

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL021623\
 Data File : VL040184.D
 Acq On : 16 Feb 2023 18:48
 Operator : SY/MD
 Sample : 01550-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

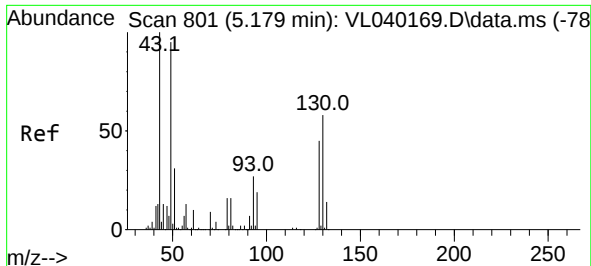
Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-03

Quant Time: Feb 17 03:31:51 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL021523AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Feb 15 17:01:01 2023
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.185	49	827316	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.648	114	2077500	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.468	117	1920722	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.780	95	1517067	9.605	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.100%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.713	85	24073	0.156	ppbv	94
3) Chlorodifluoromethane	2.661	51	21050m	0.213	ppbv	
4) Chloromethane	2.803	50	6018	0.097	ppbv #	83
9) Propene	2.684	41	316909m	7.867	ppbv	
10) Heptane	7.577	43	256618	2.676	ppbv	98
11) Trichlorofluoromethane	3.552	101	74409	0.538	ppbv	88
13) Ethanol	3.227	45	37550m	10.125	ppbv	
15) Acetone	3.452	43	3044642	30.568	ppbv #	78
17) tert-Butyl alcohol	3.867	59	351563	3.870	ppbv #	1
19) Isopropyl Alcohol	3.568	45	57222m	1.209	ppbv	
20) Methylene Chloride	3.925	84	240103	4.631	ppbv	97
26) Hexane	5.208	57	1347571	16.953	ppbv #	36
27) Carbon Disulfide	4.115	76	49922	0.495	ppbv #	82
29) Chloroform	5.266	83	36483	0.267	ppbv	88
30) Cyclohexane	6.600	84	16324m	0.262	ppbv	
32) 1,1,1-Trichloroethane	5.996	97	5598m	0.044	ppbv	
34) 2-Butanone	4.777	43	428802	4.184	ppbv	95
35) Carbon Tetrachloride	6.491	117	5050m	0.041	ppbv	
36) Benzene	6.368	78	115447	0.714	ppbv	93
44) 2,2,4-Trimethylpentane	7.323	57	222798m	0.826	ppbv	
51) 2-Hexanone	9.552	43	306070	2.501	ppbv #	92
52) Tetrachloroethene	10.622	164	21358m	0.423	ppbv	
53) Toluene	9.220	91	693042	4.002	ppbv	99
58) Ethyl Benzene	12.092	91	255356	1.094	ppbv	99
59) m/p-Xylene	12.346	91	842437	4.076	ppbv	96
60) o-Xylene	13.063	91	357735	1.799	ppbv	99
62) Isopropylbenzene	14.031	105	36550m	0.128	ppbv	
64) n-propylbenzene	14.918	120	27392m	0.388	ppbv	
72) 4-Ethyltoluene	15.198	105	150276	0.684	ppbv	98
73) 1,3,5-Trimethylbenzene	15.362	105	125508m	0.613	ppbv	
74) 1,2,4-Trimethylbenzene	16.114	105	472130	2.101	ppbv #	68

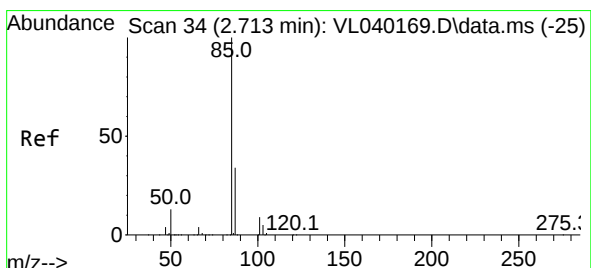
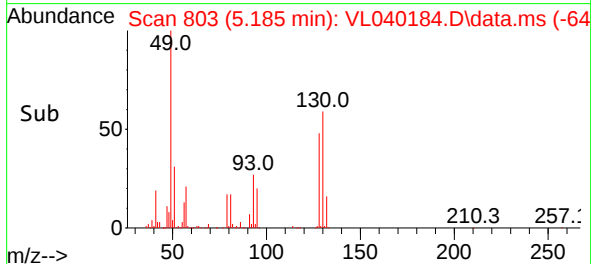
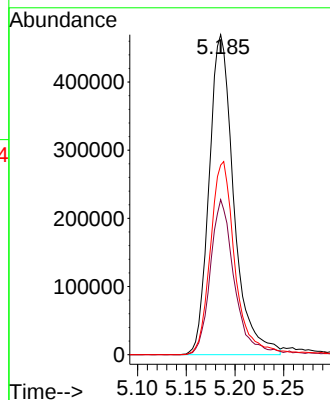
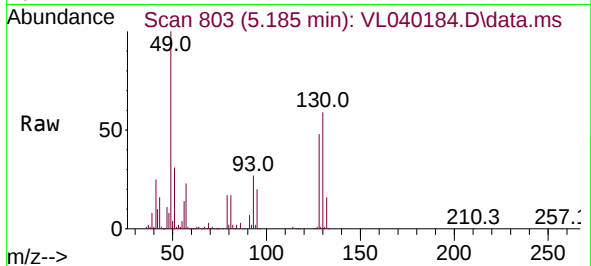
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.185 min Scan# 80
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

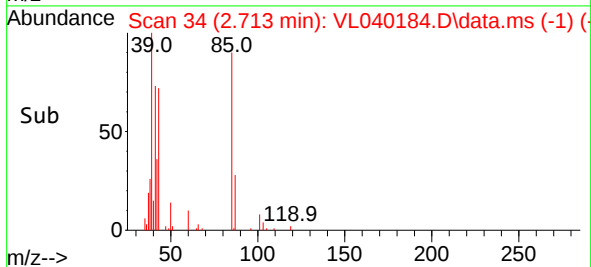
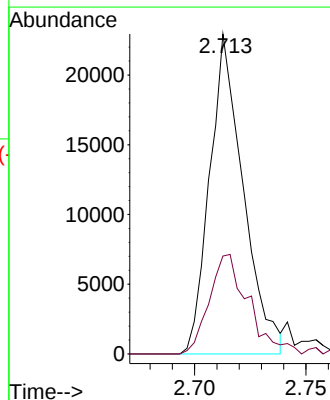
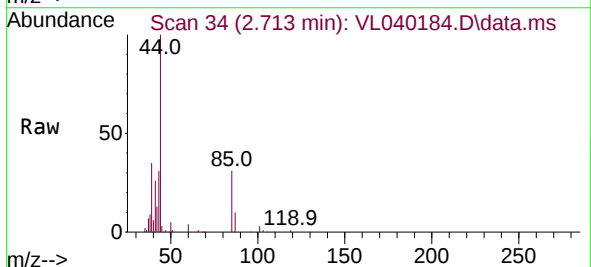
Instrument :
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ClientSampleId :
SVP-03

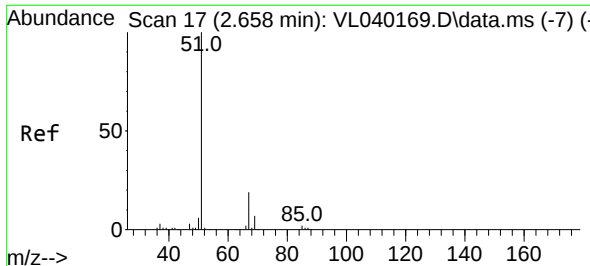
Tgt Ion: 49 Resp: 827316
Ion Ratio Lower Upper
49 100
128 48.0 24.1 72.3
130 61.5 30.9 92.8



#2
Dichlorodifluoromethane
Concen: 0.156 ppbv
RT: 2.713 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 85 Resp: 24073
Ion Ratio Lower Upper
85 100
87 30.6 27.0 40.6

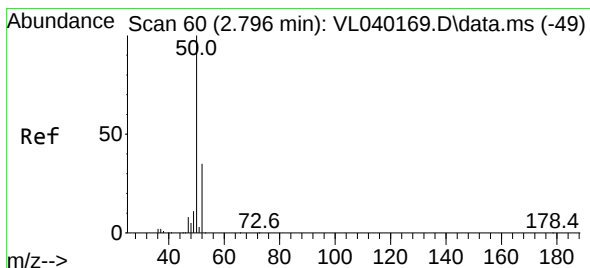
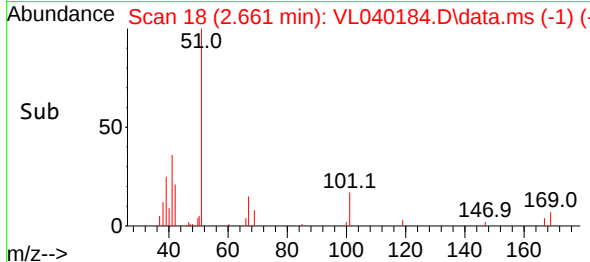
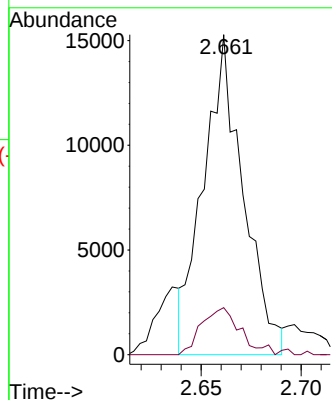
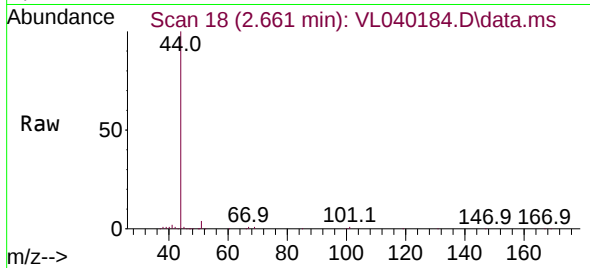




#3
Chlorodifluoromethane
Concen: 0.213 ppbv m
RT: 2.661 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

