

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL110823\
 Data File : VL040812.D
 Acq On : 8 Nov 2023 15:57
 Operator : SY/MD
 Sample : 05290-03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Quant Time: Nov 09 00:30:34 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101123AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Nov 09 00:25:02 2023
 Response via : Initial Calibration

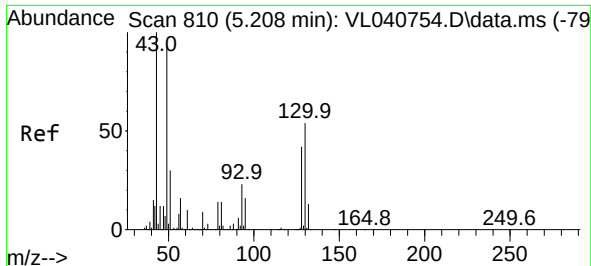
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.208	49	1121423	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.658	114	2821419	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.458	117	2329111	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.767	95	1678983	9.797	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.000%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.771	85	97091	0.492	ppbv	99
3) Chlorodifluoromethane	2.716	51	105553	0.640	ppbv #	82
4) Chloromethane	2.854	50	37683	0.579	ppbv	96
9) Propene	2.912	41	116175	1.898	ppbv	96
10) Heptane	7.587	43	12498	0.081	ppbv #	27
11) Trichlorofluoromethane	3.594	101	46729	0.307	ppbv	96
12) 1,1,2-Trichlorotrifluo...	4.092	101	4429	0.041	ppbv #	7
13) Ethanol	3.272	45	216326	15.655	ppbv	96
15) Acetone	3.500	43	746551	6.440	ppbv	92
16) 1,3-Butadiene	3.021	39	3182	0.052	ppbv #	1
17) tert-Butyl alcohol	3.918	59	3668	0.031	ppbv #	71
19) Isopropyl Alcohol	3.613	45	343136	4.598	ppbv #	43
20) Methylene Chloride	3.960	84	253071	5.241	ppbv	98
23) Vinyl Acetate	4.632	43	42196	0.286	ppbv #	12
25) Ethyl Acetate	5.227	43	202825	0.798	ppbv #	82
26) Hexane	5.230	57	241537	2.081	ppbv #	45
30) Cyclohexane	6.610	84	7954	0.081	ppbv #	40
34) 2-Butanone	4.809	43	80745	0.632	ppbv	93
35) Carbon Tetrachloride	6.500	117	5688	0.036	ppbv #	40
36) Benzene	6.378	78	83548	0.385	ppbv #	90
39) 1,2-Dichloropropane	6.658	63	696956	8.220	ppbv #	27
41) Tetrahydrofuran	5.587	42	3153	0.036	ppbv #	60
44) 2,2,4-Trimethylpentane	7.327	57	22334	0.061	ppbv #	1
53) Toluene	9.214	91	296833	1.149	ppbv	98
58) Ethyl Benzene	12.342	91	79044	0.270	ppbv	88
59) m/p-Xylene	12.342	91	79044	0.328	ppbv #	30
60) o-Xylene	13.053	91	16547	0.072	ppbv #	30
61) Styrene	12.889	104	14617	0.115	ppbv #	43
74) 1,2,4-Trimethylbenzene	16.092	105	12843	0.050	ppbv #	76
80) Naphthalene,2-methyl-	24.371	142	4919	0.083	ppbv #	86

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

Quant Time: Nov 09 00:30:34 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101123AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Nov 09 00:25:02 2023
Response via : Initial Calibration

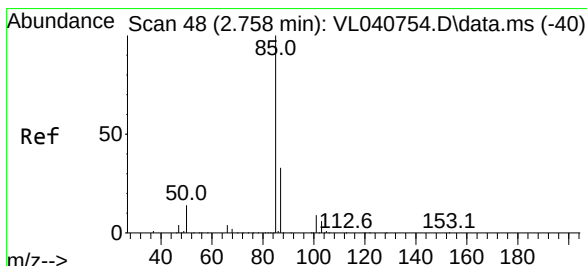
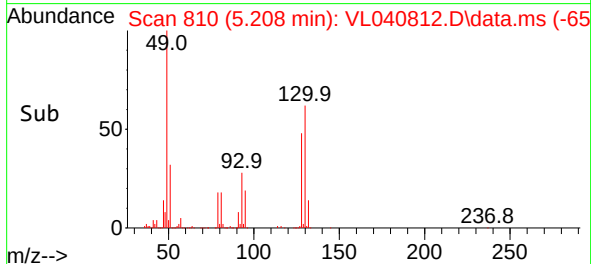
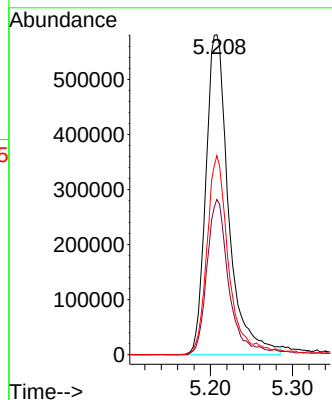
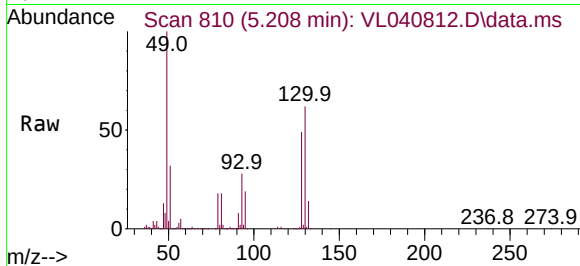




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.208 min Scan# 81
Delta R.T. -0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

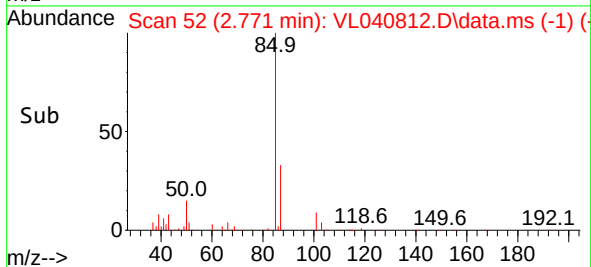
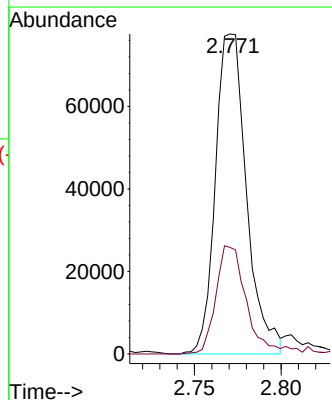
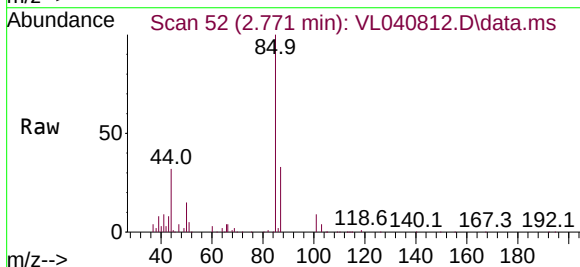
Instrument :
MSVOA_L
ClientSampleId :
OA1

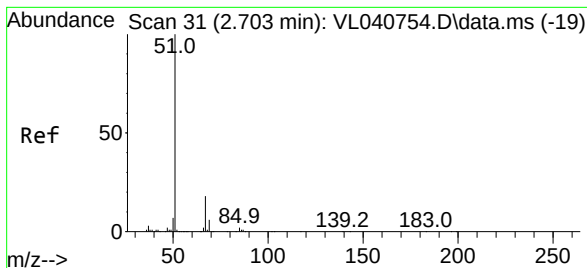
Tgt Ion: 49 Resp: 1121423
Ion Ratio Lower Upper
49 100
128 48.2 23.9 71.7
130 61.3 30.7 92.1



#2
Dichlorodifluoromethane
Concen: 0.492 ppbv
RT: 2.771 min Scan# 52
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion: 85 Resp: 97091
Ion Ratio Lower Upper
85 100
87 33.3 26.0 39.0

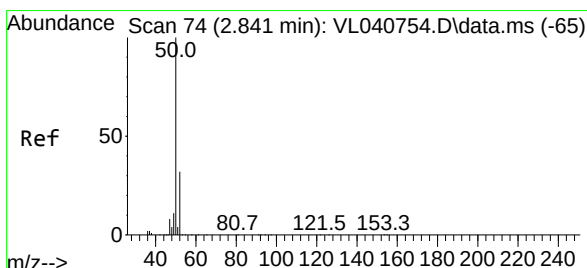
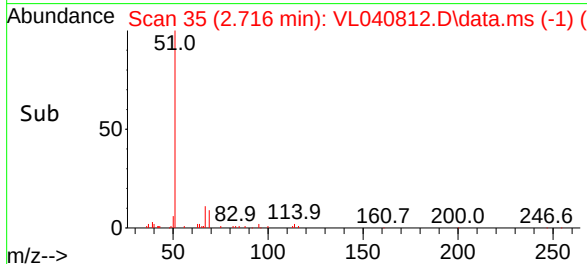
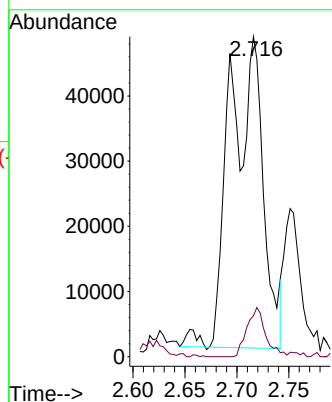
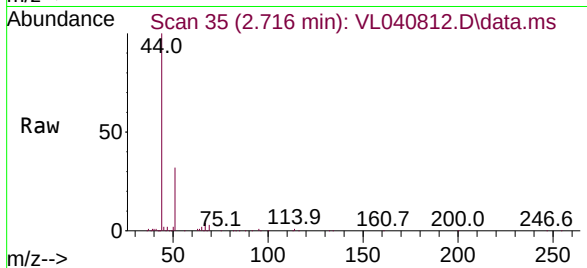




#3
Chlorodifluoromethane
Concen: 0.640 ppbv
RT: 2.716 min Scan# 31
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

