

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111022\
 Data File : VL039869.D
 Acq On : 10 Nov 2022 18:36
 Operator : SY/AP
 Sample : N5579-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

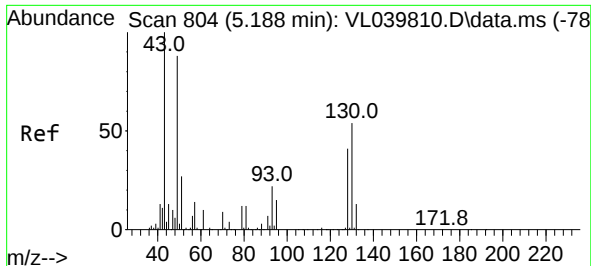
Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Nov 11 05:01:53 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL110222AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Nov 03 09:27:12 2022
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.192	49	976114	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.645	114	2200483	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.452	117	1814498	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.761	95	1446454	10.650	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 106.500%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.742	85	25803	0.157	ppbv	96
3) Chlorodifluoromethane	2.693	51	49679	0.427	ppbv	97
4) Chloromethane	2.829	50	25704	0.355	ppbv #	86
6) Bromomethane	3.131	94	974	0.047	ppbv #	42
9) Propene	2.710	41	9972	0.164	ppbv #	14
13) Ethanol	3.247	45	286985	66.973	ppbv	99
15) Acetone	3.481	43	387102	3.258	ppbv	96
16) 1,3-Butadiene	2.980	39	14674	0.266	ppbv #	32
17) tert-Butyl alcohol	3.902	59	5400	0.048	ppbv #	68
18) 1,1-Dichloroethene	3.890	96	1350	0.030	ppbv #	39
19) Isopropyl Alcohol	3.591	45	199922	3.400	ppbv #	34
20) Methylene Chloride	3.941	84	82133	1.932	ppbv #	89
23) Vinyl Acetate	4.632	43	3671	0.078	ppbv #	73
25) Ethyl Acetate	5.214	43	52856	0.216	ppbv #	84
26) Hexane	5.211	57	66661	0.611	ppbv #	44
27) Carbon Disulfide	4.134	76	4721	0.041	ppbv #	64
29) Chloroform	5.275	83	11537	0.075	ppbv	95
34) 2-Butanone	4.793	43	24084	0.265	ppbv #	80
36) Benzene	6.365	78	34087	0.184	ppbv #	91
38) Trichloroethene	7.279	130	50801	0.511	ppbv	88
39) 1,2-Dichloropropane	6.648	63	617695	8.541	ppbv #	26
44) 2,2,4-Trimethylpentane	7.320	57	33399	0.107	ppbv #	77
52) Tetrachloroethene	10.606	164	1527260	21.961	ppbv	94
53) Toluene	9.208	91	82850	0.389	ppbv	97
60) o-Xylene	13.047	91	8487	0.044	ppbv #	29
62) Isopropylbenzene	14.021	105	8804	0.031	ppbv #	48
69) p-Isopropyltoluene	16.989	119	14293	0.051	ppbv #	45
70) n-Butylbenzene	17.876	91	11193	0.041	ppbv #	24
71) 2-Chlorotoluene	14.786	91	6714	0.032	ppbv #	54
72) 4-Ethyltoluene	15.182	105	8535	0.039	ppbv #	63
74) 1,2,4-Trimethylbenzene	16.088	105	17187	0.084	ppbv #	62
78) Hexachloro-1,3-Butadiene	22.616	225	3537	0.042	ppbv #	18
80) Naphthalene,2-methyl-	24.365	142	13993	0.221	ppbv #	92
81) 1,2,4-Trichlorobenzene	21.127	180	5344	0.064	ppbv #	11

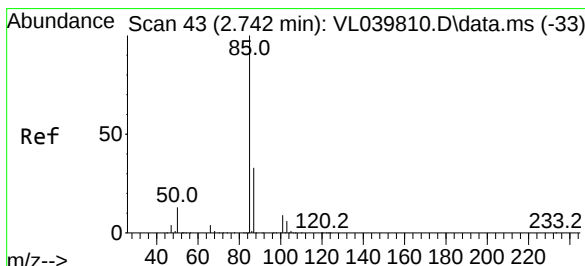
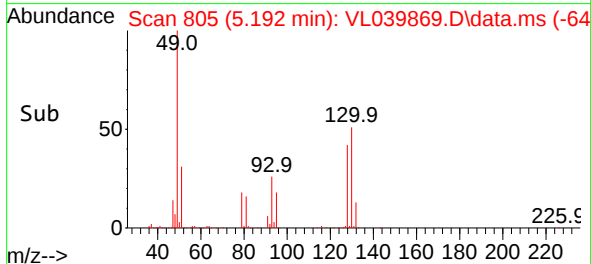
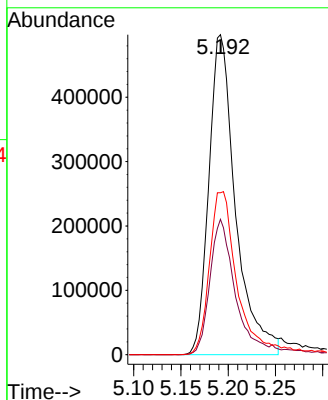
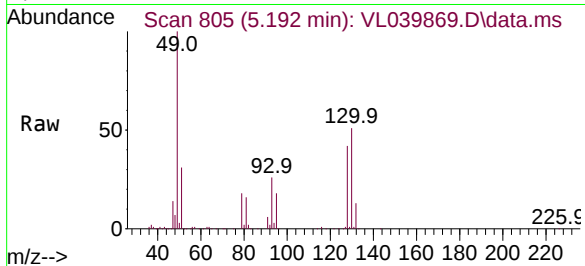
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 804
Delta R.T. 0.004 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

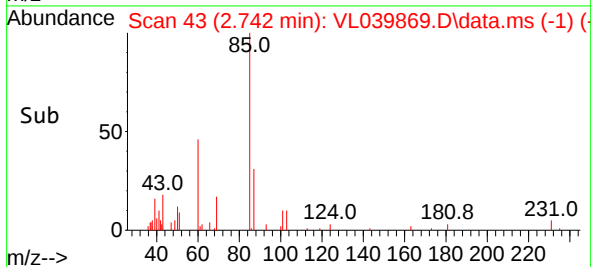
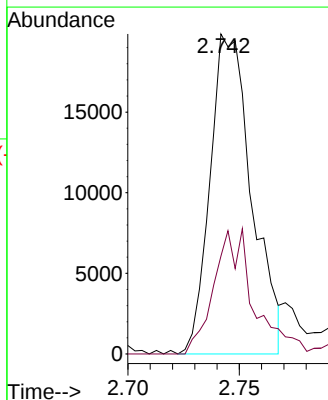
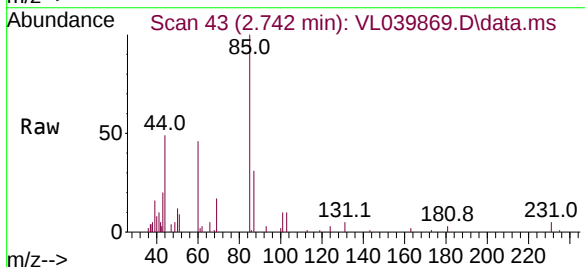
Instrument :
MSVOA_L
ClientSampleId :

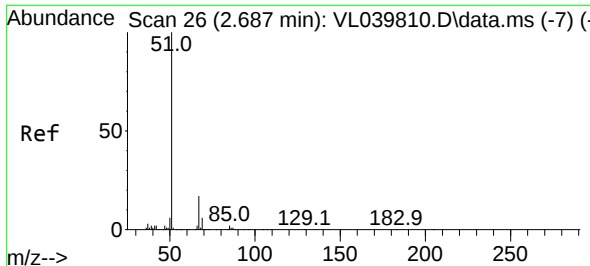
Tgt Ion: 49 Resp: 976114
Ion Ratio Lower Upper
49 100
128 42.8 24.6 73.6
130 55.1 31.1 93.2



#2
Dichlorodifluoromethane
Concen: 0.157 ppbv
RT: 2.742 min Scan# 43
Delta R.T. 0.000 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 85 Resp: 25803
Ion Ratio Lower Upper
85 100
87 30.6 26.4 39.6

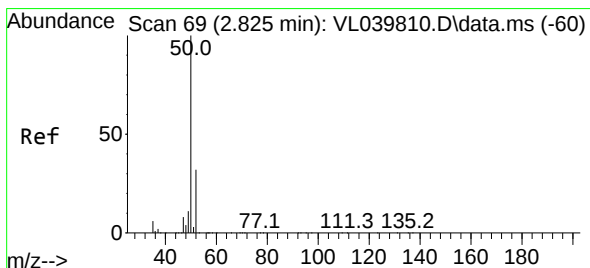
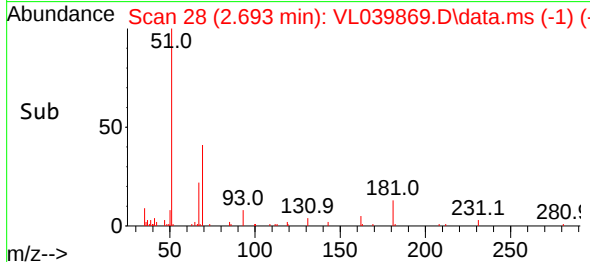
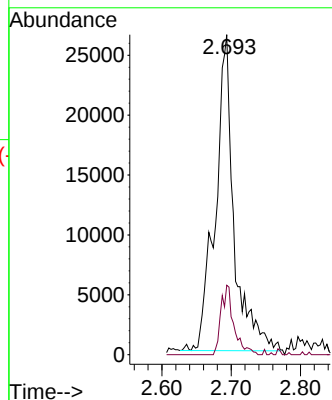
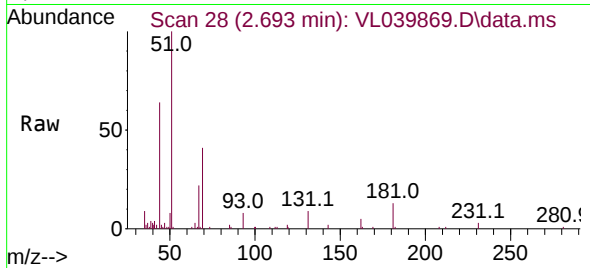




#3
Chlorodifluoromethane
Concen: 0.427 ppbv
RT: 2.693 min Scan# 21
Delta R.T. 0.007 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

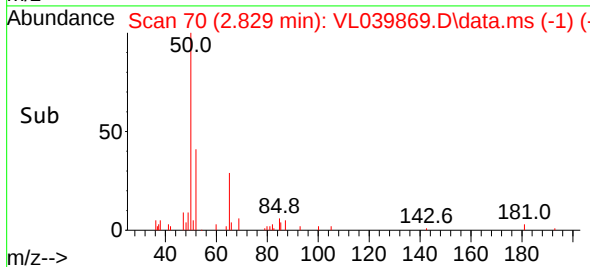
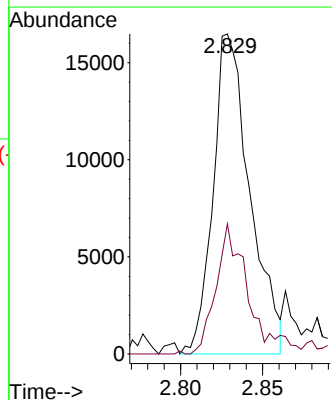
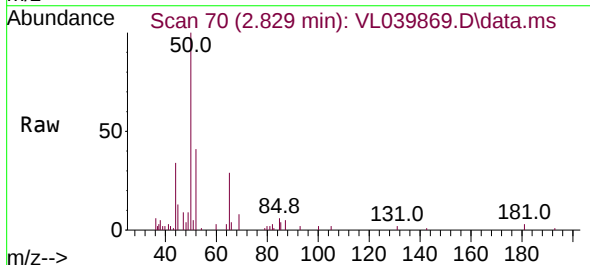
Instrument :
MSVOA_L
ClientSampleId :

