

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040523\
 Data File : VL040312.D
 Acq On : 5 Apr 2023 11:39
 Operator : SY/MD
 Sample : 02168-04
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2

Quant Time: Apr 06 07:50:12 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL031523AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Mar 15 16:14:43 2023
 Response via : Initial Calibration

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

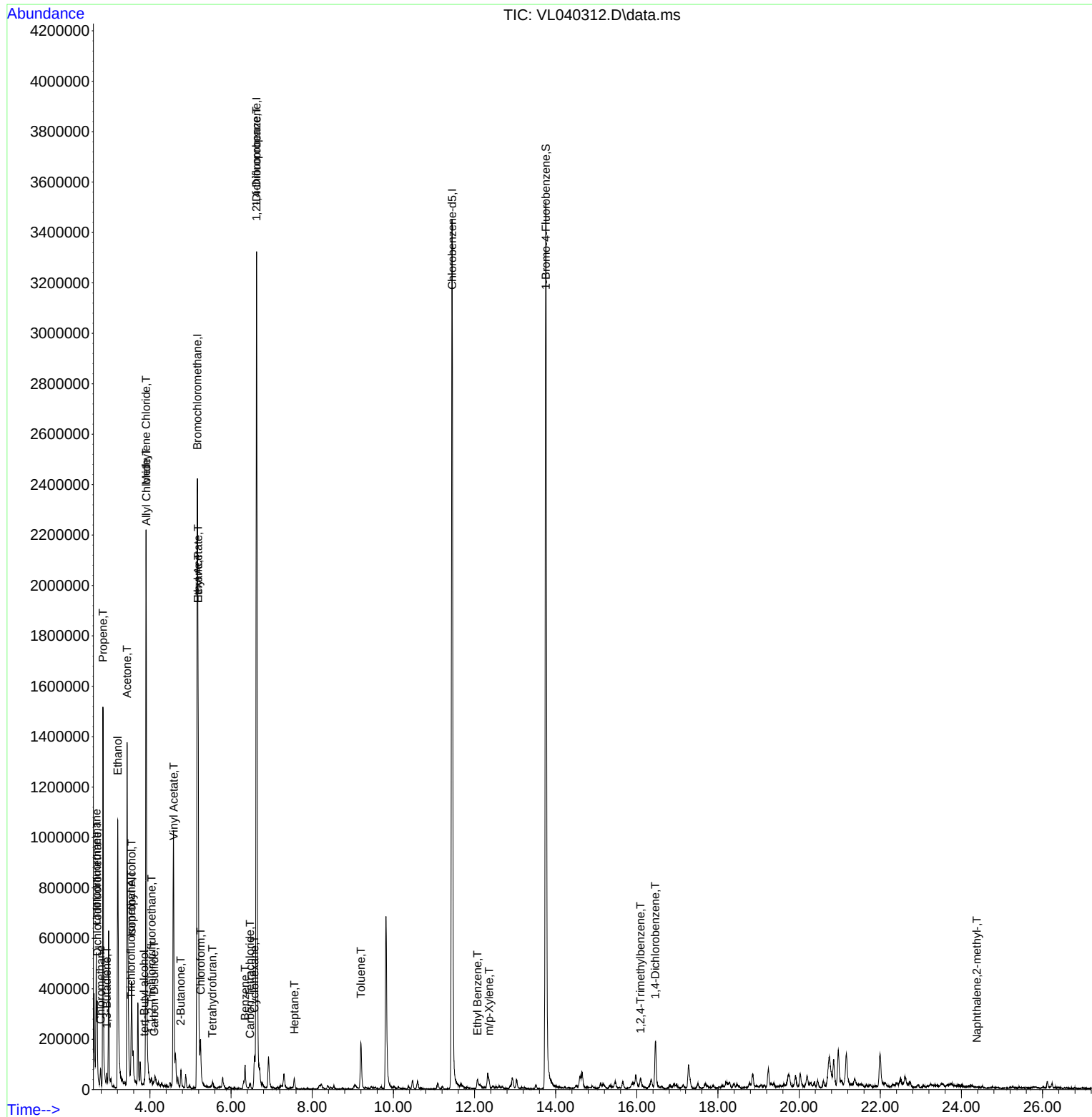
Internal Standards						
1) Bromochloromethane	5.166	49	989613	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	6.629	114	2437191	10.000	ppbv	-0.03
55) Chlorobenzene-d5	11.446	117	2128421	10.000	ppbv	-0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.757	95	1735533	9.737	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.700	85	203225	1.047	ppbv	96
3) Chlorodifluoromethane	2.681	51	48589	0.390	ppbv	97
4) Chloromethane	2.784	50	52640	0.685	ppbv	98
9) Propene	2.841	41	388665	8.153	ppbv	94
10) Heptane	7.558	43	11706	0.102	ppbv #	67
11) Trichlorofluoromethane	3.533	101	49867	0.283	ppbv	87
12) 1,1,2-Trichlorotrifluo...	4.037	101	4969	0.038	ppbv #	28
13) Ethanol	3.205	45	1126763	322.260	ppbv	99
15) Acetone	3.436	43	1433242	11.896	ppbv	98
16) 1,3-Butadiene	2.935	39	7473	0.136	ppbv	93
17) tert-Butyl alcohol	3.857	59	7901	0.069	ppbv #	72
19) Isopropyl Alcohol	3.549	45	401551	6.958	ppbv	100
20) Methylene Chloride	3.906	84	728550	14.374	ppbv	96
21) Allyl Chloride	3.909	41	25232	0.323	ppbv #	26
23) Vinyl Acetate	4.587	43	97282	2.902	ppbv #	1
25) Ethyl Acetate	5.185	43	340637	1.510	ppbv #	80
26) Hexane	5.185	57	447251	4.831	ppbv #	39
27) Carbon Disulfide	4.105	76	4924	0.038	ppbv #	61
29) Chloroform	5.250	83	89756	0.549	ppbv	97
30) Cyclohexane	6.574	84	34143	0.468	ppbv #	91
34) 2-Butanone	4.761	43	76239	0.634	ppbv	97
35) Carbon Tetrachloride	6.468	117	7362	0.048	ppbv #	74
36) Benzene	6.346	78	65060	0.350	ppbv	96
39) 1,2-Dichloropropane	6.626	63	624413	8.569	ppbv #	24
41) Tetrahydrofuran	5.542	42	3546	0.051	ppbv #	1
53) Toluene	9.201	91	124740	0.641	ppbv	99
58) Ethyl Benzene	12.069	91	15682	0.065	ppbv	100
59) m/p-Xylene	12.359	91	11560	0.052	ppbv #	33
74) 1,2,4-Trimethylbenzene	16.088	105	15533	0.065	ppbv #	76
76) 1,4-Dichlorobenzene	16.455	146	28930	0.234	ppbv #	8
80) Naphthalene,2-methyl-	24.381	142	1983	0.055	ppbv	91

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

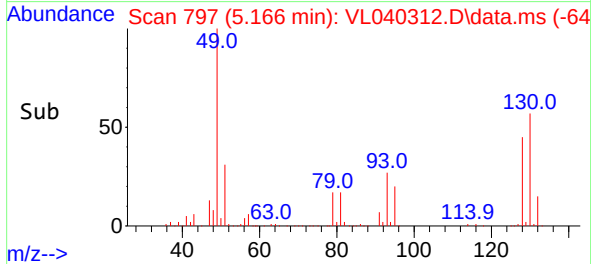
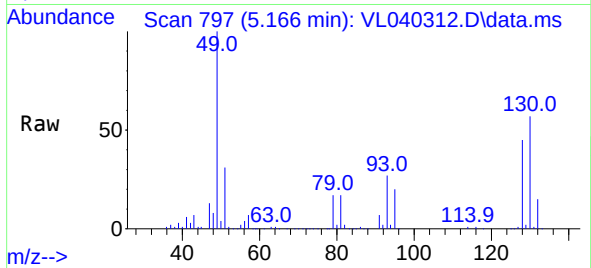
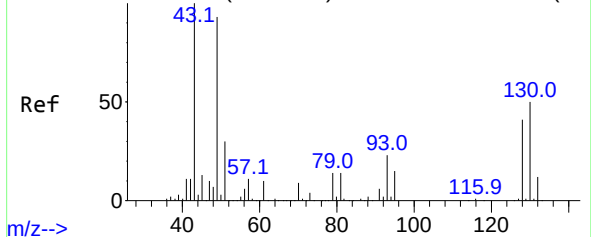
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040523\
Data File : VL040312.D
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QLast Update : Wed Mar 15 16:14:43 2023
Response via : Initial Calibration



Abundance Scan 804 (5.189 min): VL040279.D\data.ms (-78)



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.166 min Scan# 79

Delta R.T. -0.023 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Instrument :

MSVOA_L

ClientSampleId :

IA2

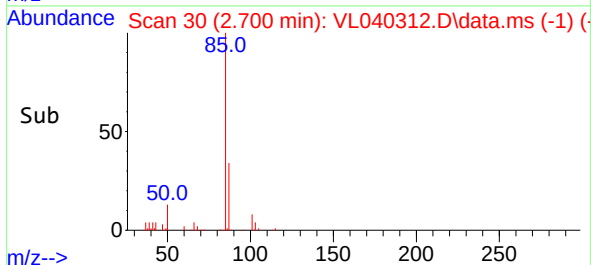
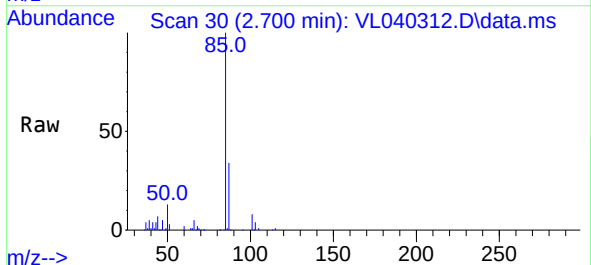
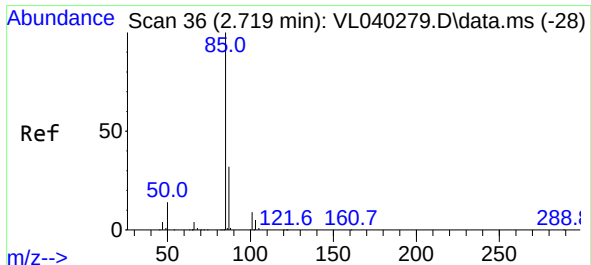
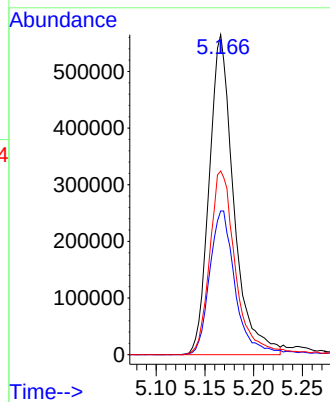
Tgt Ion: 49 Resp: 989613

