

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL101123\
 Data File : VL040768.D
 Acq On : 11 Oct 2023 23:10
 Operator : SY/MD
 Sample : 04827-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Oct 12 00:29:19 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101123AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Oct 12 00:21:08 2023
 Response via : Initial Calibration

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

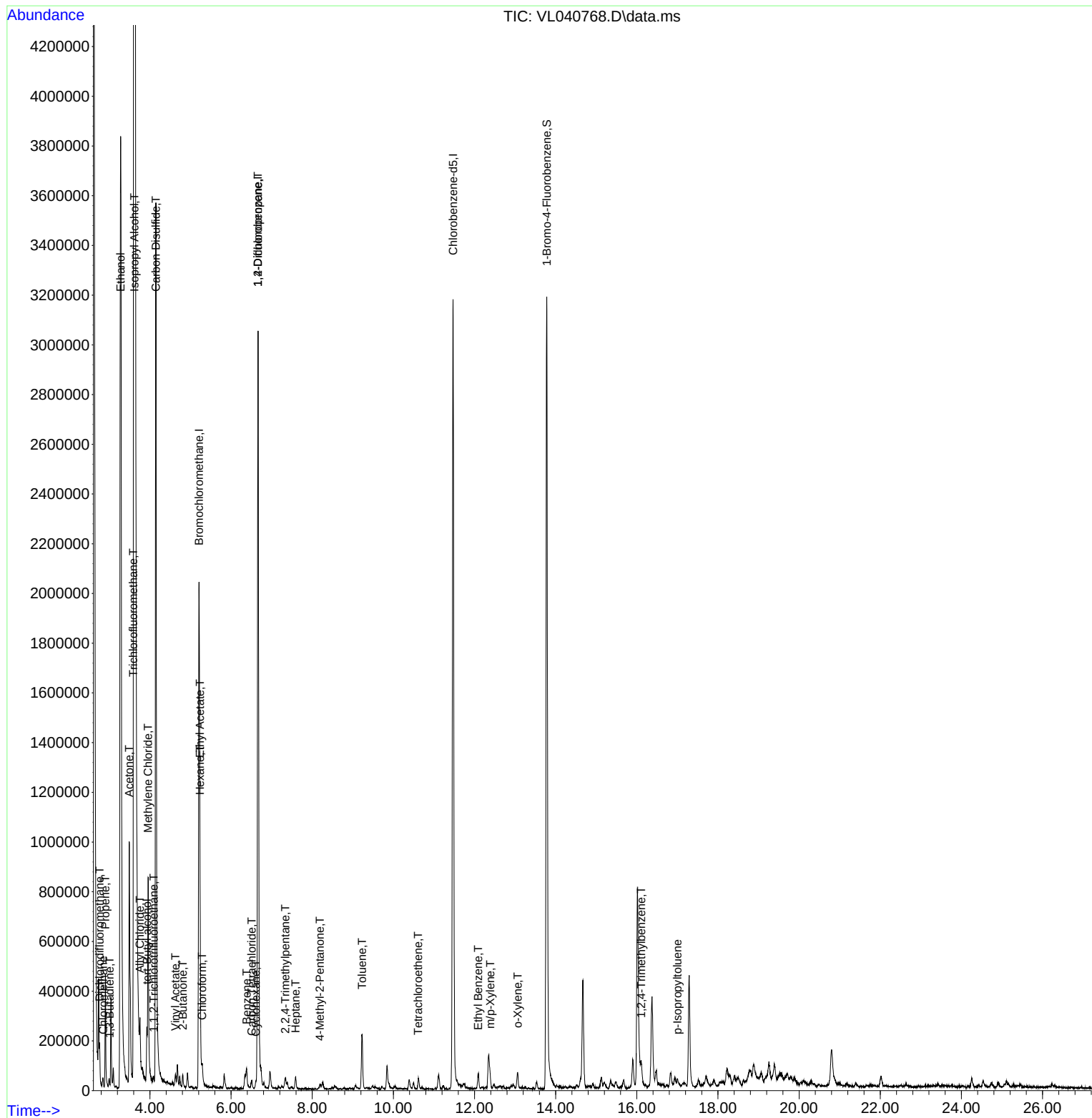
Internal Standards						
1) Bromochloromethane	5.208	49	912140	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.664	114	2516303	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	2254386	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.783	95	1643574	9.908	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.100%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.761	85	81391	0.507	ppbv	99
4) Chloromethane	2.844	50	25063	0.473	ppbv	94
9) Propene	2.902	41	94232	1.893	ppbv	84
10) Heptane	7.587	43	15095	0.121	ppbv #	51
11) Trichlorofluoromethane	3.587	101	28225	0.228	ppbv	99
12) 1,1,2-Trichlorotrifluo...	4.092	101	5275	0.060	ppbv #	80
13) Ethanol	3.279	45	5538226	492.749	ppbv	99
15) Acetone	3.491	43	1027127	10.892	ppbv	97
16) 1,3-Butadiene	3.005	39	2197	0.044	ppbv	91
17) tert-Butyl alcohol	3.928	59	29267	0.303	ppbv #	15
19) Isopropyl Alcohol	3.619	45	20877238	343.929	ppbv #	38
20) Methylene Chloride	3.954	84	256813	6.538	ppbv	98
21) Allyl Chloride	3.754	41	49216	0.791	ppbv #	19
23) Vinyl Acetate	4.626	43	28765	0.239	ppbv #	41
25) Ethyl Acetate	5.230	43	228937	1.108	ppbv #	86
26) Hexane	5.233	57	294584	3.120	ppbv #	45
27) Carbon Disulfide	4.147	76	4252057	40.812	ppbv	99
29) Chloroform	5.288	83	33783	0.247	ppbv	99
30) Cyclohexane	6.610	84	6085	0.076	ppbv #	1
34) 2-Butanone	4.809	43	53940	0.474	ppbv	93
35) Carbon Tetrachloride	6.507	117	10773	0.076	ppbv	89
36) Benzene	6.385	78	49872	0.258	ppbv	93
39) 1,2-Dichloropropane	6.664	63	586357	7.754	ppbv #	27
44) 2,2,4-Trimethylpentane	7.336	57	41435	0.127	ppbv #	86
50) 4-Methyl-2-Pentanone	8.188	43	7002	0.036	ppbv #	39
52) Tetrachloroethene	10.613	164	4964	0.063	ppbv #	80
53) Toluene	9.230	91	169420	0.736	ppbv	100
58) Ethyl Benzene	12.092	91	55885	0.197	ppbv	93
59) m/p-Xylene	12.388	91	16598	0.071	ppbv #	30
60) o-Xylene	13.063	91	50674	0.228	ppbv	96
69) p-Isopropyltoluene	16.998	119	21664	0.061	ppbv #	64
74) 1,2,4-Trimethylbenzene	16.111	105	51555	0.206	ppbv #	77

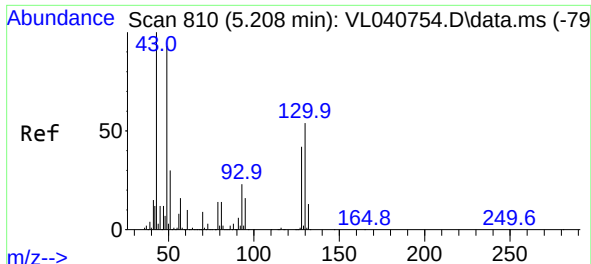
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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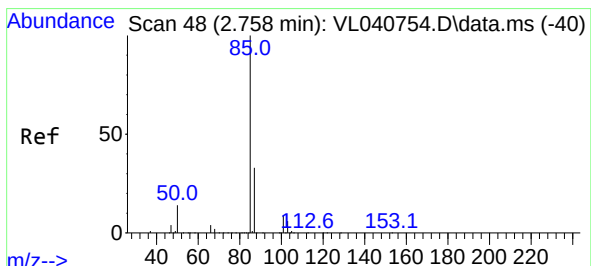
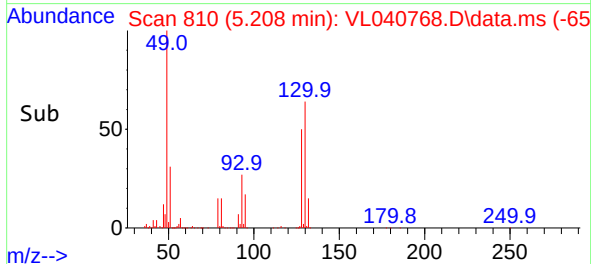
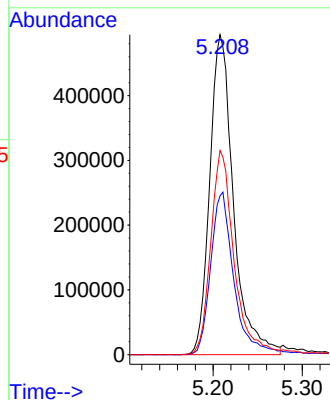
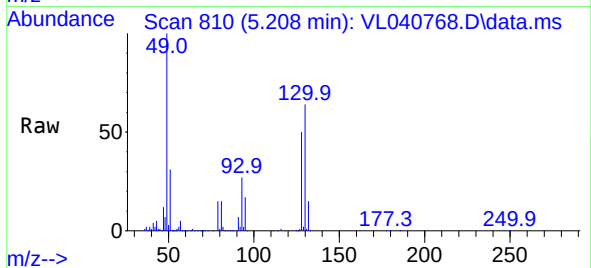




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.208 min Scan# 81
Delta R.T. -0.000 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

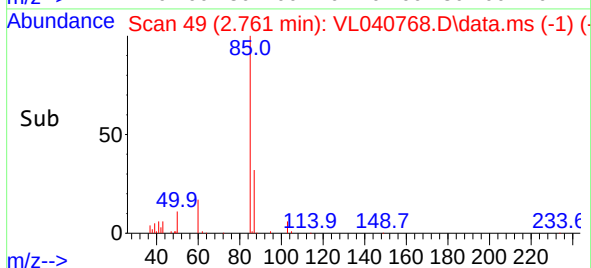
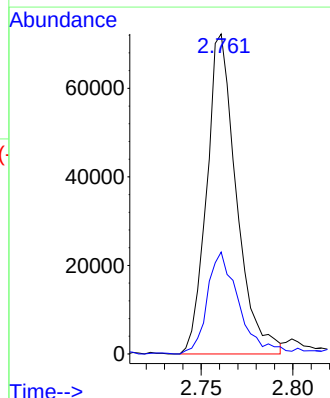
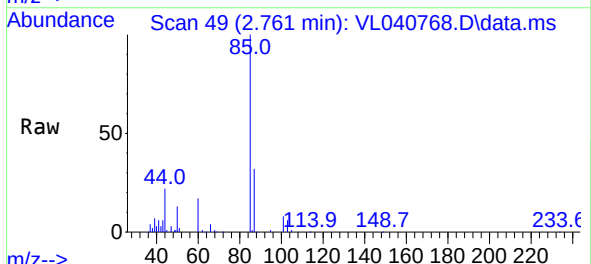
Instrument :
MSVOA_L
ClientSampleId :

Tgt Ion: 49 Resp: 912140
Ion Ratio Lower Upper
49 100
128 50.8 23.9 71.7
130 64.3 30.7 92.1

