

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL010923\
 Data File : VL040075.D
 Acq On : 9 Jan 2023 14:36
 Operator : SY/MD
 Sample : 01074-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AP-113

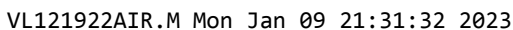
Quant Time: Jan 09 21:31:23 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL121922AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Dec 20 04:50:21 2022
 Response via : Initial Calibration

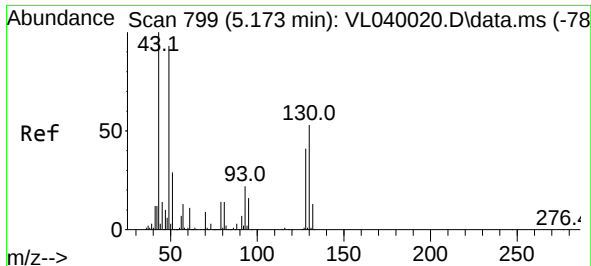
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.192	49	1065446	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	6.655	114	2885537	10.000	ppbv	0.02
55) Chlorobenzene-d5	11.475	117	2508696	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.786	95	1966678	10.263	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	= 102.600%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.716	85	27944	0.140	ppbv	89
3) Chlorodifluoromethane	2.639	51	389992	2.481	ppbv #	62
4) Chloromethane	2.800	50	31939	0.324	ppbv	97
9) Propene	2.690	41	51222	0.768	ppbv #	83
11) Trichlorofluoromethane	3.552	101	38455	0.177	ppbv	91
12) 1,1,2-Trichlorotrifluo...	4.057	101	8170	0.050	ppbv #	71
13) Ethanol	3.227	45	702230	111.841	ppbv	96
15) Acetone	3.456	43	1470738	8.923	ppbv	99
17) tert-Butyl alcohol	3.886	59	20349	0.125	ppbv #	86
19) Isopropyl Alcohol	3.575	45	109684	1.350	ppbv #	1
20) Methylene Chloride	3.925	84	1813106	25.880	ppbv	98
21) Allyl Chloride	3.925	41	70200	0.709	ppbv #	30
23) Vinyl Acetate	4.613	43	20568	0.394	ppbv #	1
25) Ethyl Acetate	5.211	43	1396558	4.893	ppbv #	75
26) Hexane	5.211	57	2054615	17.126	ppbv #	36
30) Cyclohexane	6.610	84	4734	0.045	ppbv #	1
34) 2-Butanone	4.787	43	89409	0.571	ppbv	100
35) Carbon Tetrachloride	6.497	117	12350	0.069	ppbv #	89
36) Benzene	6.369	78	67144	0.261	ppbv	95
39) 1,2-Dichloropropane	6.655	63	706271	7.312	ppbv #	23
41) Tetrahydrofuran	5.552	42	1257151	12.866	ppbv	100
44) 2,2,4-Trimethylpentane	7.336	57	14814	0.035	ppbv #	1
53) Toluene	9.224	91	215310	0.755	ppbv	99
58) Ethyl Benzene	12.105	91	43873	0.123	ppbv	96
59) m/p-Xylene	12.372	91	15825	0.051	ppbv #	32
60) o-Xylene	13.069	91	11489	0.039	ppbv #	1
61) Styrene	12.912	104	7233	0.045	ppbv #	22
62) Isopropylbenzene	14.037	105	14805	0.035	ppbv	97
73) 1,3,5-Trimethylbenzene	15.368	105	12107	0.041	ppbv #	79
74) 1,2,4-Trimethylbenzene	16.124	105	67681	0.206	ppbv #	65

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

Quant Time: Jan 09 21:31:23 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL121922AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Dec 20 04:50:21 2022
Response via : Initial Calibration

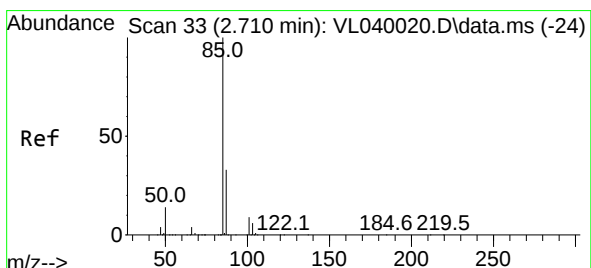
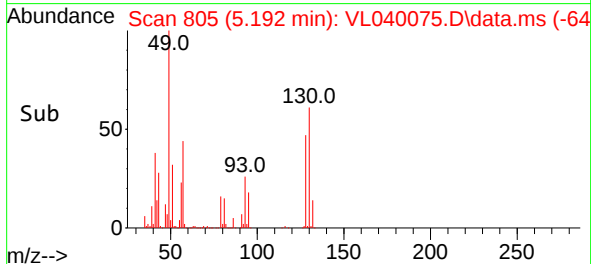
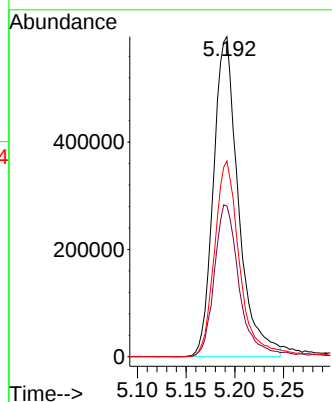
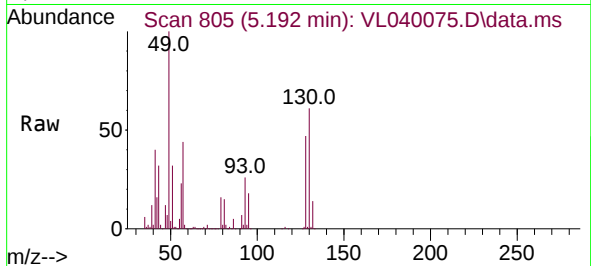




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 80
Delta R.T. 0.019 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

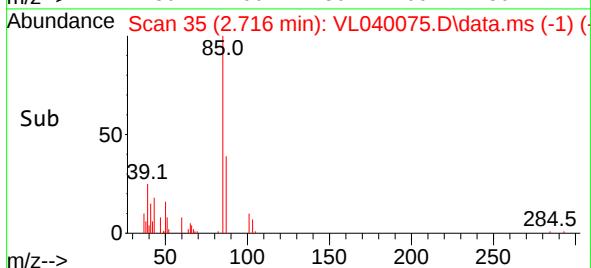
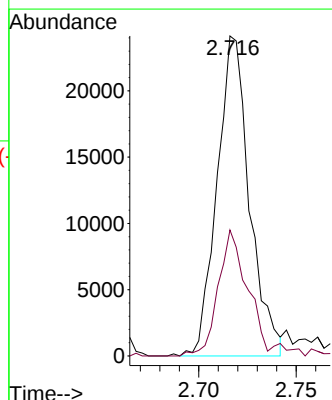
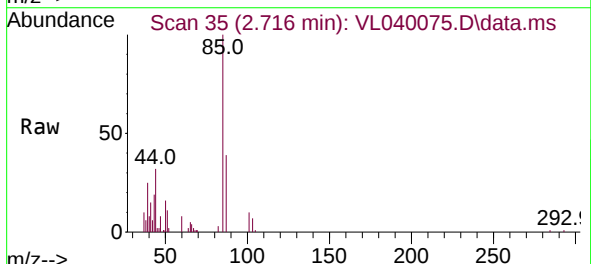
Instrument :
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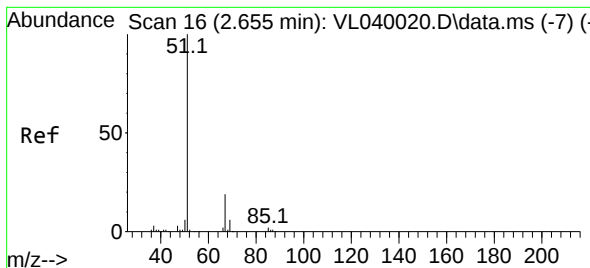
Tgt Ion: 49 Resp: 1065446
Ion Ratio Lower Upper
49 100
128 48.6 22.4 67.3
130 63.2 28.9 86.8



#2
Dichlorodifluoromethane
Concen: 0.140 ppbv
RT: 2.716 min Scan# 35
Delta R.T. 0.006 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Tgt Ion: 85 Resp: 27944
Ion Ratio Lower Upper
85 100
87 39.7 26.6 40.0





#3

Chlorodifluoromethane

Concen: 2.481 ppbv

RT: 2.639 min Scan# 11

Delta R.T. -0.016 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

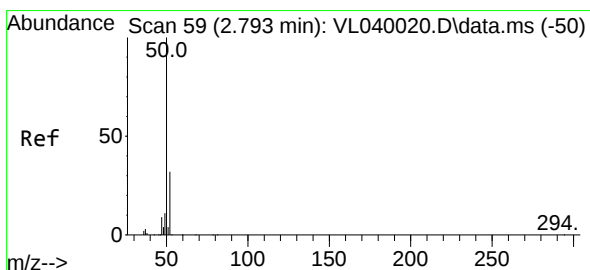
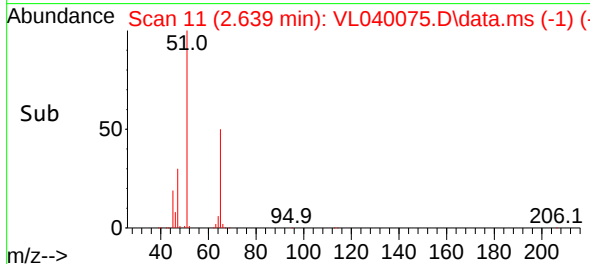
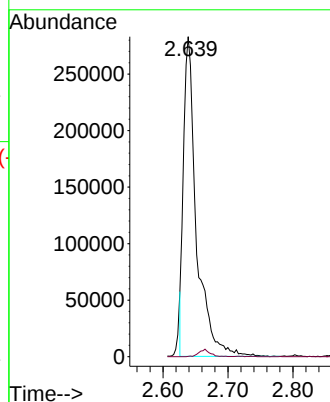
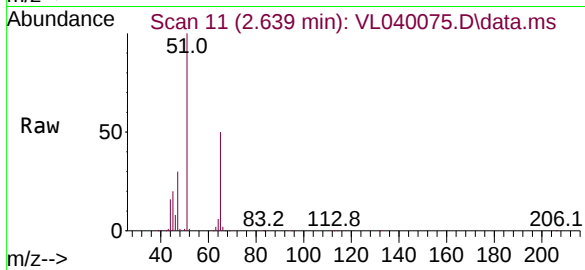
AP-113