Ion Ratio Lower Upper

49 100

128 47.5 22.4 67.3

130 61.2 28.7 86.1



#2

Dichlorodifluoromethane

Concen: 1.047 ppbv

RT: 2.700 min Scan# 30

Delta R.T. -0.019 min

Lab File: VL040312.D

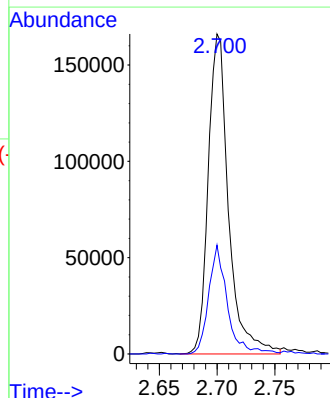
Acq: 5 Apr 2023 11:39

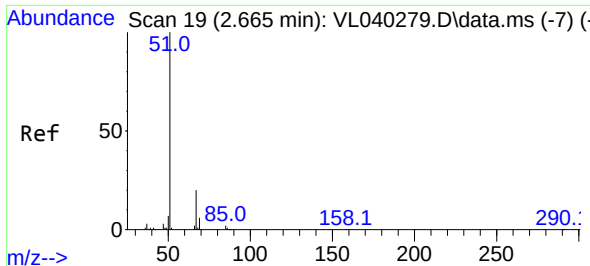
Tgt Ion: 85 Resp: 203225

Ion Ratio Lower Upper

85 100

87 34.0 25.5 38.3

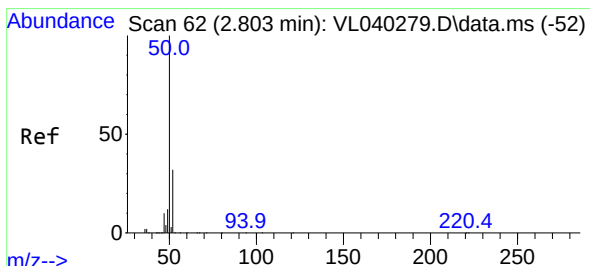
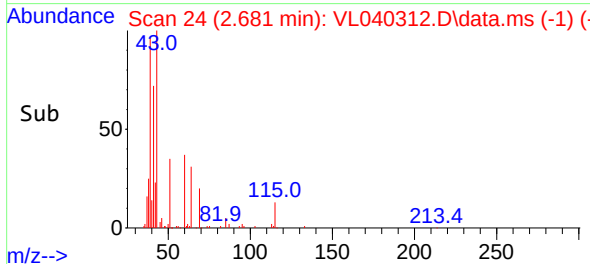
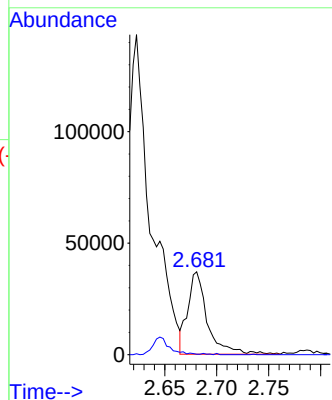
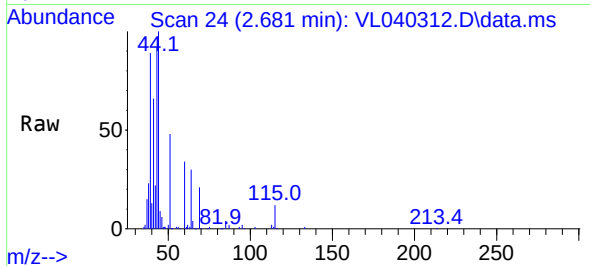




#3
Chlorodifluoromethane
Concen: 0.390 ppbv
RT: 2.681 min Scan# 24
Delta R.T. 0.016 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

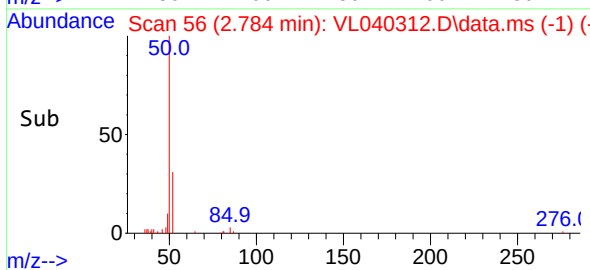
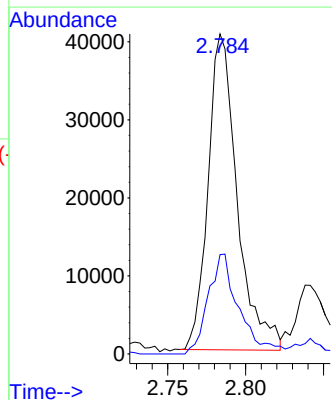
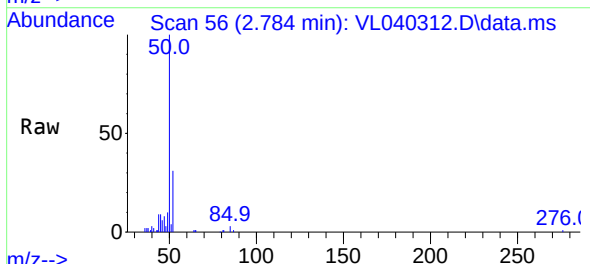
Instrument :
MSVOA_L
ClientSampleId :
IA2

Tgt Ion: 51 Resp: 48589
Ion Ratio Lower Upper
51 100
67 18.5 16.0 24.0

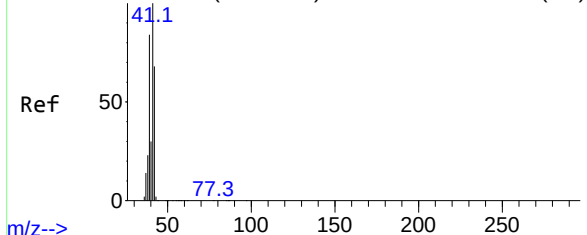


#4
Chloromethane
Concen: 0.685 ppbv
RT: 2.784 min Scan# 56
Delta R.T. -0.019 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 50 Resp: 52640
Ion Ratio Lower Upper
50 100
52 31.5 25.9 38.9



Abundance Scan 25 (2.684 min): VL040279.D\data.ms (-15)



#9

Propene

Concen: 8.153 ppbv

RT: 2.841 min Scan# 74

Delta R.T. 0.157 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Instrument :

MSVOA_L

ClientSampleId :

IA2

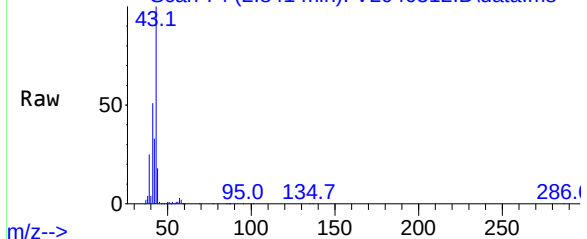
Tgt Ion: 41 Resp: 388665

Ion Ratio Lower Upper

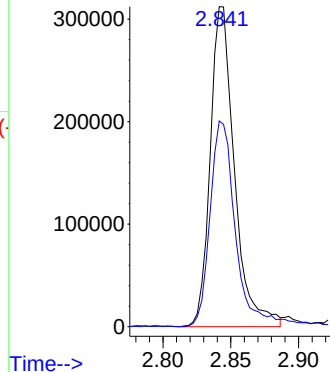
41 100

42 68.8 59.0 88.4

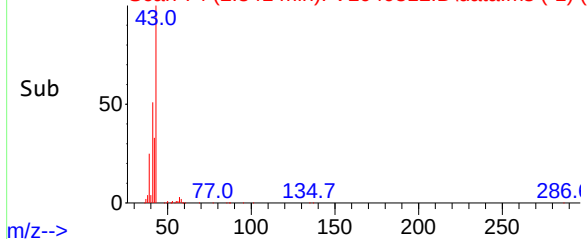
Abundance Scan 74 (2.841 min): VL040312.D\data.ms



Abundance

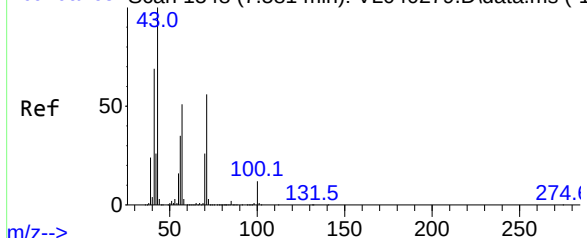


Abundance Scan 74 (2.841 min): VL040312.D\data.ms (-1)



Time-->

Abundance Scan 1548 (7.581 min): VL040279.D\data.ms (-1)



#10

Heptane

Concen: 0.102 ppbv

RT: 7.558 min Scan# 1541

Delta R.T. -0.023 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

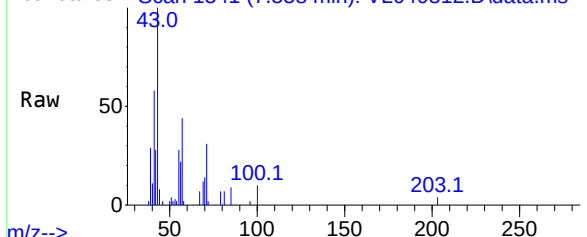
Tgt Ion: 43 Resp: 11706

Ion Ratio Lower Upper

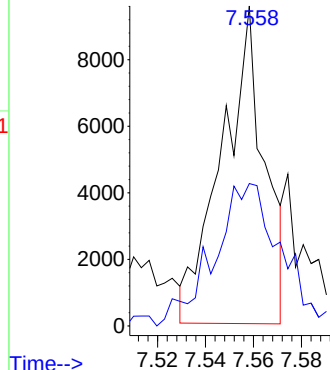
43 100

57 75.0 41.7 62.5#

Abundance Scan 1541 (7.558 min): VL040312.D\data.ms

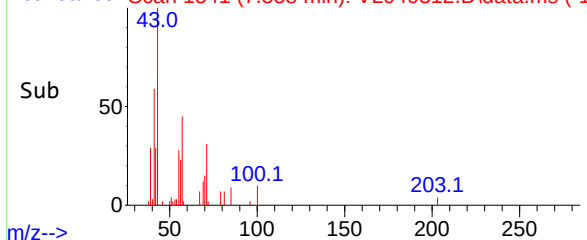


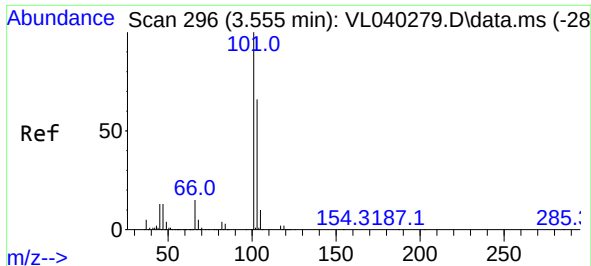
Abundance



Time-->

Abundance Scan 1541 (7.558 min): VL040312.D\data.ms (-1)

