

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL102522\
 Data File : VL039802.D
 Acq On : 26 Oct 2022 00:41
 Operator : SY/AP
 Sample : N5227-10
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 J

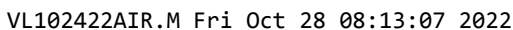
Quant Time: Oct 28 08:12:57 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL102422AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Mon Oct 24 20:00:55 2022
 Response via : Initial Calibration

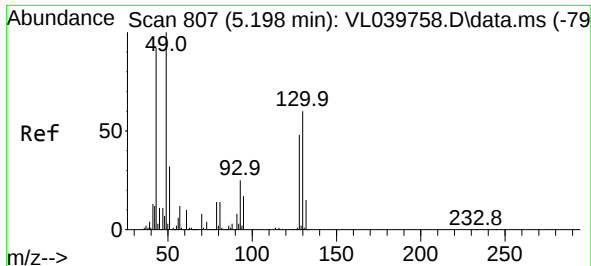
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.205	49	838290	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.664	114	2261995	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	1944458	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.777	95	1386830	10.026	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 100.300%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.751	85	27216	0.310	ppbv	91
3) Chlorodifluoromethane	2.693	51	350836	3.484	ppbv #	65
4) Chloromethane	2.835	50	34125	0.541	ppbv	97
6) Bromomethane	3.144	94	776	0.041	ppbv #	18
9) Propene	2.716	41	187500	4.334	ppbv	93
10) Heptane	7.587	43	13567	0.131	ppbv	90
11) Trichlorofluoromethane	3.581	101	29379	0.240	ppbv	88
12) 1,1,2-Trichlorotrifluo...	4.079	101	3112	0.033	ppbv #	14
13) Ethanol	3.269	45	11000	3.540	ppbv #	37
15) Acetone	3.491	43	687743	6.869	ppbv	98
16) 1,3-Butadiene	2.989	39	118512	2.395	ppbv #	36
19) Isopropyl Alcohol	3.613	45	20044	0.427	ppbv #	89
20) Methylene Chloride	3.954	84	74245	1.949	ppbv	87
21) Allyl Chloride	4.005	41	2928	0.045	ppbv #	1
23) Vinyl Acetate	4.639	43	13268	0.344	ppbv #	81
25) Ethyl Acetate	5.230	43	61615	0.315	ppbv #	76
26) Hexane	5.227	57	74831	0.919	ppbv #	35
27) Carbon Disulfide	4.144	76	27816	0.288	ppbv #	75
30) Cyclohexane	6.613	84	4047	0.061	ppbv #	10
34) 2-Butanone	4.819	43	62790	0.590	ppbv #	88
35) Carbon Tetrachloride	6.500	117	4338	0.034	ppbv #	37
36) Benzene	6.378	78	36643	0.210	ppbv	94
39) 1,2-Dichloropropane	6.664	63	548031	8.166	ppbv #	26
53) Toluene	9.224	91	78001	0.427	ppbv	98
58) Ethyl Benzene	12.092	91	6952	0.031	ppbv	89
59) m/p-Xylene	12.378	91	12699	0.064	ppbv #	31
60) o-Xylene	13.063	91	18614	0.099	ppbv #	57
72) 4-Ethyltoluene	15.201	105	10050	0.047	ppbv #	47
73) 1,3,5-Trimethylbenzene	15.362	105	7162	0.037	ppbv #	33
74) 1,2,4-Trimethylbenzene	16.111	105	31474	0.144	ppbv #	66
75) 1,3-Dichlorobenzene	16.336	146	4122	0.031	ppbv #	1

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

Quant Time: Oct 28 08:12:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL102422AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Mon Oct 24 20:00:55 2022
Response via : Initial Calibration

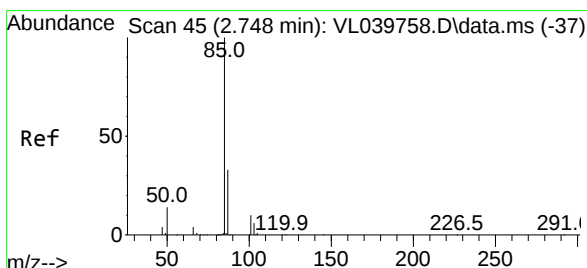
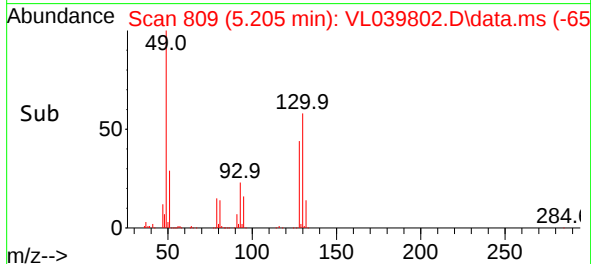
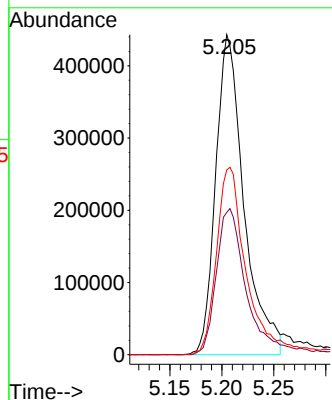
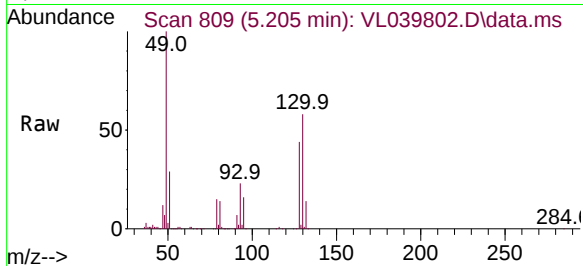




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.205 min Scan# 80
Delta R.T. 0.007 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

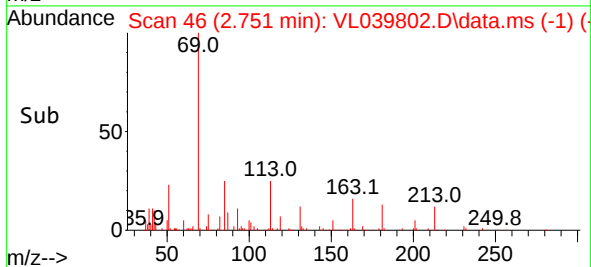
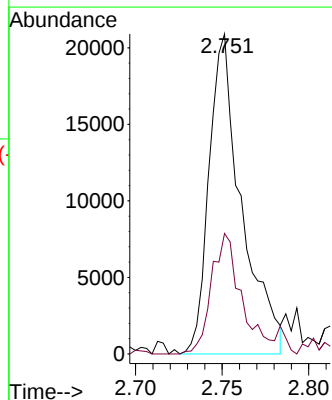
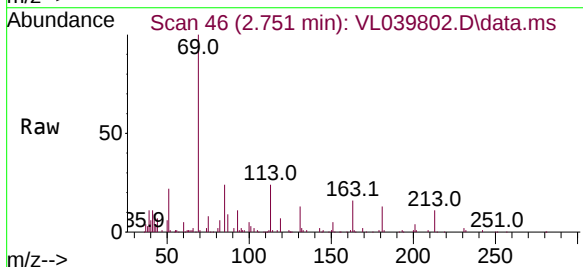
Instrument :
MSVOA_L
ClientSampleId :
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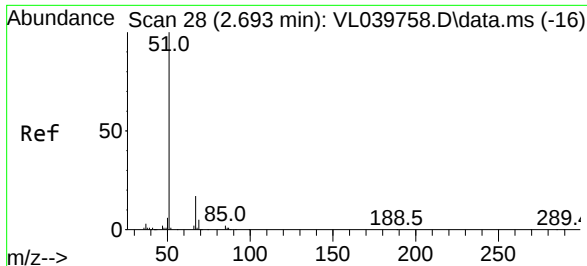
Tgt Ion: 49 Resp: 838290
Ion Ratio Lower Upper
49 100
128 50.8 24.6 74.0
130 65.2 31.8 95.3



#2
Dichlorodifluoromethane
Concen: 0.310 ppbv
RT: 2.751 min Scan# 46
Delta R.T. 0.003 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 85 Resp: 27216
Ion Ratio Lower Upper
85 100
87 37.6 26.1 39.1

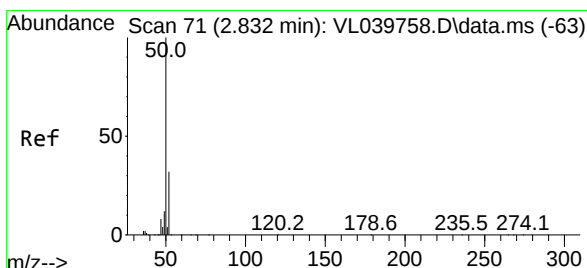
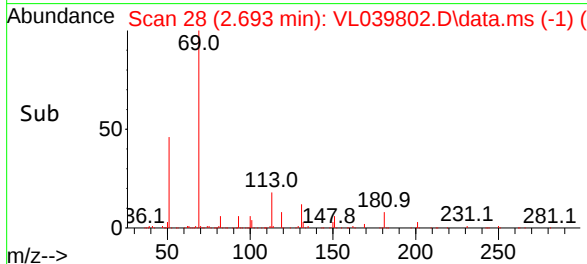
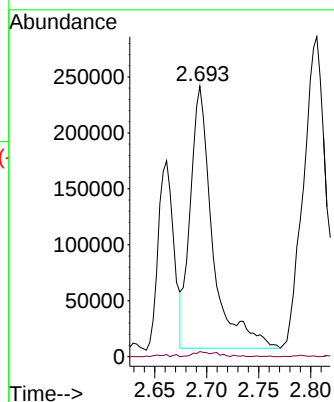
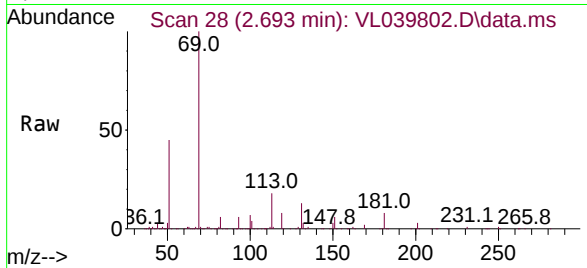




#3
Chlorodifluoromethane
Concen: 3.484 ppbv
RT: 2.693 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

