

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041923\
 Data File : VL040397.D
 Acq On : 20 Apr 2023 9:12
 Operator : SY/MD
 Sample : 02368-05 2X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1A

Quant Time: Apr 20 10:33:19 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Apr 13 14:37:02 2023
 Response via : Initial Calibration

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

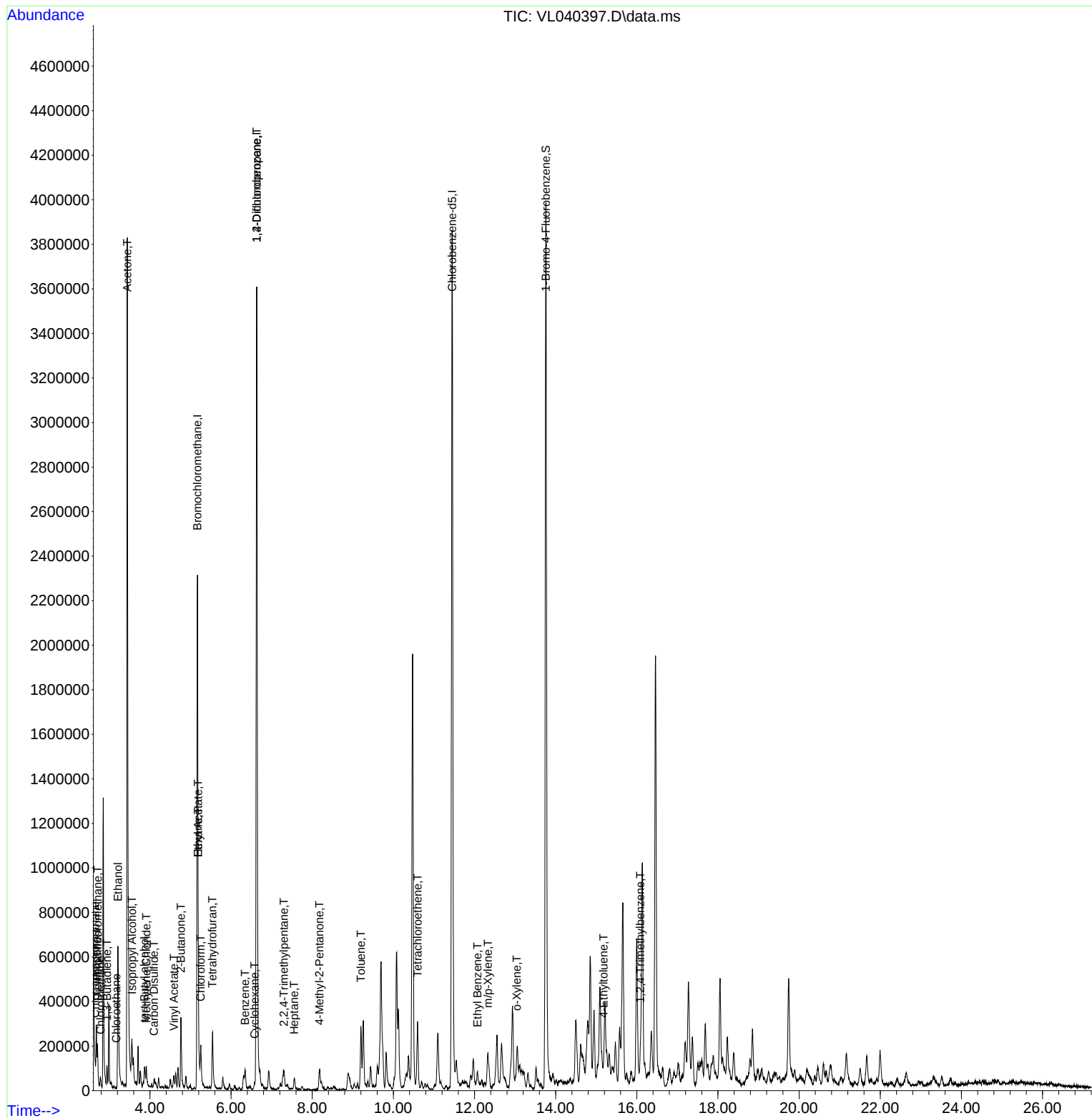
Internal Standards						
1) Bromochloromethane	5.169	49	1073066	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	6.632	114	2789676	10.000	ppbv	-0.02
55) Chlorobenzene-d5	11.449	117	2559004	10.000	ppbv	-0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.760	95	2060958	9.739	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.709	85	98306	0.508	ppbv	91
3) Chlorodifluoromethane	2.652	51	28401	0.203	ppbv	95
4) Chloromethane	2.787	50	19844	0.224	ppbv	97
7) Chloroethane	3.169	64	836	0.030	ppbv #	50
9) Propene	2.681	41	49655	0.896	ppbv #	80
10) Heptane	7.552	43	8739	0.069	ppbv #	25
13) Ethanol	3.211	45	738172	159.623	ppbv	95
15) Acetone	3.439	43	3934772	25.889	ppbv	95
16) 1,3-Butadiene	2.941	39	22487	0.358	ppbv #	31
17) tert-Butyl alcohol	3.867	59	66777	0.478	ppbv #	90
19) Isopropyl Alcohol	3.555	45	216025	3.115	ppbv #	1
20) Methylene Chloride	3.909	84	25989	0.428	ppbv	95
23) Vinyl Acetate	4.590	43	25200	0.651	ppbv #	52
25) Ethyl Acetate	5.188	43	43203	0.169	ppbv #	80
26) Hexane	5.188	57	45092	0.418	ppbv #	46
27) Carbon Disulfide	4.102	76	41519	0.298	ppbv #	80
29) Chloroform	5.253	83	90759	0.473	ppbv	98
30) Cyclohexane	6.581	84	3691	0.044	ppbv #	1
34) 2-Butanone	4.764	43	367386	2.442	ppbv	98
36) Benzene	6.343	78	62574	0.275	ppbv	98
39) 1,2-Dichloropropane	6.632	63	674296	7.529	ppbv #	24
41) Tetrahydrofuran	5.542	42	135066	1.639	ppbv	97
44) 2,2,4-Trimethylpentane	7.301	57	23808	0.063	ppbv #	1
50) 4-Methyl-2-Pentanone	8.179	43	71043	0.311	ppbv	97
52) Tetrachloroethene	10.597	164	45055	0.633	ppbv	91
53) Toluene	9.201	91	216334	0.897	ppbv	98
58) Ethyl Benzene	12.072	91	21508	0.068	ppbv	95
59) m/p-Xylene	12.330	91	100973	0.349	ppbv #	57
60) o-Xylene	13.040	91	55875	0.201	ppbv	98
72) 4-Ethyltoluene	15.178	105	15718	0.051	ppbv #	53
74) 1,2,4-Trimethylbenzene	16.085	105	23428	0.072	ppbv #	69

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

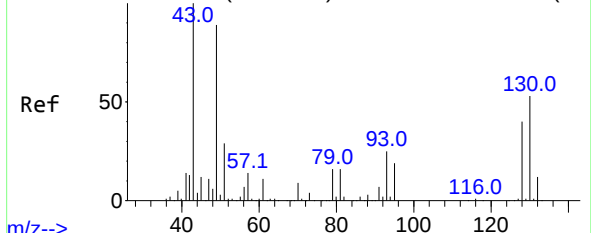
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041923\
Data File : VL040397.D
Acq On : 20 Apr 2023 9:12
Operator : SY/MD
Sample : 02368-05 2X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VP-1A

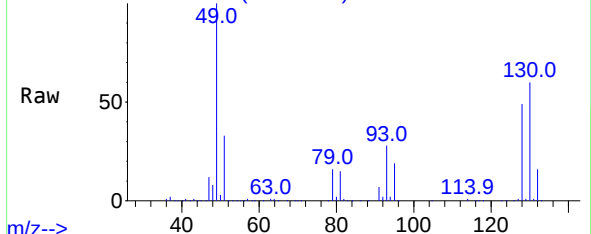
Quant Time: Apr 20 10:33:19 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Thu Apr 13 14:37:02 2023
Response via : Initial Calibration



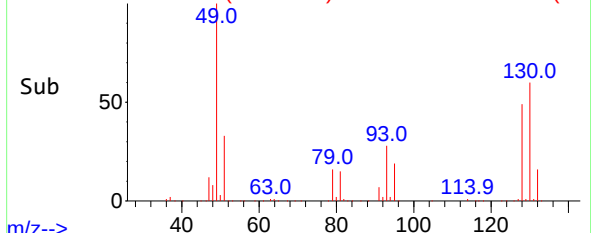
Abundance Scan 804 (5.189 min): VL040354.D\data.ms (-78



m/z--> Scan 798 (5.169 min): VL040397.D\data.ms

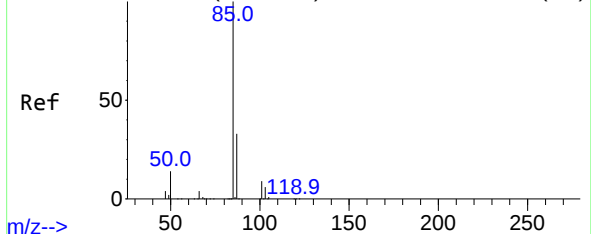


m/z--> Abundance Scan 798 (5.169 min): VL040397.D\data.ms (-64

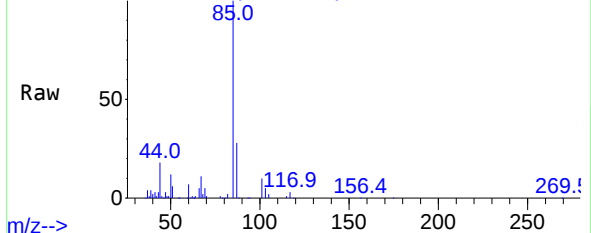


m/z-->

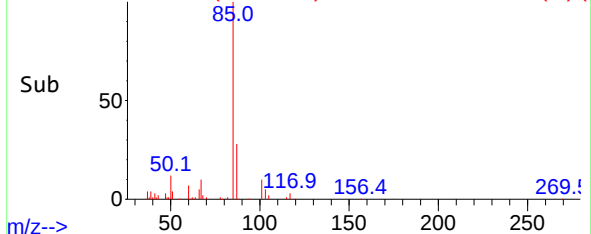
Abundance Scan 35 (2.716 min): VL040354.D\data.ms (-25)



m/z--> Abundance Scan 33 (2.709 min): VL040397.D\data.ms



m/z--> Abundance Scan 33 (2.709 min): VL040397.D\data.ms (-1)