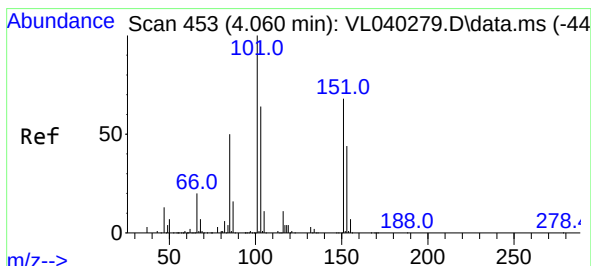
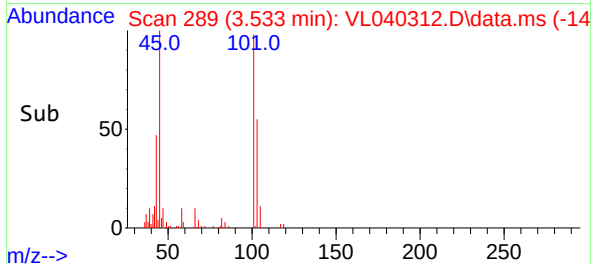
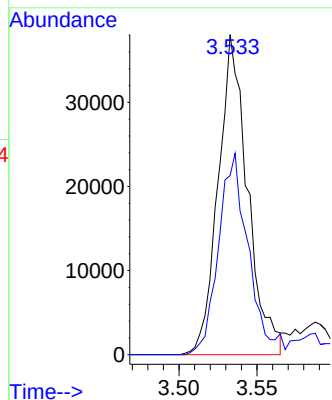
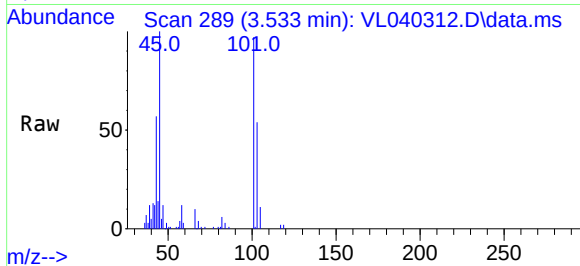




#11
Trichlorofluoromethane
Concen: 0.283 ppbv
RT: 3.533 min Scan# 21
Delta R.T. -0.022 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

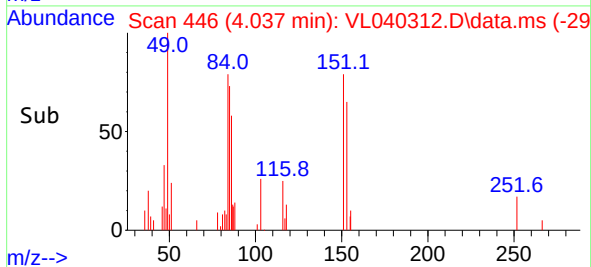
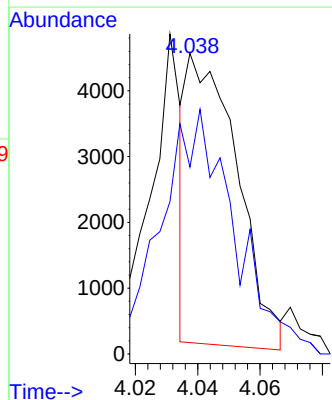
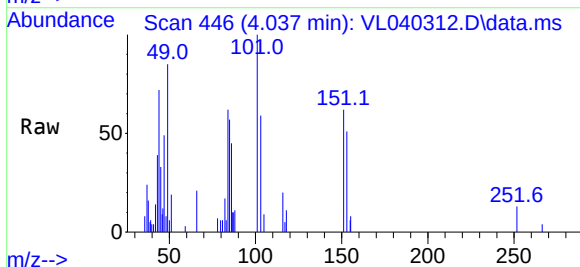
Instrument :
MSVOA_L
ClientSampleId :
IA2

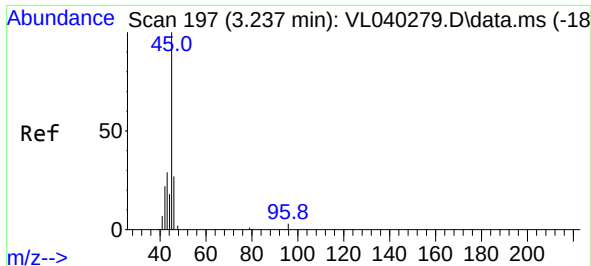
Tgt Ion:101 Resp: 49867
Ion Ratio Lower Upper
101 100
103 56.0 53.1 79.7



#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.038 ppbv
RT: 4.037 min Scan# 446
Delta R.T. -0.022 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion:101 Resp: 4969
Ion Ratio Lower Upper
101 100
151 123.6 53.2 79.8#

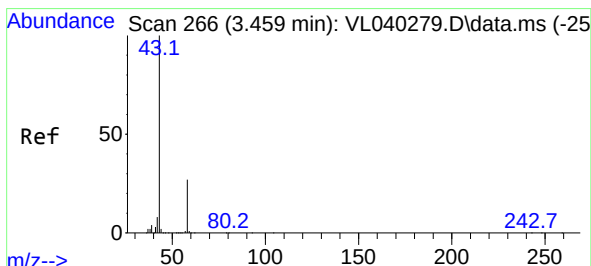
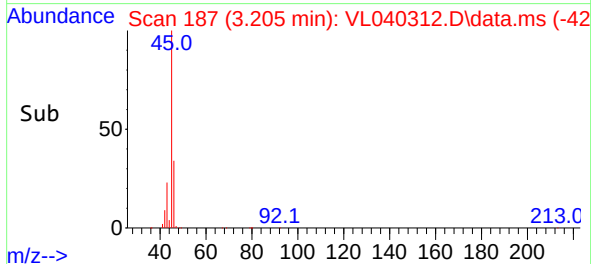
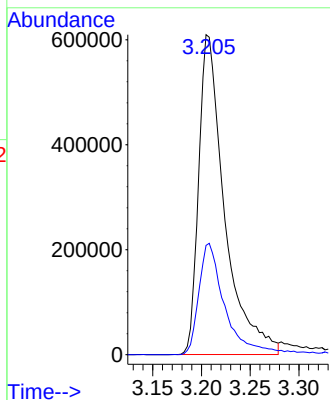
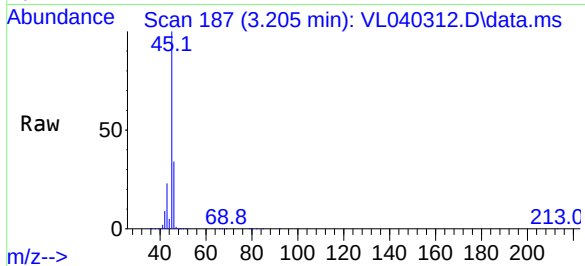




#13
Ethanol
Concen: 322.260 ppbv
RT: 3.205 min Scan# 11
Delta R.T. -0.032 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

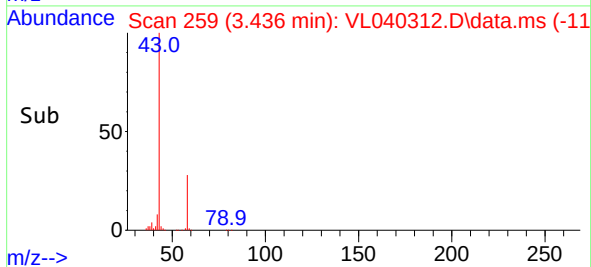
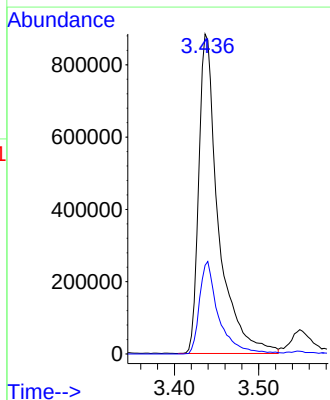
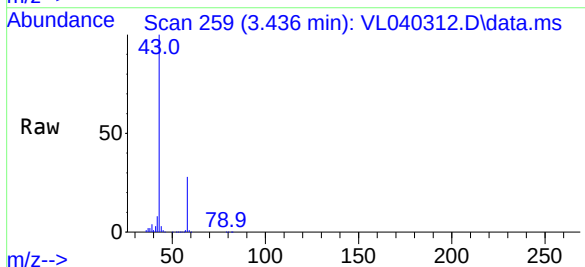
Instrument :
MSVOA_L
ClientSampleId :
IA2

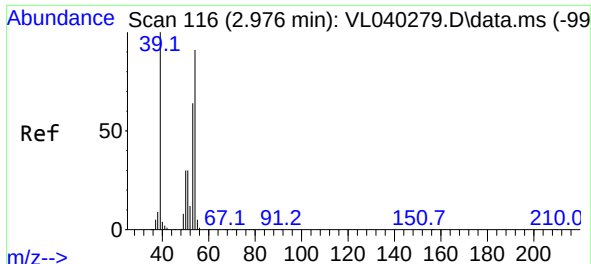
Tgt Ion: 45 Resp: 1126763
Ion Ratio Lower Upper
45 100
46 37.1 15.0 60.2



#15
Acetone
Concen: 11.896 ppbv
RT: 3.436 min Scan# 259
Delta R.T. -0.023 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 43 Resp: 1433242
Ion Ratio Lower Upper
43 100
58 28.3 21.8 32.8

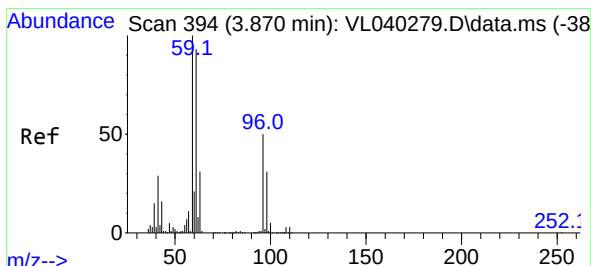
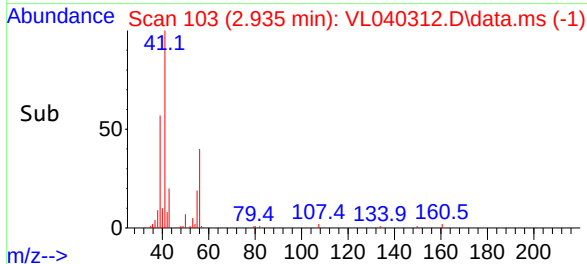
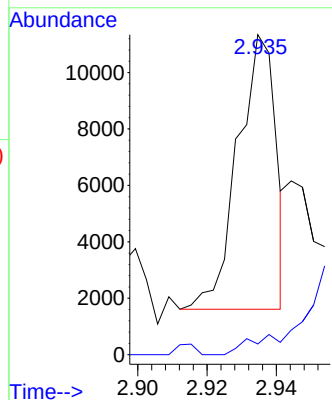
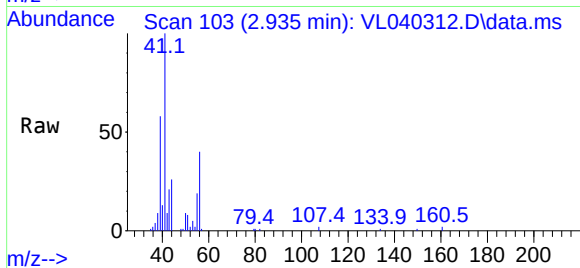




#16
1,3-Butadiene
Concen: 0.136 ppbv
RT: 2.935 min Scan# 103
Delta R.T. -0.041 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