Tgt Ion: 51 Resp: 389992

Ion Ratio Lower Upper

51 100

67 2.0 15.3 22.9#



#4

Chloromethane

Concen: 0.324 ppbv

RT: 2.800 min Scan# 61

Delta R.T. 0.006 min

Lab File: VL040075.D

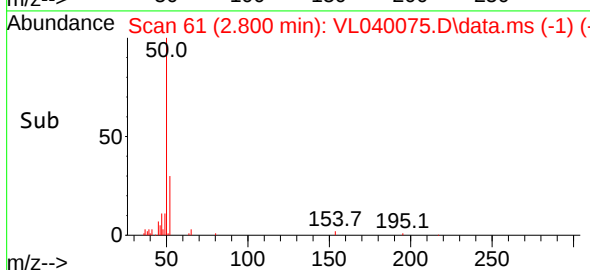
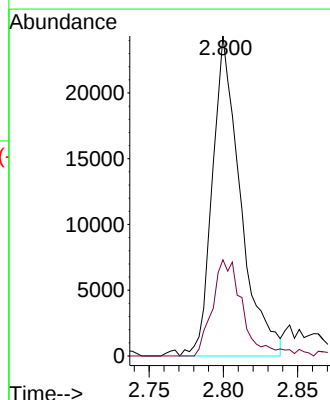
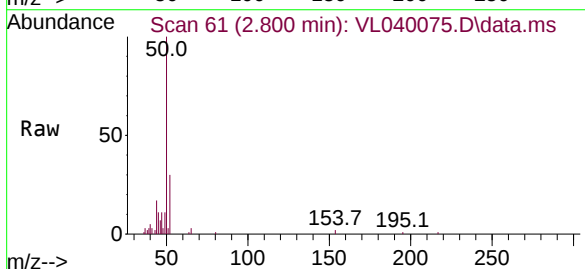
Acq: 9 Jan 2023 14:36

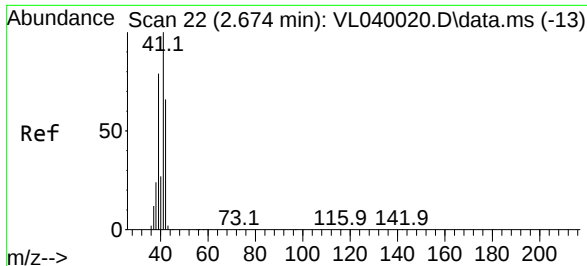
Tgt Ion: 50 Resp: 31939

Ion Ratio Lower Upper

50 100

52 30.0 25.5 38.3

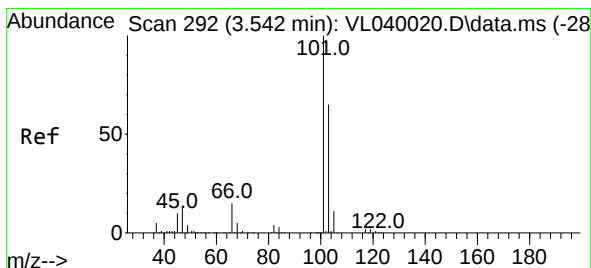
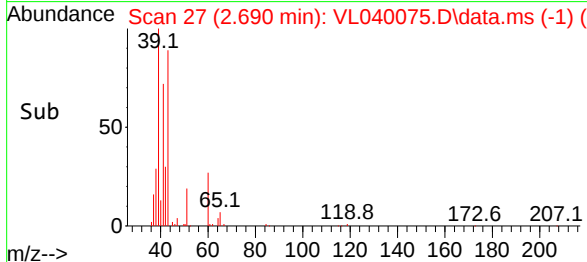
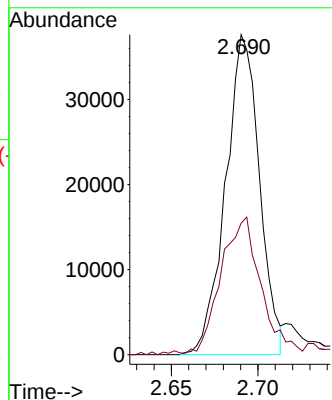
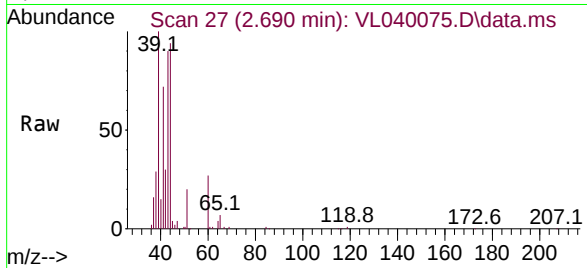




#9
 Propene
 Concen: 0.768 ppbv
 RT: 2.690 min Scan# 21
 Delta R.T. 0.016 min
 Lab File: VL040075.D
 Acq: 9 Jan 2023 14:36

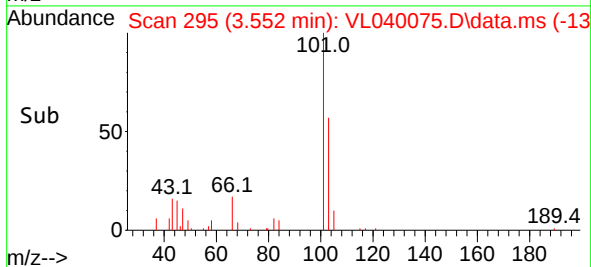
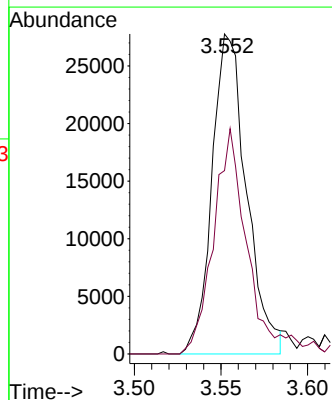
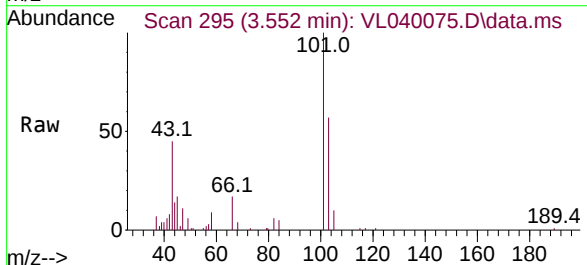
Instrument :
 MSVOA_L
 ClientSampleId :
 AP-113

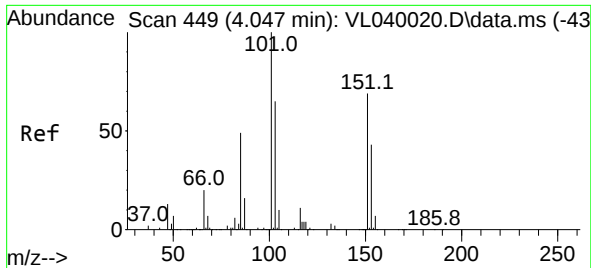
Tgt Ion: 41 Resp: 51222
 Ion Ratio Lower Upper
 41 100
 42 54.3 54.8 82.2#



#11
 Trichlorofluoromethane
 Concen: 0.177 ppbv
 RT: 3.552 min Scan# 295
 Delta R.T. 0.010 min
 Lab File: VL040075.D
 Acq: 9 Jan 2023 14:36

Tgt Ion: 101 Resp: 38455
 Ion Ratio Lower Upper
 101 100
 103 57.3 51.7 77.5





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.050 ppbv

RT: 4.057 min Scan# 4

Delta R.T. 0.010 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

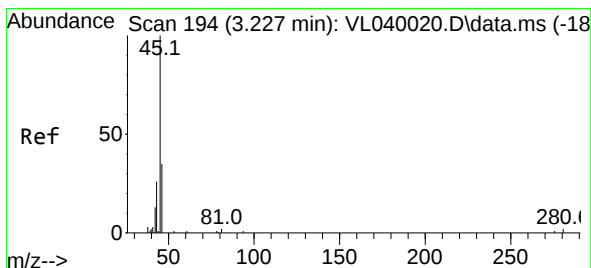
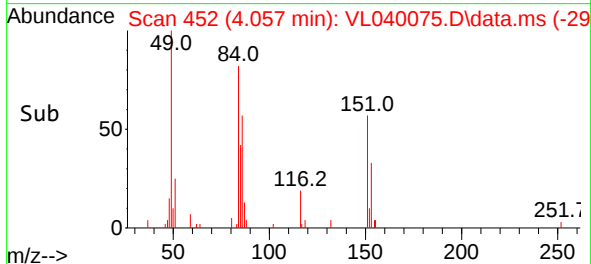
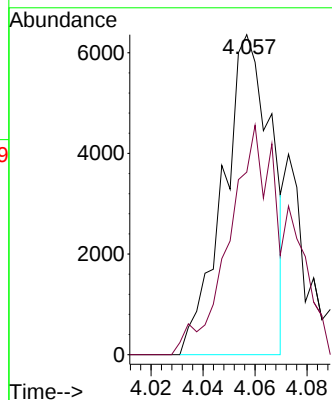
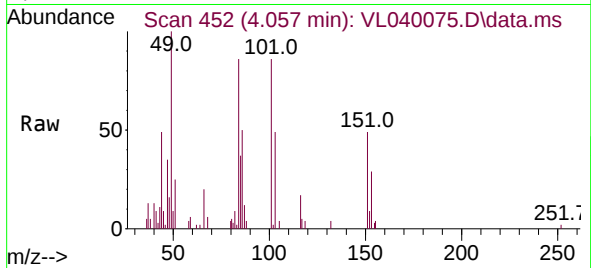
AP-113