m/z-->

#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.169 min Scan# 79

Delta R.T. -0.020 min

Lab File: VL040397.D

Acq: 20 Apr 2023 9:12

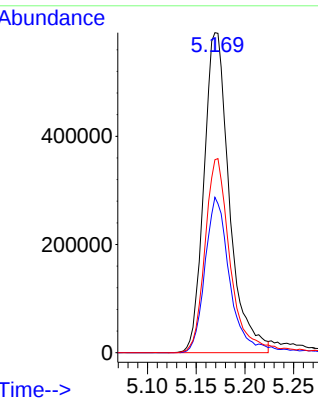
Tgt Ion: 49 Resp: 1073066

Ion Ratio Lower Upper

49 100

128 48.8 23.7 71.1

130 62.6 29.9 89.8



#2

Dichlorodifluoromethane

Concen: 0.508 ppbv

RT: 2.709 min Scan# 33

Delta R.T. -0.007 min

Lab File: VL040397.D

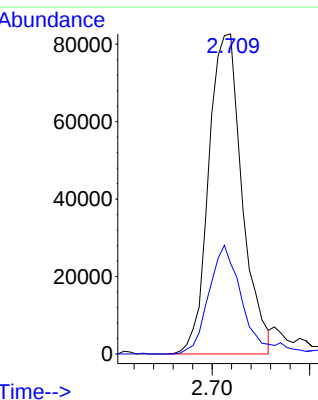
Acq: 20 Apr 2023 9:12

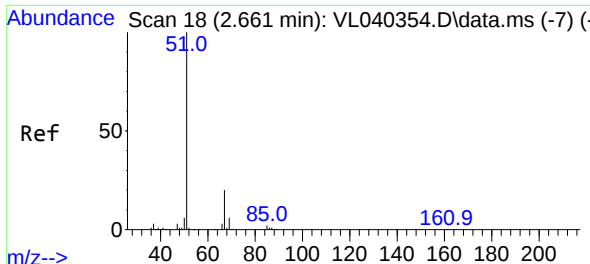
Tgt Ion: 85 Resp: 98306

Ion Ratio Lower Upper

85 100

87 28.3 26.6 40.0

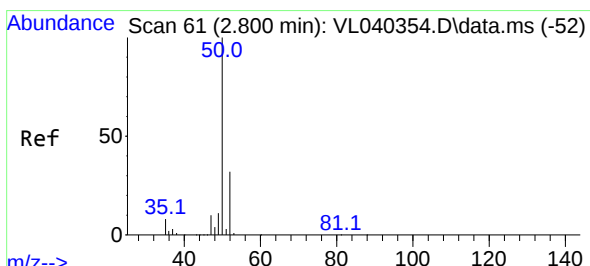
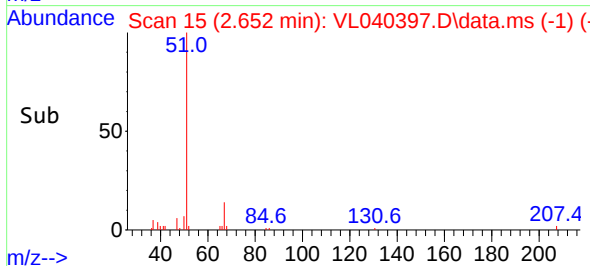
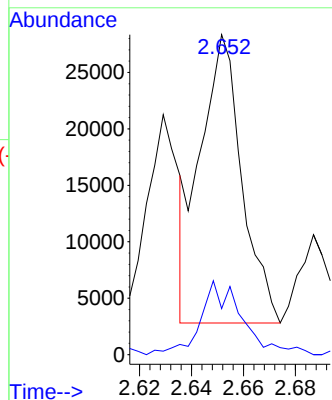
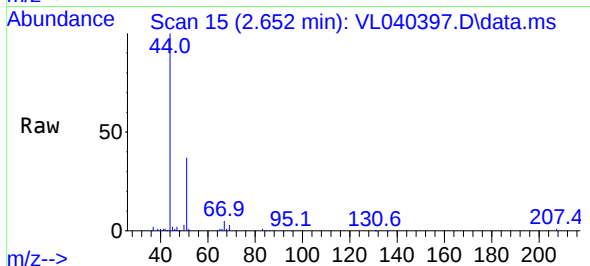




#3
Chlorodifluoromethane
Concen: 0.203 ppbv
RT: 2.652 min Scan# 11
Delta R.T. -0.009 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

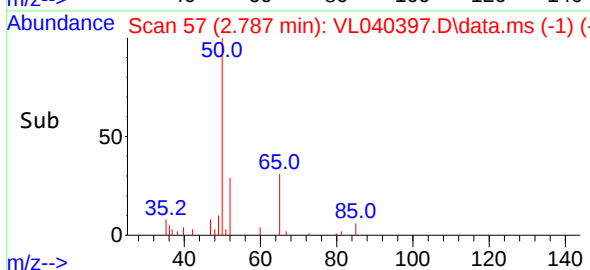
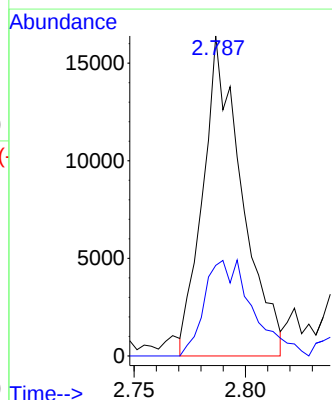
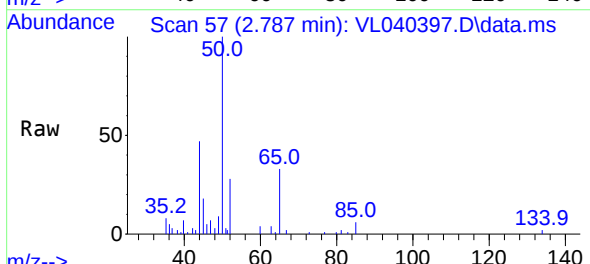
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

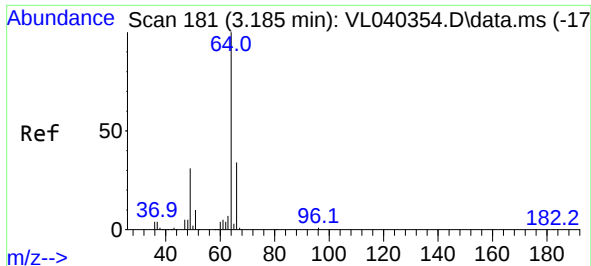
Tgt Ion: 51 Resp: 28401
Ion Ratio Lower Upper
51 100
67 21.5 15.5 23.3



#4
Chloromethane
Concen: 0.224 ppbv
RT: 2.787 min Scan# 57
Delta R.T. -0.013 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 50 Resp: 19844
Ion Ratio Lower Upper
50 100
52 29.9 25.3 37.9

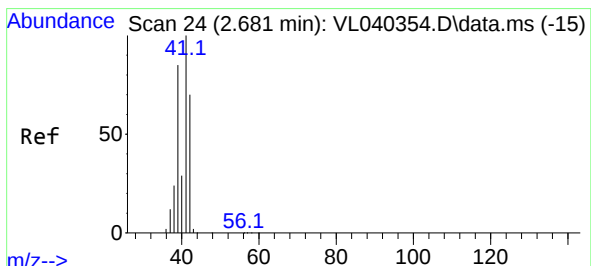
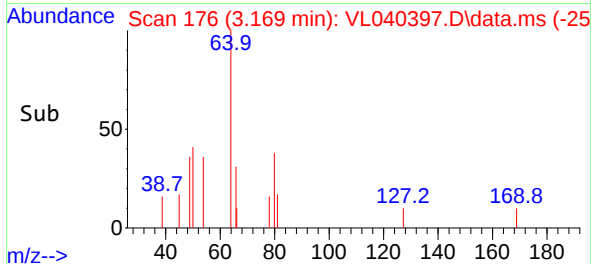
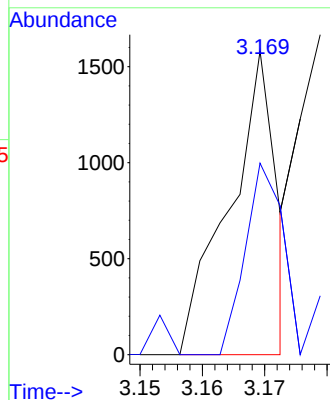
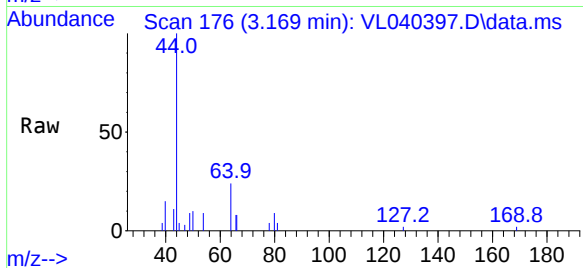




#7
Chloroethane
Concen: 0.030 ppbv
RT: 3.169 min Scan# 11
Delta R.T. -0.016 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

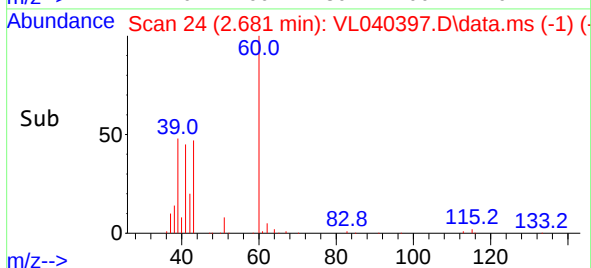
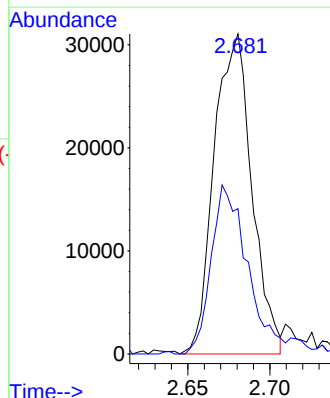
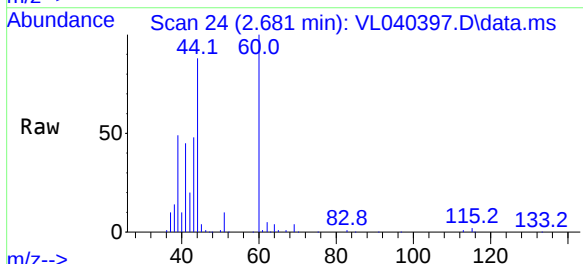
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

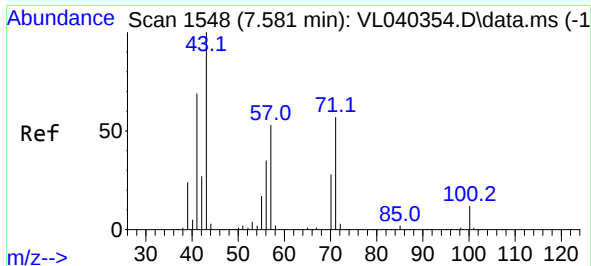
Tgt Ion: 64 Resp: 836
Ion Ratio Lower Upper
64 100
66 63.1 27.5 41.3#



#9
Propene
Concen: 0.896 ppbv
RT: 2.681 min Scan# 24
Delta R.T. -0.000 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 41 Resp: 49655
Ion Ratio Lower Upper
41 100
42 53.9 56.5 84.7#