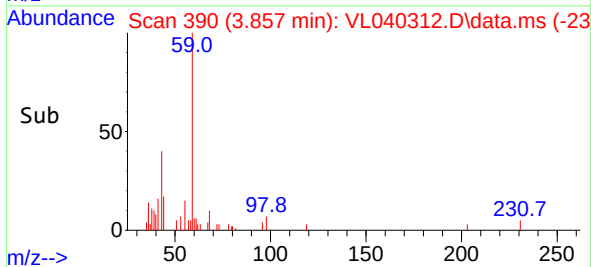
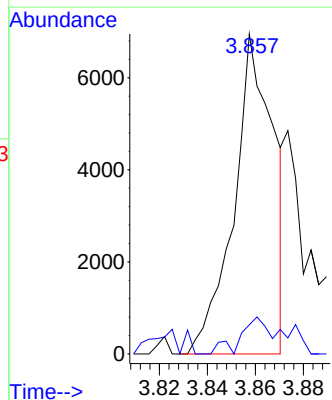
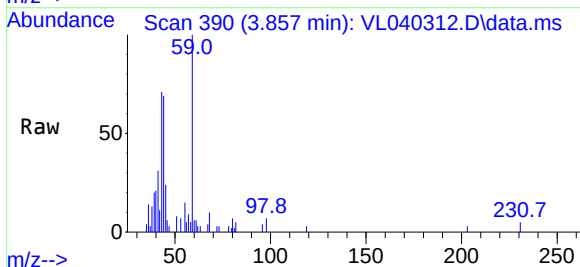
Instrument :
MSVOA_L
ClientSampleId :
IA2

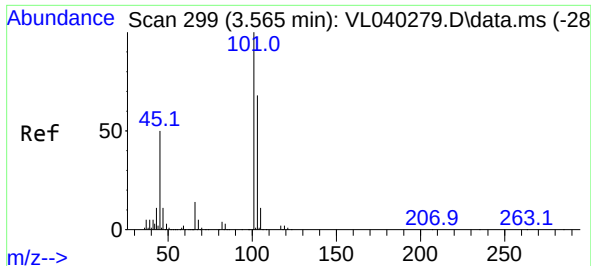
Tgt Ion: 39 Resp: 7473
Ion Ratio Lower Upper
39 100
54 79.1 68.4 102.6



#17
tert-Butyl alcohol
Concen: 0.069 ppbv
RT: 3.857 min Scan# 390
Delta R.T. -0.013 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 59 Resp: 7901
Ion Ratio Lower Upper
59 100
57 0.0 8.5 12.7#





#19

Isopropyl Alcohol

Concen: 6.958 ppbv

RT: 3.549 min Scan# 299

Delta R.T. -0.016 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Instrument :

MSVOA_L

ClientSampleId :

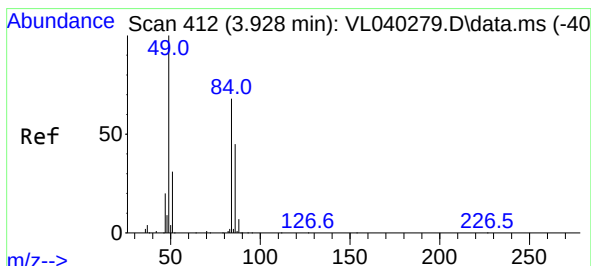
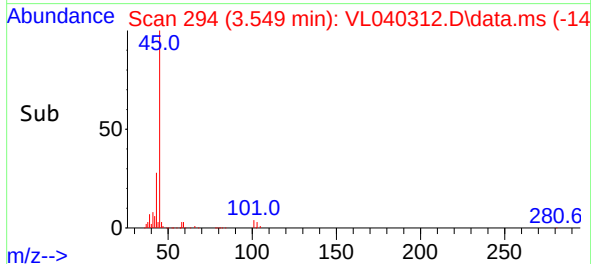
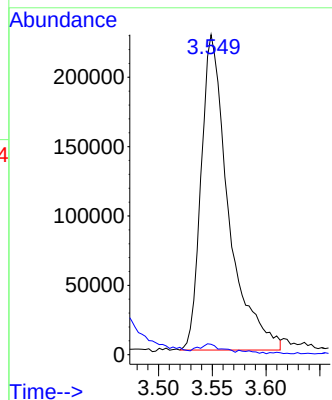
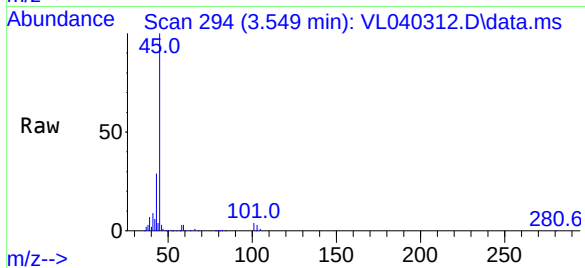
IA2

Tgt Ion: 45 Resp: 401551

Ion Ratio Lower Upper

45 100

58 3.5 2.7 4.1



#20

Methylene Chloride

Concen: 14.374 ppbv

RT: 3.906 min Scan# 405

Delta R.T. -0.022 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Tgt Ion: 84 Resp: 728550

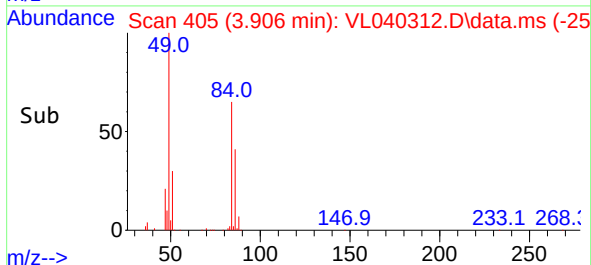
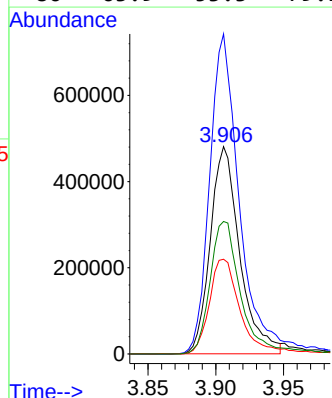
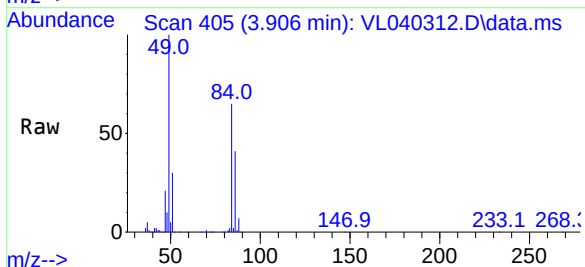
Ion Ratio Lower Upper

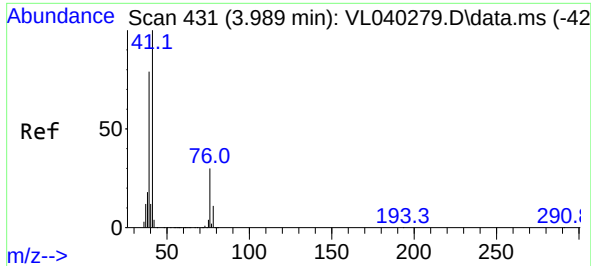
84 100

49 154.2 117.5 176.3

51 45.7 36.9 55.3

86 63.9 53.3 79.9

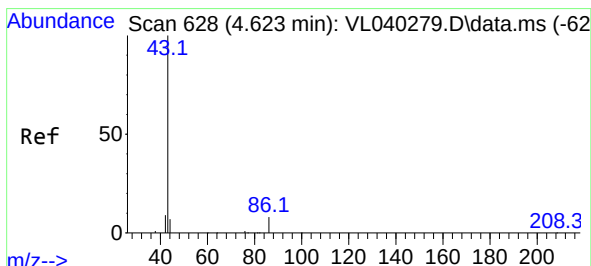
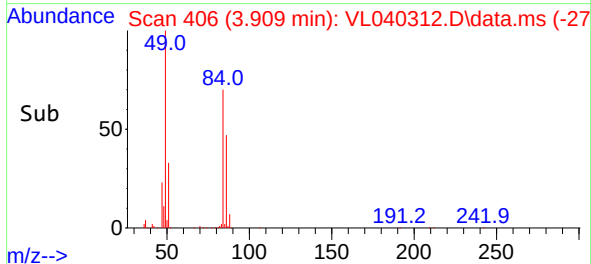
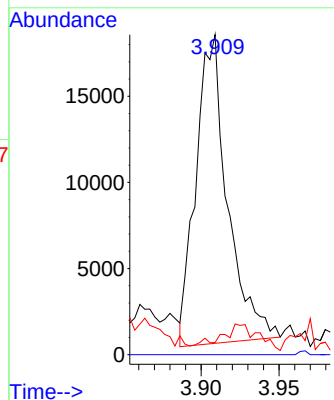
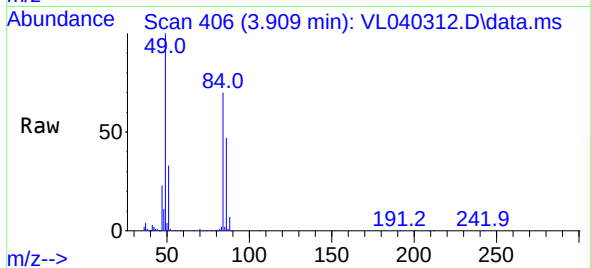




#21
Allyl Chloride
Concen: 0.323 ppbv
RT: 3.909 min Scan# 406
Delta R.T. -0.080 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

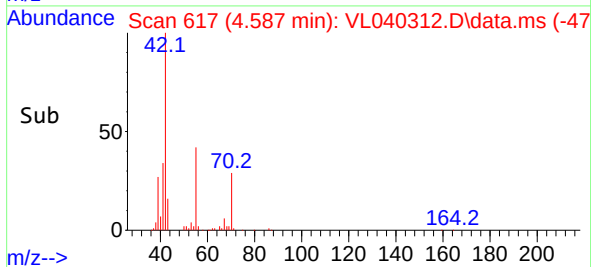
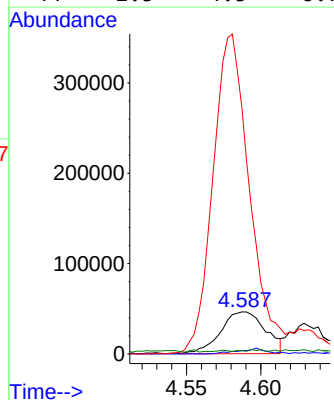
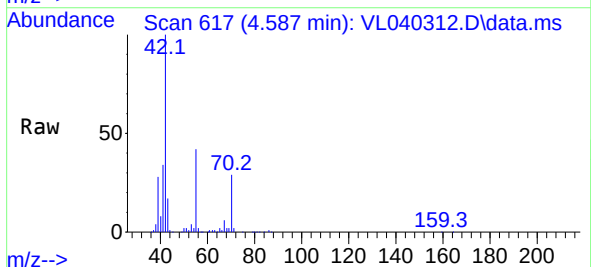
Instrument :
MSVOA_L
ClientSampleId :
IA2

