

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL101022\
 Data File : VL039704.D
 Acq On : 10 Oct 2022 20:18
 Operator : SY/AP
 Sample : N5065-02DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Quant Time: Oct 11 07:21:02 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091922AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Mon Sep 19 14:26:28 2022
 Response via : Initial Calibration

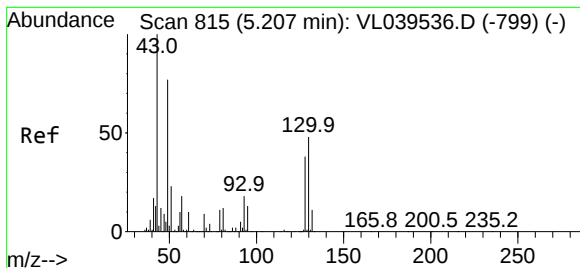
Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards							
1) Bromochloromethane		5.195	49	1074470	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene		6.651	114	2708130	10.000	ppbv	0.00
55) Chlorobenzene-d5		11.455	117	2422999	10.000	ppbv	-0.02
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene		13.764	95	1825976	10.095	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.000%	
Target Compounds							
						Qvalue	
2) Dichlorodifluoromethane		2.748	85	23042	0.185	ppbv	94
9) Propene		2.716	41	210064	3.607	ppbv	83
10) Heptane		7.574	43	61880	0.455	ppbv	99
11) Trichlorofluoromethane		3.571	101	37734m	0.245	ppbv	
12) 1,1,2-Trichlorotrifluo...		4.073	101	7425	0.064	ppbv	96
13) Ethanol		3.266	45	11749369	2647.929	ppbv	73
15) Acetone		3.475	43	14027940	117.328	ppbv #	85
19) Isopropyl Alcohol		3.607	45	18252750	299.495	ppbv #	93
20) Methylene Chloride		3.944	84	189262	3.424	ppbv	96
25) Ethyl Acetate		5.211	43	336058	1.289	ppbv #	96
26) Hexane		5.214	57	211459	1.911	ppbv #	74
29) Chloroform		5.282	83	521188	3.263	ppbv	97
30) Cyclohexane		6.603	84	36363m	0.424	ppbv	
35) Carbon Tetrachloride		6.487	117	10633m	0.074	ppbv	
36) Benzene		6.369	78	359746	1.738	ppbv #	93
43) Methyl Methacrylate		7.471	69	79791	1.057	ppbv #	78
44) 2,2,4-Trimethylpentane		7.317	57	283230	0.794	ppbv #	87
52) Tetrachloroethene		10.610	164	5186m	0.066	ppbv	
53) Toluene		9.214	91	519515	2.256	ppbv	100
58) Ethyl Benzene		12.079	91	232039	0.831	ppbv	89
59) m/p-Xylene		12.333	91	855842m	3.442	ppbv	
60) o-Xylene		13.047	91	304444	1.282	ppbv	100
61) Styrene		12.883	104	28292m	0.221	ppbv	
62) Isopropylbenzene		14.015	105	42649	0.119	ppbv #	87
72) 4-Ethyltoluene		15.178	105	193500	0.714	ppbv	94
73) 1,3,5-Trimethylbenzene		15.339	105	149105	0.601	ppbv	95
74) 1,2,4-Trimethylbenzene		16.092	105	536168	1.929	ppbv #	70

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

Quant Time: Oct 11 07:21:02 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091922AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Mon Sep 19 14:26:28 2022
Response via : Initial Calibration

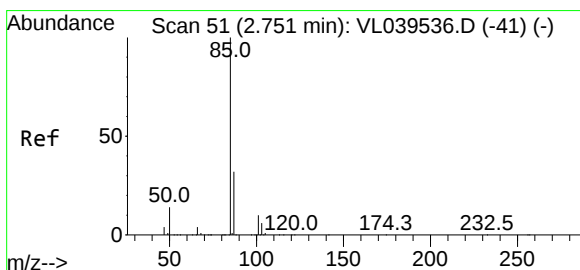
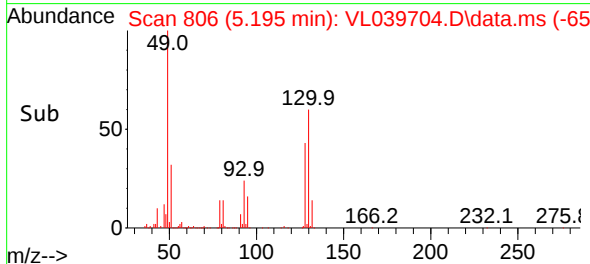
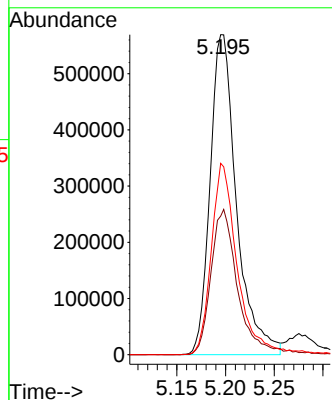
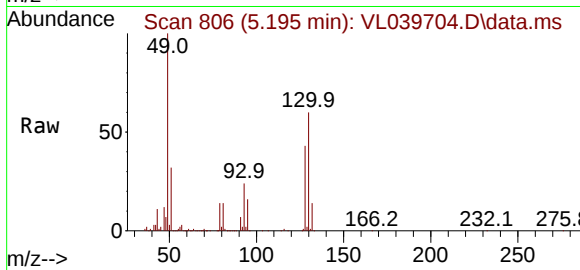




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.195 min Scan# 80
 Delta R.T. -0.012 min
 Lab File: VL039704.D
 Acq: 10 Oct 2022 20:18

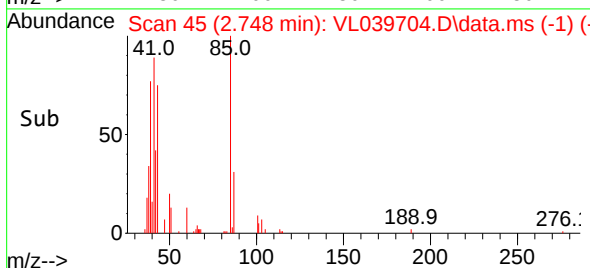
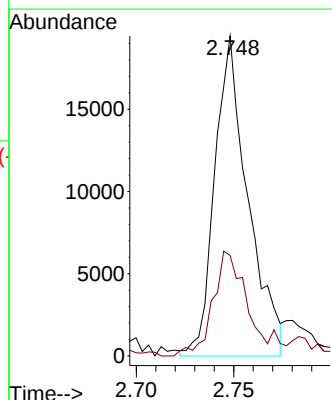
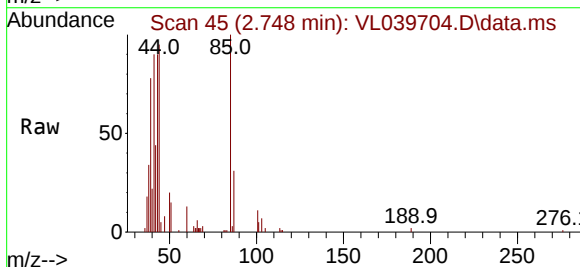
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

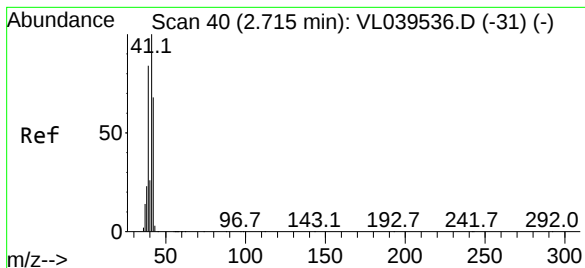
Tgt Ion: 49 Resp: 1074470
 Ion Ratio Lower Upper
 49 100
 128 46.6 26.7 80.0
 130 59.4 34.3 102.8



#2
 Dichlorodifluoromethane
 Concen: 0.185 ppbv
 RT: 2.748 min Scan# 45
 Delta R.T. -0.003 min
 Lab File: VL039704.D
 Acq: 10 Oct 2022 20:18

Tgt Ion: 85 Resp: 23042
 Ion Ratio Lower Upper
 85 100
 87 30.3 26.7 40.1





#9

Propene

Concen: 3.607 ppbv

RT: 2.716 min Scan# 31

Delta R.T. 0.001 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

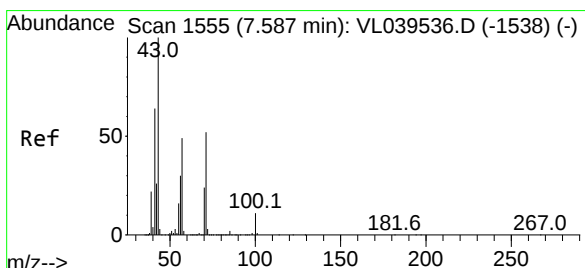
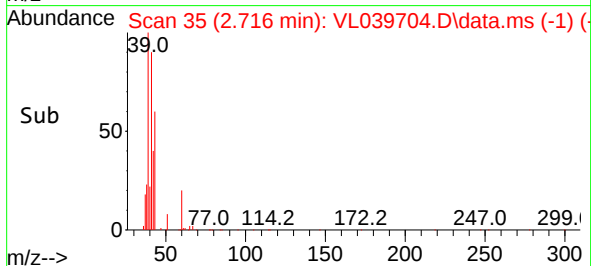
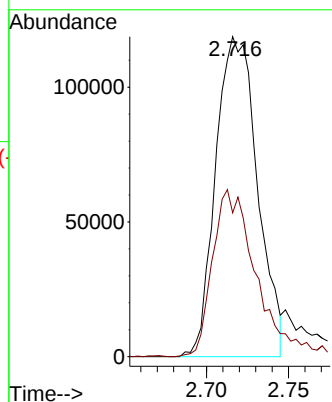
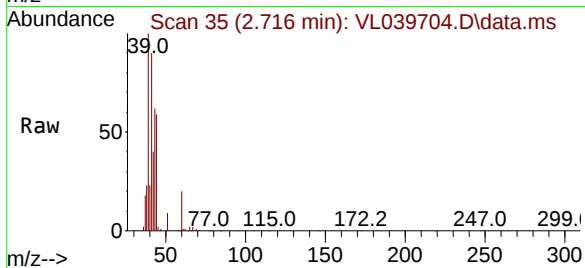
IA1