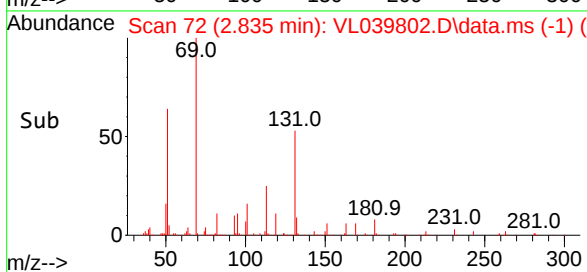
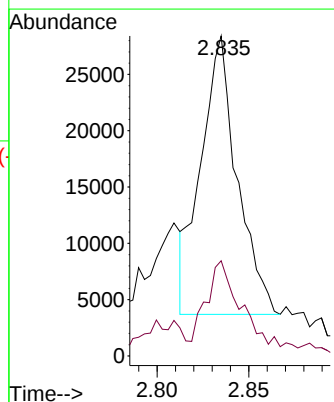
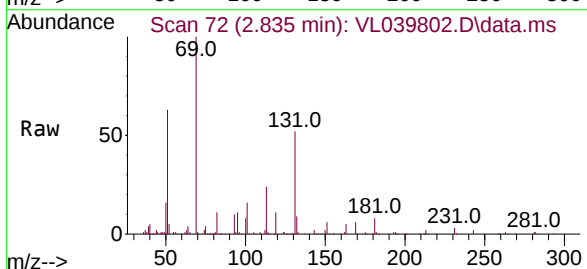
Instrument :
MSVOA_L
ClientSampleId :
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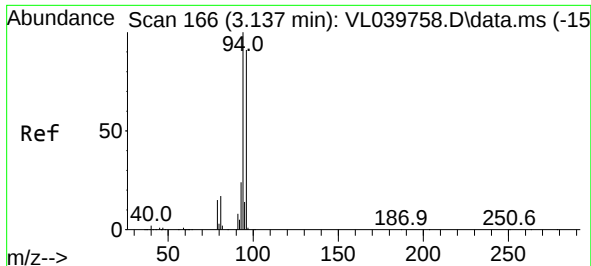
Tgt Ion: 51 Resp: 350836
Ion Ratio Lower Upper
51 100
67 2.1 14.2 21.2#



#4
Chloromethane
Concen: 0.541 ppbv
RT: 2.835 min Scan# 72
Delta R.T. 0.003 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 50 Resp: 34125
Ion Ratio Lower Upper
50 100
52 30.9 25.9 38.9

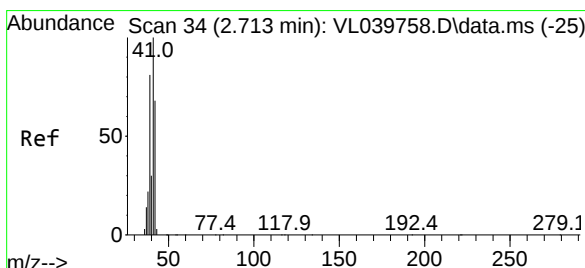
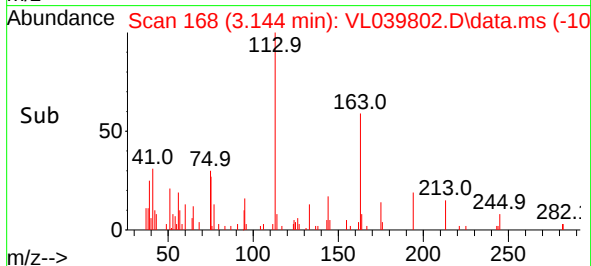
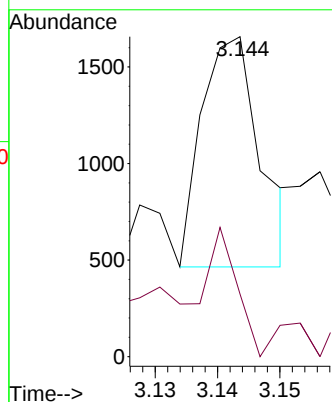
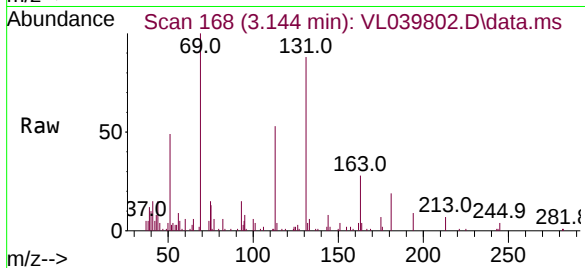




#6
Bromomethane
Concen: 0.041 ppbv
RT: 3.144 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

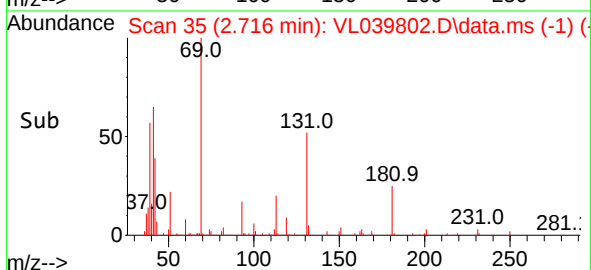
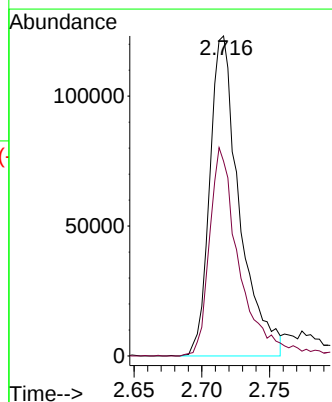
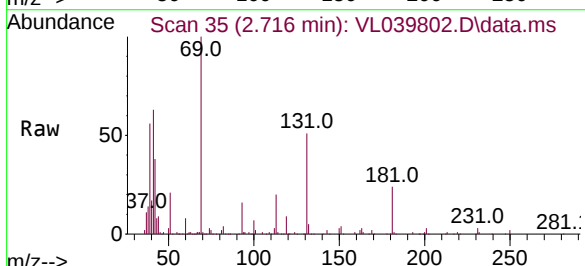
Instrument :
MSVOA_L
ClientSampleId :
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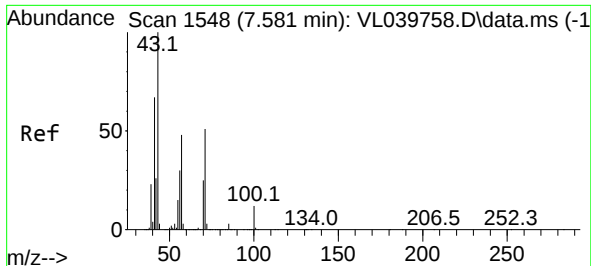
Tgt Ion: 94 Resp: 776
Ion Ratio Lower Upper
94 100
96 13.6 73.0 109.6#



#9
Propene
Concen: 4.334 ppbv
RT: 2.716 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 41 Resp: 187500
Ion Ratio Lower Upper
41 100
42 67.0 58.0 87.0

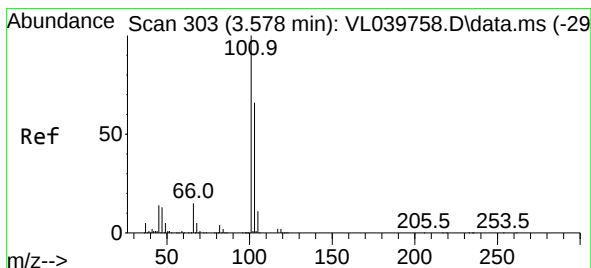
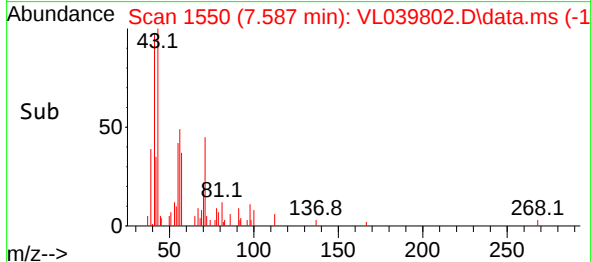
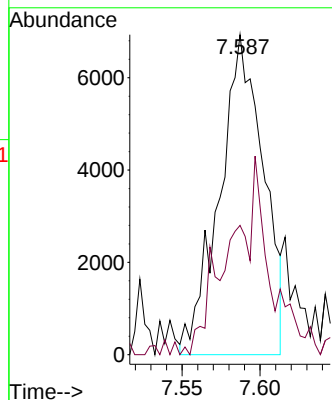
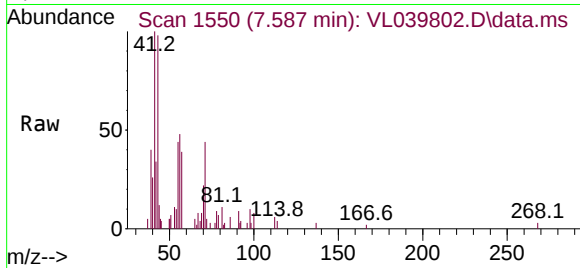




#10
Heptane
Concen: 0.131 ppbv
RT: 7.587 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

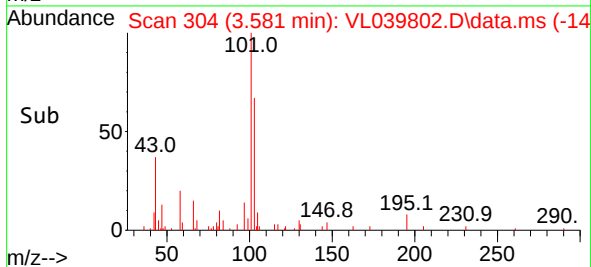
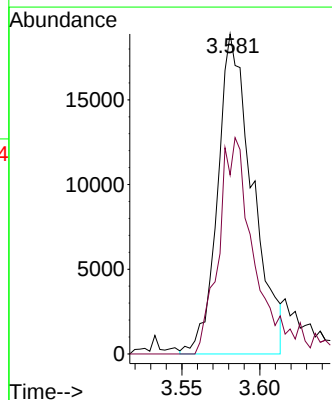
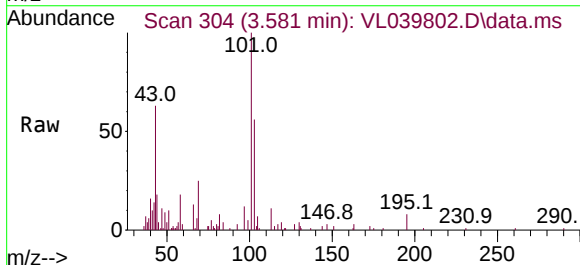
Instrument :
MSVOA_L
ClientSampleId :
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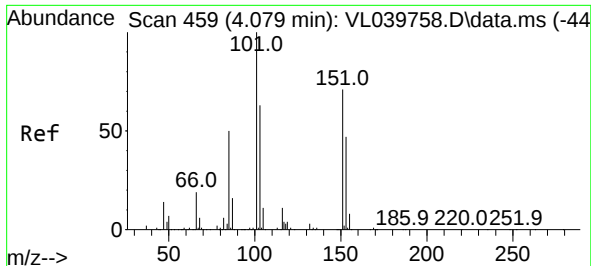
Tgt Ion: 43 Resp: 13567
Ion Ratio Lower Upper
43 100
57 57.1 40.0 60.0