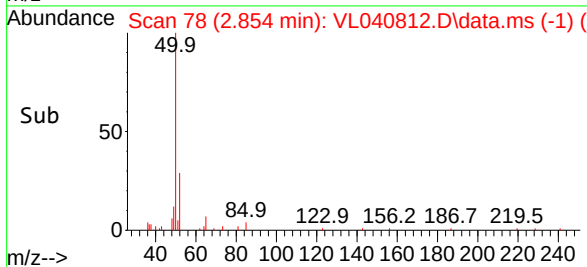
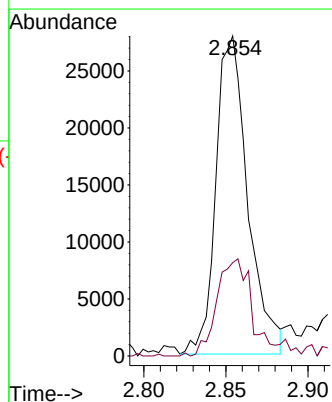
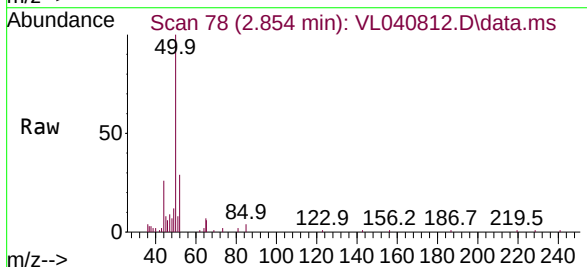
Instrument :
MSVOA_L
ClientSampleId :
OA1

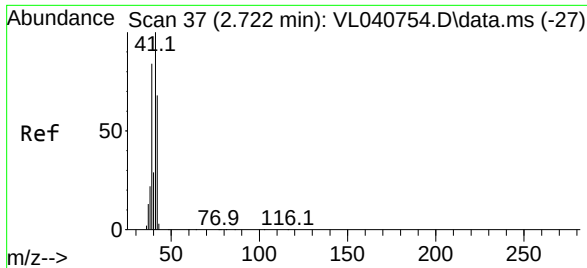
Tgt Ion: 51 Resp: 105553
Ion Ratio Lower Upper
51 100
67 9.4 13.8 20.6#



#4
Chloromethane
Concen: 0.579 ppbv
RT: 2.854 min Scan# 78
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion: 50 Resp: 37683
Ion Ratio Lower Upper
50 100
52 29.3 25.3 37.9

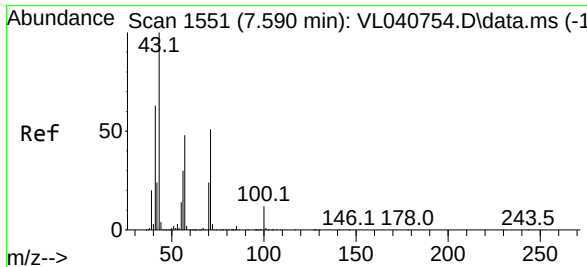
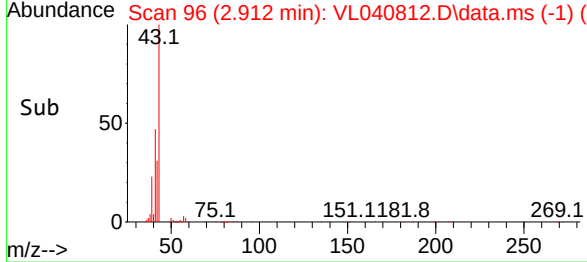
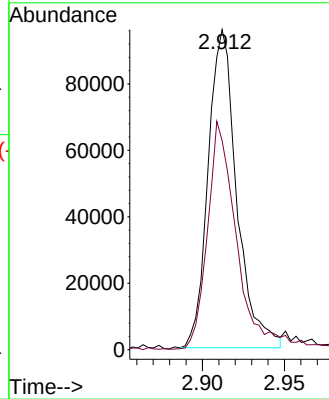
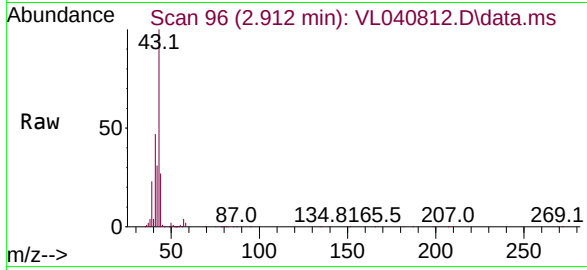




#9
Propene
Concen: 1.898 ppbv
RT: 2.912 min Scan# 90
Delta R.T. 0.177 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

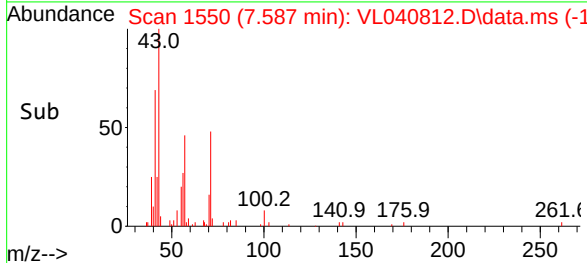
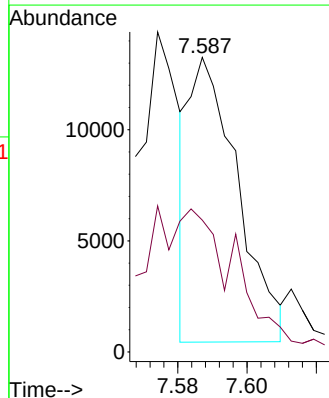
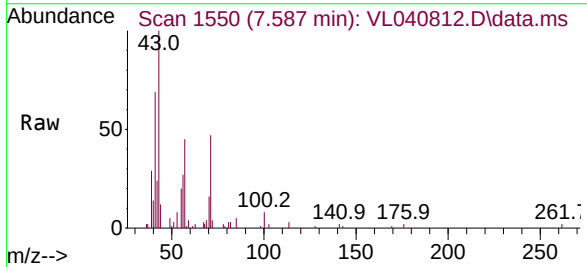
Instrument :
MSVOA_L
ClientSampleId :
OA1

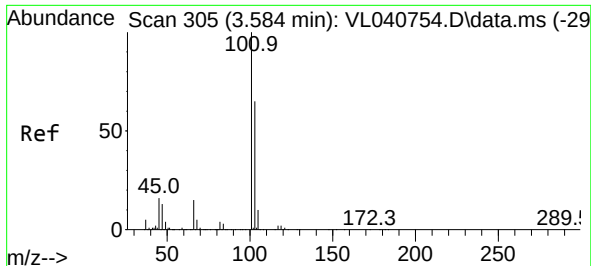
Tgt Ion: 41 Resp: 116175
Ion Ratio Lower Upper
41 100
42 75.1 57.1 85.7



#10
Heptane
Concen: 0.081 ppbv
RT: 7.587 min Scan# 1550
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion: 43 Resp: 12498
Ion Ratio Lower Upper
43 100
57 0.0 40.0 60.0#

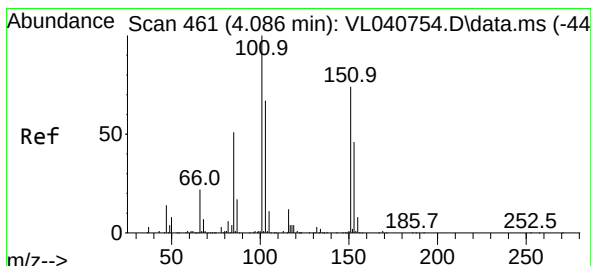
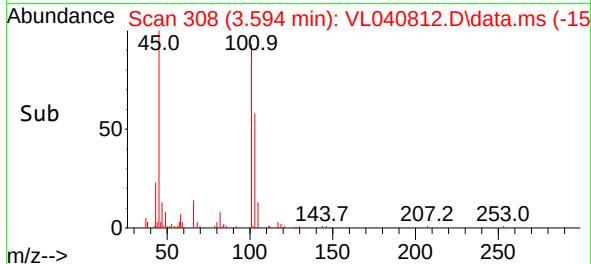
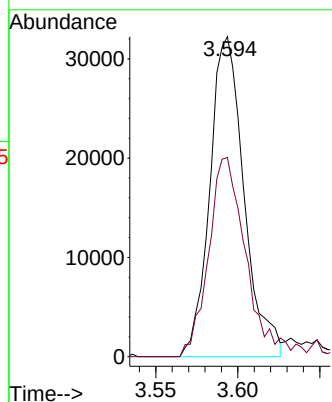
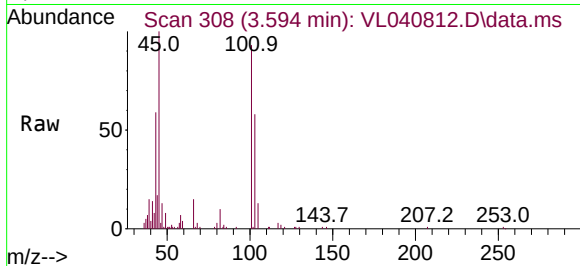




#11
Trichlorofluoromethane
Concen: 0.307 ppbv
RT: 3.594 min Scan# 305
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

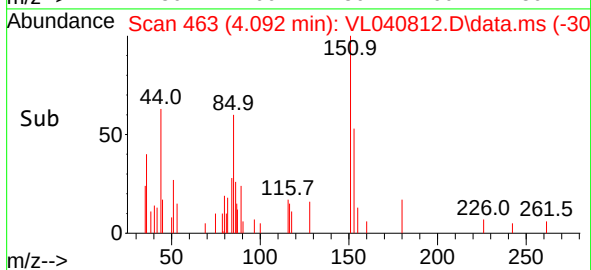
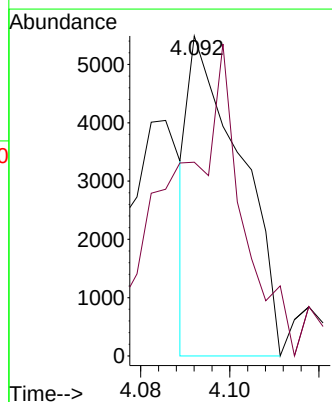
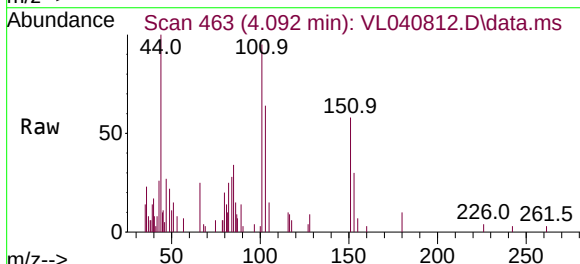
Instrument :
MSVOA_L
ClientSampleId :
OA1