Tgt Ion:101 Resp: 8170

Ion Ratio Lower Upper

101 100

151 92.2 55.0 82.4#



#13

Ethanol

Concen: 111.841 ppbv

RT: 3.227 min Scan# 194

Delta R.T. -0.000 min

Lab File: VL040075.D

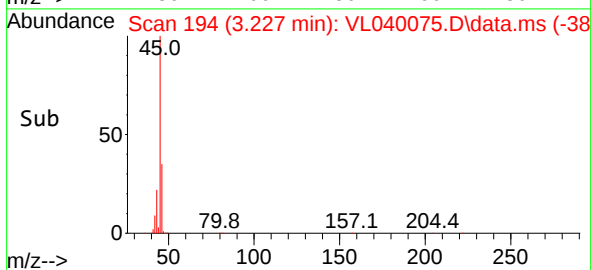
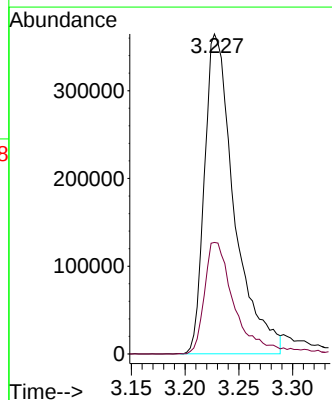
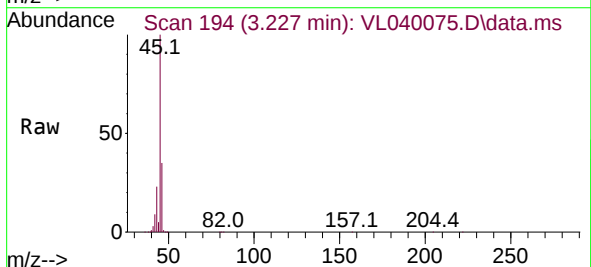
Acq: 9 Jan 2023 14:36

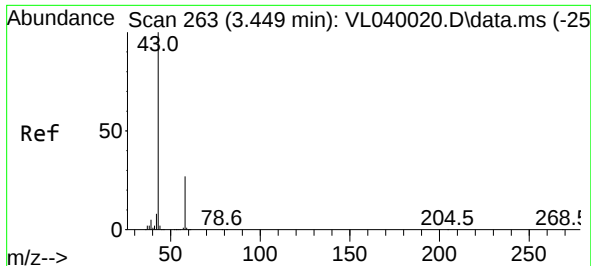
Tgt Ion: 45 Resp: 702230

Ion Ratio Lower Upper

45 100

46 36.3 13.7 54.7





#15

Acetone

Concen: 8.923 ppbv

RT: 3.456 min Scan# 2

Delta R.T. 0.006 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

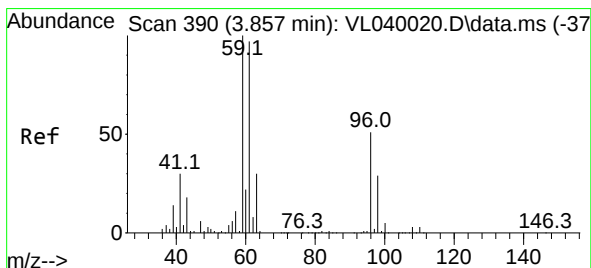
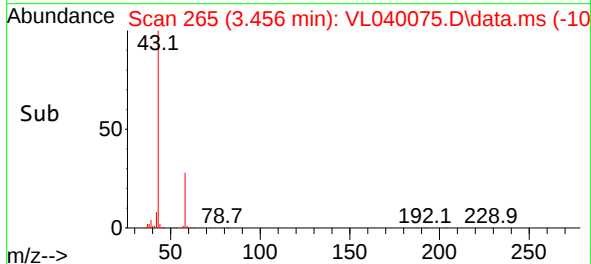
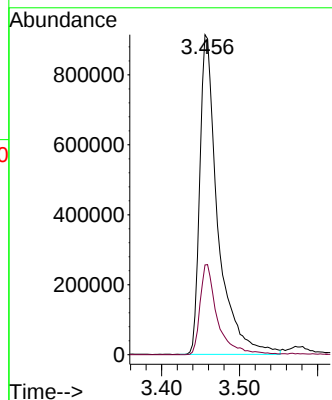
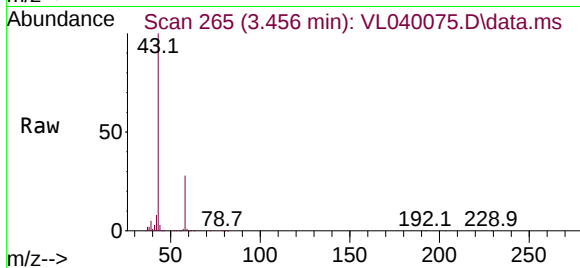
AP-113

Tgt Ion: 43 Resp: 1470738

Ion Ratio Lower Upper

43 100

58 27.0 21.8 32.8



#17

tert-Butyl alcohol

Concen: 0.125 ppbv

RT: 3.886 min Scan# 399

Delta R.T. 0.029 min

Lab File: VL040075.D

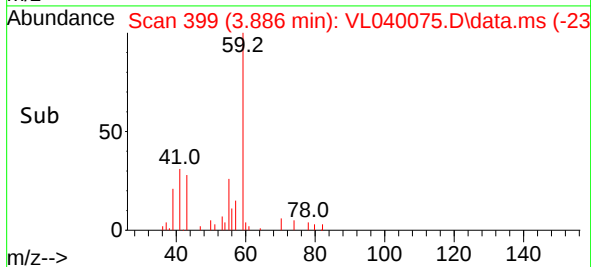
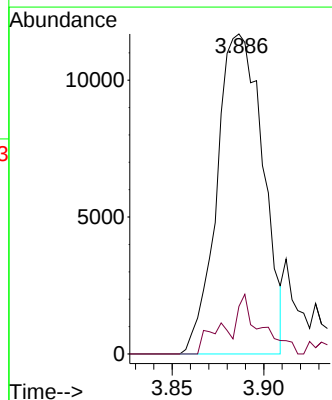
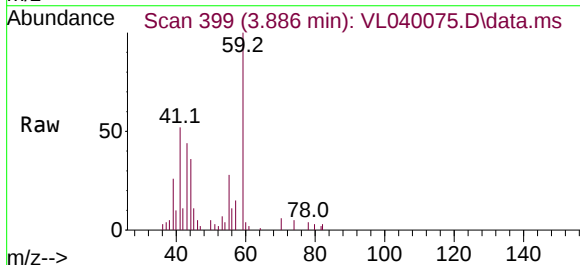
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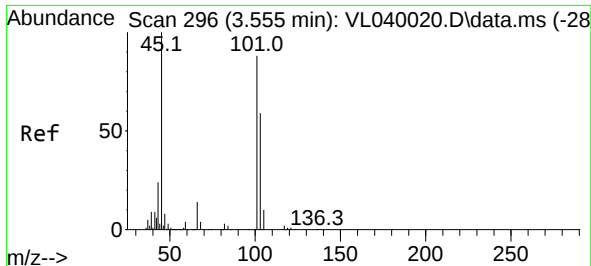
Tgt Ion: 59 Resp: 20349

Ion Ratio Lower Upper

59 100

57 15.8 8.4 12.6#





#19

Isopropyl Alcohol

Concen: 1.350 ppbv

RT: 3.575 min Scan# 302

Delta R.T. 0.019 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

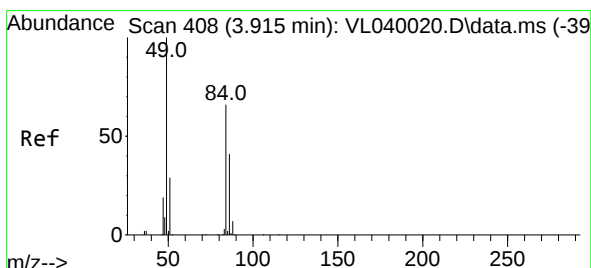
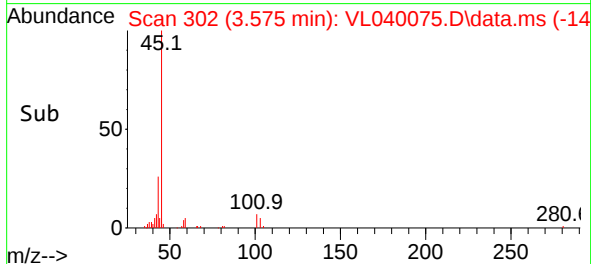
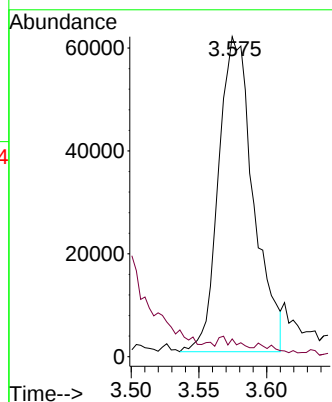
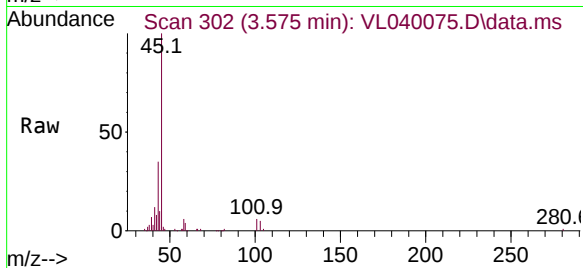
AP-113

Tgt Ion: 45 Resp: 109684

Ion Ratio Lower Upper

45 100

58 362.5 1.7 2.5#



#20

Methylene Chloride

Concen: 25.880 ppbv

RT: 3.925 min Scan# 411

Delta R.T. 0.010 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Tgt Ion: 84 Resp: 1813106

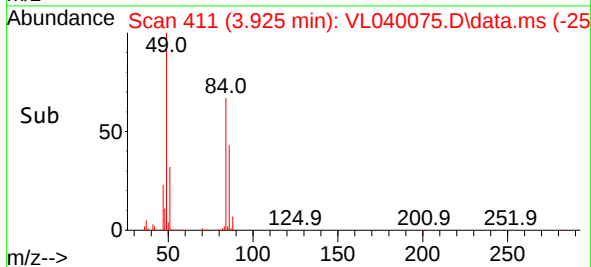
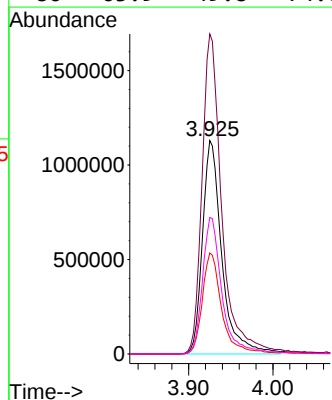
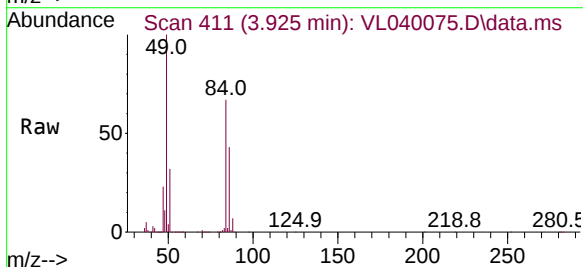
Ion Ratio Lower Upper