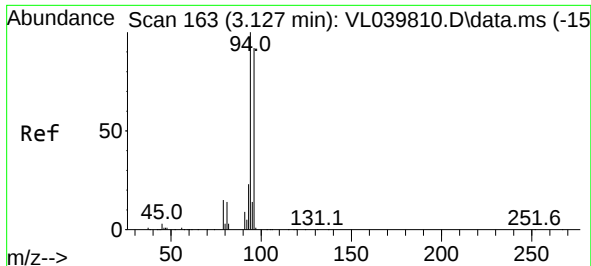
Tgt Ion: 51 Resp: 49679
Ion Ratio Lower Upper
51 100
67 15.1 13.2 19.8



#4
Chloromethane
Concen: 0.355 ppbv
RT: 2.829 min Scan# 70
Delta R.T. 0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 50 Resp: 25704
Ion Ratio Lower Upper
50 100
52 39.7 25.5 38.3#

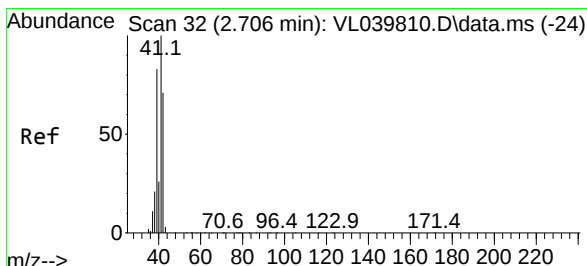
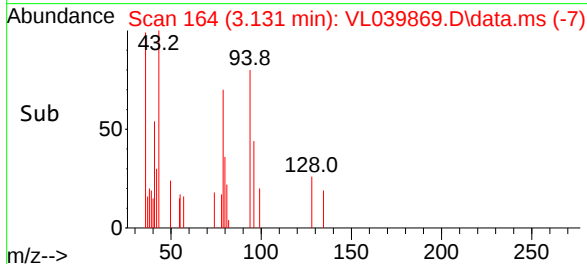
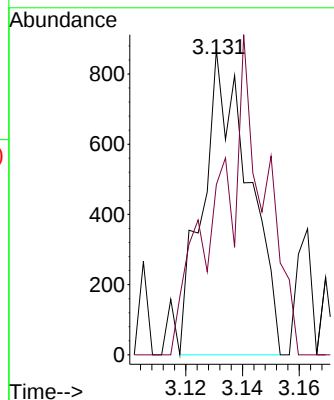
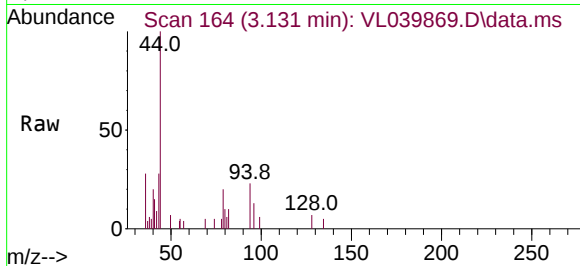




#6
Bromomethane
Concen: 0.047 ppbv
RT: 3.131 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

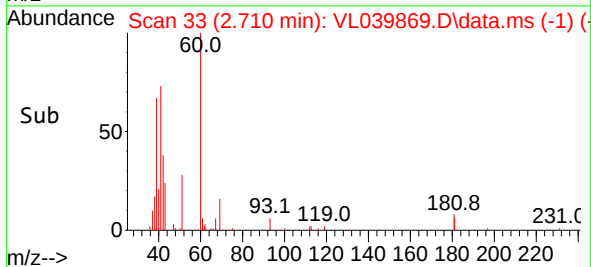
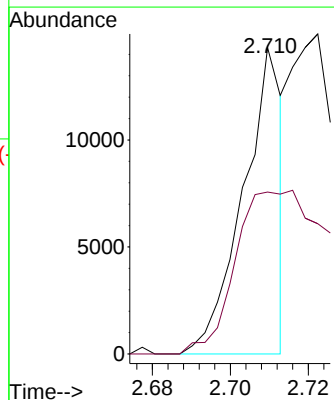
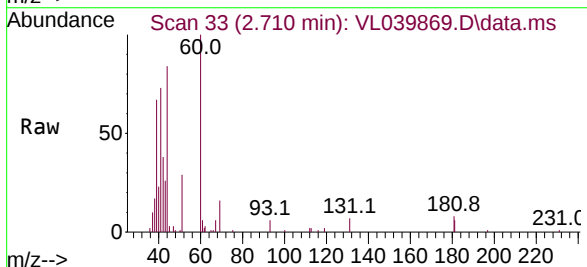
Instrument :
MSVOA_L
ClientSampleId :

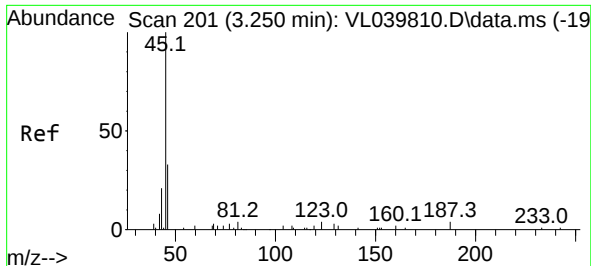
Tgt Ion: 94 Resp: 974
Ion Ratio Lower Upper
94 100
96 36.7 73.5 110.3#



#9
Propene
Concen: 0.164 ppbv
RT: 2.710 min Scan# 33
Delta R.T. 0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 41 Resp: 9972
Ion Ratio Lower Upper
41 100
42 0.0 56.3 84.5#

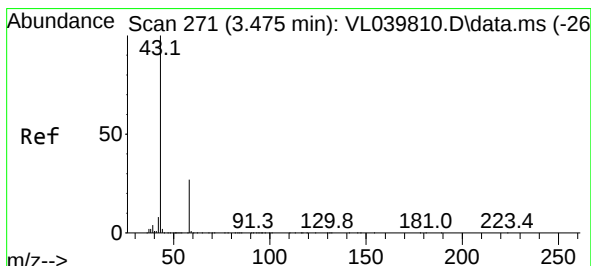
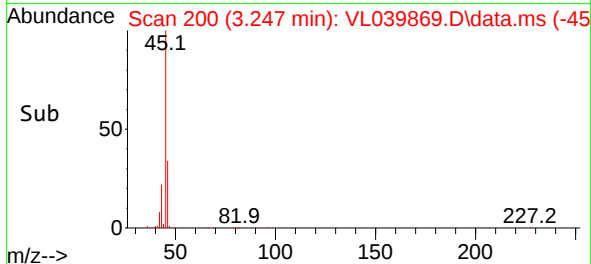
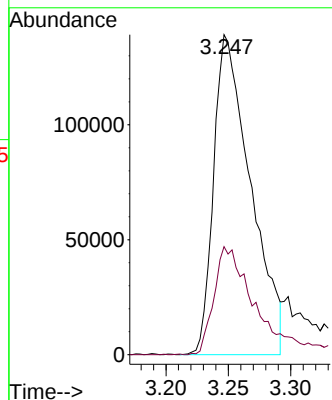
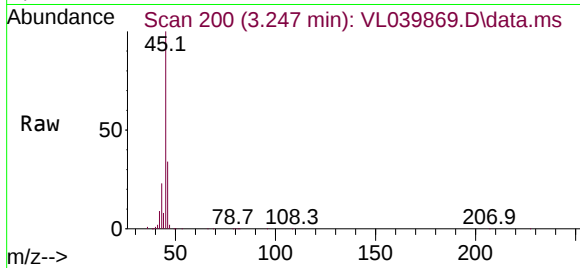




#13
Ethanol
Concen: 66.973 ppbv
RT: 3.247 min Scan# 201
Delta R.T. -0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

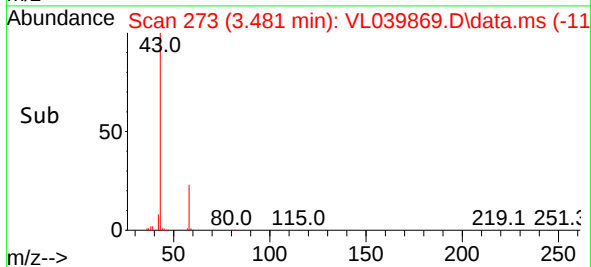
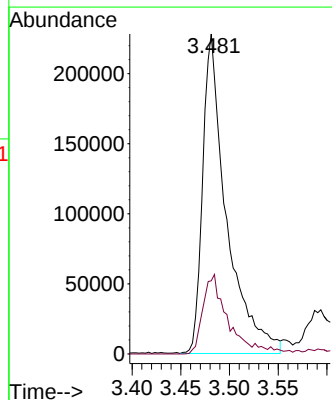
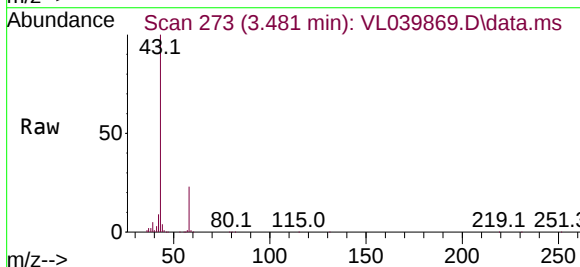
Instrument :
MSVOA_L
ClientSampleId :

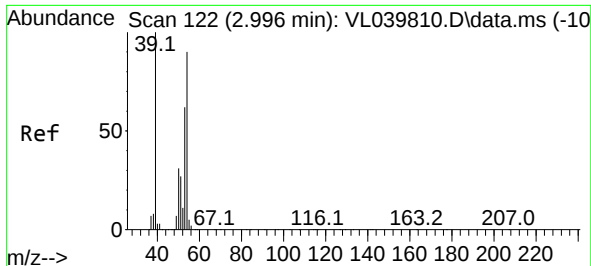
Tgt Ion: 45 Resp: 286985
Ion Ratio Lower Upper
45 100
46 40.4 16.5 65.9



#15
Acetone
Concen: 3.258 ppbv
RT: 3.481 min Scan# 273
Delta R.T. 0.007 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 43 Resp: 387102
Ion Ratio Lower Upper
43 100
58 26.6 23.2 34.8