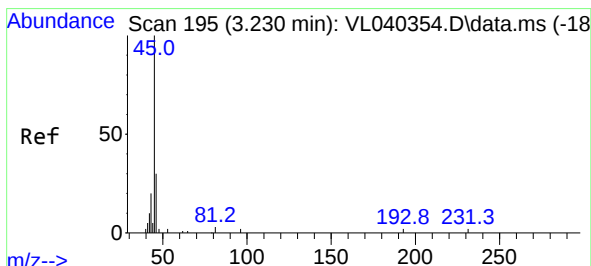
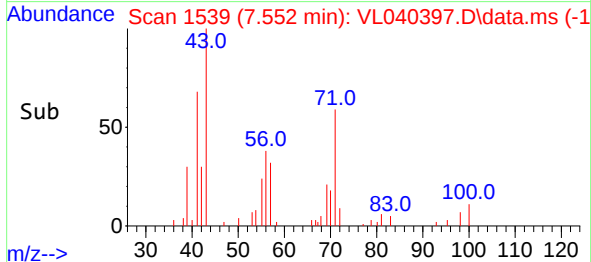
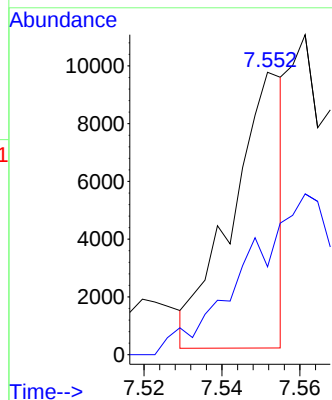
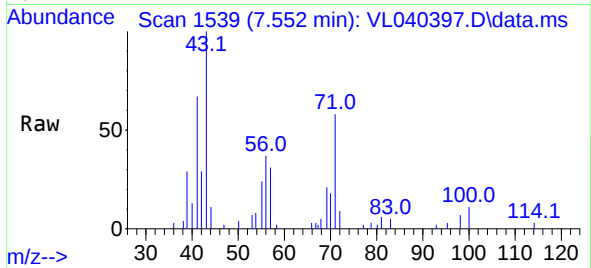




#10
Heptane
Concen: 0.069 ppbv
RT: 7.552 min Scan# 11
Delta R.T. -0.029 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

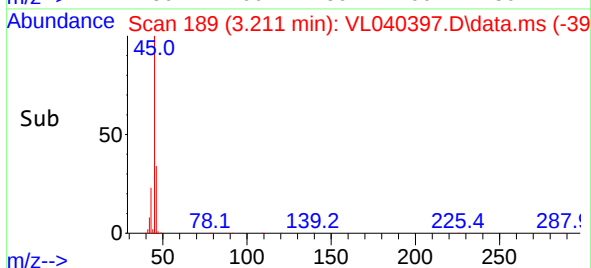
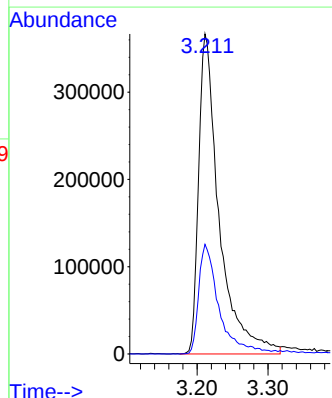
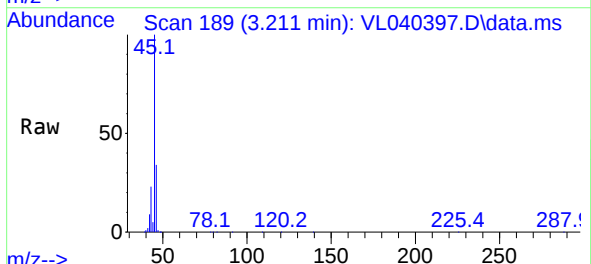
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

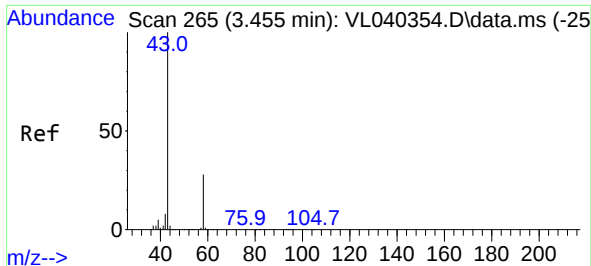
Tgt Ion: 43 Resp: 8739
Ion Ratio Lower Upper
43 100
57 0.0 42.2 63.4#



#13
Ethanol
Concen: 159.623 ppbv
RT: 3.211 min Scan# 189
Delta R.T. -0.019 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 45 Resp: 738172
Ion Ratio Lower Upper
45 100
46 35.1 15.3 61.3

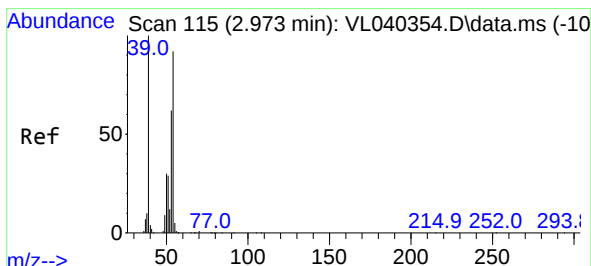
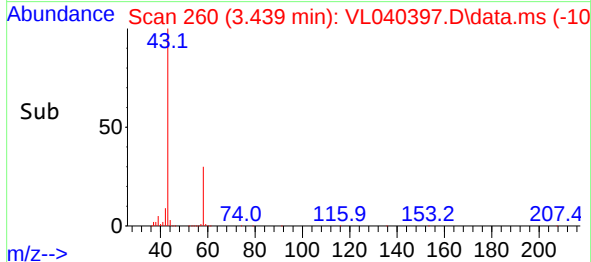
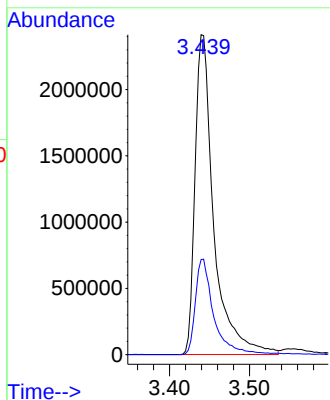
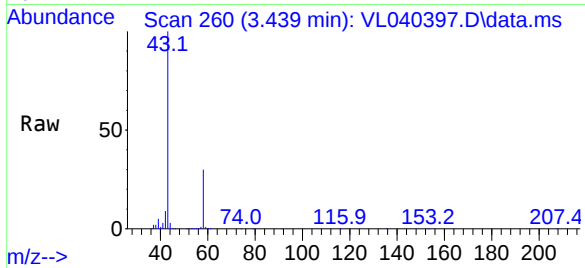




#15
Acetone
Concen: 25.889 ppbv
RT: 3.439 min Scan# 20
Delta R.T. -0.016 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

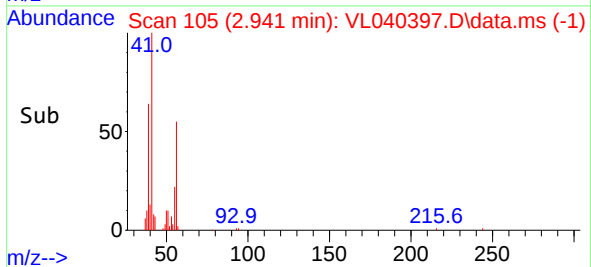
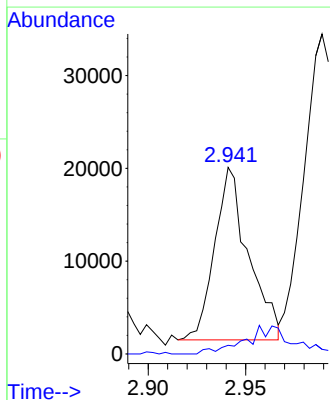
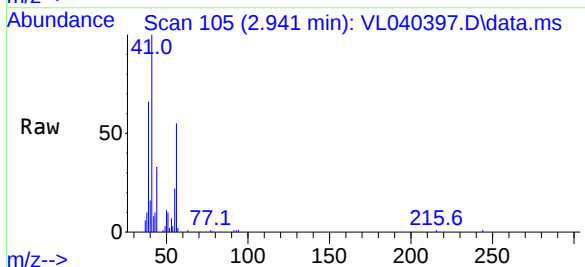
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

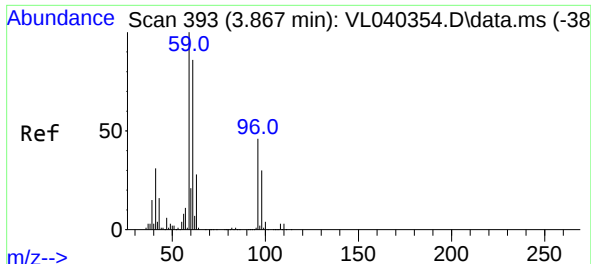
Tgt Ion: 43 Resp: 3934772
Ion Ratio Lower Upper
43 100
58 30.2 22.2 33.2



#16
1,3-Butadiene
Concen: 0.358 ppbv
RT: 2.941 min Scan# 105
Delta R.T. -0.032 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 39 Resp: 22487
Ion Ratio Lower Upper
39 100
54 23.0 68.8 103.2#

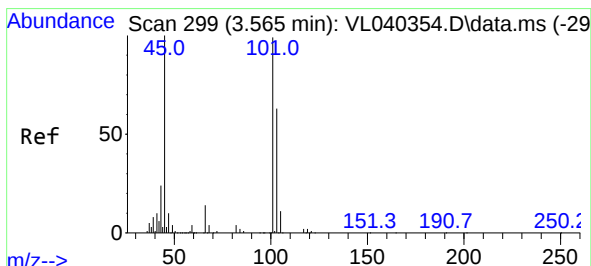
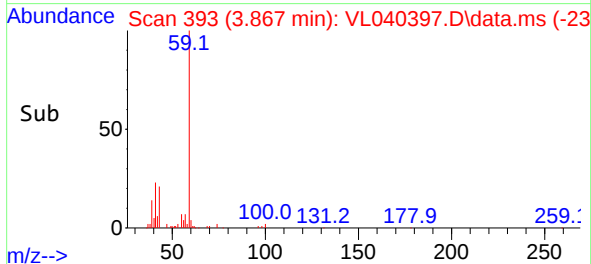
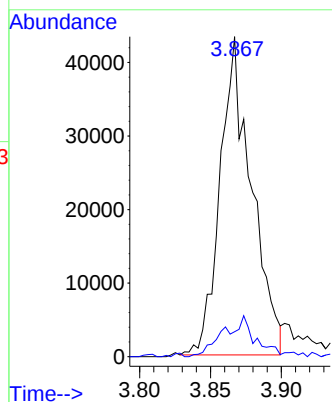
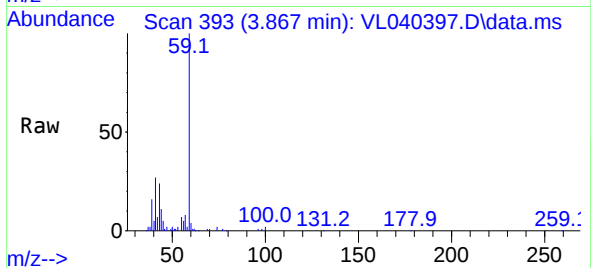




#17
tert-Butyl alcohol
Concen: 0.478 ppbv
RT: 3.867 min Scan# 393
Delta R.T. -0.000 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