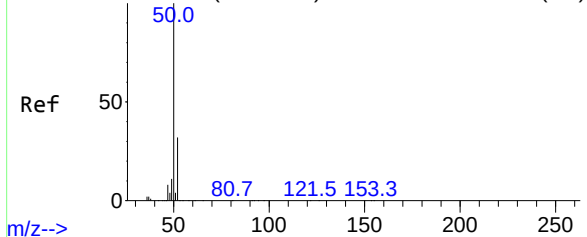


#2
Dichlorodifluoromethane
Concen: 0.507 ppbv
RT: 2.761 min Scan# 49
Delta R.T. 0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 85 Resp: 81391
Ion Ratio Lower Upper
85 100
87 31.8 26.0 39.0



Abundance Scan 74 (2.841 min): VL040754.D\data.ms (-65)



#4
Chloromethane
Concen: 0.473 ppbv
RT: 2.844 min Scan# 74
Delta R.T. 0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

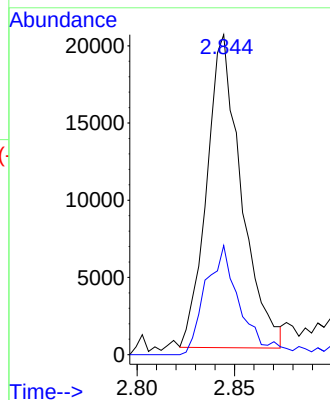
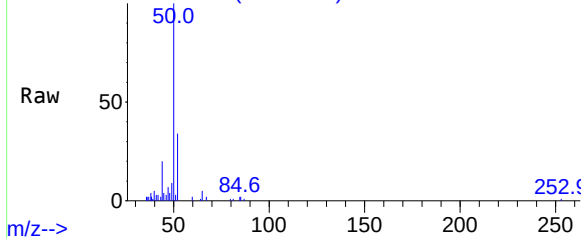
Instrument :

MSVOA_L

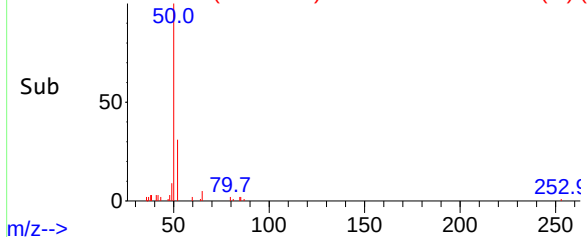
ClientSampleId :

Tgt Ion: 50 Resp: 25063
Ion Ratio Lower Upper
50 100
52 35.0 25.3 37.9

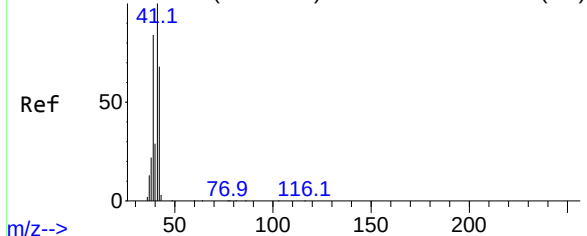
Abundance Scan 75 (2.844 min): VL040768.D\data.ms



Abundance Scan 75 (2.844 min): VL040768.D\data.ms (-1) (-)



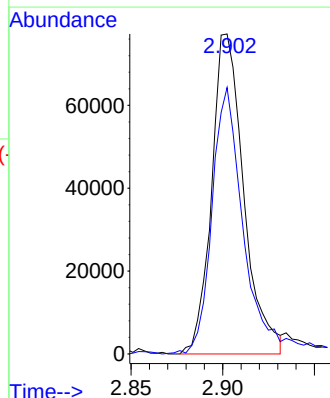
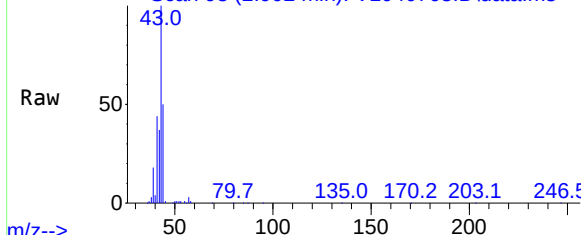
Abundance Scan 37 (2.722 min): VL040754.D\data.ms (-27)



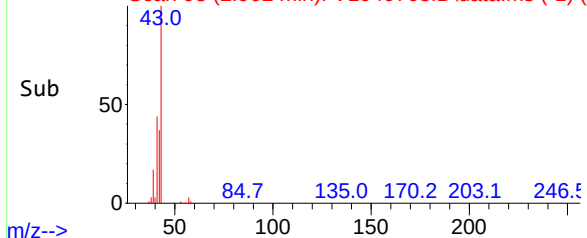
#9
Propene
Concen: 1.893 ppbv
RT: 2.902 min Scan# 93
Delta R.T. 0.180 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

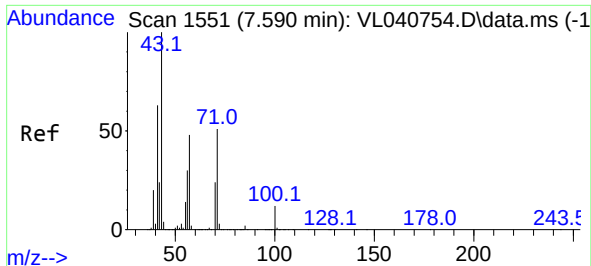
Tgt Ion: 41 Resp: 94232
Ion Ratio Lower Upper
41 100
42 84.9 57.1 85.7

Abundance Scan 93 (2.902 min): VL040768.D\data.ms



Abundance Scan 93 (2.902 min): VL040768.D\data.ms (-1) (-)





#10

Heptane

Concen: 0.121 ppbv

RT: 7.587 min Scan# 11

Delta R.T. -0.003 min

Lab File: VL040768.D

Acq: 11 Oct 2023 23:10

Instrument :

MSVOA_L

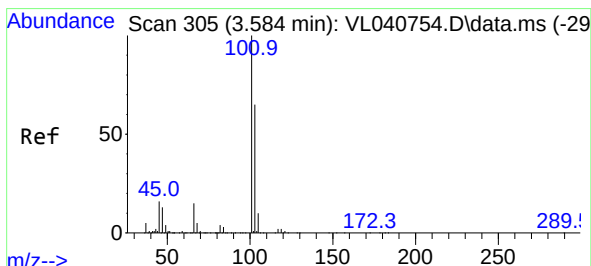
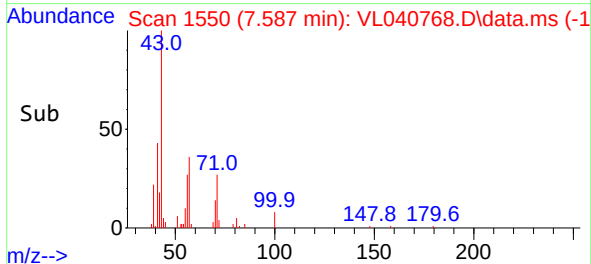
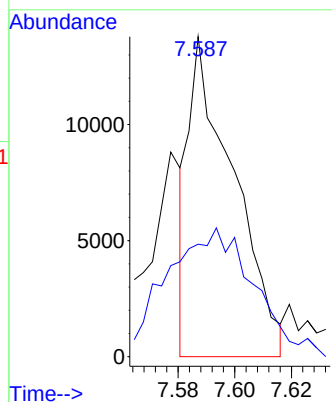
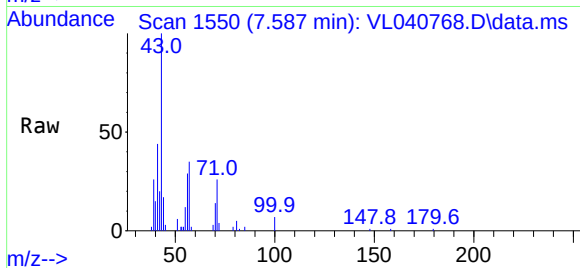
ClientSampleId :

Tgt Ion: 43 Resp: 15095

Ion Ratio Lower Upper

43 100

57 83.9 40.0 60.0#



#11

Trichlorofluoromethane

Concen: 0.228 ppbv

RT: 3.587 min Scan# 306

Delta R.T. 0.003 min

Lab File: VL040768.D

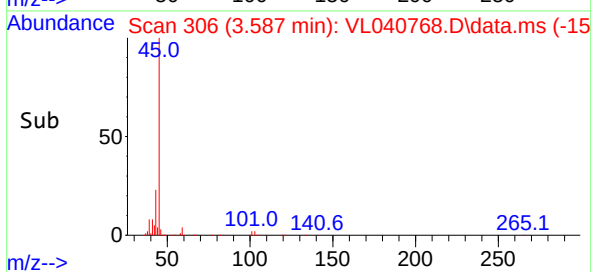
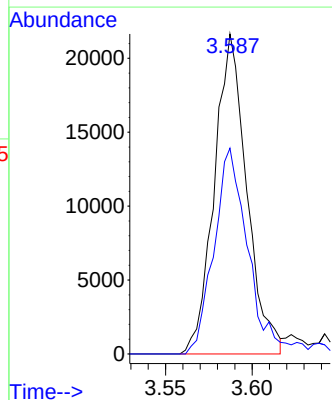
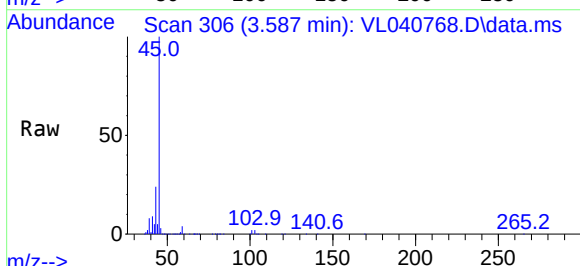
Acq: 11 Oct 2023 23:10

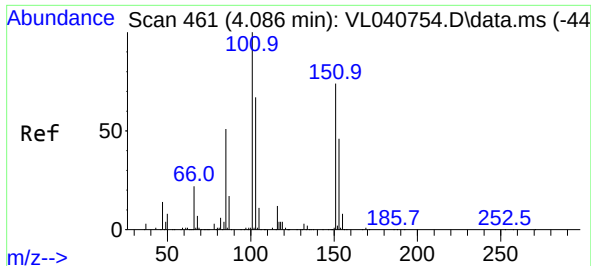
Tgt Ion:101 Resp: 28225

Ion Ratio Lower Upper

101 100

103 64.3 52.2 78.2

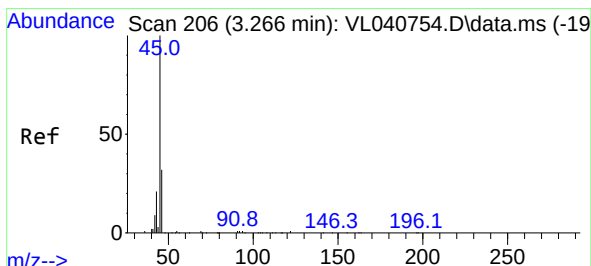
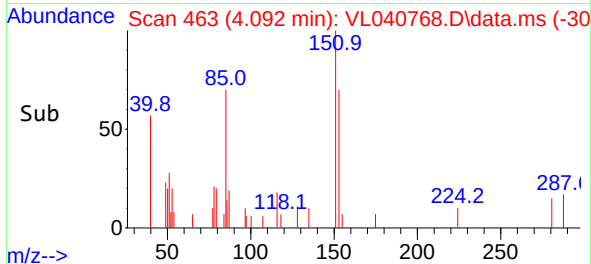
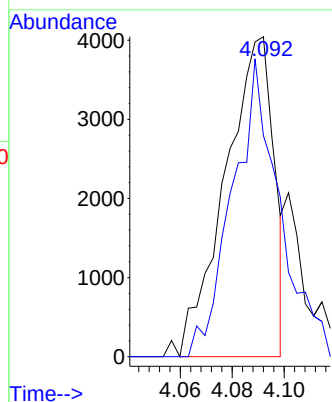
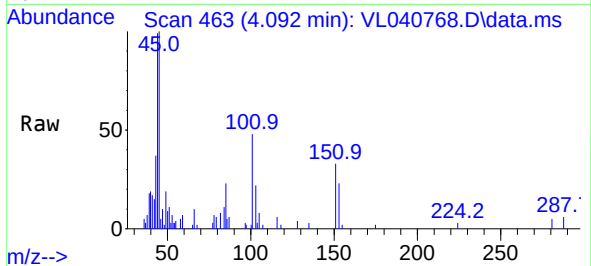




