

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL021125\
 Data File : VL041998.D
 Acq On : 11 Feb 2025 11:39
 Operator : SY/MD
 Sample : Q1342-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Feb 11 22:18:33 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Jan 14 23:15:42 2025
 Response via : Initial Calibration

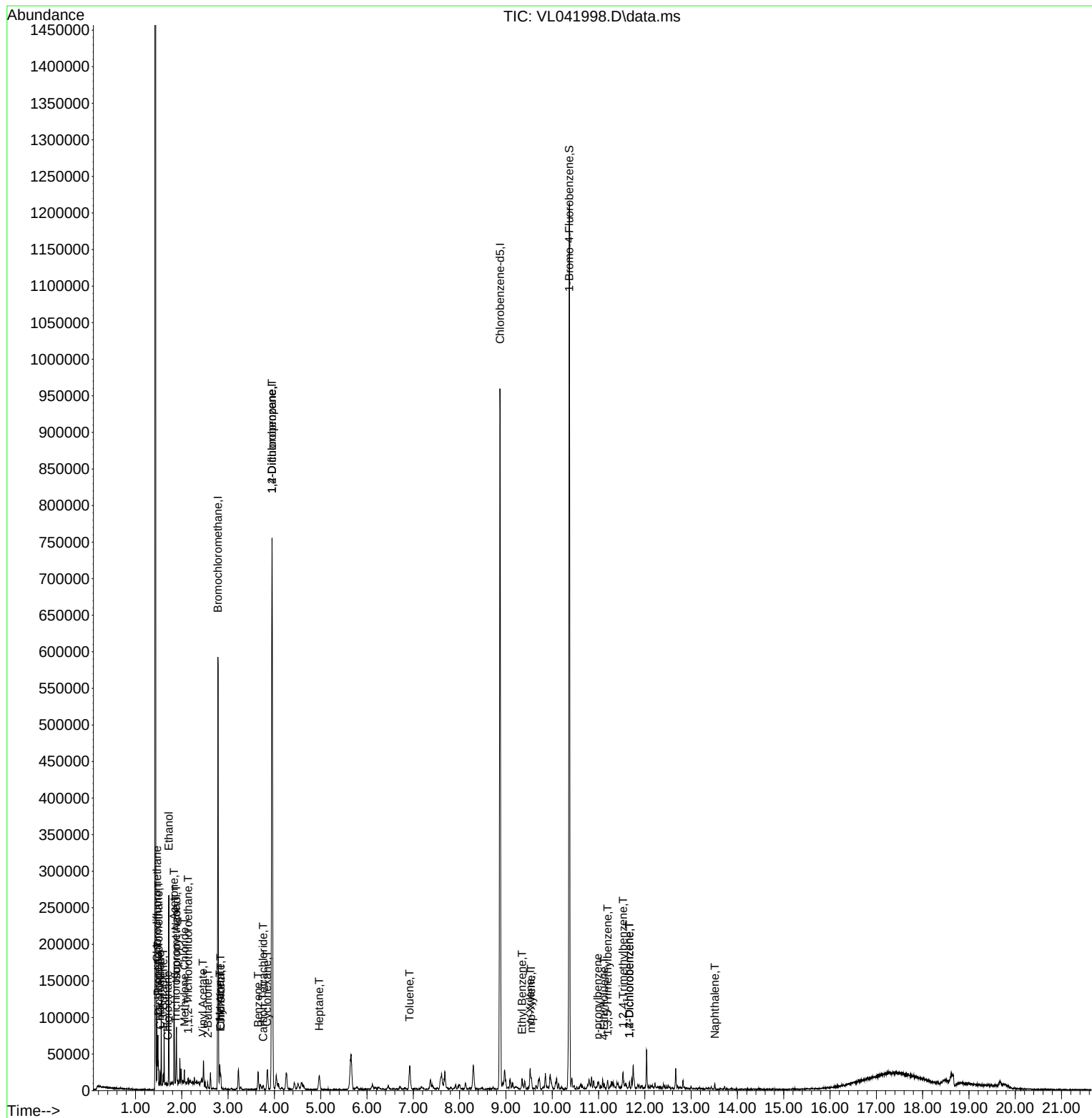
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

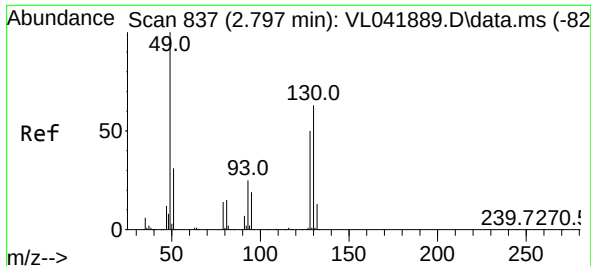
Internal Standards						
1) Bromochloromethane	2.780	49	163540	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	3.949	114	454250	10.000	ppbv	-0.03
55) Chlorobenzene-d5	8.872	117	398767	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.367	95	323329	10.294	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	= 102.900%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	8116	0.364	ppbv	93
3) Chlorodifluoromethane	1.463	51	33402	1.431	ppbv #	71
4) Chloromethane	1.531	50	4224	0.504	ppbv #	89
7) Chloroethane	1.699	64	148	0.045	ppbv #	43
9) Propene	1.483	41	6238	0.649	ppbv	96
10) Heptane	4.968	43	7115	0.277	ppbv	96
11) Trichlorofluoromethane	1.874	101	4423	0.191	ppbv #	79
12) 1,1,2-Trichlorotrifluo...	2.136	101	1286	0.071	ppbv	87
13) Ethanol	1.719	45	84552	120.078	ppbv	90
15) Acetone	1.832	43	69626	3.545	ppbv	98
16) 1,3-Butadiene	1.599	39	1661	0.188	ppbv #	57
19) Isopropyl Alcohol	1.884	45	30975	2.660	ppbv #	75
20) Methylene Chloride	2.059	84	1849	0.238	ppbv #	92
23) Vinyl Acetate	2.454	43	2726	0.280	ppbv #	57
25) Ethyl Acetate	2.832	43	3256	0.061	ppbv #	80
26) Hexane	2.819	57	6857	0.327	ppbv #	51
29) Chloroform	2.842	83	5393	0.163	ppbv	94
30) Cyclohexane	3.842	84	3488	0.192	ppbv #	1
34) 2-Butanone	2.560	43	5549	0.192	ppbv #	88
35) Carbon Tetrachloride	3.755	117	1320	0.046	ppbv	85
36) Benzene	3.648	78	14133	0.339	ppbv	96
39) 1,2-Dichloropropane	3.949	63	112540	7.701	ppbv #	22
53) Toluene	6.920	91	23101	0.509	ppbv	97
58) Ethyl Benzene	9.348	91	6500	0.104	ppbv #	85
59) m/p-Xylene	9.545	91	2121	0.042	ppbv #	31
60) o-Xylene	9.522	91	13602	0.274	ppbv	80
64) n-propylbenzene	10.985	120	647	0.033	ppbv	96
72) 4-Ethyltoluene	11.118	105	2128	0.036	ppbv #	59
73) 1,3,5-Trimethylbenzene	11.199	105	2093	0.040	ppbv #	80
74) 1,2,4-Trimethylbenzene	11.529	105	5608	0.099	ppbv #	69
76) 1,4-Dichlorobenzene	11.665	146	2158	0.066	ppbv	85
77) 1,2-Dichlorobenzene	11.665	146	2158	0.065	ppbv	88
79) Naphthalene	13.510	128	3653	0.064	ppbv #	95

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

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Feb 11 22:18:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

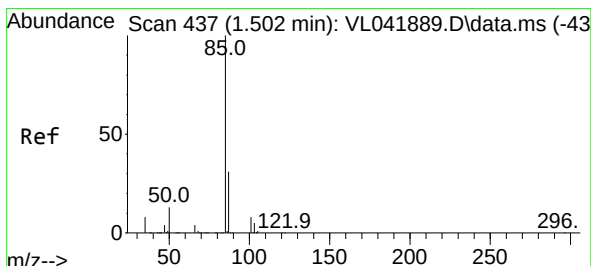
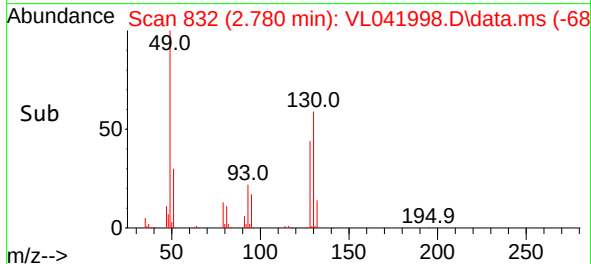
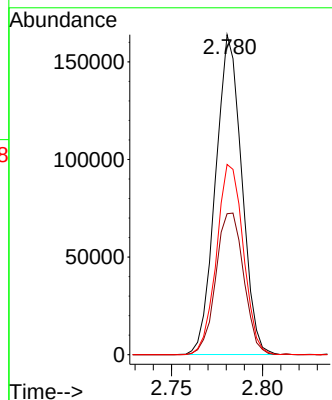
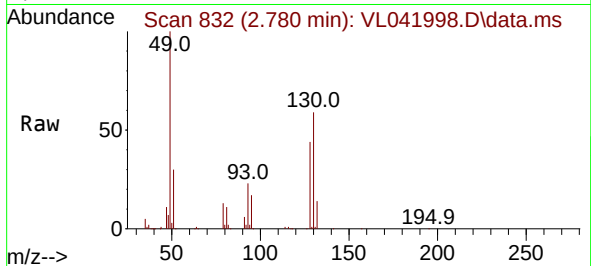




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 81
Delta R.T. -0.017 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

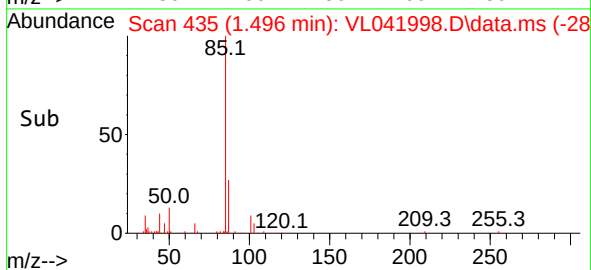
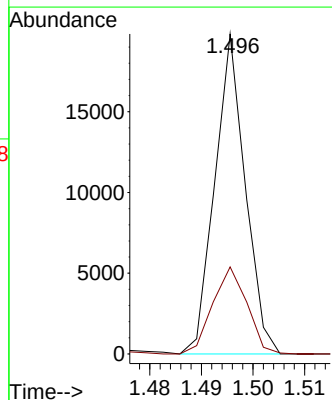
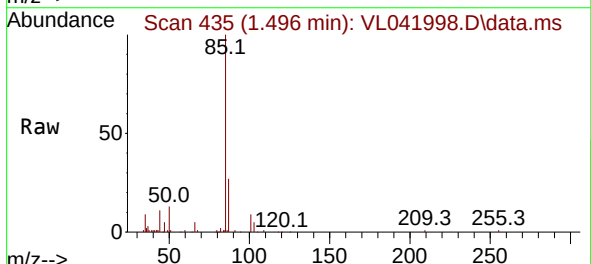
Instrument :
MSVOA_L
ClientSampleId :

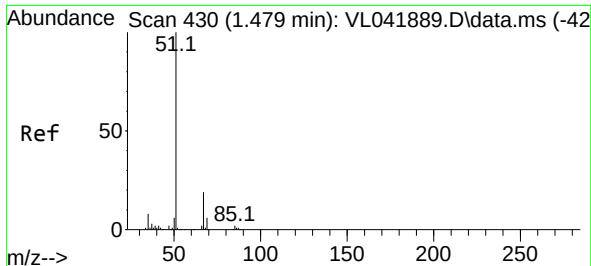
Tgt Ion: 49 Resp: 163540
Ion Ratio Lower Upper
49 100
128 47.2 24.3 73.0
130 61.0 31.1 93.2