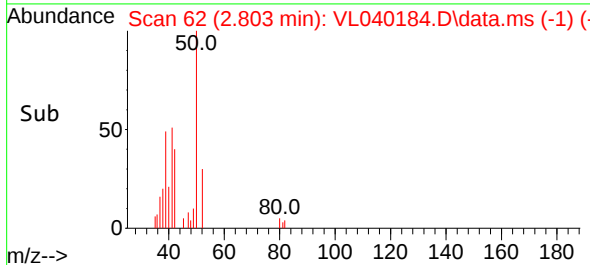
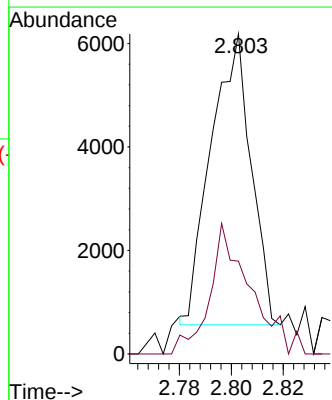
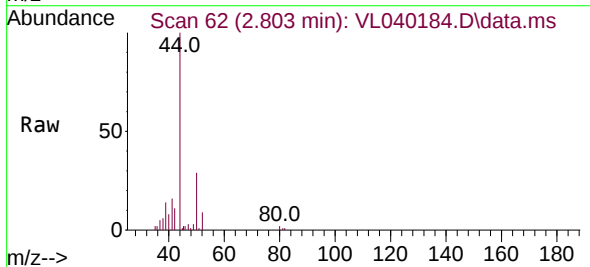
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

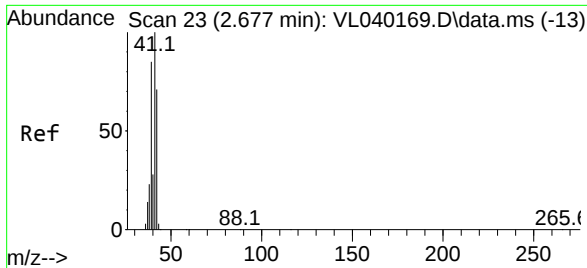
Tgt Ion: 51 Resp: 21050
Ion Ratio Lower Upper
51 100
67 15.0 15.4 23.2#



#4
Chloromethane
Concen: 0.097 ppbv
RT: 2.803 min Scan# 62
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 50 Resp: 6018
Ion Ratio Lower Upper
50 100
52 25.4 28.3 42.5#

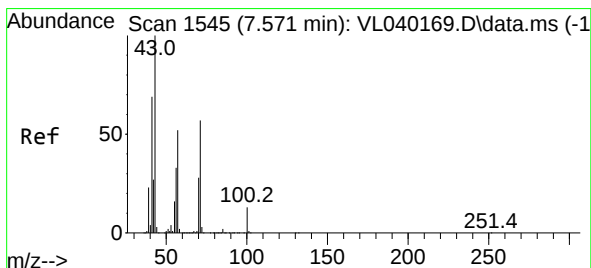
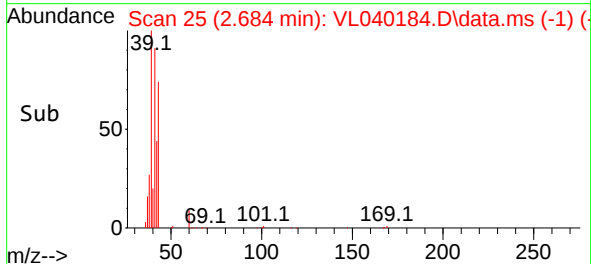
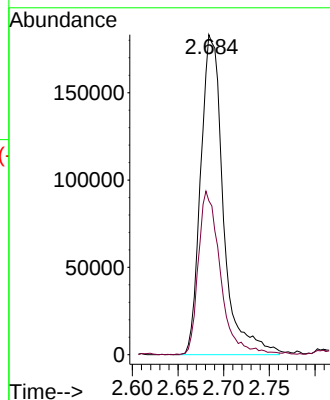
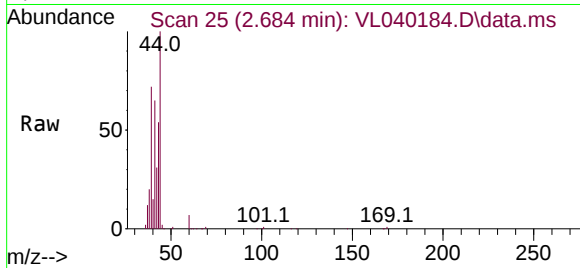




#9
Propene
Concen: 7.867 ppbv m
RT: 2.684 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

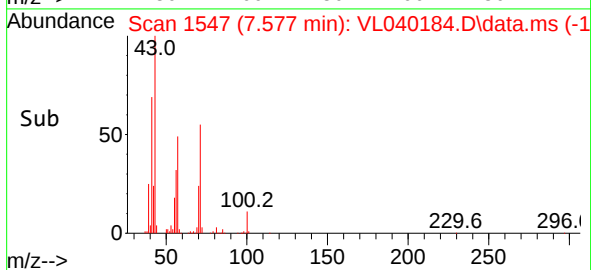
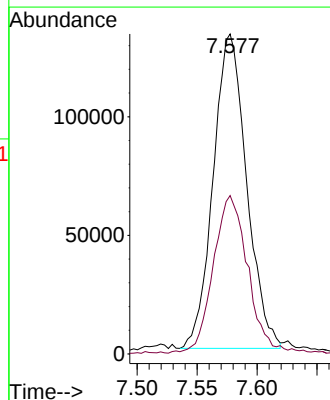
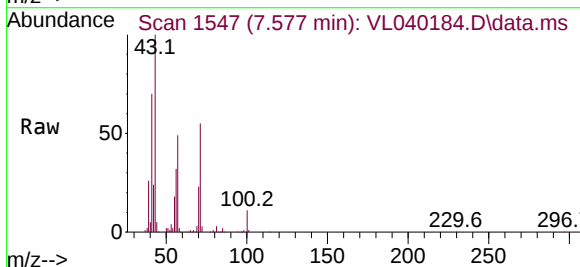
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

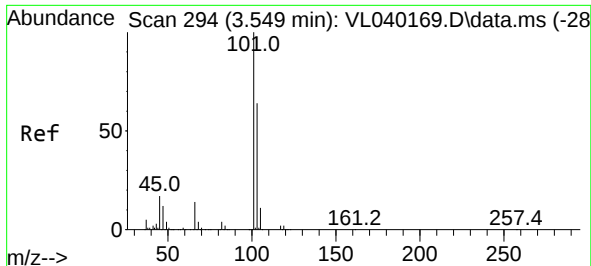
Tgt Ion: 41 Resp: 316909
Ion Ratio Lower Upper
41 100
42 124.3 56.9 85.3#



#10
Heptane
Concen: 2.676 ppbv
RT: 7.577 min Scan# 1547
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 43 Resp: 256618
Ion Ratio Lower Upper
43 100
57 53.4 41.4 62.2

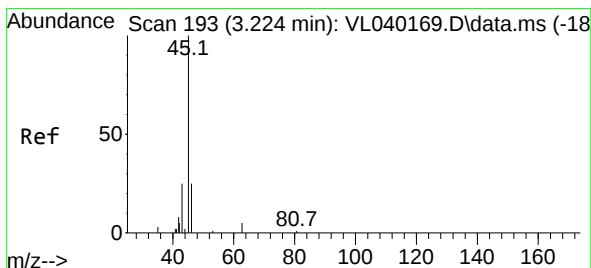
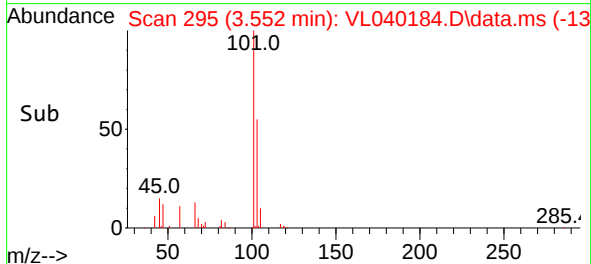
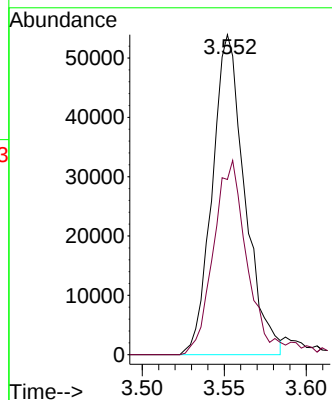
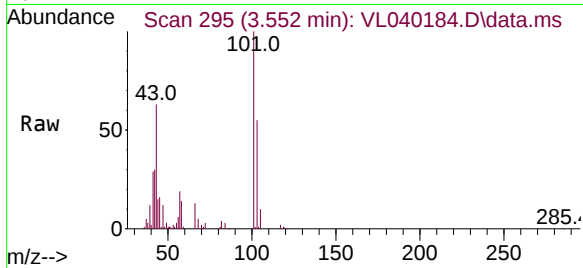




#11
 Trichlorofluoromethane
 Concen: 0.538 ppbv
 RT: 3.552 min Scan# 294
 Delta R.T. 0.003 min
 Lab File: VL040184.D
 Acq: 16 Feb 2023 18:48

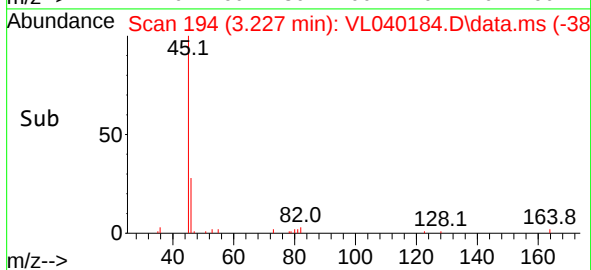
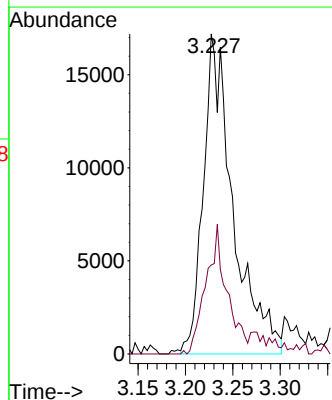
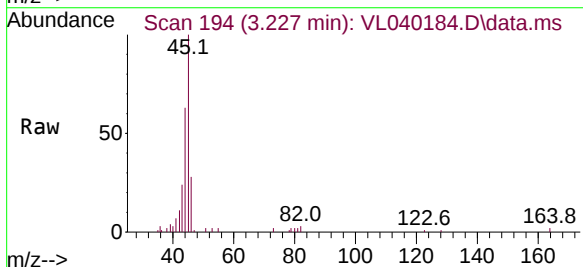
Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-03