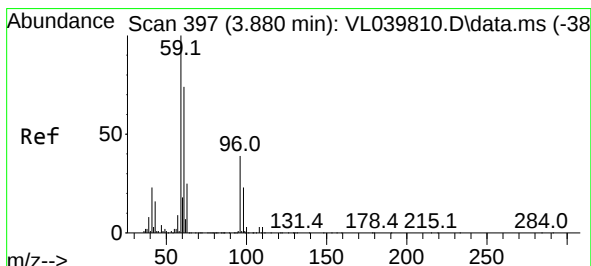
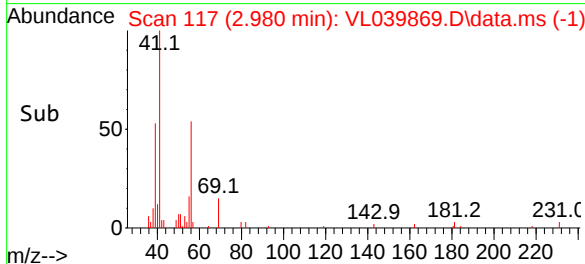
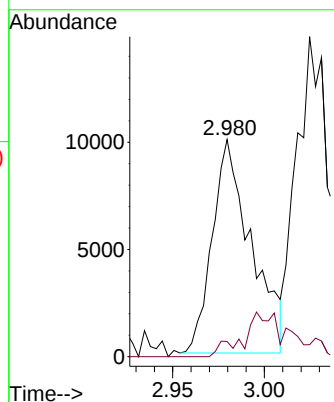
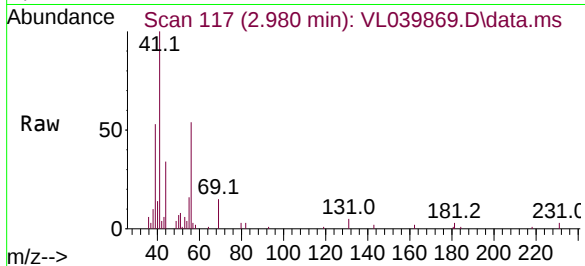




#16
1,3-Butadiene
Concen: 0.266 ppbv
RT: 2.980 min Scan# 11
Delta R.T. -0.016 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

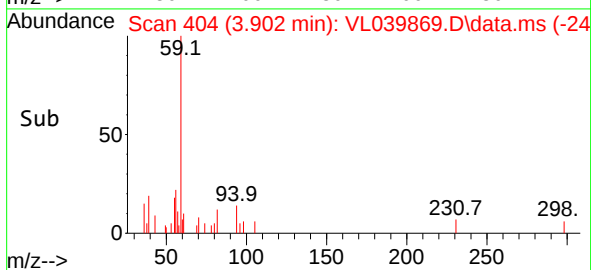
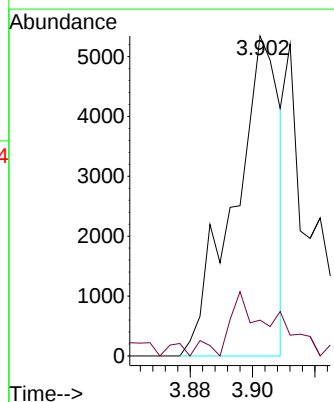
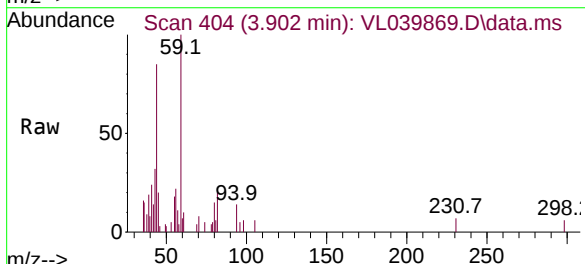
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MSVOA_L
ClientSampleId :

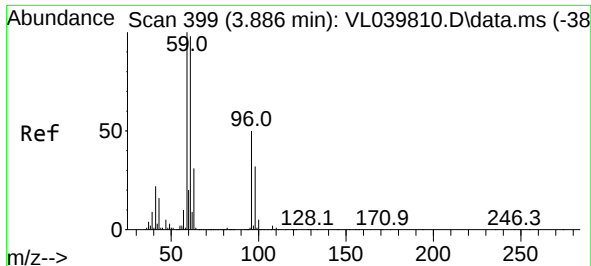
Tgt Ion: 39 Resp: 14674
Ion Ratio Lower Upper
39 100
54 25.5 71.0 106.4#



#17
tert-Butyl alcohol
Concen: 0.048 ppbv
RT: 3.902 min Scan# 404
Delta R.T. 0.023 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 59 Resp: 5400
Ion Ratio Lower Upper
59 100
57 23.5 9.0 13.6#





#18

1,1-Dichloroethene

Concen: 0.030 ppbv

RT: 3.890 min Scan# 40

Delta R.T. 0.003 min

Lab File: VL039869.D

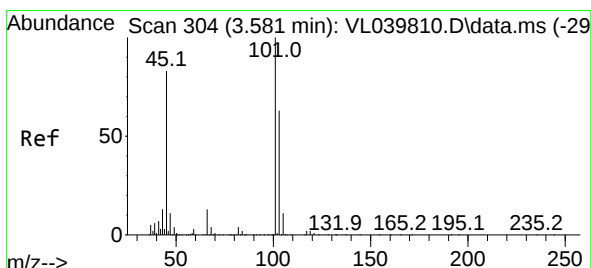
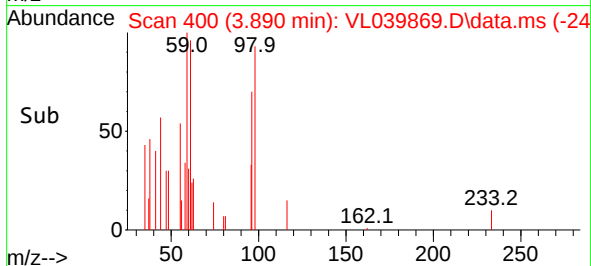
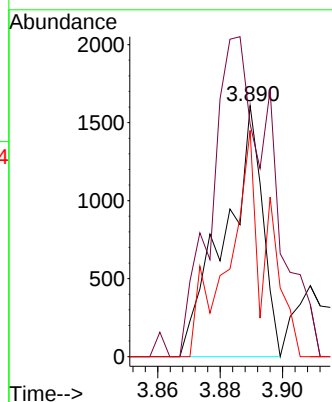
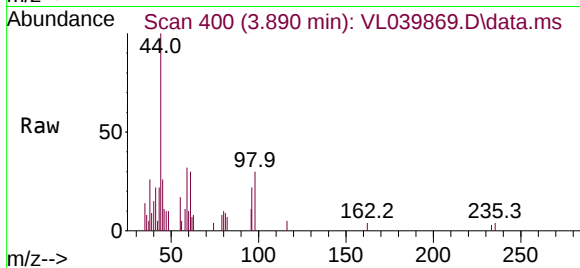
Acq: 10 Nov 2022 18:36

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 96 Resp: 1350
 Ion Ratio Lower Upper
 96 100
 61 92.7 156.9 235.3#
 98 90.1 50.6 75.8#



#19

Isopropyl Alcohol

Concen: 3.400 ppbv

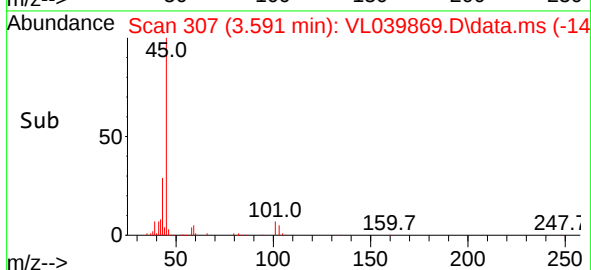
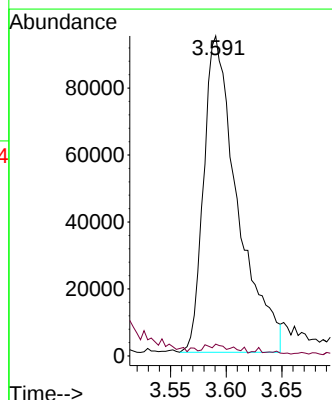
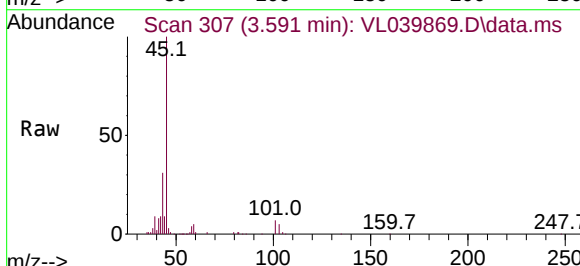
RT: 3.591 min Scan# 307

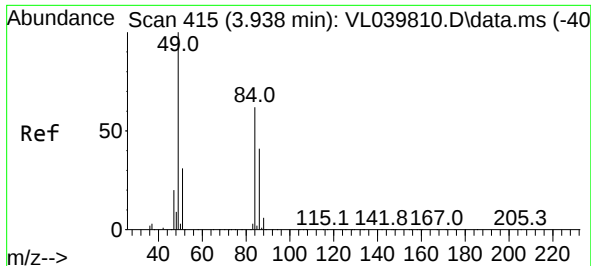
Delta R.T. 0.010 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Tgt Ion: 45 Resp: 199922
 Ion Ratio Lower Upper
 45 100
 58 3.5 38.3 57.5#





#20

Methylene Chloride

Concen: 1.932 ppbv

RT: 3.941 min Scan# 415

Delta R.T. 0.003 min

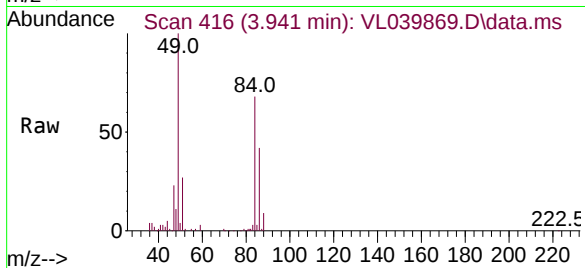
Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 84 Resp: 82133

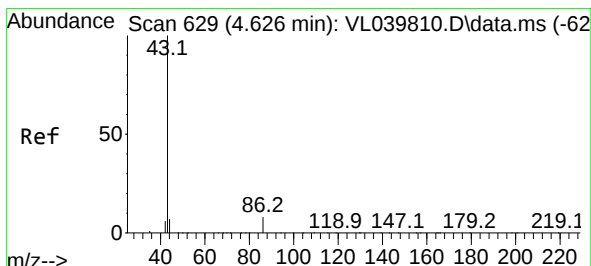
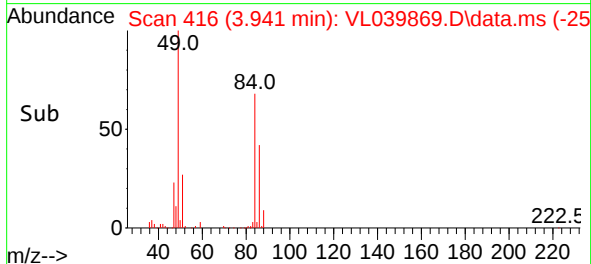
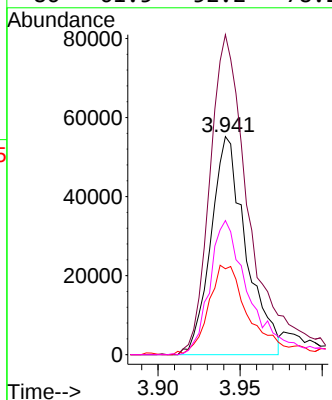
Ion Ratio Lower Upper

84 100

49 146.7 128.6 192.8

51 37.8 40.2 60.4#

86 61.5 52.2 78.2



#23

Vinyl Acetate

Concen: 0.078 ppbv

RT: 4.632 min Scan# 631

Delta R.T. 0.007 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Tgt Ion: 43 Resp: 3671