Tgt Ion: 41 Resp: 210064

Ion Ratio Lower Upper

41 100

42 55.3 55.2 82.8



#10

Heptane

Concen: 0.455 ppbv

RT: 7.574 min Scan# 1546

Delta R.T. -0.012 min

Lab File: VL039704.D

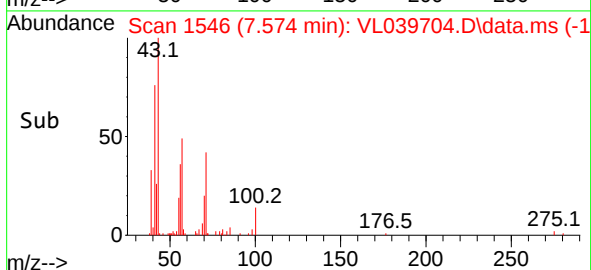
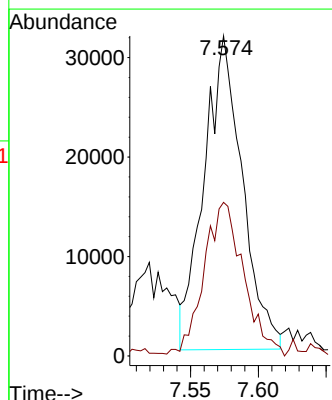
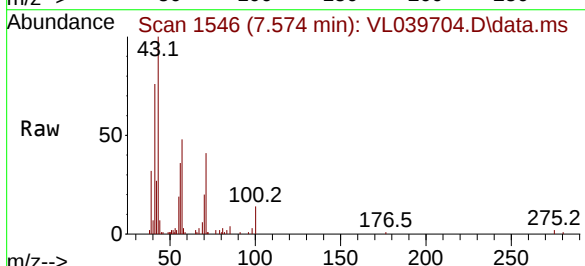
Acq: 10 Oct 2022 20:18

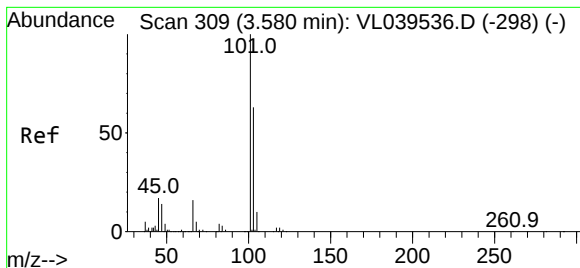
Tgt Ion: 43 Resp: 61880

Ion Ratio Lower Upper

43 100

57 51.0 40.5 60.7

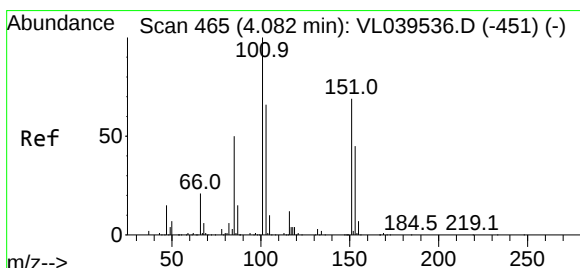
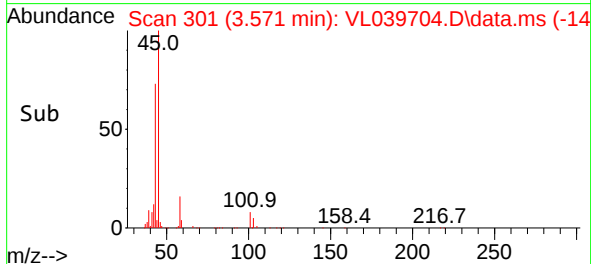
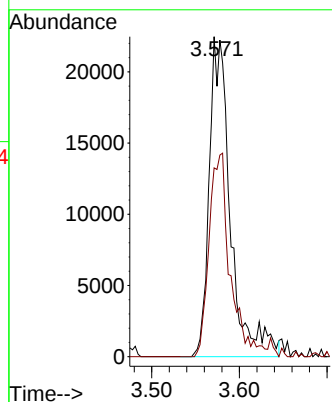
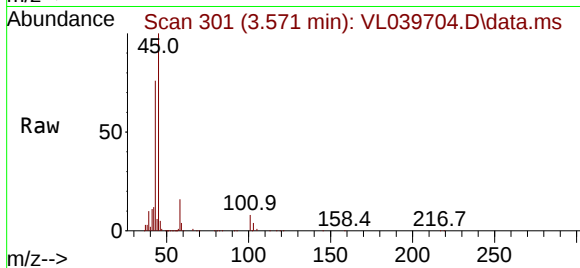




#11
 Trichlorofluoromethane
 Concen: 0.245 ppbv m
 RT: 3.571 min Scan# 309
 Delta R.T. -0.009 min
 Lab File: VL039704.D
 Acq: 10 Oct 2022 20:18

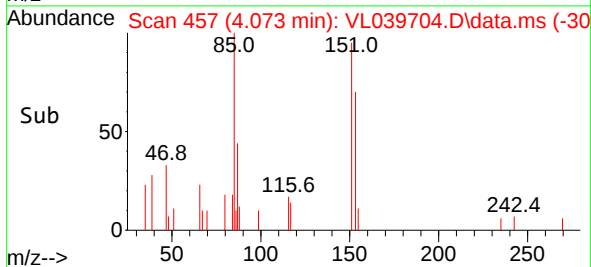
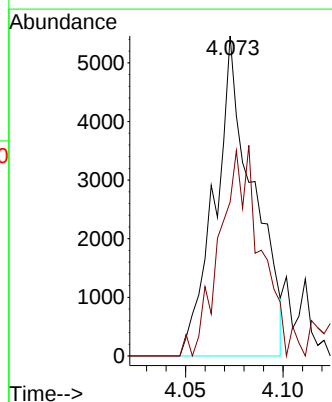
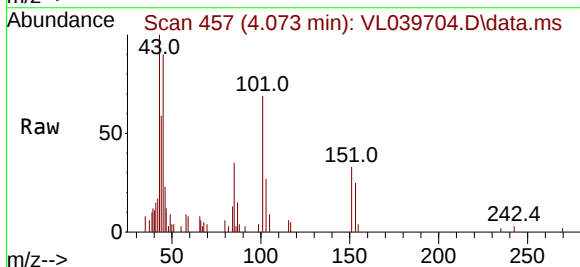
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

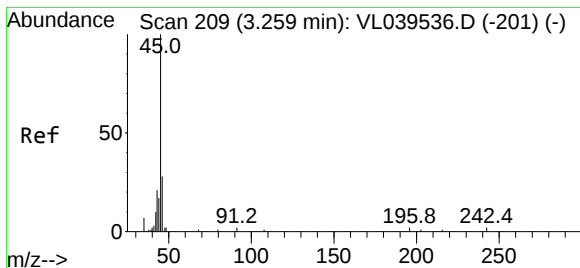
Tgt Ion:101 Resp: 37734
 Ion Ratio Lower Upper
 101 100
 103 59.0 51.8 77.8



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.064 ppbv
 RT: 4.073 min Scan# 457
 Delta R.T. -0.009 min
 Lab File: VL039704.D
 Acq: 10 Oct 2022 20:18

Tgt Ion:101 Resp: 7425
 Ion Ratio Lower Upper
 101 100
 151 77.0 58.9 88.3

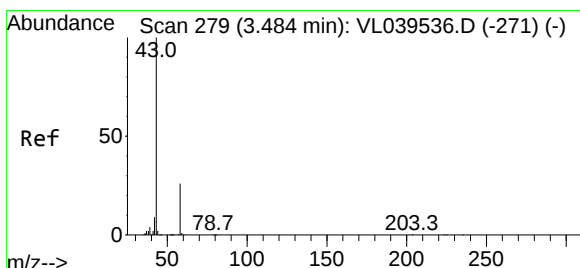
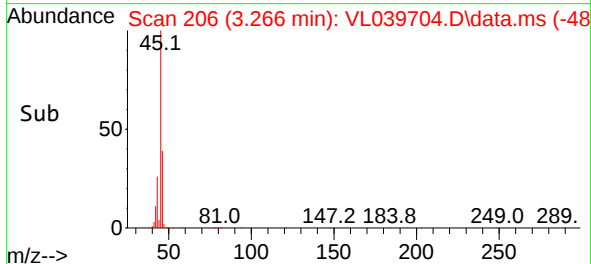
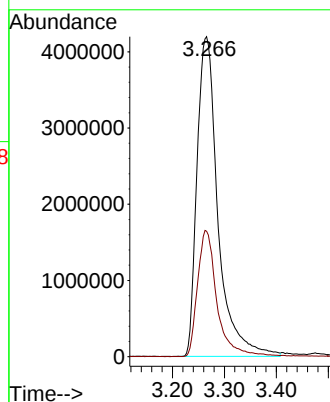
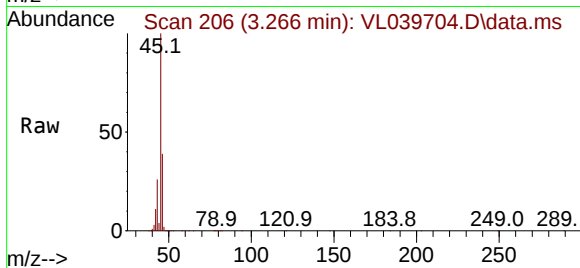