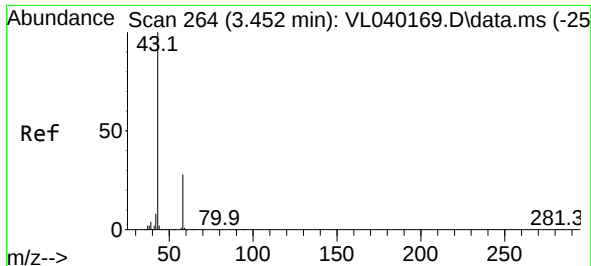
Tgt Ion:101 Resp: 74409
 Ion Ratio Lower Upper
 101 100
 103 54.8 51.0 76.6



#13
 Ethanol
 Concen: 10.125 ppbv m
 RT: 3.227 min Scan# 194
 Delta R.T. 0.003 min
 Lab File: VL040184.D
 Acq: 16 Feb 2023 18:48

Tgt Ion: 45 Resp: 37550
 Ion Ratio Lower Upper
 45 100
 46 0.0 13.3 53.1#

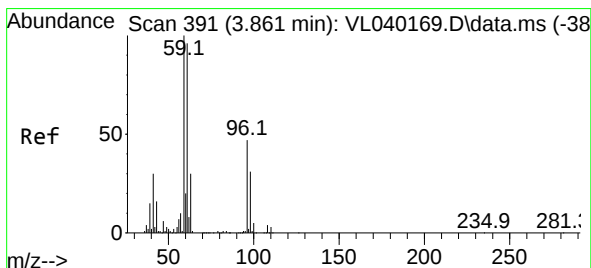
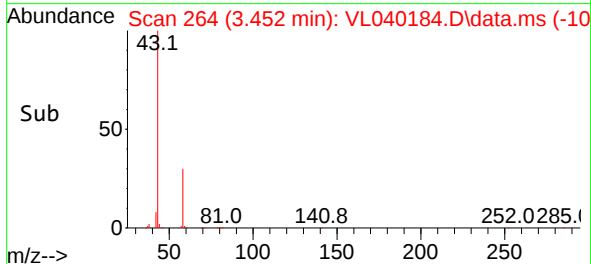
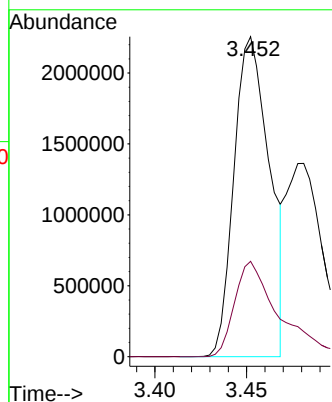
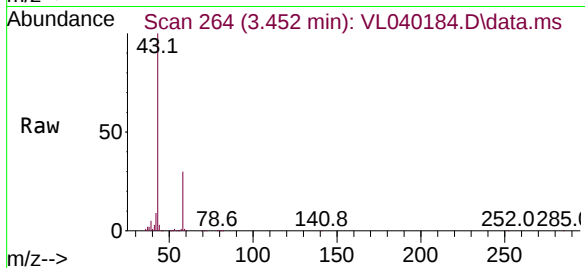




#15
Acetone
Concen: 30.568 ppbv
RT: 3.452 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

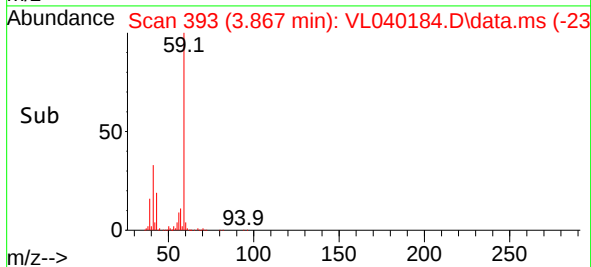
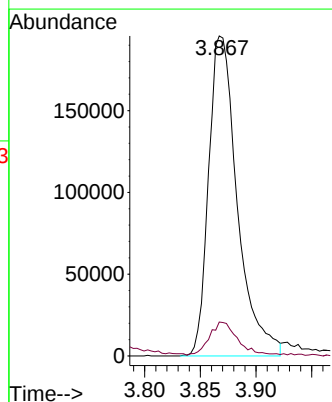
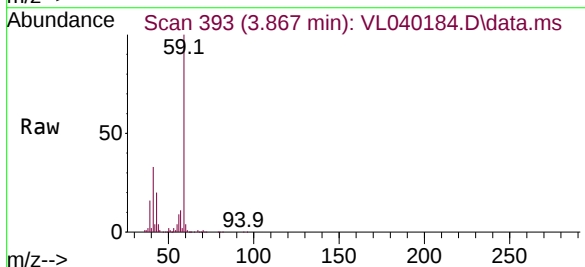
Instrument :
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ClientSampleId :
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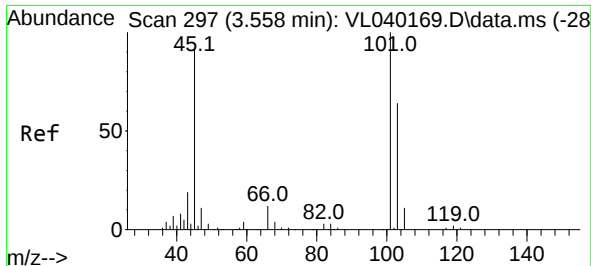
Tgt Ion: 43 Resp: 3044642
Ion Ratio Lower Upper
43 100
58 39.6 22.4 33.6#



#17
tert-Butyl alcohol
Concen: 3.870 ppbv
RT: 3.867 min Scan# 393
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 59 Resp: 351563
Ion Ratio Lower Upper
59 100
57 167.8 8.5 12.7#

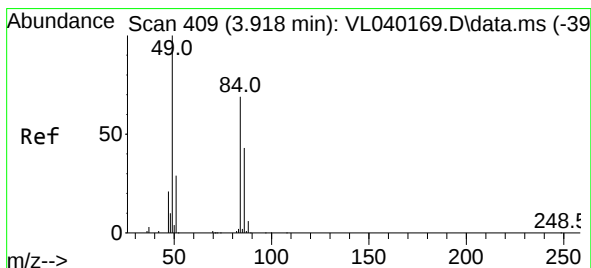
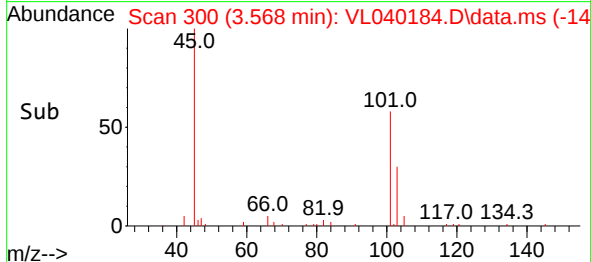
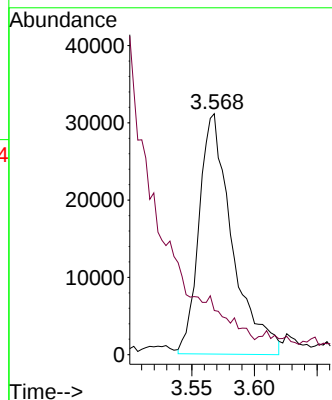
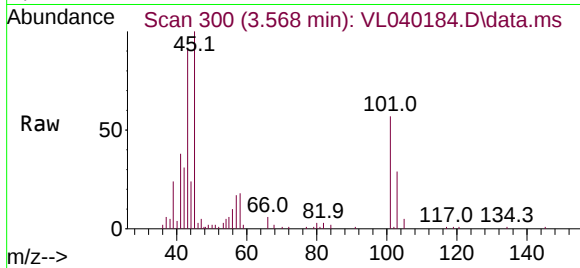




#19
Isopropyl Alcohol
Concen: 1.209 ppbv m
RT: 3.568 min Scan# 300
Delta R.T. 0.010 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

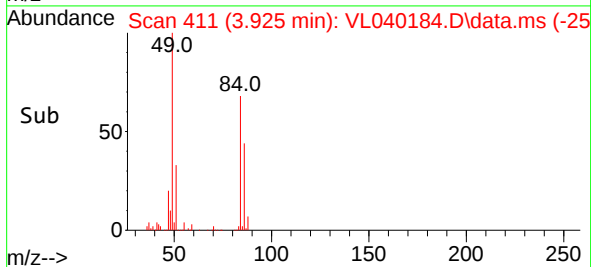
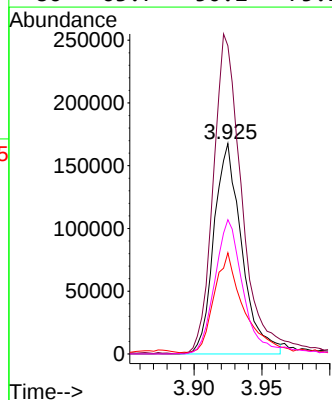
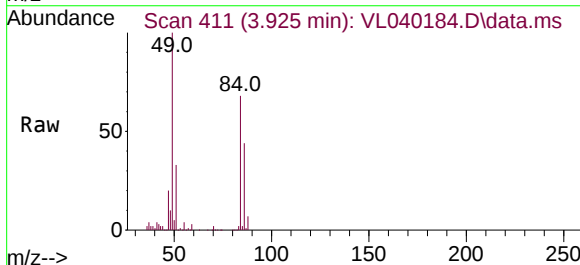
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SVP-03

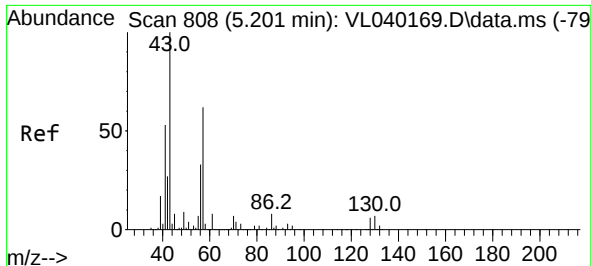
Tgt Ion: 45 Resp: 57222
Ion Ratio Lower Upper
45 100
58 0.0 2.6 3.8#



#20
Methylene Chloride
Concen: 4.631 ppbv
RT: 3.925 min Scan# 411
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 84 Resp: 240103
Ion Ratio Lower Upper
84 100
49 146.0 115.5 173.3
51 47.4 33.1 49.7
86 63.7 50.2 75.2