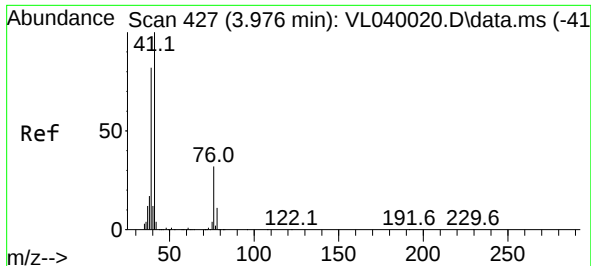
84 100

49 149.9 120.5 180.7

51 47.2 35.2 52.8

86 63.9 49.8 74.6





#21

Allyl Chloride

Concen: 0.709 ppbv

RT: 3.925 min Scan# 41

Delta R.T. -0.051 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

AP-113

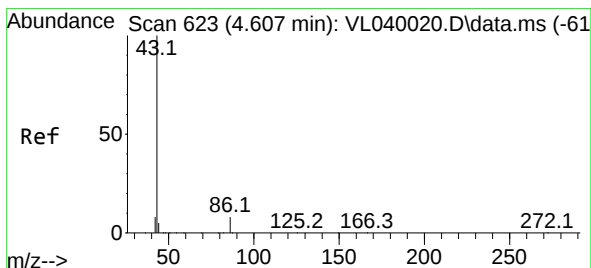
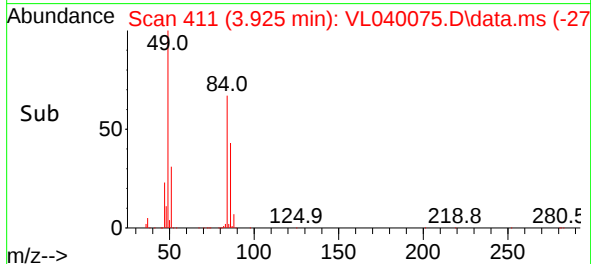
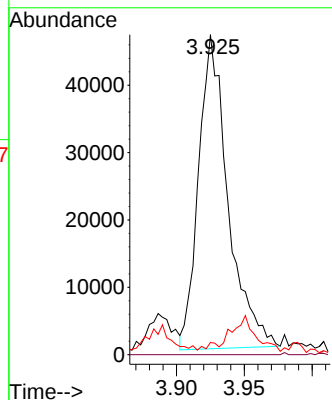
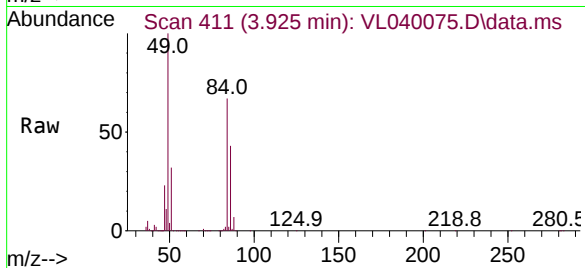
Tgt Ion: 41 Resp: 70200

Ion Ratio Lower Upper

41 100

76 0.2 25.9 38.9#

39 15.2 66.0 99.0#



#23

Vinyl Acetate

Concen: 0.394 ppbv

RT: 4.613 min Scan# 625

Delta R.T. 0.006 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Tgt Ion: 43 Resp: 20568

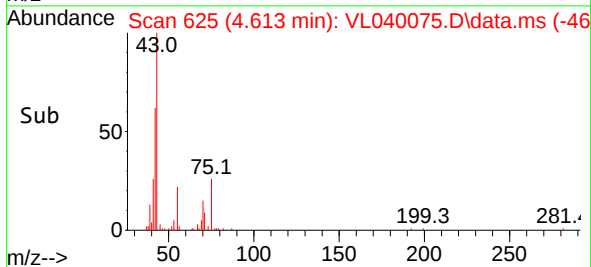
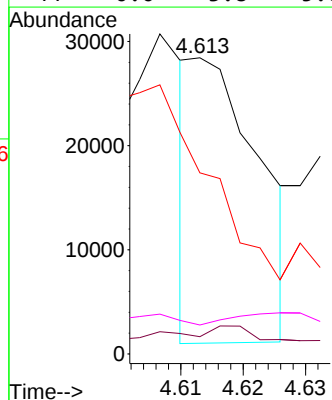
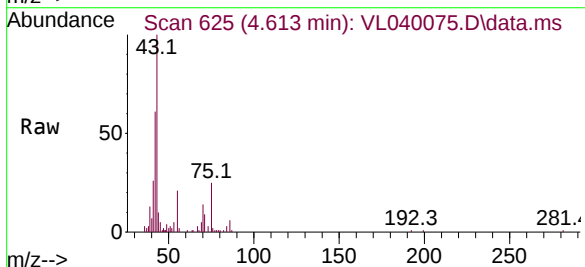
Ion Ratio Lower Upper

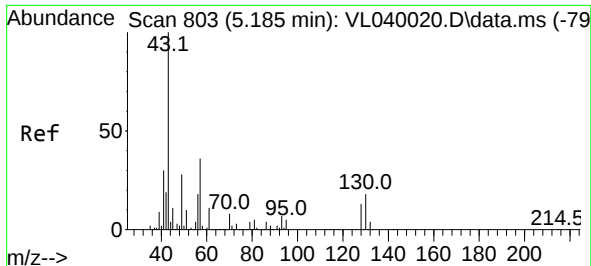
43 100

86 2.2 5.3 7.9#

42 83.7 7.4 11.0#

44 0.0 3.8 5.6#



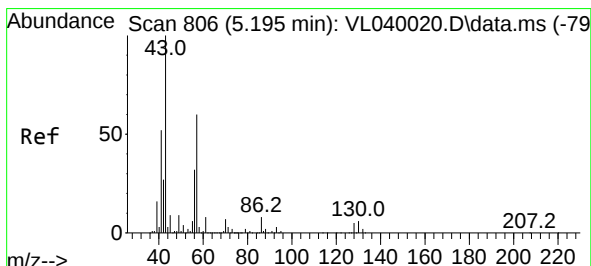
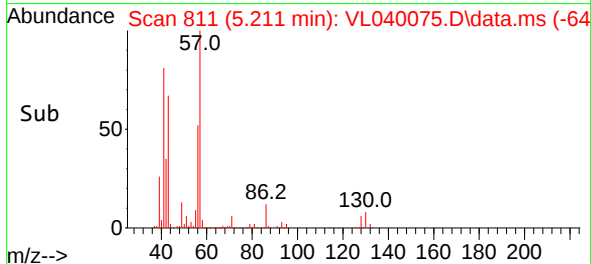
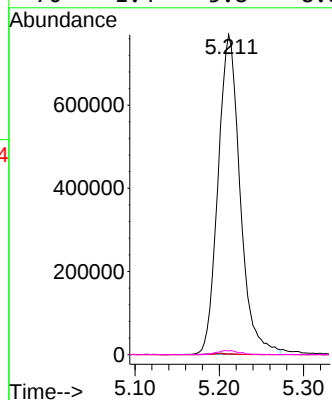
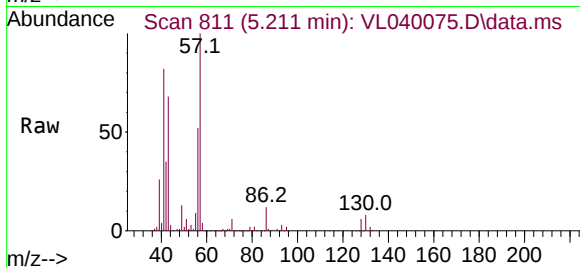


#25
Ethyl Acetate
Concen: 4.893 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.026 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Instrument :
MSVOA_L
ClientSampleId :
AP-113

Tgt Ion: 43 Resp: 1396558

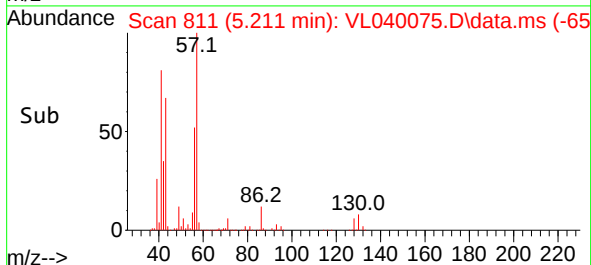
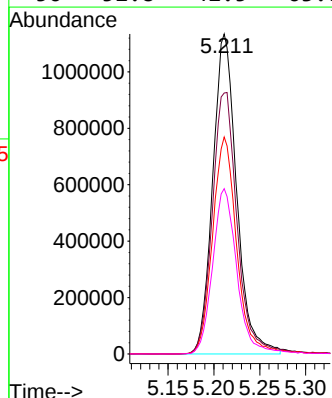
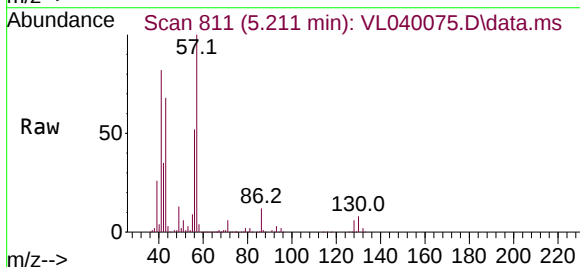
Ion	Ratio	Lower	Upper
43	100		
45	0.5	8.6	12.8#
61	0.3	8.5	12.7#
70	1.4	5.8	8.8#

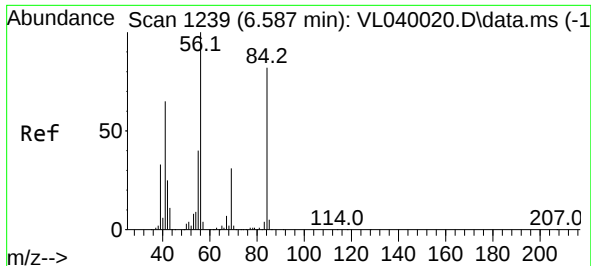


#26
Hexane
Concen: 17.126 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.016 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Tgt Ion: 57 Resp: 2054615