#13
Ethanol
Concen: 2647.929 ppbv
RT: 3.266 min Scan# 206
Delta R.T. 0.007 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

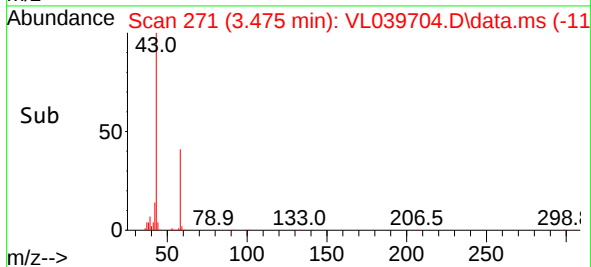
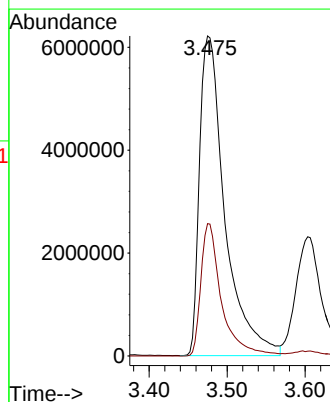
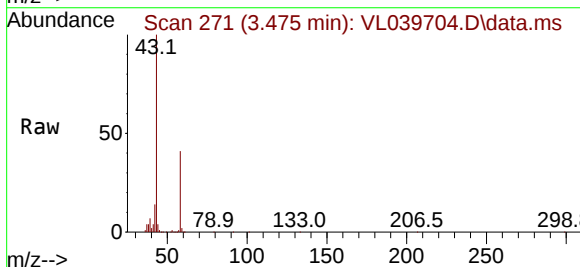
Instrument :
MSVOA_L
ClientSampleId :
IA1

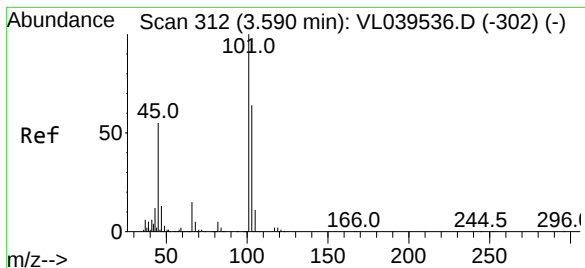
Tgt Ion: 45 Resp:11749369
Ion Ratio Lower Upper
45 100
46 37.2 22.8 91.2



#15
Acetone
Concen: 117.328 ppbv
RT: 3.475 min Scan# 271
Delta R.T. -0.009 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

Tgt Ion: 43 Resp:14027940
Ion Ratio Lower Upper
43 100
58 33.9 21.0 31.6#

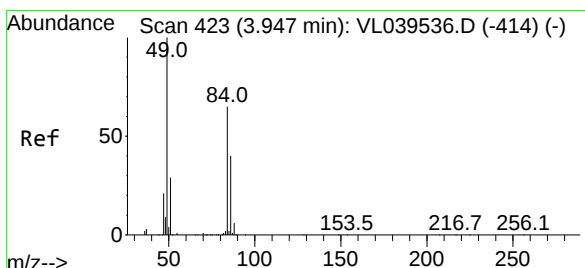
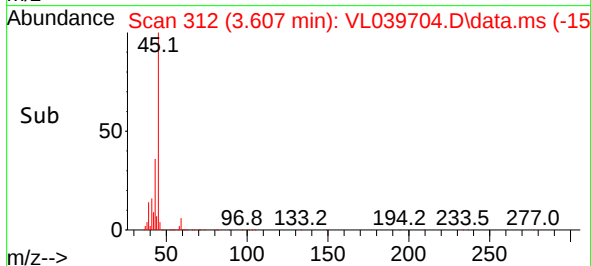
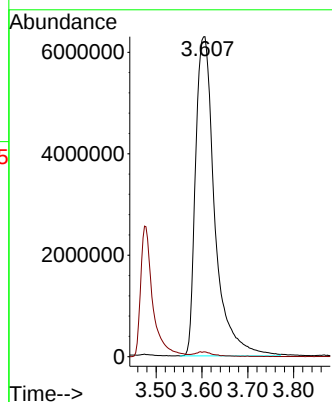
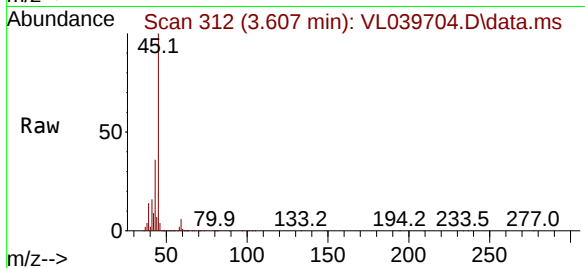




#19
Isopropyl Alcohol
Concen: 299.495 ppbv
RT: 3.607 min Scan# 312
Delta R.T. 0.017 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

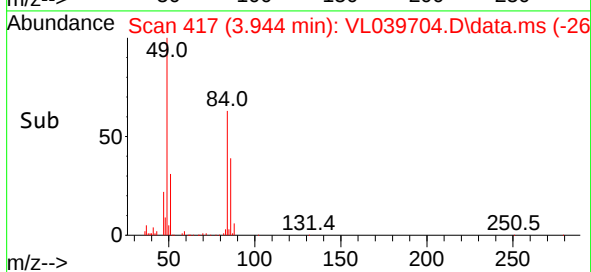
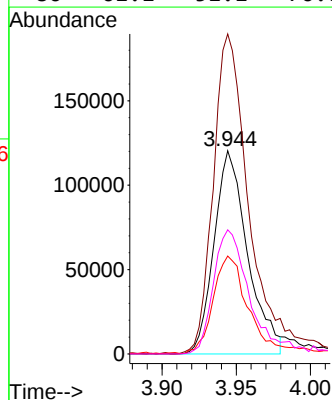
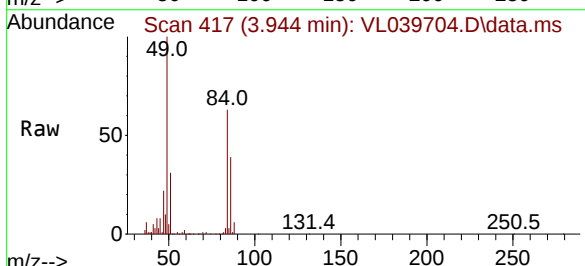
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MSVOA_L
ClientSampleId :
IA1

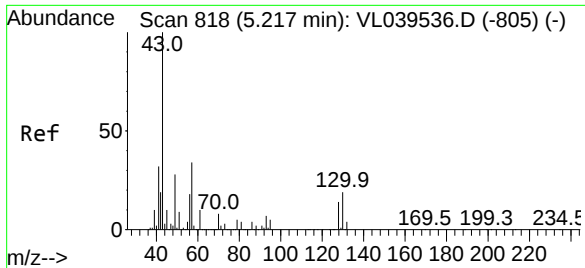
Tgt Ion: 45 Resp:18252750
Ion Ratio Lower Upper
45 100
58 1.6 3.2 4.8#



#20
Methylene Chloride
Concen: 3.424 ppbv
RT: 3.944 min Scan# 417
Delta R.T. -0.003 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

Tgt Ion: 84 Resp: 189262
Ion Ratio Lower Upper
84 100
49 157.2 123.1 184.7
51 47.9 34.4 51.6
86 61.1 51.1 76.7





#25

Ethyl Acetate

Concen: 1.289 ppbv

RT: 5.211 min Scan# 811

Delta R.T. -0.006 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion: 43 Resp: 336058