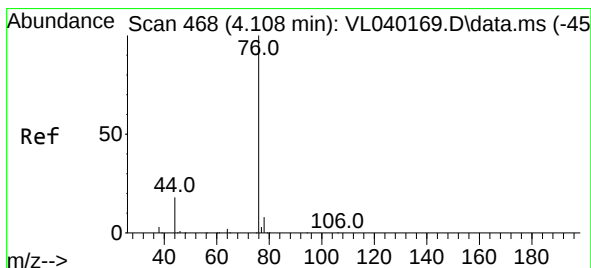
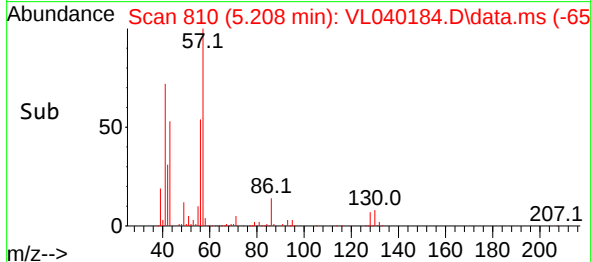
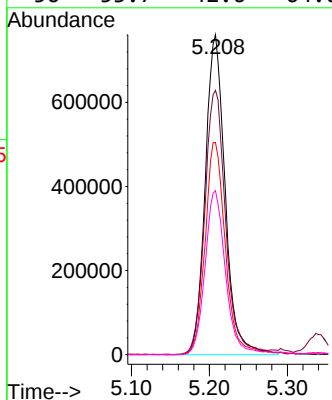
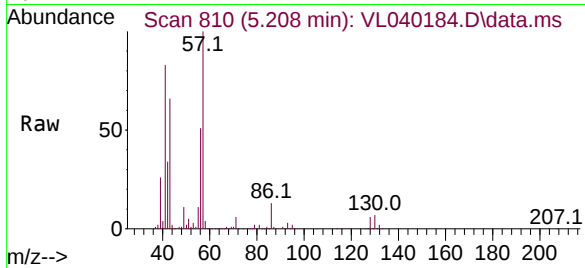


#26
Hexane
Concen: 16.953 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Instrument :
MSVOA_L
ClientSampleId :
SVP-03

Tgt Ion: 57 Resp: 1347571

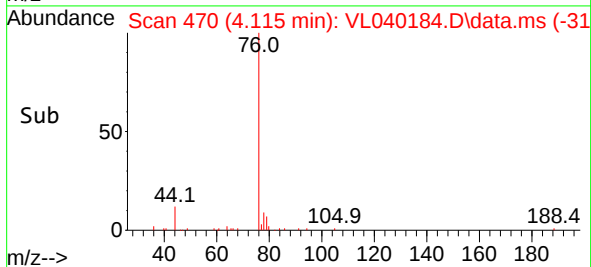
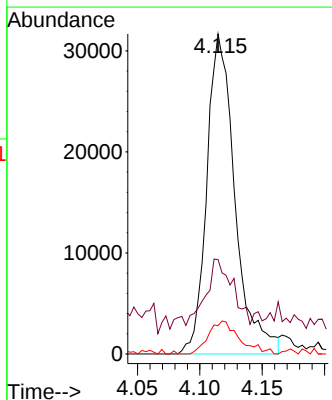
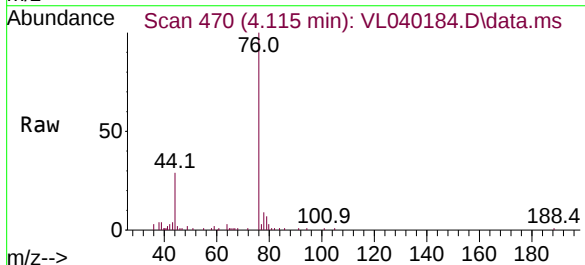
Ion	Ratio	Lower	Upper
57	100		
41	88.8	74.3	111.5
43	68.4	193.0	289.4#
56	53.7	42.6	64.0

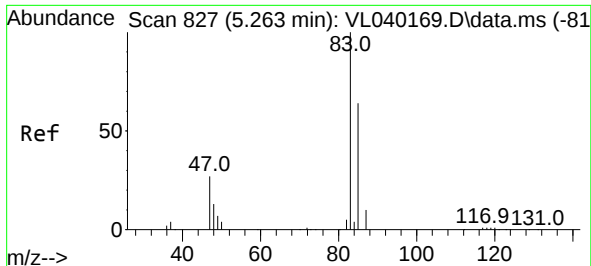


#27
Carbon Disulfide
Concen: 0.495 ppbv
RT: 4.115 min Scan# 470
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 76 Resp: 49922

Ion	Ratio	Lower	Upper
76	100		
44	30.4	15.3	22.9#
78	11.3	7.7	11.5





#29

Chloroform

Concen: 0.267 ppbv

RT: 5.266 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL040184.D

Acq: 16 Feb 2023 18:48

Instrument :

MSVOA_L

ClientSampleId :

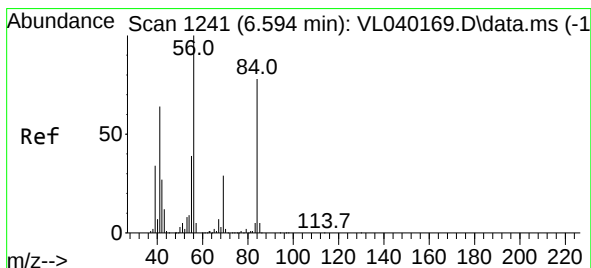
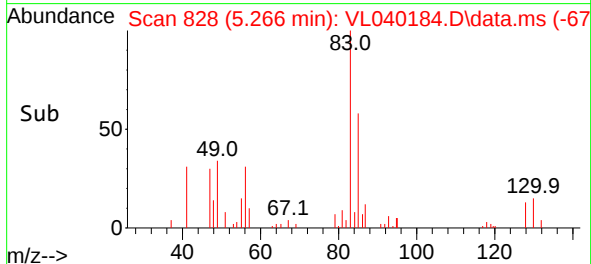
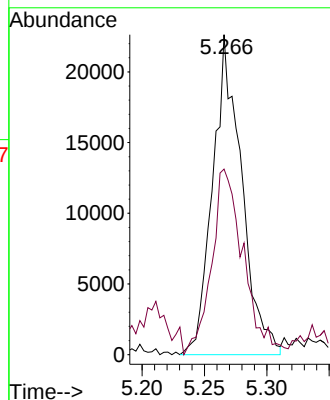
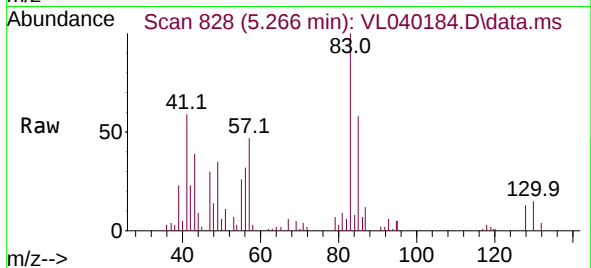
SVP-03

Tgt Ion: 83 Resp: 36483

Ion Ratio Lower Upper

83 100

85 55.0 51.5 77.3



#30

Cyclohexane

Concen: 0.262 ppbv m

RT: 6.600 min Scan# 1243

Delta R.T. 0.006 min

Lab File: VL040184.D

Acq: 16 Feb 2023 18:48

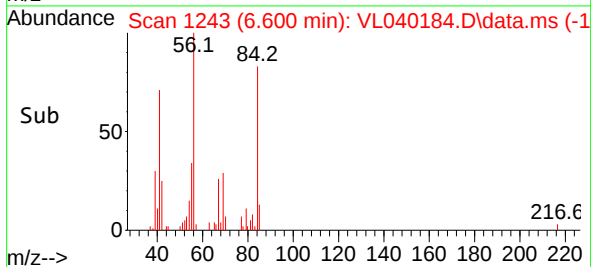
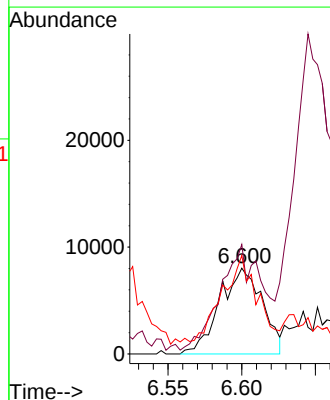
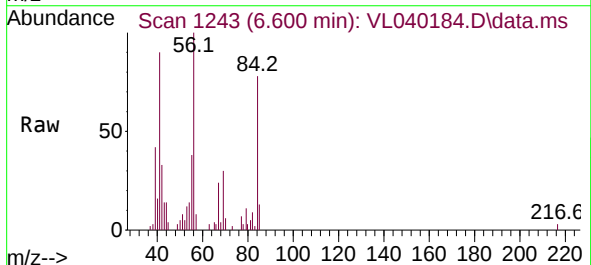
Tgt Ion: 84 Resp: 16324

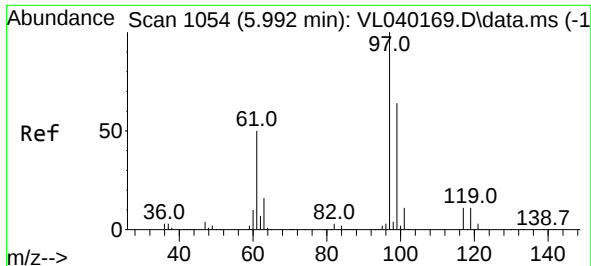
Ion Ratio Lower Upper

84 100

56 73.6 109.9 164.9#

41 105.1 67.8 101.6#

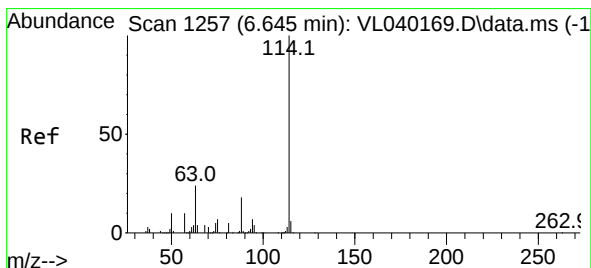
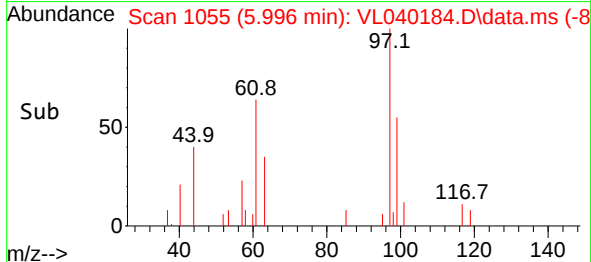
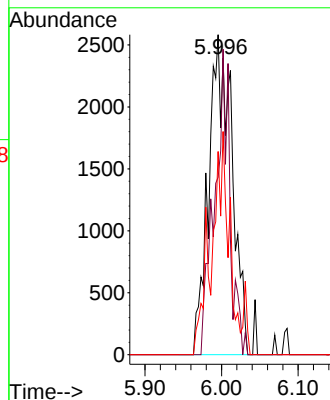
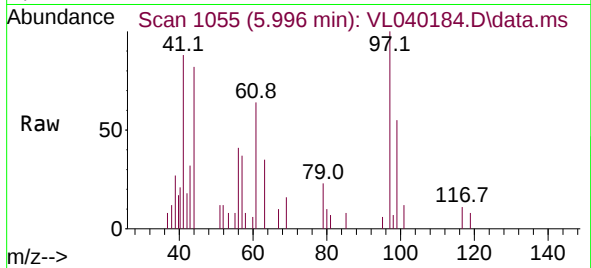