#2
Dichlorodifluoromethane
Concen: 0.364 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.006 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 85 Resp: 8116
Ion Ratio Lower Upper
85 100
87 27.2 24.9 37.3

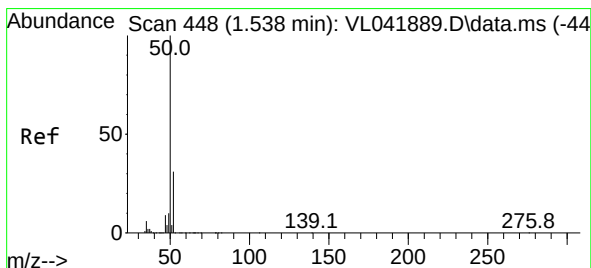
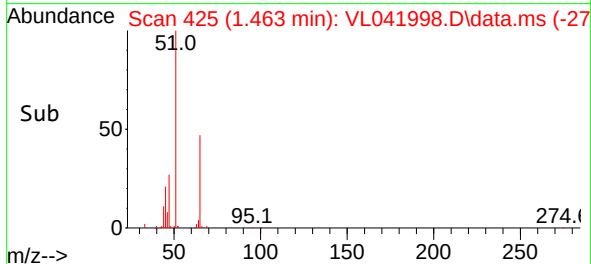
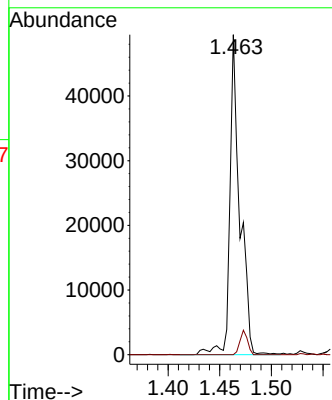
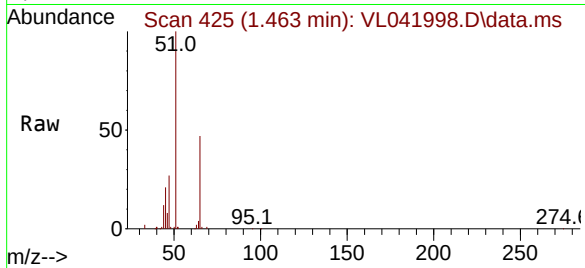




#3
Chlorodifluoromethane
Concen: 1.431 ppbv
RT: 1.463 min Scan# 41
Delta R.T. -0.016 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

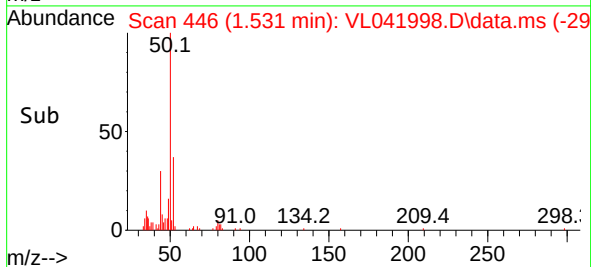
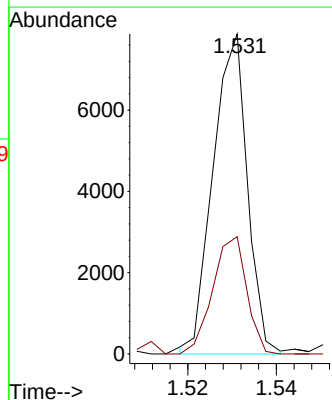
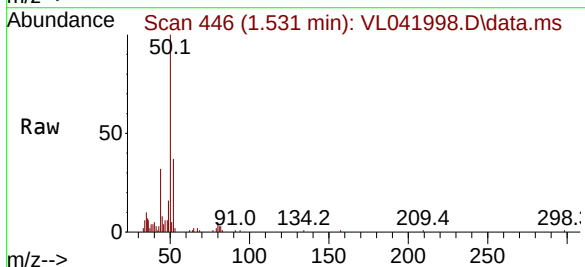
Instrument :
MSVOA_L
ClientSampleId :

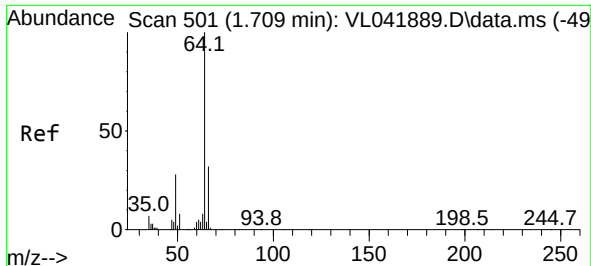
Tgt Ion: 51 Resp: 33402
Ion Ratio Lower Upper
51 100
67 5.7 15.0 22.4#



#4
Chloromethane
Concen: 0.504 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.006 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 50 Resp: 4224
Ion Ratio Lower Upper
50 100
52 37.0 24.6 36.8#

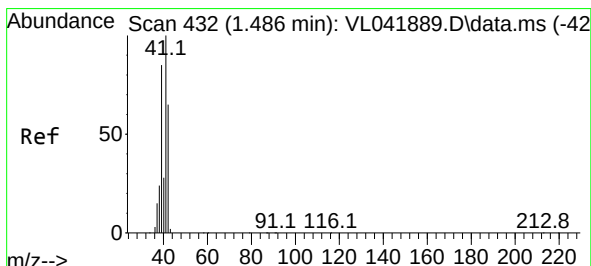
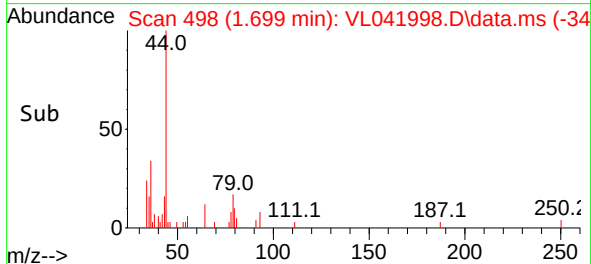
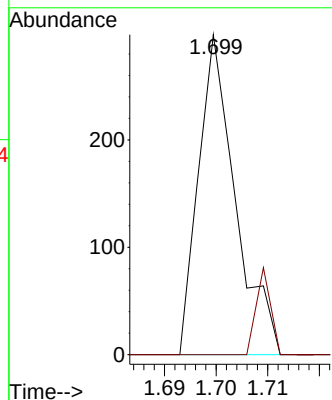
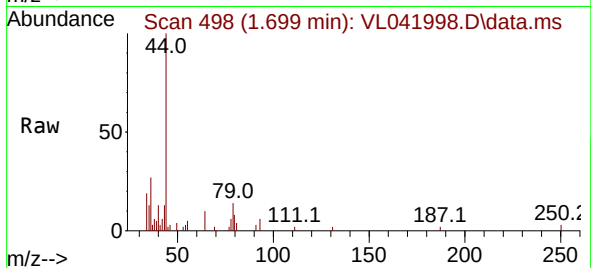




#7
Chloroethane
Concen: 0.045 ppbv
RT: 1.699 min Scan# 498
Delta R.T. -0.010 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

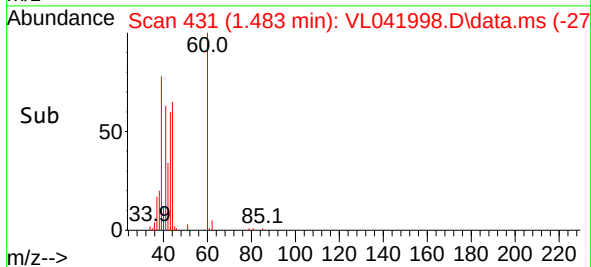
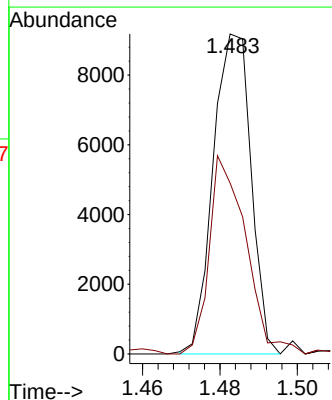
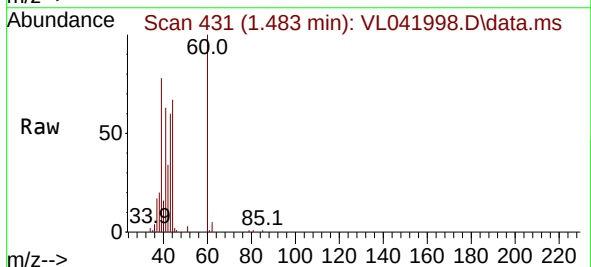
Instrument :
MSVOA_L
ClientSampleId :

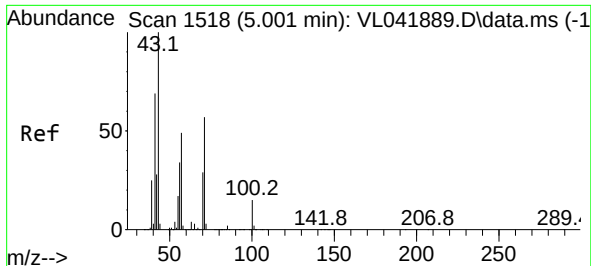
Tgt Ion: 64 Resp: 148
Ion Ratio Lower Upper
64 100
66 0.0 25.7 38.5#



#9
Propene
Concen: 0.649 ppbv
RT: 1.483 min Scan# 431
Delta R.T. -0.003 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 41 Resp: 6238
Ion Ratio Lower Upper
41 100
42 62.2 52.0 78.0

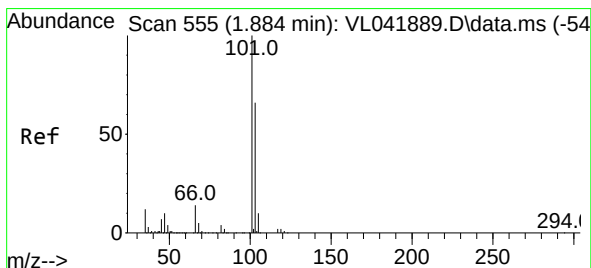
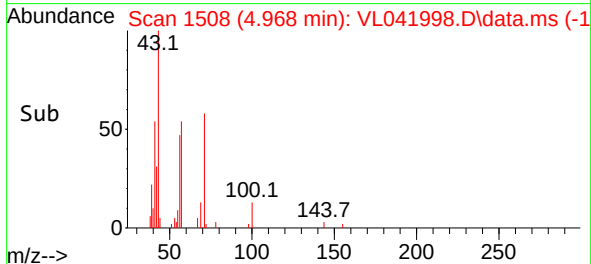
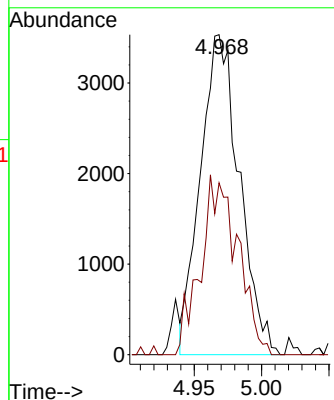
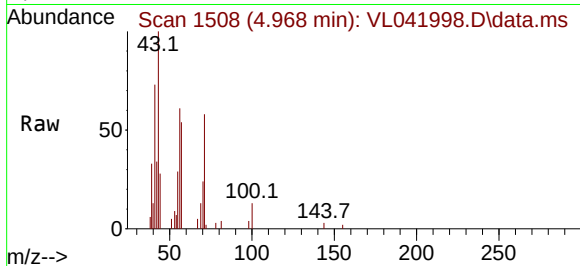




