

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL010923\  
 Data File : VL040074.D  
 Acq On : 9 Jan 2023 13:55  
 Operator : SY/MD  
 Sample : 01074-01 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 AP-110

Quant Time: Jan 09 21:31:02 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

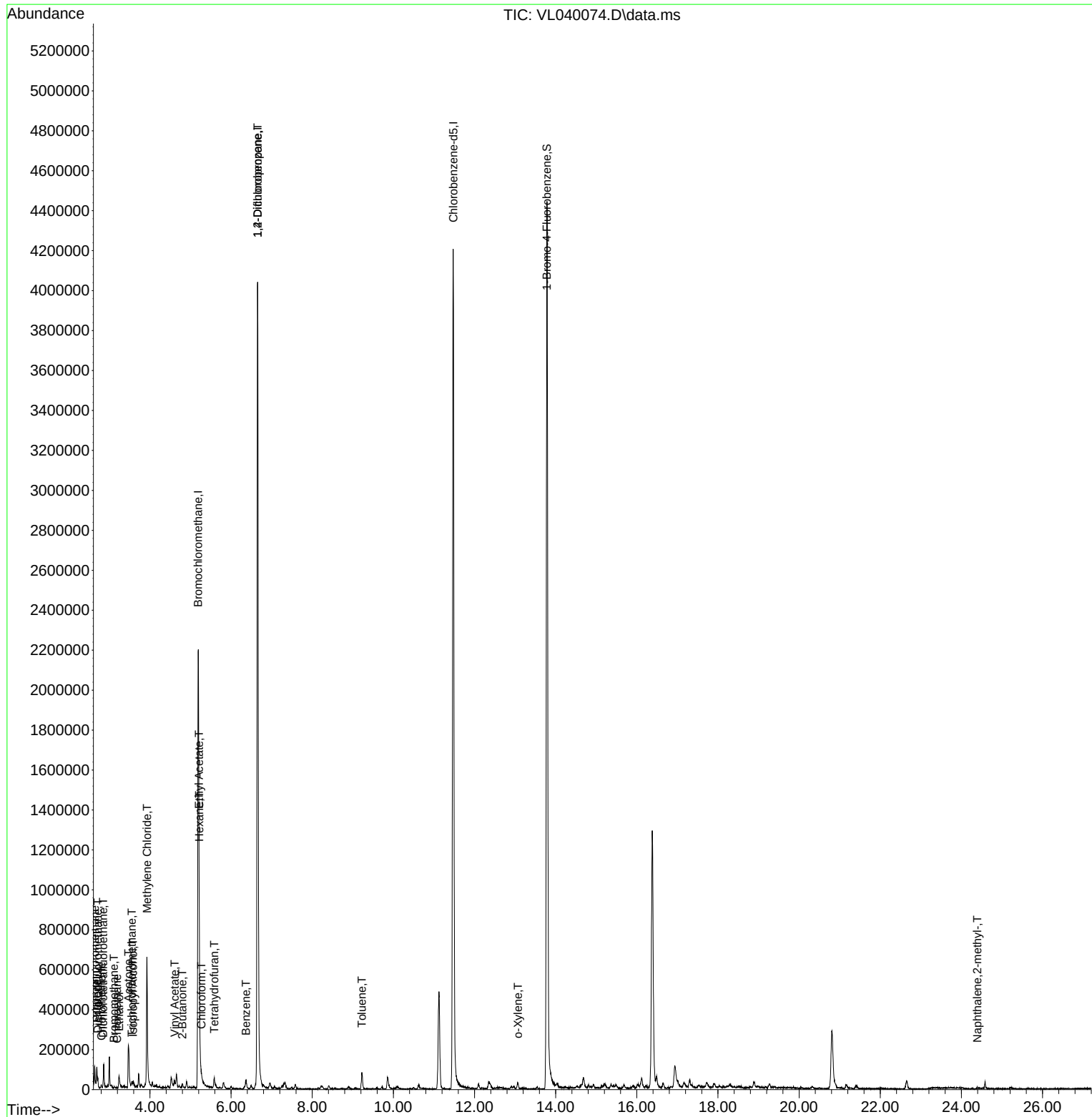
| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Bromochloromethane        | 5.189  | 49    | 1107933  | 10.000   | ppbv   | 0.02     |
| 33) 1,4-Difluorobenzene      | 6.655  | 114   | 3187739  | 10.000   | ppbv   | 0.02     |
| 55) Chlorobenzene-d5         | 11.478 | 117   | 2847124  | 10.000   | ppbv   | 0.03     |
|                              |        |       |          |          |        |          |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene  | 13.786 | 95    | 2274801  | 10.460   | ppbv   | 0.02     |
| Spiked Amount                | 10.000 | Range | 65 - 135 | Recovery | =      | 104.600% |
|                              |        |       |          |          |        |          |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.716  | 85    | 24542    | 0.118    | ppbv   | 99       |
| 3) Chlorodifluoromethane     | 2.639  | 51    | 69576    | 0.426    | ppbv # | 66       |
| 4) Chloromethane             | 2.806  | 50    | 10663    | 0.104    | ppbv # | 87       |
| 6) Bromomethane              | 3.111  | 94    | 979      | 0.032    | ppbv # | 48       |
| 7) Chloroethane              | 3.189  | 64    | 1053     | 0.034    | ppbv # | 44       |
| 8) Dichlorotetrafluoroethane | 2.845  | 85    | 7556     | 0.035    | ppbv # | 79       |
| 9) Propene                   | 2.690  | 41    | 21248    | 0.306    | ppbv   | 85       |
| 11) Trichlorofluoromethane   | 3.552  | 101   | 15185    | 0.067    | ppbv   | 97       |
| 13) Ethanol                  | 3.240  | 45    | 60598    | 9.281    | ppbv   | 77       |
| 15) Acetone                  | 3.468  | 43    | 225552   | 1.316    | ppbv   | 98       |
| 19) Isopropyl Alcohol        | 3.584  | 45    | 15693    | 0.186    | ppbv # | 94       |
| 20) Methylene Chloride       | 3.928  | 84    | 218756   | 3.003    | ppbv   | 95       |
| 23) Vinyl Acetate            | 4.610  | 43    | 9552     | 0.176    | ppbv # | 1        |
| 25) Ethyl Acetate            | 5.211  | 43    | 173665   | 0.585    | ppbv # | 78       |
| 26) Hexane                   | 5.214  | 57    | 254227   | 2.038    | ppbv # | 38       |
| 29) Chloroform               | 5.269  | 83    | 5822     | 0.031    | ppbv   | 95       |
| 34) 2-Butanone               | 4.799  | 43    | 22229    | 0.129    | ppbv # | 83       |
| 36) Benzene                  | 6.365  | 78    | 28952    | 0.102    | ppbv   | 99       |
| 39) 1,2-Dichloropropane      | 6.655  | 63    | 781338   | 7.322    | ppbv # | 23       |
| 41) Tetrahydrofuran          | 5.587  | 42    | 27622    | 0.256    | ppbv   | 92       |
| 53) Toluene                  | 9.224  | 91    | 59766    | 0.190    | ppbv   | 100      |
| 60) o-Xylene                 | 13.069 | 91    | 16702    | 0.049    | ppbv   | 95       |
| 80) Naphthalene,2-methyl-    | 24.390 | 142   | 5192     | 0.076    | ppbv # | 58       |
| -----                        |        |       |          |          |        |          |