Ion	Ratio	Lower	Upper
57	100		
41	86.0	72.1	108.1
43	68.9	192.1	288.1#
56	52.8	42.5	63.7

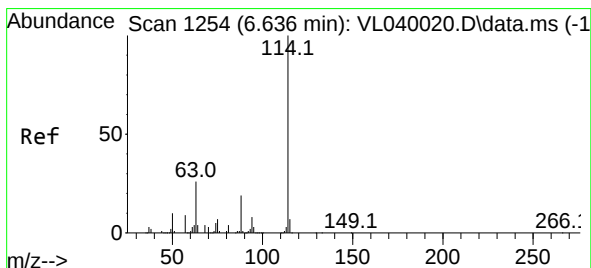
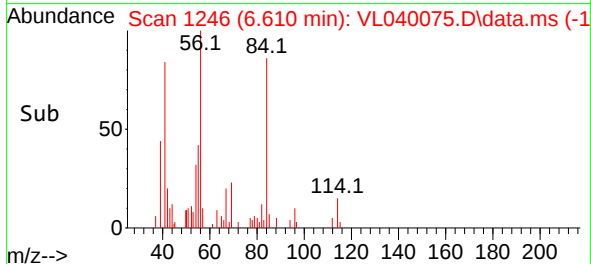
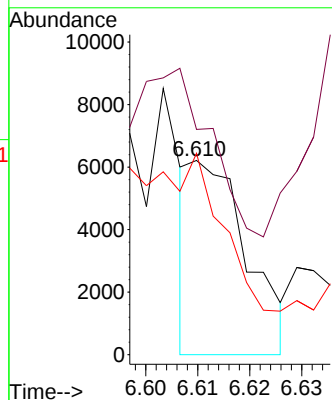
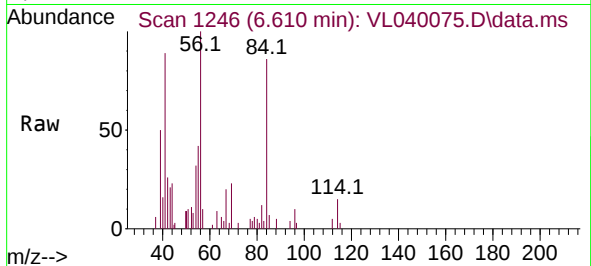




#30
Cyclohexane
Concen: 0.045 ppbv
RT: 6.610 min Scan# 1246
Delta R.T. 0.022 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

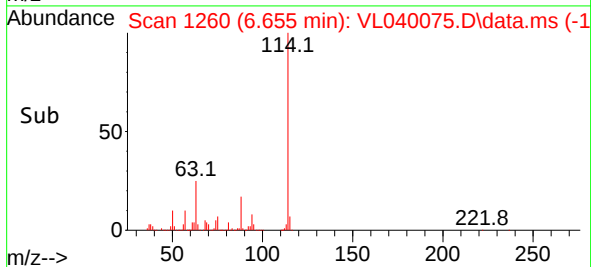
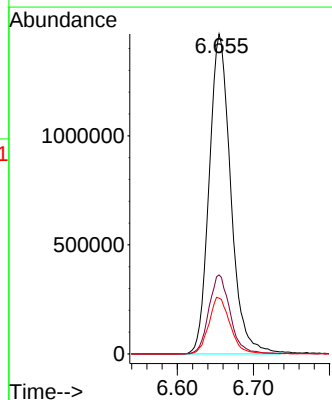
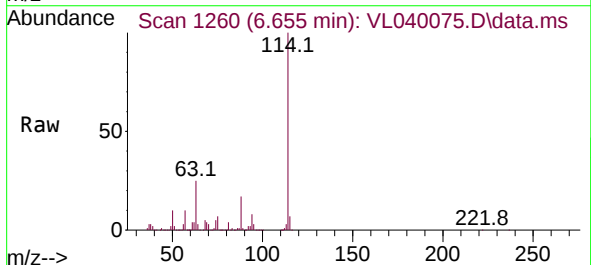
Instrument :
MSVOA_L
ClientSampleId :
AP-113

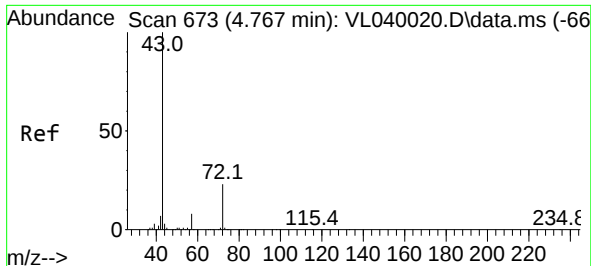
Tgt Ion: 84 Resp: 4734
Ion Ratio Lower Upper
84 100
56 319.9 110.2 165.4#
41 304.5 67.8 101.8#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.655 min Scan# 1260
Delta R.T. 0.019 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Tgt Ion: 114 Resp: 2885537
Ion Ratio Lower Upper
114 100
63 24.8 20.2 30.2
88 17.7 14.6 21.8

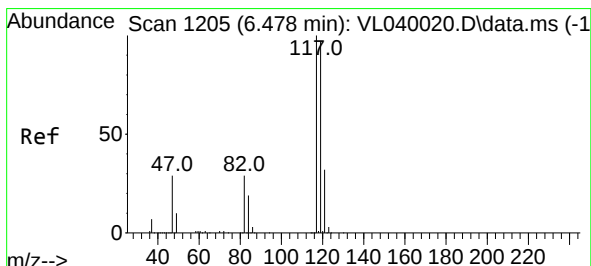
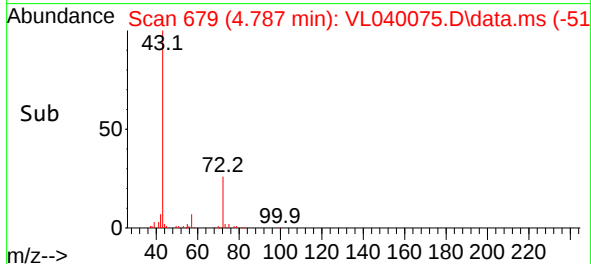
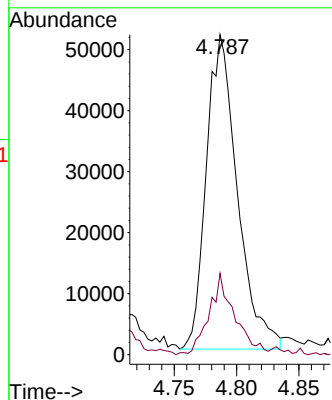
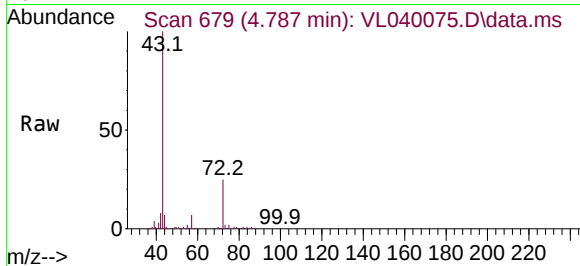




#34
2-Butanone
Concen: 0.571 ppbv
RT: 4.787 min Scan# 61
Delta R.T. 0.019 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

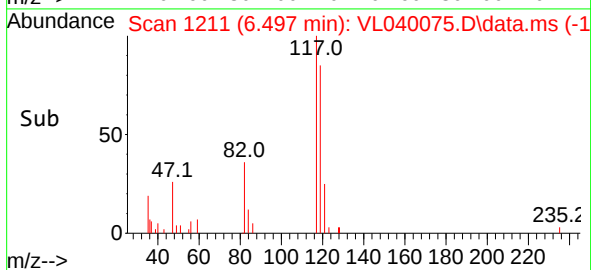
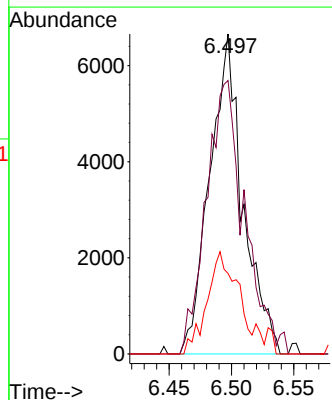
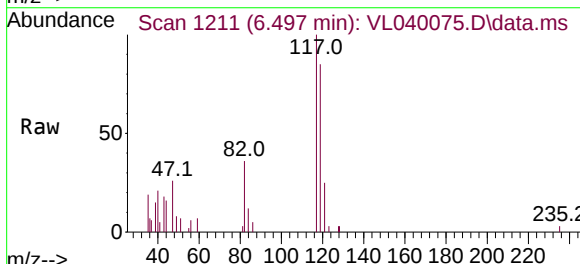
Instrument :
MSVOA_L
ClientSampleId :
AP-113

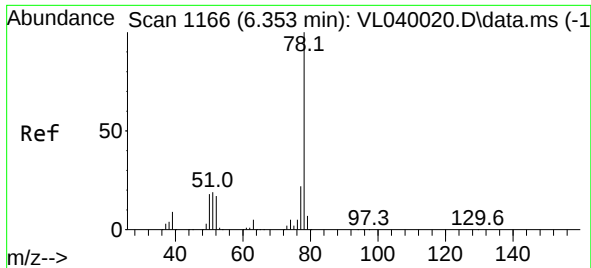
Tgt Ion: 43 Resp: 89409
Ion Ratio Lower Upper
43 100
72 22.7 18.0 27.0



#35
Carbon Tetrachloride
Concen: 0.069 ppbv
RT: 6.497 min Scan# 1211
Delta R.T. 0.019 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Tgt Ion: 117 Resp: 12350
Ion Ratio Lower Upper
117 100
119 85.4 77.3 115.9
121 25.1 25.4 38.0#