#11
Trichlorofluoromethane
Concen: 0.240 ppbv
RT: 3.581 min Scan# 304
Delta R.T. 0.003 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 101 Resp: 29379
Ion Ratio Lower Upper
101 100
103 56.5 52.7 79.1

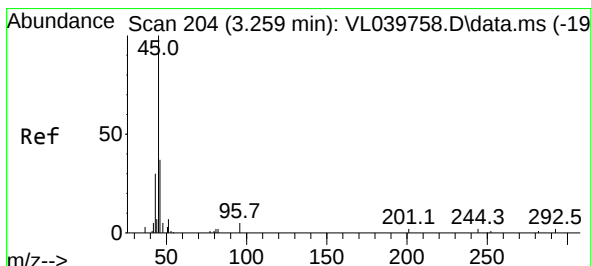
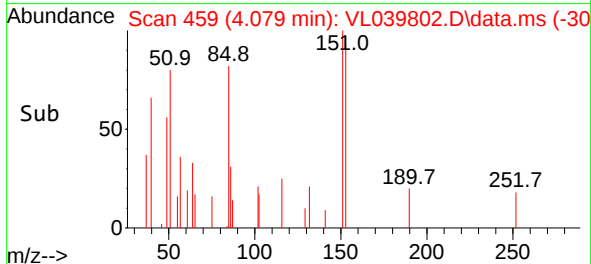
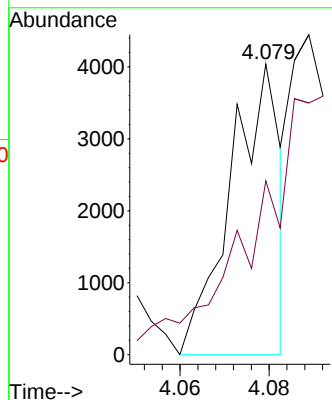
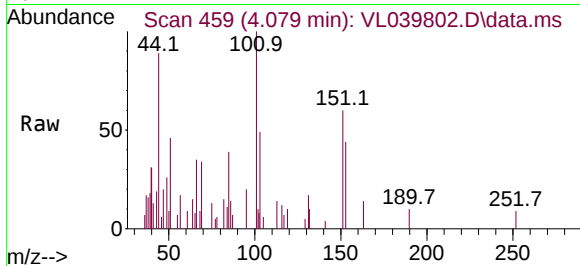




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.033 ppbv
RT: 4.079 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

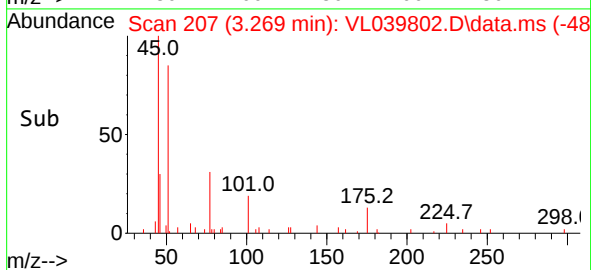
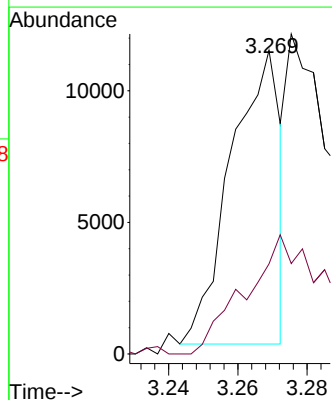
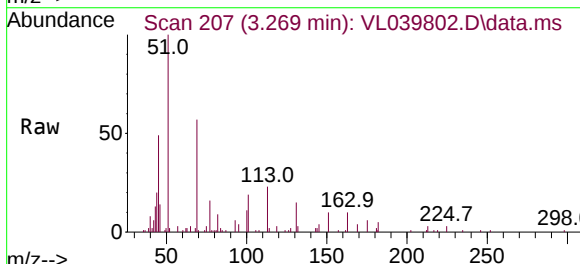
Instrument :
MSVOA_L
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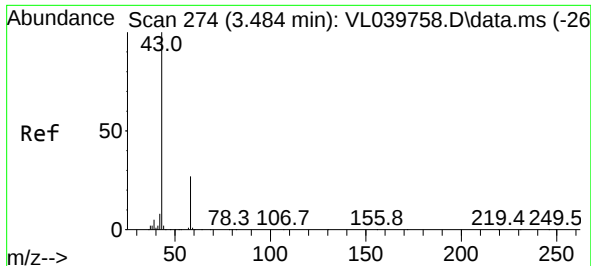
Tgt Ion:101 Resp: 3112
Ion Ratio Lower Upper
101 100
151 0.0 56.6 84.8#



#13
Ethanol
Concen: 3.540 ppbv
RT: 3.269 min Scan# 207
Delta R.T. 0.010 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 45 Resp: 11000
Ion Ratio Lower Upper
45 100
46 0.0 15.3 61.3#

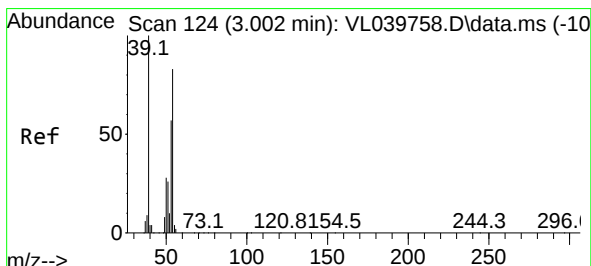
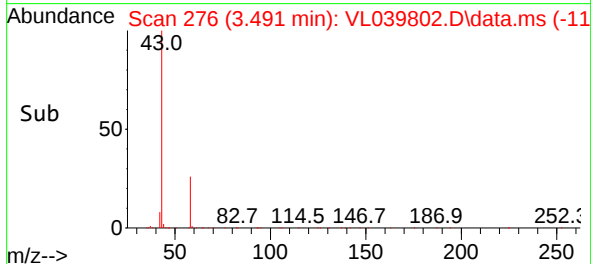
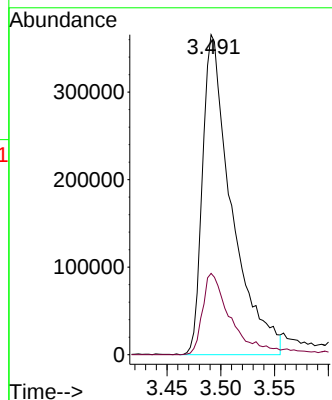
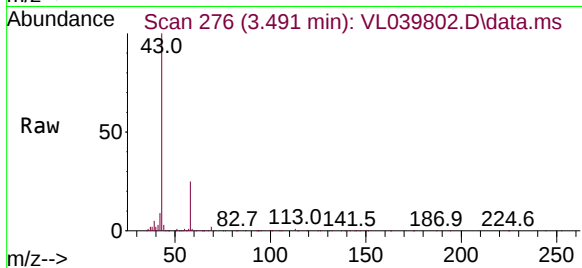




#15
Acetone
Concen: 6.869 ppbv
RT: 3.491 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

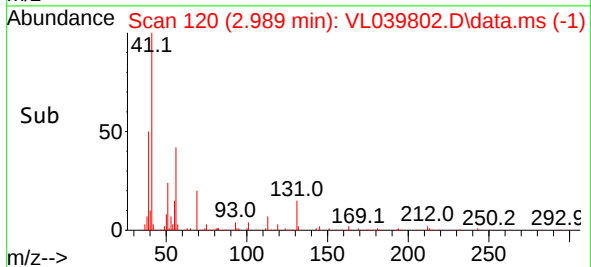
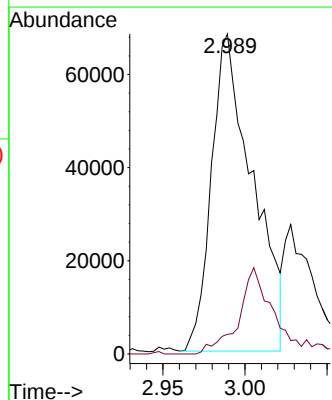
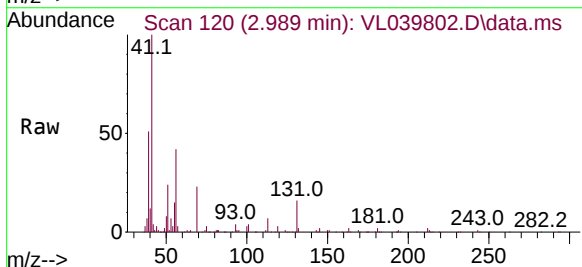
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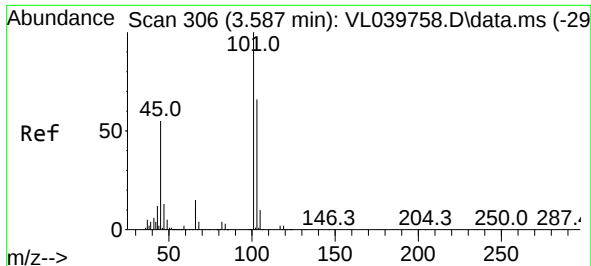
Tgt Ion: 43 Resp: 687743
Ion Ratio Lower Upper
43 100
58 26.8 20.7 31.1



#16
1,3-Butadiene
Concen: 2.395 ppbv
RT: 2.989 min Scan# 120
Delta R.T. -0.013 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 39 Resp: 118512
Ion Ratio Lower Upper
39 100
54 24.4 64.6 97.0#