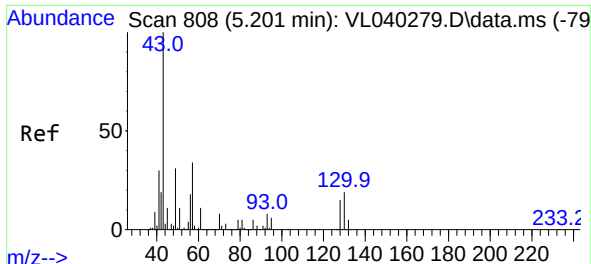
Tgt Ion: 41 Resp: 25232
Ion Ratio Lower Upper
41 100
76 0.0 25.4 38.0#
39 9.4 65.4 98.2#



#23
Vinyl Acetate
Concen: 2.902 ppbv
RT: 4.587 min Scan# 617
Delta R.T. -0.036 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 43 Resp: 97282
Ion Ratio Lower Upper
43 100
86 8.1 5.0 7.4#
42 583.7 9.1 13.7#
44 1.5 4.5 6.7#





#25

Ethyl Acetate

Concen: 1.510 ppbv

RT: 5.185 min Scan# 803

Delta R.T. -0.016 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Instrument :

MSVOA_L

ClientSampleId :

IA2

Tgt Ion: 43 Resp: 340637

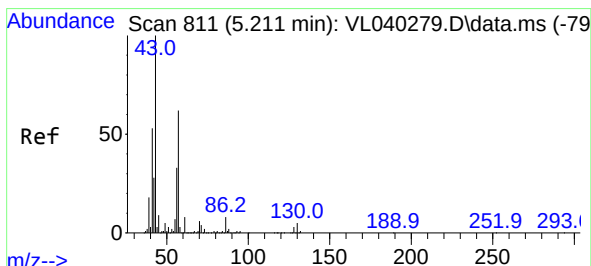
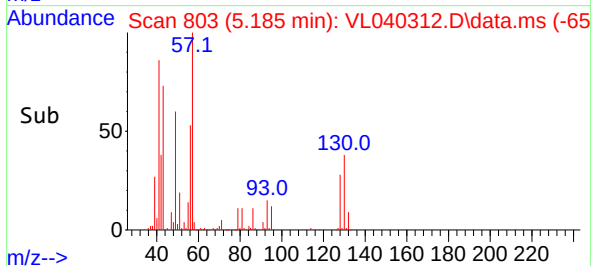
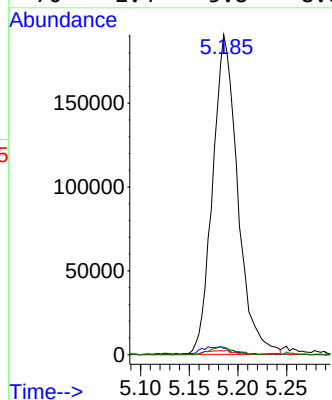
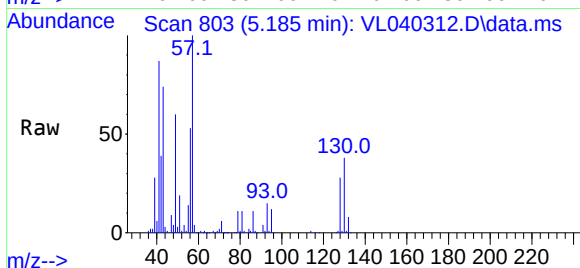
Ion Ratio Lower Upper

43 100

45 3.1 8.6 12.8#

61 1.5 8.4 12.6#

70 2.4 5.8 8.6#



#26

Hexane

Concen: 4.831 ppbv

RT: 5.185 min Scan# 803

Delta R.T. -0.026 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Tgt Ion: 57 Resp: 447251

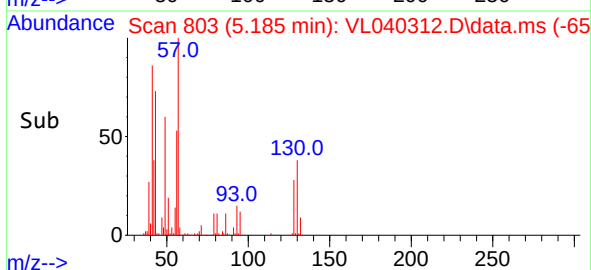
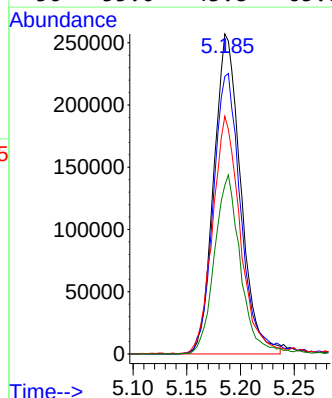
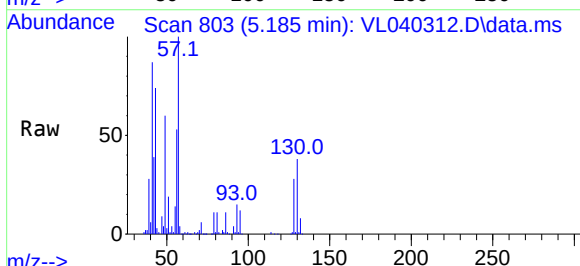
Ion Ratio Lower Upper

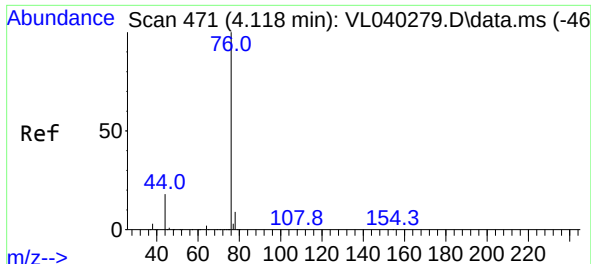
57 100

41 91.4 73.5 110.3

43 78.1 196.3 294.5#

56 55.0 43.8 65.8

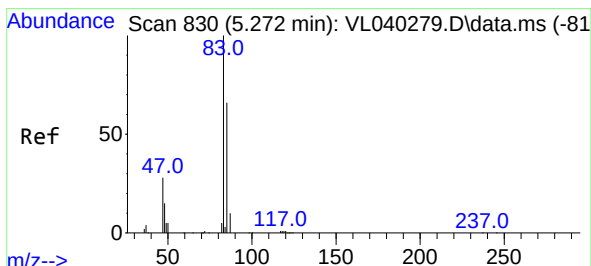
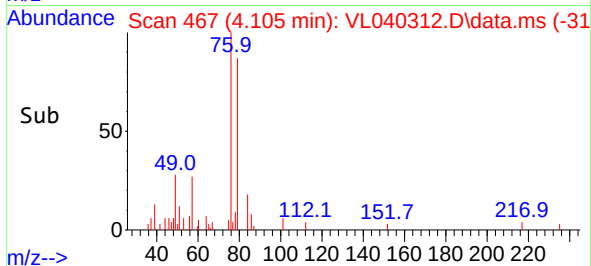
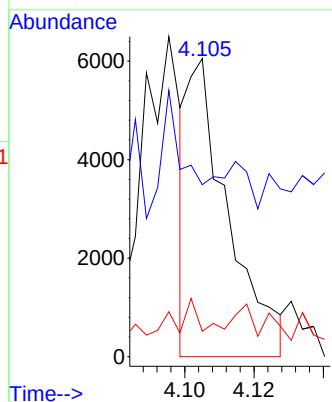
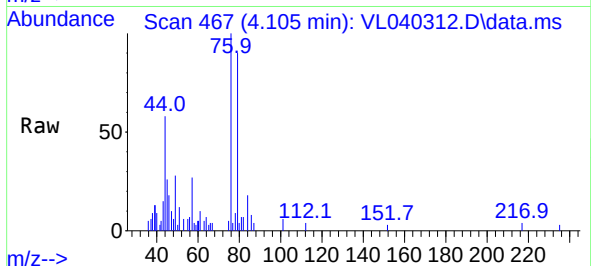




#27
Carbon Disulfide
Concen: 0.038 ppbv
RT: 4.105 min Scan# 41
Delta R.T. -0.013 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

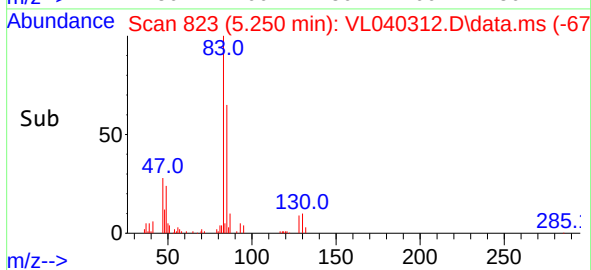
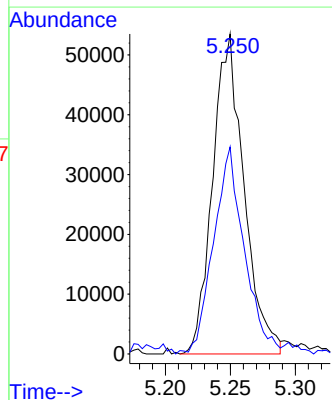
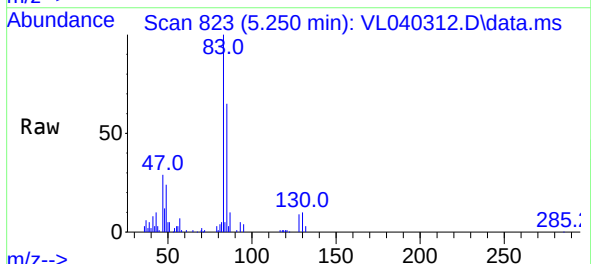
Instrument :
MSVOA_L
ClientSampleId :
IA2

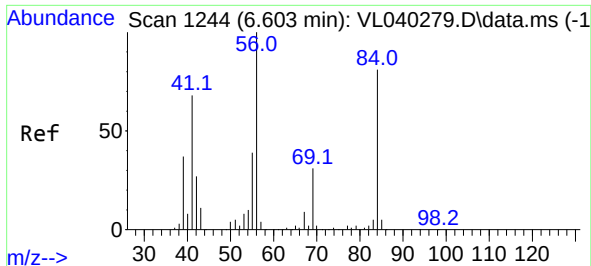
Tgt Ion: 76 Resp: 4924
Ion Ratio Lower Upper
76 100
44 0.0 15.2 22.8#
78 21.1 7.6 11.4#



#29
Chloroform
Concen: 0.549 ppbv
RT: 5.250 min Scan# 823
Delta R.T. -0.022 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 83 Resp: 89756
Ion Ratio Lower Upper
83 100
85 63.7 52.8 79.2