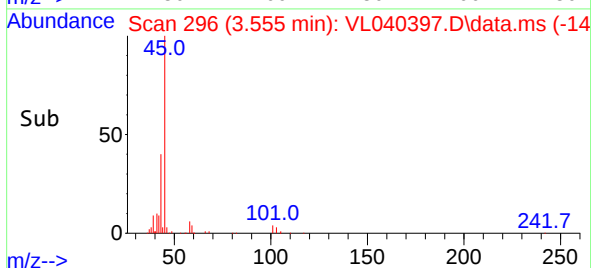
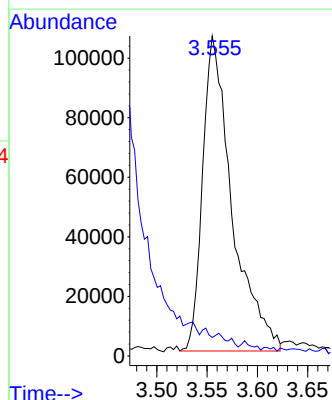
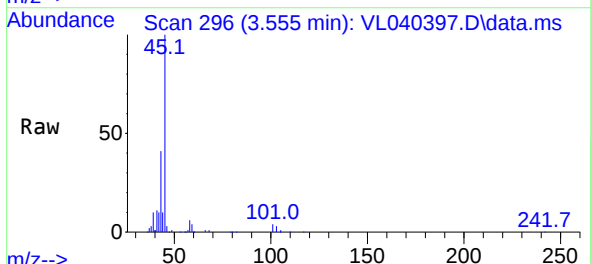
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

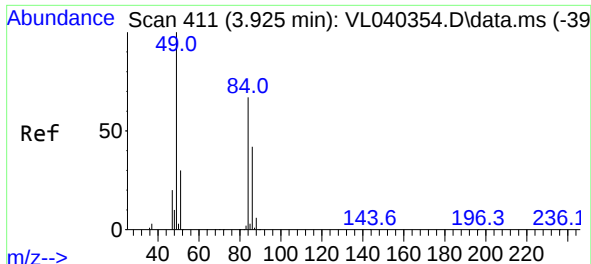
Tgt Ion: 59 Resp: 66777
Ion Ratio Lower Upper
59 100
57 14.2 8.5 12.7#



#19
Isopropyl Alcohol
Concen: 3.115 ppbv
RT: 3.555 min Scan# 296
Delta R.T. -0.010 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 45 Resp: 216025
Ion Ratio Lower Upper
45 100
58 547.0 2.6 4.0#



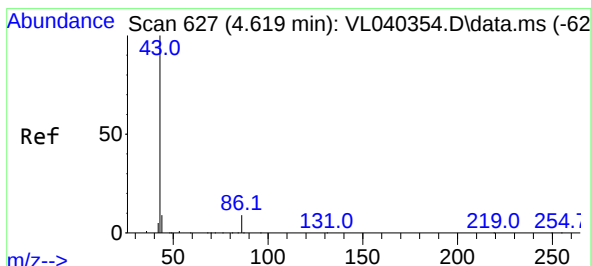
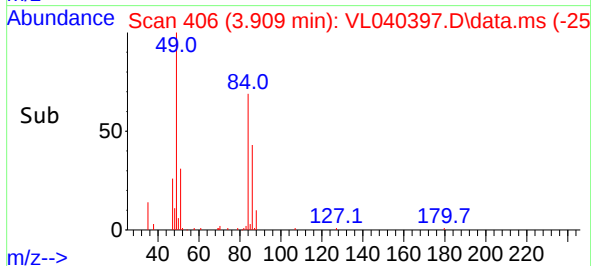
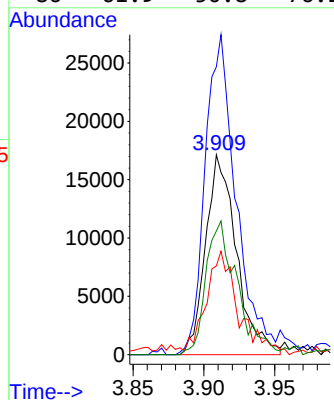
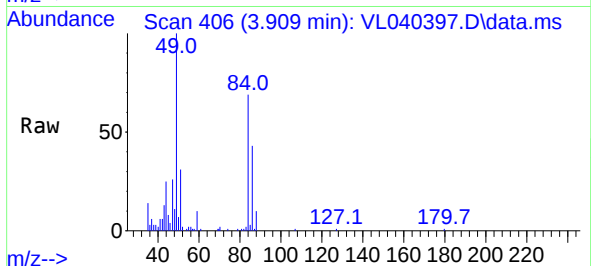


#20
Methylene Chloride
Concen: 0.428 ppbv
RT: 3.909 min Scan# 406
Delta R.T. -0.016 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Instrument :
MSVOA_L
ClientSampleId :
VP-1A

Tgt Ion: 84 Resp: 25989

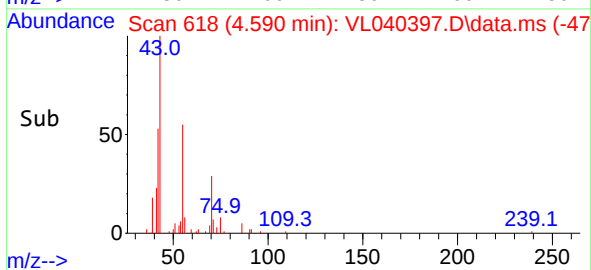
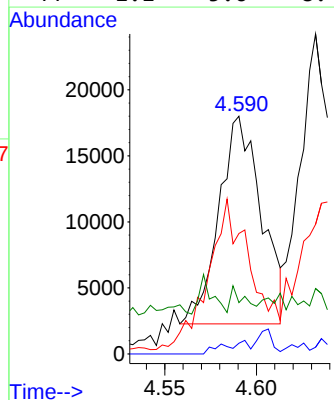
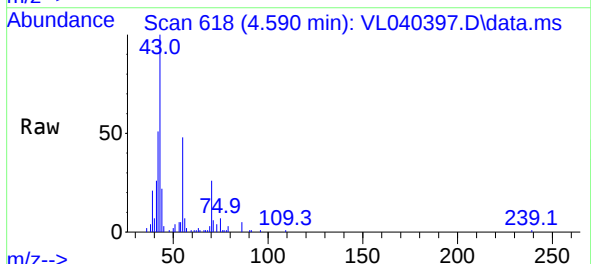
Ion	Ratio	Lower	Upper
84	100		
49	142.8	120.1	180.1
51	42.0	36.3	54.5
86	61.9	50.8	76.2

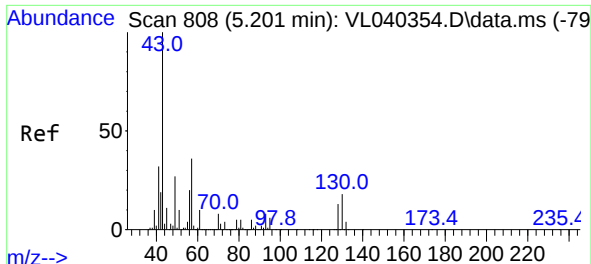


#23
Vinyl Acetate
Concen: 0.651 ppbv
RT: 4.590 min Scan# 618
Delta R.T. -0.029 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 43 Resp: 25200

Ion	Ratio	Lower	Upper
43	100		
86	5.2	6.0	9.0#
42	47.7	6.4	9.6#
44	1.1	5.6	8.4#



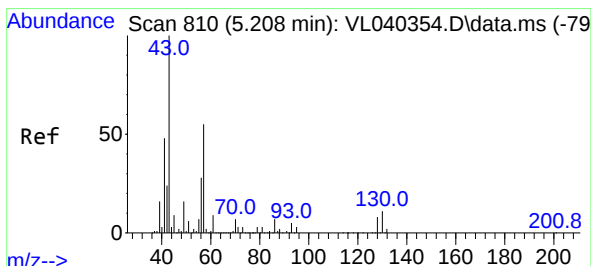
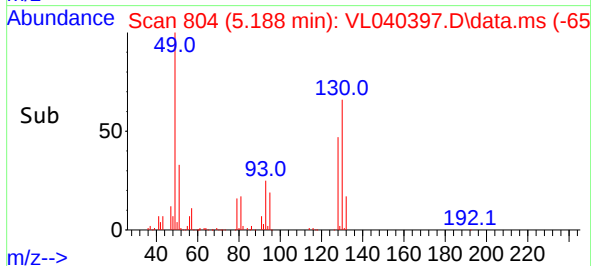
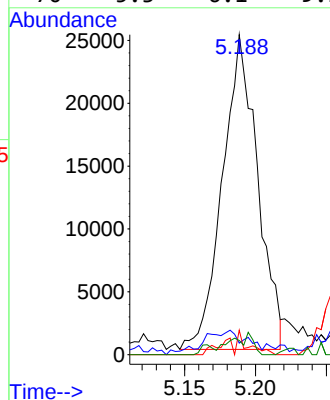
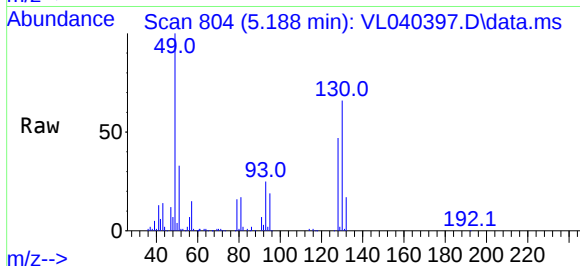


#25
Ethyl Acetate
Concen: 0.169 ppbv
RT: 5.188 min Scan# 804
Delta R.T. -0.013 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Instrument :
MSVOA_L
ClientSampleId :
VP-1A

Tgt Ion: 43 Resp: 43203

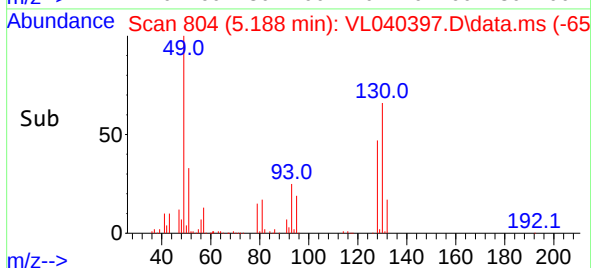
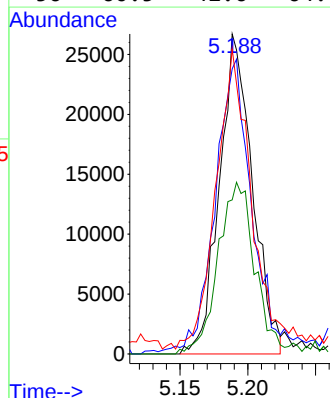
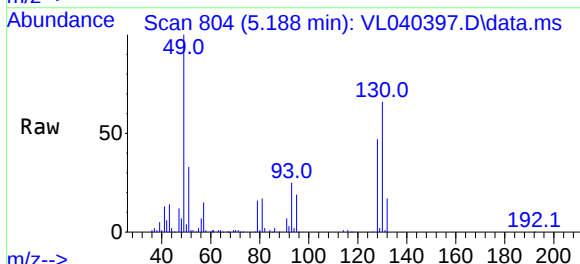
Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.5	12.7#
61	2.3	8.5	12.7#
70	5.3	6.1	9.1#