#10
 Heptane
 Concen: 0.277 ppbv
 RT: 4.968 min Scan# 11
 Delta R.T. -0.032 min
 Lab File: VL041998.D
 Acq: 11 Feb 2025 11:39

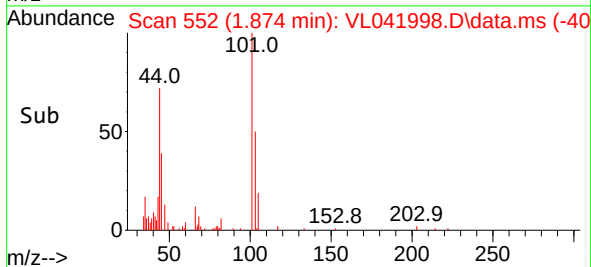
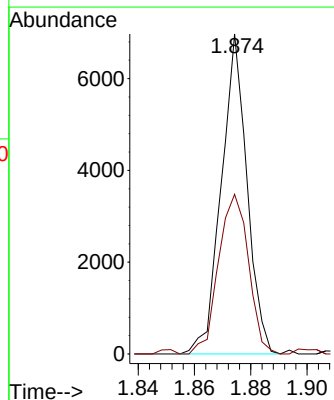
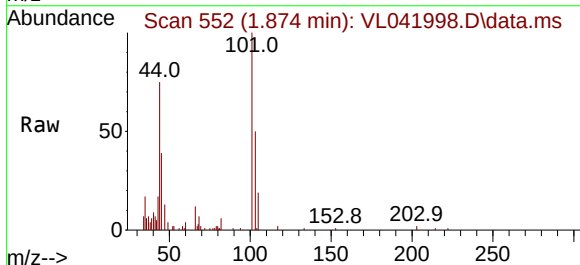
Instrument :
 MSVOA_L
 ClientSampleId :

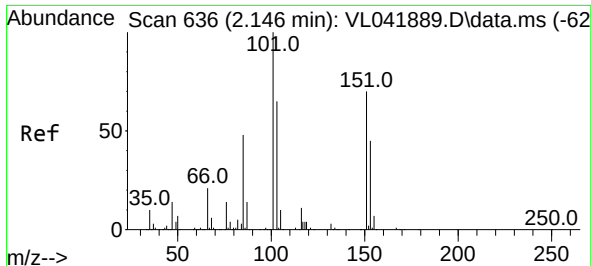
Tgt Ion: 43 Resp: 7115
 Ion Ratio Lower Upper
 43 100
 57 54.1 41.0 61.4



#11
 Trichlorofluoromethane
 Concen: 0.191 ppbv
 RT: 1.874 min Scan# 552
 Delta R.T. -0.010 min
 Lab File: VL041998.D
 Acq: 11 Feb 2025 11:39

Tgt Ion:101 Resp: 4423
 Ion Ratio Lower Upper
 101 100
 103 49.9 53.1 79.7#





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.071 ppbv

RT: 2.136 min Scan# 61

Delta R.T. -0.010 min

Lab File: VL041998.D

Acq: 11 Feb 2025 11:39

Instrument :

MSVOA_L

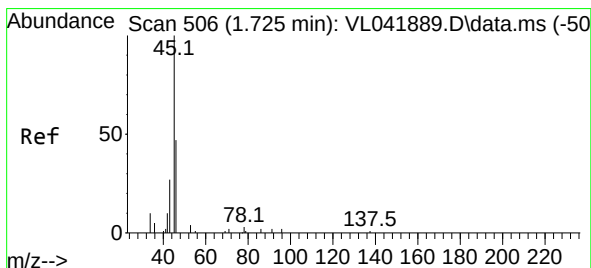
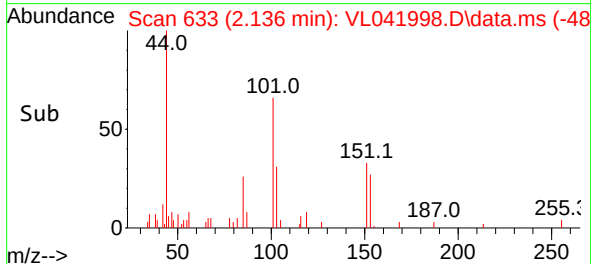
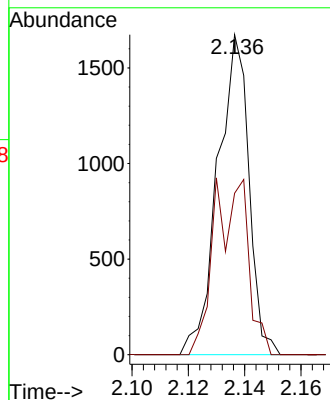
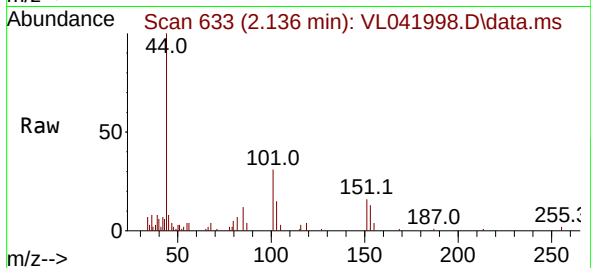
ClientSampleId :

Tgt Ion:101 Resp: 1286

Ion Ratio Lower Upper

101 100

151 59.4 56.1 84.1



#13

Ethanol

Concen: 120.078 ppbv

RT: 1.719 min Scan# 504

Delta R.T. -0.006 min

Lab File: VL041998.D

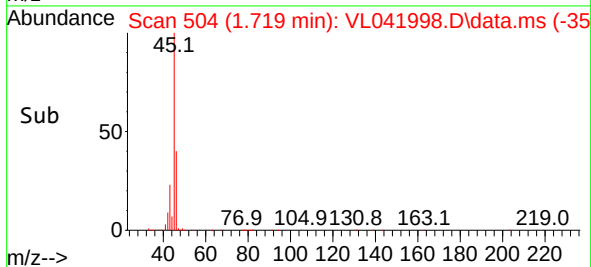
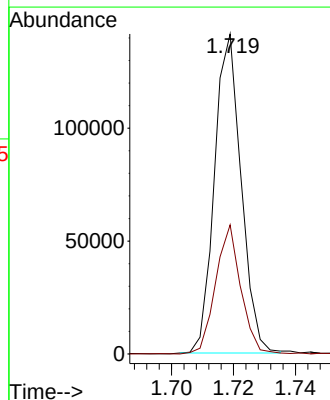
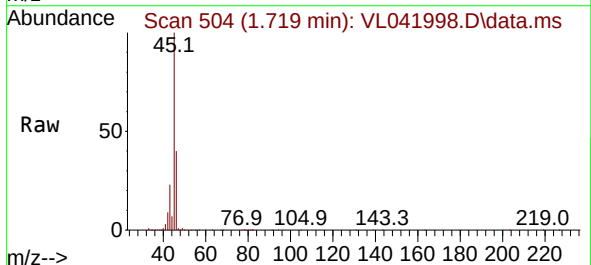
Acq: 11 Feb 2025 11:39

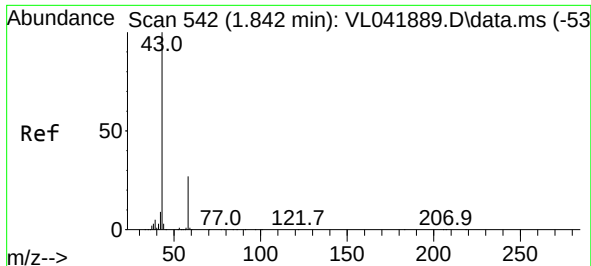
Tgt Ion: 45 Resp: 84552

Ion Ratio Lower Upper

45 100

46 38.6 18.1 72.5





#15

Acetone

Concen: 3.545 ppbv

RT: 1.832 min Scan# 51

Delta R.T. -0.010 min

Lab File: VL041998.D

Acq: 11 Feb 2025 11:39

Instrument :

MSVOA_L

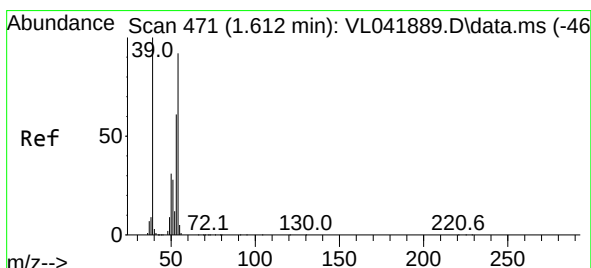
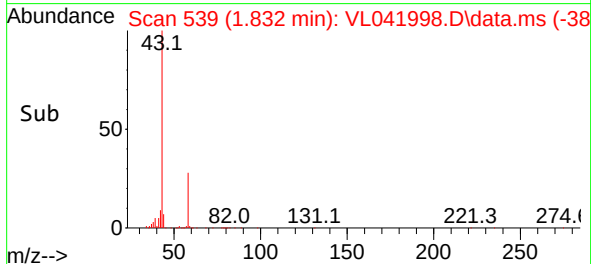
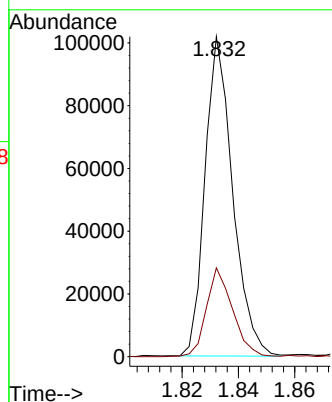
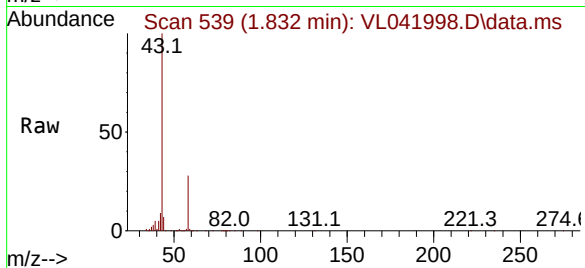
ClientSampleId :

Tgt Ion: 43 Resp: 69626

Ion Ratio Lower Upper

43 100

58 26.5 21.9 32.9



#16

1,3-Butadiene

Concen: 0.188 ppbv

RT: 1.599 min Scan# 467

Delta R.T. -0.013 min

Lab File: VL041998.D

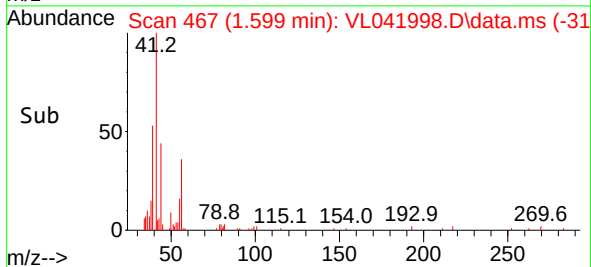
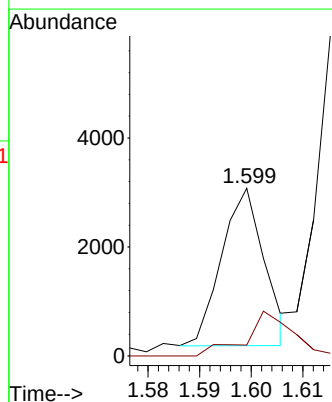
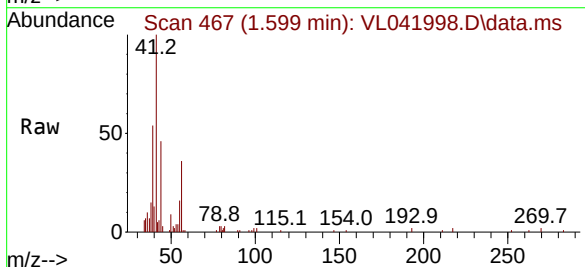
Acq: 11 Feb 2025 11:39