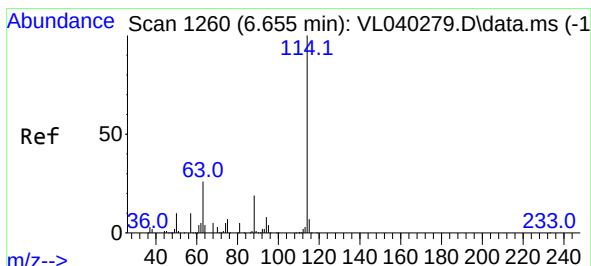
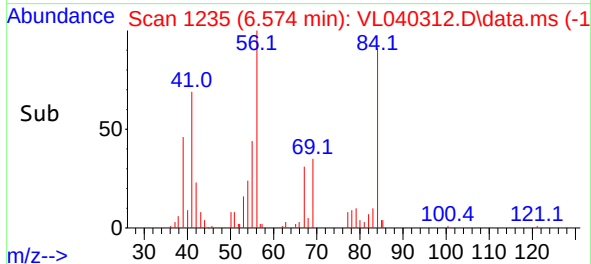
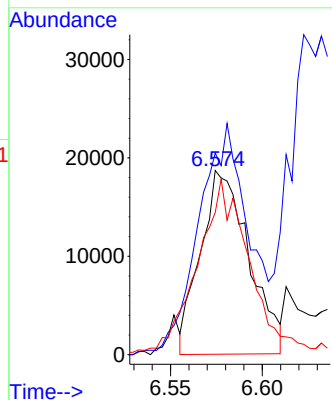
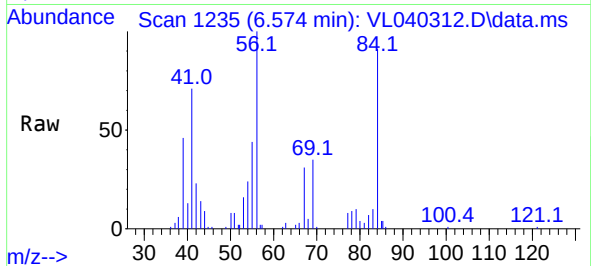




#30
Cyclohexane
Concen: 0.468 ppbv
RT: 6.574 min Scan# 11
Delta R.T. -0.029 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

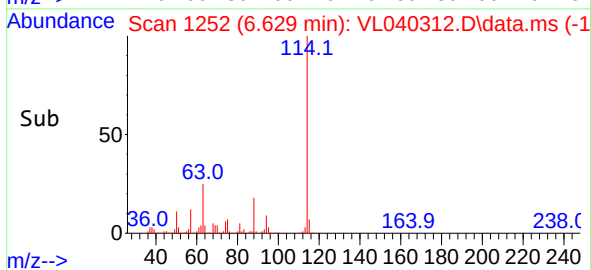
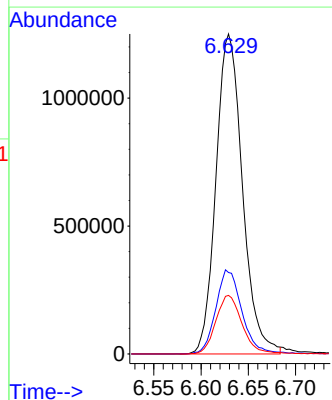
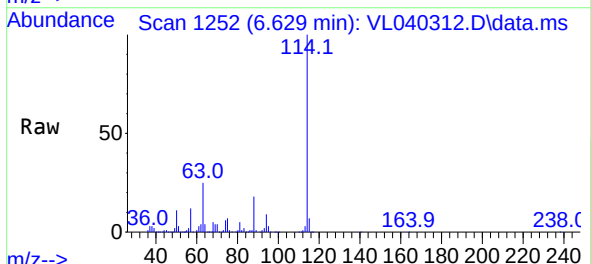
Instrument :
MSVOA_L
ClientSampleId :
IA2

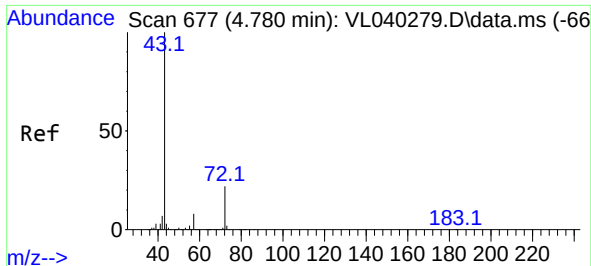
Tgt Ion: 84 Resp: 34143
Ion Ratio Lower Upper
84 100
56 134.2 109.0 163.4
41 103.2 67.9 101.9#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.629 min Scan# 1252
Delta R.T. -0.026 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 114 Resp: 2437191
Ion Ratio Lower Upper
114 100
63 26.1 21.2 31.8
88 18.4 14.5 21.7

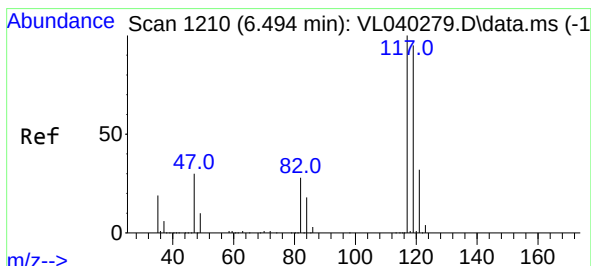
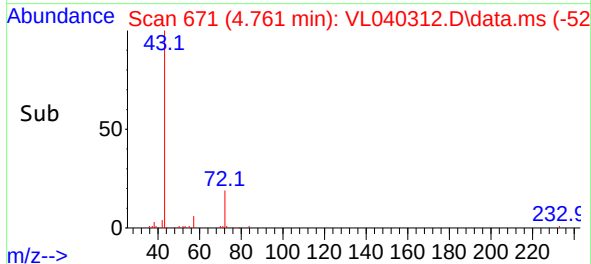
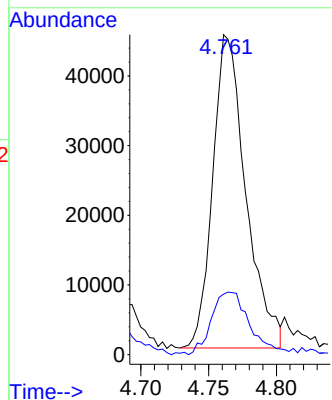
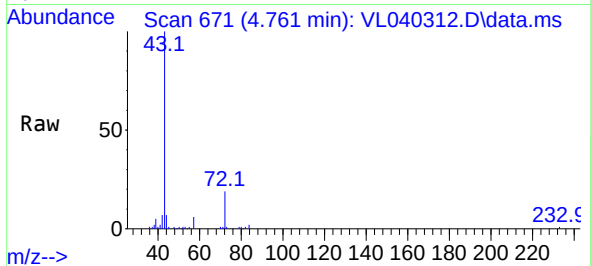




#34
2-Butanone
Concen: 0.634 ppbv
RT: 4.761 min Scan# 61
Delta R.T. -0.019 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

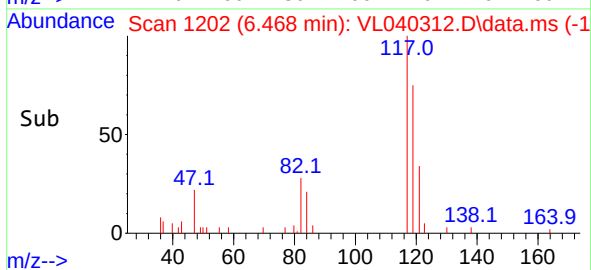
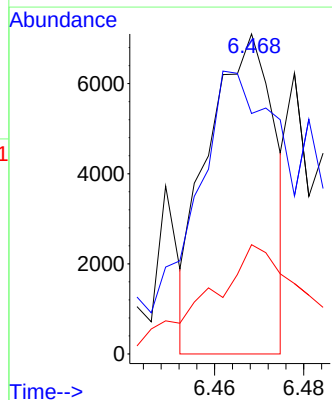
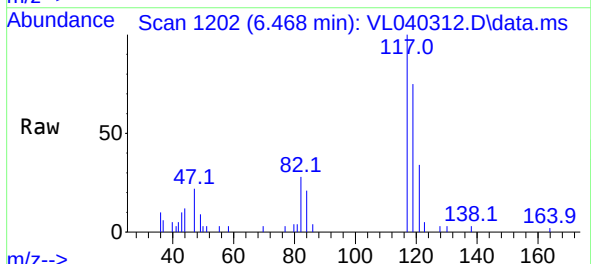
Instrument :
MSVOA_L
ClientSampleId :
IA2

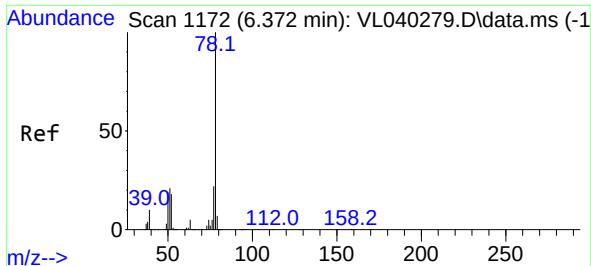
Tgt Ion: 43 Resp: 76239
Ion Ratio Lower Upper
43 100
72 24.3 18.3 27.5



#35
Carbon Tetrachloride
Concen: 0.048 ppbv
RT: 6.468 min Scan# 1202
Delta R.T. -0.026 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 117 Resp: 7362
Ion Ratio Lower Upper
117 100
119 62.7 76.4 114.6#
121 33.4 25.6 38.4

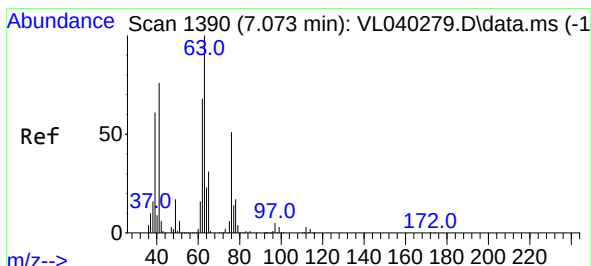
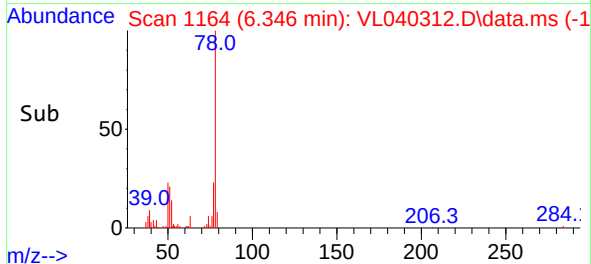
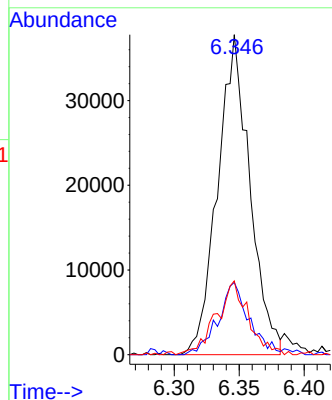
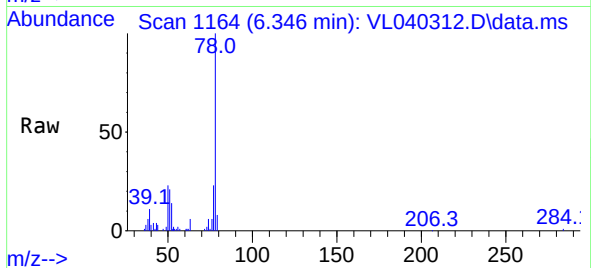




#36
Benzene
Concen: 0.350 ppbv
RT: 6.346 min Scan# 1172
Delta R.T. -0.026 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