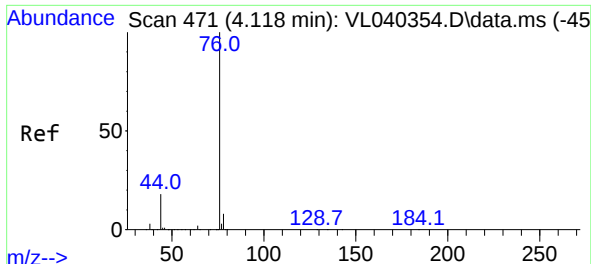


#26
Hexane
Concen: 0.418 ppbv
RT: 5.188 min Scan# 804
Delta R.T. -0.020 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 57 Resp: 45092

Ion	Ratio	Lower	Upper
57	100		
41	101.1	74.8	112.2
43	101.5	192.7	289.1#
56	60.5	42.6	64.0

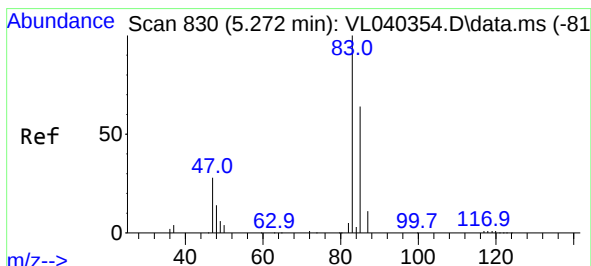
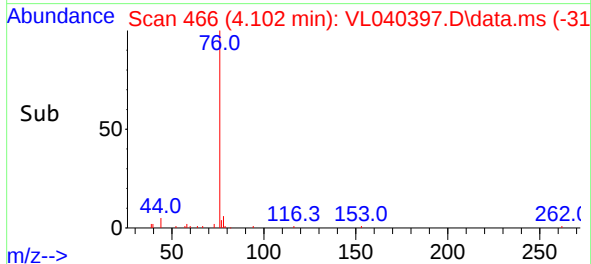
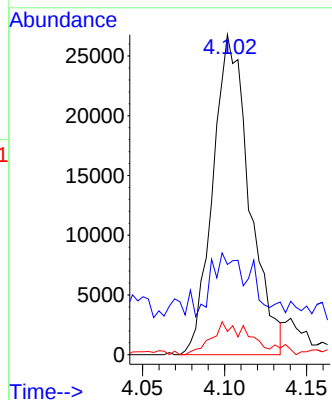
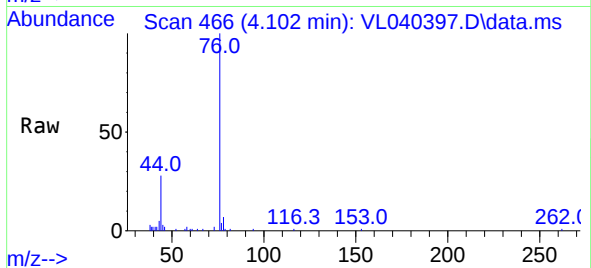




#27
Carbon Disulfide
Concen: 0.298 ppbv
RT: 4.102 min Scan# 415
Delta R.T. -0.016 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

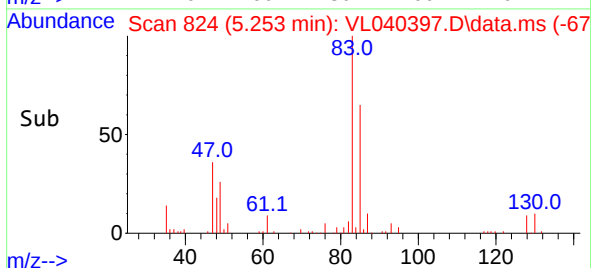
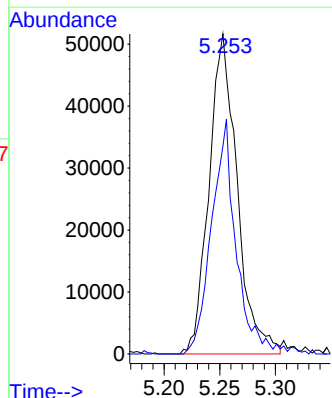
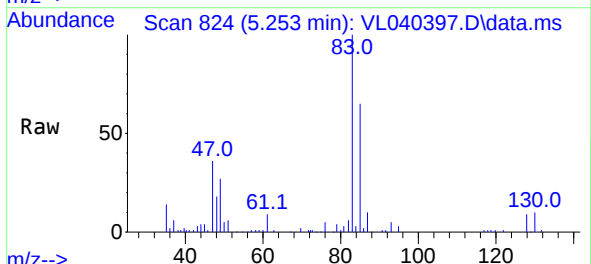
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

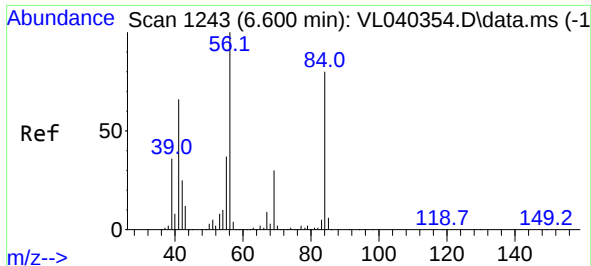
Tgt Ion: 76 Resp: 41519
Ion Ratio Lower Upper
76 100
44 31.1 14.7 22.1#
78 11.3 7.7 11.5



#29
Chloroform
Concen: 0.473 ppbv
RT: 5.253 min Scan# 824
Delta R.T. -0.019 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 83 Resp: 90759
Ion Ratio Lower Upper
83 100
85 64.9 51.0 76.4

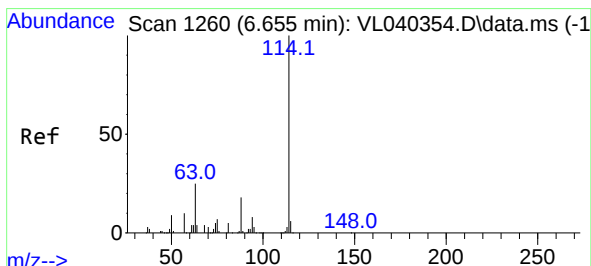
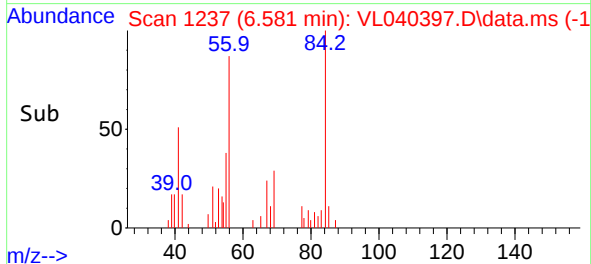
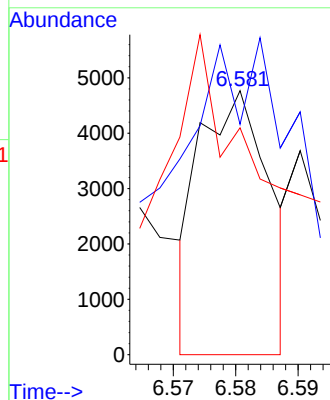
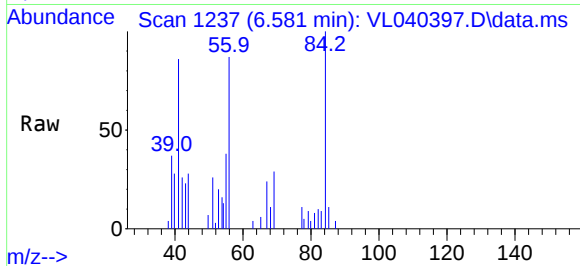




#30
Cyclohexane
Concen: 0.044 ppbv
RT: 6.581 min Scan# 11
Delta R.T. -0.019 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

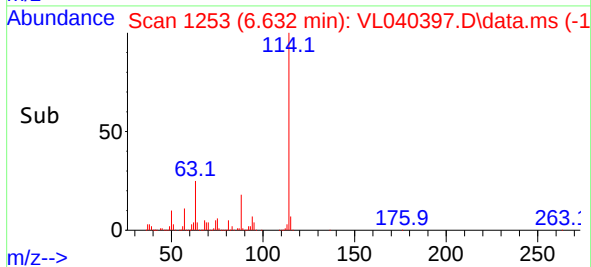
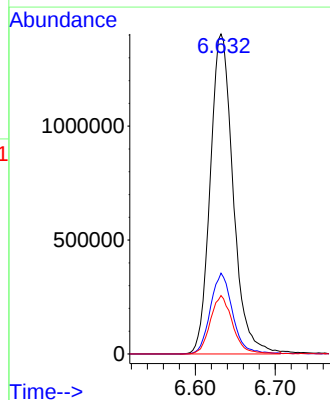
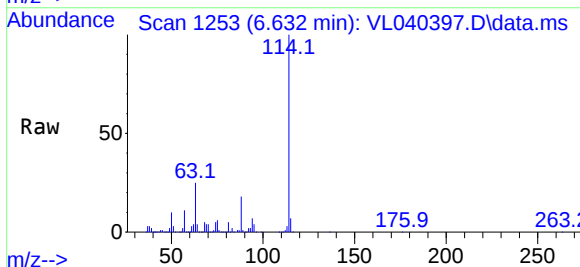
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

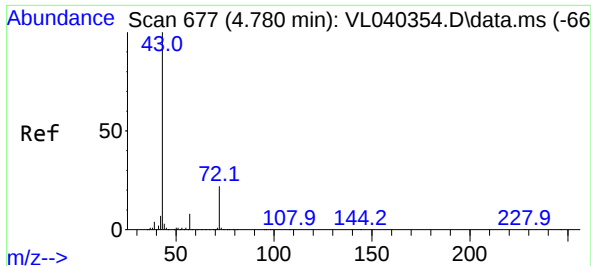
Tgt Ion: 84 Resp: 3691
Ion Ratio Lower Upper
84 100
56 285.3 107.0 160.6#
41 297.1 66.7 100.1#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.632 min Scan# 1253
Delta R.T. -0.023 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 114 Resp: 2789676
Ion Ratio Lower Upper
114 100
63 24.8 21.4 32.0
88 18.0 14.6 22.0





#34

2-Butanone

Concen: 2.442 ppbv

RT: 4.764 min Scan# 61

Delta R.T. -0.016 min

Lab File: VL040397.D

Acq: 20 Apr 2023 9:12

Instrument :

MSVOA_L

ClientSampleId :