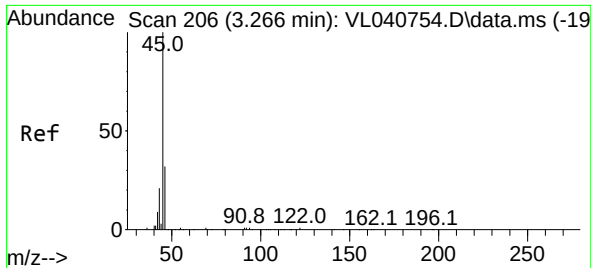
Tgt Ion:101 Resp: 46729
Ion Ratio Lower Upper
101 100
103 62.2 52.2 78.2



#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.041 ppbv
RT: 4.092 min Scan# 463
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion:101 Resp: 4429
Ion Ratio Lower Upper
101 100
151 150.6 58.1 87.1#

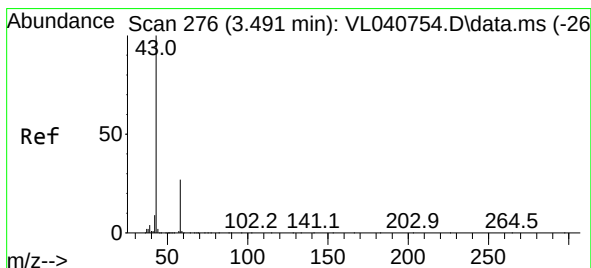
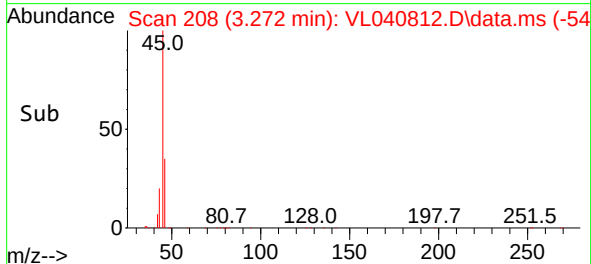
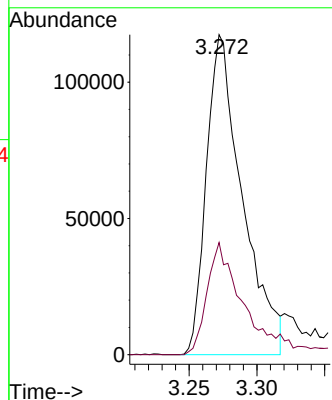
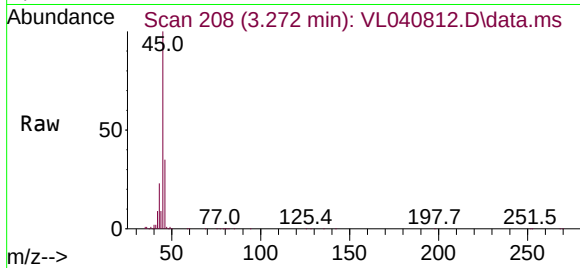




#13
Ethanol
Concen: 15.655 ppbv
RT: 3.272 min Scan# 206
Delta R.T. -0.006 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

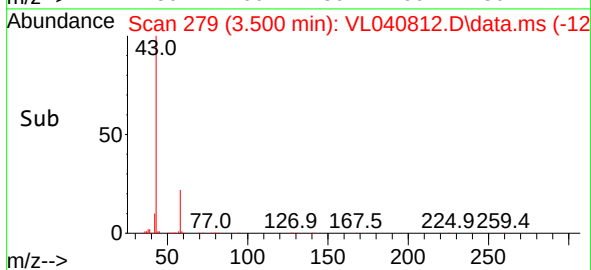
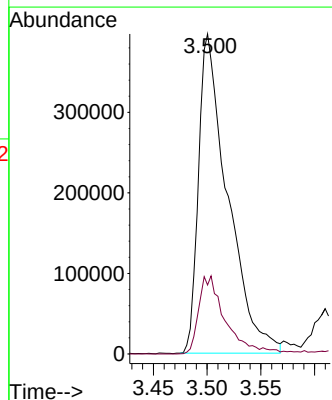
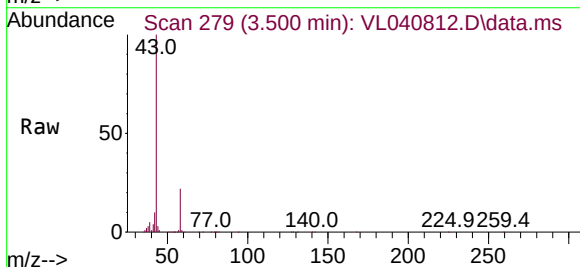
Instrument :
MSVOA_L
ClientSampleId :
OA1

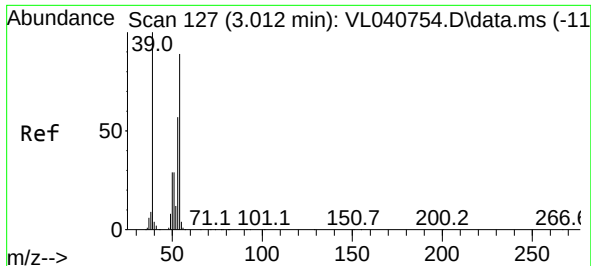
Tgt Ion: 45 Resp: 216326
Ion Ratio Lower Upper
45 100
46 38.8 14.6 58.2



#15
Acetone
Concen: 6.440 ppbv
RT: 3.500 min Scan# 279
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion: 43 Resp: 746551
Ion Ratio Lower Upper
43 100
58 22.8 21.6 32.4





#16

1,3-Butadiene

Concen: 0.052 ppbv

RT: 3.021 min Scan# 11

Delta R.T. 0.000 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Instrument :

MSVOA_L

ClientSampleId :

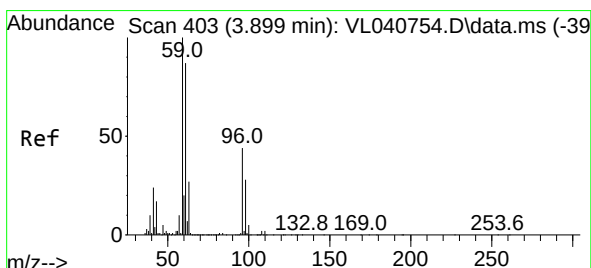
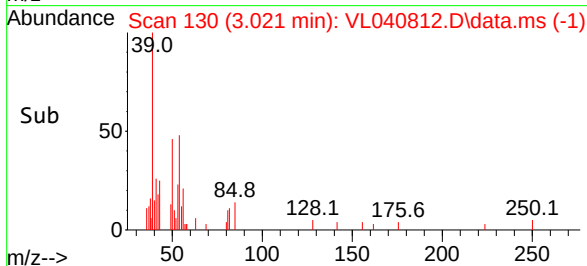
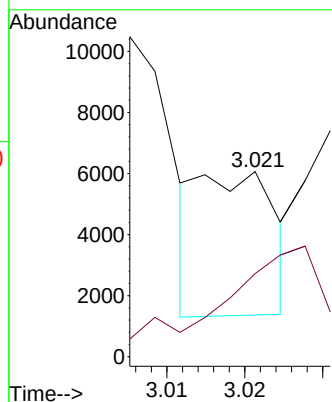
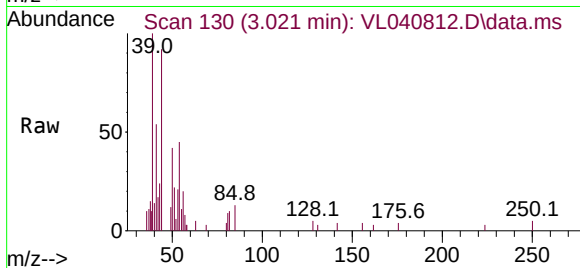
OA1

Tgt Ion: 39 Resp: 3182

Ion Ratio Lower Upper

39 100

54 197.2 63.0 94.6#



#17

tert-Butyl alcohol

Concen: 0.031 ppbv

RT: 3.918 min Scan# 409

Delta R.T. 0.013 min

Lab File: VL040812.D

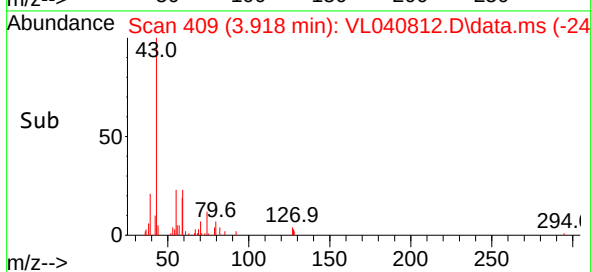
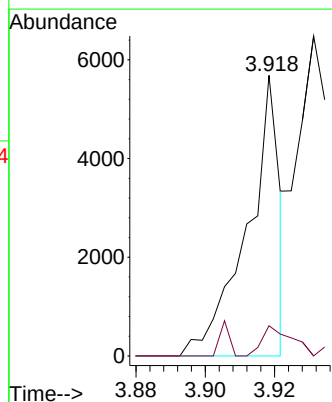
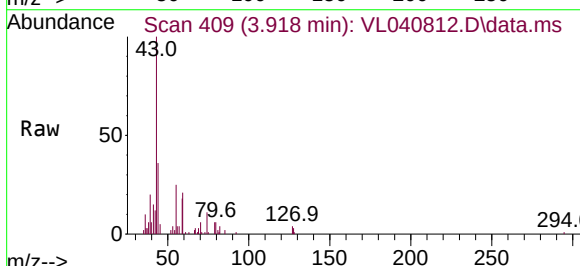
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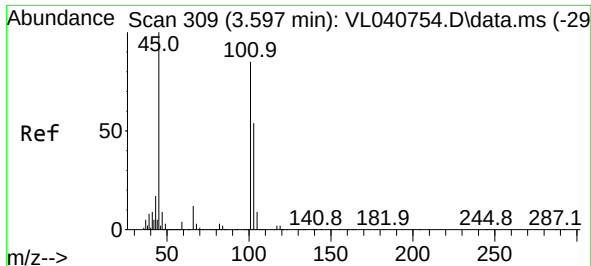
Tgt Ion: 59 Resp: 3668