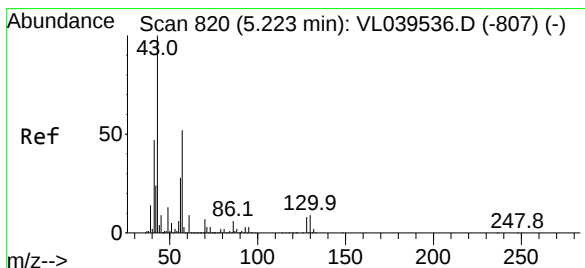
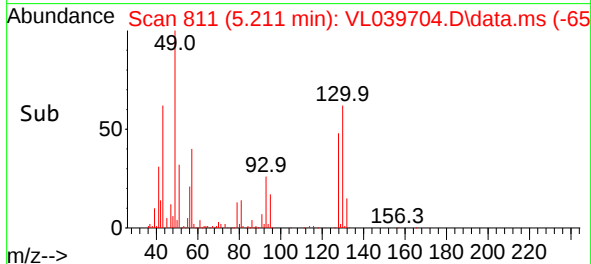
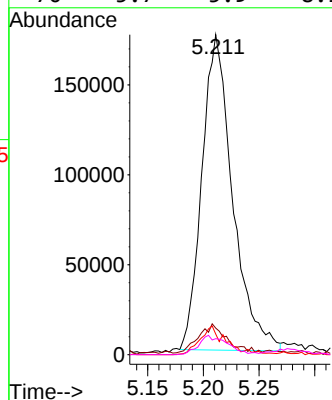
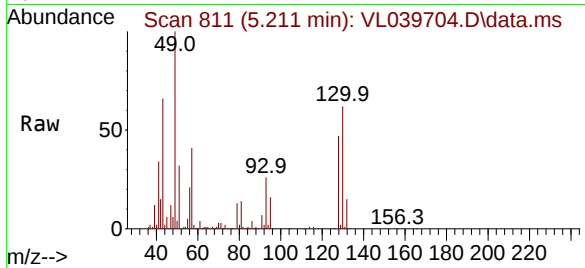
Ion Ratio Lower Upper

43 100

45 10.9 8.2 12.4

61 7.9 8.3 12.5#

70 5.7 5.9 8.9#



#26

Hexane

Concen: 1.911 ppbv

RT: 5.214 min Scan# 812

Delta R.T. -0.009 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Tgt Ion: 57 Resp: 211459

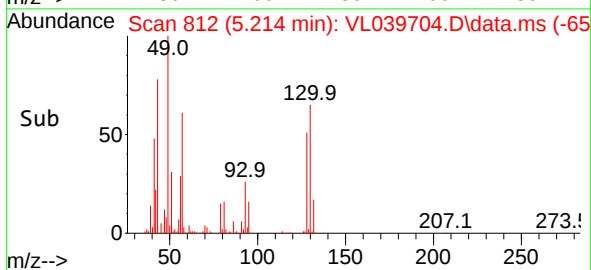
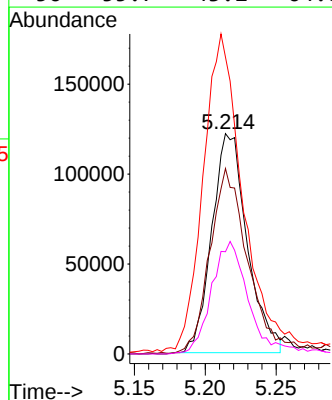
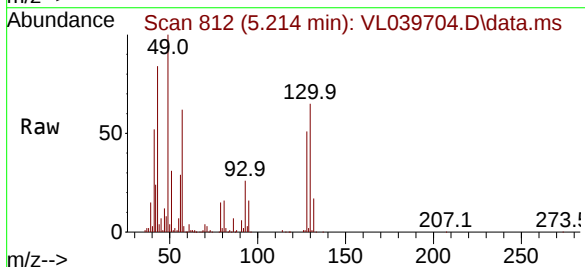
Ion Ratio Lower Upper

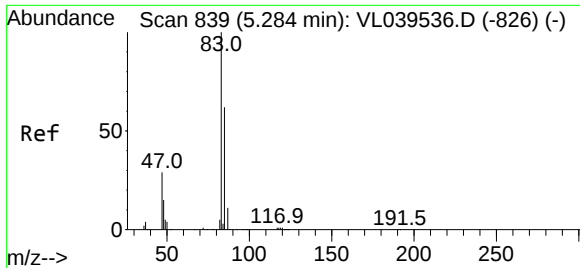
57 100

41 95.3 76.9 115.3

43 168.4 191.0 286.6#

56 55.7 43.2 64.8

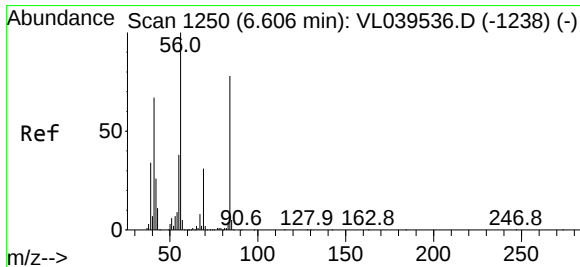
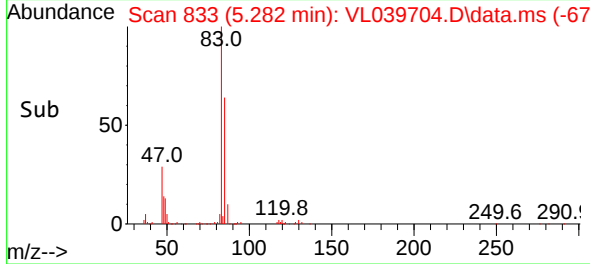
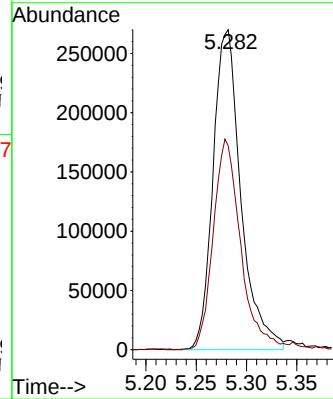
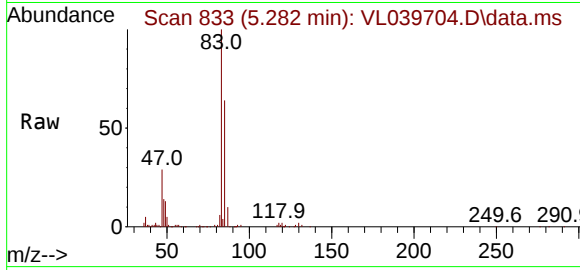




#29
Chloroform
Concen: 3.263 ppbv
RT: 5.282 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

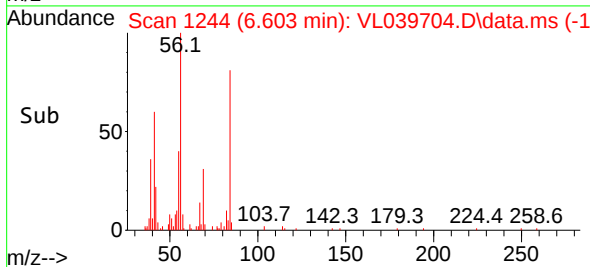
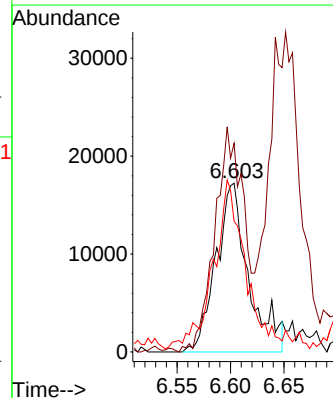
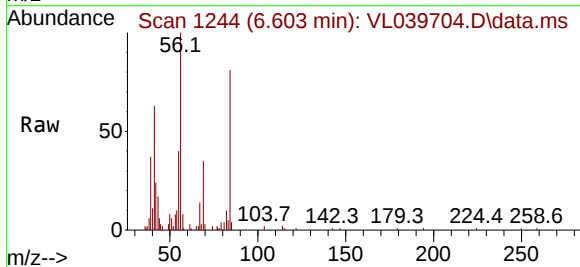
Instrument :
MSVOA_L
ClientSampleId :
IA1

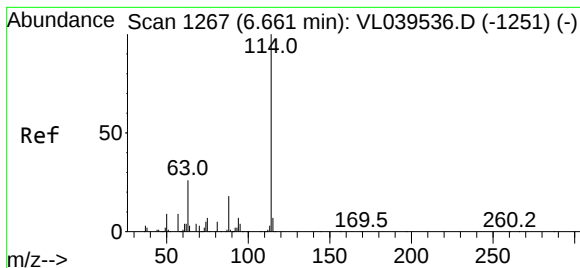
Tgt Ion: 83 Resp: 521188
Ion Ratio Lower Upper
83 100
85 63.6 52.8 79.2



#30
Cyclohexane
Concen: 0.424 ppbv m
RT: 6.603 min Scan# 1244
Delta R.T. -0.003 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

Tgt Ion: 84 Resp: 36363
Ion Ratio Lower Upper
84 100
56 0.0 107.7 161.5#
41 0.0 67.7 101.5#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.651 min Scan# 11

Delta R.T. -0.009 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

IA1

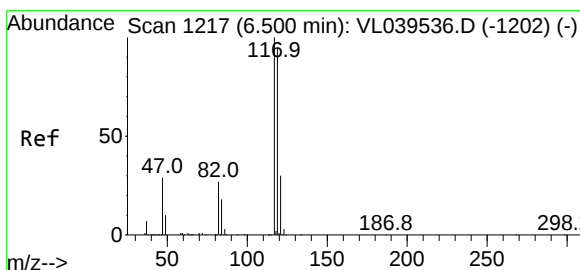
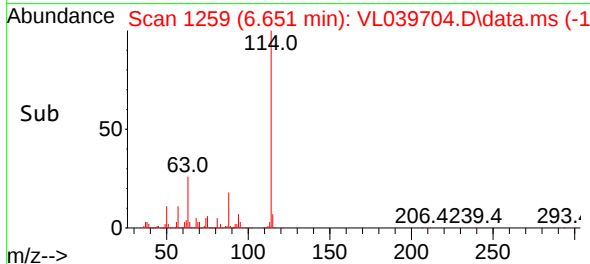
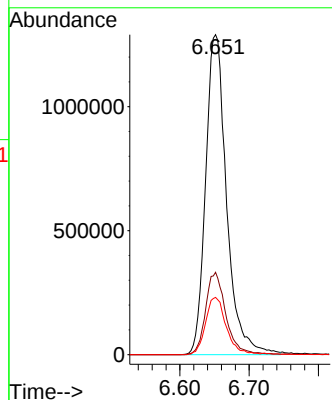
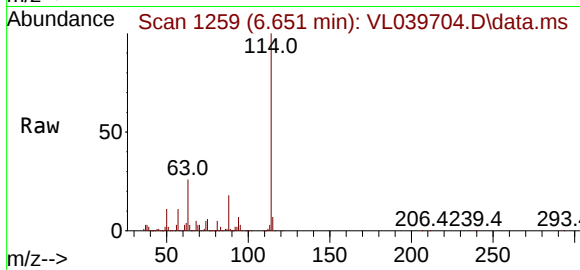
Tgt Ion:114 Resp: 2708130