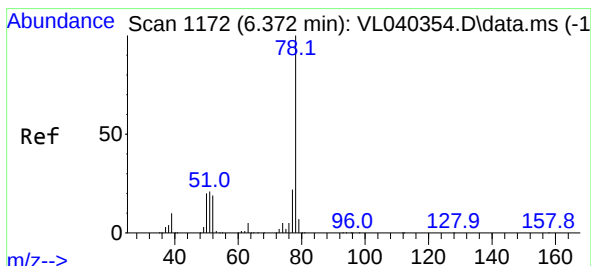
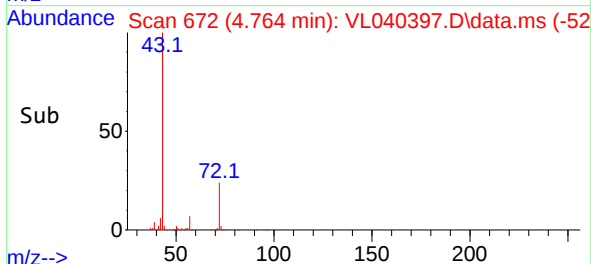
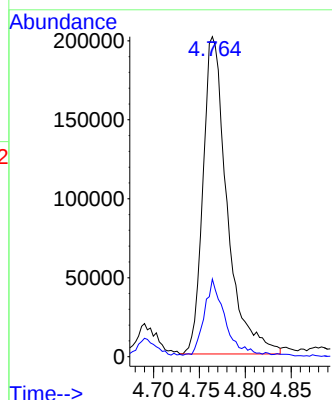
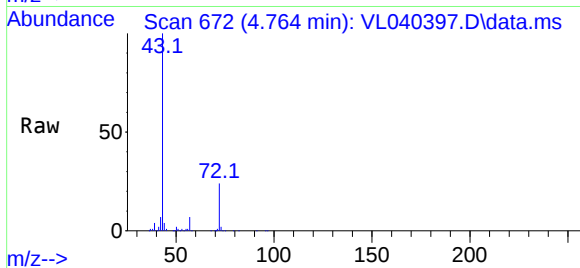
VP-1A

Tgt Ion: 43 Resp: 367386

Ion Ratio Lower Upper

43 100

72 22.2 18.4 27.6



#36

Benzene

Concen: 0.275 ppbv

RT: 6.343 min Scan# 1163

Delta R.T. -0.029 min

Lab File: VL040397.D

Acq: 20 Apr 2023 9:12

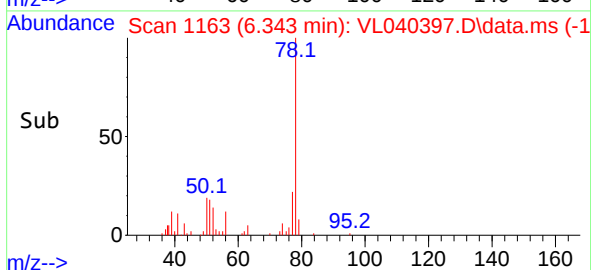
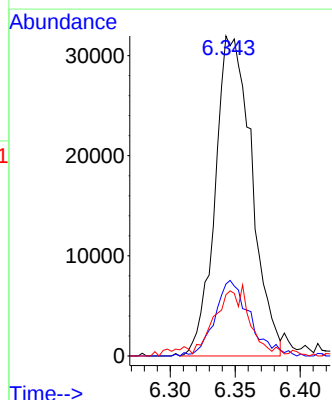
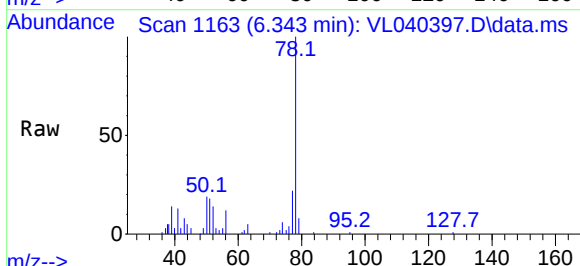
Tgt Ion: 78 Resp: 62574

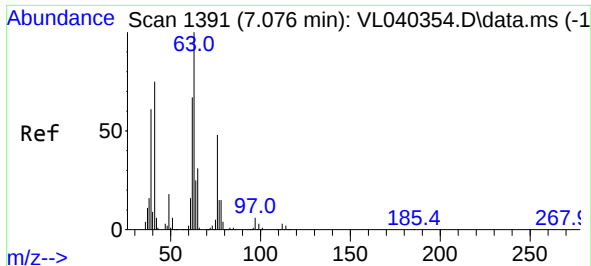
Ion Ratio Lower Upper

78 100

77 22.5 17.8 26.8

50 17.3 15.6 23.4





#39

1,2-Dichloropropane

Concen: 7.529 ppbv

RT: 6.632 min Scan# 11

Delta R.T. -0.444 min

Lab File: VL040397.D

Acq: 20 Apr 2023 9:12

Instrument :

MSVOA_L

ClientSampleId :

VP-1A

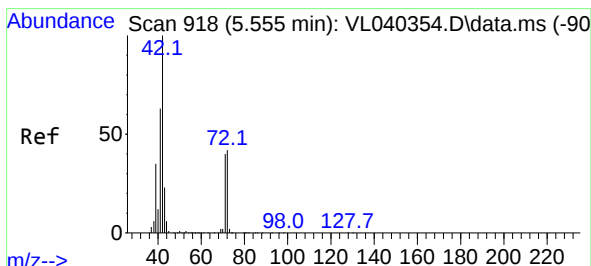
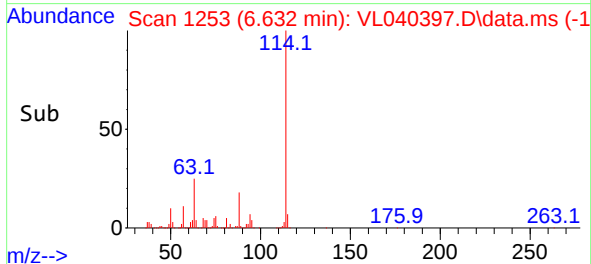
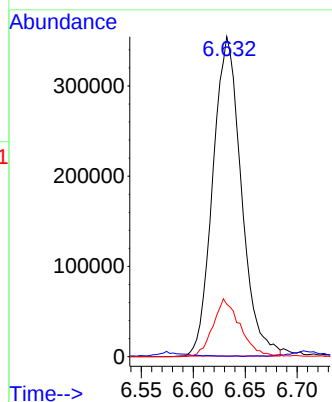
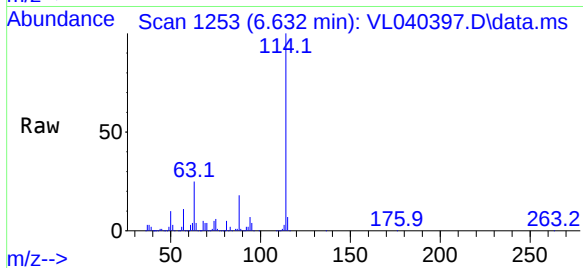
Tgt Ion: 63 Resp: 674296

Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 16.4 53.9 80.9#



#41

Tetrahydrofuran

Concen: 1.639 ppbv

RT: 5.542 min Scan# 914

Delta R.T. -0.013 min

Lab File: VL040397.D

Acq: 20 Apr 2023 9:12

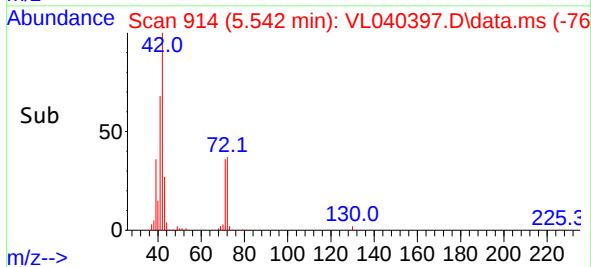
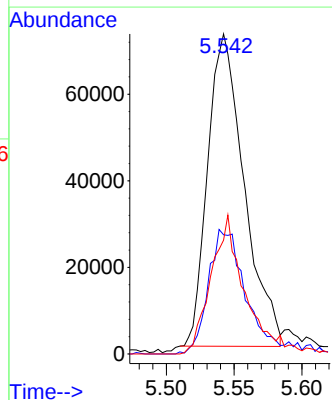
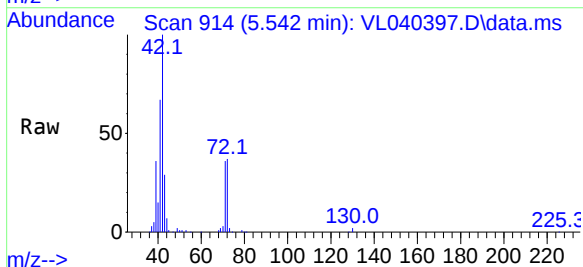
Tgt Ion: 42 Resp: 135066

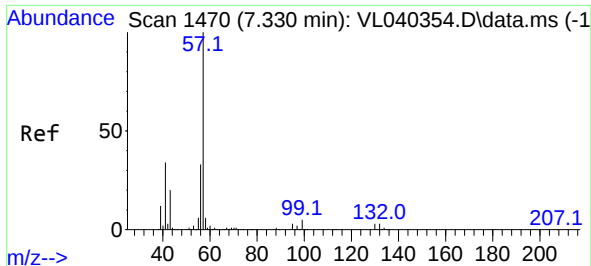
Ion Ratio Lower Upper

42 100

72 43.2 33.7 50.5

71 42.5 32.2 48.2

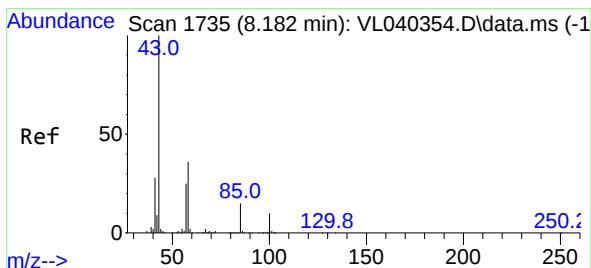
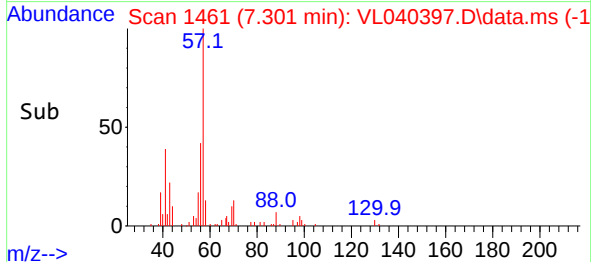
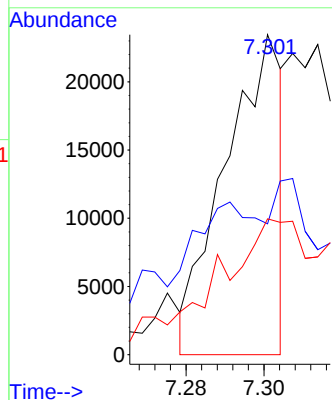
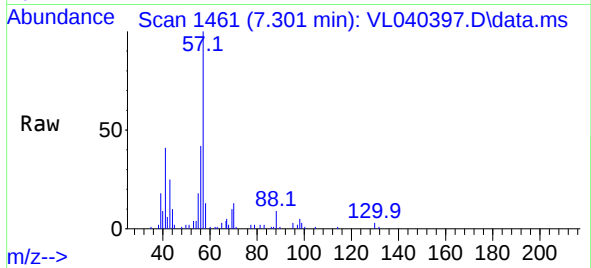




#44
2,2,4-Trimethylpentane
Concen: 0.063 ppbv
RT: 7.301 min Scan# 1470
Delta R.T. -0.029 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