Ion Ratio Lower Upper

59 100

57 0.0 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 4.598 ppbv

RT: 3.613 min Scan# 314

Delta R.T. 0.006 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Instrument :

MSVOA_L

ClientSampleId :

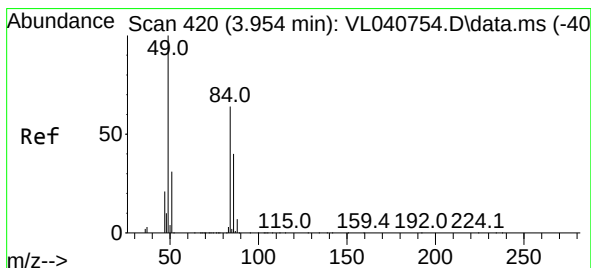
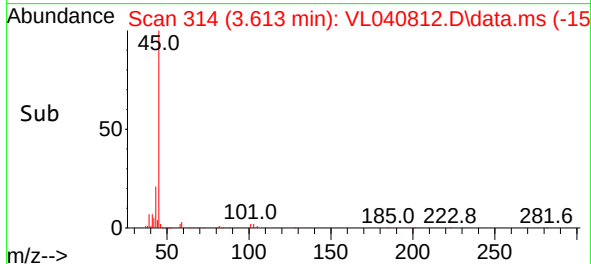
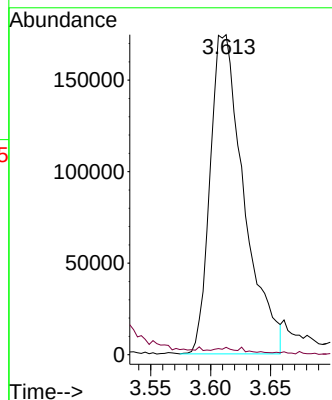
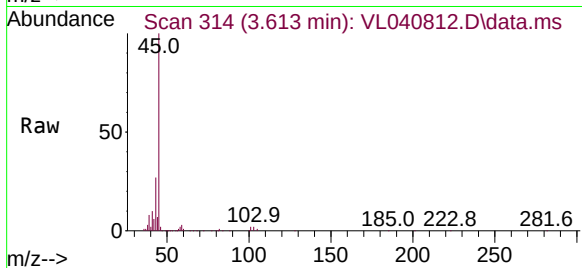
OA1

Tgt Ion: 45 Resp: 343136

Ion Ratio Lower Upper

45 100

58 3.5 30.3 45.5#



#20

Methylene Chloride

Concen: 5.241 ppbv

RT: 3.960 min Scan# 422

Delta R.T. 0.000 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Tgt Ion: 84 Resp: 253071

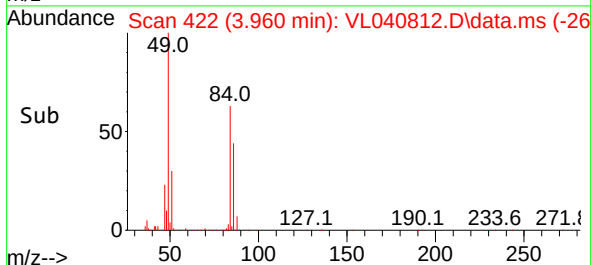
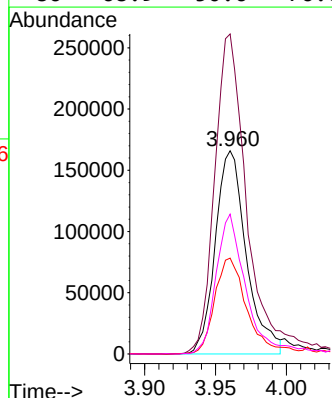
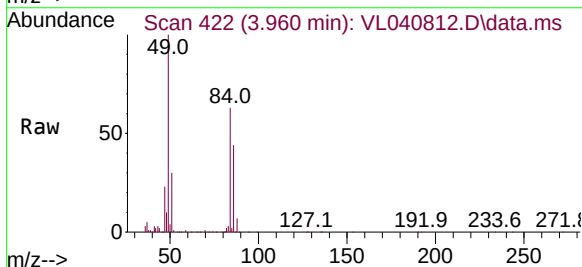
Ion Ratio Lower Upper

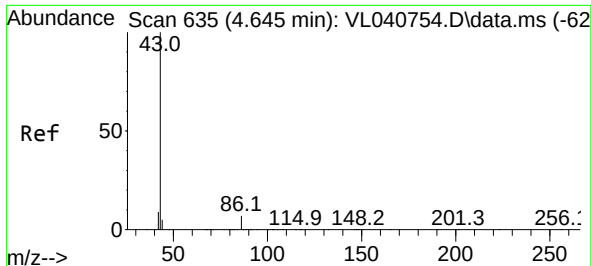
84 100

49 157.3 125.6 188.4

51 47.0 38.9 58.3

86 68.9 50.6 76.0

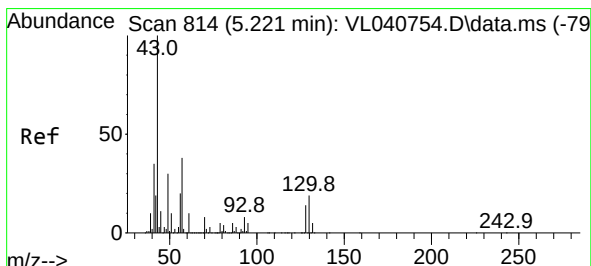
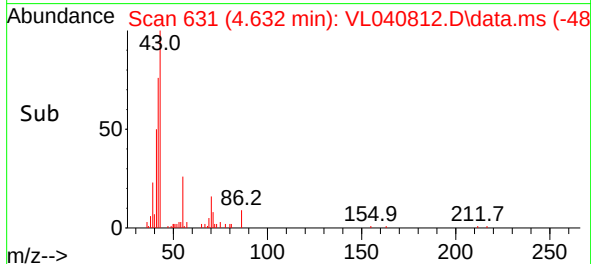
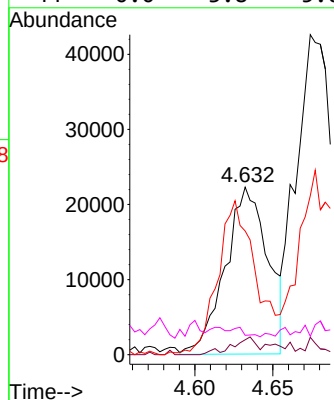
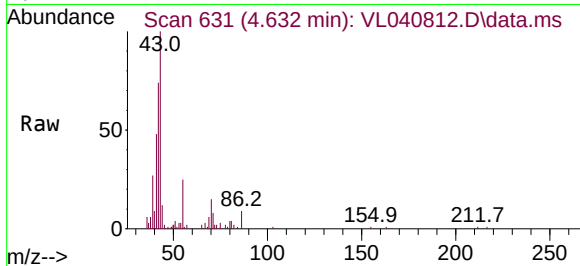




#23
 Vinyl Acetate
 Concen: 0.286 ppbv
 RT: 4.632 min Scan# 61
 Delta R.T. -0.016 min
 Lab File: VL040812.D
 Acq: 8 Nov 2023 15:57

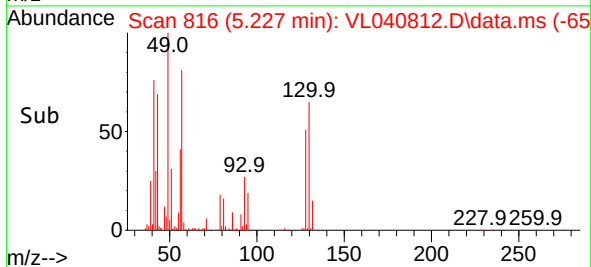
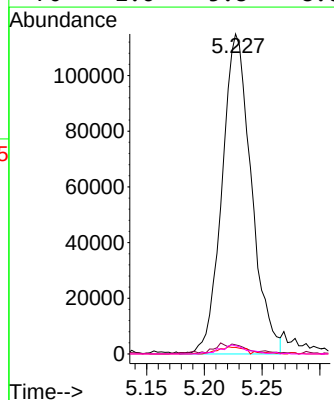
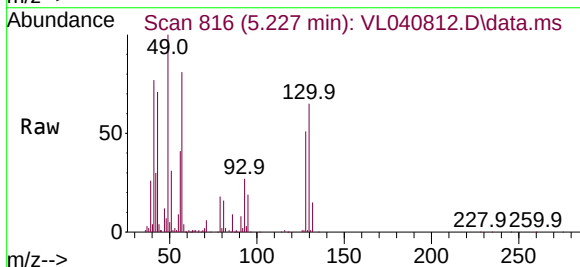
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

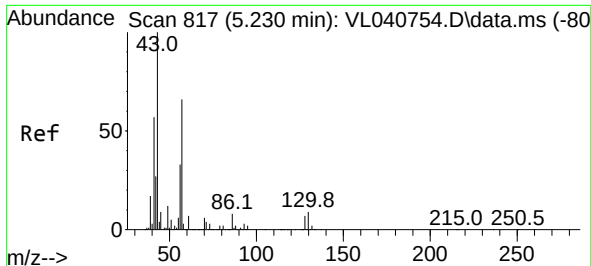
Tgt Ion:	43	Resp:	42196
Ion	Ratio	Lower	Upper
43	100		
86	9.0	4.9	7.3#
42	73.5	7.8	11.6#
44	0.0	3.8	5.6#



#25
 Ethyl Acetate
 Concen: 0.798 ppbv
 RT: 5.227 min Scan# 816
 Delta R.T. 0.006 min
 Lab File: VL040812.D
 Acq: 8 Nov 2023 15:57

Tgt Ion:	43	Resp:	202825
Ion	Ratio	Lower	Upper
43	100		
45	4.2	8.2	12.4#
61	2.1	8.2	12.2#
70	2.6	5.8	8.6#