#19

Isopropyl Alcohol

Concen: 0.427 ppbv

RT: 3.613 min Scan# 314

Delta R.T. 0.026 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

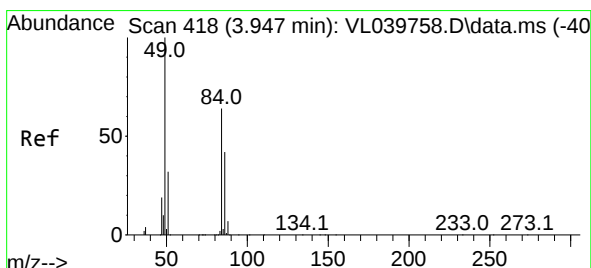
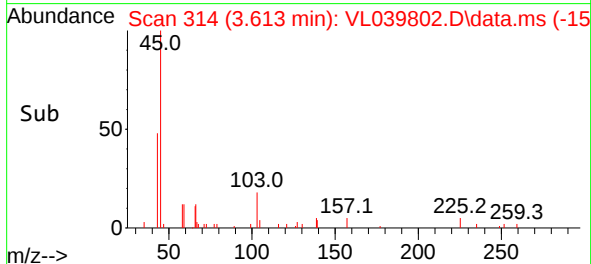
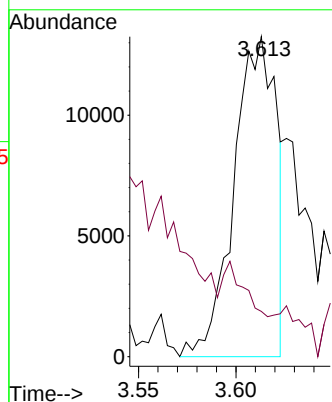
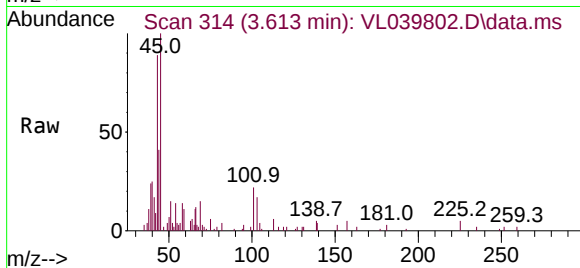
ClientSampleId :

Tgt Ion: 45 Resp: 20044

Ion Ratio Lower Upper

45 100

58 0.0 2.8 4.2#



#20

Methylene Chloride

Concen: 1.949 ppbv

RT: 3.954 min Scan# 420

Delta R.T. 0.006 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Tgt Ion: 84 Resp: 74245

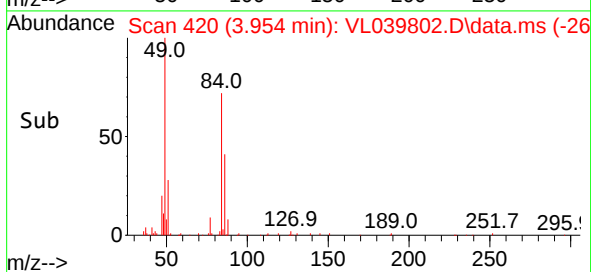
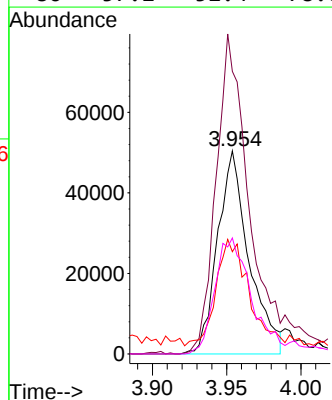
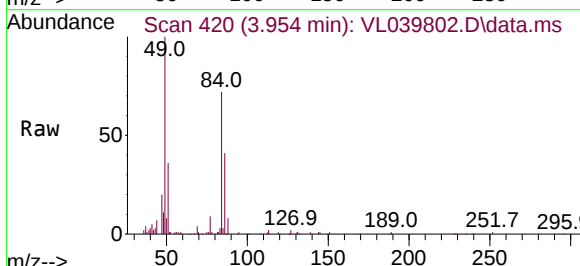
Ion Ratio Lower Upper

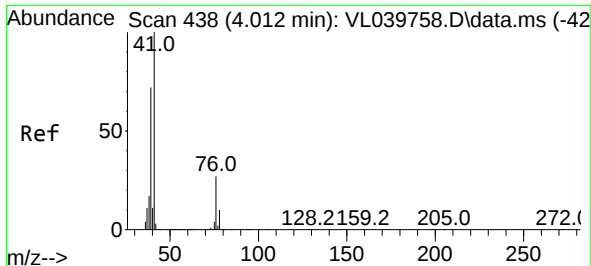
84 100

49 139.2 126.0 189.0

51 42.7 40.9 61.3

86 57.2 52.4 78.6

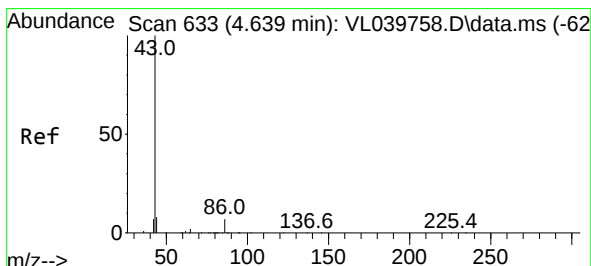
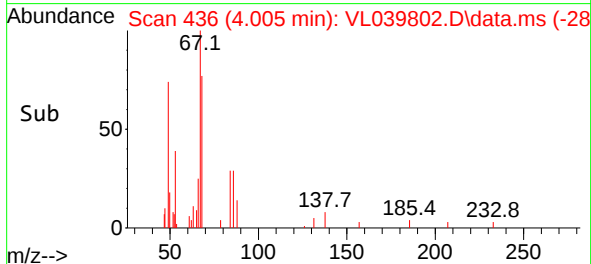
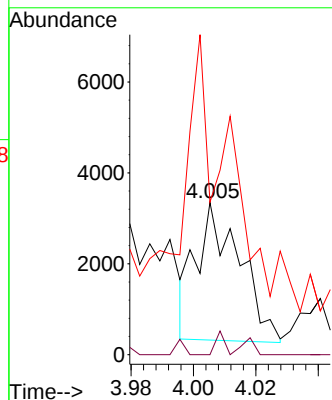
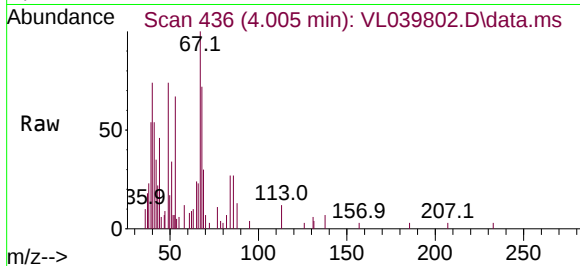




#21
 Allyl Chloride
 Concen: 0.045 ppbv
 RT: 4.005 min Scan# 41
 Delta R.T. -0.006 min
 Lab File: VL039802.D
 Acq: 26 Oct 2022 00:41

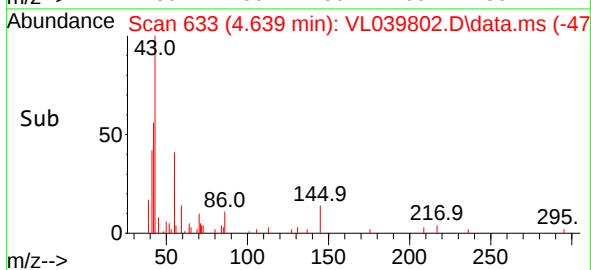
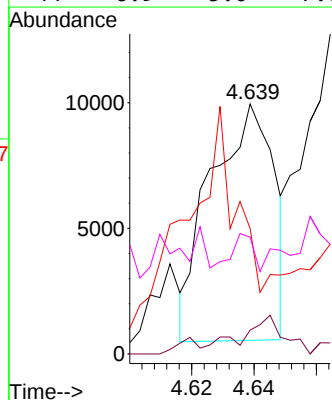
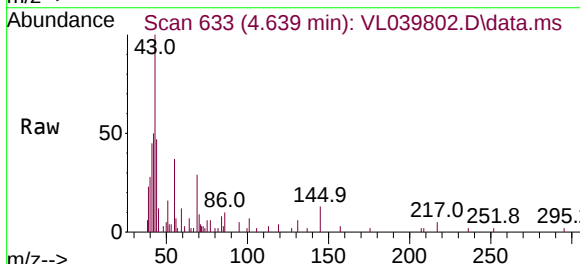
Instrument :
 MSVOA_L
 ClientSampleId :
 J

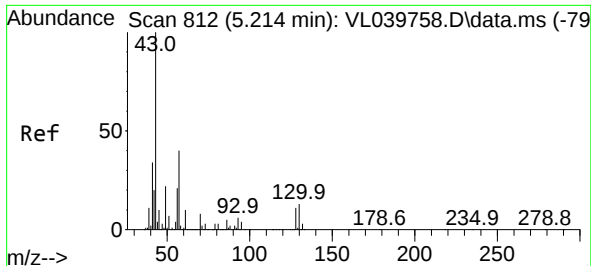
Tgt Ion: 41 Resp: 2928
 Ion Ratio Lower Upper
 41 100
 76 0.0 23.5 35.3#
 39 502.7 64.9 97.3#



#23
 Vinyl Acetate
 Concen: 0.344 ppbv
 RT: 4.639 min Scan# 633
 Delta R.T. 0.000 min
 Lab File: VL039802.D
 Acq: 26 Oct 2022 00:41

Tgt Ion: 43 Resp: 13268
 Ion Ratio Lower Upper
 43 100
 86 6.9 4.9 7.3
 42 24.7 7.2 10.8#
 44 6.9 5.0 7.6





#25

Ethyl Acetate

Concen: 0.315 ppbv

RT: 5.230 min Scan# 817

Delta R.T. 0.016 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 43 Resp: 61615

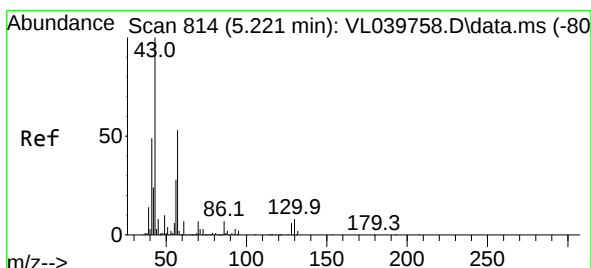
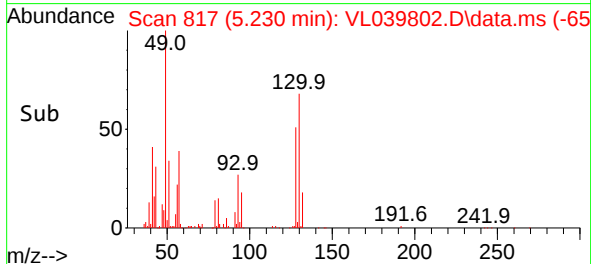
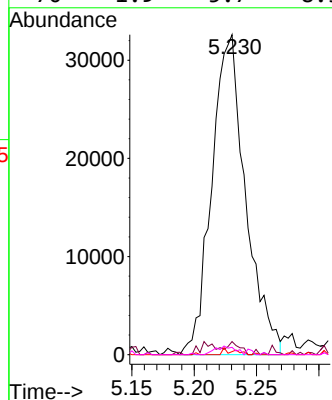
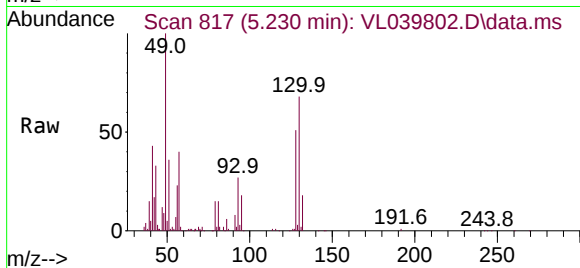
Ion Ratio Lower Upper