#32
 1,1,1-Trichloroethane
 Concen: 0.044 ppbv m
 RT: 5.996 min Scan# 1055
 Delta R.T. 0.003 min
 Lab File: VL040184.D
 Acq: 16 Feb 2023 18:48

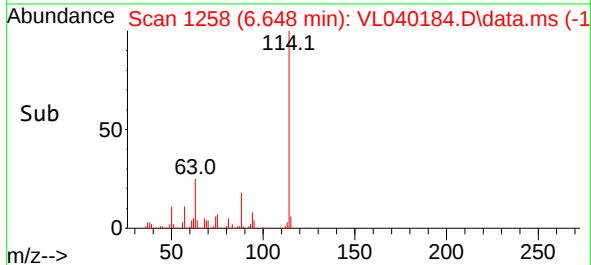
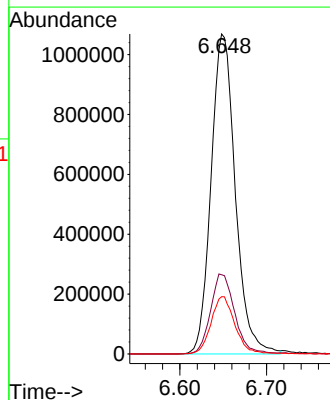
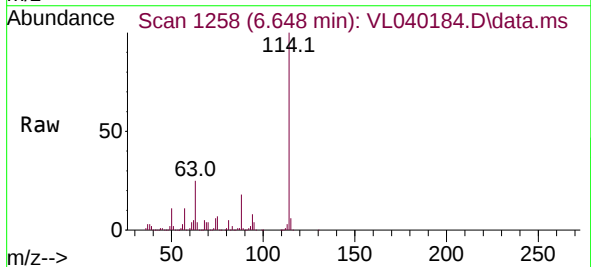
Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-03

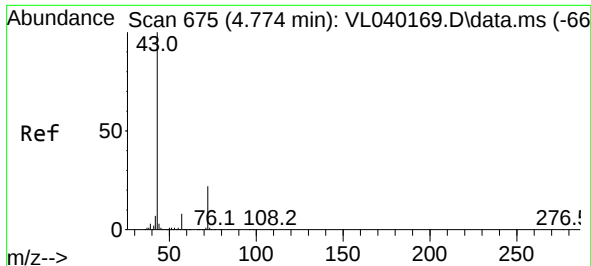
Tgt Ion: 97 Resp: 5598
 Ion Ratio Lower Upper
 97 100
 99 0.0 51.5 77.3#
 61 0.0 40.6 60.8#



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 6.648 min Scan# 1258
 Delta R.T. 0.003 min
 Lab File: VL040184.D
 Acq: 16 Feb 2023 18:48

Tgt Ion: 114 Resp: 2077500
 Ion Ratio Lower Upper
 114 100
 63 25.2 20.4 30.6
 88 17.8 14.3 21.5

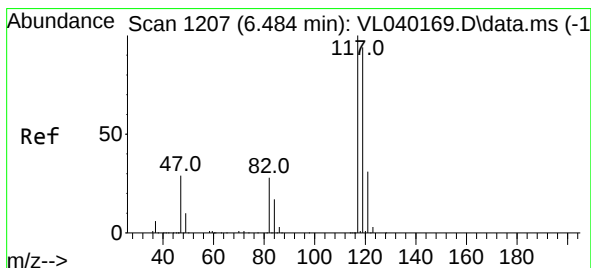
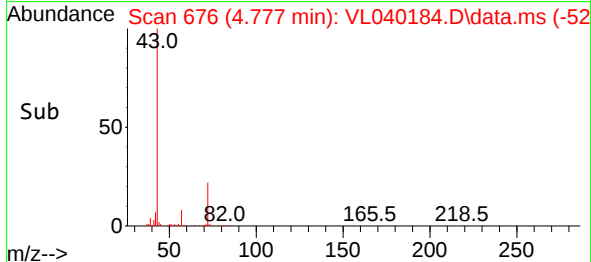
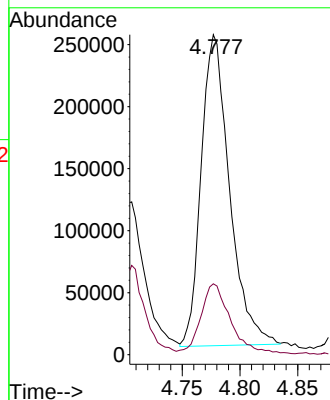
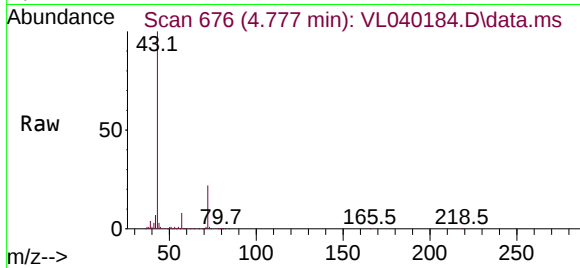




#34
2-Butanone
Concen: 4.184 ppbv
RT: 4.777 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

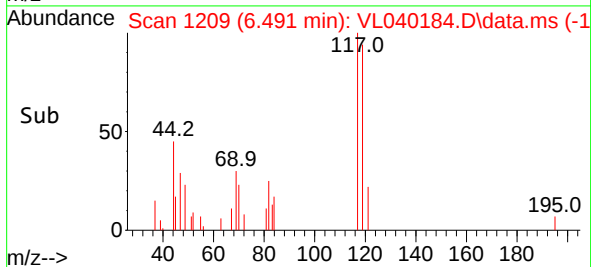
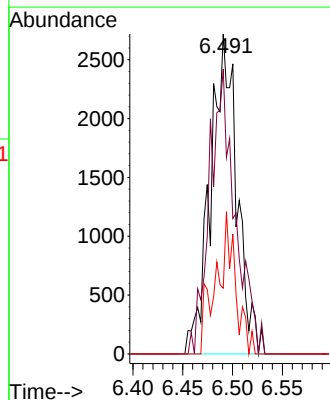
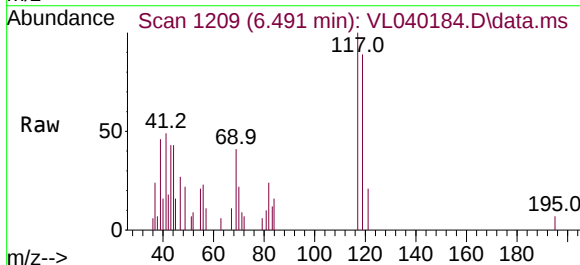
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

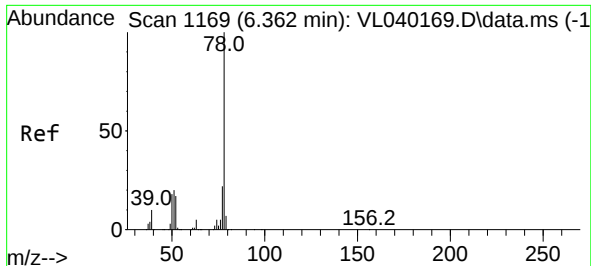
Tgt Ion: 43 Resp: 428802
Ion Ratio Lower Upper
43 100
72 24.6 17.8 26.8



#35
Carbon Tetrachloride
Concen: 0.041 ppbv m
RT: 6.491 min Scan# 1209
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 117 Resp: 5050
Ion Ratio Lower Upper
117 100
119 89.0 75.0 112.6
121 20.5 25.0 37.4#





#36

Benzene

Concen: 0.714 ppbv

RT: 6.368 min Scan# 1169

Delta R.T. 0.006 min

Lab File: VL040184.D

Acq: 16 Feb 2023 18:48

Instrument :

MSVOA_L

ClientSampleId :

SVP-03

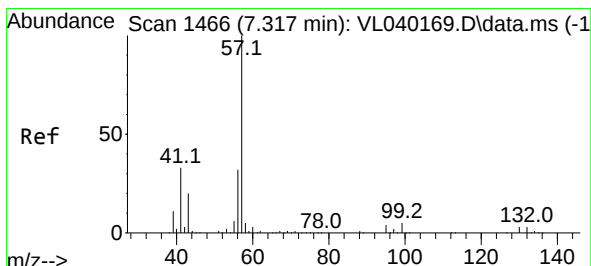
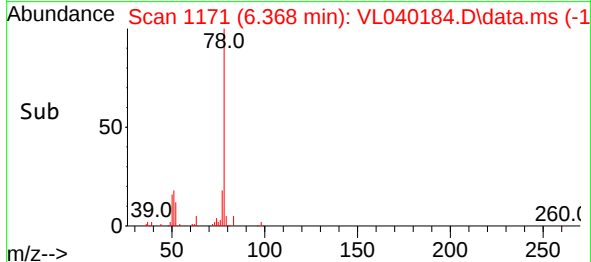
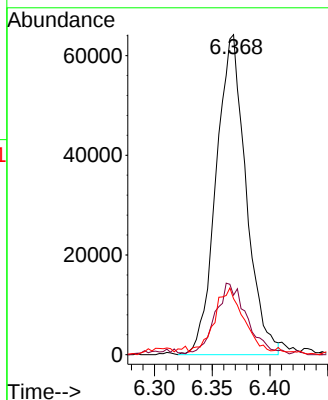
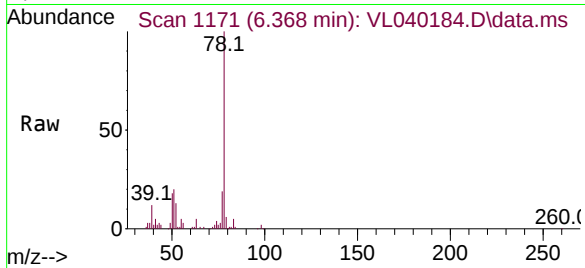
Tgt Ion: 78 Resp: 115447