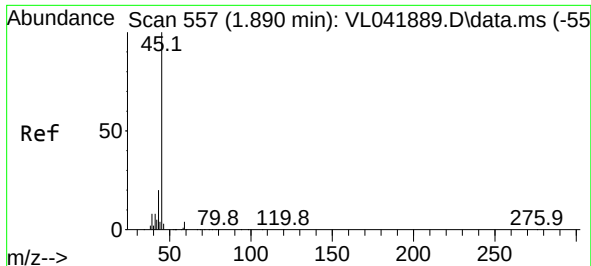
Tgt Ion: 39 Resp: 1661

Ion Ratio Lower Upper

39 100

54 40.2 61.6 92.4#

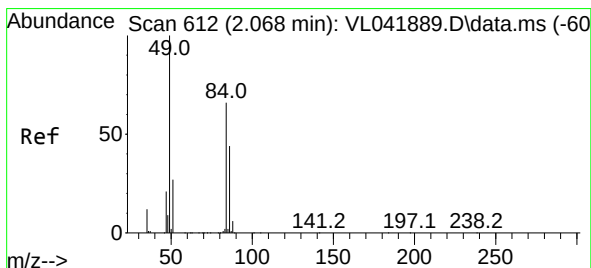
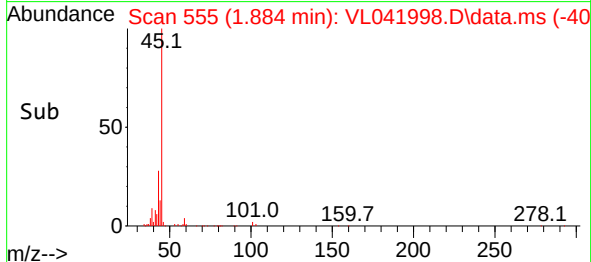
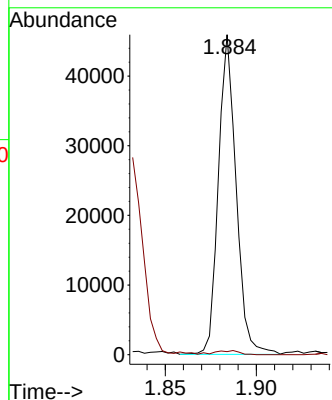
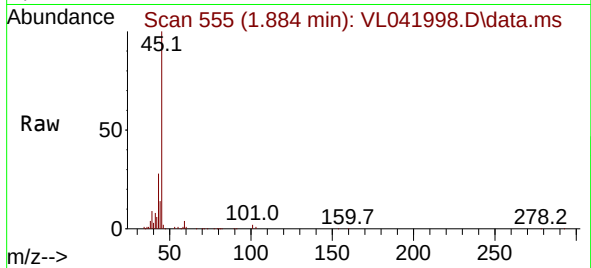




#19
Isopropyl Alcohol
Concen: 2.660 ppbv
RT: 1.884 min Scan# 51
Delta R.T. -0.006 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

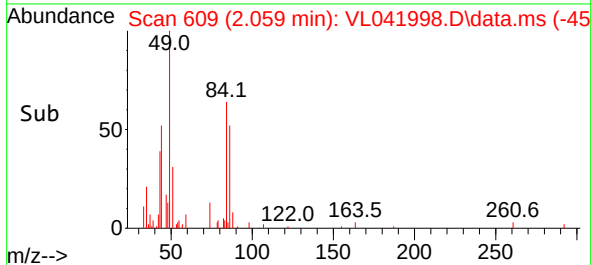
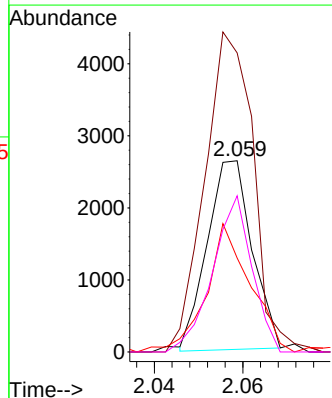
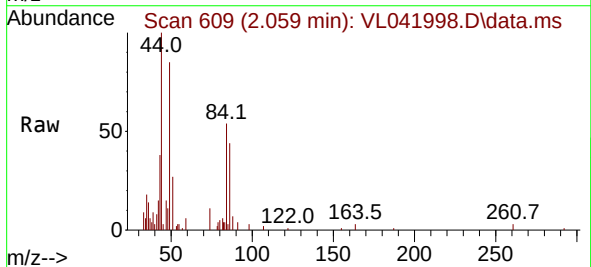
Instrument :
MSVOA_L
ClientSampleId :

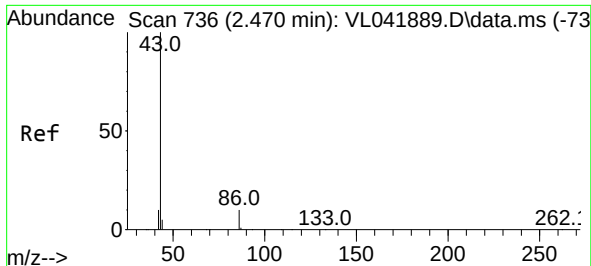
Tgt Ion: 45 Resp: 30975
Ion Ratio Lower Upper
45 100
58 59.7 35.0 52.6#



#20
Methylene Chloride
Concen: 0.238 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.010 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

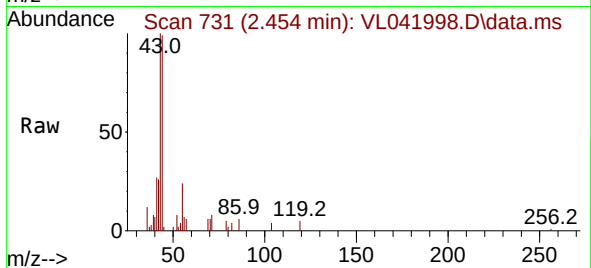
Tgt Ion: 84 Resp: 1849
Ion Ratio Lower Upper
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49 148.9 123.1 184.7
51 45.5 35.8 53.8
86 83.5 53.7 80.5#



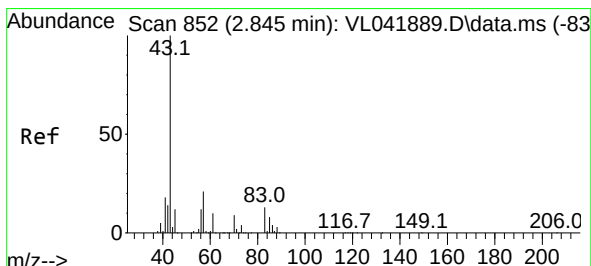
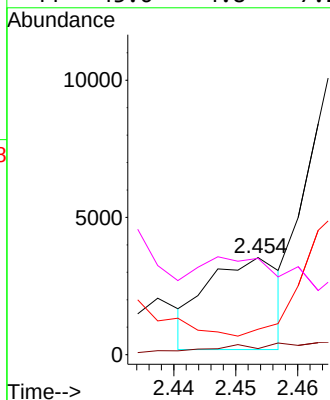
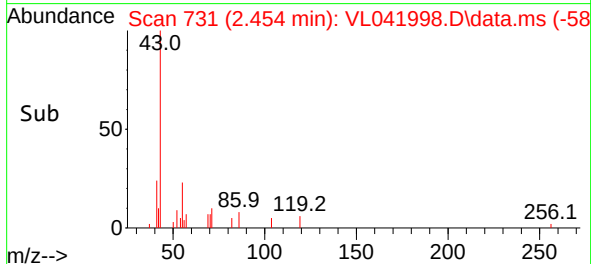


#23
 Vinyl Acetate
 Concen: 0.280 ppbv
 RT: 2.454 min Scan# 71
 Delta R.T. -0.016 min
 Lab File: VL041998.D
 Acq: 11 Feb 2025 11:39

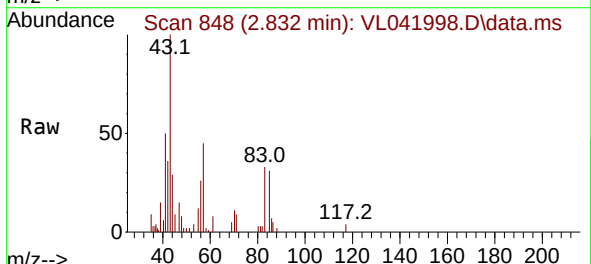
Instrument :
 MSVOA_L
 ClientSampleId :



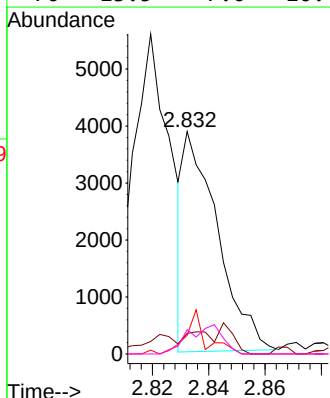
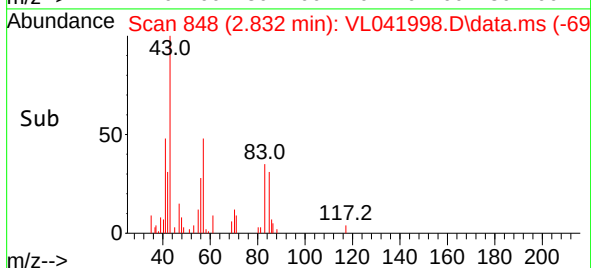
Tgt Ion:	43	Resp:	2726
Ion	Ratio	Lower	Upper
43	100		
86	4.4	6.2	9.4#
42	0.0	8.5	12.7#
44	43.6	4.8	7.2#

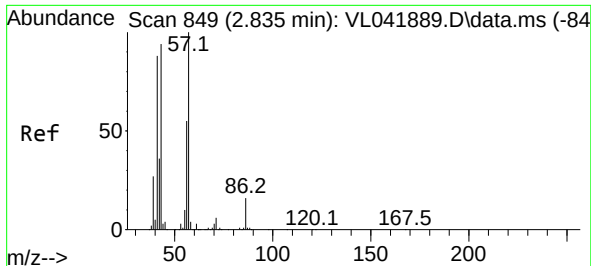


#25
 Ethyl Acetate
 Concen: 0.061 ppbv
 RT: 2.832 min Scan# 848
 Delta R.T. -0.013 min
 Lab File: VL041998.D
 Acq: 11 Feb 2025 11:39



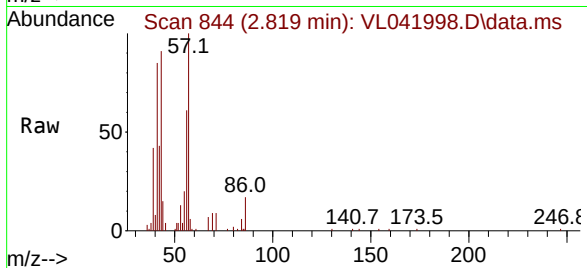
Tgt Ion:	43	Resp:	3256
Ion	Ratio	Lower	Upper
43	100		
45	23.9	8.2	12.2#
61	11.7	7.4	11.0#
70	13.5	7.0	10.4#