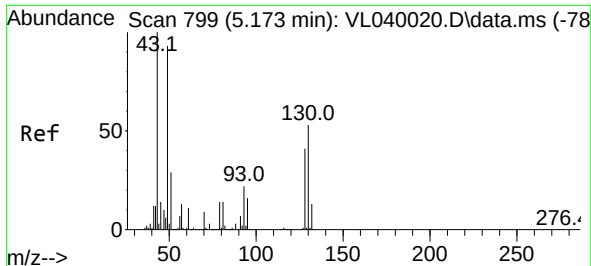
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL010923\  
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Instrument :  
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Quant Time: Jan 09 21:31:02 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  
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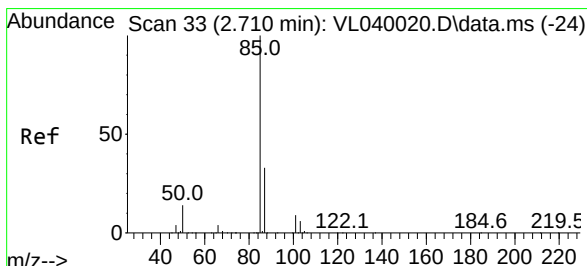
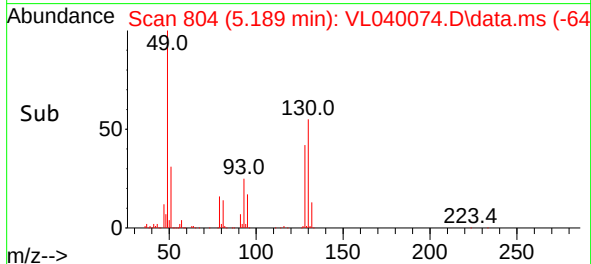
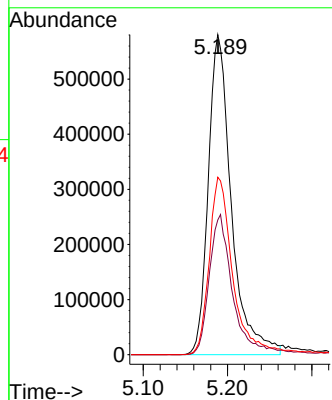
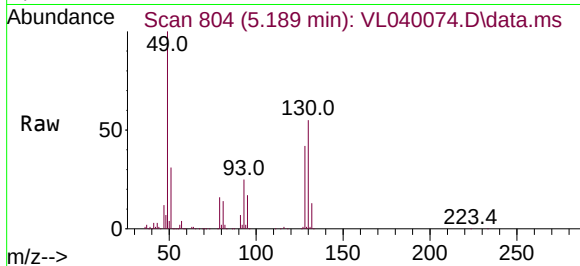