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.060 ppbv
RT: 4.092 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

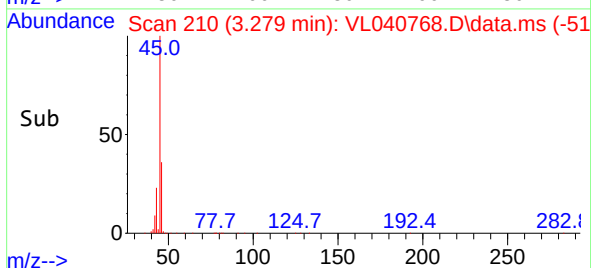
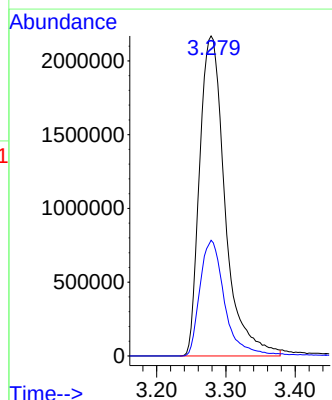
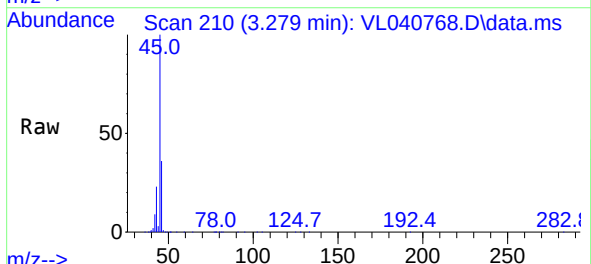
Instrument :
MSVOA_L
ClientSampleId :

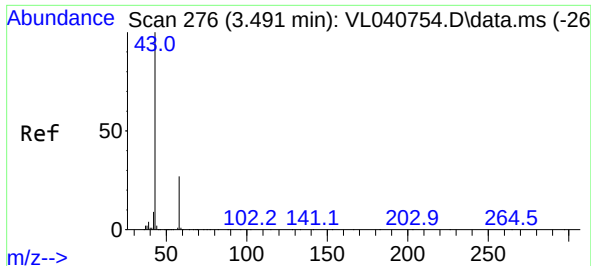
Tgt Ion:101 Resp: 5275
Ion Ratio Lower Upper
101 100
151 89.5 58.1 87.1#



#13
Ethanol
Concen: 492.749 ppbv
RT: 3.279 min Scan# 210
Delta R.T. 0.013 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 45 Resp: 5538226
Ion Ratio Lower Upper
45 100
46 35.8 14.6 58.2

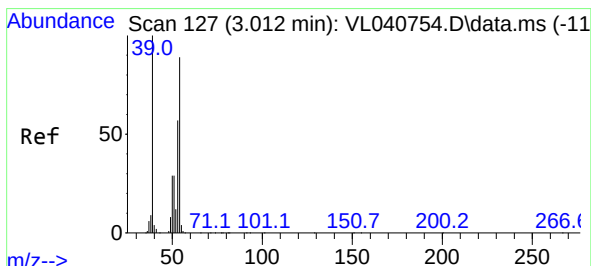
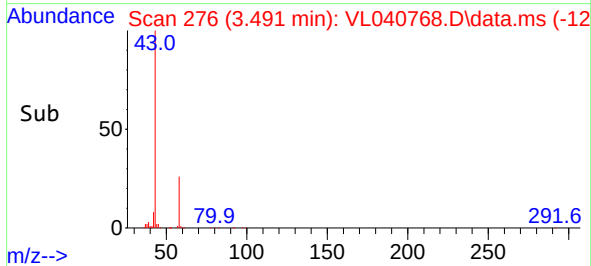
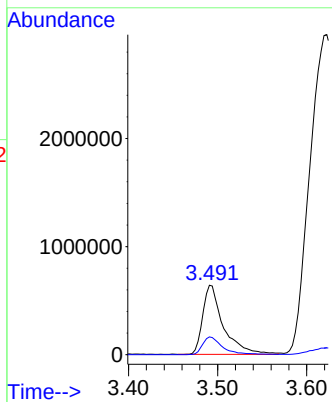
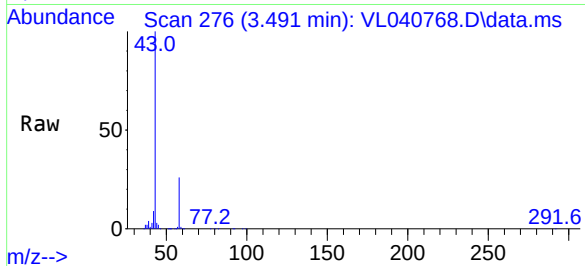




#15
Acetone
Concen: 10.892 ppbv
RT: 3.491 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

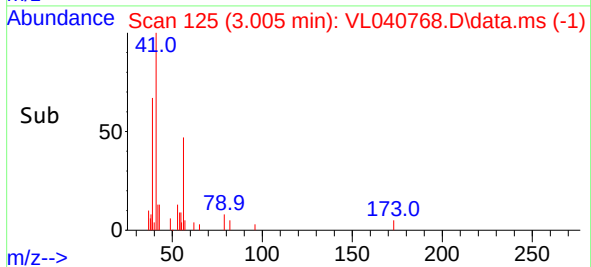
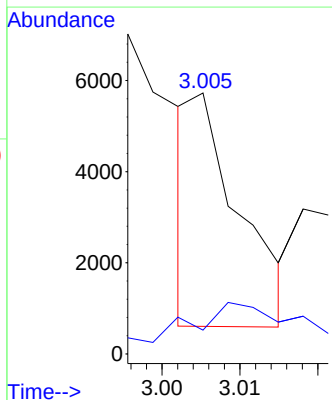
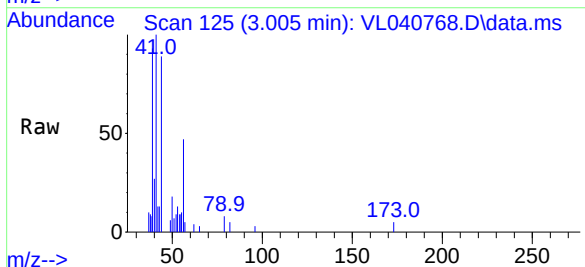
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ClientSampleId :

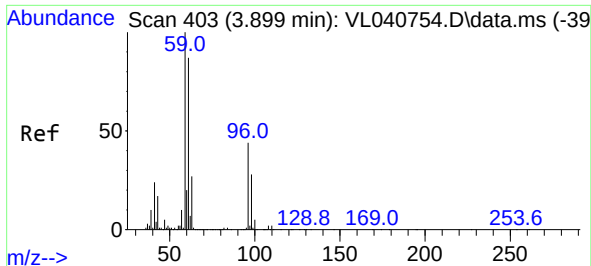
Tgt Ion: 43 Resp: 1027127
Ion Ratio Lower Upper
43 100
58 25.3 21.6 32.4



#16
1,3-Butadiene
Concen: 0.044 ppbv
RT: 3.005 min Scan# 125
Delta R.T. -0.006 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 39 Resp: 2197
Ion Ratio Lower Upper
39 100
54 70.9 63.0 94.6

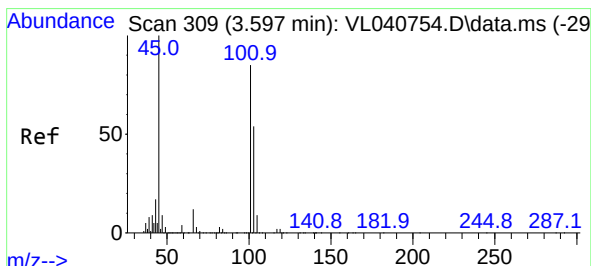
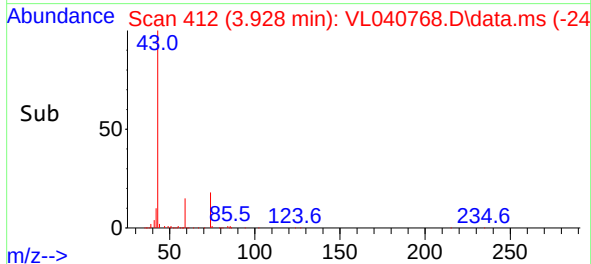
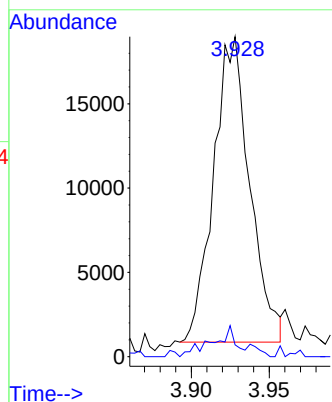
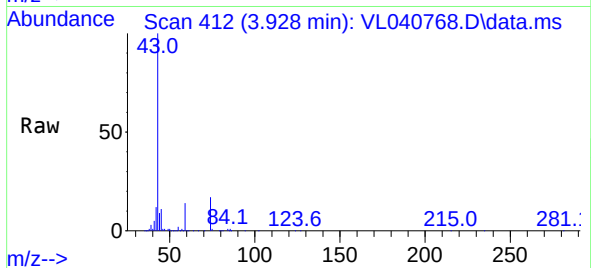




#17
tert-Butyl alcohol
Concen: 0.303 ppbv
RT: 3.928 min Scan# 412
Delta R.T. 0.029 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

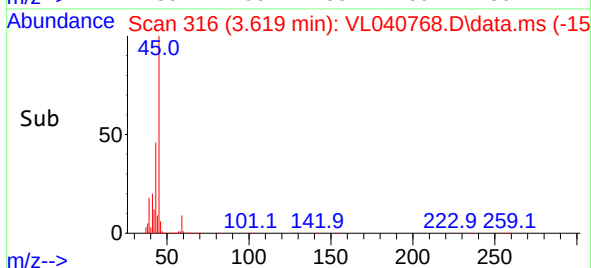
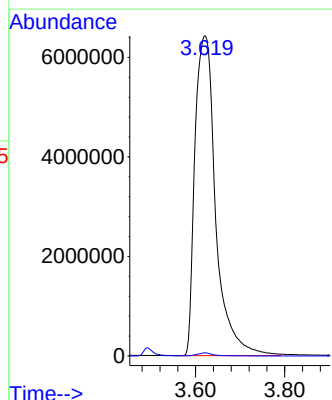
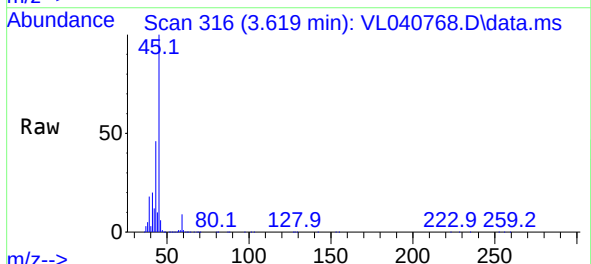
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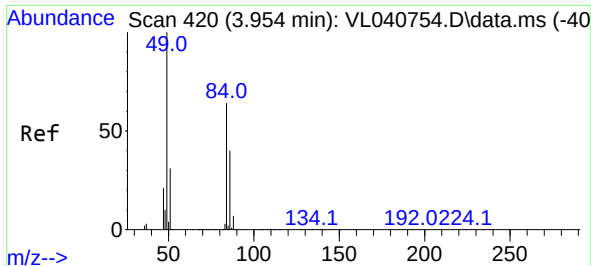
Tgt Ion: 59 Resp: 29267
Ion Ratio Lower Upper
59 100
57 43.0 8.6 13.0#