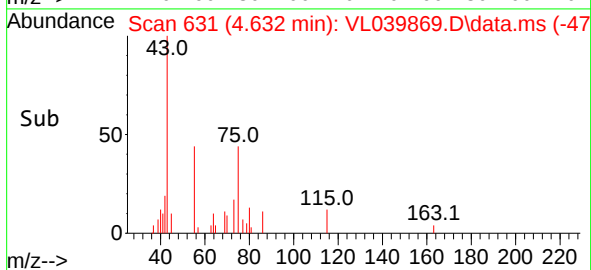
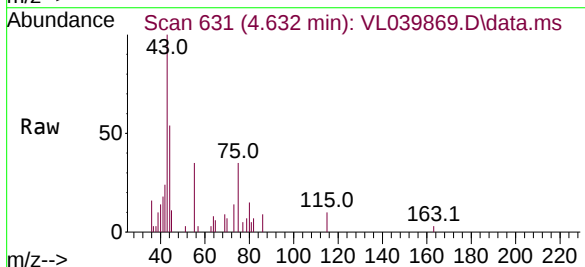
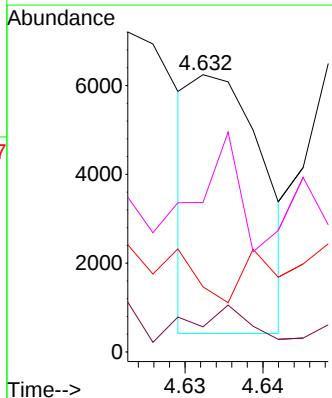
Ion Ratio Lower Upper

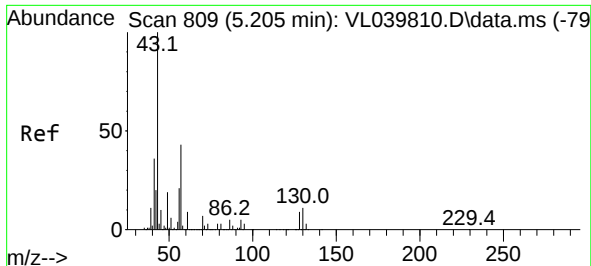
43 100

86 9.8 5.0 7.4#

42 0.0 6.8 10.2#

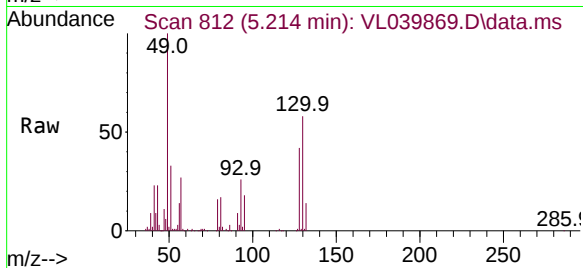
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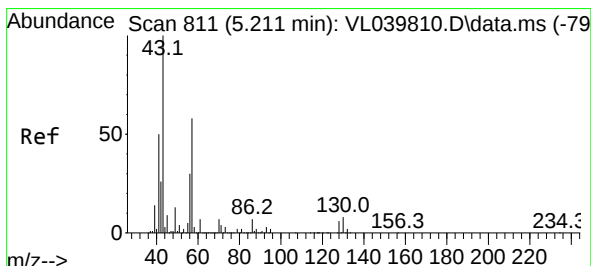
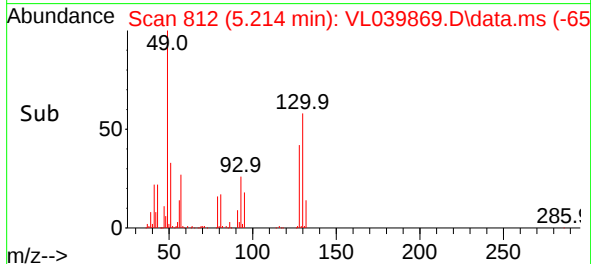
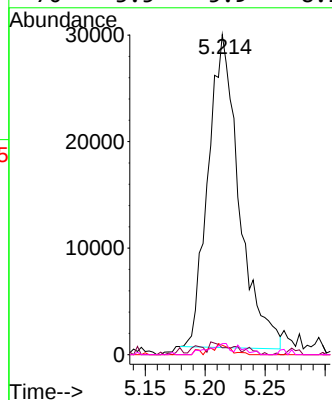


#25
Ethyl Acetate
Concen: 0.216 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.010 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Instrument :
MSVOA_L
ClientSampleId :

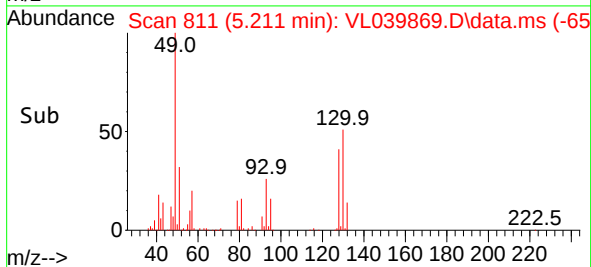
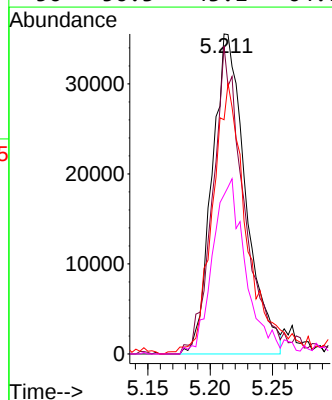
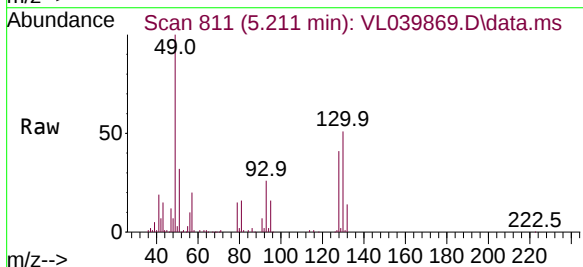


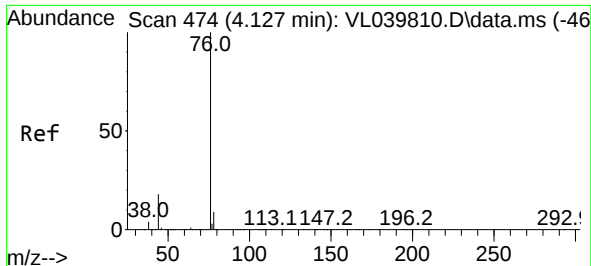
Tgt Ion: 43 Resp: 52856
Ion Ratio Lower Upper
43 100
45 4.9 8.2 12.2#
61 2.4 8.1 12.1#
70 3.5 5.9 8.9#



#26
Hexane
Concen: 0.611 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.000 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 57 Resp: 66661
Ion Ratio Lower Upper
57 100
41 93.8 73.7 110.5
43 87.6 189.8 284.8#
56 56.3 43.1 64.7

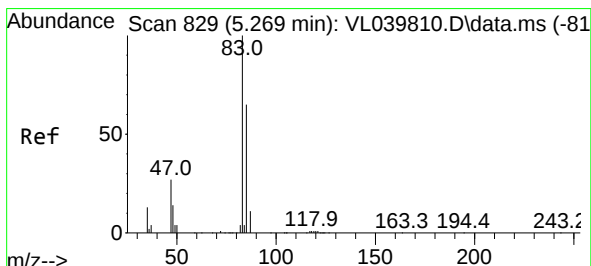
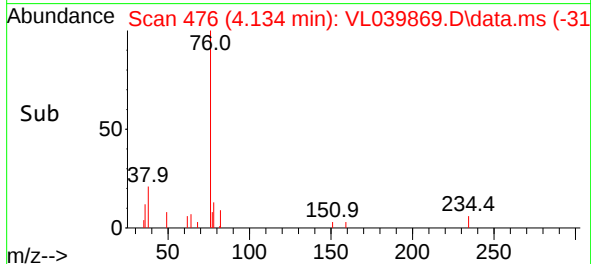
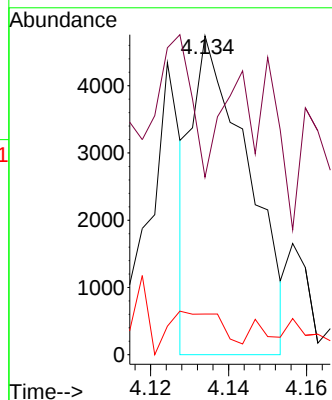
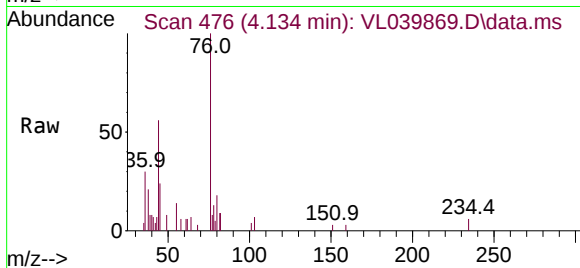




#27
Carbon Disulfide
Concen: 0.041 ppbv
RT: 4.134 min Scan# 41
Delta R.T. 0.007 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

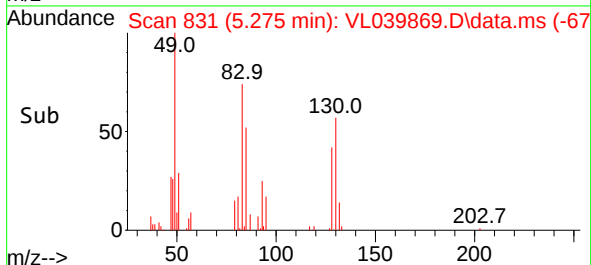
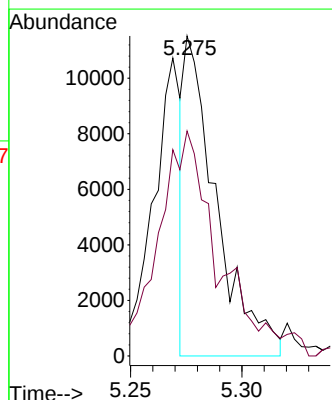
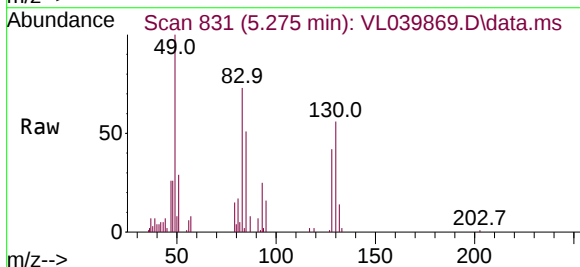
Instrument :
MSVOA_L
ClientSampleId :

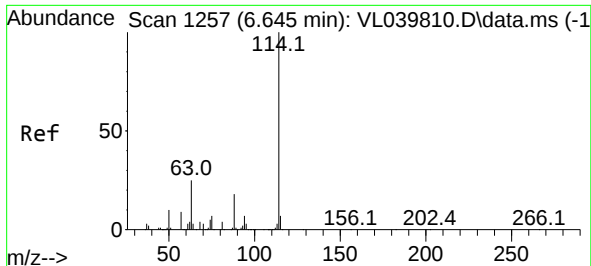
Tgt Ion: 76 Resp: 4721
Ion Ratio Lower Upper
76 100
44 0.0 14.6 22.0#
78 0.0 7.6 11.4#



#29
Chloroform
Concen: 0.075 ppbv
RT: 5.275 min Scan# 831
Delta R.T. 0.007 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 83 Resp: 11537
Ion Ratio Lower Upper
83 100
85 68.3 51.6 77.4