#36

Benzene

Concen: 0.261 ppbv

RT: 6.369 min Scan# 1166

Delta R.T. 0.016 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

AP-113

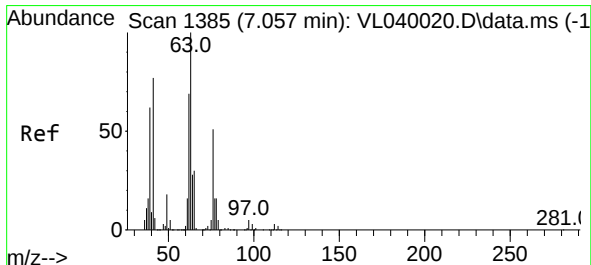
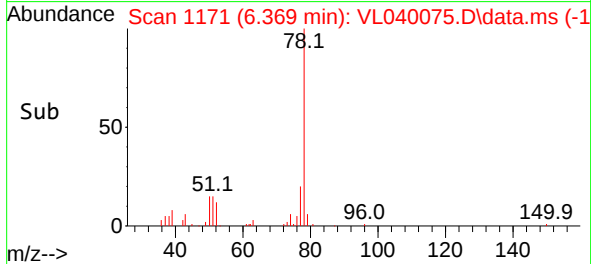
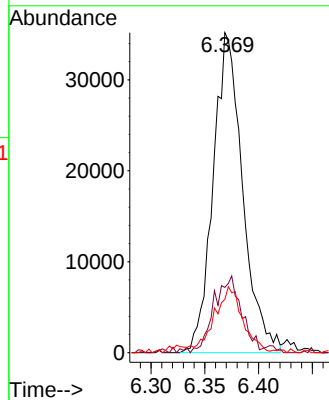
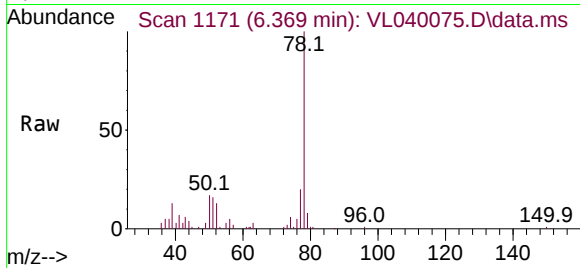
Tgt Ion: 78 Resp: 67144

Ion Ratio Lower Upper

78 100

77 19.2 17.5 26.3

50 15.9 14.2 21.2



#39

1,2-Dichloropropane

Concen: 7.312 ppbv

RT: 6.655 min Scan# 1260

Delta R.T. -0.402 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

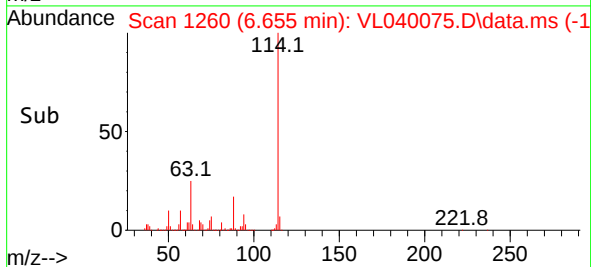
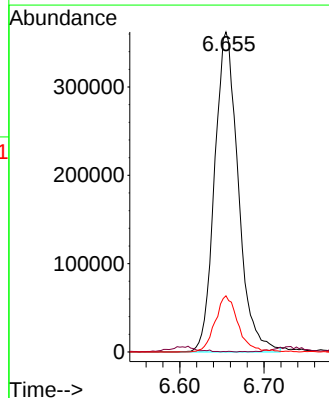
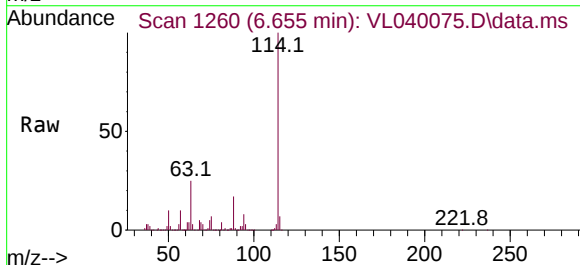
Tgt Ion: 63 Resp: 706271

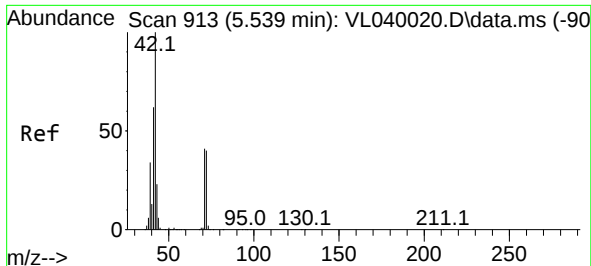
Ion Ratio Lower Upper

63 100

41 0.0 61.4 92.0#

62 17.5 55.4 83.2#





#41

Tetrahydrofuran

Concen: 12.866 ppbv

RT: 5.552 min Scan# 913

Delta R.T. 0.013 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

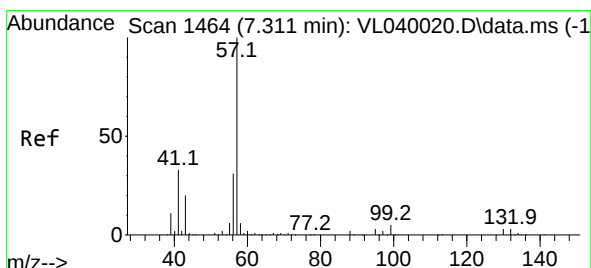
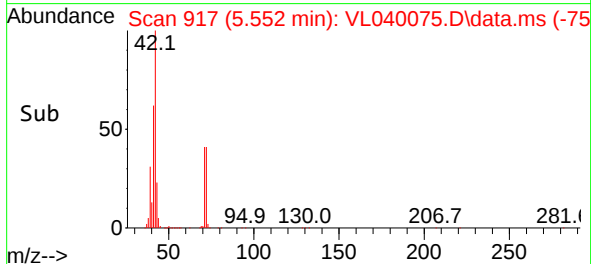
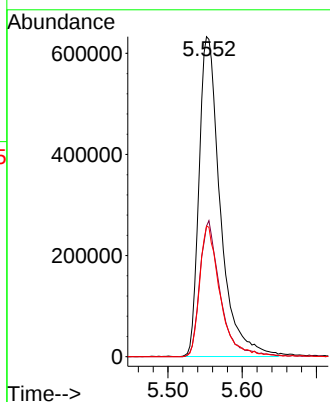
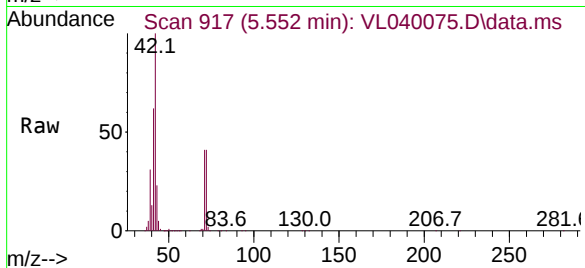
MSVOA_L

ClientSampleId :

AP-113

Tgt Ion: 42 Resp: 1257151

Ion	Ratio	Lower	Upper
42	100		
72	41.0	32.9	49.3
71	39.9	32.2	48.2



#44

2,2,4-Trimethylpentane

Concen: 0.035 ppbv

RT: 7.336 min Scan# 1472

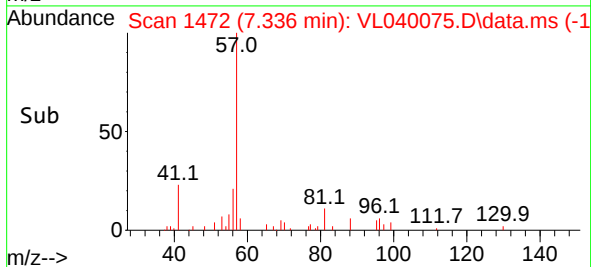
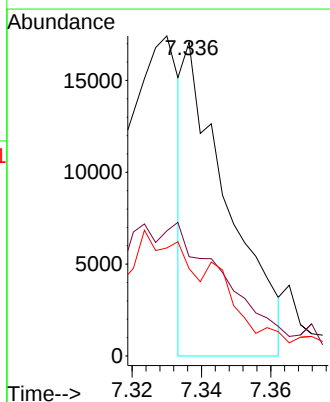
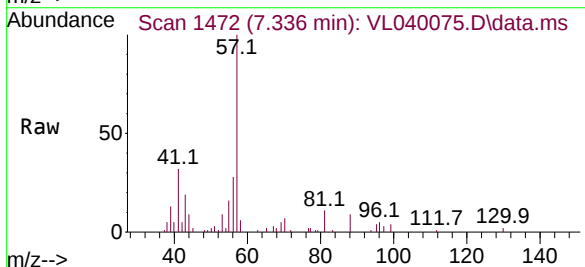
Delta R.T. 0.026 min

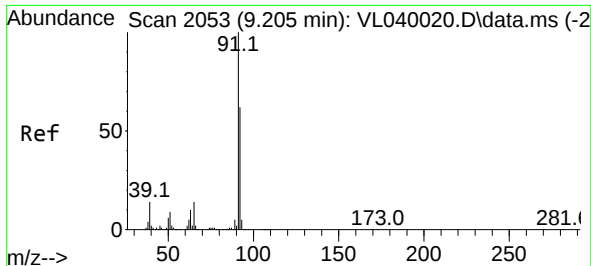
Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Tgt Ion: 57 Resp: 14814

Ion	Ratio	Lower	Upper
57	100		
41	112.9	26.2	39.4#
56	0.0	25.1	37.7#

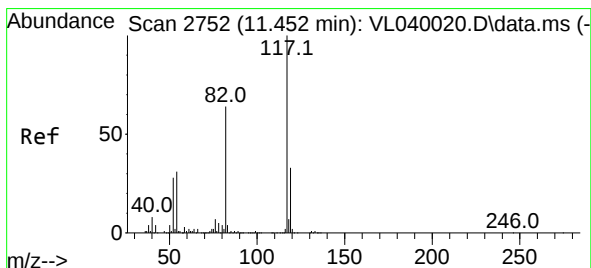
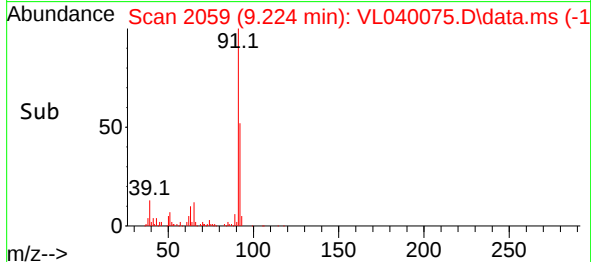
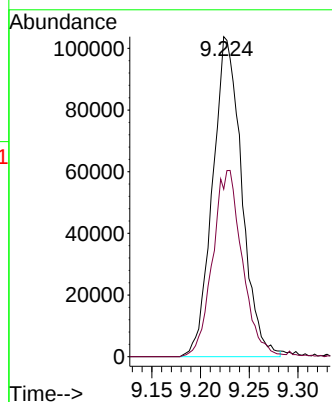
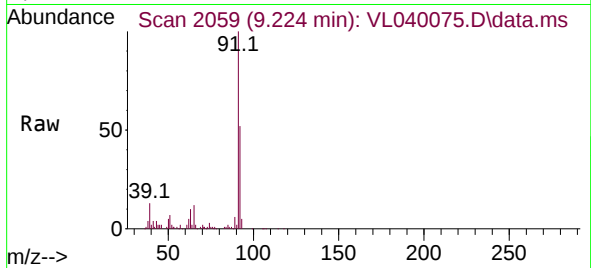