#19
Isopropyl Alcohol
Concen: 343.929 ppbv
RT: 3.619 min Scan# 316
Delta R.T. 0.022 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 45 Resp: 20877238
Ion Ratio Lower Upper
45 100
58 0.8 30.3 45.5#

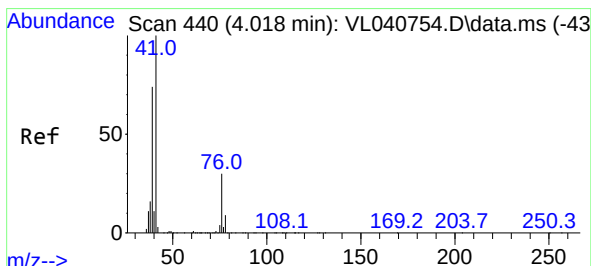
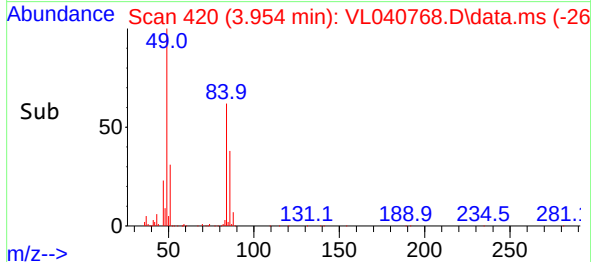
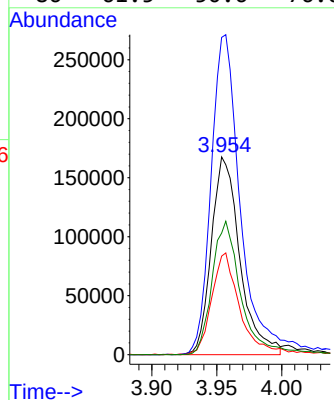
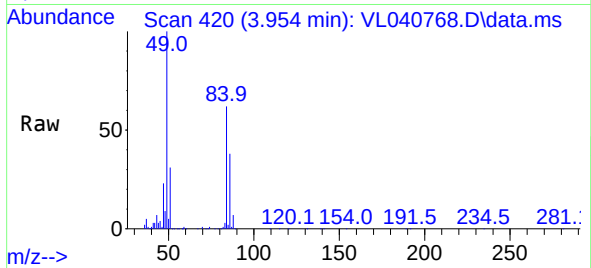




#20
Methylene Chloride
Concen: 6.538 ppbv
RT: 3.954 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

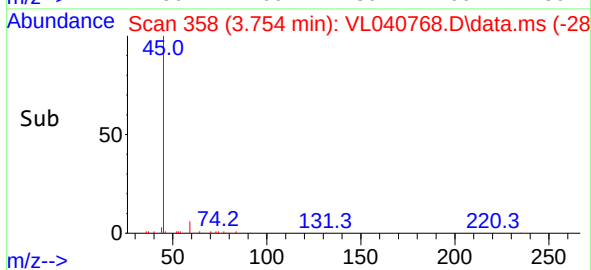
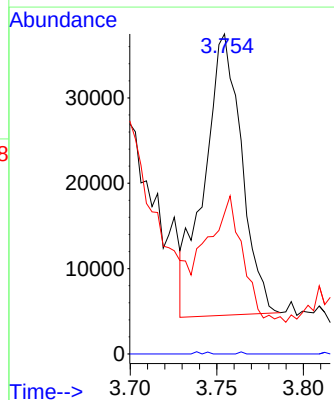
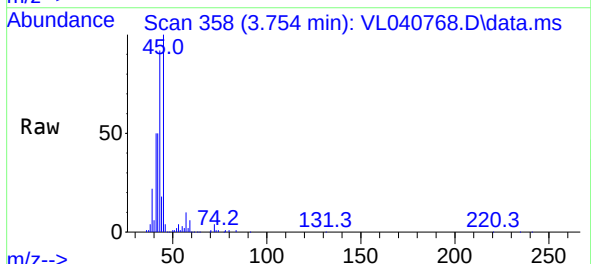
Instrument :
MSVOA_L
ClientSampleId :

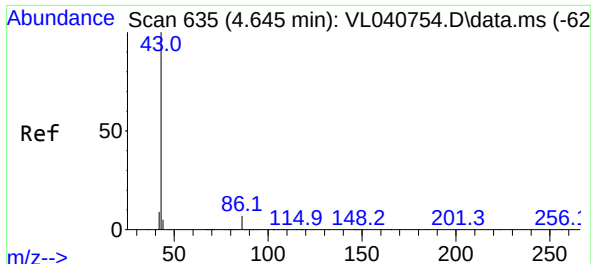
Tgt Ion: 84 Resp: 256813
Ion Ratio Lower Upper
84 100
49 160.3 125.6 188.4
51 49.5 38.9 58.3
86 61.5 50.6 76.0



#21
Allyl Chloride
Concen: 0.791 ppbv
RT: 3.754 min Scan# 358
Delta R.T. -0.264 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

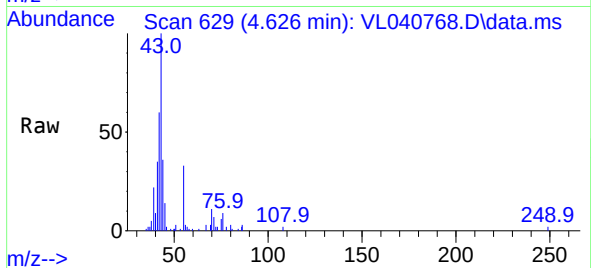
Tgt Ion: 41 Resp: 49216
Ion Ratio Lower Upper
41 100
76 0.0 24.1 36.1#
39 0.0 63.8 95.6#





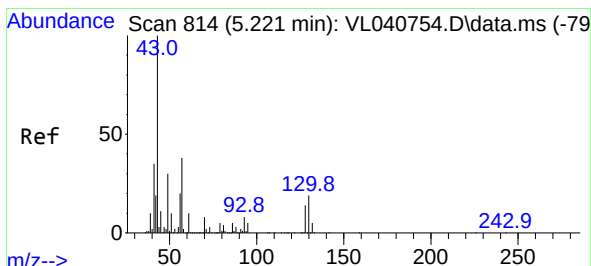
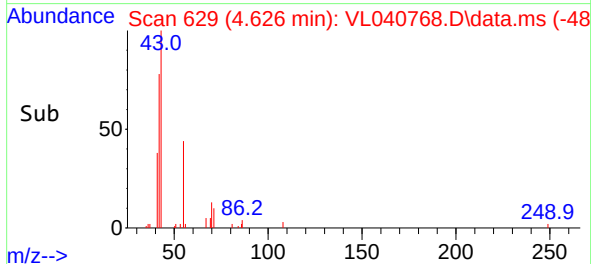
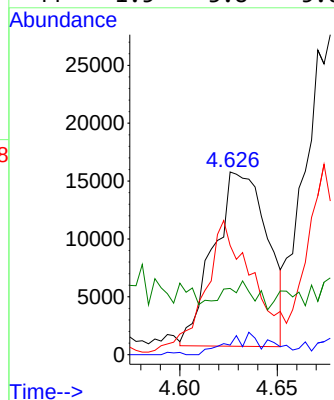
#23
 Vinyl Acetate
 Concen: 0.239 ppbv
 RT: 4.626 min Scan# 61
 Delta R.T. -0.019 min
 Lab File: VL040768.D
 Acq: 11 Oct 2023 23:10

Instrument :
 MSVOA_L
 ClientSampleId :



Tgt Ion: 43 Resp: 28765

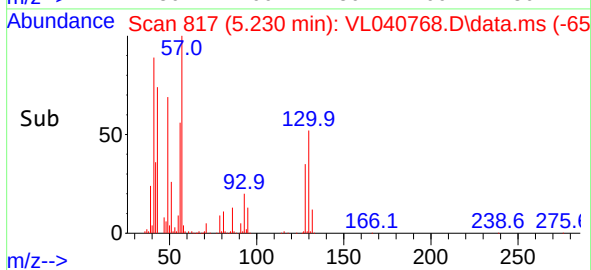
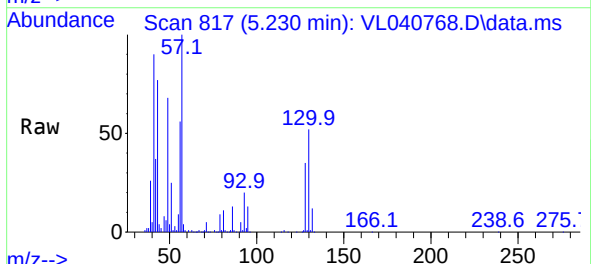
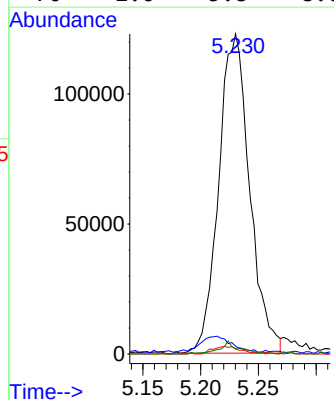
Ion	Ratio	Lower	Upper
43	100		
86	4.3	4.9	7.3#
42	52.3	7.8	11.6#
44	1.5	3.8	5.6#

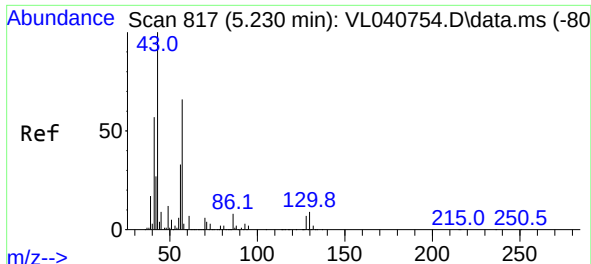


#25
 Ethyl Acetate
 Concen: 1.108 ppbv
 RT: 5.230 min Scan# 817
 Delta R.T. 0.010 min
 Lab File: VL040768.D
 Acq: 11 Oct 2023 23:10