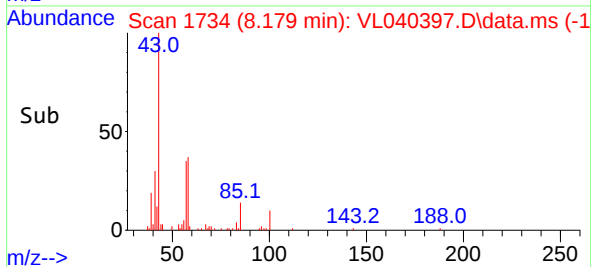
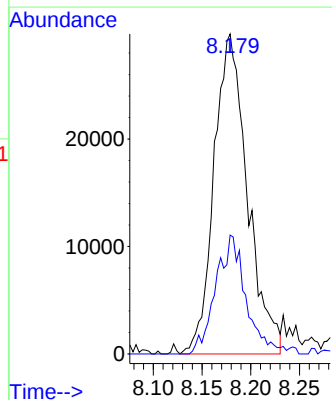
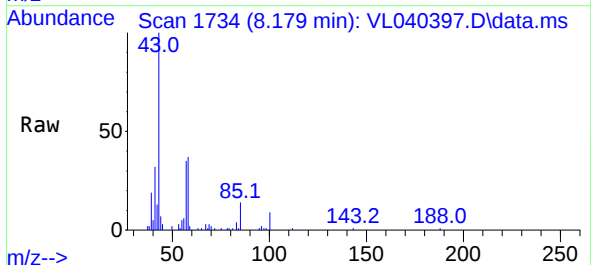
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

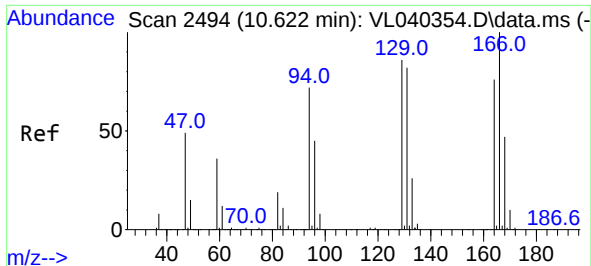
Tgt Ion: 57 Resp: 23808
Ion Ratio Lower Upper
57 100
41 0.0 26.9 40.3#
56 130.3 25.1 37.7#



#50
4-Methyl-2-Pentanone
Concen: 0.311 ppbv
RT: 8.179 min Scan# 1734
Delta R.T. -0.003 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 43 Resp: 71043
Ion Ratio Lower Upper
43 100
58 33.9 28.6 43.0

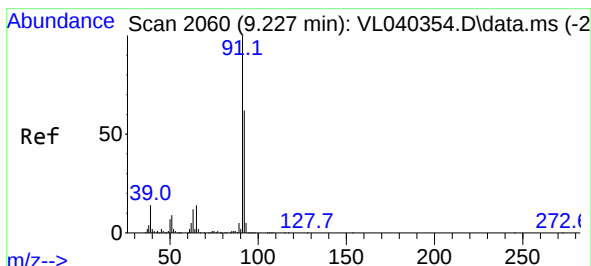
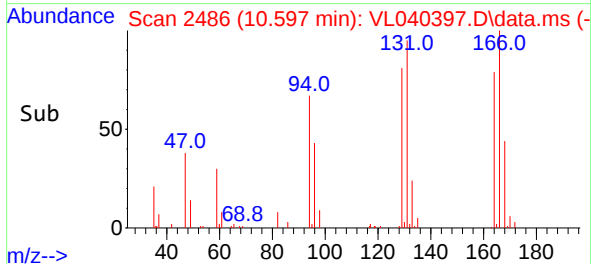
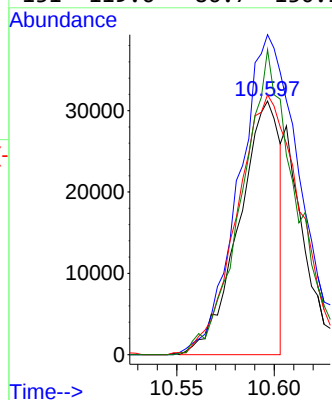
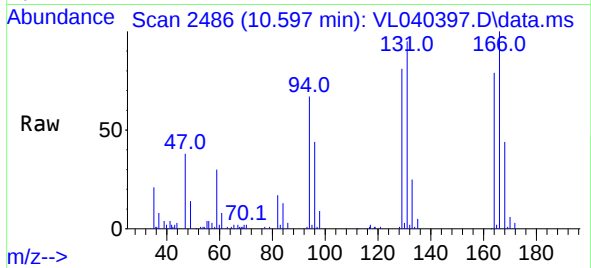




#52
Tetrachloroethene
Concen: 0.633 ppbv
RT: 10.597 min Scan# 24
Delta R.T. -0.025 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

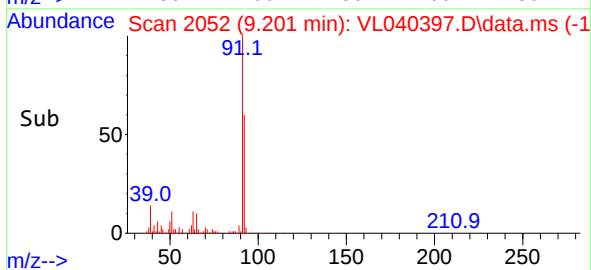
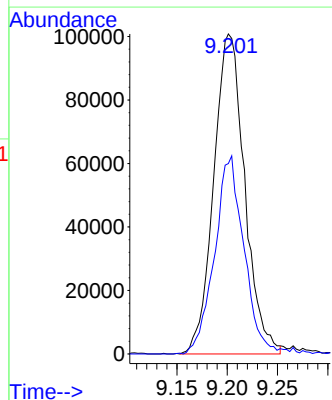
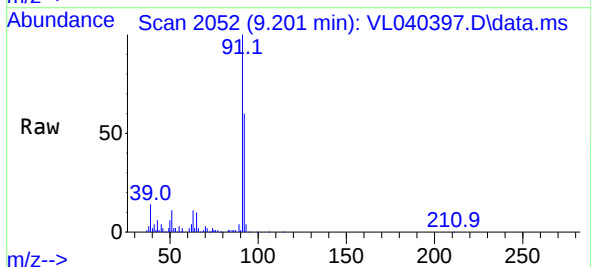
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

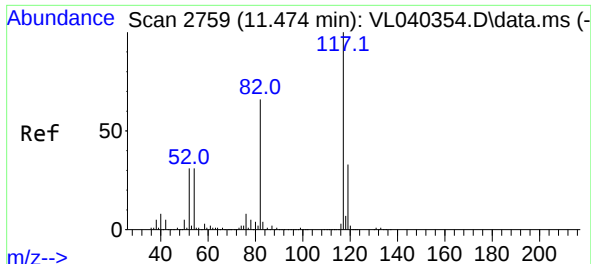
Tgt Ion:164 Resp: 45055
Ion Ratio Lower Upper
164 100
166 125.2 105.2 157.8
129 101.6 90.3 135.5
131 119.6 86.7 130.1



#53
Toluene
Concen: 0.897 ppbv
RT: 9.201 min Scan# 2052
Delta R.T. -0.026 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 91 Resp: 216334
Ion Ratio Lower Upper
91 100
92 59.4 48.9 73.3

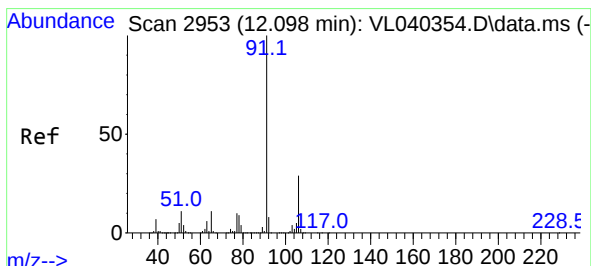
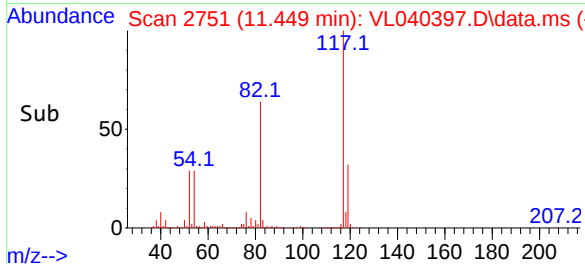
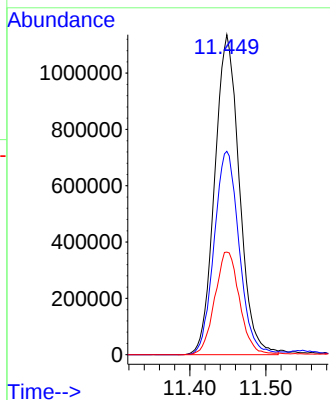
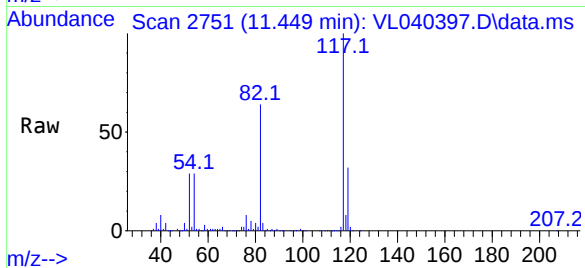




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.449 min Scan# 21
Delta R.T. -0.025 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

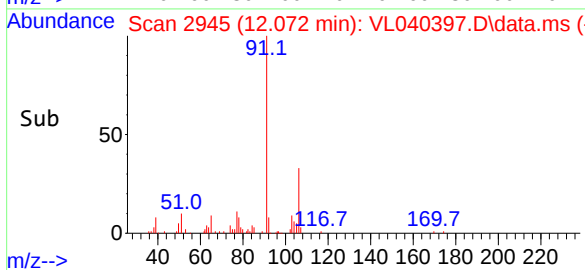
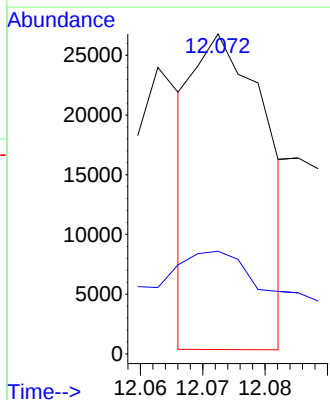
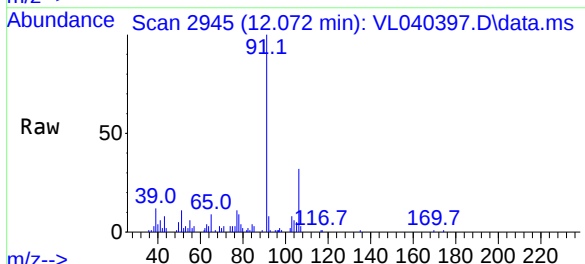
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

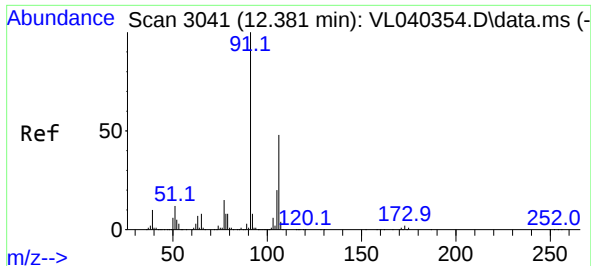
Tgt Ion:117 Resp: 2559004
Ion Ratio Lower Upper
117 100
82 64.8 52.5 78.7
119 32.9 24.3 36.5