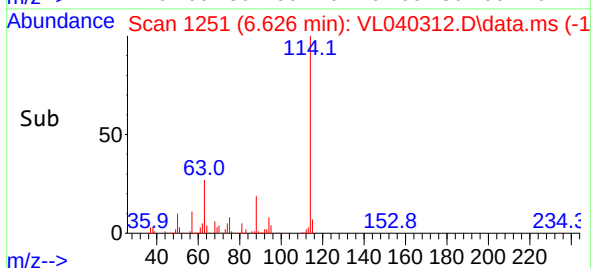
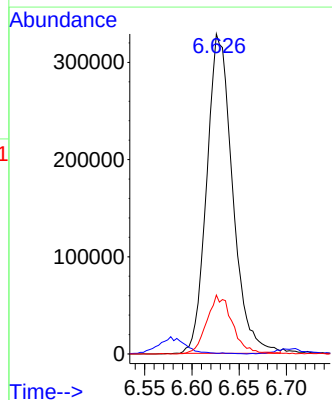
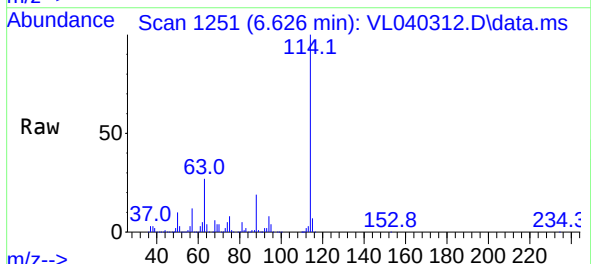
Instrument :
MSVOA_L
ClientSampleId :
IA2

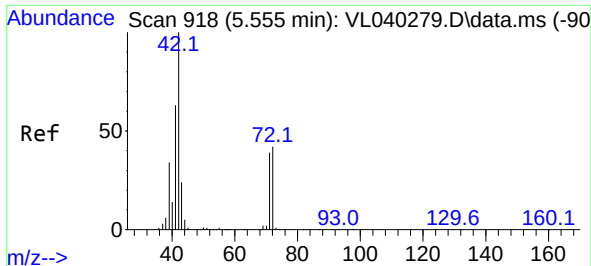
Tgt Ion: 78 Resp: 65060
Ion Ratio Lower Upper
78 100
77 22.6 17.8 26.8
50 22.5 15.4 23.2



#39
1,2-Dichloropropane
Concen: 8.569 ppbv
RT: 6.626 min Scan# 1251
Delta R.T. -0.447 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 63 Resp: 624413
Ion Ratio Lower Upper
63 100
41 0.0 60.8 91.2#
62 18.3 54.1 81.1#





#41

Tetrahydrofuran

Concen: 0.051 ppbv

RT: 5.542 min Scan# 91

Delta R.T. -0.013 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Instrument :

MSVOA_L

ClientSampleId :

IA2

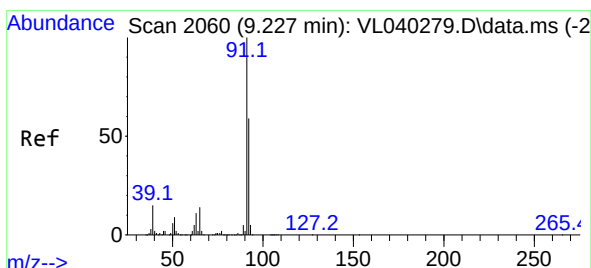
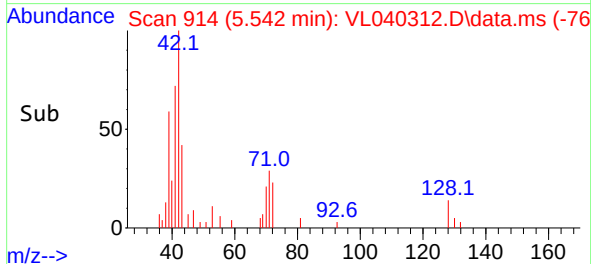
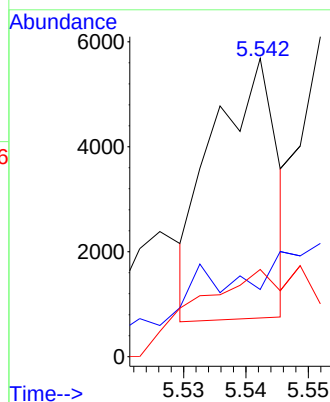
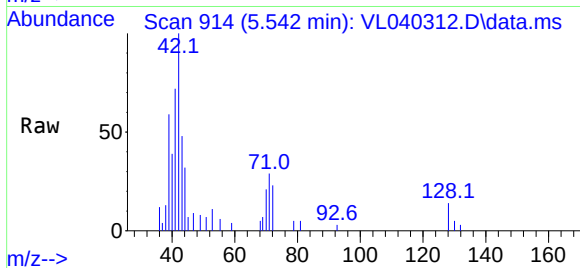
Tgt Ion: 42 Resp: 3546

Ion Ratio Lower Upper

42 100

72 119.8 32.6 49.0#

71 88.1 31.0 46.4#



#53

Toluene

Concen: 0.641 ppbv

RT: 9.201 min Scan# 2052

Delta R.T. -0.026 min

Lab File: VL040312.D

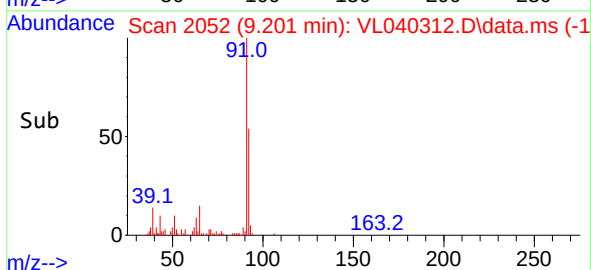
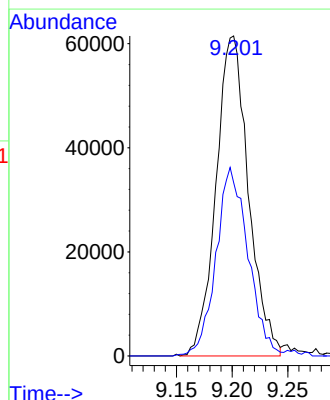
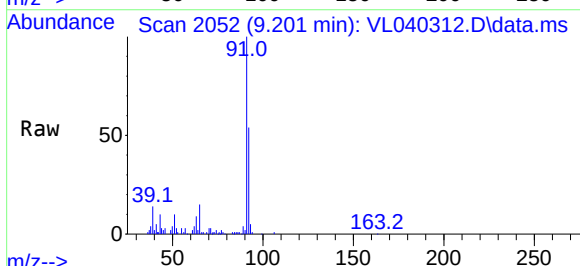
Acq: 5 Apr 2023 11:39

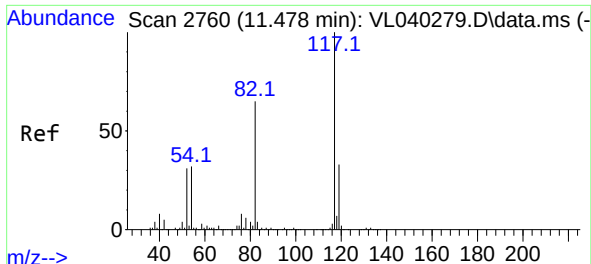
Tgt Ion: 91 Resp: 124740

Ion Ratio Lower Upper

91 100

92 58.9 48.0 72.0

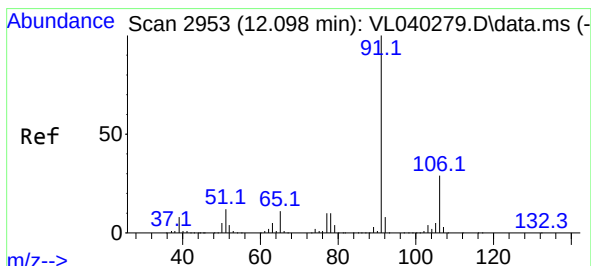
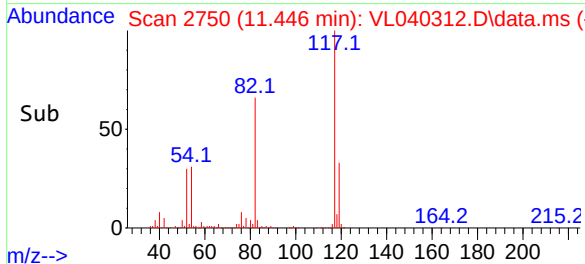
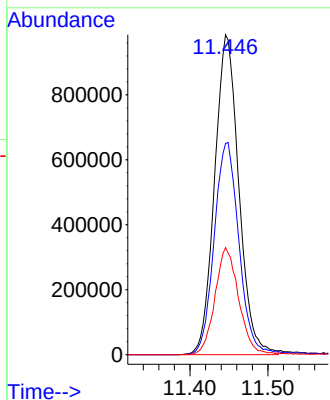
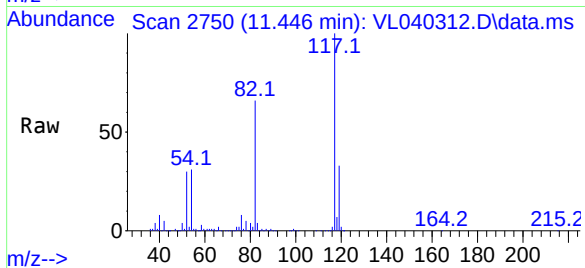




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.446 min Scan# 2117
Delta R.T. -0.032 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

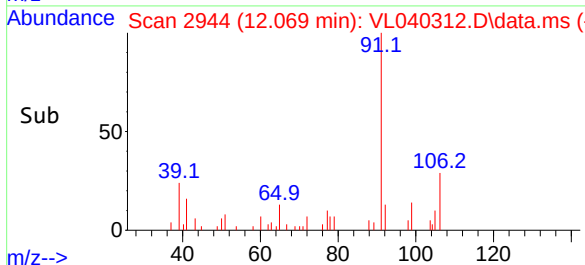
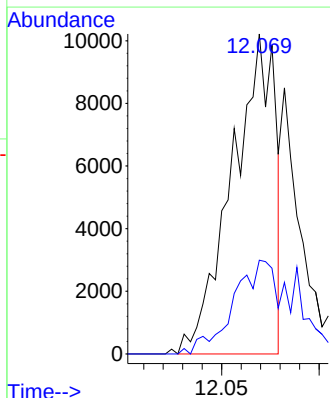
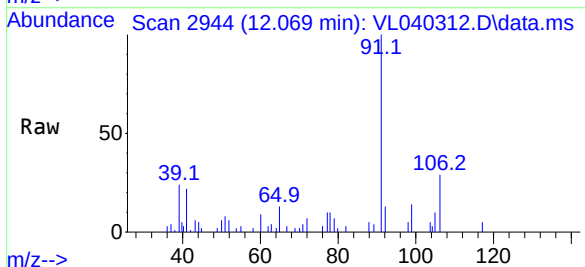
Instrument :
MSVOA_L
ClientSampleId :
IA2

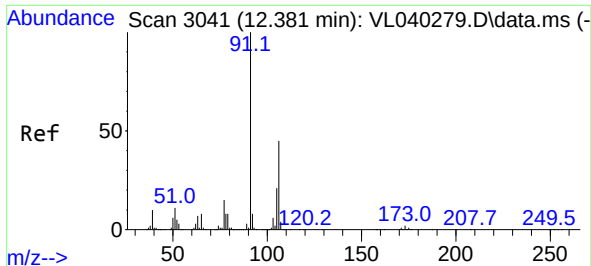
Tgt Ion:117 Resp: 2128421
Ion Ratio Lower Upper
117 100
82 68.4 51.4 77.2
119 33.0 24.0 36.0