Ion Ratio Lower Upper

114 100

63 25.0 20.2 30.4

88 18.0 14.5 21.7



#35

Carbon Tetrachloride

Concen: 0.074 ppbv m

RT: 6.487 min Scan# 1208

Delta R.T. -0.012 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

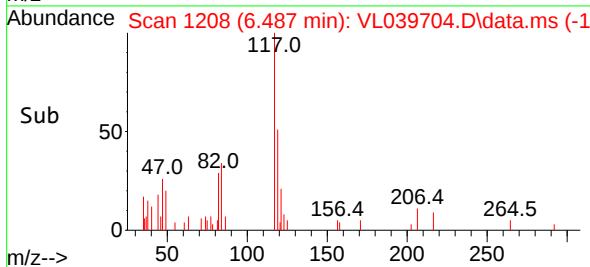
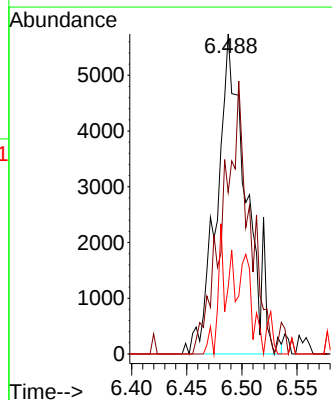
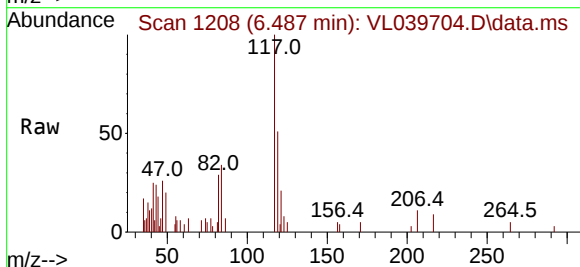
Tgt Ion:117 Resp: 10633

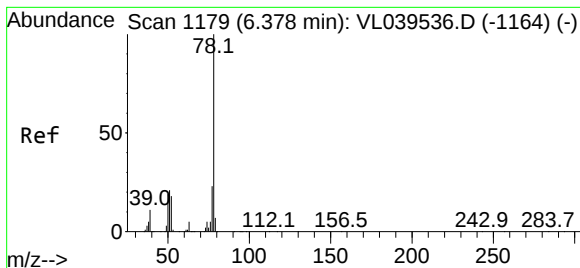
Ion Ratio Lower Upper

117 100

119 50.5 75.4 113.2#

121 20.9 24.2 36.2#





#36

Benzene

Concen: 1.738 ppbv

RT: 6.369 min Scan# 1171

Delta R.T. -0.009 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

IA1

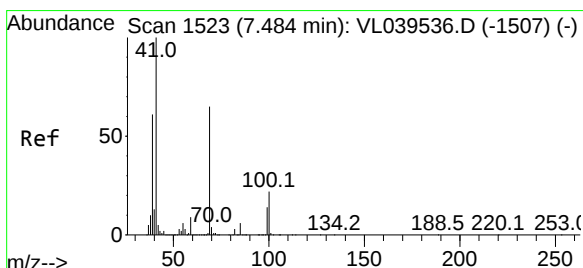
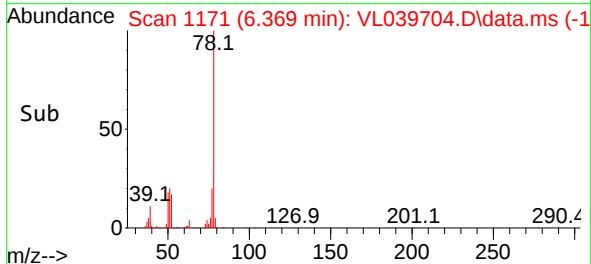
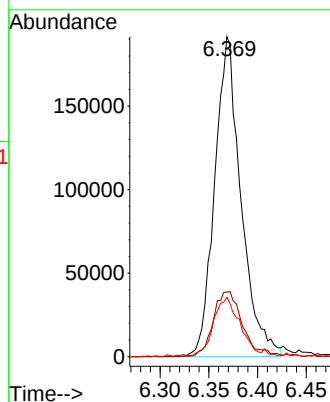
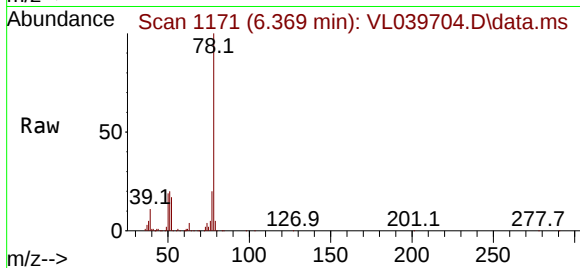
Tgt Ion: 78 Resp: 359746

Ion Ratio Lower Upper

78 100

77 20.0 20.3 30.5#

50 17.9 15.5 23.3



#43

Methyl Methacrylate

Concen: 1.057 ppbv

RT: 7.471 min Scan# 1514

Delta R.T. -0.012 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

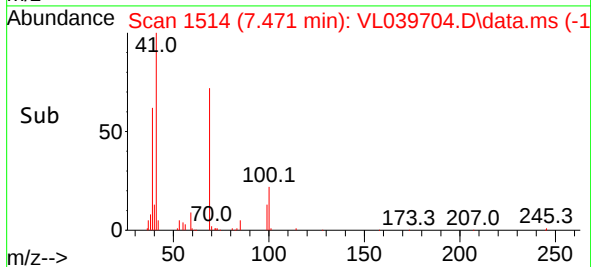
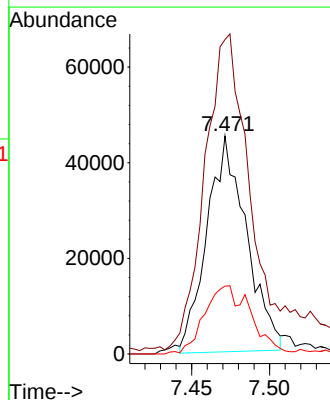
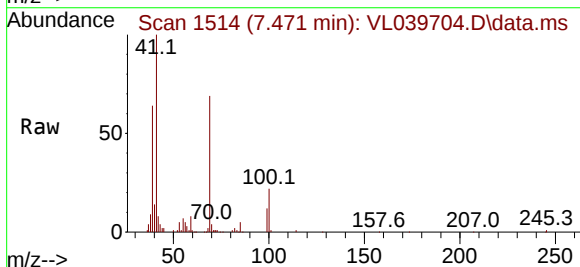
Tgt Ion: 69 Resp: 79791

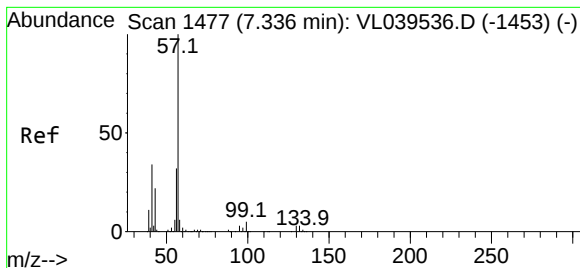
Ion Ratio Lower Upper

69 100

41 184.5 120.8 181.2#

100 37.7 27.8 41.6





#44

2,2,4-Trimethylpentane

Concen: 0.794 ppbv

RT: 7.317 min Scan# 14

Delta R.T. -0.019 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

IA1

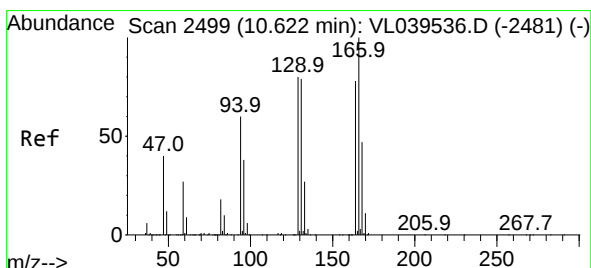
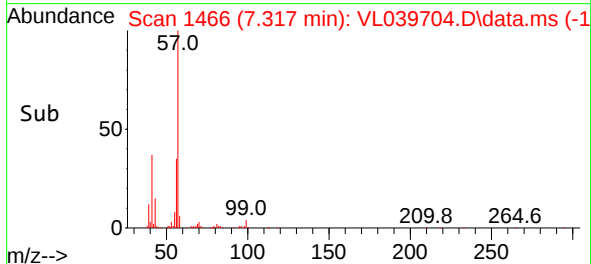
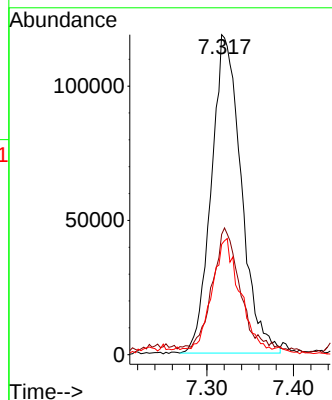
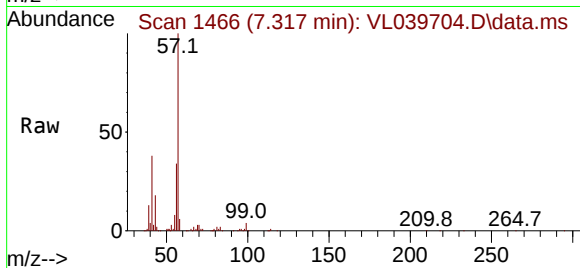
Tgt Ion: 57 Resp: 283230