Tgt Ion: 43 Resp: 228937

Ion	Ratio	Lower	Upper
43	100		
45	7.0	8.2	12.4#
61	2.4	8.2	12.2#
70	2.6	5.8	8.6#

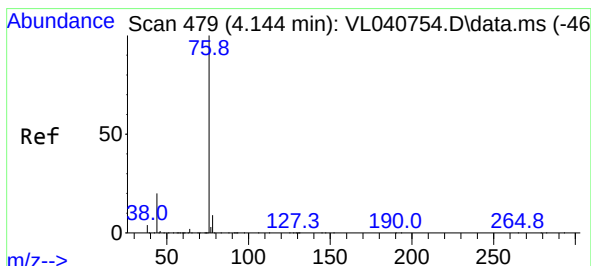
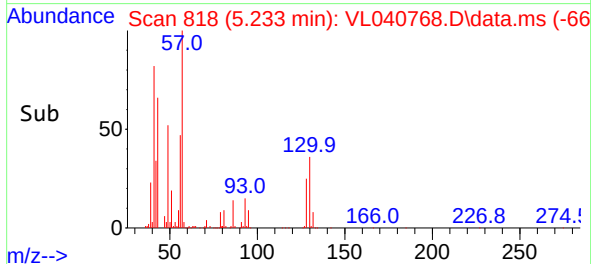
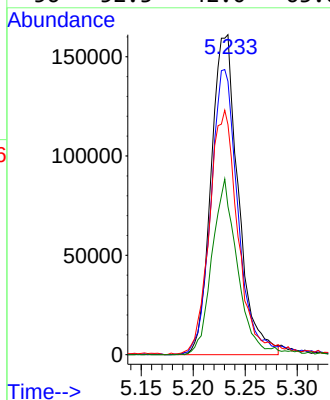
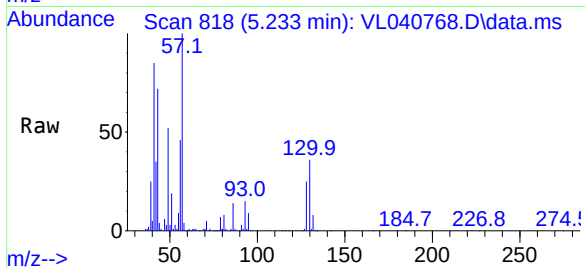




#26
Hexane
Concen: 3.120 ppbv
RT: 5.233 min Scan# 817
Delta R.T. 0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

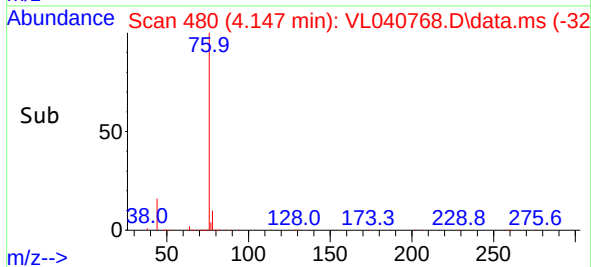
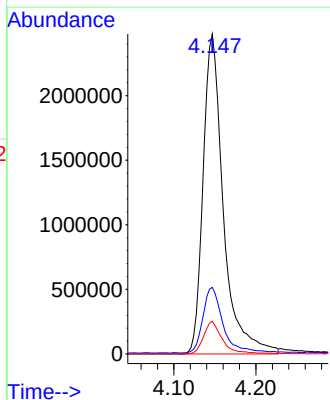
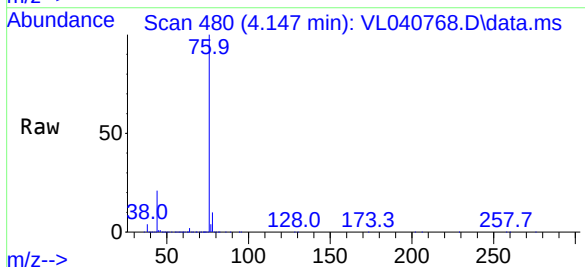
Instrument :
MSVOA_L
ClientSampleId :

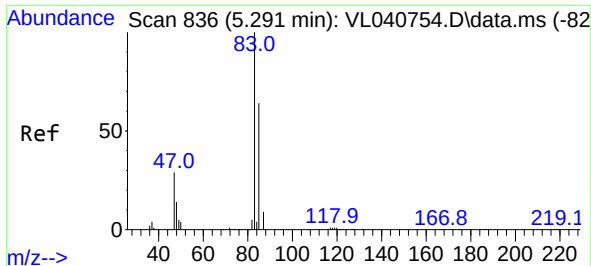
Tgt Ion: 57 Resp: 294584
Ion Ratio Lower Upper
57 100
41 90.2 71.4 107.2
43 82.2 182.3 273.5#
56 52.3 42.0 63.0



#27
Carbon Disulfide
Concen: 40.812 ppbv
RT: 4.147 min Scan# 480
Delta R.T. 0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 76 Resp: 4252057
Ion Ratio Lower Upper
76 100
44 21.1 16.6 25.0
78 9.7 7.8 11.6





#29

Chloroform

Concen: 0.247 ppbv

RT: 5.288 min Scan# 81

Delta R.T. -0.003 min

Lab File: VL040768.D

Acq: 11 Oct 2023 23:10

Instrument :

MSVOA_L

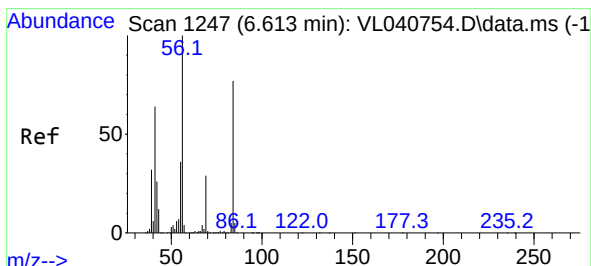
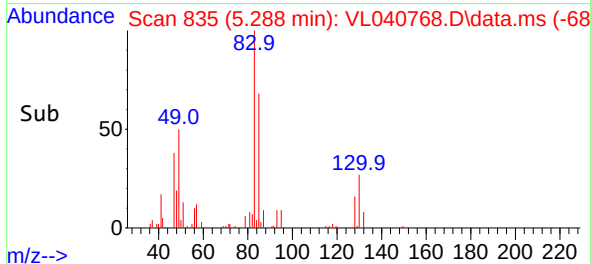
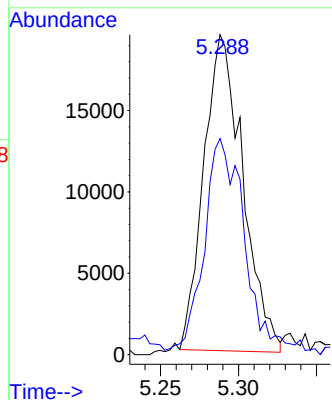
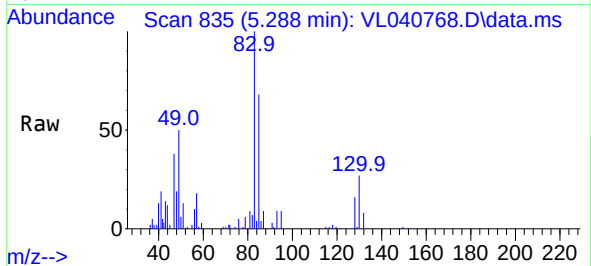
ClientSampleId :

Tgt Ion: 83 Resp: 33783

Ion Ratio Lower Upper

83 100

85 65.2 51.3 76.9



#30

Cyclohexane

Concen: 0.076 ppbv

RT: 6.610 min Scan# 1246

Delta R.T. -0.003 min

Lab File: VL040768.D

Acq: 11 Oct 2023 23:10

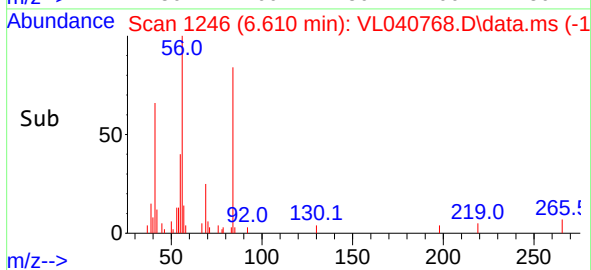
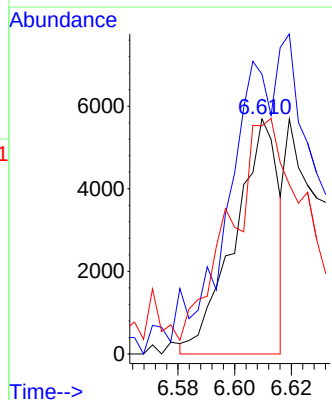
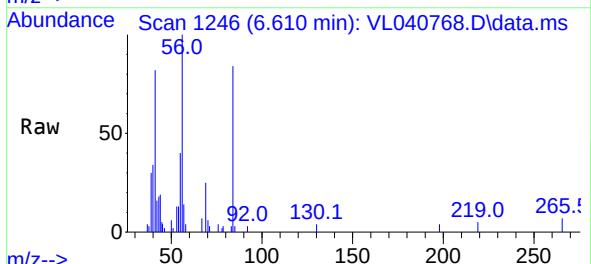
Tgt Ion: 84 Resp: 6085

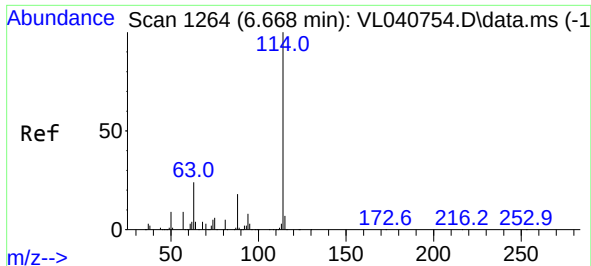
Ion Ratio Lower Upper

84 100

56 0.0 110.3 165.5#

41 219.4 67.4 101.2#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.664 min Scan# 11

Delta R.T. -0.003 min

Lab File: VL040768.D

Acq: 11 Oct 2023 23:10

Instrument :

MSVOA_L

ClientSampleId :

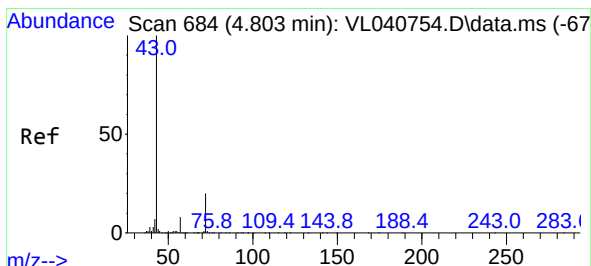
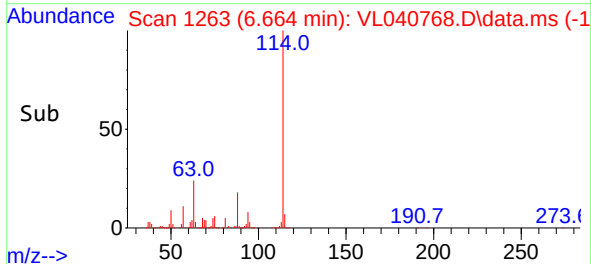
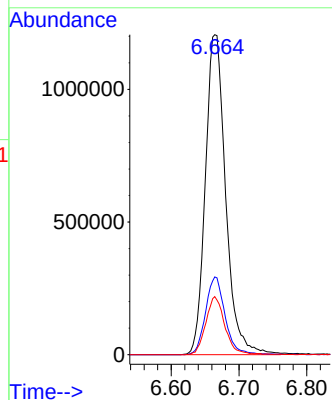
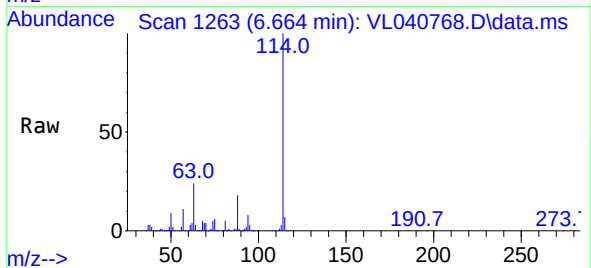
Tgt Ion:114 Resp: 2516303