#53
Toluene
Concen: 0.755 ppbv
RT: 9.224 min Scan# 2053
Delta R.T. 0.019 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

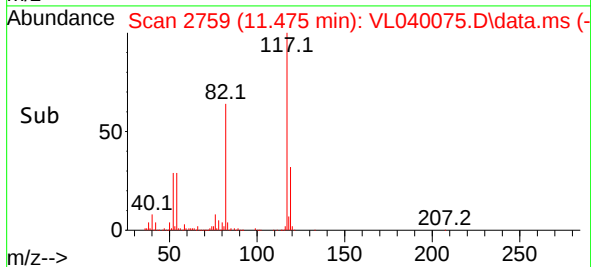
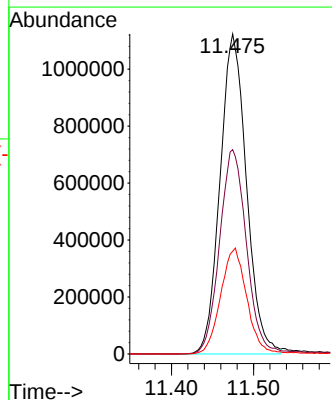
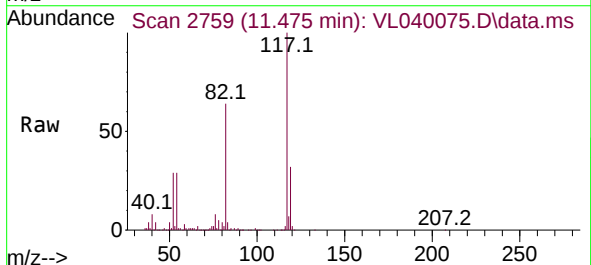
Instrument :
MSVOA_L
ClientSampleId :
AP-113

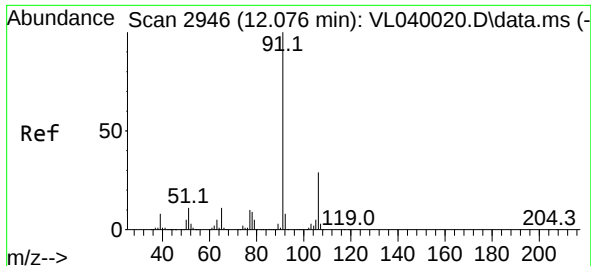
Tgt Ion: 91 Resp: 215310
Ion Ratio Lower Upper
91 100
92 59.8 48.7 73.1



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.475 min Scan# 2759
Delta R.T. 0.022 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Tgt Ion: 117 Resp: 2508696
Ion Ratio Lower Upper
117 100
82 66.8 51.2 76.8
119 33.4 23.2 34.8

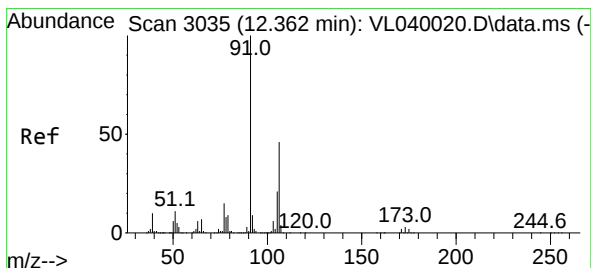
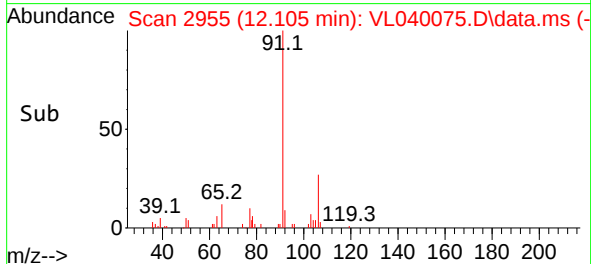
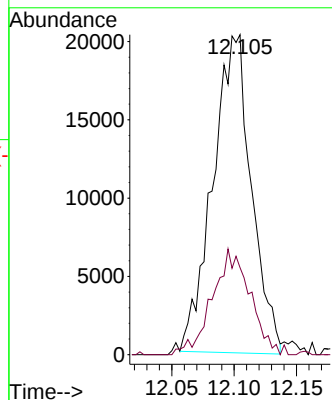
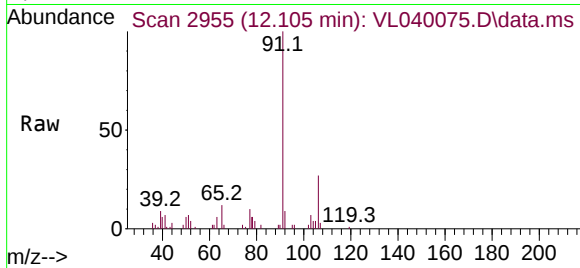




#58
Ethyl Benzene
Concen: 0.123 ppbv
RT: 12.105 min Scan# 2946
Delta R.T. 0.029 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

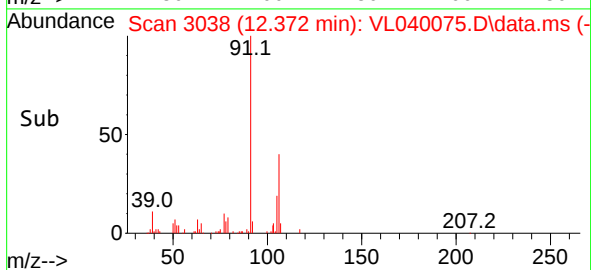
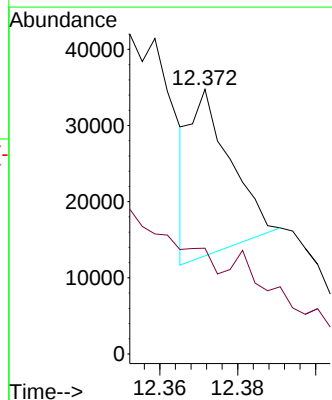
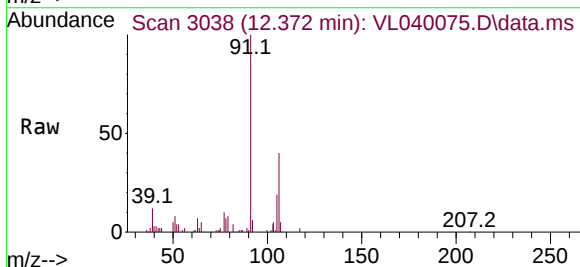
Instrument :
MSVOA_L
ClientSampleId :
AP-113

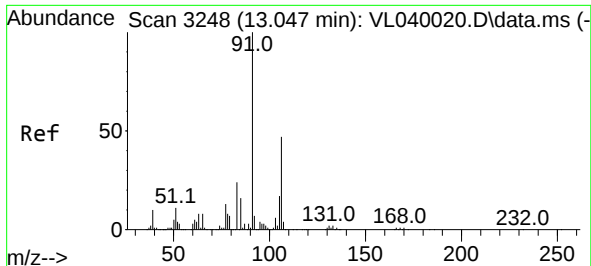
Tgt Ion: 91 Resp: 43873
Ion Ratio Lower Upper
91 100
106 27.5 23.5 35.3



#59
m/p-Xylene
Concen: 0.051 ppbv
RT: 12.372 min Scan# 3038
Delta R.T. 0.010 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Tgt Ion: 91 Resp: 15825
Ion Ratio Lower Upper
91 100
106 0.0 35.5 53.3#

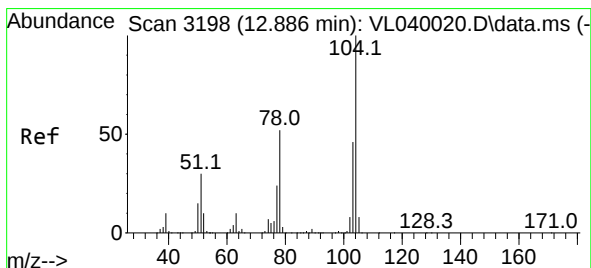
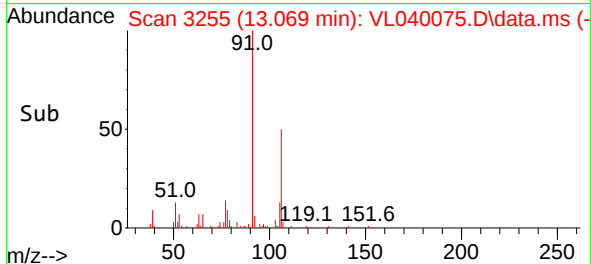
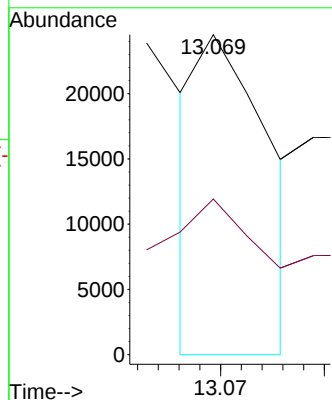
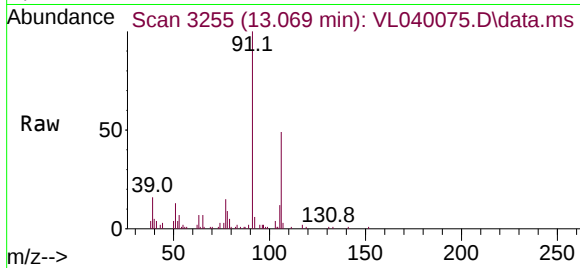