Ion Ratio Lower Upper

57 100

41 43.0 27.4 41.2#

56 37.0 24.5 36.7#



#52

Tetrachloroethene

Concen: 0.066 ppbv m

RT: 10.610 min Scan# 2490

Delta R.T. -0.012 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Tgt Ion: 164 Resp: 5186

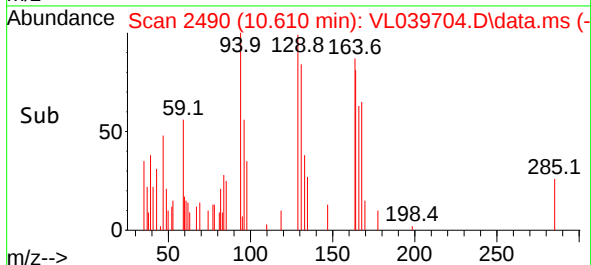
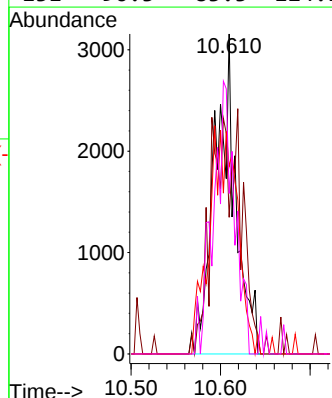
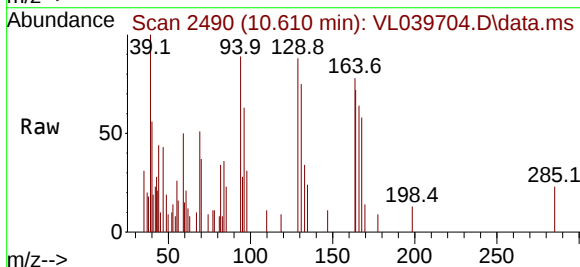
Ion Ratio Lower Upper

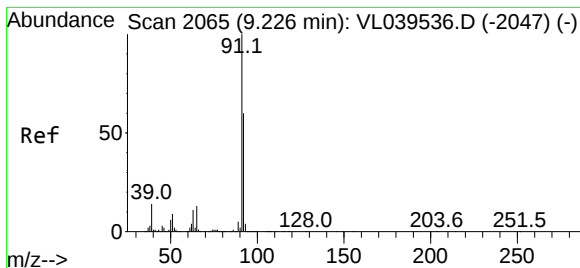
164 100

166 82.0 102.2 153.2#

129 112.6 85.8 128.8

131 96.3 83.3 124.9





#53

Toluene

Concen: 2.256 ppbv

RT: 9.214 min Scan# 2065

Delta R.T. -0.012 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

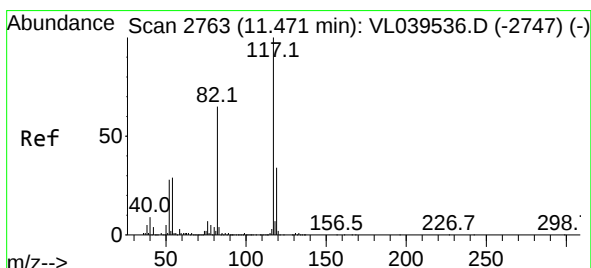
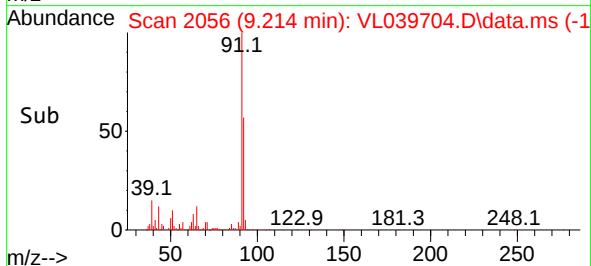
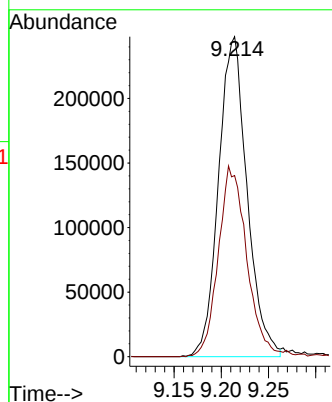
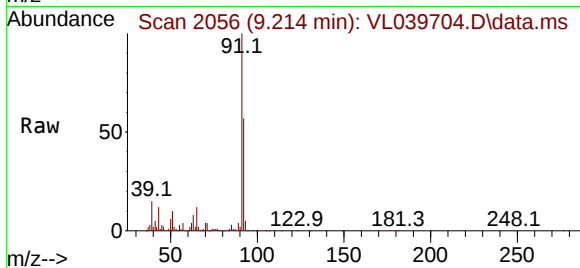
IA1

Tgt Ion: 91 Resp: 519515

Ion Ratio Lower Upper

91 100

92 60.4 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.455 min Scan# 2753

Delta R.T. -0.015 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

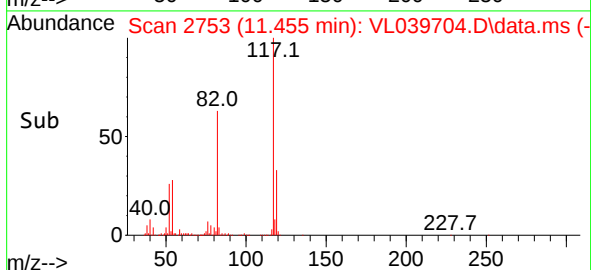
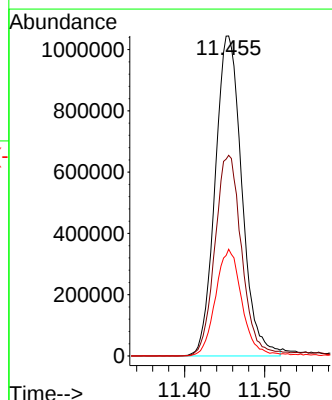
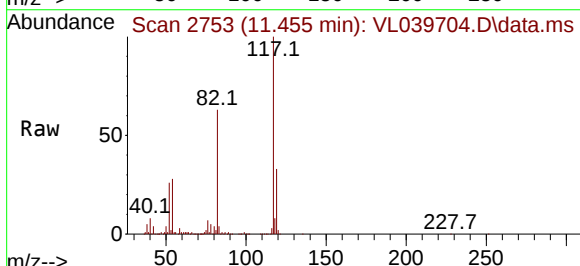
Tgt Ion: 117 Resp: 2422999

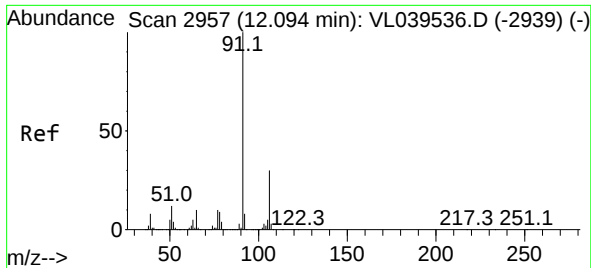
Ion Ratio Lower Upper

117 100

82 65.0 50.8 76.2

119 33.9 24.1 36.1

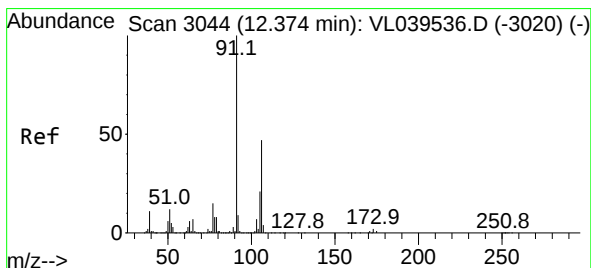
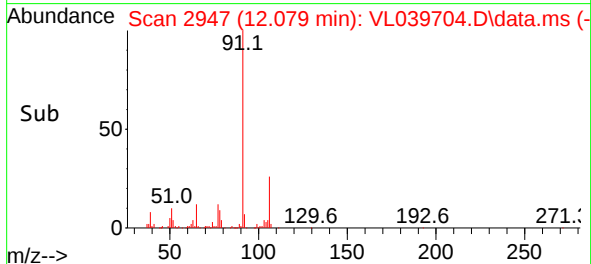
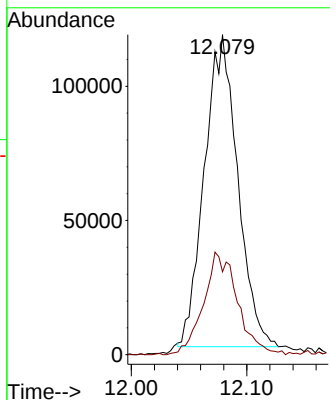
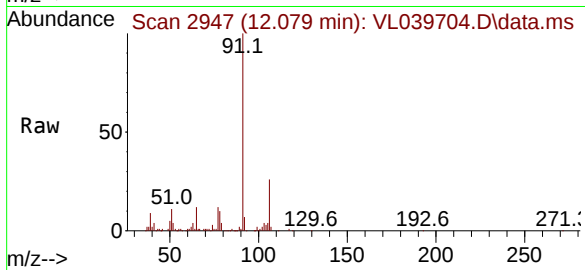