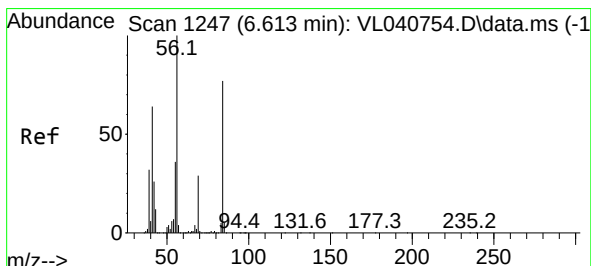
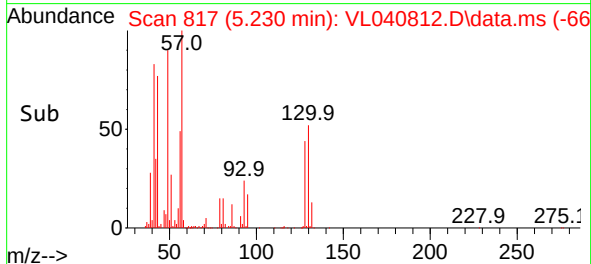
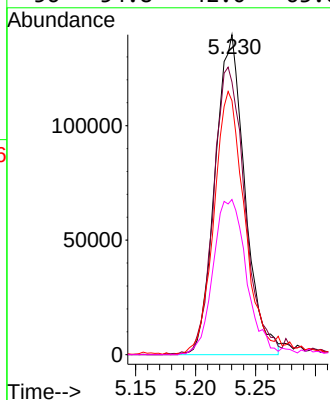
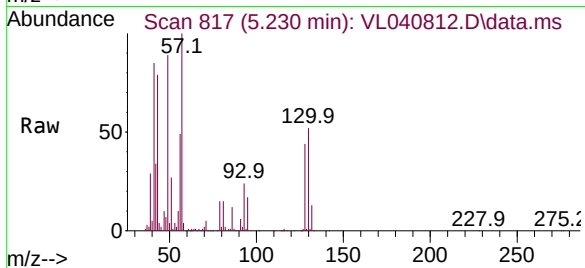




#26
Hexane
Concen: 2.081 ppbv
RT: 5.230 min Scan# 817
Delta R.T. 0.003 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

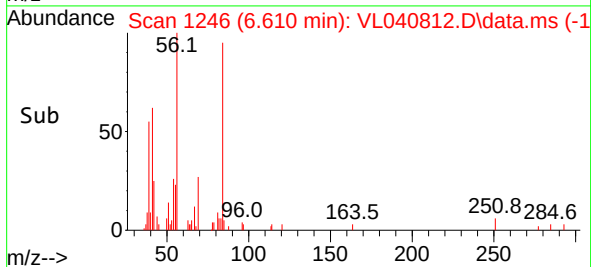
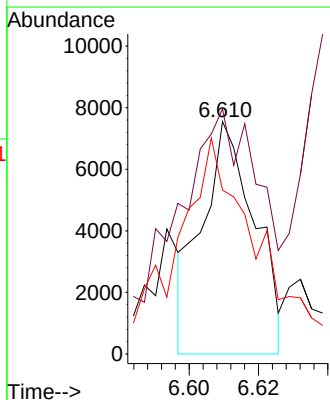
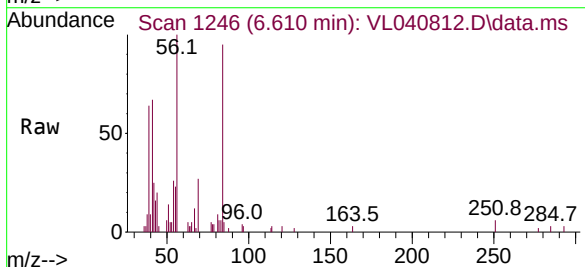
Instrument :
MSVOA_L
ClientSampleId :
OA1

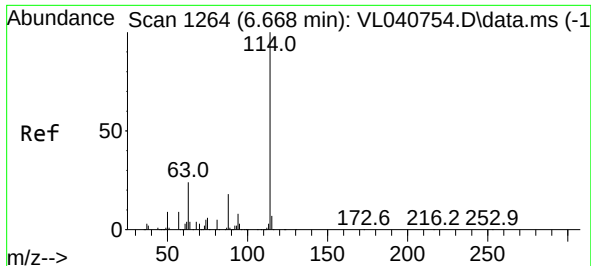
Tgt Ion: 57 Resp: 241537
Ion Ratio Lower Upper
57 100
41 98.2 71.4 107.2
43 87.9 182.3 273.5#
56 54.8 42.0 63.0



#30
Cyclohexane
Concen: 0.081 ppbv
RT: 6.610 min Scan# 1246
Delta R.T. 0.000 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion: 84 Resp: 7954
Ion Ratio Lower Upper
84 100
56 196.6 110.3 165.5#
41 156.5 67.4 101.2#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.658 min Scan# 11

Delta R.T. -0.006 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Instrument :

MSVOA_L

ClientSampleId :

OA1

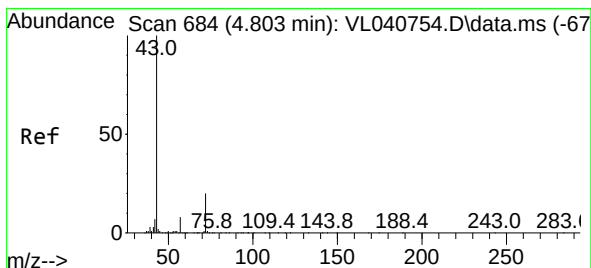
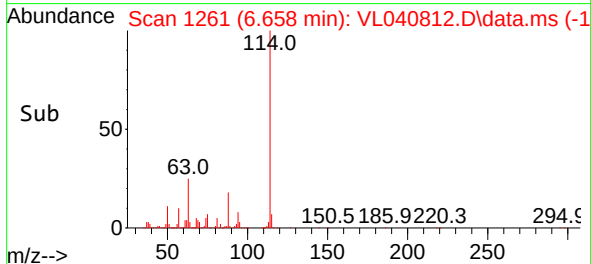
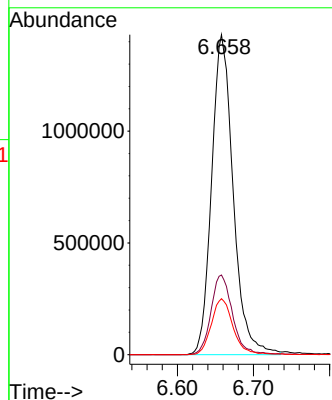
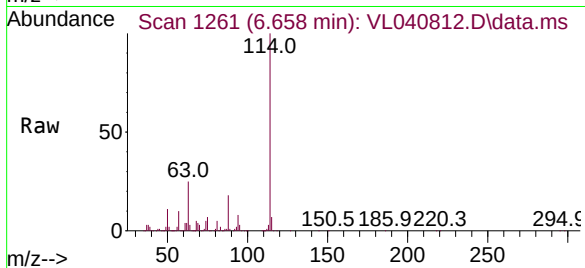
Tgt Ion:114 Resp: 2821419

Ion Ratio Lower Upper

114 100

63 25.1 19.8 29.6

88 17.7 14.2 21.2



#34

2-Butanone

Concen: 0.632 ppbv

RT: 4.809 min Scan# 686

Delta R.T. 0.003 min

Lab File: VL040812.D

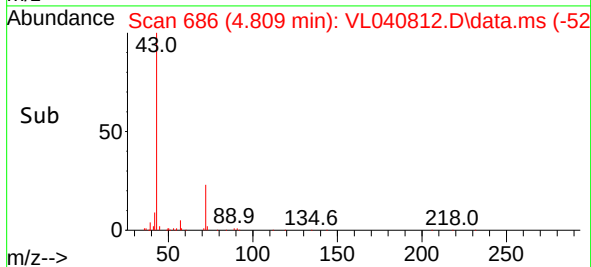
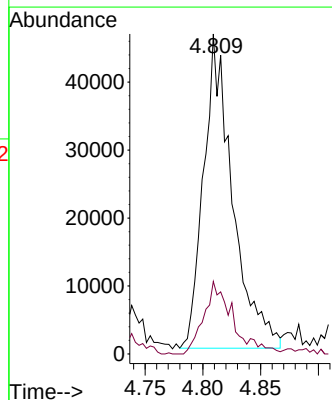
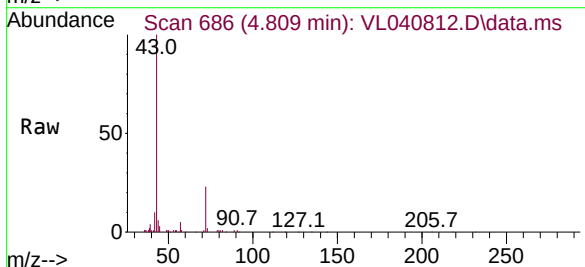
Acq: 8 Nov 2023 15:57

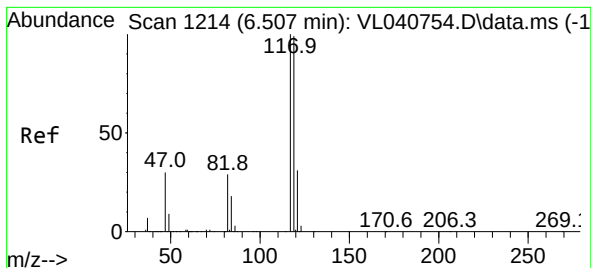
Tgt Ion: 43 Resp: 80745

Ion Ratio Lower Upper

43 100

72 24.5 16.8 25.2





#35

Carbon Tetrachloride

Concen: 0.036 ppbv

RT: 6.500 min Scan# 1174

Delta R.T. -0.006 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Instrument :

MSVOA_L

ClientSampleId :