Ion Ratio Lower Upper

114 100

63 23.5 19.8 29.6

88 17.2 14.2 21.2



#34

2-Butanone

Concen: 0.474 ppbv

RT: 4.809 min Scan# 686

Delta R.T. 0.006 min

Lab File: VL040768.D

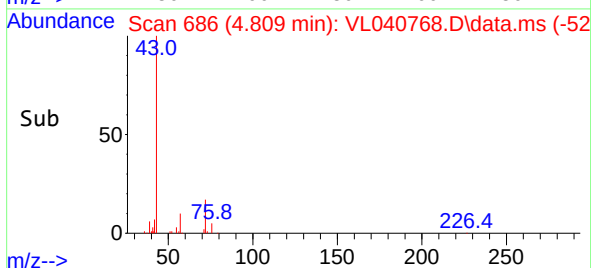
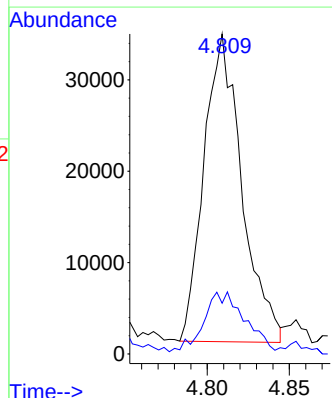
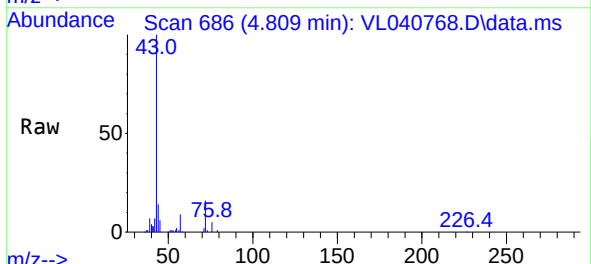
Acq: 11 Oct 2023 23:10

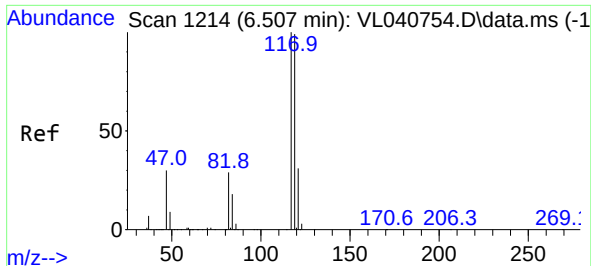
Tgt Ion: 43 Resp: 53940

Ion Ratio Lower Upper

43 100

72 24.4 16.8 25.2

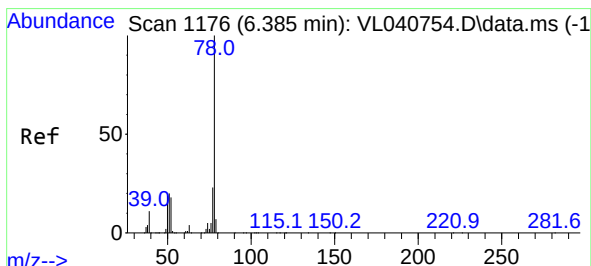
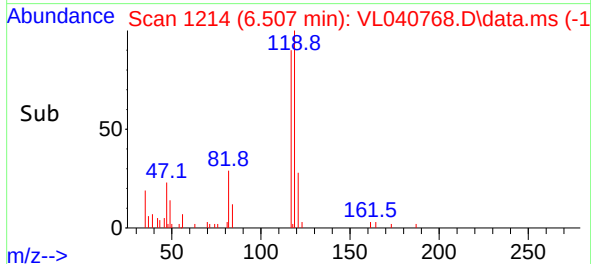
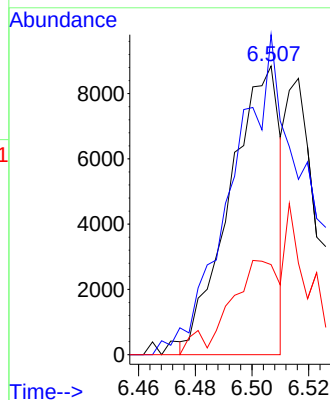
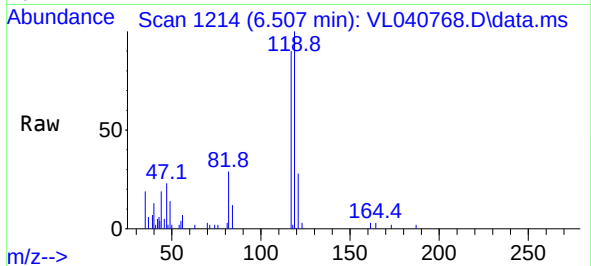




#35
Carbon Tetrachloride
Concen: 0.076 ppbv
RT: 6.507 min Scan# 117
Delta R.T. -0.000 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

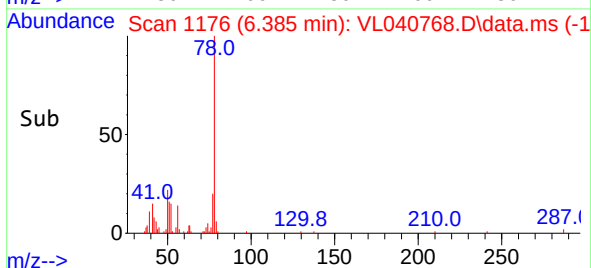
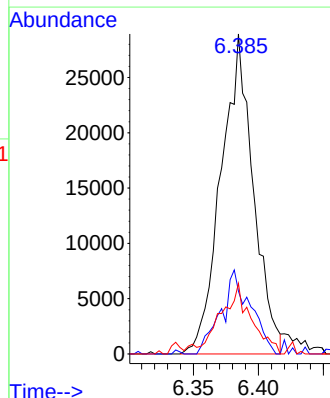
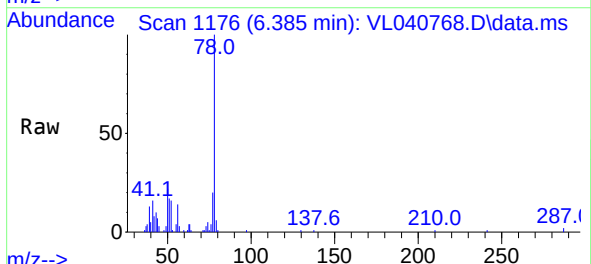
Instrument :
MSVOA_L
ClientSampleId :

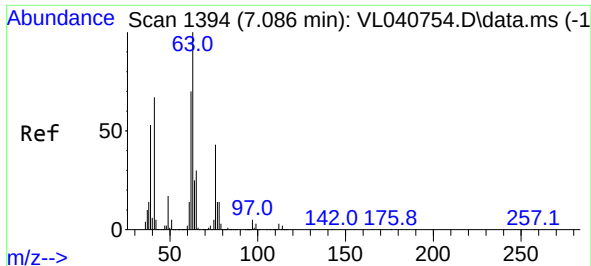
Tgt Ion:117 Resp: 10773
Ion Ratio Lower Upper
117 100
119 111.8 79.4 119.0
121 34.4 25.0 37.4



#36
Benzene
Concen: 0.258 ppbv
RT: 6.385 min Scan# 1176
Delta R.T. -0.000 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 78 Resp: 49872
Ion Ratio Lower Upper
78 100
77 19.6 18.4 27.6
50 22.0 15.0 22.4





#39

1,2-Dichloropropane

Concen: 7.754 ppbv

RT: 6.664 min Scan# 11

Delta R.T. -0.421 min

Lab File: VL040768.D

Acq: 11 Oct 2023 23:10

Instrument :

MSVOA_L

ClientSampleId :

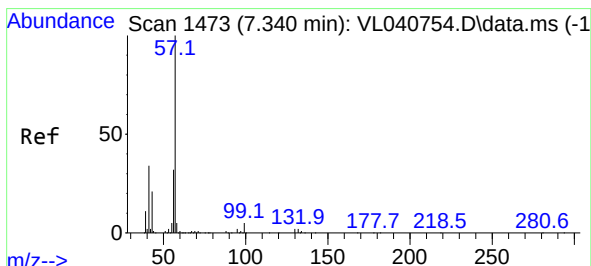
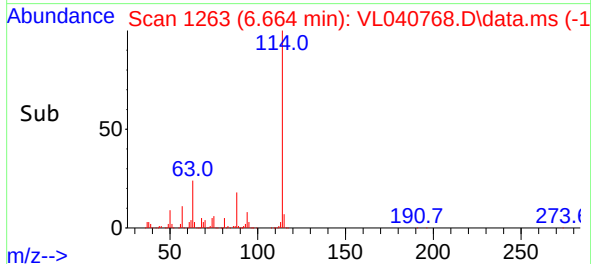
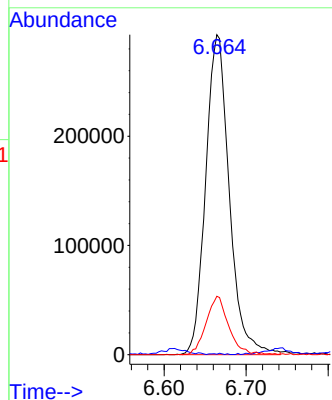
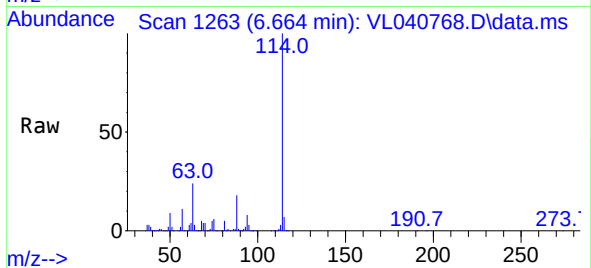
Tgt Ion: 63 Resp: 586357

Ion Ratio Lower Upper

63 100

41 0.0 53.7 80.5#

62 18.2 55.7 83.5#



#44

2,2,4-Trimethylpentane

Concen: 0.127 ppbv

RT: 7.336 min Scan# 1472

Delta R.T. -0.003 min

Lab File: VL040768.D

Acq: 11 Oct 2023 23:10

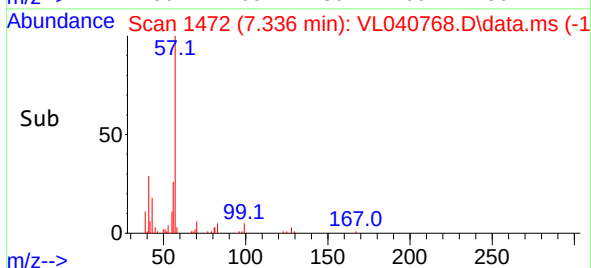
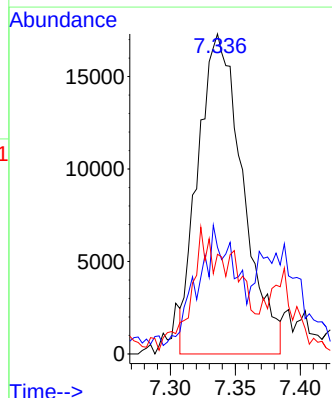
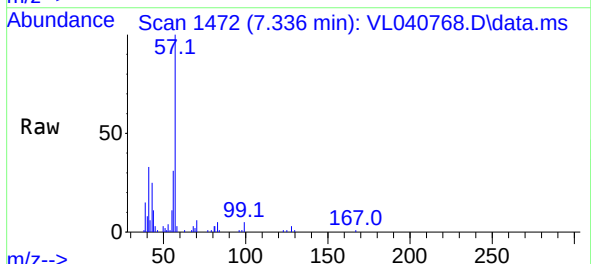
Tgt Ion: 57 Resp: 41435