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.189 min Scan# 80  
Delta R.T. 0.016 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

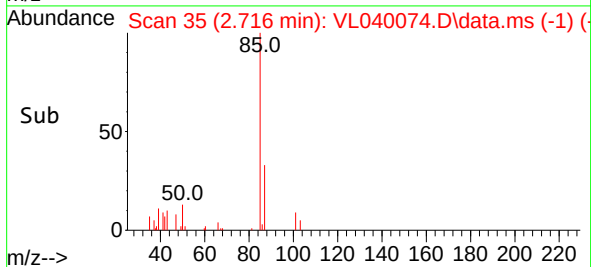
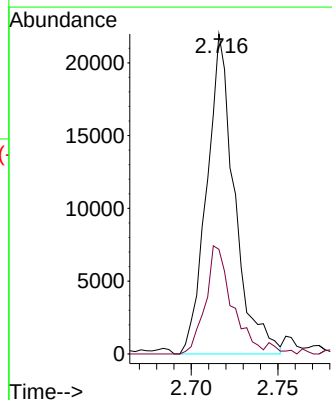
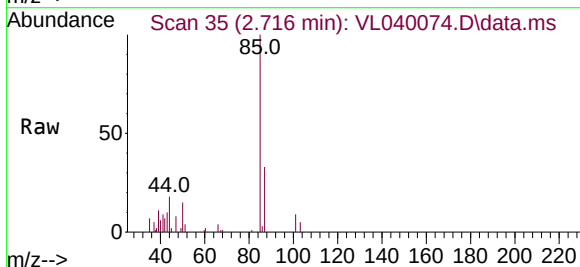
Instrument :  
MSVOA\_L  
ClientSampleId :  
AP-110