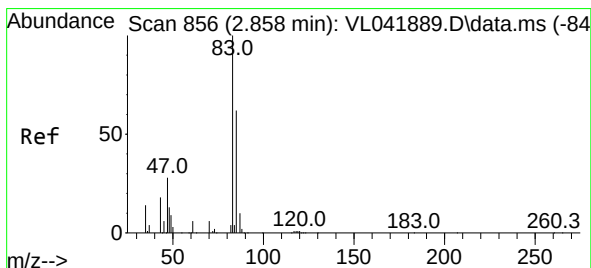
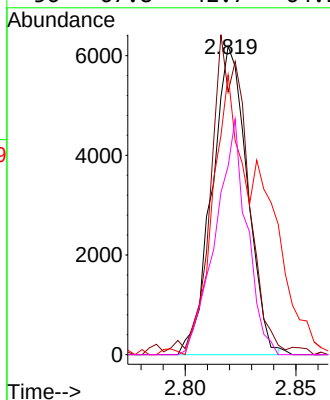
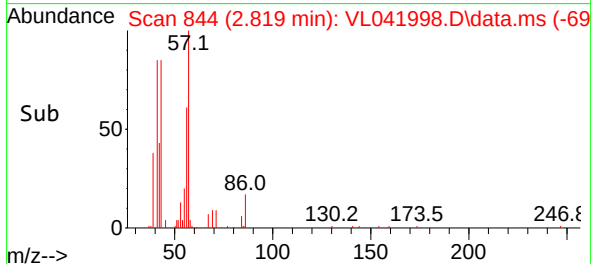


#26
Hexane
Concen: 0.327 ppbv
RT: 2.819 min Scan# 849
Delta R.T. -0.016 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Instrument :
MSVOA_L
ClientSampleId :

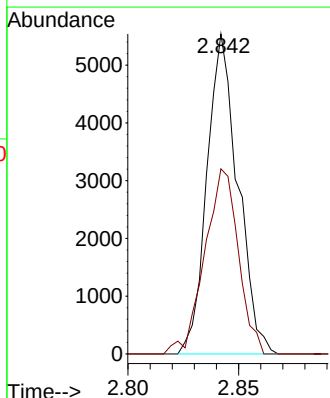
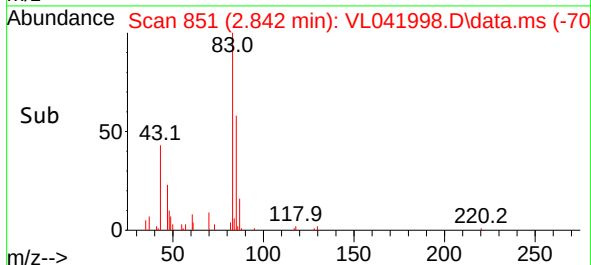
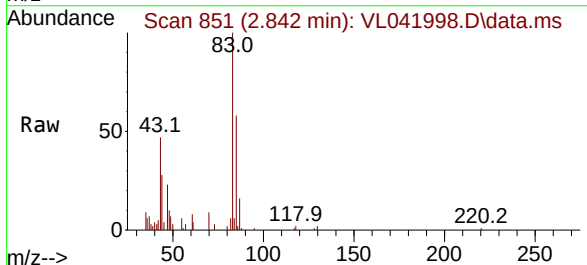


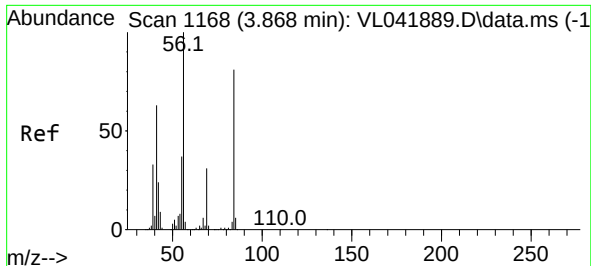
Tgt Ion: 57 Resp: 6857
Ion Ratio Lower Upper
57 100
41 108.5 73.8 110.8
43 131.5 197.3 295.9#
56 67.8 42.7 64.1#



#29
Chloroform
Concen: 0.163 ppbv
RT: 2.842 min Scan# 851
Delta R.T. -0.016 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 83 Resp: 5393
Ion Ratio Lower Upper
83 100
85 57.9 50.1 75.1

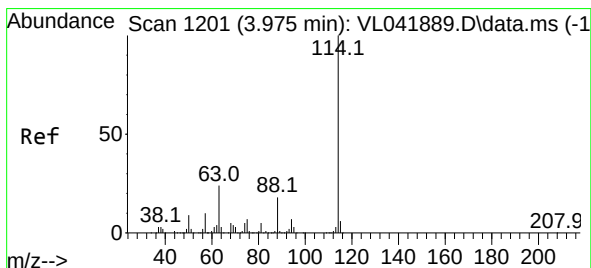
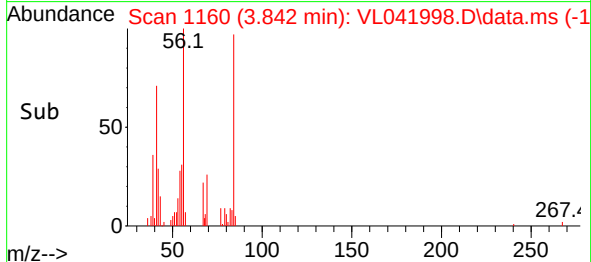
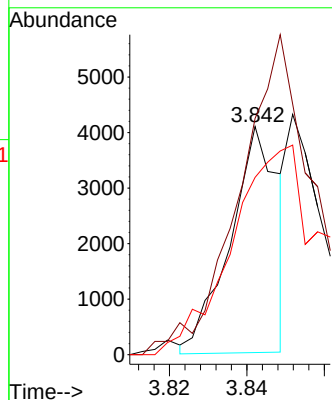
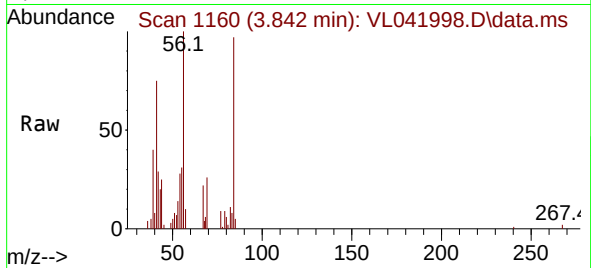




#30
Cyclohexane
Concen: 0.192 ppbv
RT: 3.842 min Scan# 1168
Delta R.T. -0.026 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

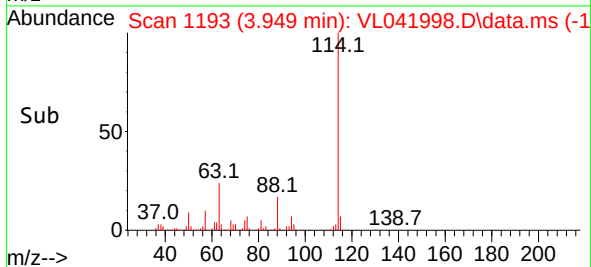
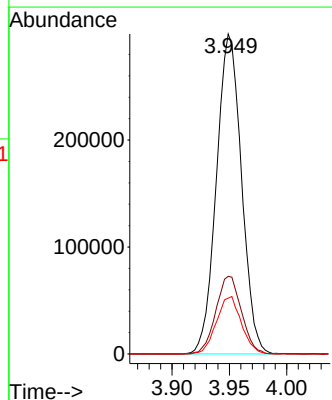
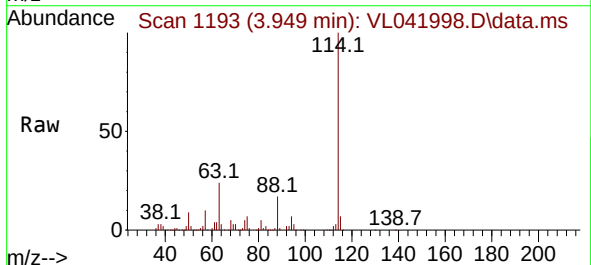
Instrument :
MSVOA_L
ClientSampleId :

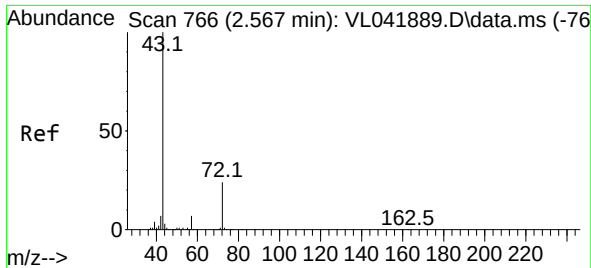
Tgt Ion: 84 Resp: 3488
Ion Ratio Lower Upper
84 100
56 0.0 99.3 148.9#
41 0.0 64.3 96.5#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.026 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 114 Resp: 454250
Ion Ratio Lower Upper
114 100
63 24.8 19.8 29.6
88 17.9 14.4 21.6

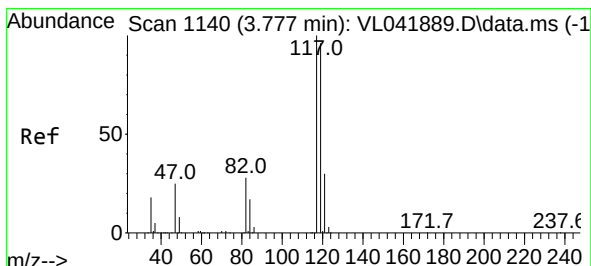
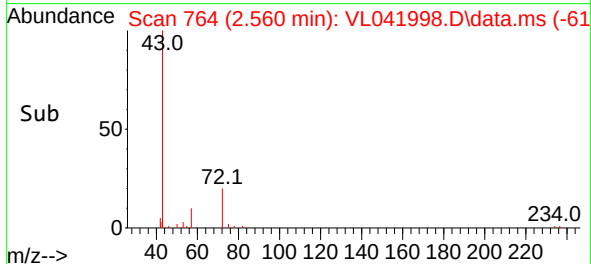
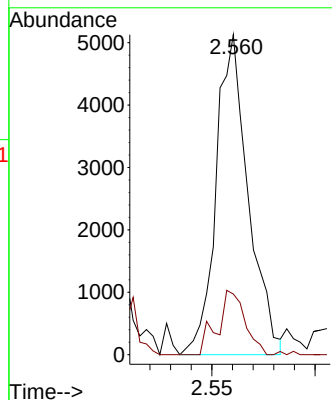
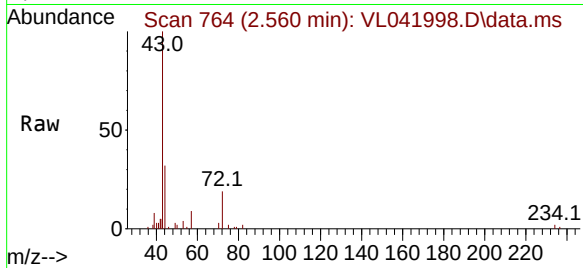




#34
2-Butanone
Concen: 0.192 ppbv
RT: 2.560 min Scan# 70
Delta R.T. -0.006 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

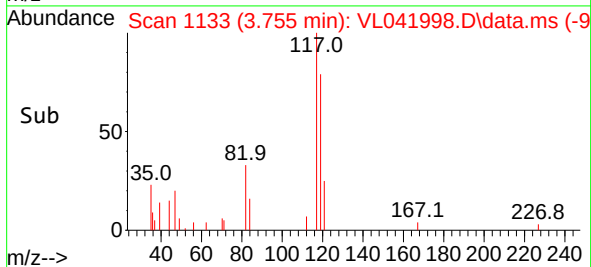
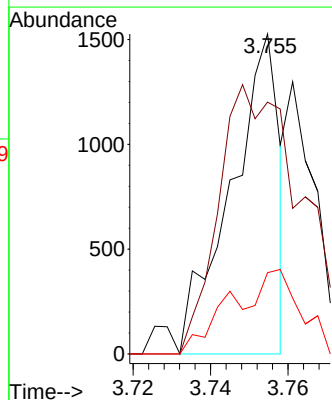
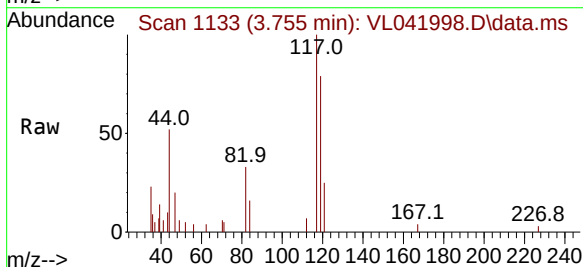
Instrument :
MSVOA_L
ClientSampleId :