43 100

45 0.0 8.2 12.2#

61 0.7 8.2 12.4#

70 1.9 5.7 8.5#



#26

Hexane

Concen: 0.919 ppbv

RT: 5.227 min Scan# 816

Delta R.T. 0.006 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Tgt Ion: 57 Resp: 74831

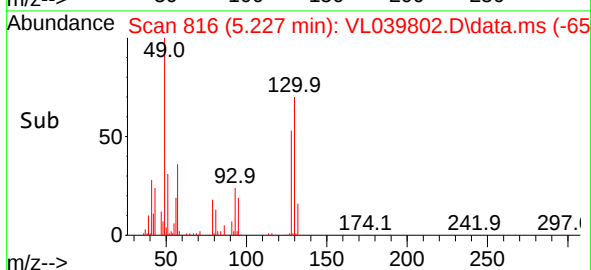
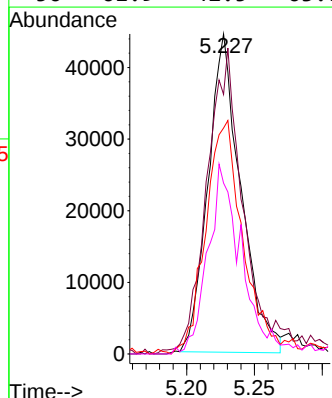
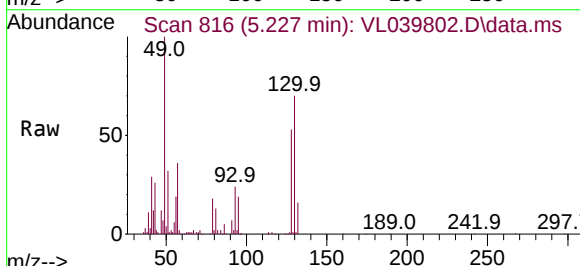
Ion Ratio Lower Upper

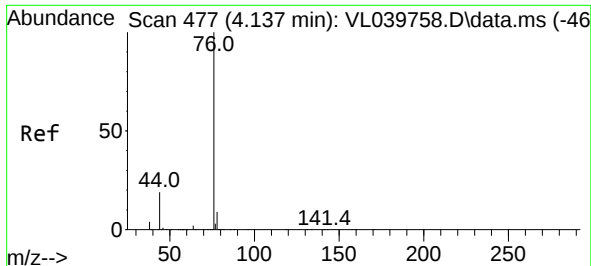
57 100

41 111.1 76.1 114.1

43 81.1 197.1 295.7#

56 61.9 42.5 63.7





#27

Carbon Disulfide

Concen: 0.288 ppbv

RT: 4.144 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

ClientSampleId :

J

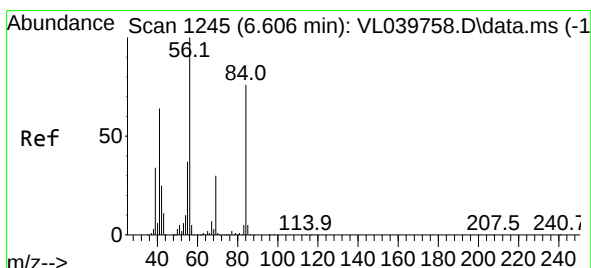
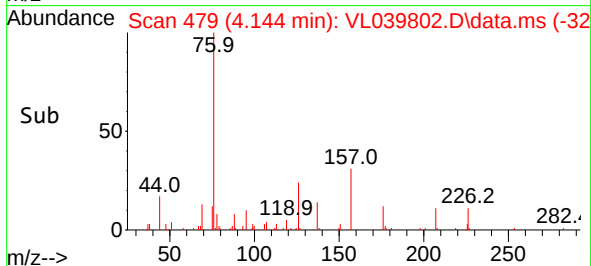
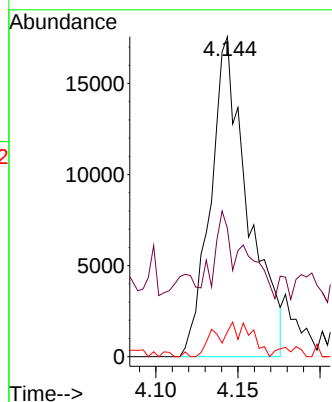
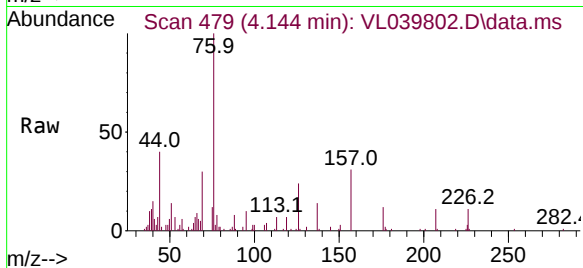
Tgt Ion: 76 Resp: 27816

Ion Ratio Lower Upper

76 100

44 36.1 16.6 25.0#

78 12.2 7.6 11.4#



#30

Cyclohexane

Concen: 0.061 ppbv

RT: 6.613 min Scan# 1247

Delta R.T. 0.006 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

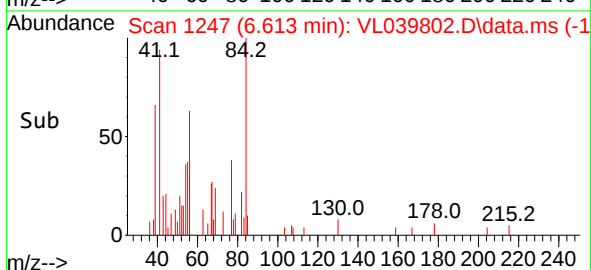
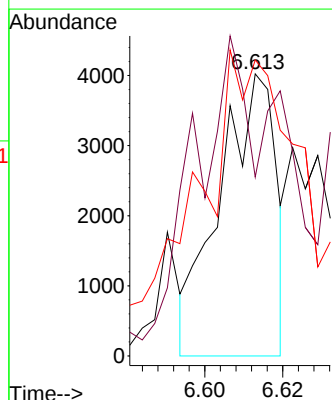
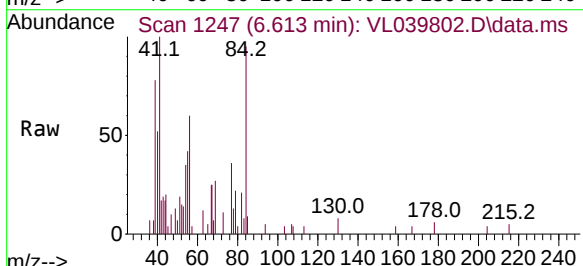
Tgt Ion: 84 Resp: 4047

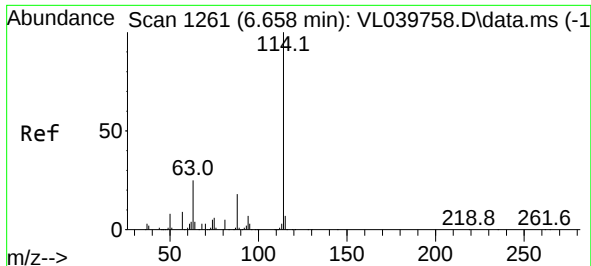
Ion Ratio Lower Upper

84 100

56 174.4 111.8 167.6#

41 263.6 71.5 107.3#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.664 min Scan# 11

Delta R.T. 0.006 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

ClientSampleId :

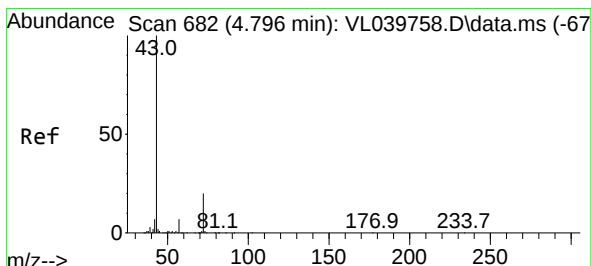
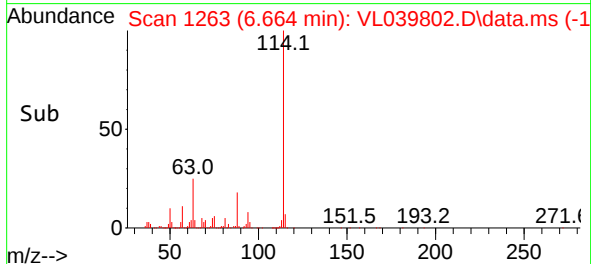
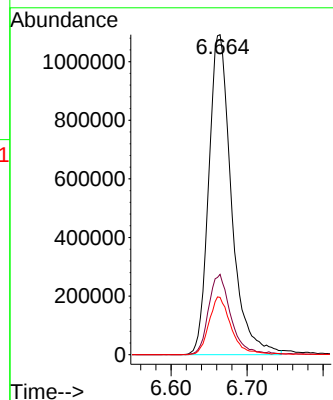
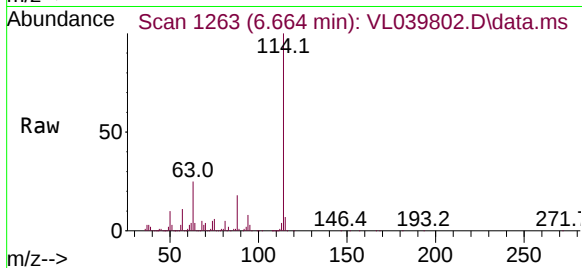
Tgt Ion:114 Resp: 2261995