OA1

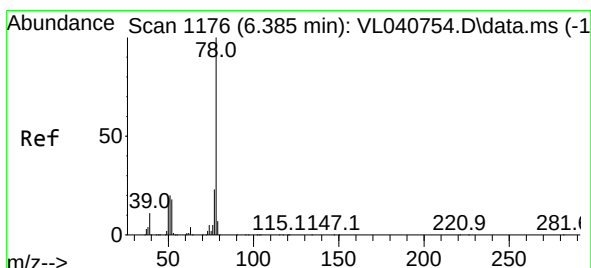
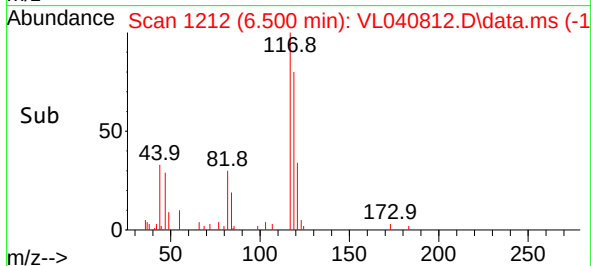
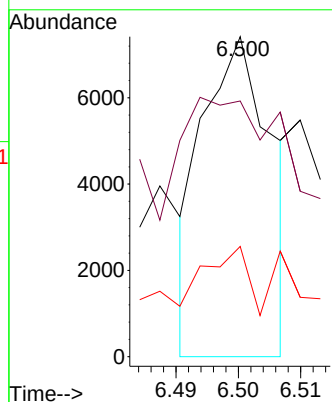
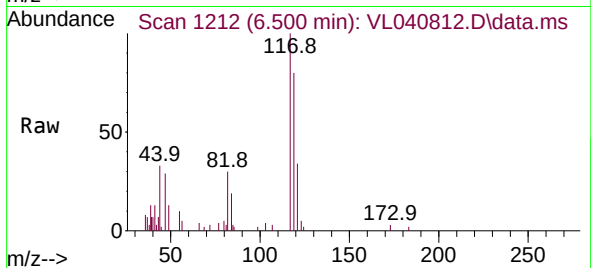
Tgt Ion:117 Resp: 5688

Ion Ratio Lower Upper

117 100

119 21.9 79.4 119.0#

121 33.3 25.0 37.4



#36

Benzene

Concen: 0.385 ppbv

RT: 6.378 min Scan# 1174

Delta R.T. -0.003 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

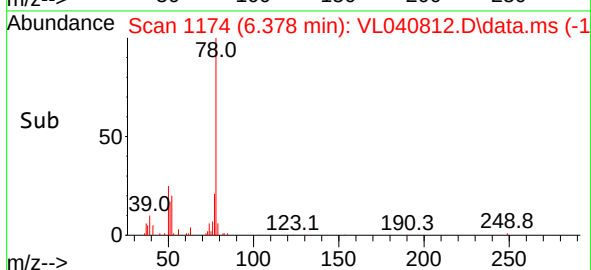
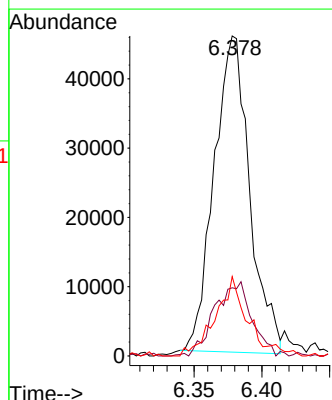
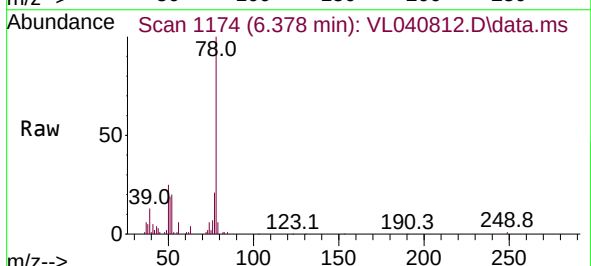
Tgt Ion: 78 Resp: 83548

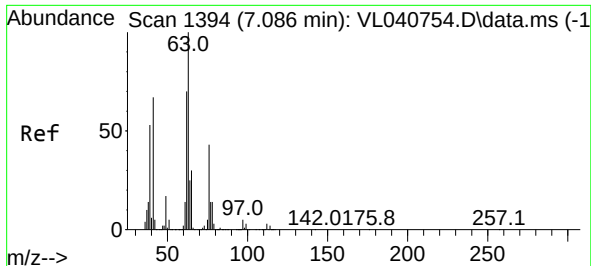
Ion Ratio Lower Upper

78 100

77 20.3 18.4 27.6

50 25.2 15.0 22.4#





#39

1,2-Dichloropropane

Concen: 8.220 ppbv

RT: 6.658 min Scan# 11

Delta R.T. -0.424 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Instrument :

MSVOA_L

ClientSampleId :

OA1

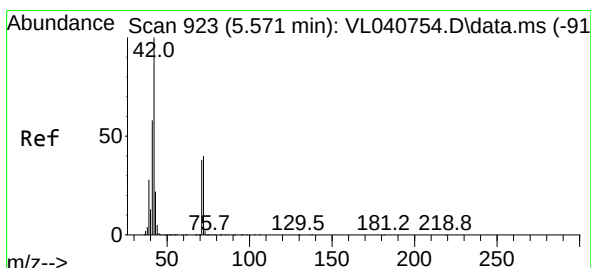
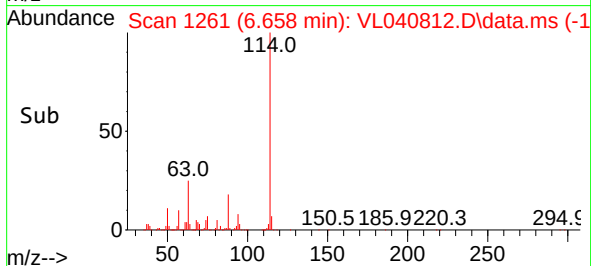
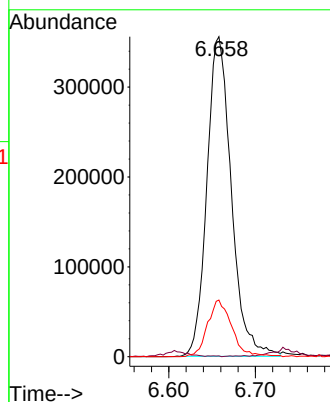
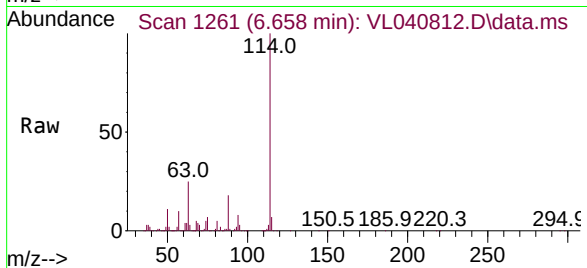
Tgt Ion: 63 Resp: 696956

Ion Ratio Lower Upper

63 100

41 0.0 53.7 80.5#

62 17.7 55.7 83.5#



#41

Tetrahydrofuran

Concen: 0.036 ppbv

RT: 5.587 min Scan# 928

Delta R.T. 0.016 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

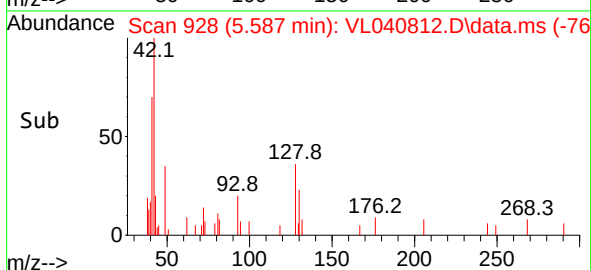
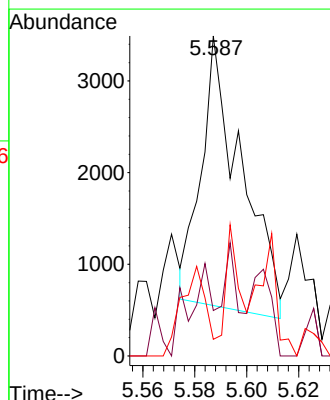
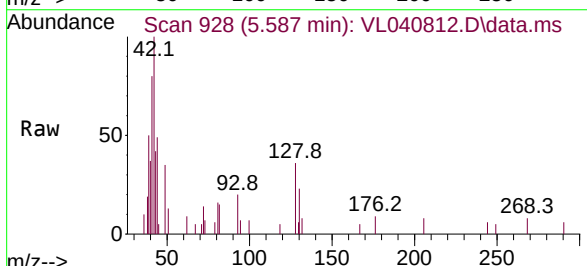
Tgt Ion: 42 Resp: 3153

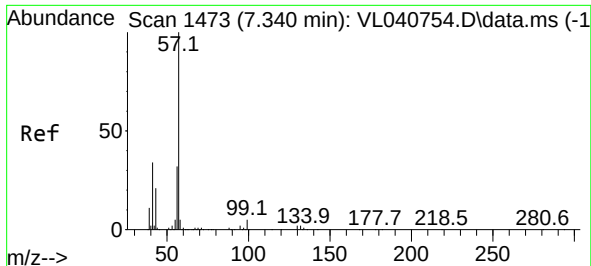
Ion Ratio Lower Upper

42 100

72 62.4 31.1 46.7#

71 61.8 29.7 44.5#

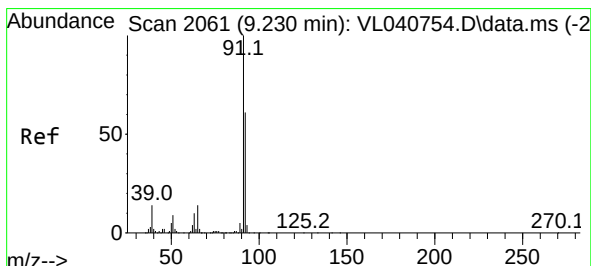
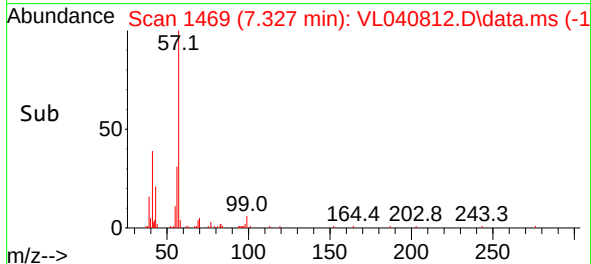
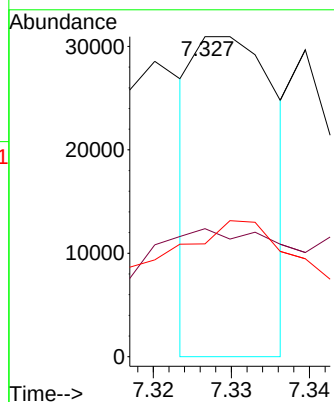
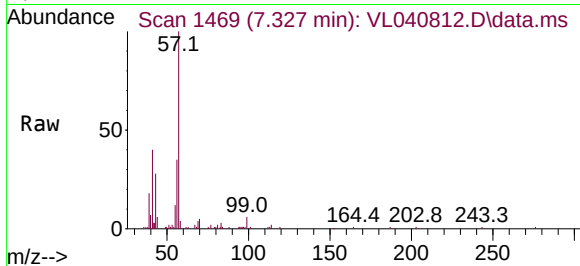