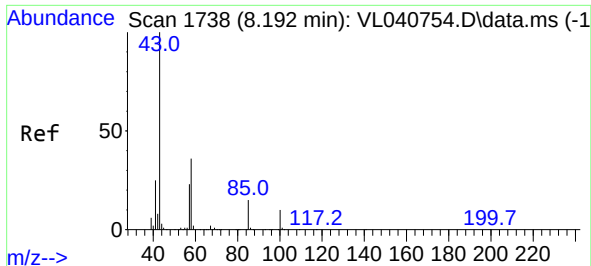
Ion Ratio Lower Upper

57 100

41 37.9 27.4 41.0

56 43.1 25.0 37.6#

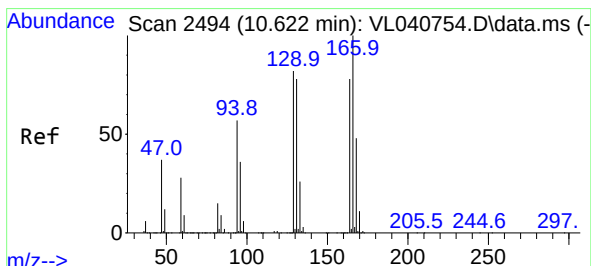
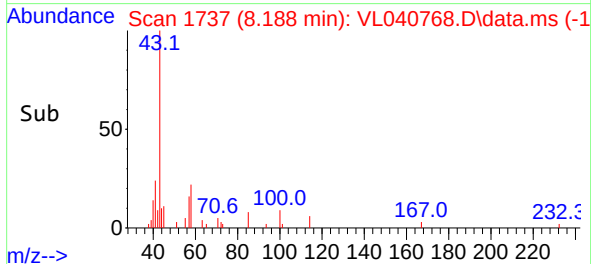
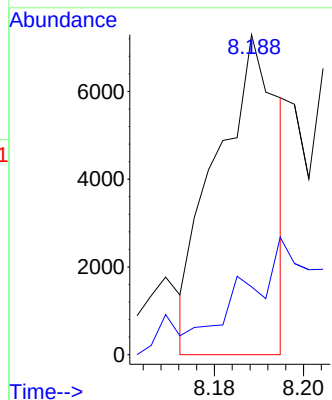
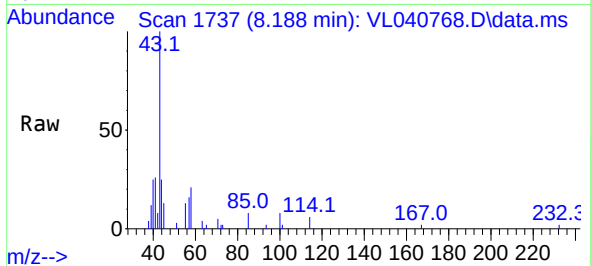




#50
4-Methyl-2-Pentanone
Concen: 0.036 ppbv
RT: 8.188 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

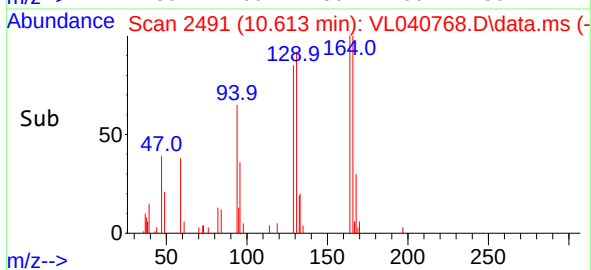
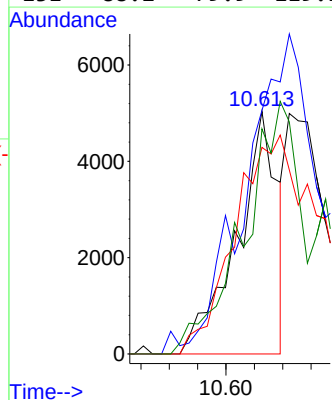
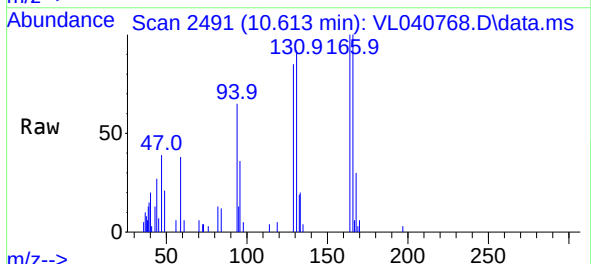
Instrument :
MSVOA_L
ClientSampleId :

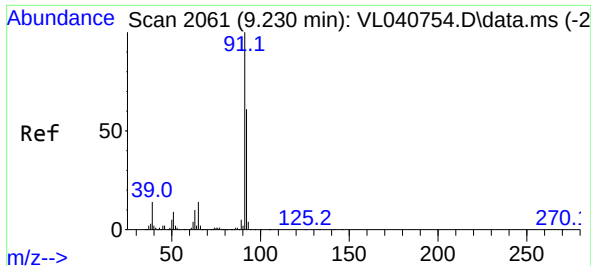
Tgt Ion: 43 Resp: 7002
Ion Ratio Lower Upper
43 100
58 0.0 28.8 43.2#



#52
Tetrachloroethene
Concen: 0.063 ppbv
RT: 10.613 min Scan# 2491
Delta R.T. -0.010 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 164 Resp: 4964
Ion Ratio Lower Upper
164 100
166 97.0 102.4 153.6#
129 85.2 84.2 126.4
131 88.2 79.9 119.9

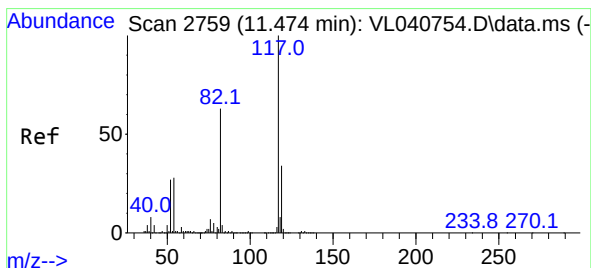
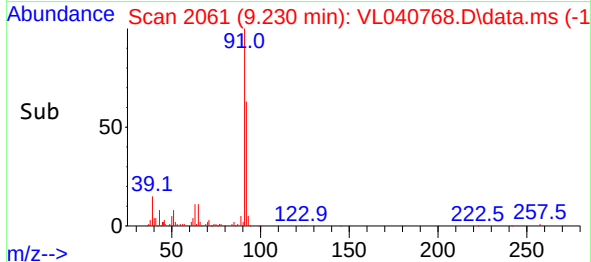
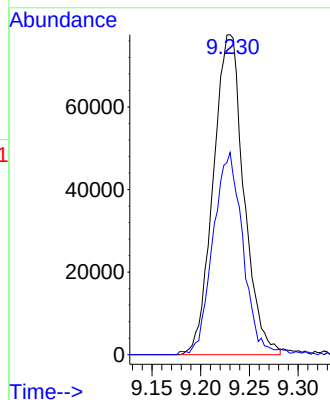
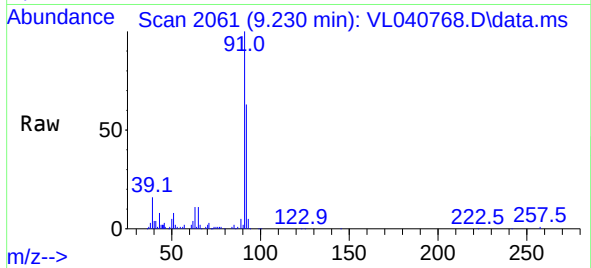




#53
Toluene
Concen: 0.736 ppbv
RT: 9.230 min Scan# 2061
Delta R.T. -0.000 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

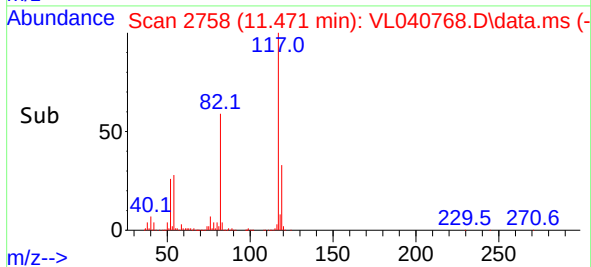
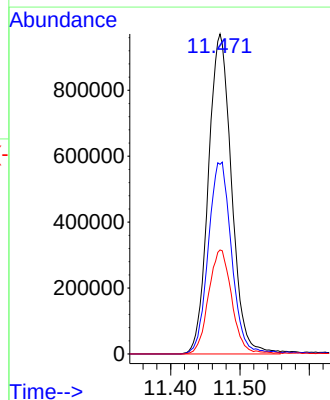
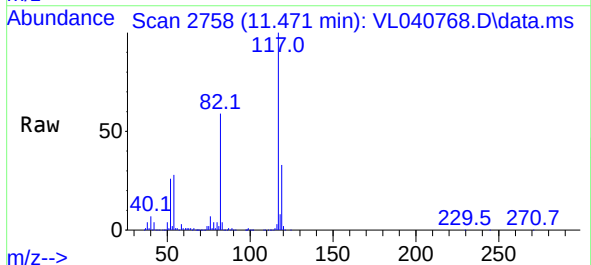
Instrument :
MSVOA_L
ClientSampleId :

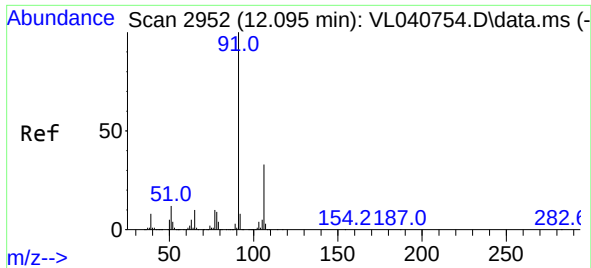
Tgt Ion: 91 Resp: 169420
Ion Ratio Lower Upper
91 100
92 62.6 50.2 75.2



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.471 min Scan# 2758
Delta R.T. -0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 117 Resp: 2254386
Ion Ratio Lower Upper
117 100
82 60.9 46.6 70.0
119 33.1 26.0 39.0