#58
Ethyl Benzene
Concen: 0.831 ppbv
RT: 12.079 min Scan# 2957
Delta R.T. -0.015 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

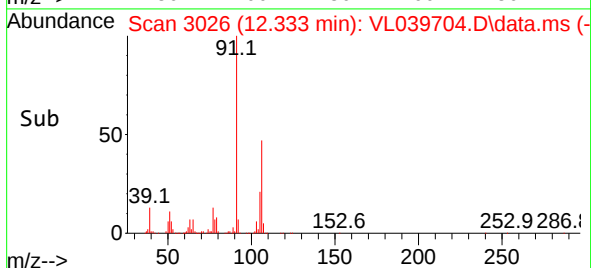
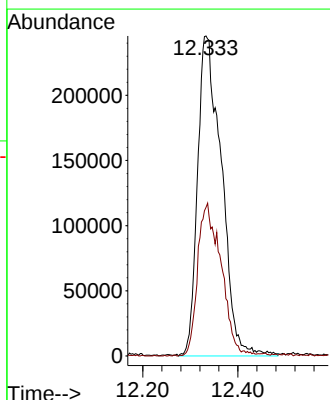
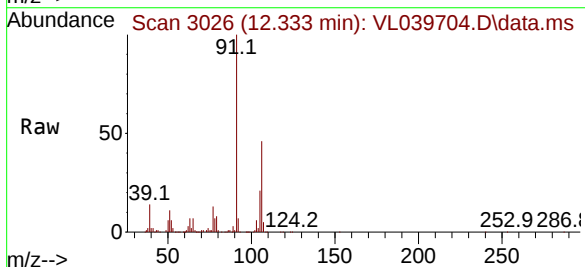
Instrument :
MSVOA_L
ClientSampleId :
IA1

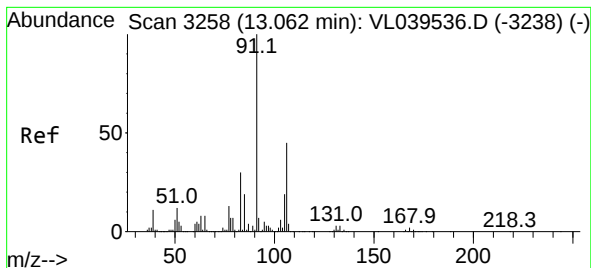
Tgt Ion: 91 Resp: 232039
Ion Ratio Lower Upper
91 100
106 25.8 25.4 38.0



#59
m/p-Xylene
Concen: 3.442 ppbv m
RT: 12.333 min Scan# 3026
Delta R.T. -0.041 min
Lab File: VL039704.D
Acq: 10 Oct 2022 20:18

Tgt Ion: 91 Resp: 855842
Ion Ratio Lower Upper
91 100
106 0.0 35.4 53.2#





#60

o-Xylene

Concen: 1.282 ppbv

RT: 13.047 min Scan# 3197

Delta R.T. -0.015 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

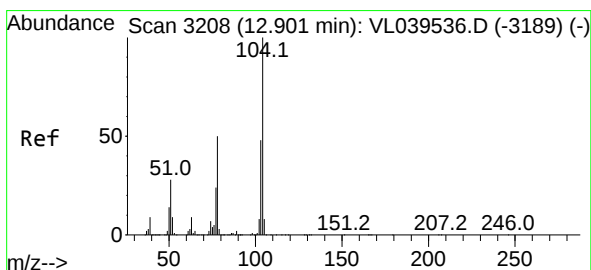
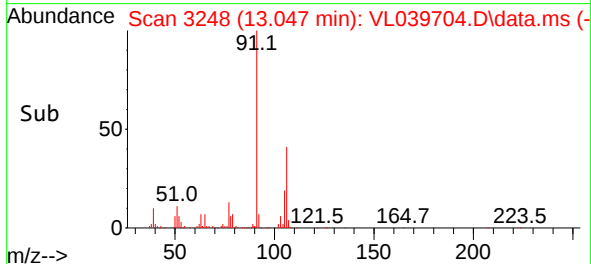
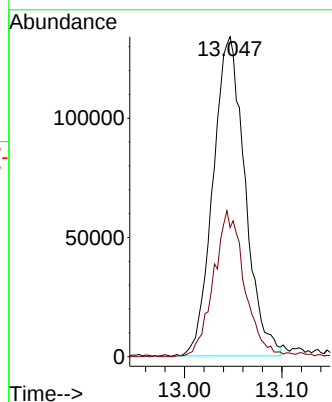
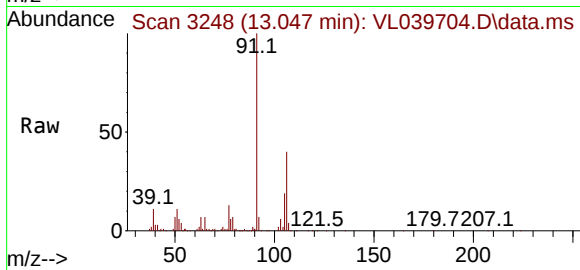
IA1

Tgt Ion: 91 Resp: 304444

Ion Ratio Lower Upper

91 100

106 45.0 22.4 67.3



#61

Styrene

Concen: 0.221 ppbv m

RT: 12.883 min Scan# 3197

Delta R.T. -0.019 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

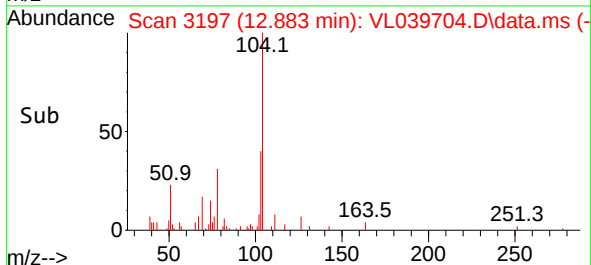
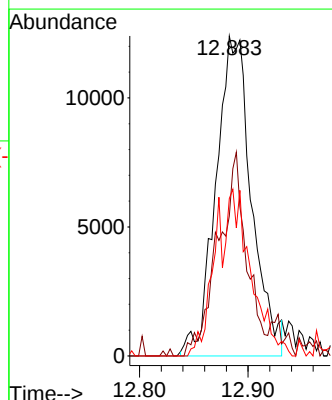
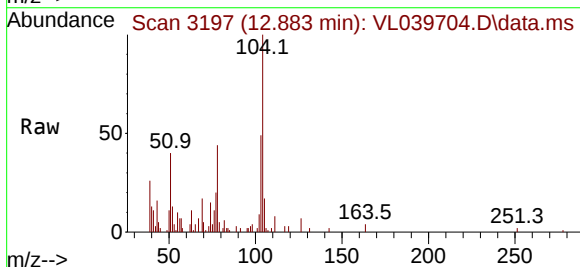
Tgt Ion: 104 Resp: 28292

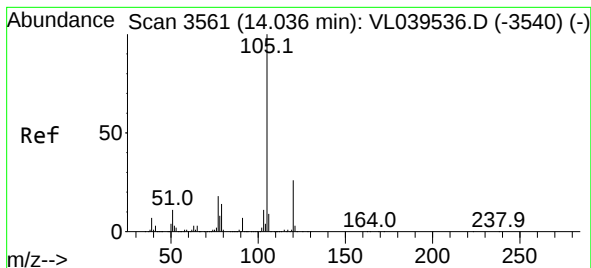
Ion Ratio Lower Upper

104 100

78 0.0 41.2 61.8#

103 0.0 38.7 58.1#





#62

Isopropylbenzene

Concen: 0.119 ppbv

RT: 14.015 min Scan# 3549

Delta R.T. -0.022 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

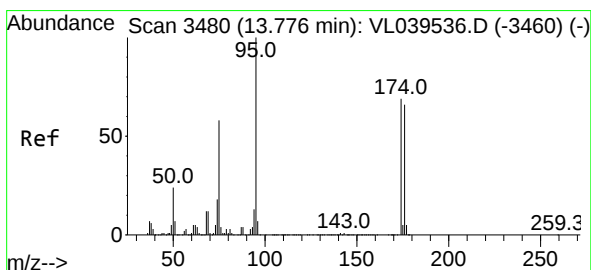
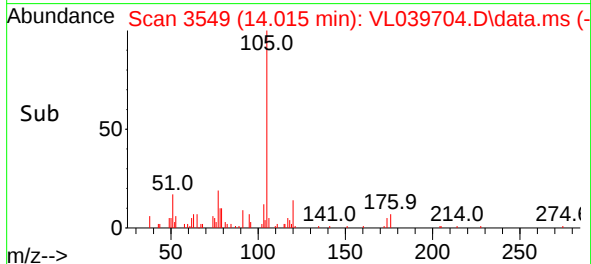
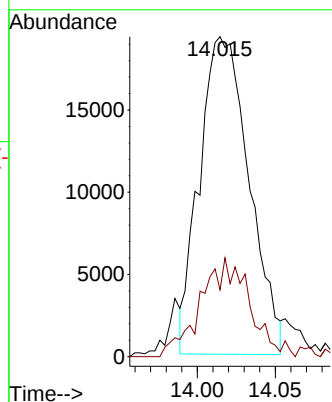
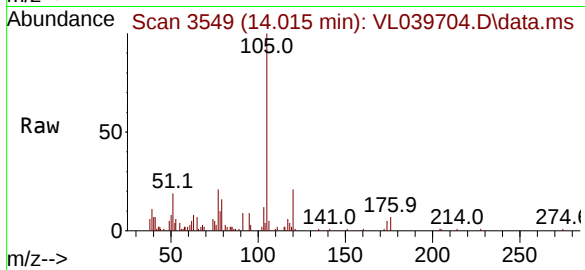
IA1