#44
2,2,4-Trimethylpentane
Concen: 0.061 ppbv
RT: 7.327 min Scan# 1473
Delta R.T. -0.006 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

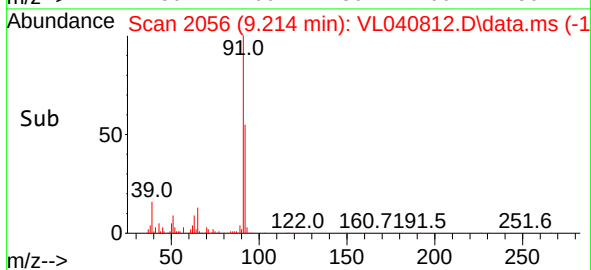
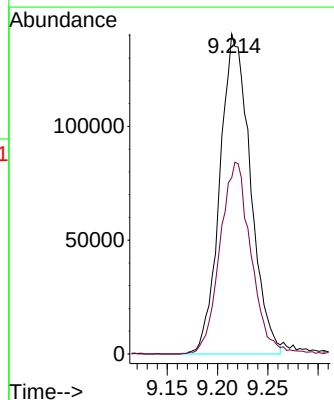
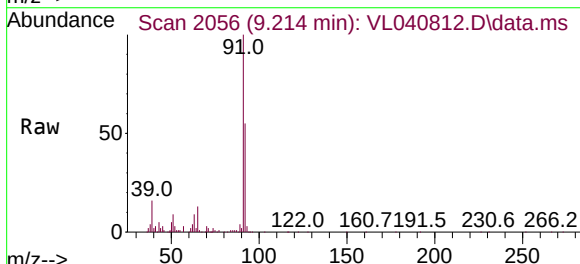
Instrument :
MSVOA_L
ClientSampleId :
OA1

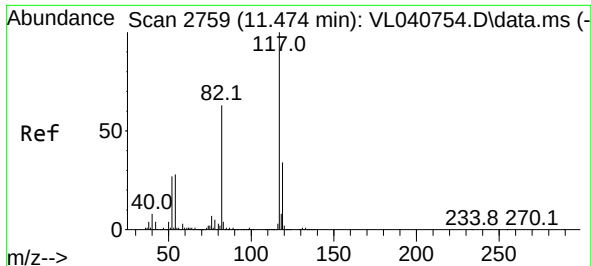
Tgt Ion: 57 Resp: 22334
Ion Ratio Lower Upper
57 100
41 143.7 27.4 41.0#
56 120.8 25.0 37.6#



#53
Toluene
Concen: 1.149 ppbv
RT: 9.214 min Scan# 2056
Delta R.T. -0.006 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion: 91 Resp: 296833
Ion Ratio Lower Upper
91 100
92 61.5 50.2 75.2

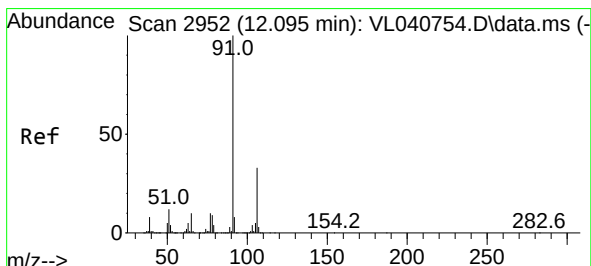
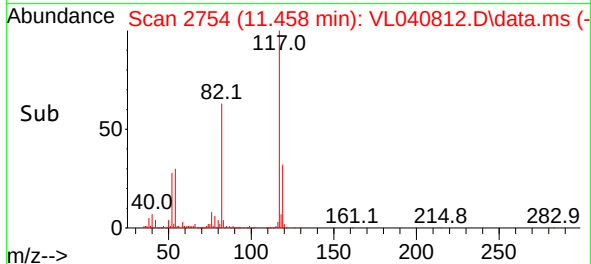
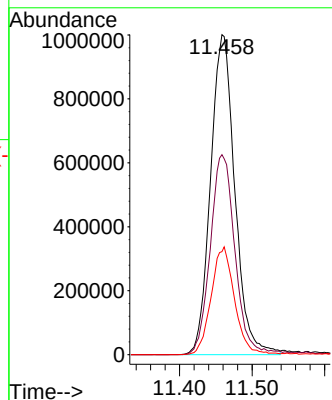
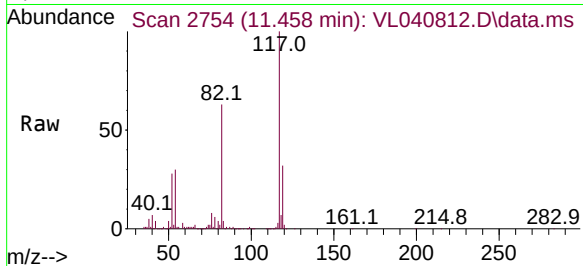




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.458 min Scan# 211
Delta R.T. -0.003 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

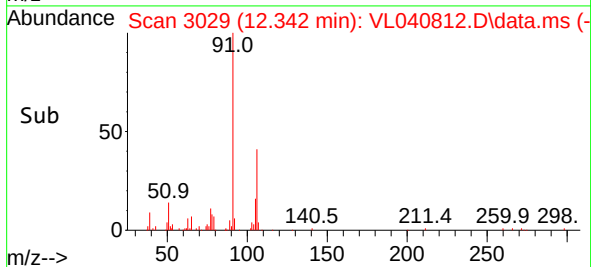
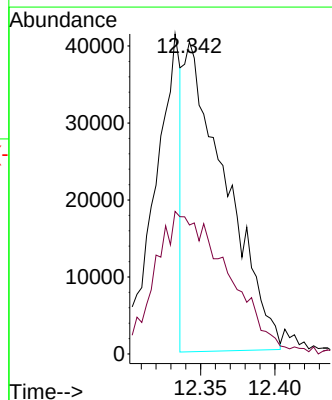
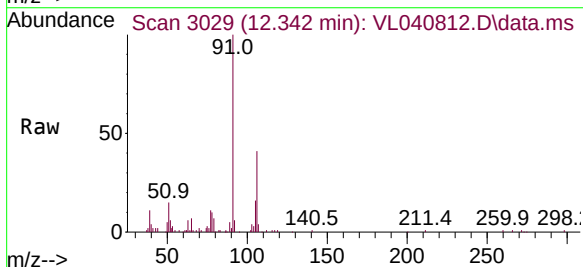
Instrument :
MSVOA_L
ClientSampleId :
OA1

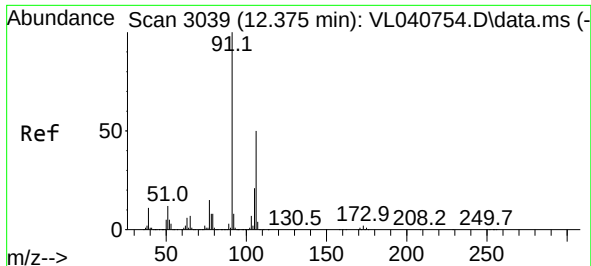
Tgt Ion:117 Resp: 2329111
Ion Ratio Lower Upper
117 100
82 64.6 46.6 70.0
119 33.0 26.0 39.0



#58
Ethyl Benzene
Concen: 0.270 ppbv
RT: 12.342 min Scan# 3029
Delta R.T. 0.260 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion: 91 Resp: 79044
Ion Ratio Lower Upper
91 100
106 40.0 26.7 40.1





#59

m/p-Xylene

Concen: 0.328 ppbv

RT: 12.342 min Scan# 3039

Delta R.T. -0.026 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Instrument :

MSVOA_L

ClientSampleId :

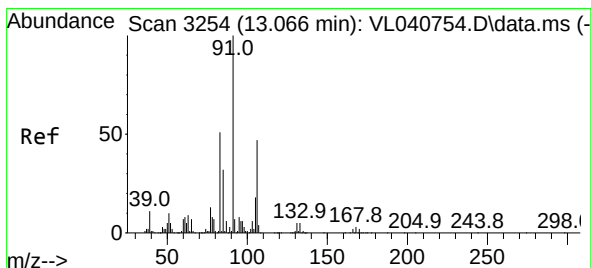
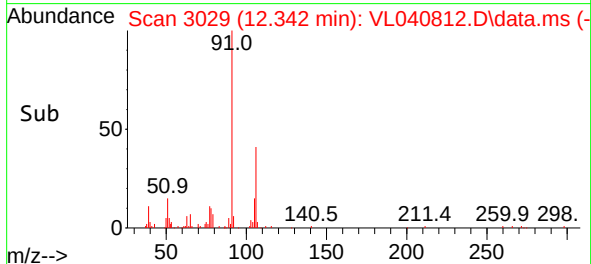
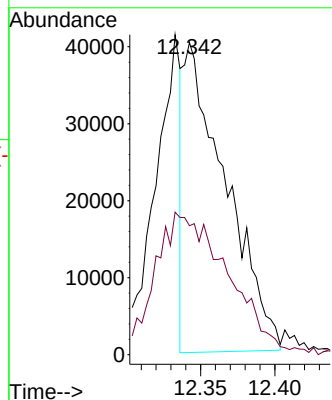
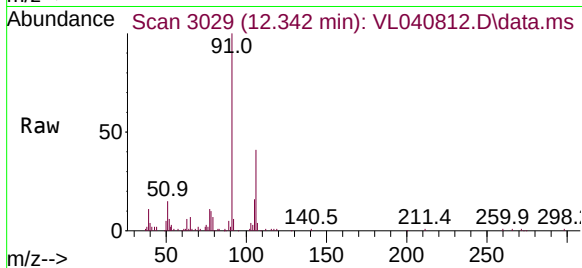
OA1