#58
Ethyl Benzene
Concen: 0.065 ppbv
RT: 12.069 min Scan# 2944
Delta R.T. -0.029 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Tgt Ion: 91 Resp: 15682
Ion Ratio Lower Upper
91 100
106 29.3 23.4 35.2





#59

m/p-Xylene

Concen: 0.052 ppbv

RT: 12.359 min Scan# 3041

Delta R.T. -0.022 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

Instrument :

MSVOA_L

ClientSampleId :

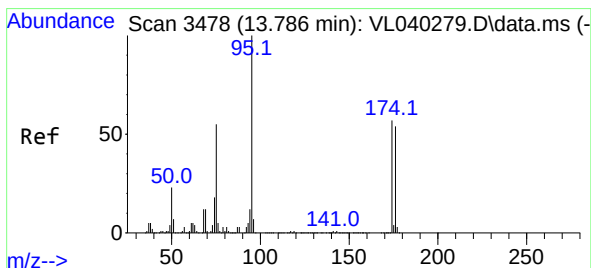
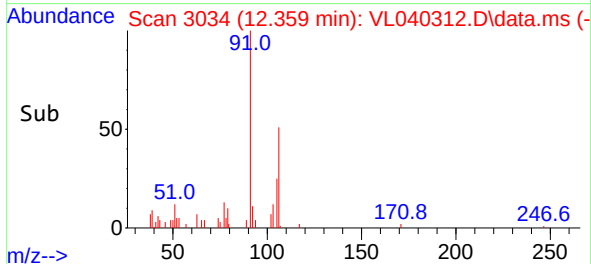
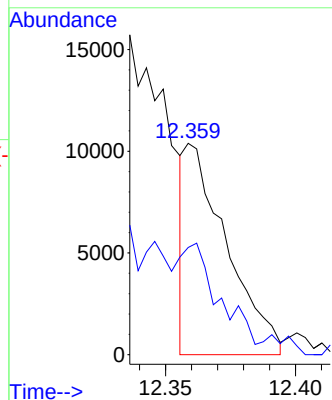
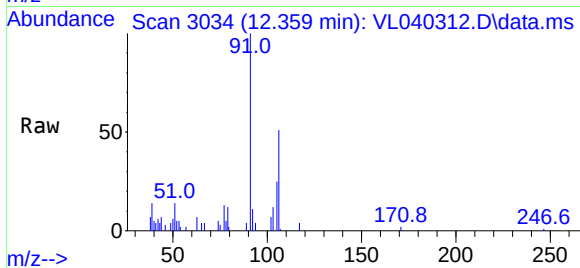
IA2

Tgt Ion: 91 Resp: 11560

Ion Ratio Lower Upper

91 100

106 0.0 34.0 51.0#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.737 ppbv

RT: 13.757 min Scan# 3469

Delta R.T. -0.029 min

Lab File: VL040312.D

Acq: 5 Apr 2023 11:39

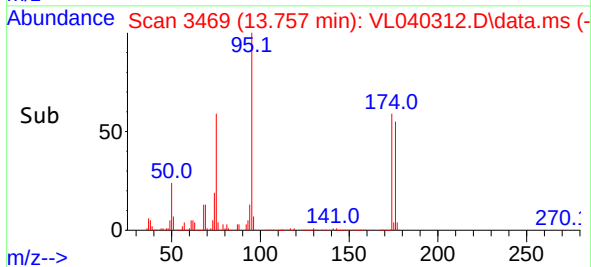
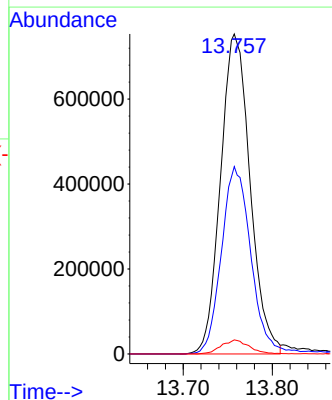
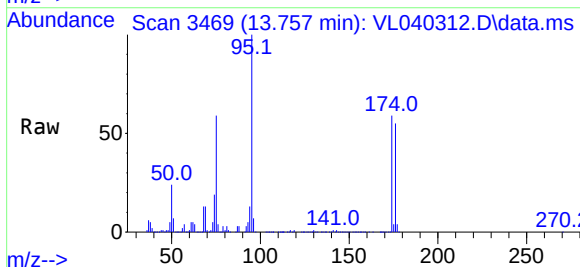
Tgt Ion: 95 Resp: 1735533

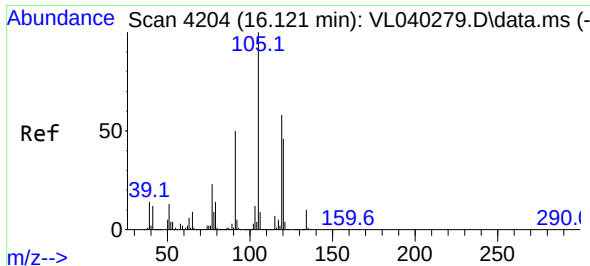
Ion Ratio Lower Upper

95 100

174 59.9 47.0 70.6

175 4.3 3.4 5.2

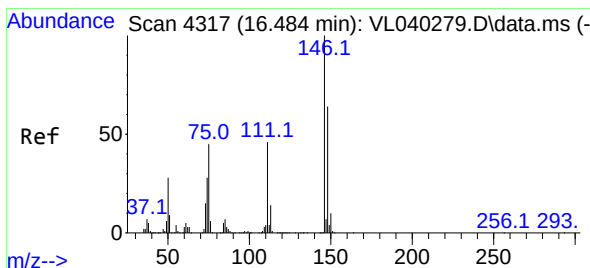
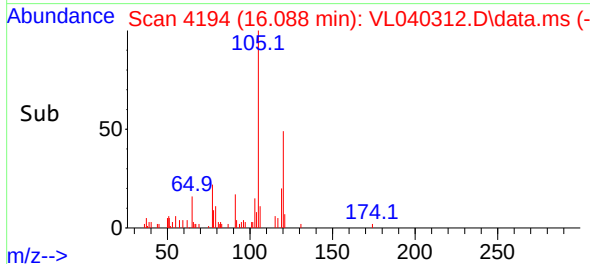
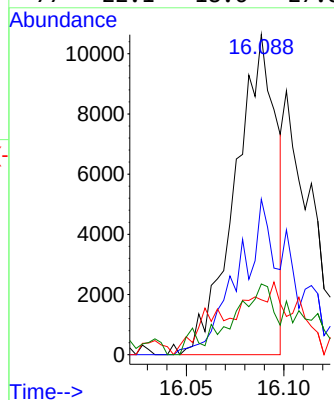
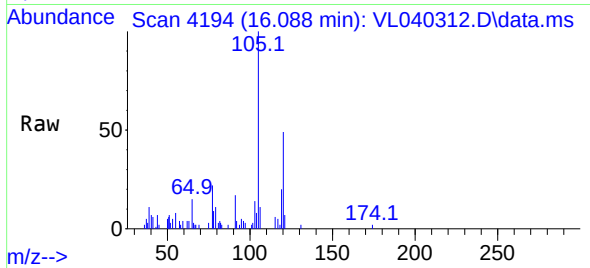




#74
1,2,4-Trimethylbenzene
Concen: 0.065 ppbv
RT: 16.088 min Scan# 41
Delta R.T. -0.033 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

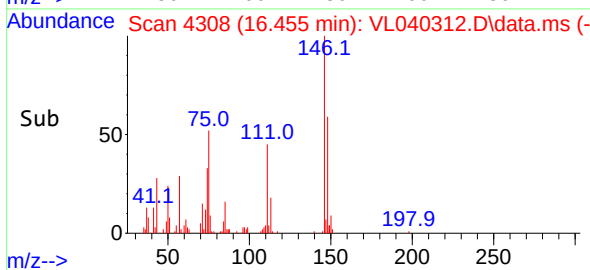
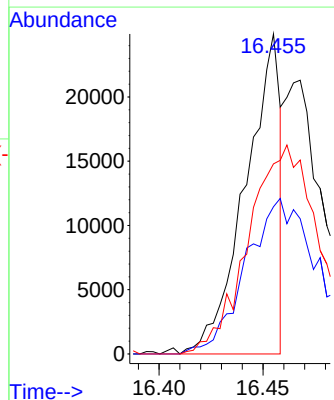
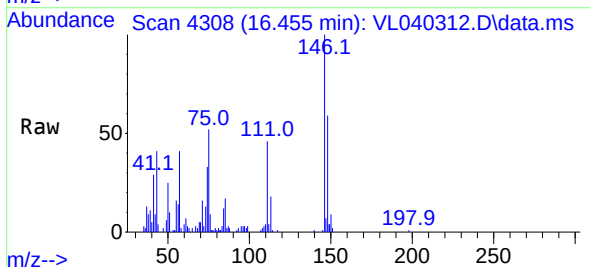
Instrument :
MSVOA_L
ClientSampleId :
IA2

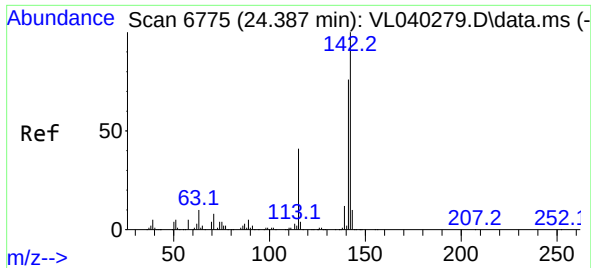
Tgt Ion:	105	Resp:	15533
Ion Ratio	Lower	Upper	
105	100		
120	47.0	36.6	54.8
91	12.4	39.9	59.9#
77	22.1	18.6	27.8



#76
1,4-Dichlorobenzene
Concen: 0.234 ppbv
RT: 16.455 min Scan# 4308
Delta R.T. -0.029 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

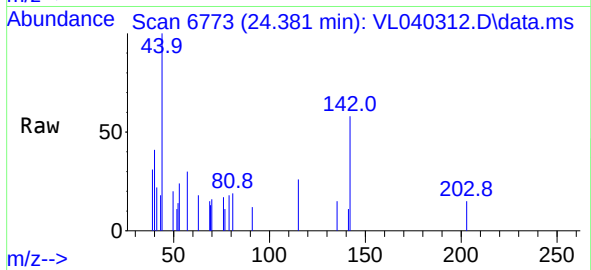
Tgt Ion:	146	Resp:	28930
Ion Ratio	Lower	Upper	
146	100		
111	103.0	23.8	71.2#
148	143.2	32.5	97.5#





#80
Naphthalene, 2-methyl-
Concen: 0.055 ppbv
RT: 24.381 min Scan# 61
Delta R.T. -0.006 min
Lab File: VL040312.D
Acq: 5 Apr 2023 11:39

Instrument :
MSVOA_L
ClientSampleId :
IA2



Tgt Ion:	142	Resp:	1983
Ion	Ratio	Lower	Upper
142	100		
141	73.6	65.5	98.3
115	36.3	33.5	50.3