Tgt Ion:105 Resp: 42649

Ion Ratio Lower Upper

105 100

120 32.4 20.7 31.1#



#68

1-Bromo-4-Fluorobenzene

Concen: 10.095 ppbv

RT: 13.764 min Scan# 3471

Delta R.T. -0.012 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

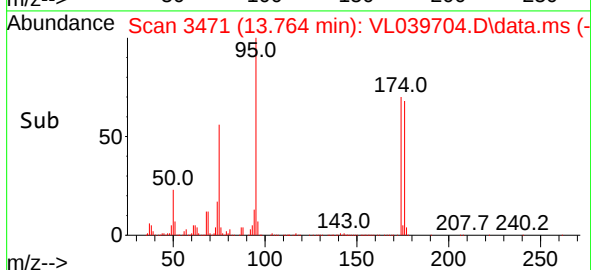
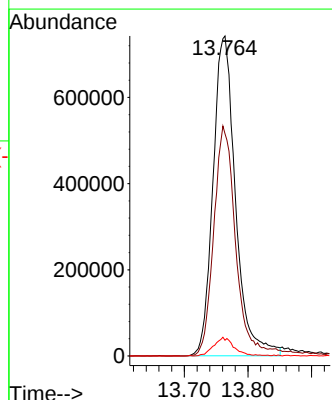
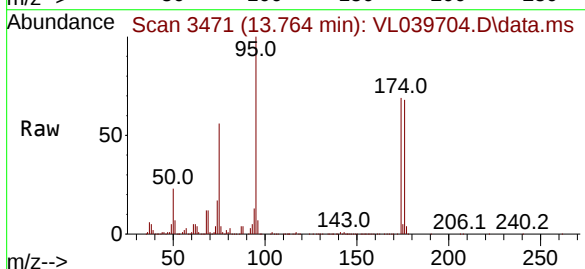
Tgt Ion: 95 Resp: 1825976

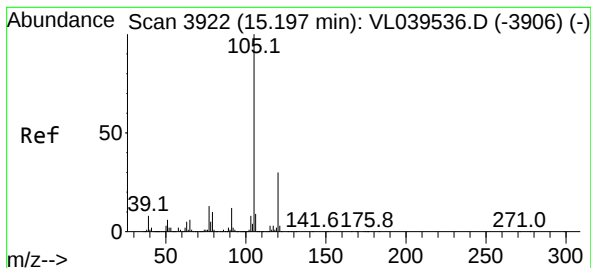
Ion Ratio Lower Upper

95 100

174 72.0 55.9 83.9

175 5.3 4.2 6.4





#72

4-Ethyltoluene

Concen: 0.714 ppbv

RT: 15.178 min Scan# 3911

Delta R.T. -0.019 min

Lab File: VL039704.D

Acq: 10 Oct 2022 20:18

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion:105 Resp: 193500

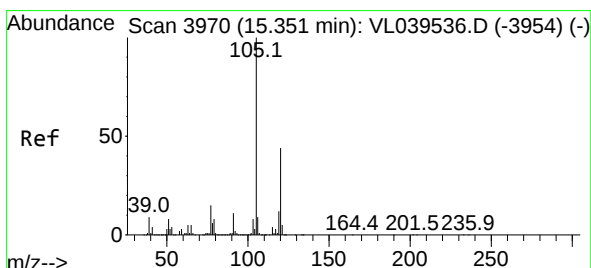
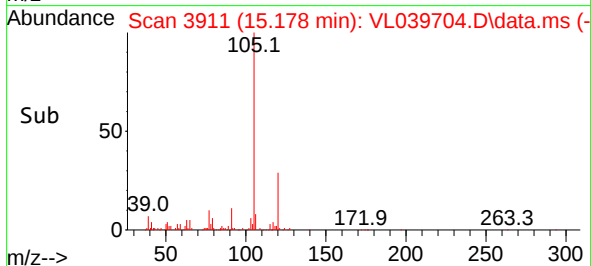
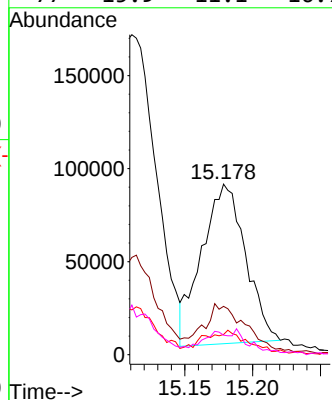
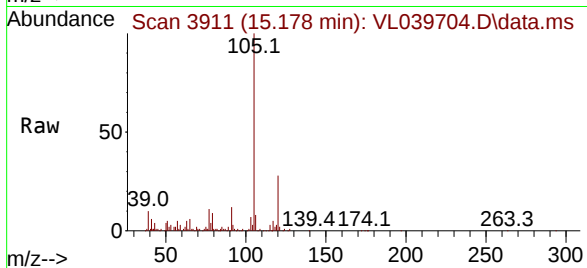
Ion Ratio Lower Upper

105 100

120 33.9 24.2 36.2

91 14.3 10.2 15.4

77 15.9 11.1 16.7



#73

1,3,5-Trimethylbenzene

Concen: 0.601 ppbv

RT: 15.339 min Scan# 3961

Delta R.T. -0.012 min

Lab File: VL039704.D

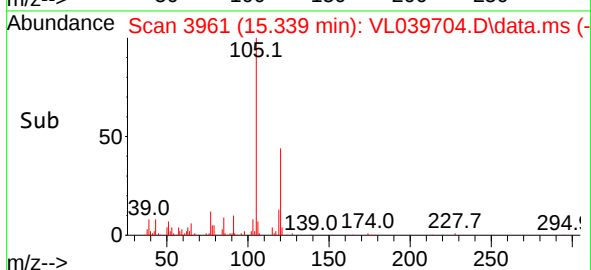
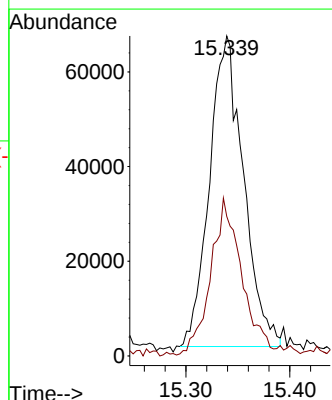
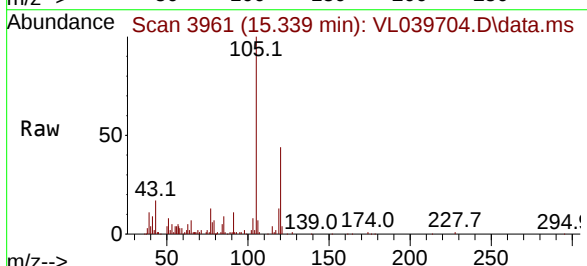
Acq: 10 Oct 2022 20:18

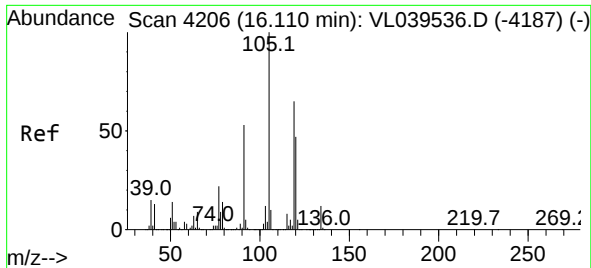
Tgt Ion:105 Resp: 149105

Ion Ratio Lower Upper

105 100

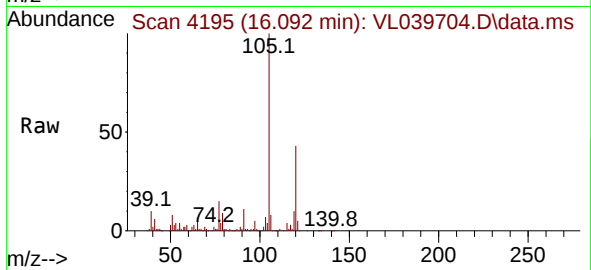
120 44.2 38.2 57.4





#74
 1,2,4-Trimethylbenzene
 Concen: 1.929 ppbv
 RT: 16.092 min Scan# 4195
 Delta R.T. -0.019 min
 Lab File: VL039704.D
 Acq: 10 Oct 2022 20:18

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1



Tgt Ion:	105	Resp:	536168
Ion	Ratio	Lower	Upper
105	100		
120	42.8	39.5	59.3
91	10.1	39.2	58.8#
77	14.8	17.2	25.8#