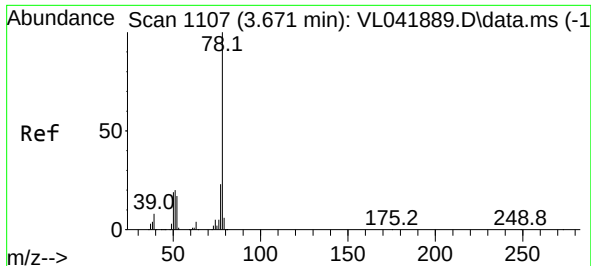
Tgt Ion: 43 Resp: 5549
Ion Ratio Lower Upper
43 100
72 17.2 18.6 28.0#



#35
Carbon Tetrachloride
Concen: 0.046 ppbv
RT: 3.755 min Scan# 1133
Delta R.T. -0.023 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 117 Resp: 1320
Ion Ratio Lower Upper
117 100
119 78.7 76.9 115.3
121 25.4 23.8 35.6

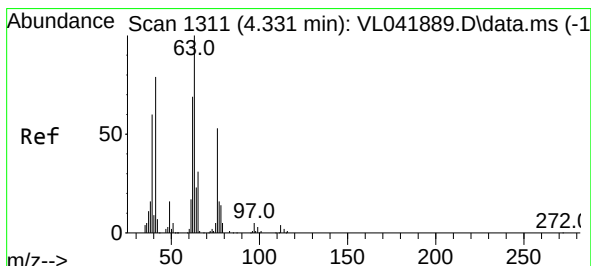
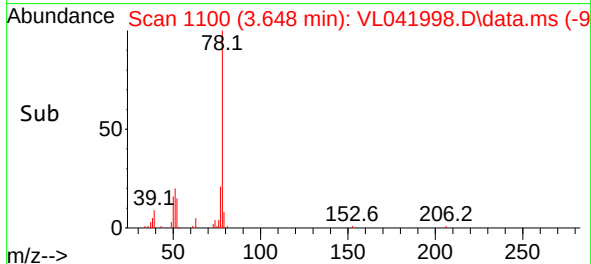
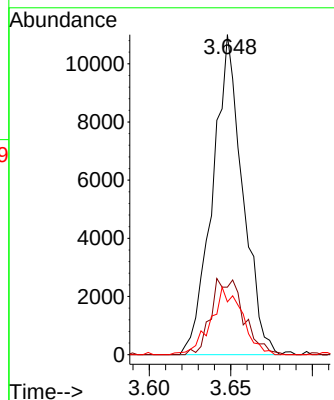
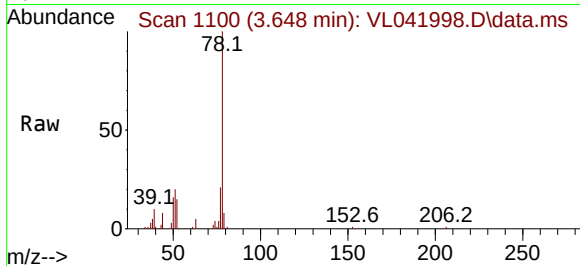




#36
Benzene
Concen: 0.339 ppbv
RT: 3.648 min Scan# 1100
Delta R.T. -0.023 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

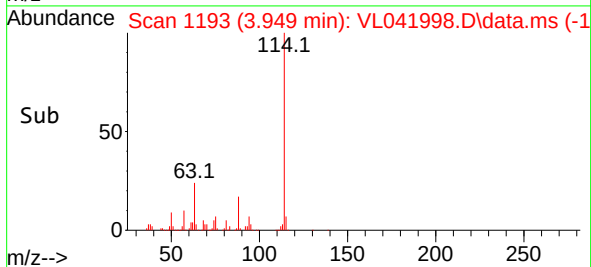
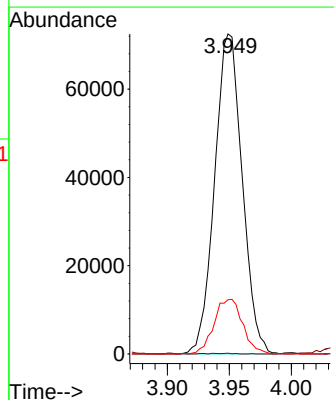
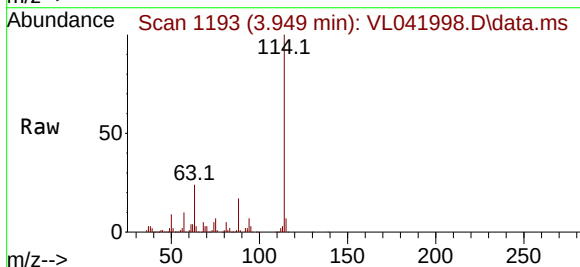
Instrument :
MSVOA_L
ClientSampleId :

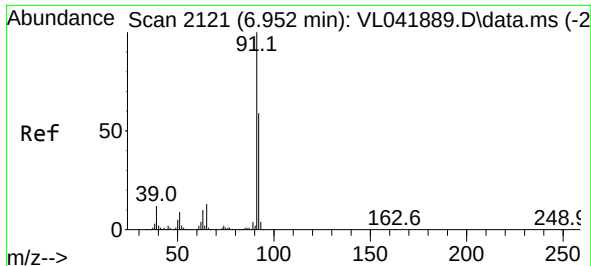
Tgt Ion:	78	Resp:	14133
Ion	Ratio	Lower	Upper
78	100		
77	21.1	18.1	27.1
50	16.5	15.2	22.8



#39
1,2-Dichloropropane
Concen: 7.701 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.382 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion:	63	Resp:	112540
Ion	Ratio	Lower	Upper
63	100		
41	0.2	63.7	95.5#
62	16.9	55.4	83.2#

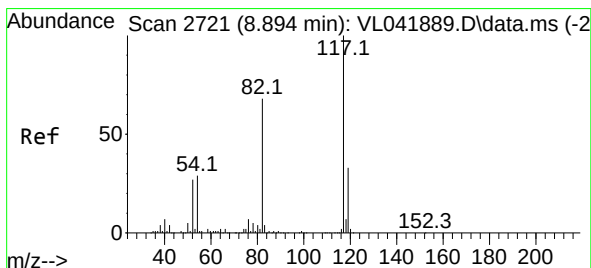
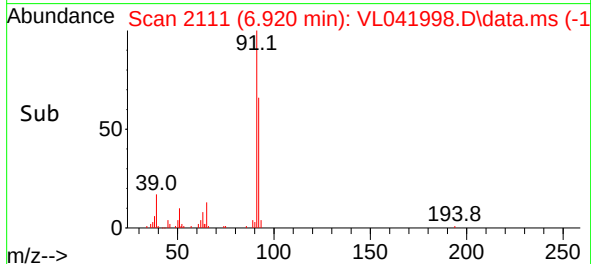
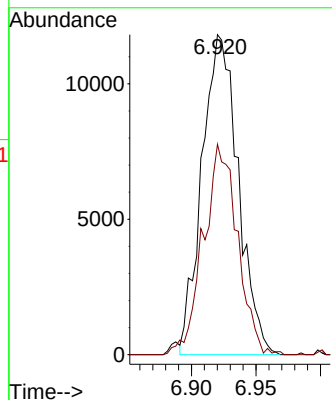
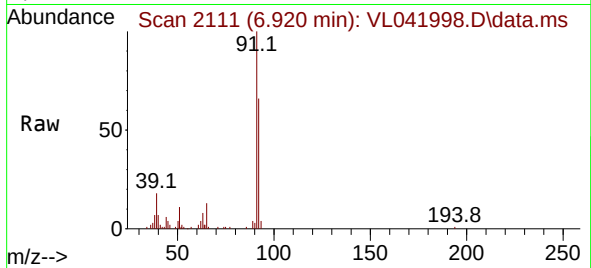




#53
Toluene
Concen: 0.509 ppbv
RT: 6.920 min Scan# 2111
Delta R.T. -0.032 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

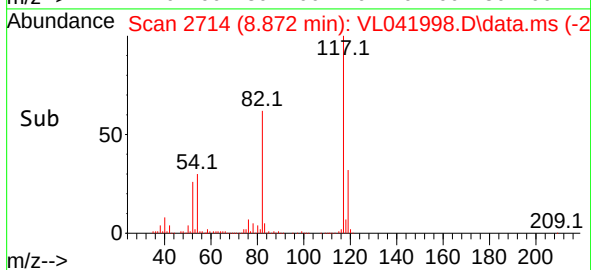
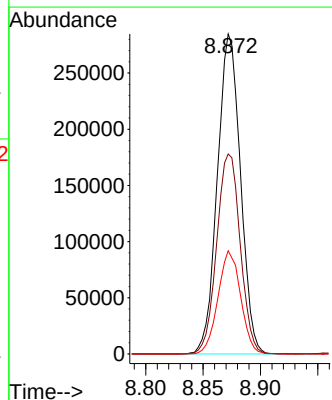
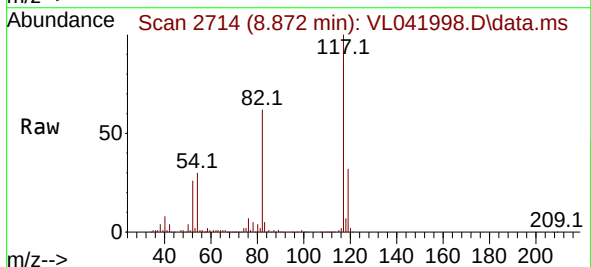
Instrument :
MSVOA_L
ClientSampleId :

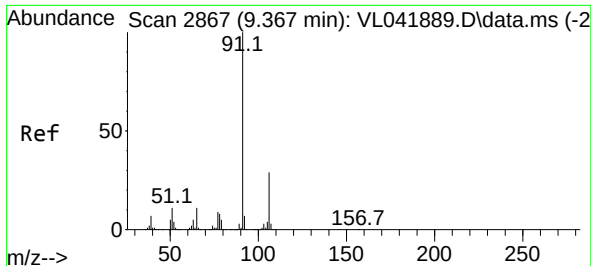
Tgt Ion: 91 Resp: 23101
Ion Ratio Lower Upper
91 100
92 61.7 47.4 71.0



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.872 min Scan# 2714
Delta R.T. -0.023 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 117 Resp: 398767
Ion Ratio Lower Upper
117 100
82 63.7 54.2 81.4
119 31.6 25.0 37.6

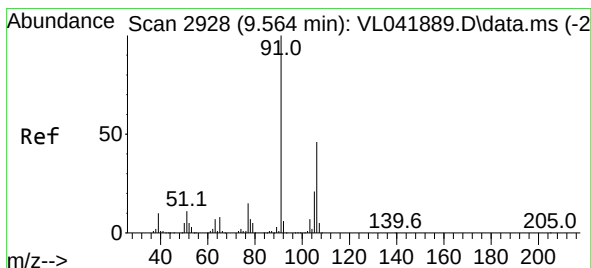
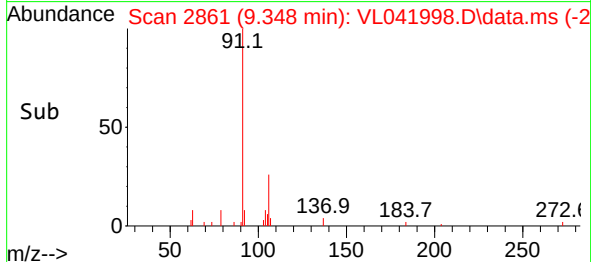
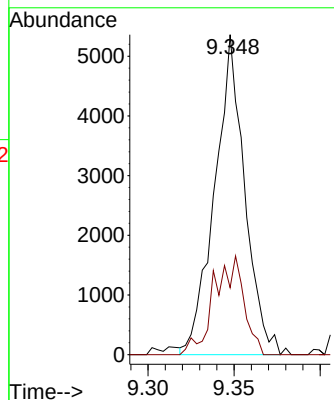
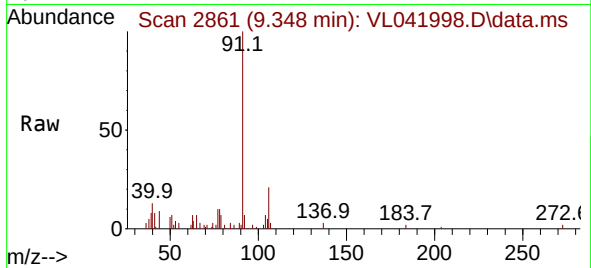