Ion Ratio Lower Upper

78 100

77 18.0 17.5 26.3

50 15.7 14.6 22.0



#44

2,2,4-Trimethylpentane

Concen: 0.826 ppbv m

RT: 7.323 min Scan# 1468

Delta R.T. 0.006 min

Lab File: VL040184.D

Acq: 16 Feb 2023 18:48

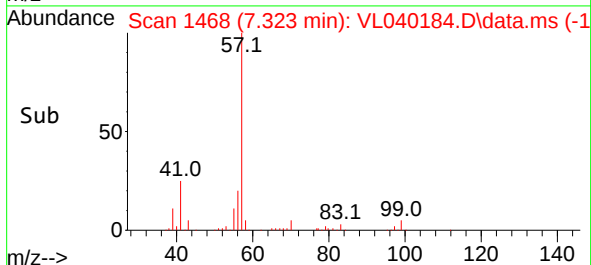
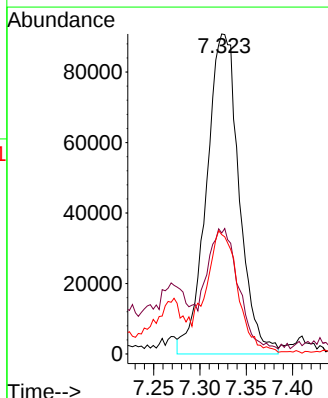
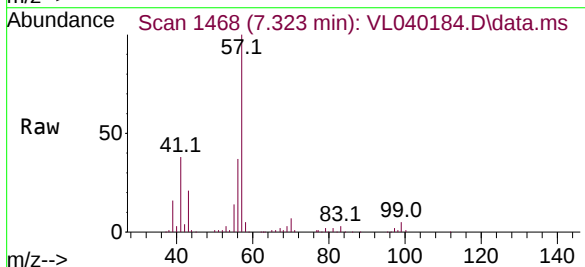
Tgt Ion: 57 Resp: 222798

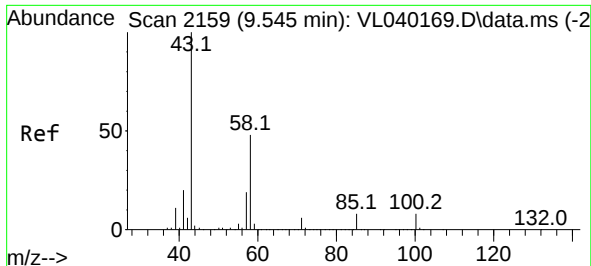
Ion Ratio Lower Upper

57 100

41 38.9 26.2 39.4

56 39.1 24.9 37.3#

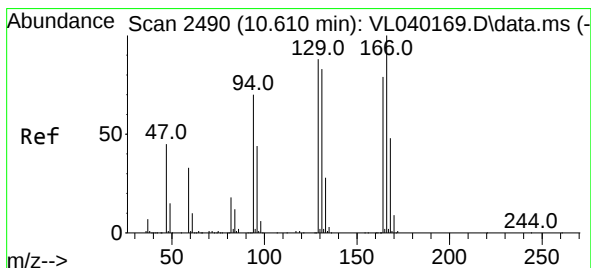
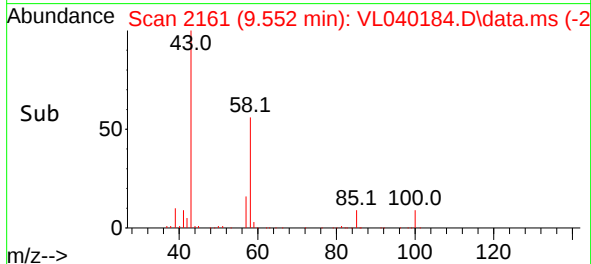
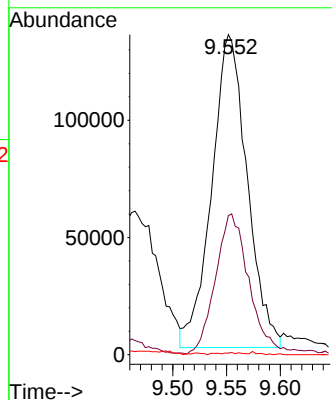
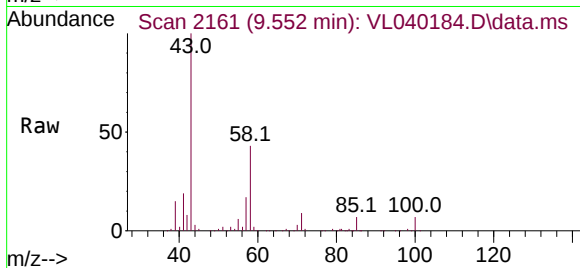




#51
2-Hexanone
Concen: 2.501 ppbv
RT: 9.552 min Scan# 2159
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

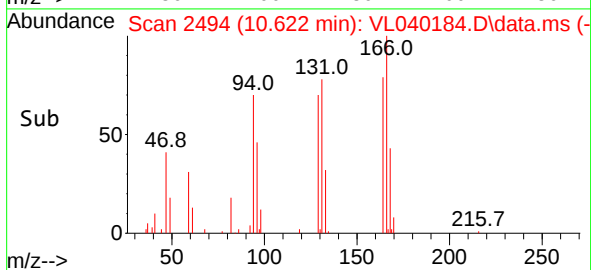
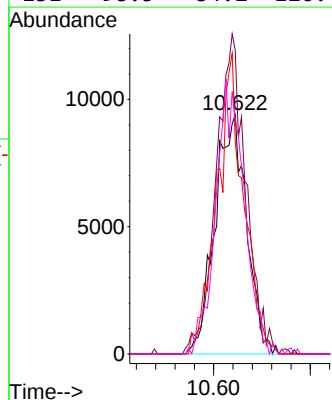
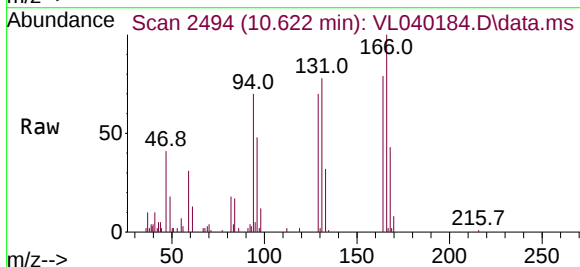
Instrument : MSVOA_L
ClientSampleId : SVP-03

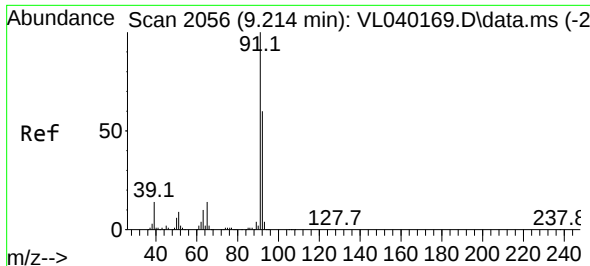
Tgt Ion: 43 Resp: 306070
Ion Ratio Lower Upper
43 100
58 43.4 39.1 58.7
98 0.7 0.2 0.4#



#52
Tetrachloroethene
Concen: 0.423 ppbv m
RT: 10.622 min Scan# 2494
Delta R.T. 0.013 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 164 Resp: 21358
Ion Ratio Lower Upper
164 100
166 126.9 101.5 152.3
129 88.8 89.0 133.4#
131 98.5 84.2 126.4

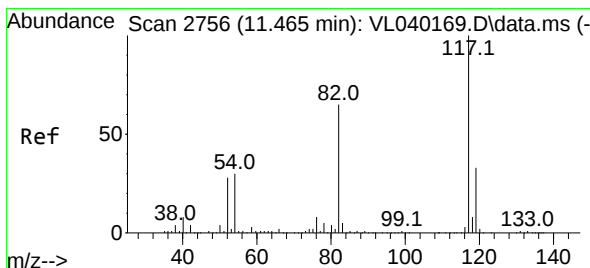
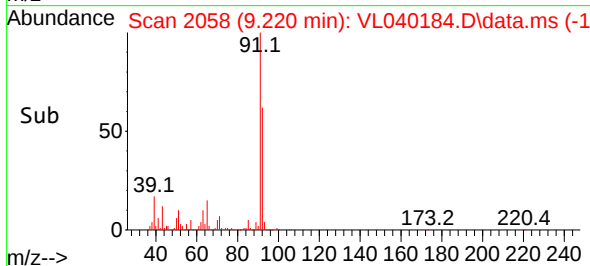
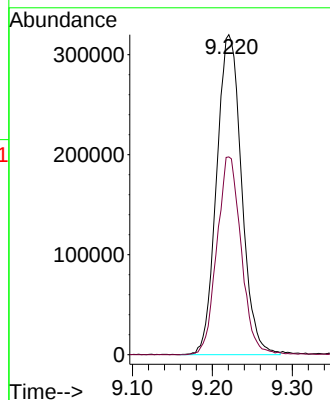
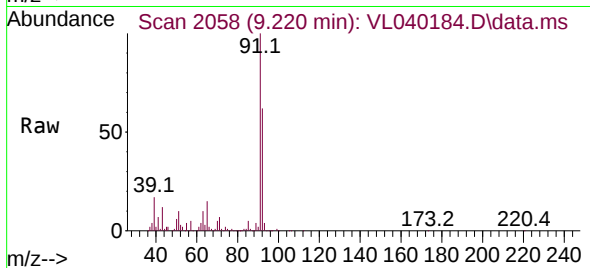




#53
Toluene
Concen: 4.002 ppbv
RT: 9.220 min Scan# 2056
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

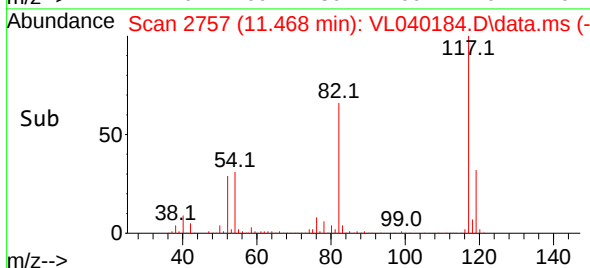
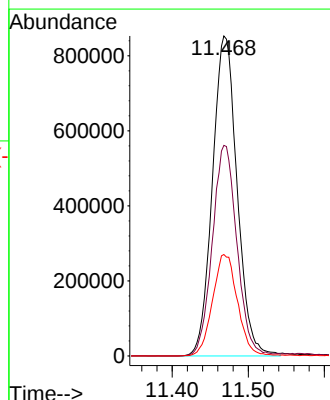
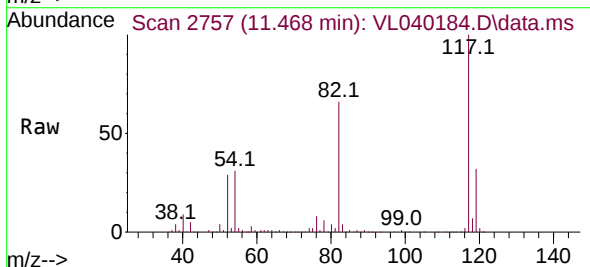
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