Ion Ratio Lower Upper

114 100

63 25.3 20.1 30.1

88 17.9 14.5 21.7



#34

2-Butanone

Concen: 0.590 ppbv

RT: 4.819 min Scan# 689

Delta R.T. 0.022 min

Lab File: VL039802.D

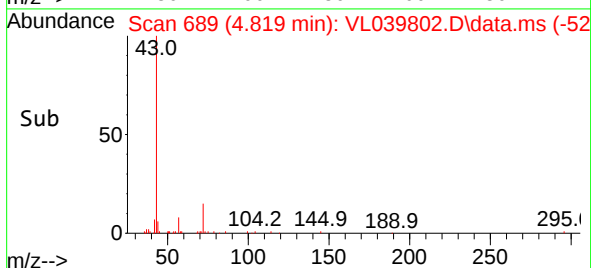
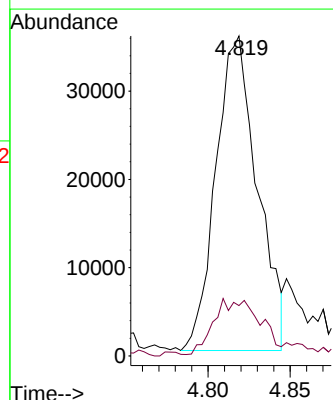
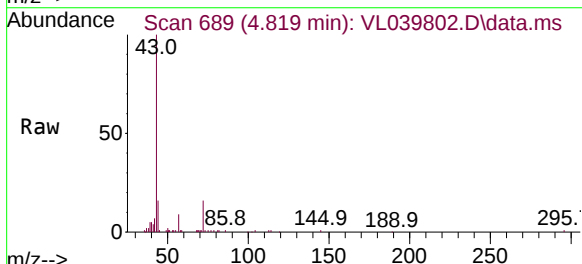
Acq: 26 Oct 2022 00:41

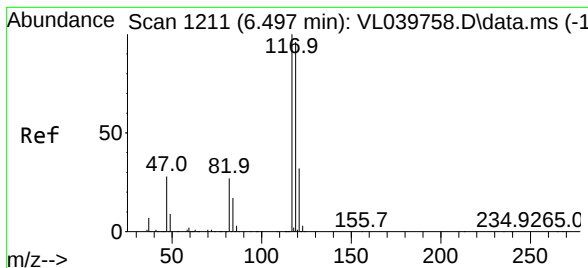
Tgt Ion: 43 Resp: 62790

Ion Ratio Lower Upper

43 100

72 26.3 16.5 24.7#





#35

Carbon Tetrachloride

Concen: 0.034 ppbv

RT: 6.500 min Scan# 117

Delta R.T. 0.003 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

ClientSampleId :

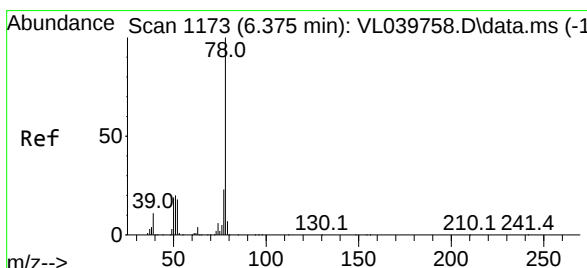
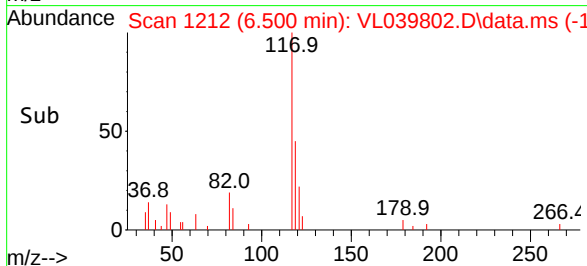
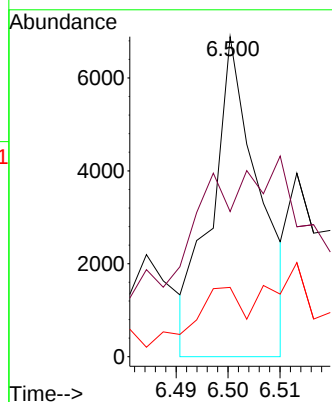
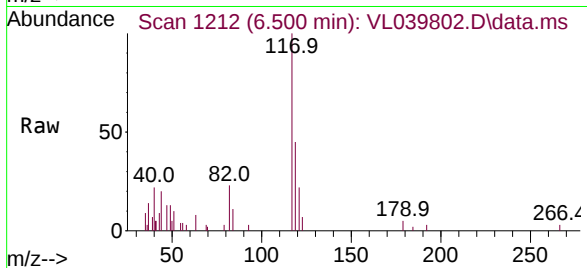
Tgt Ion:117 Resp: 4338

Ion Ratio Lower Upper

117 100

119 21.4 76.6 115.0#

121 18.2 25.3 37.9#



#36

Benzene

Concen: 0.210 ppbv

RT: 6.378 min Scan# 1174

Delta R.T. 0.003 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

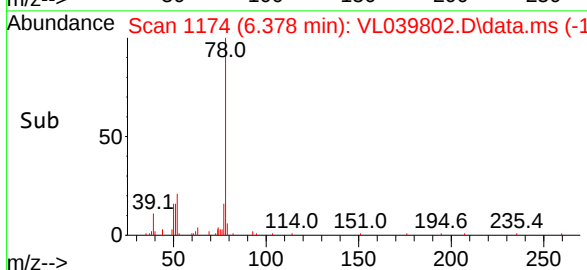
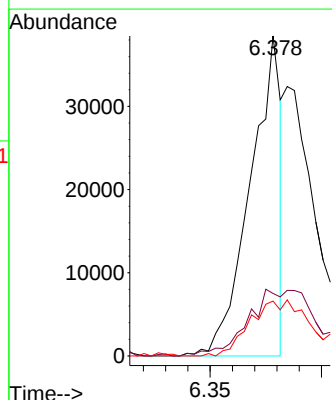
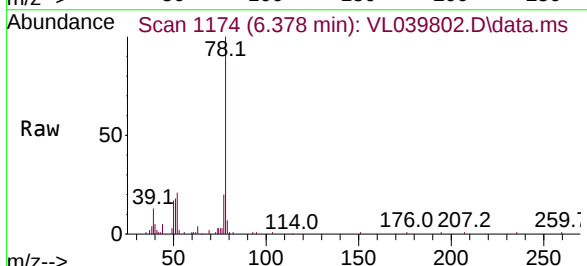
Tgt Ion: 78 Resp: 36643

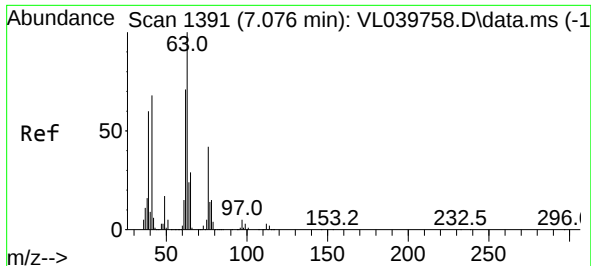
Ion Ratio Lower Upper

78 100

77 19.5 18.3 27.5

50 17.2 15.2 22.8





#39

1,2-Dichloropropane

Concen: 8.166 ppbv

RT: 6.664 min Scan# 1

Delta R.T. -0.412 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

ClientSampleId :

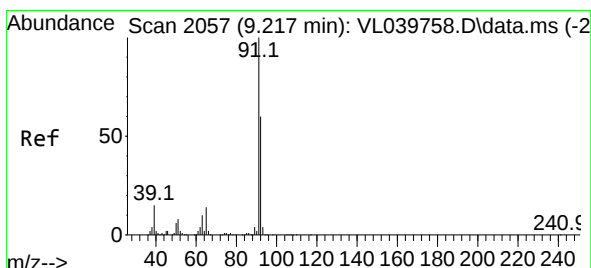
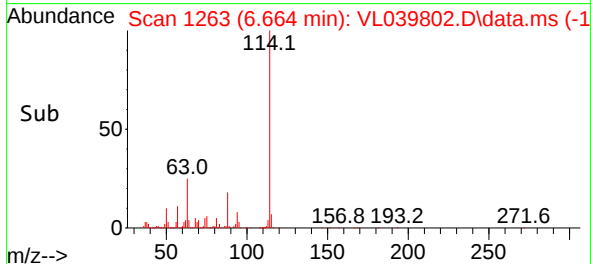
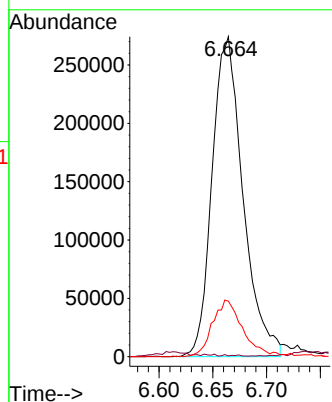
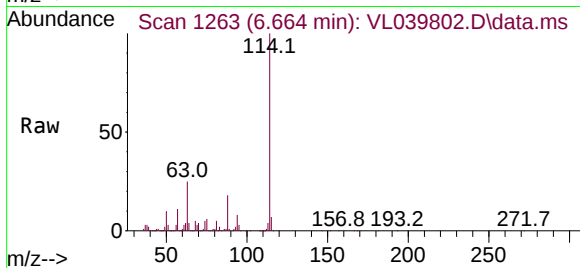
Tgt Ion: 63 Resp: 548031

Ion Ratio Lower Upper

63 100

41 0.0 54.5 81.7#

62 17.2 56.6 85.0#



#53

Toluene

Concen: 0.427 ppbv

RT: 9.224 min Scan# 2059

Delta R.T. 0.007 min

Lab File: VL039802.D

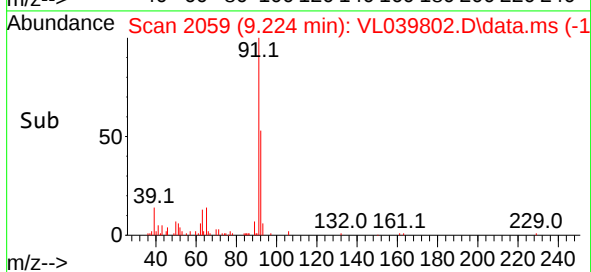
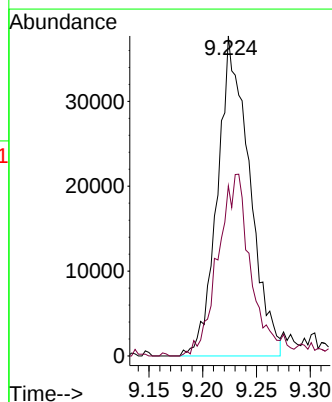
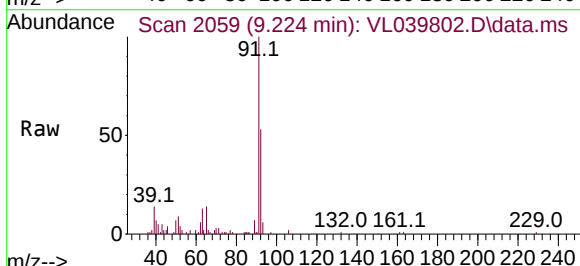
Acq: 26 Oct 2022 00:41