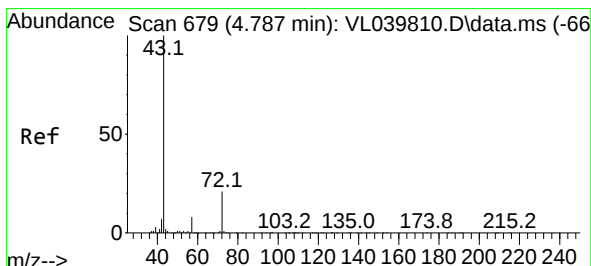
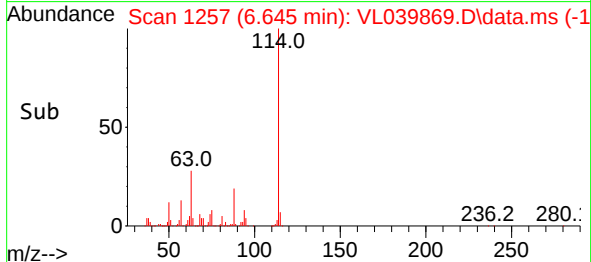
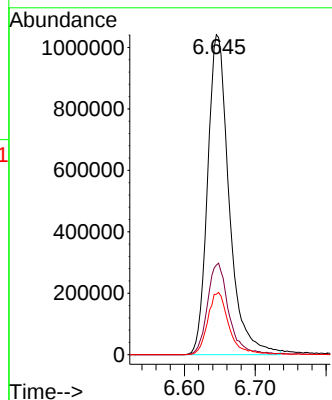
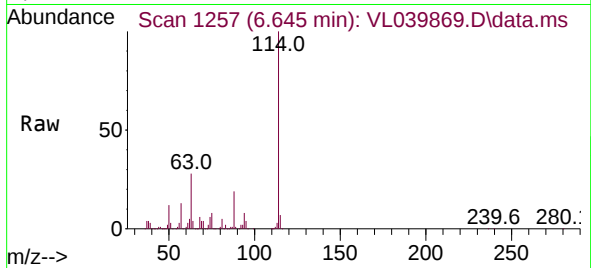




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.645 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

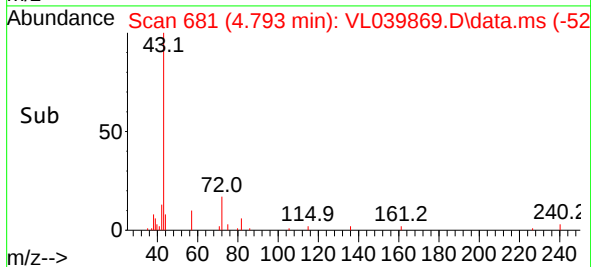
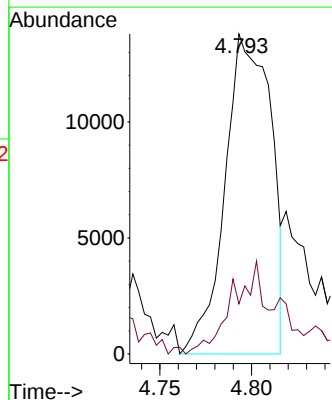
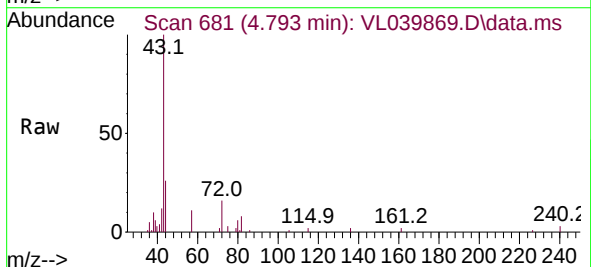
Instrument :
MSVOA_L
ClientSampleId :

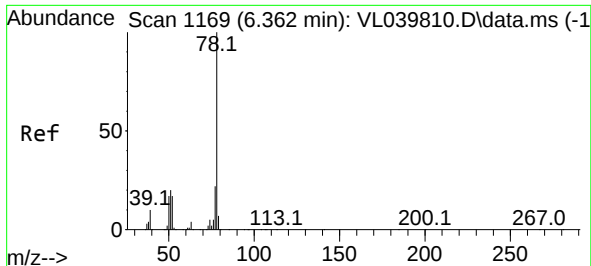
Tgt Ion:114 Resp: 2200483
Ion Ratio Lower Upper
114 100
63 28.8 19.8 29.6
88 19.4 14.4 21.6



#34
2-Butanone
Concen: 0.265 ppbv
RT: 4.793 min Scan# 681
Delta R.T. 0.007 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 43 Resp: 24084
Ion Ratio Lower Upper
43 100
72 31.5 17.5 26.3#





#36

Benzene

Concen: 0.184 ppbv

RT: 6.365 min Scan# 1169

Delta R.T. 0.003 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Instrument :

MSVOA_L

ClientSampleId :

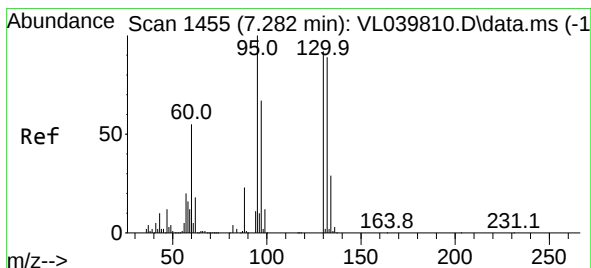
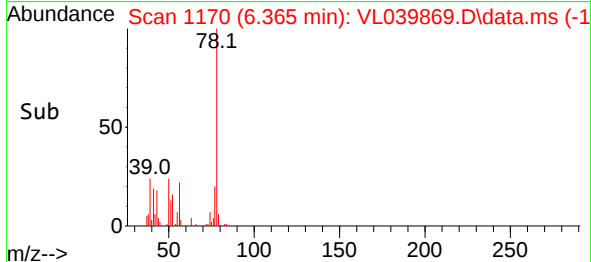
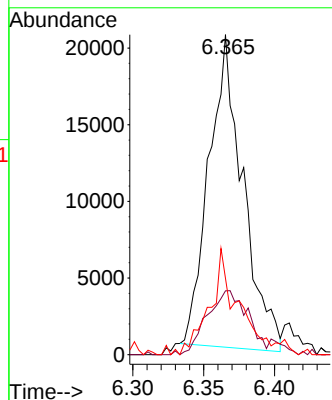
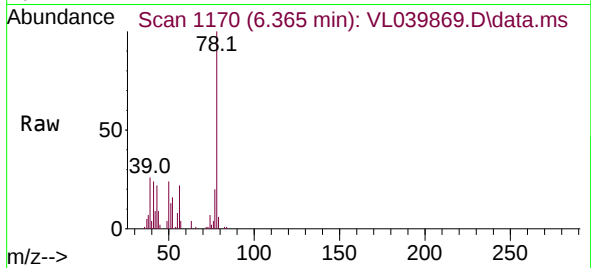
Tgt Ion: 78 Resp: 34087

Ion Ratio Lower Upper

78 100

77 20.7 17.4 26.2

50 24.7 13.9 20.9#



#38

Trichloroethene

Concen: 0.511 ppbv

RT: 7.279 min Scan# 1454

Delta R.T. -0.003 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Tgt Ion:130 Resp: 50801

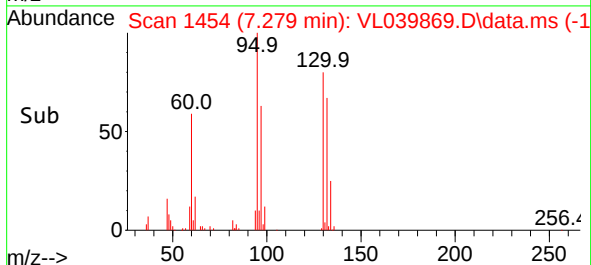
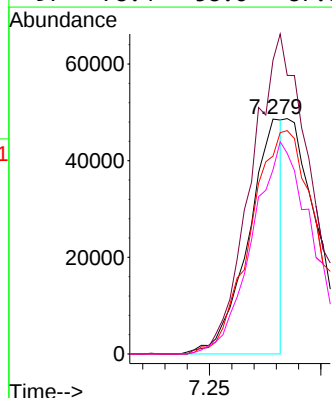
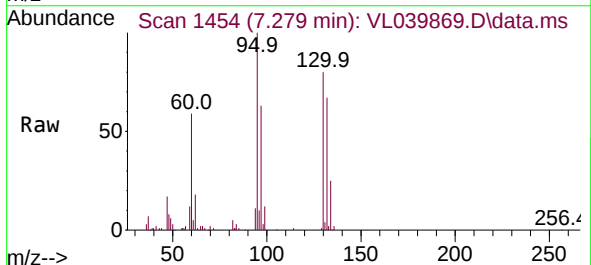
Ion Ratio Lower Upper

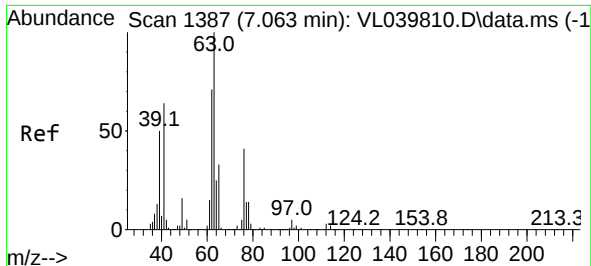
130 100

95 125.1 87.4 131.2

132 84.2 77.7 116.5

97 78.4 58.6 87.8





#39

1,2-Dichloropropane

Concen: 8.541 ppbv

RT: 6.648 min Scan# 11

Delta R.T. -0.415 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Instrument :

MSVOA_L

ClientSampleId :

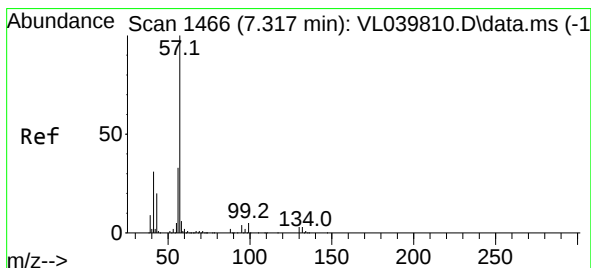
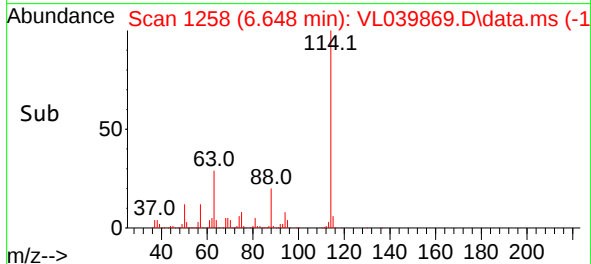
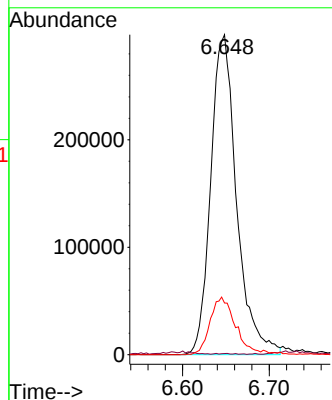
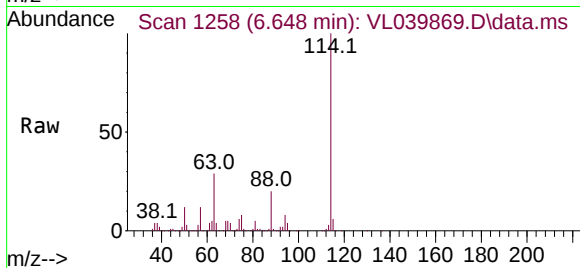
Tgt Ion: 63 Resp: 617695