#58
Ethyl Benzene
Concen: 0.104 ppbv
RT: 9.348 min Scan# 21
Delta R.T. -0.019 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

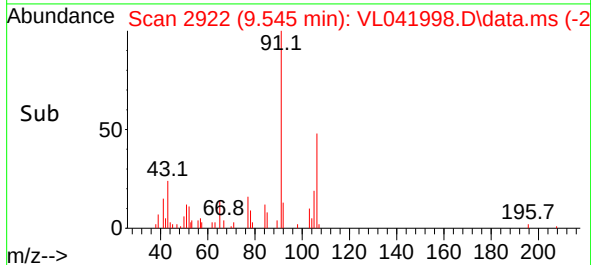
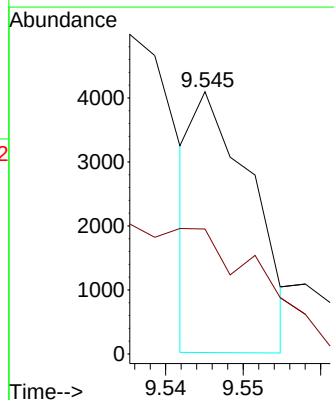
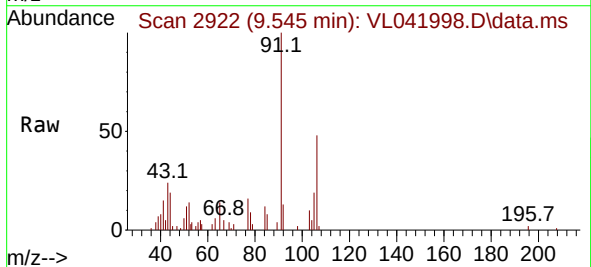
Instrument :
MSVOA_L
ClientSampleId :

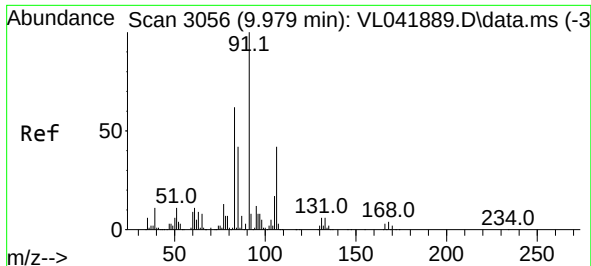
Tgt Ion: 91 Resp: 6500
Ion Ratio Lower Upper
91 100
106 21.0 23.1 34.7#



#59
m/p-Xylene
Concen: 0.042 ppbv
RT: 9.545 min Scan# 2922
Delta R.T. -0.019 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 91 Resp: 2121
Ion Ratio Lower Upper
91 100
106 0.0 36.0 54.0#

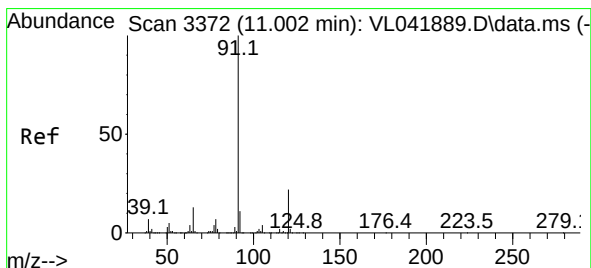
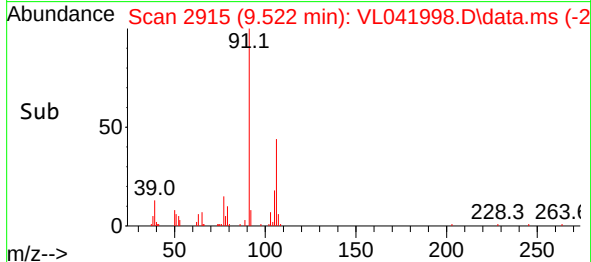
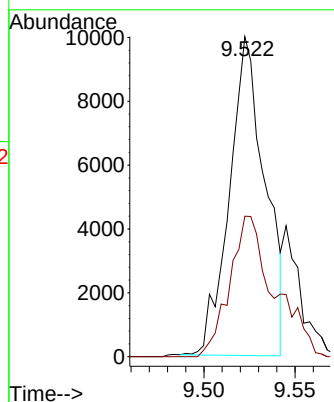
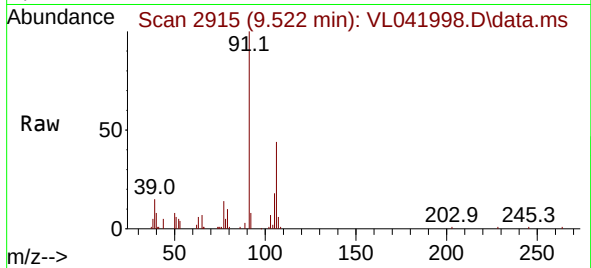




#60
o-Xylene
Concen: 0.274 ppbv
RT: 9.522 min Scan# 2915
Delta R.T. -0.456 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

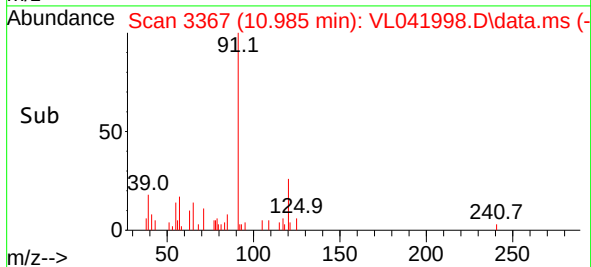
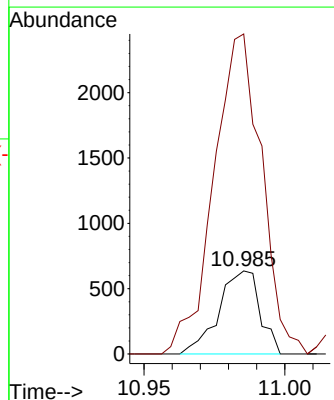
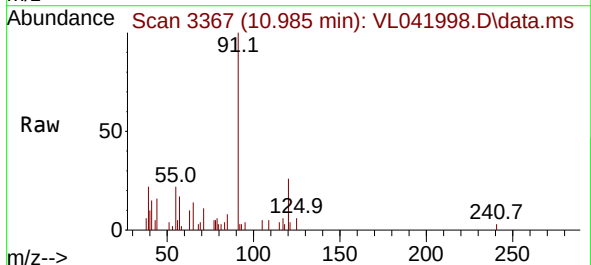
Instrument :
MSVOA_L
ClientSampleId :

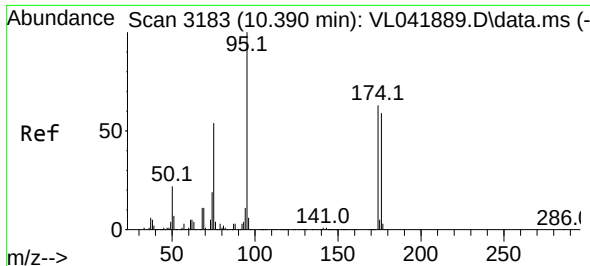
Tgt Ion: 91 Resp: 13602
Ion Ratio Lower Upper
91 100
106 55.1 21.3 63.9



#64
n-propylbenzene
Concen: 0.033 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.016 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion:120 Resp: 647
Ion Ratio Lower Upper
120 100
91 456.7 374.1 561.1

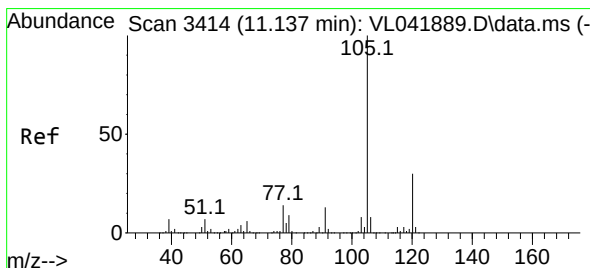
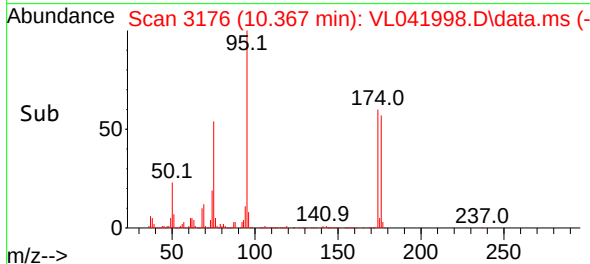
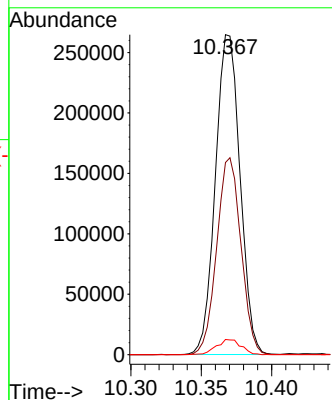
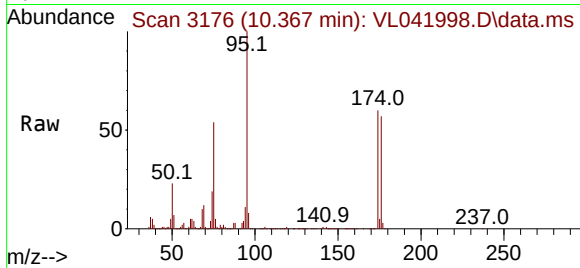




#68
1-Bromo-4-Fluorobenzene
Concen: 10.294 ppbv
RT: 10.367 min Scan# 3183
Delta R.T. -0.023 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

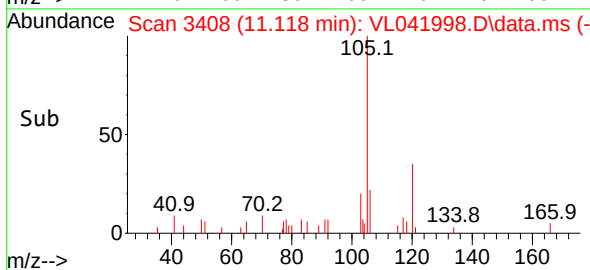
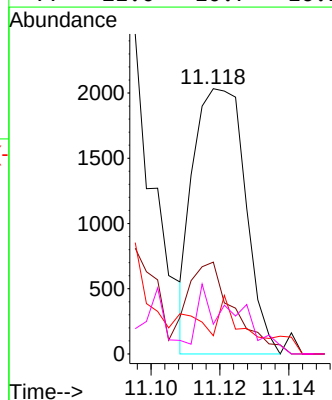
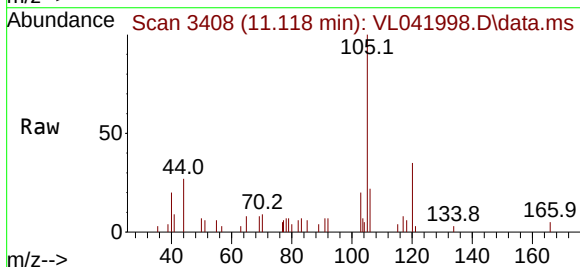
Instrument :
MSVOA_L
ClientSampleId :