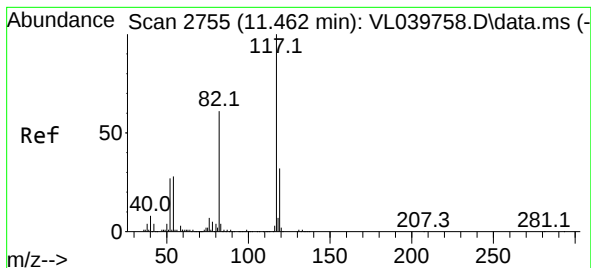
Tgt Ion: 91 Resp: 78001

Ion Ratio Lower Upper

91 100

92 61.2 48.0 72.0

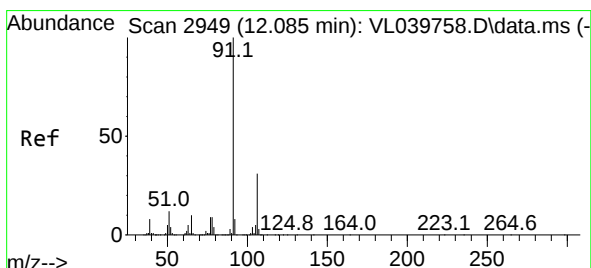
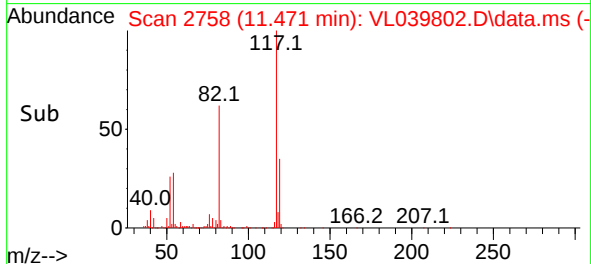
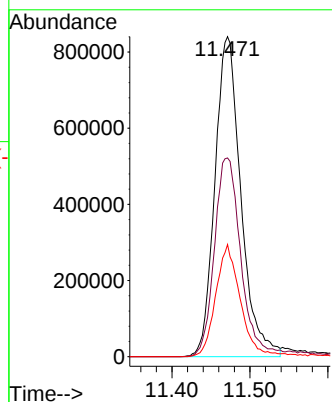
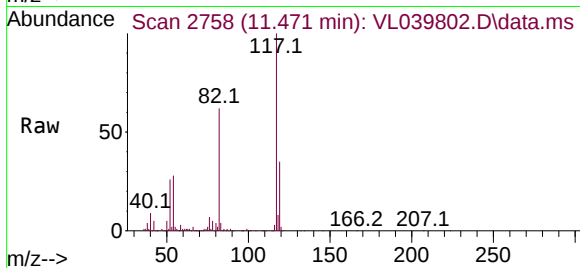




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.471 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

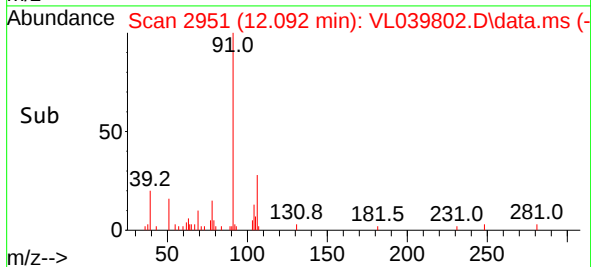
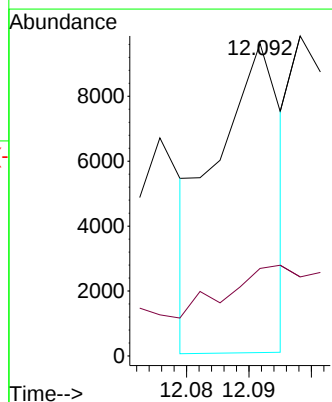
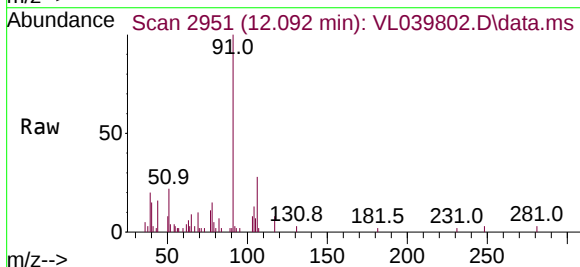
Instrument :
MSVOA_L
ClientSampleId :
J

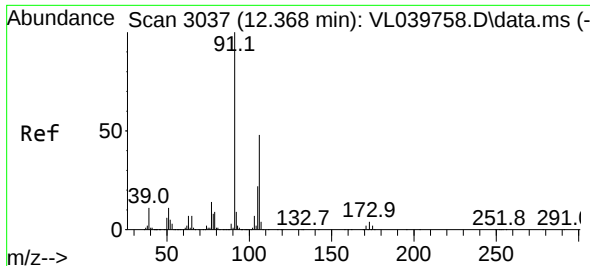
Tgt Ion:117 Resp: 1944458
Ion Ratio Lower Upper
117 100
82 66.2 49.9 74.9
119 33.3 25.2 37.8



#58
Ethyl Benzene
Concen: 0.031 ppbv
RT: 12.092 min Scan# 2951
Delta R.T. 0.006 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 91 Resp: 6952
Ion Ratio Lower Upper
91 100
106 36.8 24.6 36.8





#59

m/p-Xylene

Concen: 0.064 ppbv

RT: 12.378 min Scan# 3037

Delta R.T. 0.010 min

Lab File: VL039802.D

Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

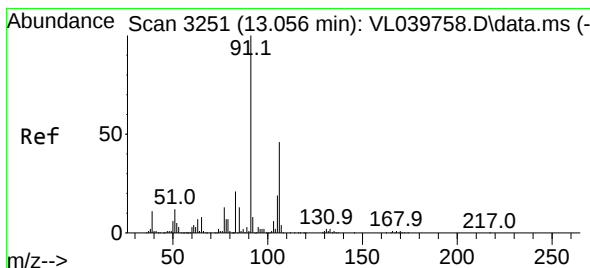
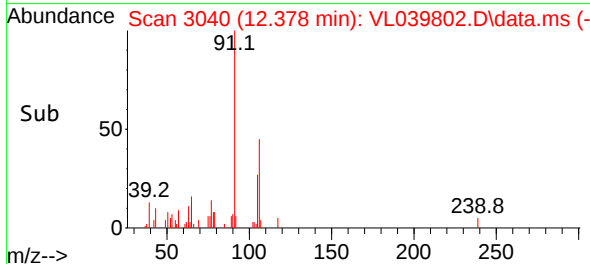
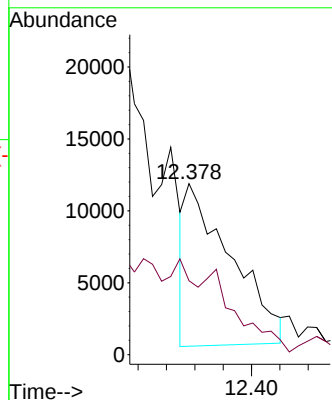
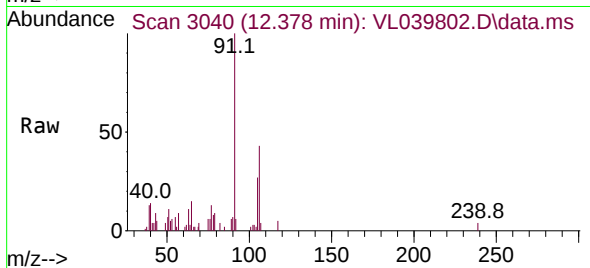
ClientSampleId :

Tgt Ion: 91 Resp: 12699

Ion Ratio Lower Upper

91 100

106 0.0 36.4 54.6#



#60

o-Xylene

Concen: 0.099 ppbv

RT: 13.063 min Scan# 3253

Delta R.T. 0.006 min

Lab File: VL039802.D

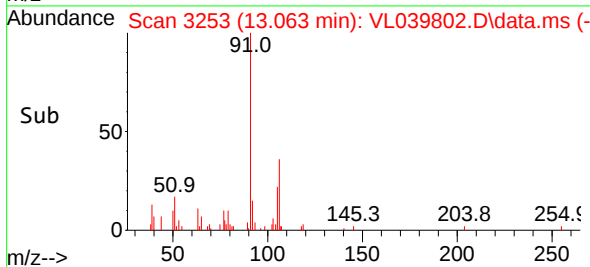
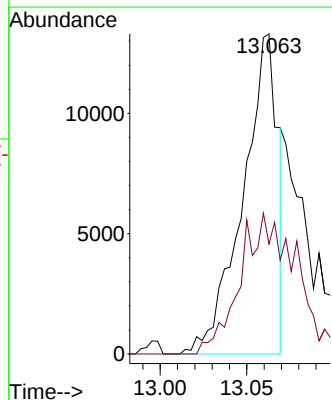
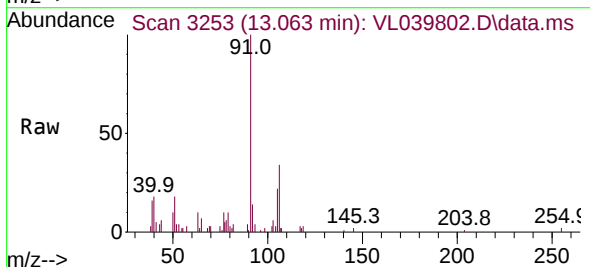
Acq: 26 Oct 2022 00:41