Ion Ratio Lower Upper

63 100

41 0.0 51.0 76.4#

62 16.1 56.6 85.0#



#44

2,2,4-Trimethylpentane

Concen: 0.107 ppbv

RT: 7.320 min Scan# 1467

Delta R.T. 0.003 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

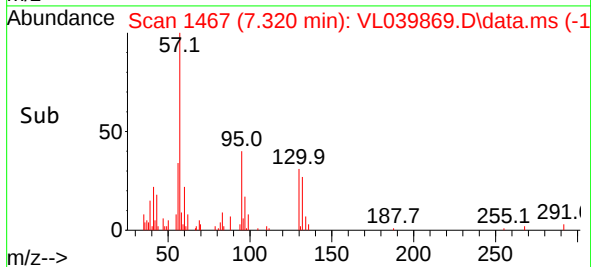
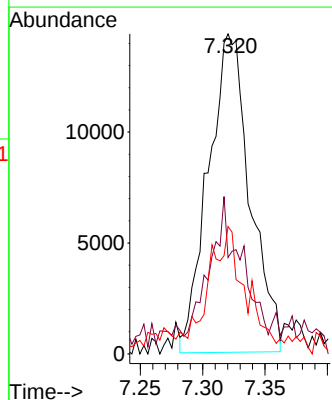
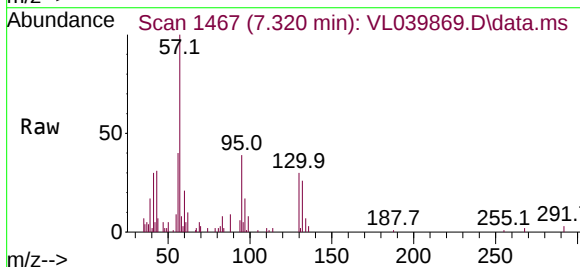
Tgt Ion: 57 Resp: 33399

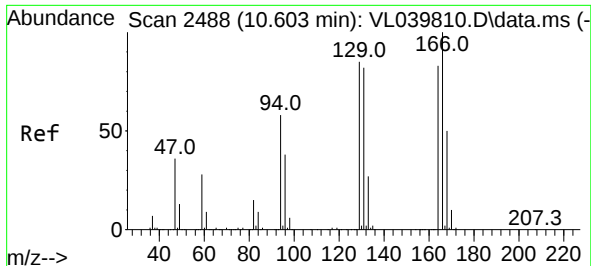
Ion Ratio Lower Upper

57 100

41 49.1 24.6 36.8#

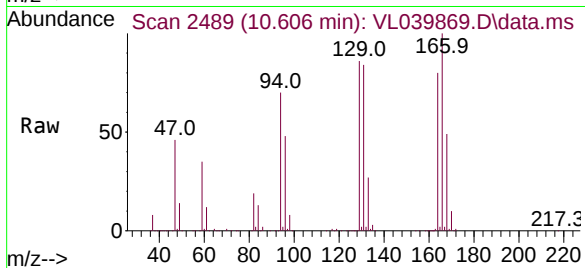
56 39.3 25.4 38.0#





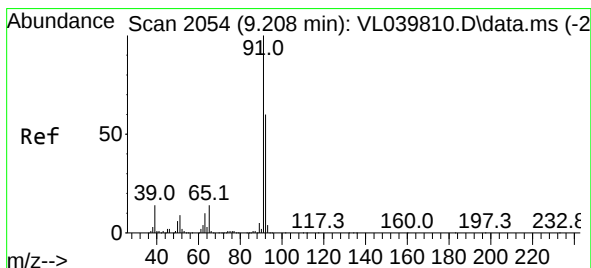
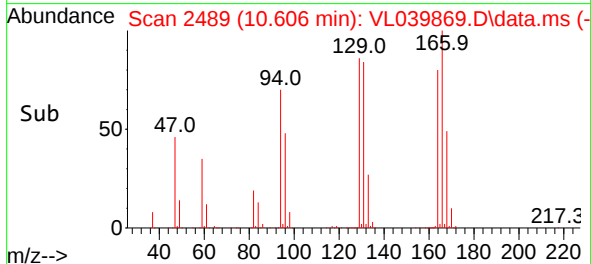
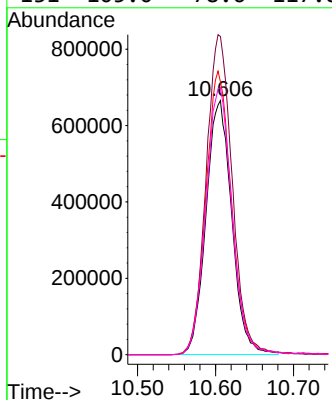
#52
Tetrachloroethene
Concen: 21.961 ppbv
RT: 10.606 min Scan# 2488
Delta R.T. 0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion:164 Resp: 1527260

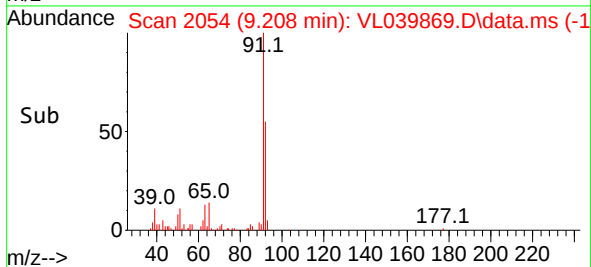
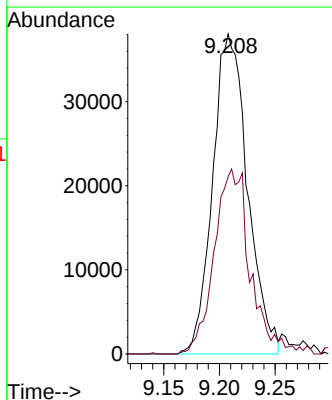
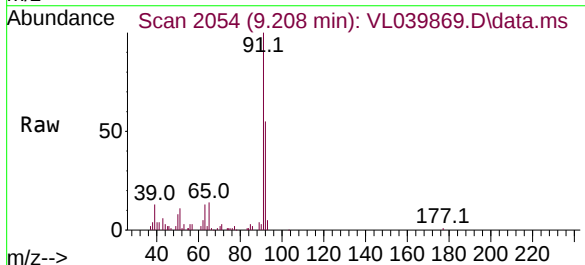
Ion	Ratio	Lower	Upper
164	100		
166	125.2	96.0	144.0
129	107.3	81.4	122.2
131	105.0	78.6	117.8

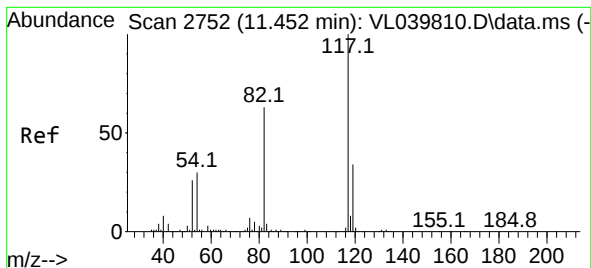


#53
Toluene
Concen: 0.389 ppbv
RT: 9.208 min Scan# 2054
Delta R.T. 0.000 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 91 Resp: 82850

Ion	Ratio	Lower	Upper
91	100		
92	59.8	49.6	74.4

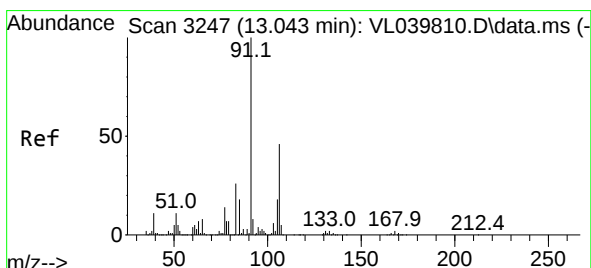
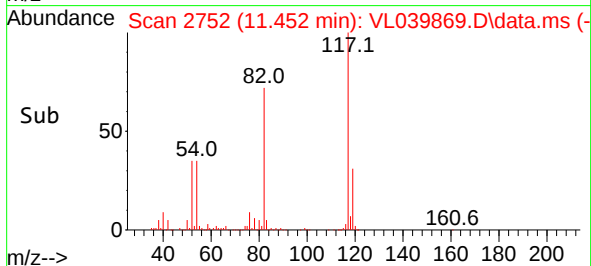
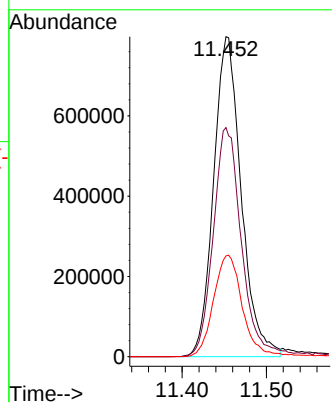
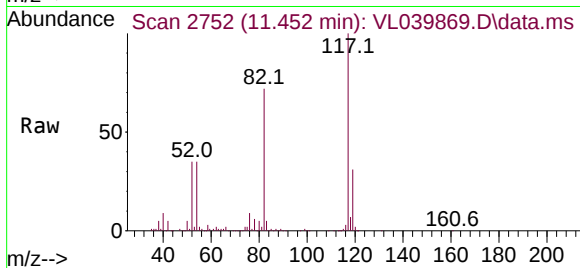




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.452 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

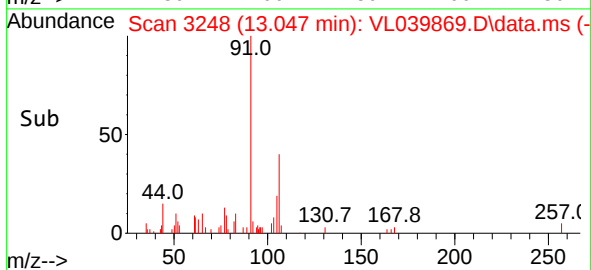
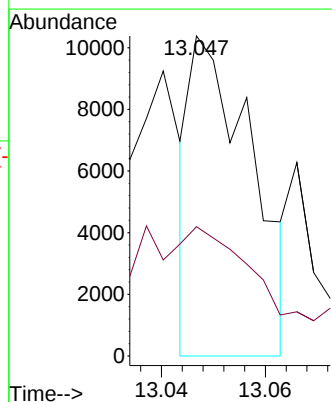
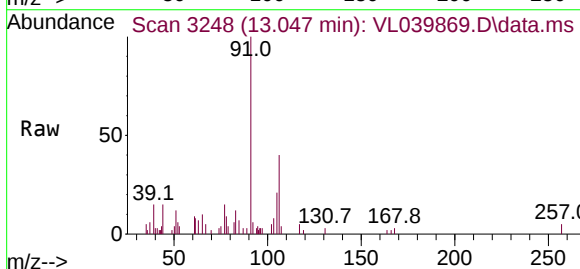
Instrument :
MSVOA_L
ClientSampleId :