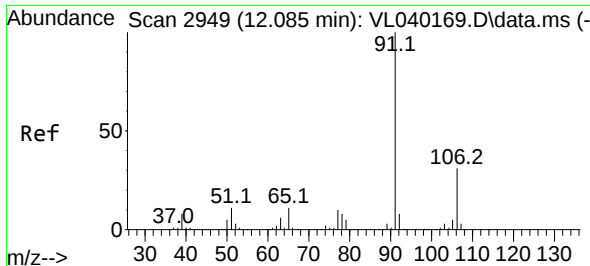
Tgt Ion: 91 Resp: 693042
Ion Ratio Lower Upper
91 100
92 60.3 48.9 73.3



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.468 min Scan# 2757
Delta R.T. 0.003 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 117 Resp: 1920722
Ion Ratio Lower Upper
117 100
82 65.9 53.3 79.9
119 32.3 24.6 37.0

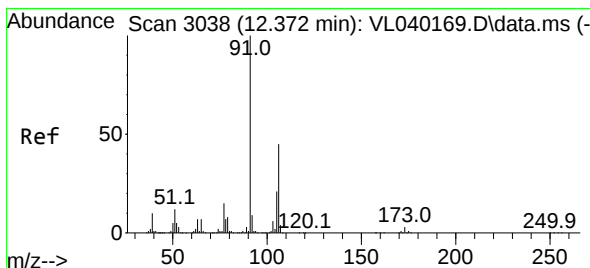
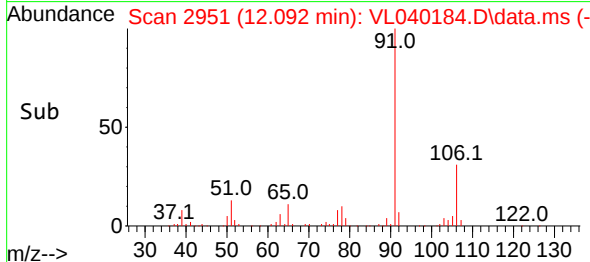
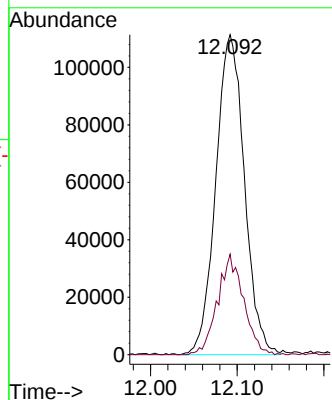
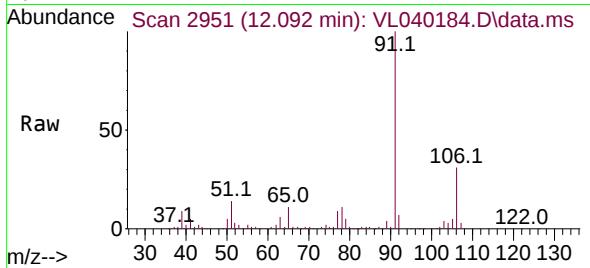




#58
Ethyl Benzene
Concen: 1.094 ppbv
RT: 12.092 min Scan# 2949
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

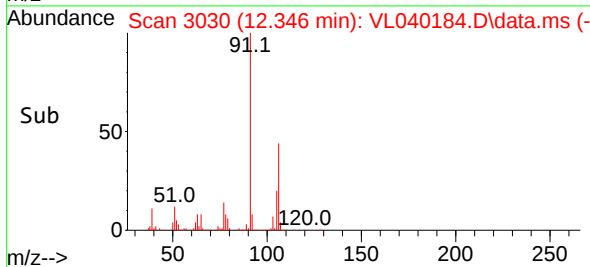
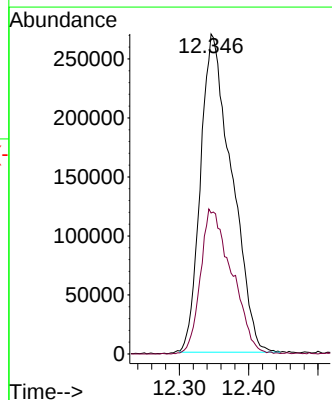
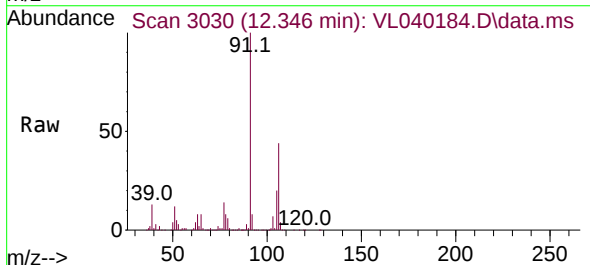
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

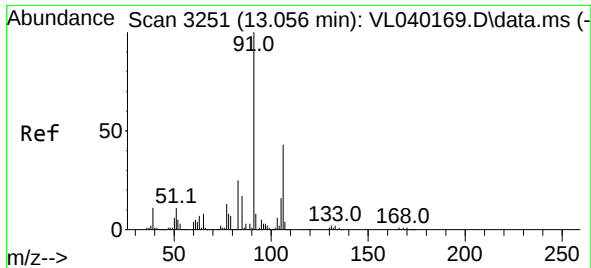
Tgt Ion: 91 Resp: 255356
Ion Ratio Lower Upper
91 100
106 31.4 24.9 37.3



#59
m/p-Xylene
Concen: 4.076 ppbv
RT: 12.346 min Scan# 3030
Delta R.T. -0.026 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 91 Resp: 842437
Ion Ratio Lower Upper
91 100
106 45.9 34.6 51.8

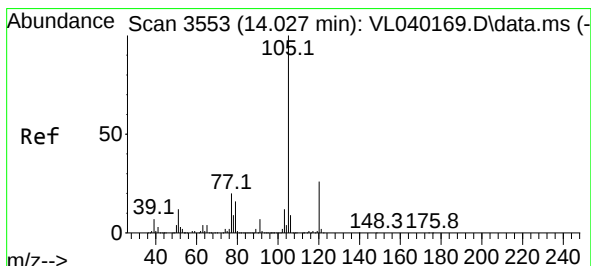
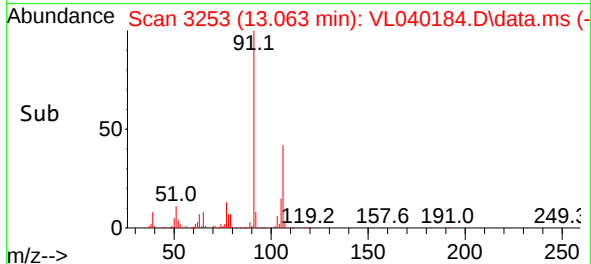
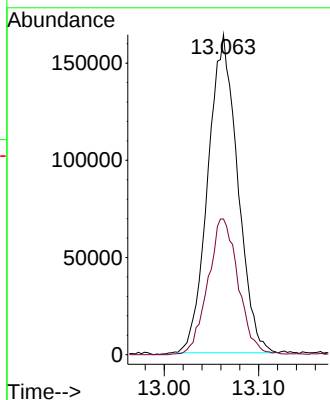
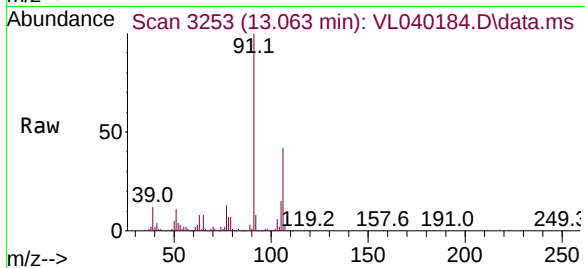




#60
o-Xylene
Concen: 1.799 ppbv
RT: 13.063 min Scan# 31
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

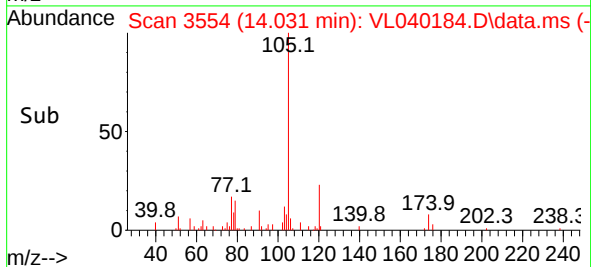
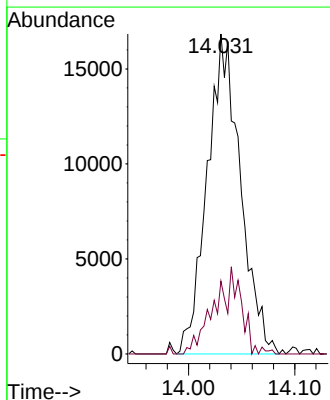
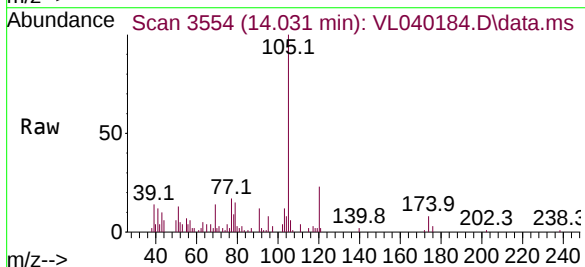
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

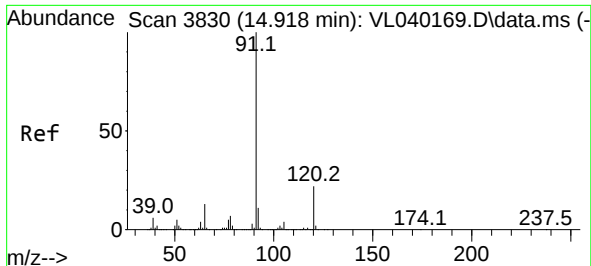
Tgt Ion: 91 Resp: 357735
Ion Ratio Lower Upper
91 100
106 43.8 21.6 65.0



#62
Isopropylbenzene
Concen: 0.128 ppbv m
RT: 14.031 min Scan# 3554
Delta R.T. 0.003 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 105 Resp: 36550
Ion Ratio Lower Upper
105 100
120 21.9 20.3 30.5