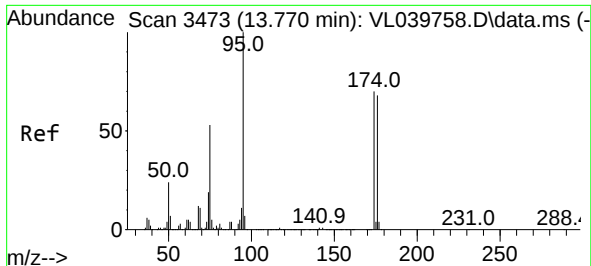
Tgt Ion: 91 Resp: 18614

Ion Ratio Lower Upper

91 100

106 74.0 22.9 68.8#

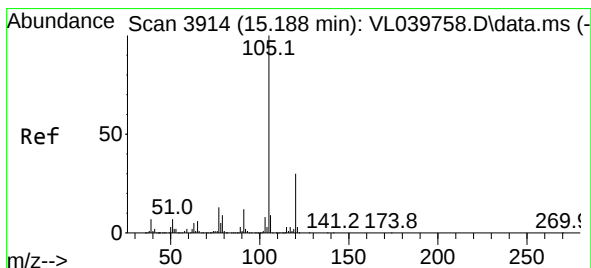
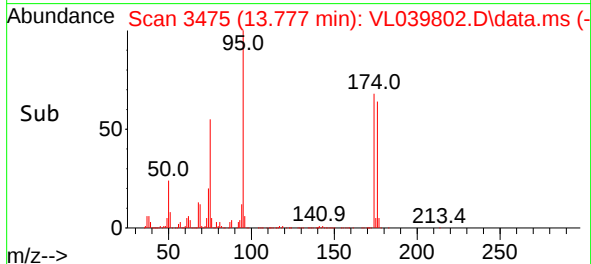
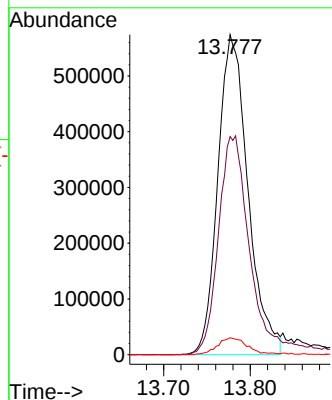
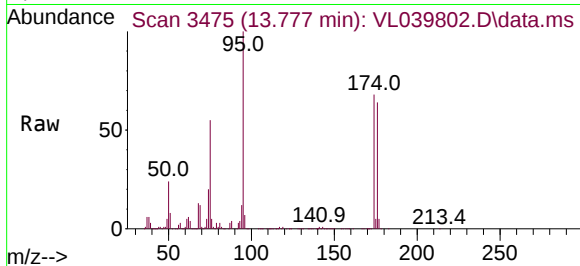




#68
1-Bromo-4-Fluorobenzene
Concen: 10.026 ppbv
RT: 13.777 min Scan# 3473
Delta R.T. 0.006 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

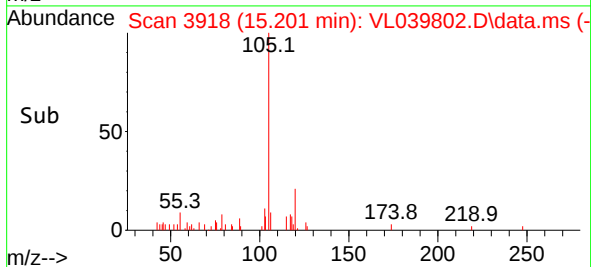
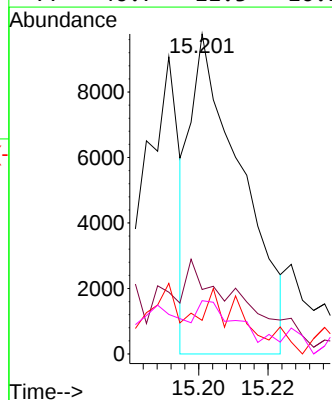
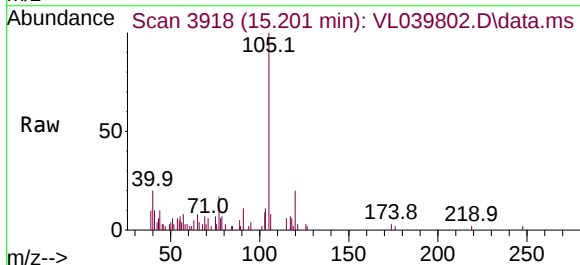
Instrument :
MSVOA_L
ClientSampleId :
J

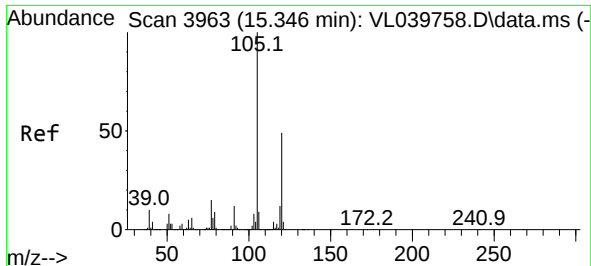
Tgt Ion: 95 Resp: 1386830
Ion Ratio Lower Upper
95 100
174 74.4 57.3 85.9
175 5.6 4.2 6.2



#72
4-Ethyltoluene
Concen: 0.047 ppbv
RT: 15.201 min Scan# 3918
Delta R.T. 0.013 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion: 105 Resp: 10050
Ion Ratio Lower Upper
105 100
120 58.8 25.0 37.6#
91 0.0 10.2 15.2#
77 46.7 11.3 16.9#

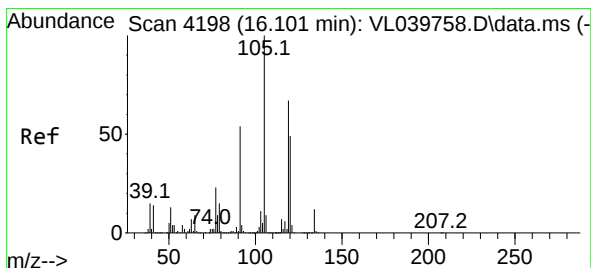
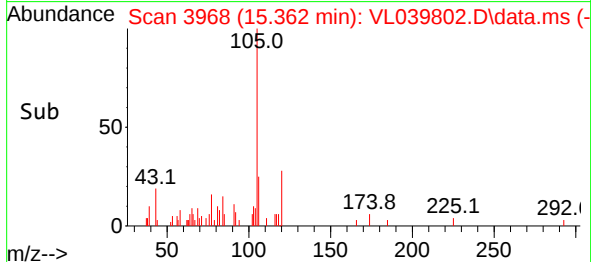
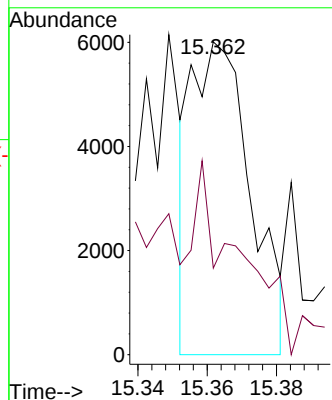
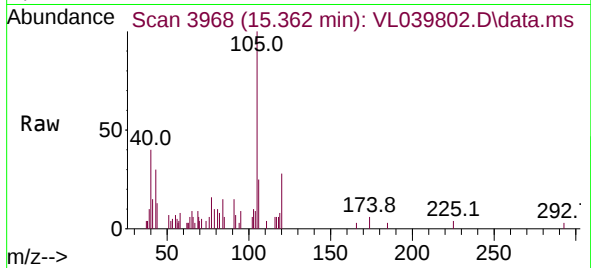




#73
1,3,5-Trimethylbenzene
Concen: 0.037 ppbv
RT: 15.362 min Scan# 3963
Delta R.T. 0.016 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

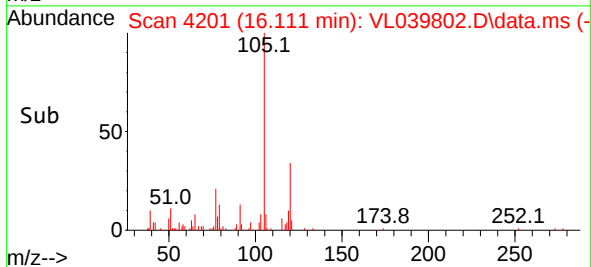
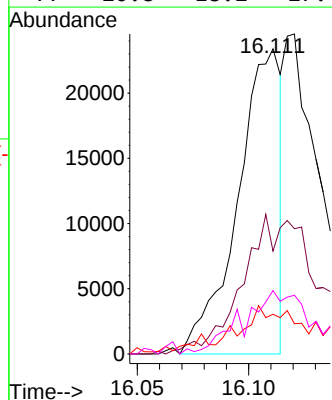
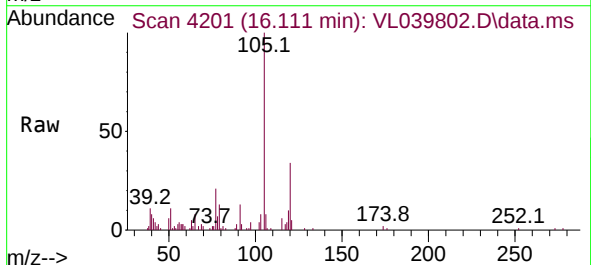
Instrument :
MSVOA_L
ClientSampleId :
J

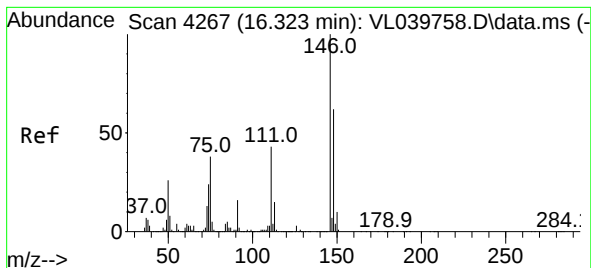
Tgt Ion:105 Resp: 7162
Ion Ratio Lower Upper
105 100
120 3.4 39.0 58.6#



#74
1,2,4-Trimethylbenzene
Concen: 0.144 ppbv
RT: 16.111 min Scan# 4201
Delta R.T. 0.010 min
Lab File: VL039802.D
Acq: 26 Oct 2022 00:41

Tgt Ion:105 Resp: 31474
Ion Ratio Lower Upper
105 100
120 37.2 39.6 59.4#
91 10.5 42.9 64.3#
77 20.8 18.2 27.4





#75

1,3-Dichlorobenzene

Concen: 0.031 ppbv

RT: 16.336 min Scan# 41

Delta R.T. 0.013 min

Lab File: VL039802.D

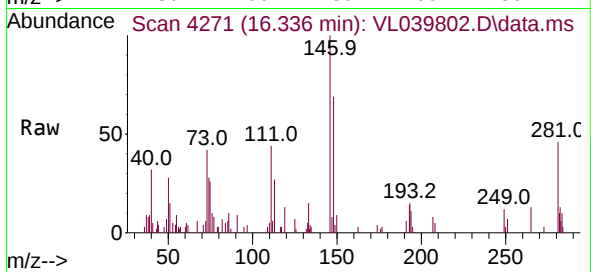
Acq: 26 Oct 2022 00:41

Instrument :

MSVOA_L

ClientSampleId :

J



Tgt Ion:146 Resp: 4122

Ion Ratio Lower Upper

146 100

111 0.0 22.4 67.3#

148 374.8 32.4 97.0#