#58
Ethyl Benzene
Concen: 0.068 ppbv
RT: 12.072 min Scan# 2945
Delta R.T. -0.026 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

Tgt Ion: 91 Resp: 21508
Ion Ratio Lower Upper
91 100
106 32.0 23.5 35.3





#59

m/p-Xylene

Concen: 0.349 ppbv

RT: 12.330 min Scan# 3041

Delta R.T. -0.051 min

Lab File: VL040397.D

Acq: 20 Apr 2023 9:12

Instrument :

MSVOA_L

ClientSampleId :

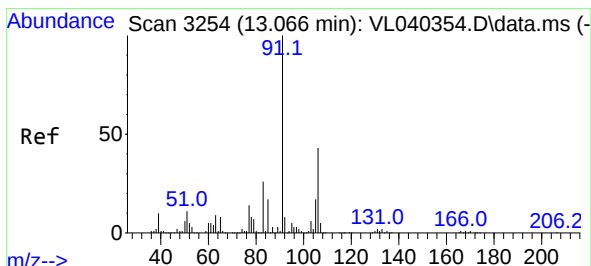
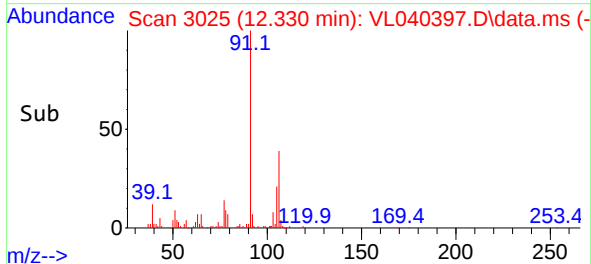
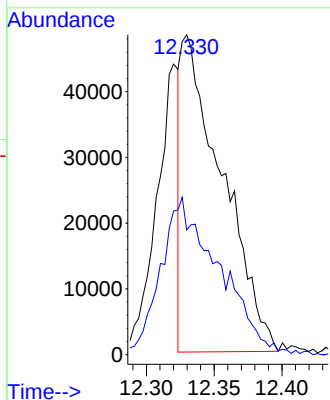
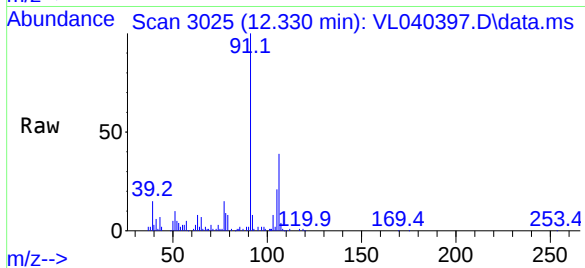
VP-1A

Tgt Ion: 91 Resp: 100973

Ion Ratio Lower Upper

91 100

106 70.9 34.7 52.1#



#60

o-Xylene

Concen: 0.201 ppbv

RT: 13.040 min Scan# 3246

Delta R.T. -0.026 min

Lab File: VL040397.D

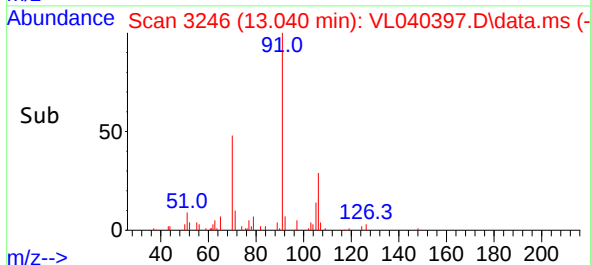
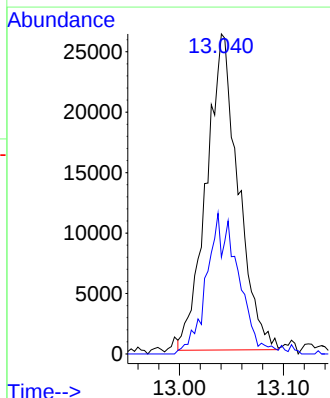
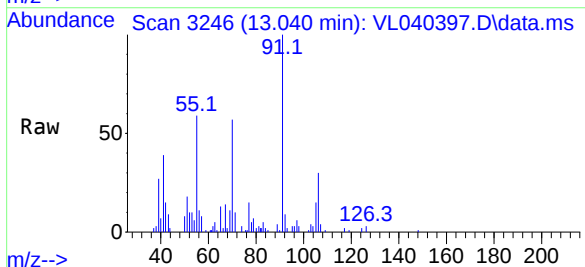
Acq: 20 Apr 2023 9:12

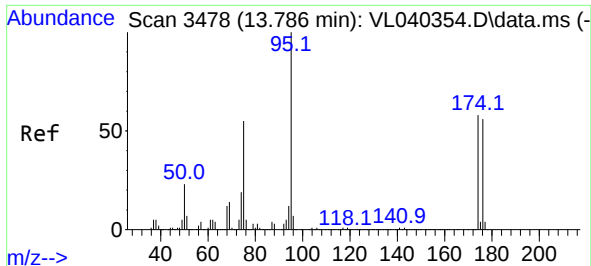
Tgt Ion: 91 Resp: 55875

Ion Ratio Lower Upper

91 100

106 44.9 21.9 65.8

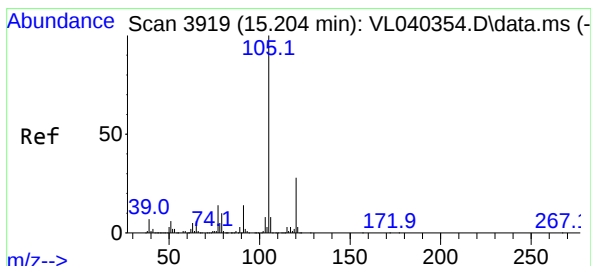
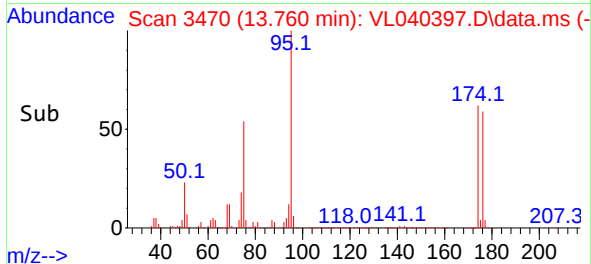
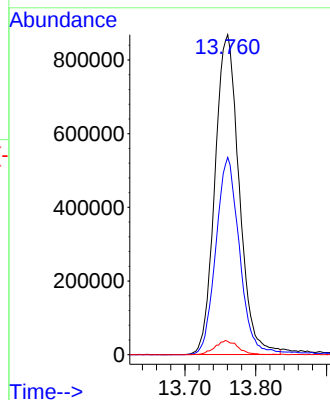
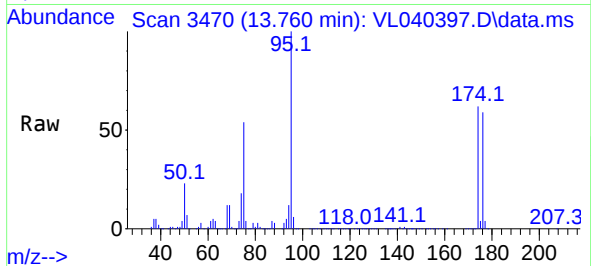




#68
1-Bromo-4-Fluorobenzene
Concen: 9.739 ppbv
RT: 13.760 min Scan# 3478
Delta R.T. -0.026 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

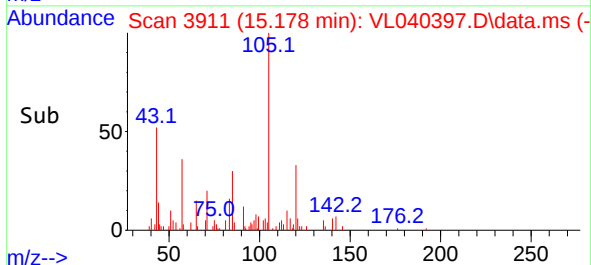
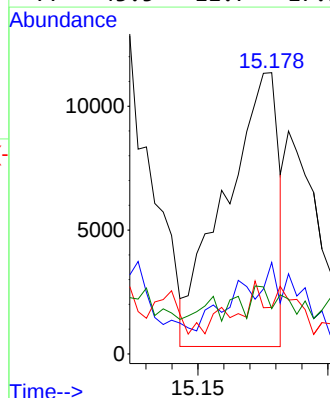
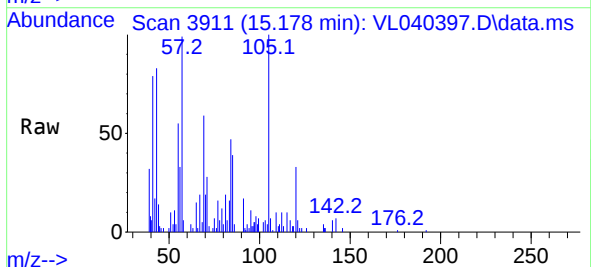
Instrument :
MSVOA_L
ClientSampleId :
VP-1A

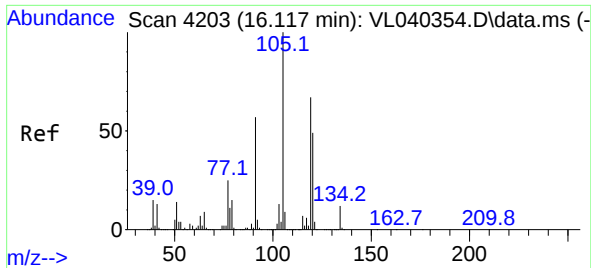
Tgt Ion: 95 Resp: 2060958
Ion Ratio Lower Upper
95 100
174 61.0 47.2 70.8
175 4.2 3.5 5.3



#72
4-Ethyltoluene
Concen: 0.051 ppbv
RT: 15.178 min Scan# 3911
Delta R.T. -0.026 min
Lab File: VL040397.D
Acq: 20 Apr 2023 9:12

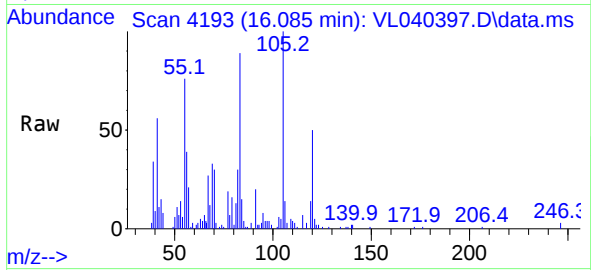
Tgt Ion: 105 Resp: 15718
Ion Ratio Lower Upper
105 100
120 51.4 23.0 34.6#
91 28.1 11.3 16.9#
77 43.5 11.7 17.5#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.072 ppbv
 RT: 16.085 min Scan# 41
 Delta R.T. -0.032 min
 Lab File: VL040397.D
 Acq: 20 Apr 2023 9:12

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1A



Tgt Ion:	105	Resp:	23428
Ion	Ratio	Lower	Upper
105	100		
120	49.1	38.9	58.3
91	12.8	46.0	69.0#
77	13.8	20.0	30.0#