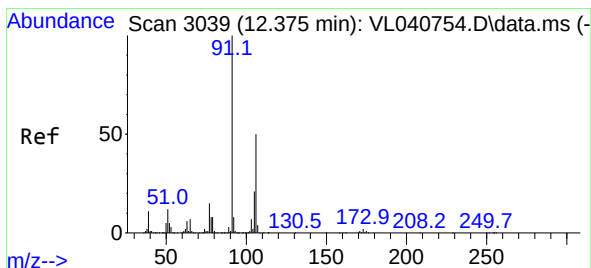
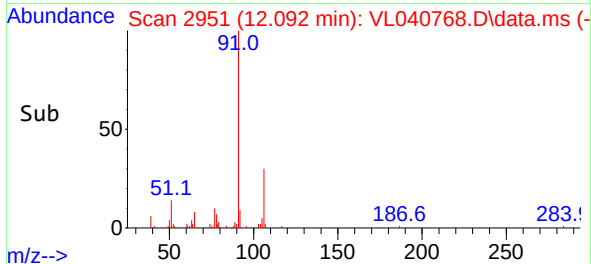
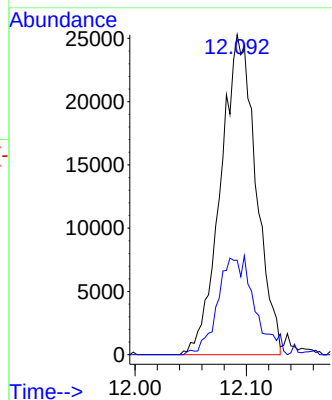
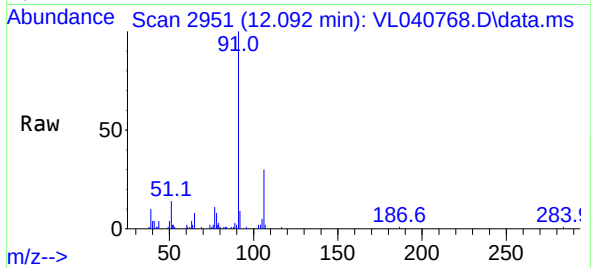




#58
Ethyl Benzene
Concen: 0.197 ppbv
RT: 12.092 min Scan# 2951
Delta R.T. -0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

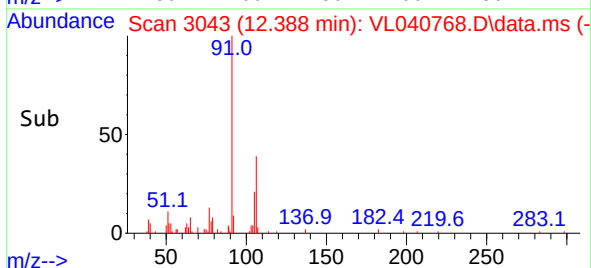
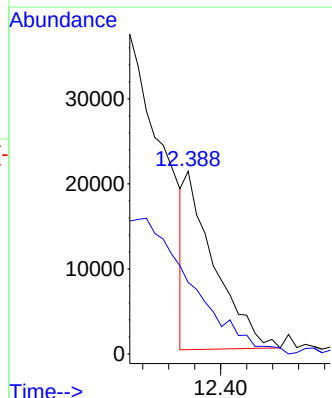
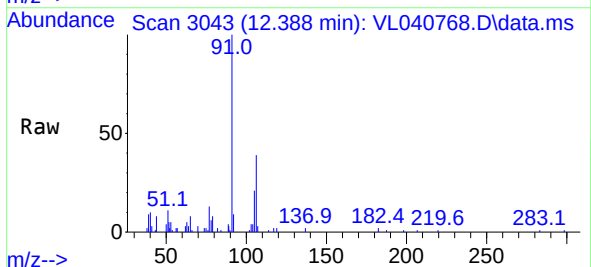
Instrument :
MSVOA_L
ClientSampleId :

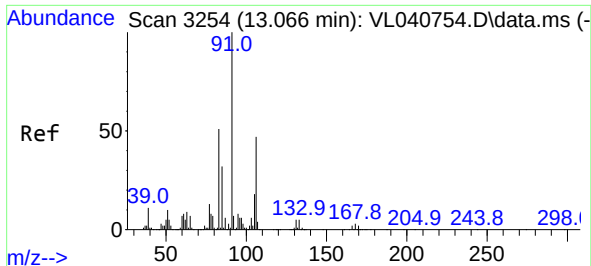
Tgt Ion: 91 Resp: 55885
Ion Ratio Lower Upper
91 100
106 29.5 26.7 40.1



#59
m/p-Xylene
Concen: 0.071 ppbv
RT: 12.388 min Scan# 3043
Delta R.T. 0.013 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 91 Resp: 16598
Ion Ratio Lower Upper
91 100
106 0.0 37.7 56.5#

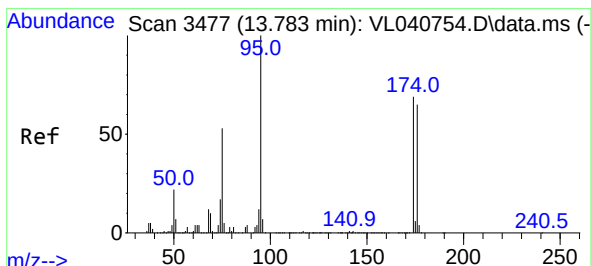
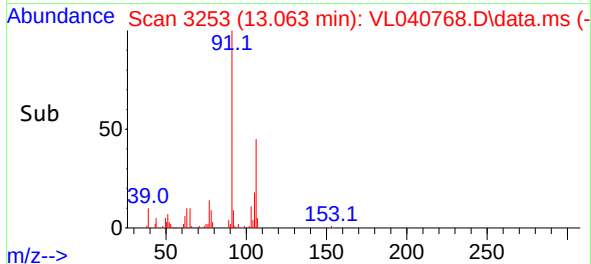
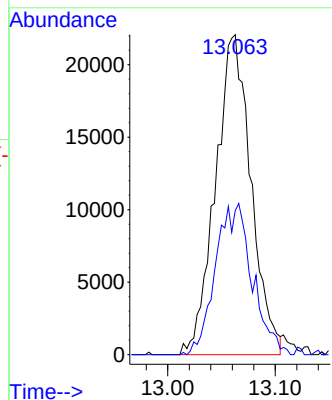
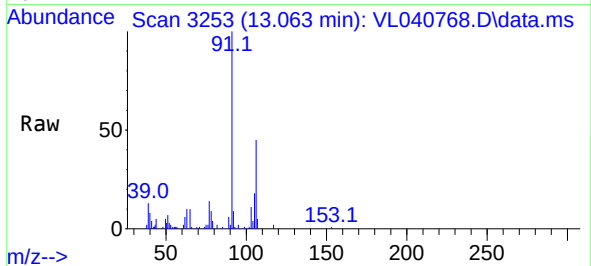




#60
o-Xylene
Concen: 0.228 ppbv
RT: 13.063 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

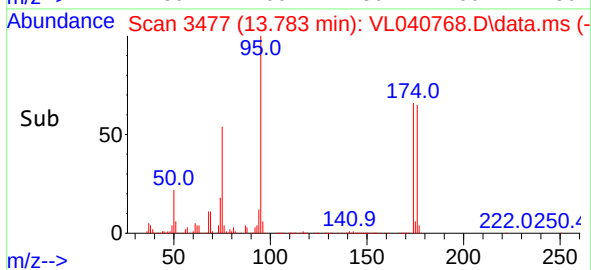
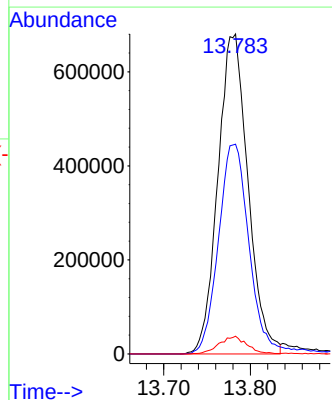
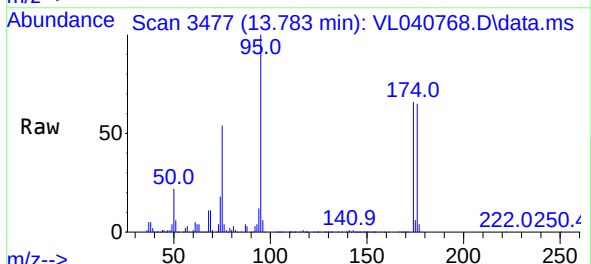
Instrument :
MSVOA_L
ClientSampleId :

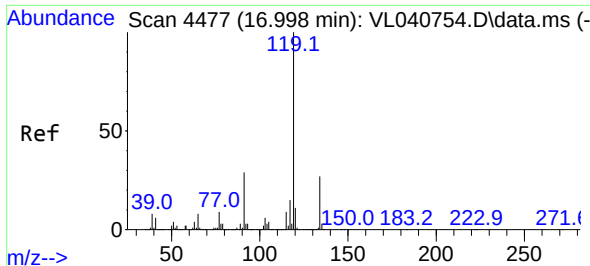
Tgt Ion: 91 Resp: 50674
Ion Ratio Lower Upper
91 100
106 49.4 23.5 70.5



#68
1-Bromo-4-Fluorobenzene
Concen: 9.908 ppbv
RT: 13.783 min Scan# 3477
Delta R.T. -0.000 min
Lab File: VL040768.D
Acq: 11 Oct 2023 23:10

Tgt Ion: 95 Resp: 1643574
Ion Ratio Lower Upper
95 100
174 68.6 54.7 82.1
175 5.3 4.2 6.4

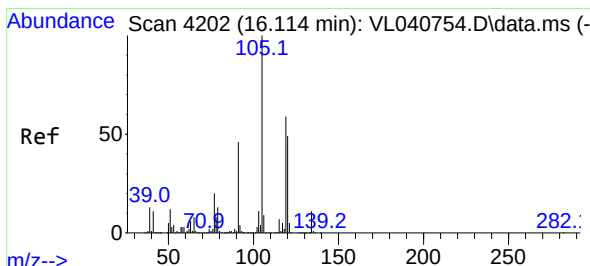
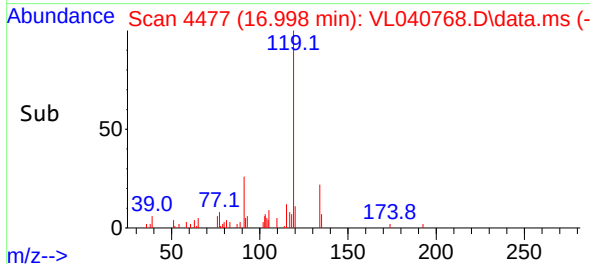
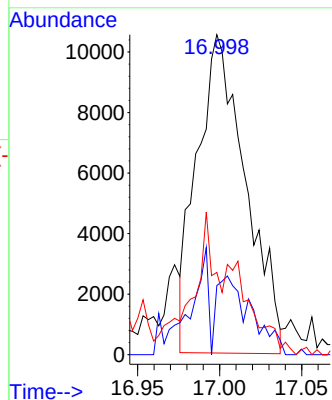
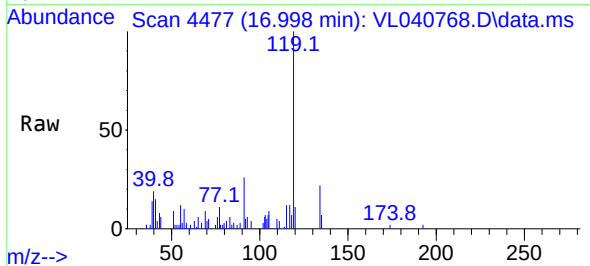




#69
 p-Isopropyltoluene
 Concen: 0.061 ppbv
 RT: 16.998 min Scan# 4477
 Delta R.T. -0.000 min
 Lab File: VL040768.D
 Acq: 11 Oct 2023 23:10

Instrument :
 MSVOA_L
 ClientSampleId :

Tgt Ion:	119	Resp:	21664
Ion	Ratio	Lower	Upper
119	100		
134	17.6	21.0	31.4#
91	0.0	22.8	34.2#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.206 ppbv
 RT: 16.111 min Scan# 4201
 Delta R.T. -0.003 min
 Lab File: VL040768.D
 Acq: 11 Oct 2023 23:10

Tgt Ion:	105	Resp:	51555
Ion	Ratio	Lower	Upper
105	100		
120	47.4	39.4	59.2
91	13.4	38.6	58.0#
77	18.0	16.6	25.0