#60
o-Xylene
Concen: 0.039 ppbv
RT: 13.069 min Scan# 31
Delta R.T. 0.022 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

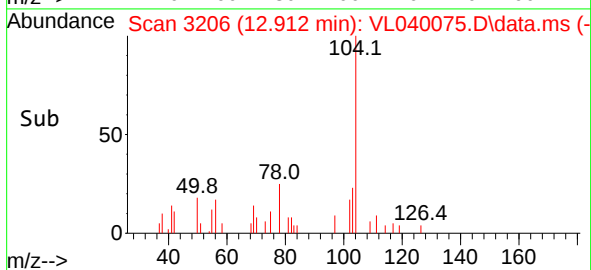
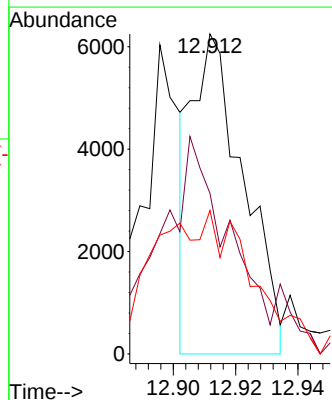
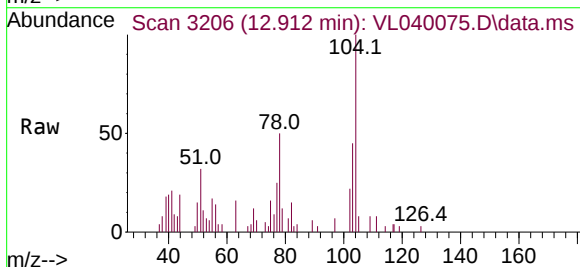
Instrument :
MSVOA_L
ClientSampleId :
AP-113

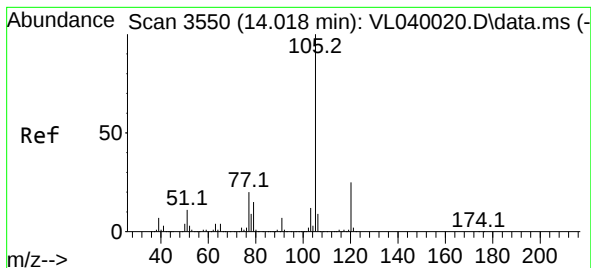
Tgt Ion: 91 Resp: 11489
Ion Ratio Lower Upper
91 100
106 201.2 22.4 67.0#



#61
Styrene
Concen: 0.045 ppbv
RT: 12.912 min Scan# 3206
Delta R.T. 0.026 min
Lab File: VL040075.D
Acq: 9 Jan 2023 14:36

Tgt Ion: 104 Resp: 7233
Ion Ratio Lower Upper
104 100
78 115.6 42.4 63.6#
103 91.0 37.2 55.8#





#62

Isopropylbenzene

Concen: 0.035 ppbv

RT: 14.037 min Scan# 3556

Delta R.T. 0.019 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

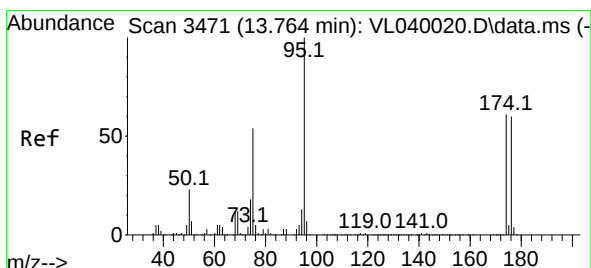
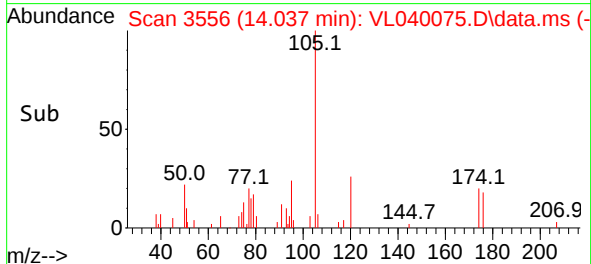
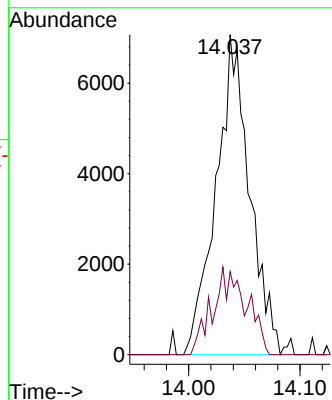
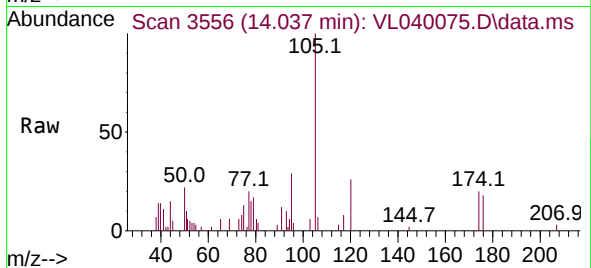
AP-113

Tgt Ion:105 Resp: 14805

Ion Ratio Lower Upper

105 100

120 27.5 20.6 31.0



#68

1-Bromo-4-Fluorobenzene

Concen: 10.263 ppbv

RT: 13.786 min Scan# 3478

Delta R.T. 0.022 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

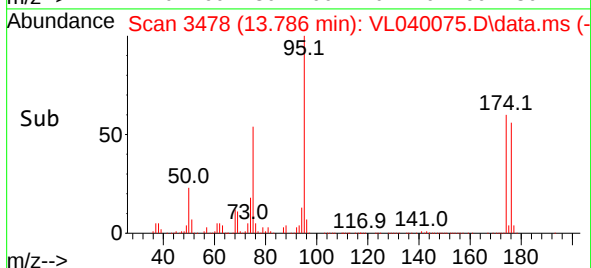
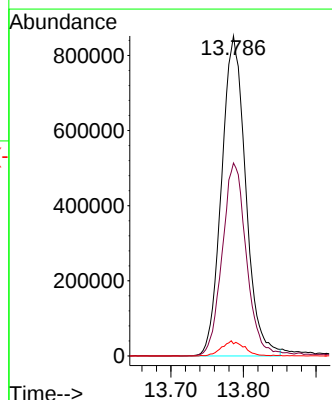
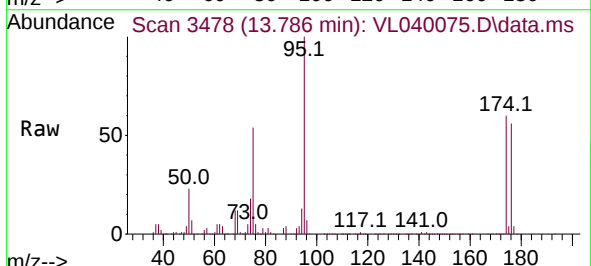
Tgt Ion: 95 Resp: 1966678

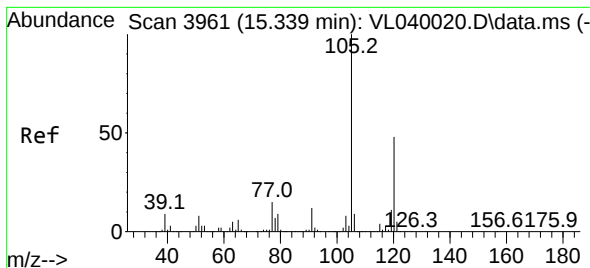
Ion Ratio Lower Upper

95 100

174 61.8 48.6 73.0

175 4.5 3.4 5.2





#73

1,3,5-Trimethylbenzene

Concen: 0.041 ppbv

RT: 15.368 min Scan# 3961

Delta R.T. 0.029 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Instrument :

MSVOA_L

ClientSampleId :

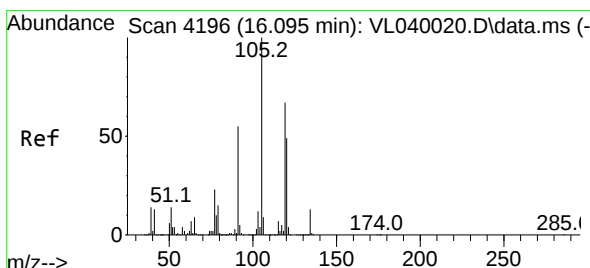
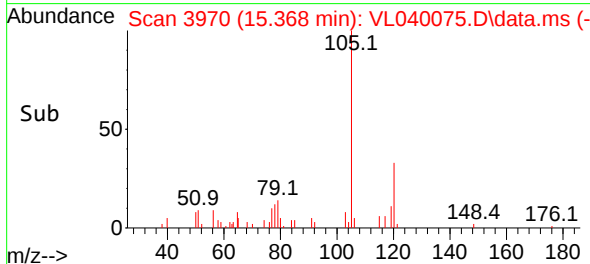
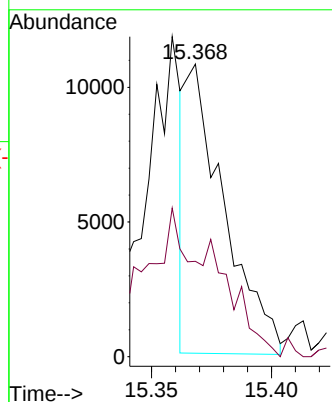
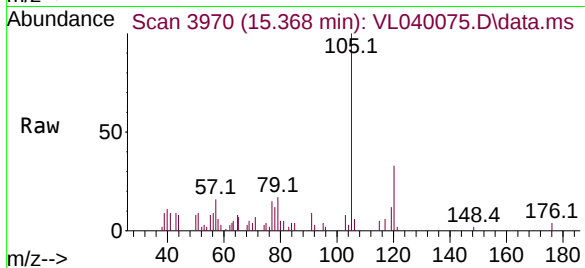
AP-113

Tgt Ion:105 Resp: 12107

Ion Ratio Lower Upper

105 100

120 34.1 38.4 57.6#



#74

1,2,4-Trimethylbenzene

Concen: 0.206 ppbv

RT: 16.124 min Scan# 4205

Delta R.T. 0.029 min

Lab File: VL040075.D

Acq: 9 Jan 2023 14:36

Tgt Ion:105 Resp: 67681

Ion Ratio Lower Upper

105 100

120 38.1 39.3 58.9#

91 12.5 44.2 66.4#

77 14.2 18.8 28.2#