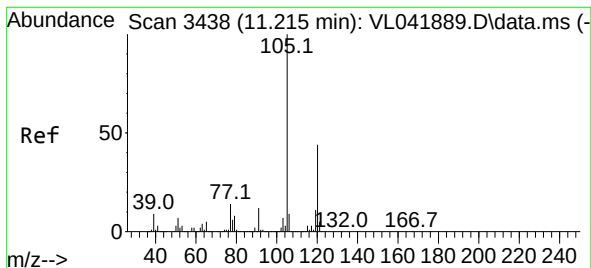
Tgt Ion: 95 Resp: 323329
Ion Ratio Lower Upper
95 100
174 60.6 49.0 73.4
175 4.8 3.8 5.8



#72
4-Ethyltoluene
Concen: 0.036 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.019 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Tgt Ion: 105 Resp: 2128
Ion Ratio Lower Upper
105 100
120 0.0 23.7 35.5#
91 0.0 10.2 15.2#
77 21.0 10.7 16.1#





#73

1,3,5-Trimethylbenzene

Concen: 0.040 ppbv

RT: 11.199 min Scan# 3433

Delta R.T. -0.016 min

Lab File: VL041998.D

Acq: 11 Feb 2025 11:39

Instrument :

MSVOA_L

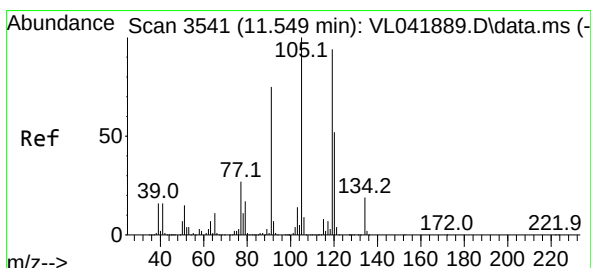
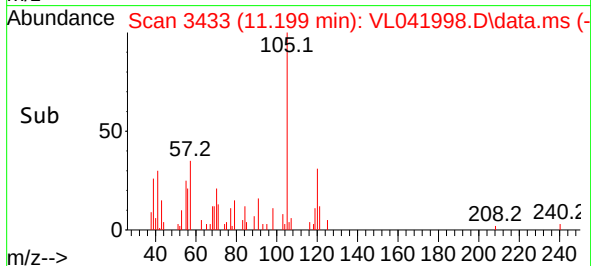
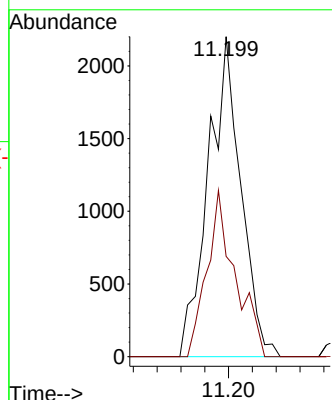
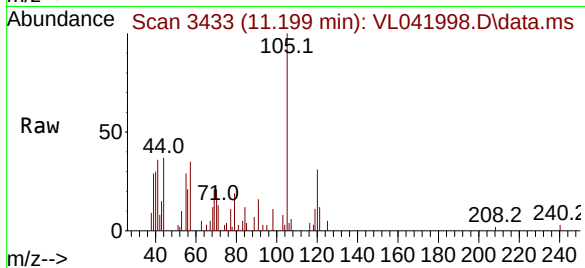
ClientSampleId :

Tgt Ion:105 Resp: 2093

Ion Ratio Lower Upper

105 100

120 31.3 35.4 53.2#



#74

1,2,4-Trimethylbenzene

Concen: 0.099 ppbv

RT: 11.529 min Scan# 3535

Delta R.T. -0.019 min

Lab File: VL041998.D

Acq: 11 Feb 2025 11:39

Tgt Ion:105 Resp: 5608

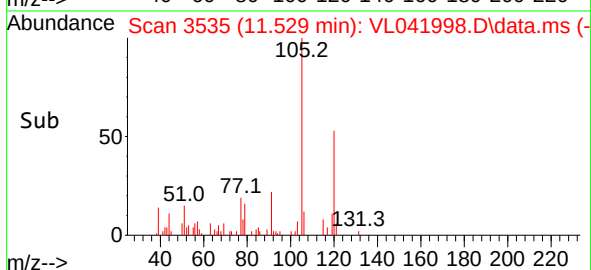
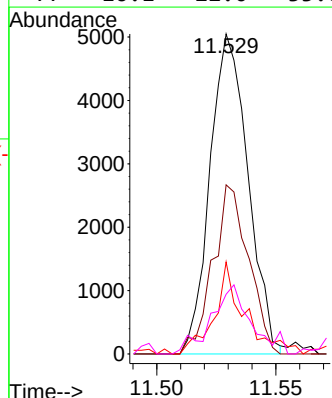
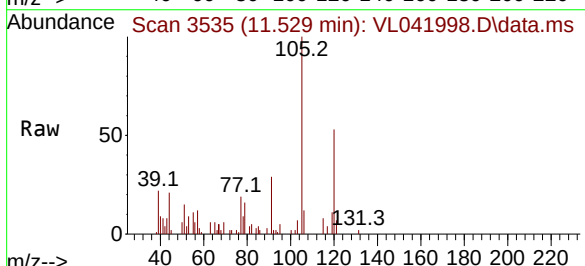
Ion Ratio Lower Upper

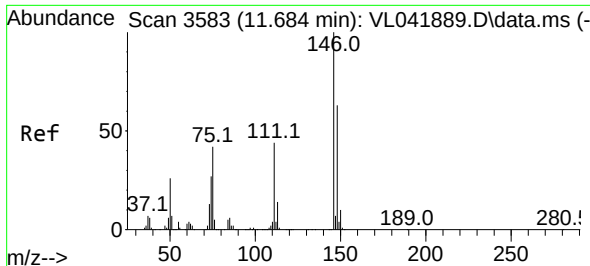
105 100

120 52.9 41.4 62.2

91 28.7 60.2 90.2#

77 16.1 22.0 33.0#

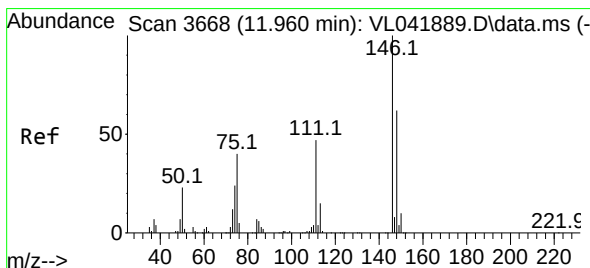
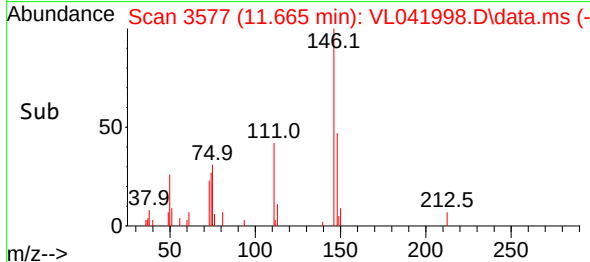
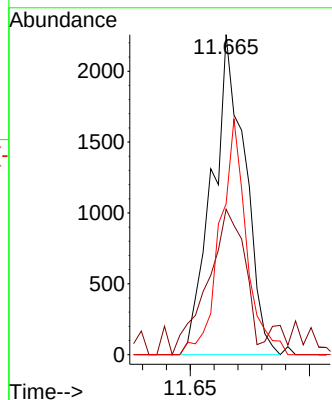
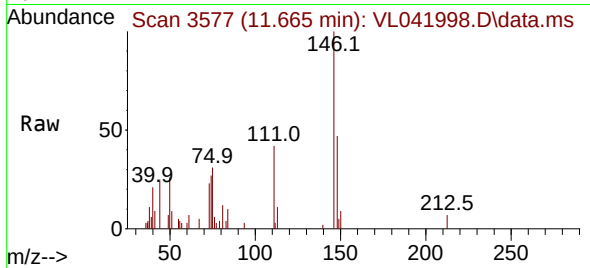




#76
1,4-Dichlorobenzene
Concen: 0.066 ppbv
RT: 11.665 min Scan# 3577
Delta R.T. -0.019 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

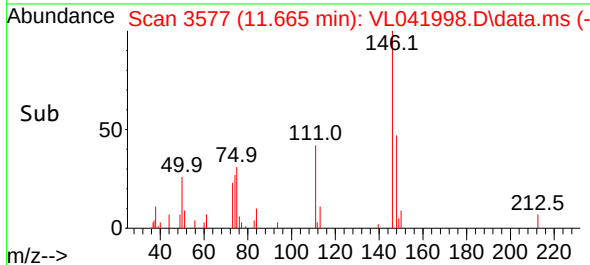
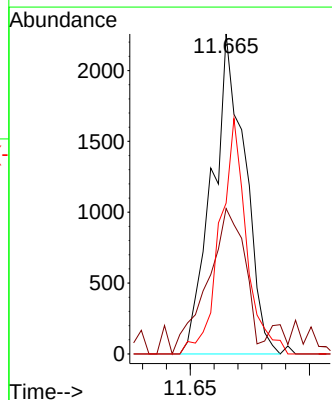
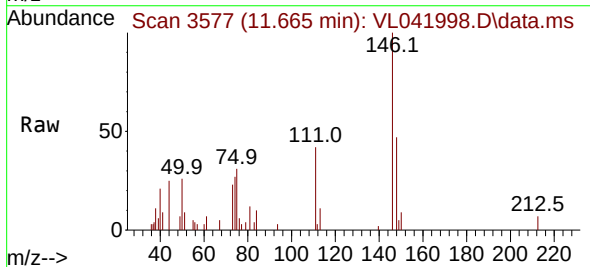
Instrument :
MSVOA_L
ClientSampleId :

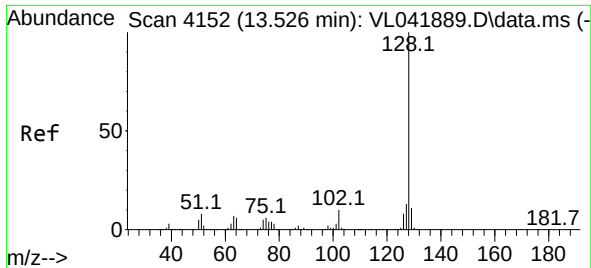
Tgt Ion:146 Resp: 2158
Ion Ratio Lower Upper
146 100
111 63.7 22.4 67.0
148 59.7 31.9 95.5



#77
1,2-Dichlorobenzene
Concen: 0.065 ppbv
RT: 11.665 min Scan# 3577
Delta R.T. -0.295 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

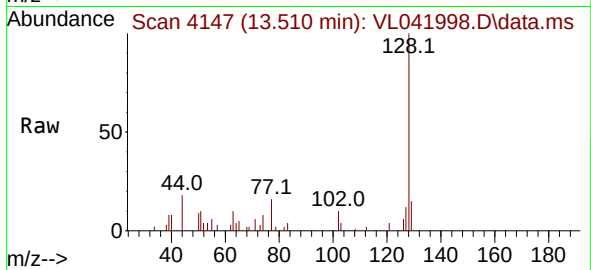
Tgt Ion:146 Resp: 2158
Ion Ratio Lower Upper
146 100
111 63.7 24.2 72.6
148 59.7 31.7 95.1





#79
Naphthalene
Concen: 0.064 ppbv
RT: 13.510 min Scan# 4152
Delta R.T. -0.016 min
Lab File: VL041998.D
Acq: 11 Feb 2025 11:39

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion:128 Resp: 3653
Ion Ratio Lower Upper
128 100
127 12.4 10.2 15.4
129 15.0 9.1 13.7#