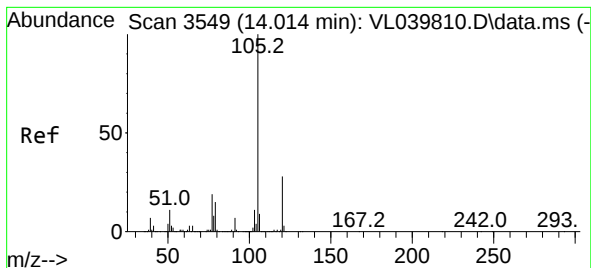
Tgt Ion:117 Resp: 1814498
Ion Ratio Lower Upper
117 100
82 74.8 51.0 76.6
119 33.9 24.7 37.1



#60
o-Xylene
Concen: 0.044 ppbv
RT: 13.047 min Scan# 3248
Delta R.T. 0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 91 Resp: 8487
Ion Ratio Lower Upper
91 100
106 0.0 23.6 70.8#





#62

Isopropylbenzene

Concen: 0.031 ppbv

RT: 14.021 min Scan# 3551

Delta R.T. 0.007 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Instrument :

MSVOA_L

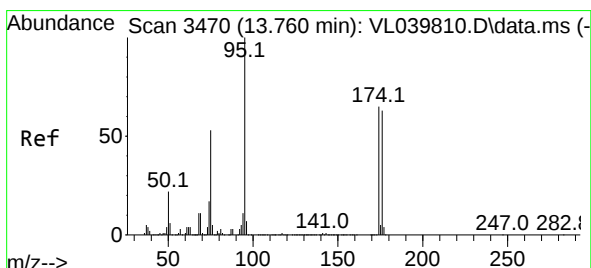
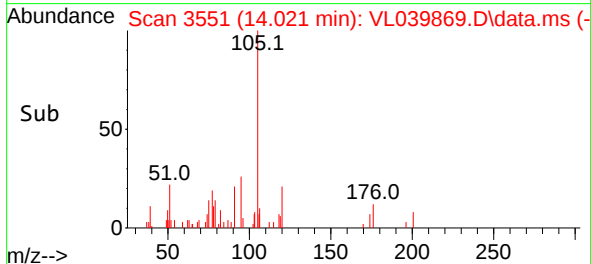
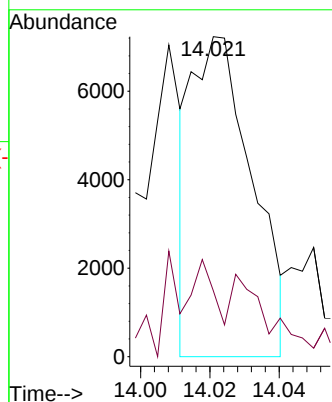
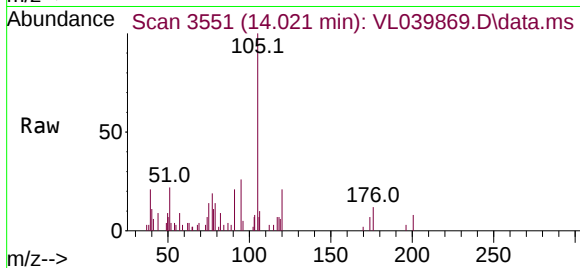
ClientSampleId :

Tgt Ion:105 Resp: 8804

Ion Ratio Lower Upper

105 100

120 0.0 21.7 32.5#



#68

1-Bromo-4-Fluorobenzene

Concen: 10.650 ppbv

RT: 13.761 min Scan# 3470

Delta R.T. 0.000 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

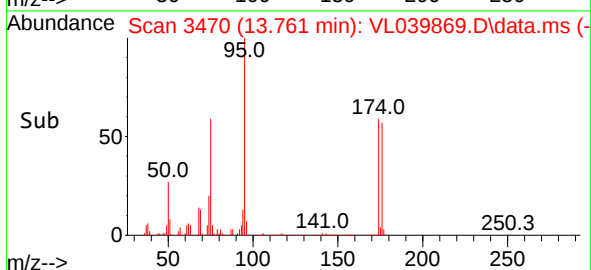
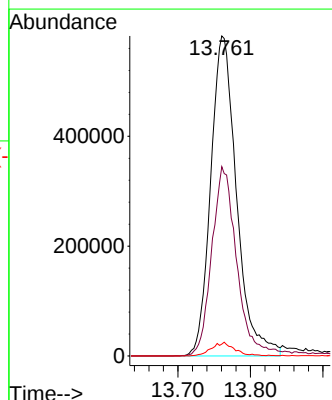
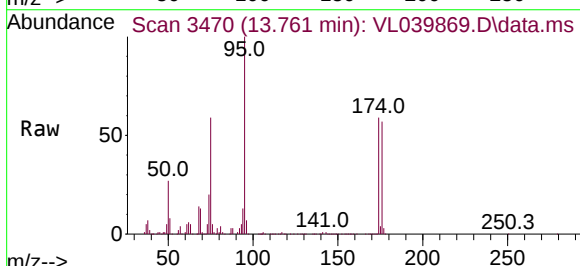
Tgt Ion: 95 Resp: 1446454

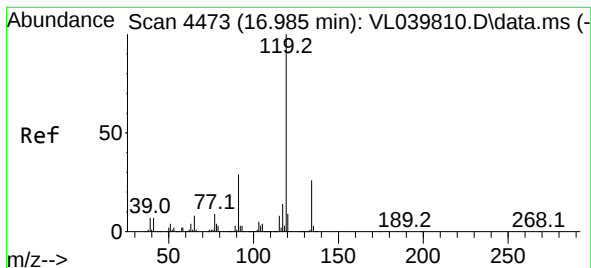
Ion Ratio Lower Upper

95 100

174 59.6 53.4 80.0

175 3.9 4.1 6.1#





#69

p-Isopropyltoluene

Concen: 0.051 ppbv

RT: 16.989 min Scan# 4473

Delta R.T. 0.003 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Instrument :

MSVOA_L

ClientSampleId :

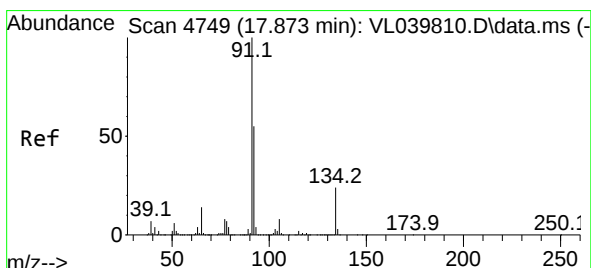
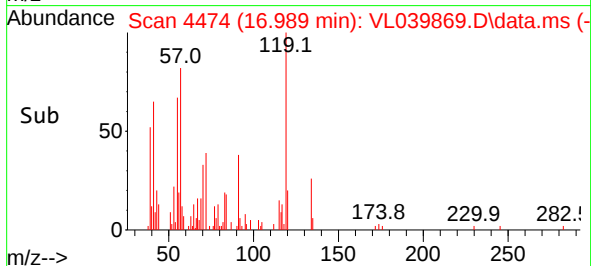
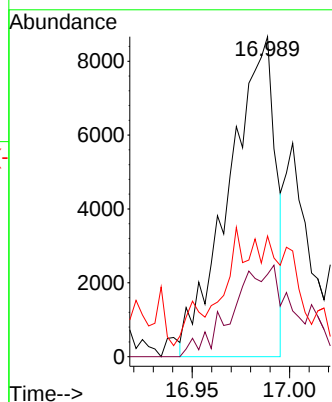
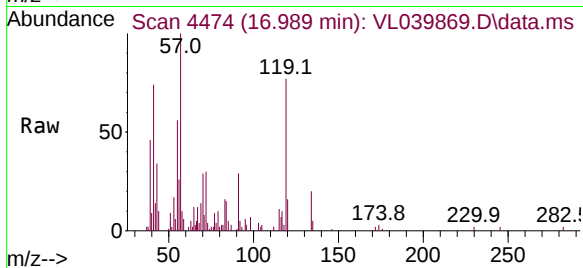
Tgt Ion:119 Resp: 14293

Ion Ratio Lower Upper

119 100

134 42.1 21.0 31.6#

91 68.9 22.8 34.2#



#70

n-Butylbenzene

Concen: 0.041 ppbv

RT: 17.876 min Scan# 4750

Delta R.T. 0.003 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

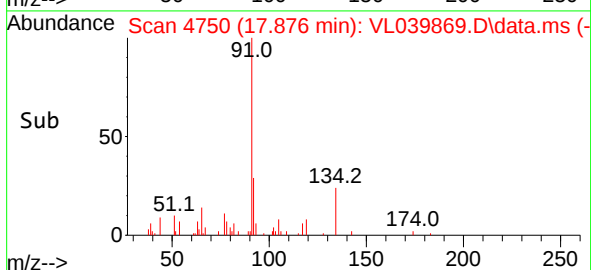
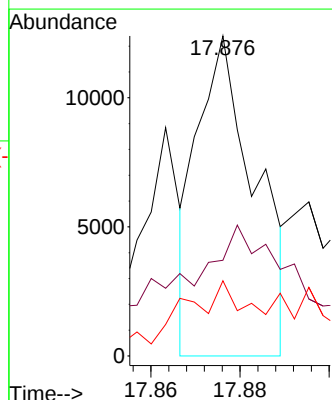
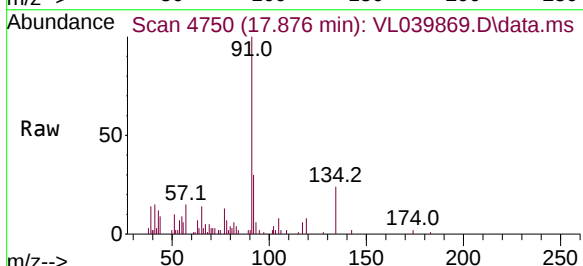
Tgt Ion: 91 Resp: 11193

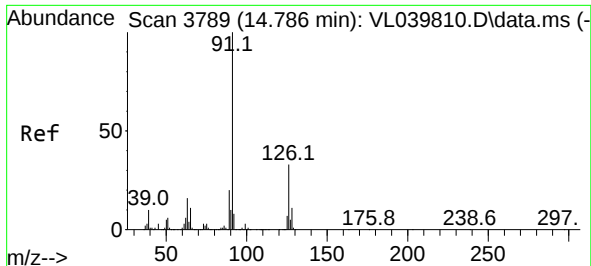
Ion Ratio Lower Upper

91 100

92 110.0 44.1 66.1#

134 60.9 19.0 28.6#

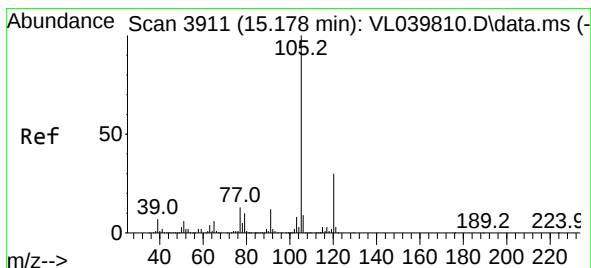
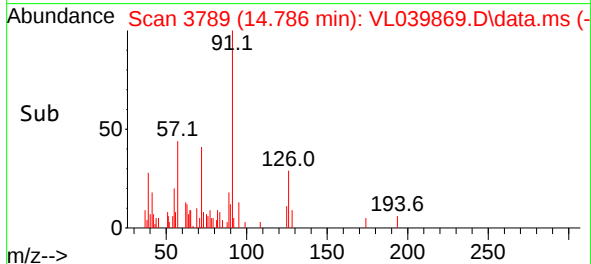
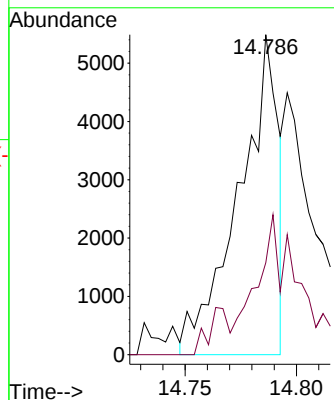
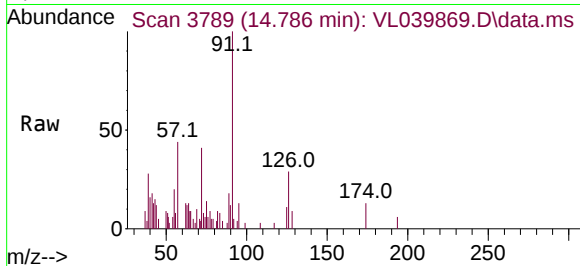