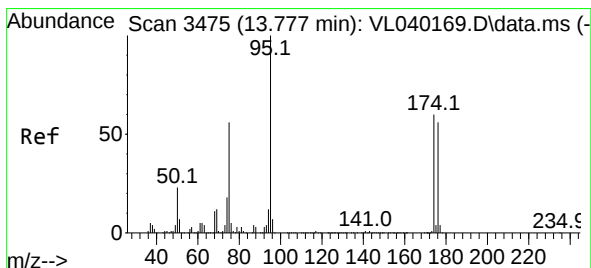
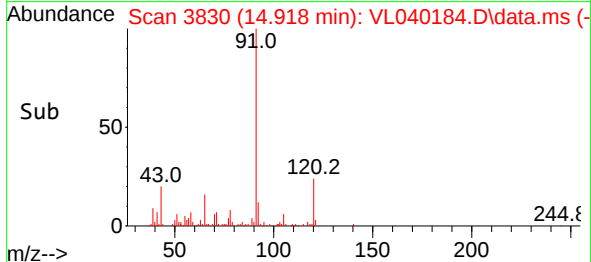
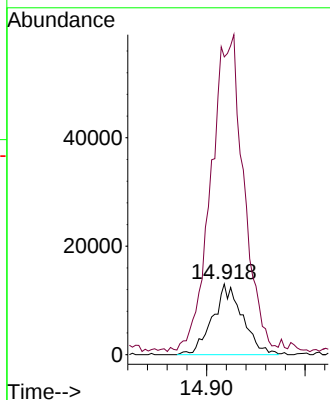
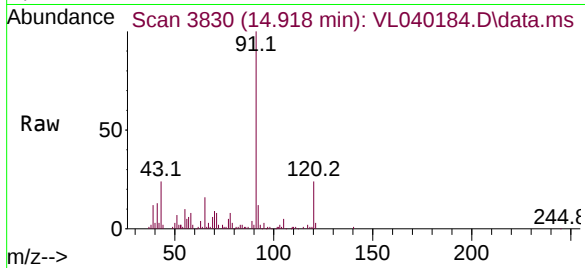




#64
n-propylbenzene
Concen: 0.388 ppbv m
RT: 14.918 min Scan# 3830
Delta R.T. -0.000 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

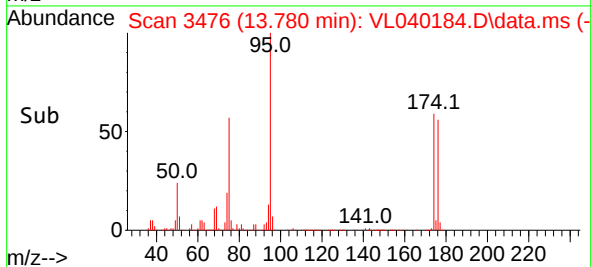
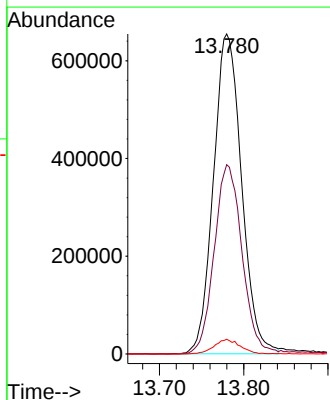
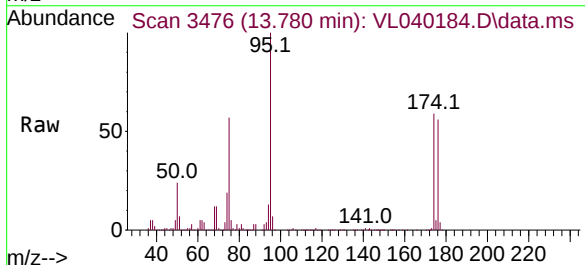
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

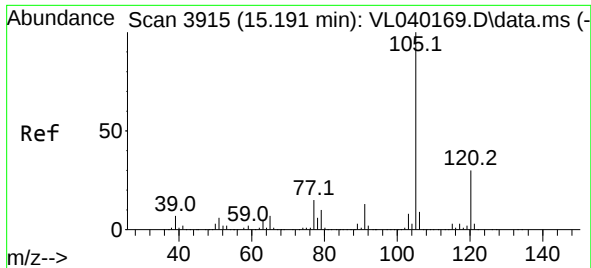
Tgt Ion:120 Resp: 27392
Ion Ratio Lower Upper
120 100
91 494.0 389.8 584.8



#68
1-Bromo-4-Fluorobenzene
Concen: 9.605 ppbv
RT: 13.780 min Scan# 3476
Delta R.T. 0.003 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

Tgt Ion: 95 Resp: 1517067
Ion Ratio Lower Upper
95 100
174 60.0 48.2 72.2
175 4.3 3.4 5.2

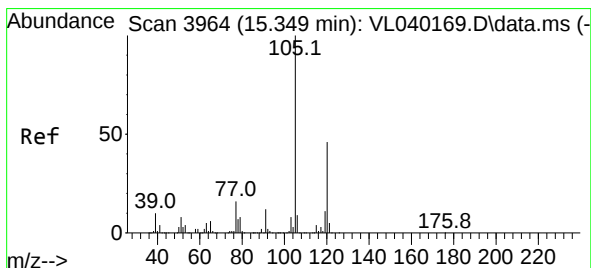
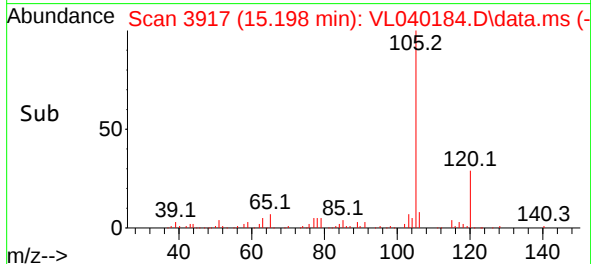
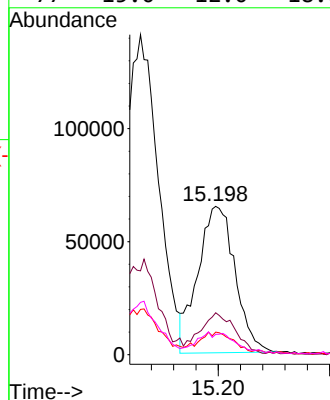
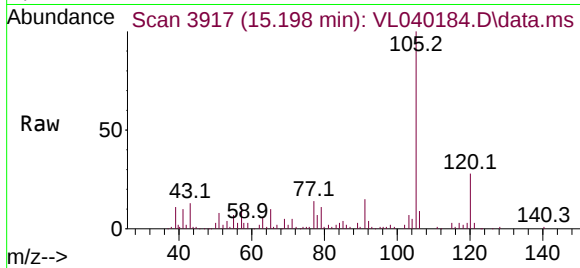




#72
4-Ethyltoluene
Concen: 0.684 ppbv
RT: 15.198 min Scan# 3915
Delta R.T. 0.006 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

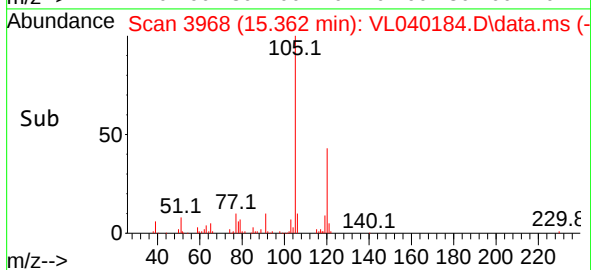
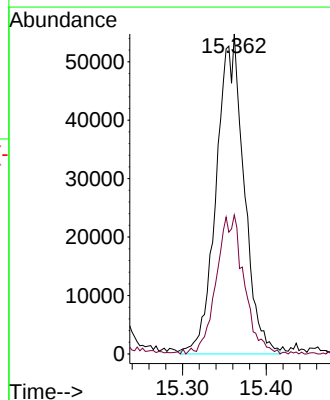
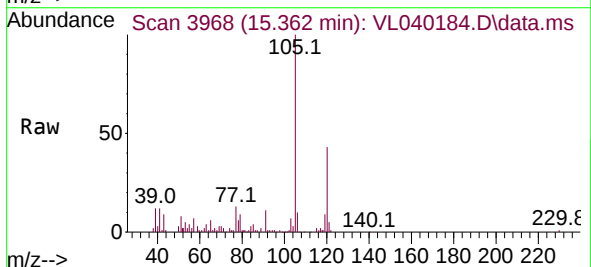
Instrument :
MSVOA_L
ClientSampleId :
SVP-03

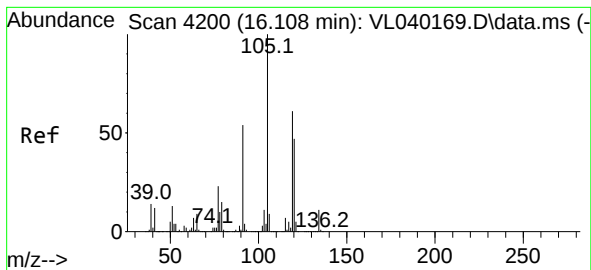
Tgt Ion:105 Resp: 150276
Ion Ratio Lower Upper
105 100
120 28.5 23.2 34.8
91 16.2 11.3 16.9
77 15.0 12.0 18.0



#73
1,3,5-Trimethylbenzene
Concen: 0.613 ppbv m
RT: 15.362 min Scan# 3968
Delta R.T. 0.013 min
Lab File: VL040184.D
Acq: 16 Feb 2023 18:48

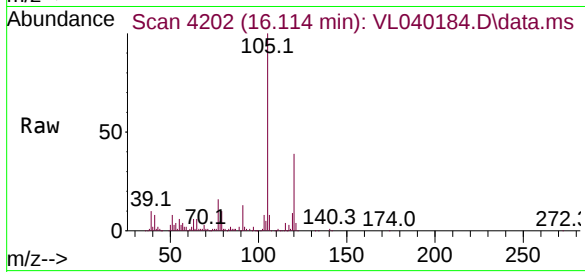
Tgt Ion:105 Resp: 125508
Ion Ratio Lower Upper
105 100
120 43.5 36.8 55.2





#74
 1,2,4-Trimethylbenzene
 Concen: 2.101 ppbv
 RT: 16.114 min Scan# 41
 Delta R.T. 0.006 min
 Lab File: VL040184.D
 Acq: 16 Feb 2023 18:48

Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-03



Tgt Ion:	105	Resp:	472130
Ion	Ratio	Lower	Upper
105	100		
120	39.2	37.9	56.9
91	13.0	43.7	65.5#
77	16.3	18.3	27.5#

