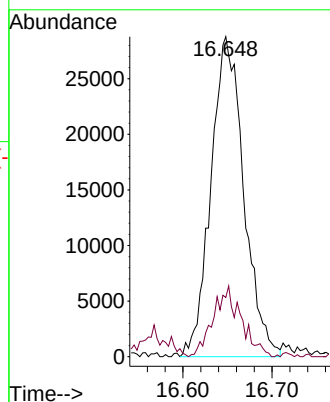
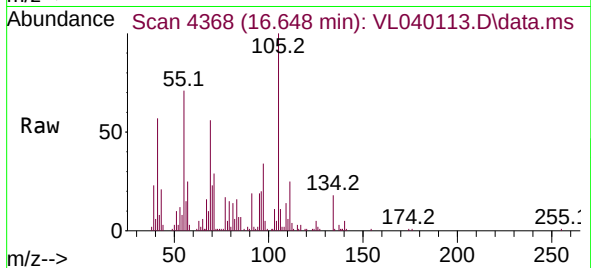
VP-1DL

Tgt Ion:105 Resp: 73698

Ion Ratio Lower Upper

105 100

134 18.9 14.1 21.1



#68

1-Bromo-4-Fluorobenzene

Concen: 10.163 ppbv

RT: 13.790 min Scan# 3479

Delta R.T. 0.006 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

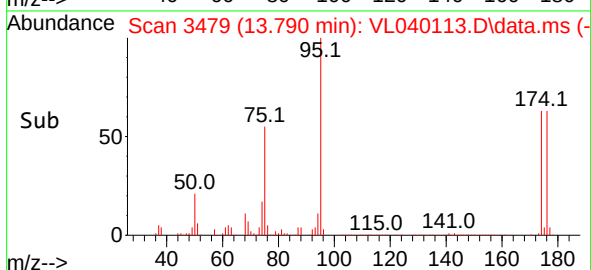
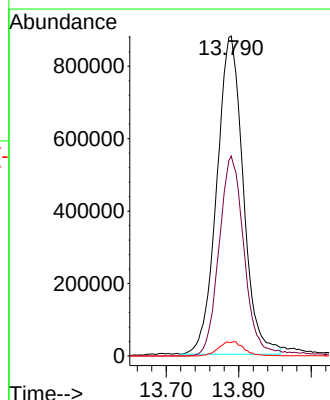
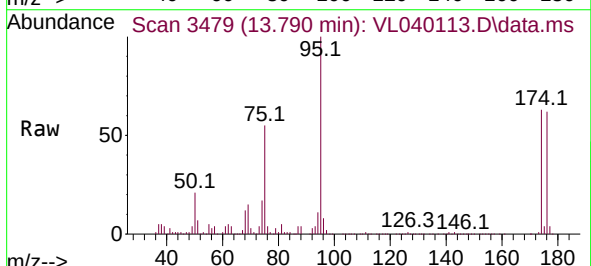
Tgt Ion: 95 Resp: 2220849

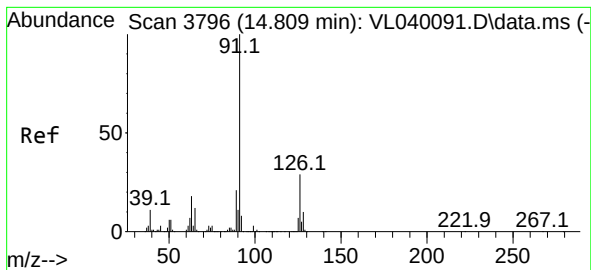
Ion Ratio Lower Upper

95 100

174 61.1 47.7 71.5

175 4.4 3.4 5.2





#71

2-Chlorotoluene

Concen: 0.669 ppbv

RT: 14.931 min Scan# 3834

Delta R.T. 0.122 min

Lab File: VL040113.D

Acq: 19 Jan 2023 14:58

Instrument :

MSVOA_L

ClientSampleId :

VP-1DL

Tgt Ion: 91 Resp: 185428

Ion Ratio Lower Upper

91 100

126 8.9 11.9 47.5#