Tgt Ion: 91 Resp: 79044

Ion Ratio Lower Upper

91 100

106 0.0 37.7 56.5#



#60

o-Xylene

Concen: 0.072 ppbv

RT: 13.053 min Scan# 3250

Delta R.T. 0.000 min

Lab File: VL040812.D

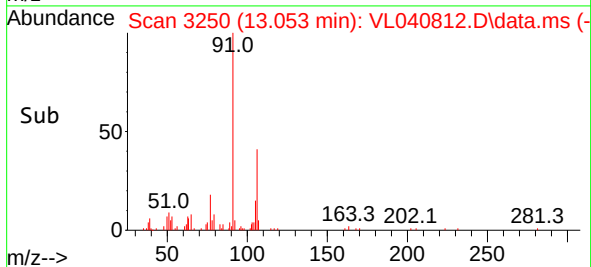
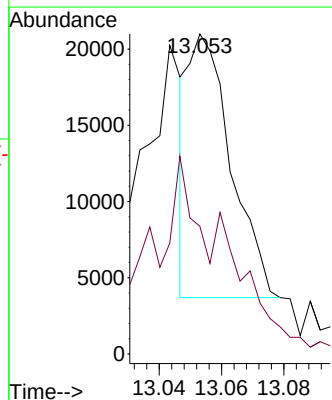
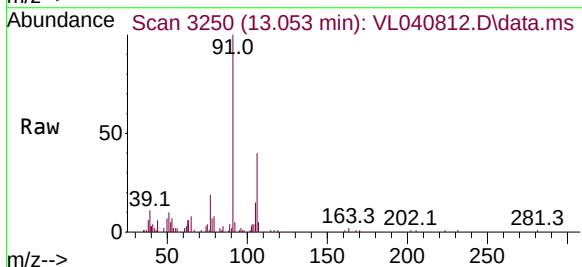
Acq: 8 Nov 2023 15:57

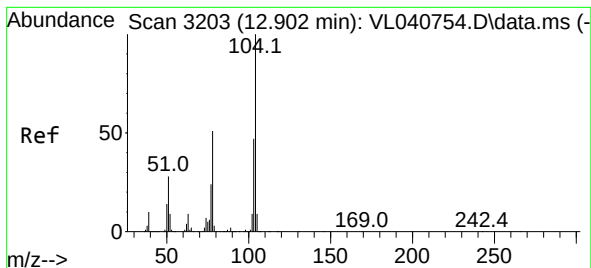
Tgt Ion: 91 Resp: 16547

Ion Ratio Lower Upper

91 100

106 0.0 23.5 70.5#





#61

Styrene

Concen: 0.115 ppbv

RT: 12.889 min Scan# 3199

Delta R.T. -0.003 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

Instrument :

MSVOA_L

ClientSampleId :

OA1

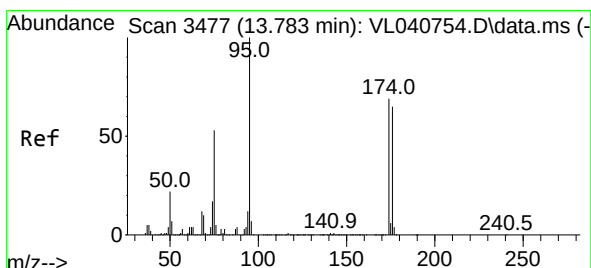
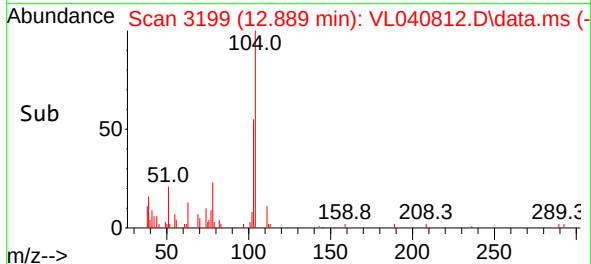
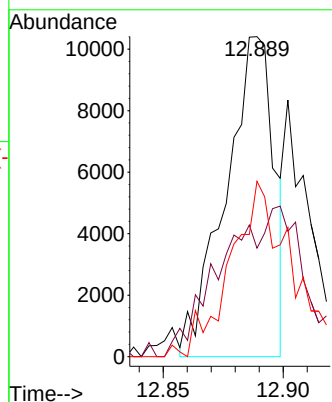
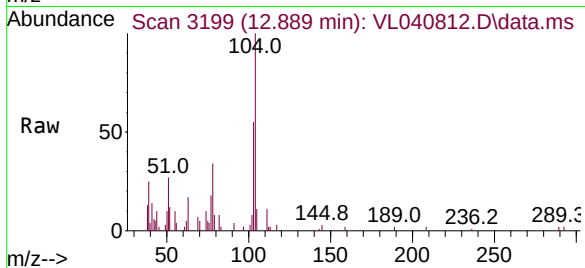
Tgt Ion:104 Resp: 14617

Ion Ratio Lower Upper

104 100

78 0.0 39.8 59.6#

103 74.3 37.5 56.3#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.797 ppbv

RT: 13.767 min Scan# 3472

Delta R.T. -0.003 min

Lab File: VL040812.D

Acq: 8 Nov 2023 15:57

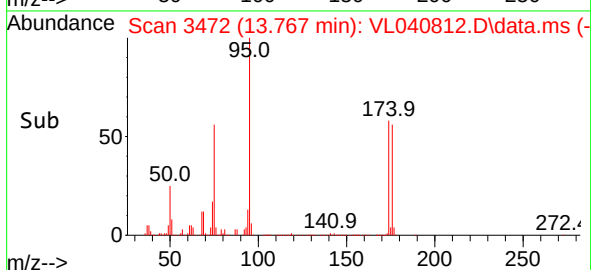
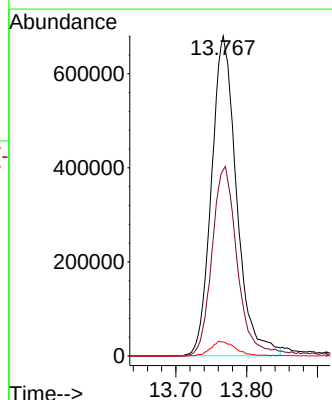
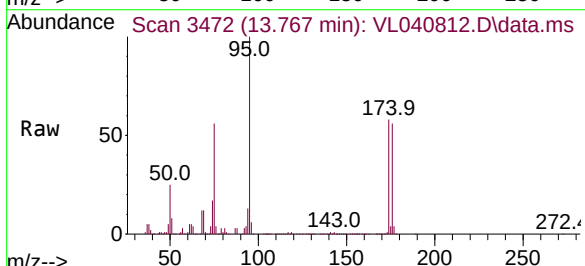
Tgt Ion: 95 Resp: 1678983

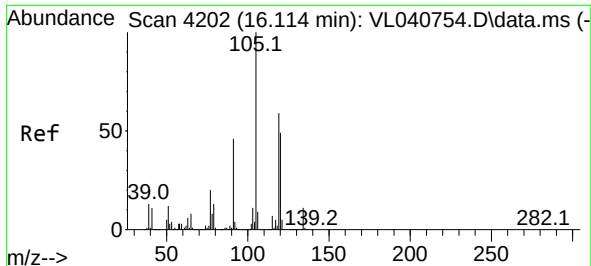
Ion Ratio Lower Upper

95 100

174 60.6 54.7 82.1

175 4.7 4.2 6.4

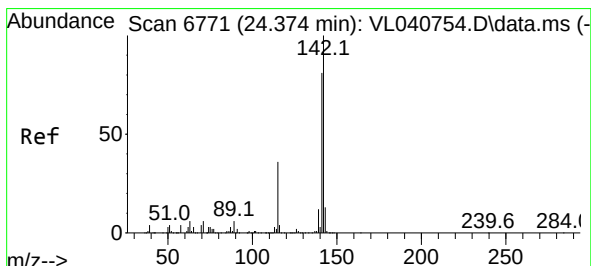
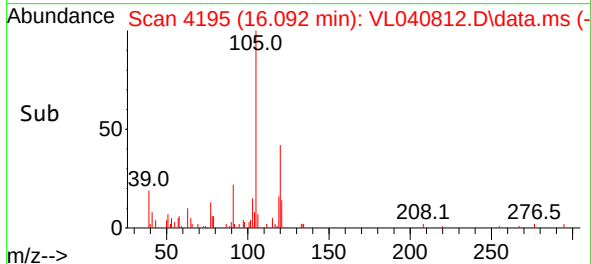
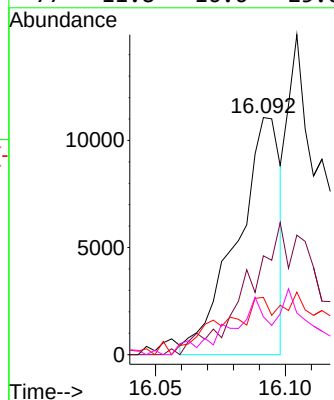
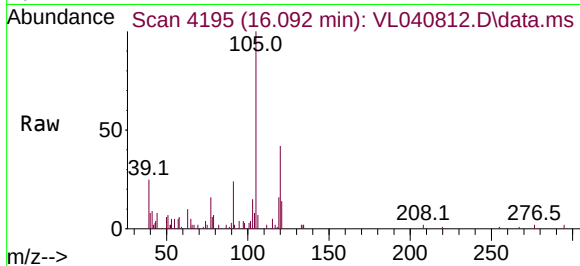




#74
1,2,4-Trimethylbenzene
Concen: 0.050 ppbv
RT: 16.092 min Scan# 4195
Delta R.T. -0.010 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Instrument :
MSVOA_L
ClientSampleId :
OA1

Tgt Ion:105 Resp: 12843
Ion Ratio Lower Upper
105 100
120 57.9 39.4 59.2
91 22.9 38.6 58.0#
77 11.8 16.6 25.0#



#80
Naphthalene,2-methyl-
Concen: 0.083 ppbv
RT: 24.371 min Scan# 6770
Delta R.T. 0.006 min
Lab File: VL040812.D
Acq: 8 Nov 2023 15:57

Tgt Ion:142 Resp: 4919
Ion Ratio Lower Upper
142 100
141 79.4 66.3 99.5
115 59.9 30.0 45.0#