#71
2-Chlorotoluene
Concen: 0.032 ppbv
RT: 14.786 min Scan# 31
Delta R.T. 0.000 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

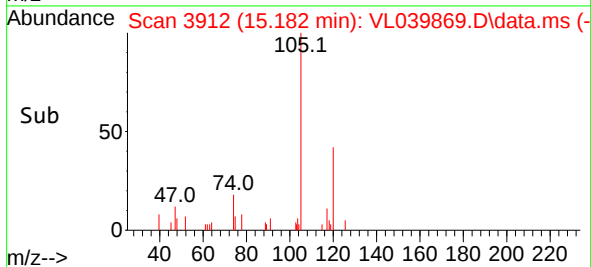
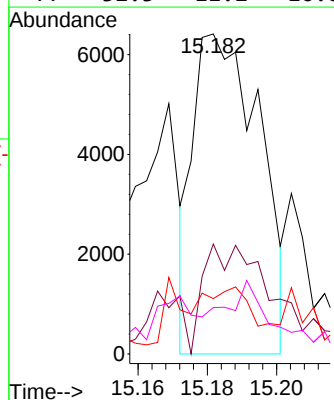
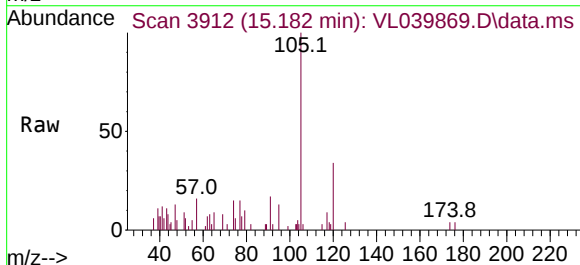
Instrument :
MSVOA_L
ClientSampleId :

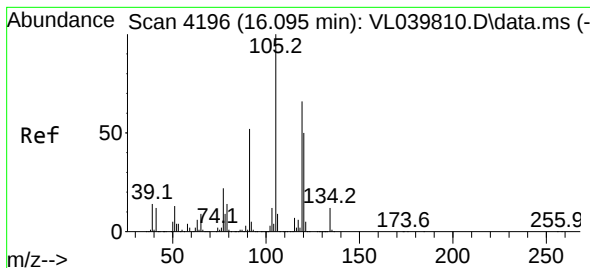
Tgt Ion: 91 Resp: 6714
Ion Ratio Lower Upper
91 100
126 58.0 12.9 51.5#



#72
4-Ethyltoluene
Concen: 0.039 ppbv
RT: 15.182 min Scan# 3912
Delta R.T. 0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion: 105 Resp: 8535
Ion Ratio Lower Upper
105 100
120 52.0 26.0 39.0#
91 0.0 10.5 15.7#
77 32.3 11.2 16.8#





#74

1,2,4-Trimethylbenzene

Concen: 0.084 ppbv

RT: 16.088 min Scan# 4196

Delta R.T. -0.006 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:105 Resp: 17187

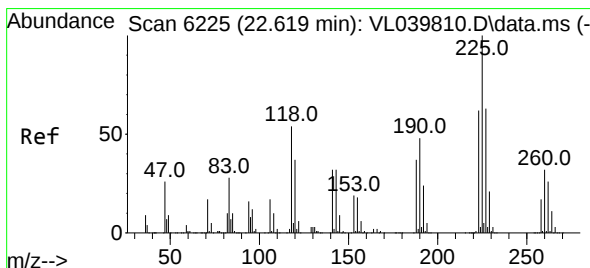
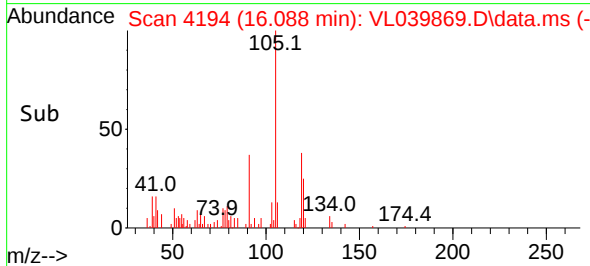
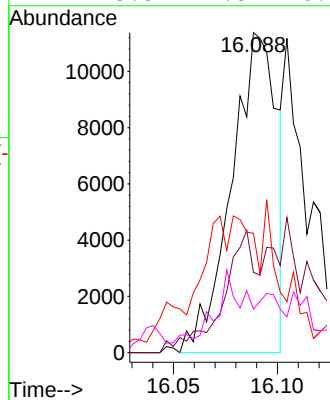
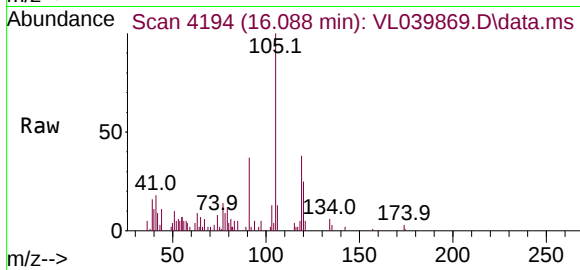
Ion Ratio Lower Upper

105 100

120 25.1 40.2 60.4#

91 23.6 42.6 64.0#

77 5.8 17.8 26.8#



#78

Hexachloro-1,3-Butadiene

Concen: 0.042 ppbv

RT: 22.616 min Scan# 6224

Delta R.T. -0.003 min

Lab File: VL039869.D

Acq: 10 Nov 2022 18:36

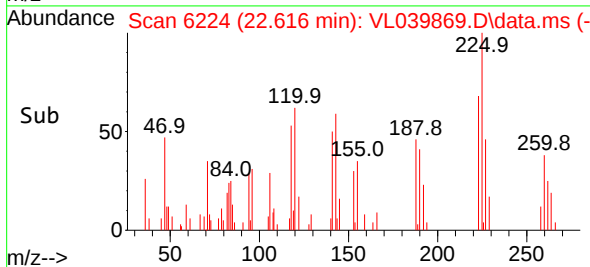
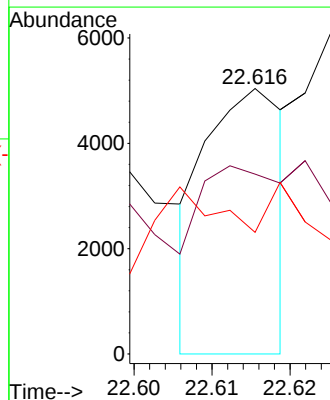
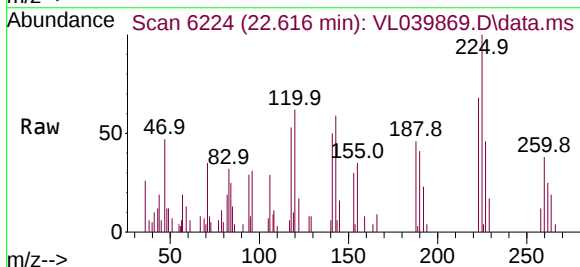
Tgt Ion:225 Resp: 3537

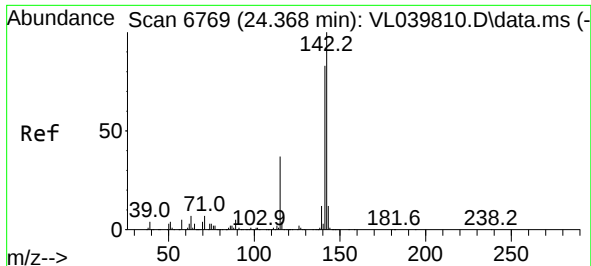
Ion Ratio Lower Upper

225 100

223 0.0 50.6 75.8#

227 0.0 51.6 77.4#

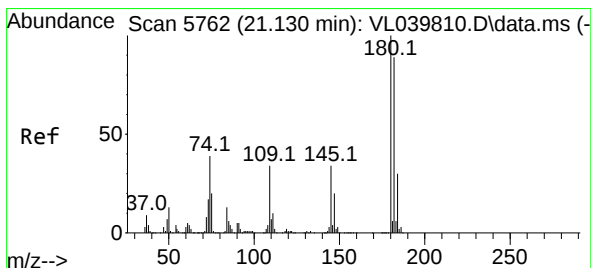
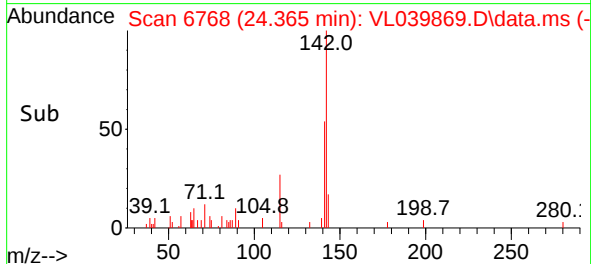
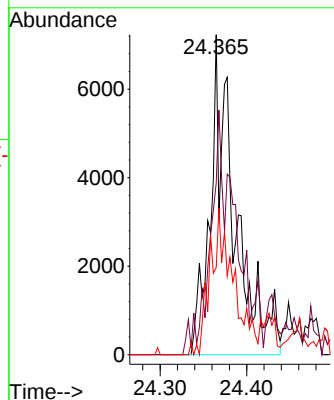
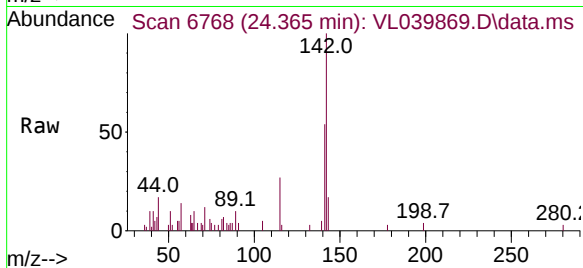




#80
Naphthalene, 2-methyl-
Concen: 0.221 ppbv
RT: 24.365 min Scan# 61
Delta R.T. -0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Instrument :
MSVOA_L
ClientSampleId :

Tgt Ion:142 Resp: 13993
Ion Ratio Lower Upper
142 100
141 80.4 65.1 97.7
115 50.4 29.1 43.7#



#81
1,2,4-Trichlorobenzene
Concen: 0.064 ppbv
RT: 21.127 min Scan# 5761
Delta R.T. -0.003 min
Lab File: VL039869.D
Acq: 10 Nov 2022 18:36

Tgt Ion:180 Resp: 5344
Ion Ratio Lower Upper
180 100
182 0.0 78.1 117.1#
184 0.0 24.5 36.7#