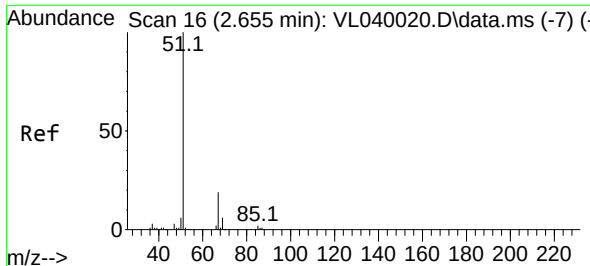
Tgt Ion: 49 Resp: 1107933  
Ion Ratio Lower Upper  
49 100  
128 45.8 22.4 67.3  
130 58.8 28.9 86.8



#2  
Dichlorodifluoromethane  
Concen: 0.118 ppbv  
RT: 2.716 min Scan# 35  
Delta R.T. 0.006 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

Tgt Ion: 85 Resp: 24542  
Ion Ratio Lower Upper  
85 100  
87 32.7 26.6 40.0

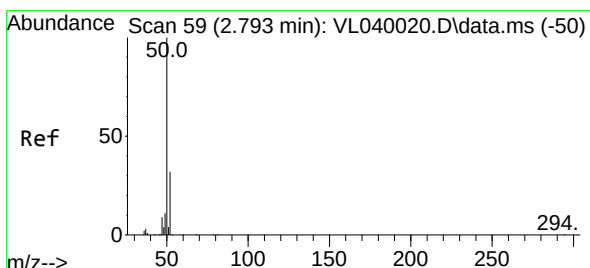
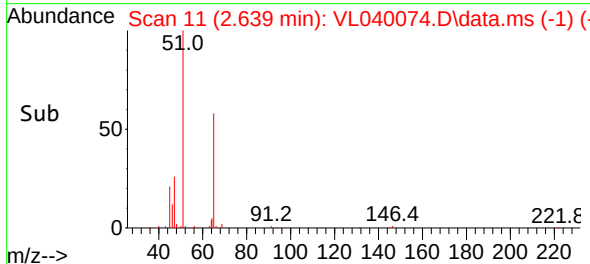
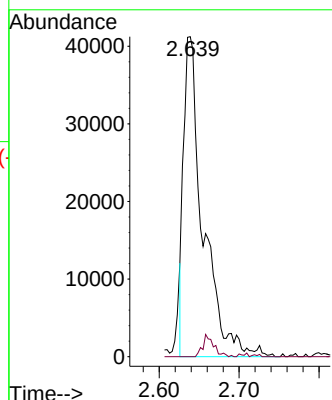
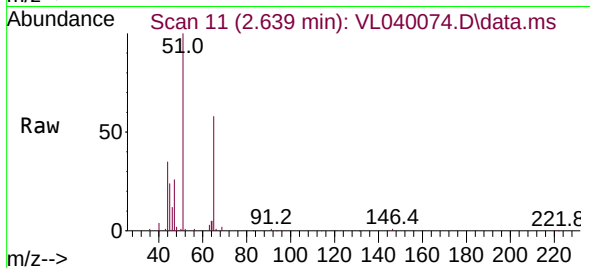




#3  
Chlorodifluoromethane  
Concen: 0.426 ppbv  
RT: 2.639 min Scan# 11  
Delta R.T. -0.016 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

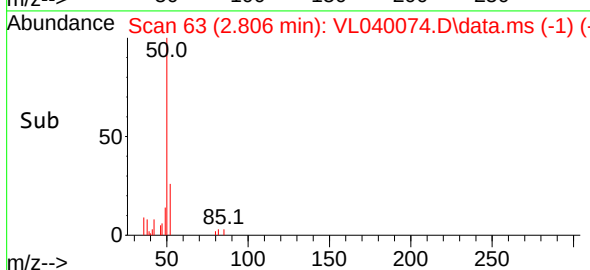
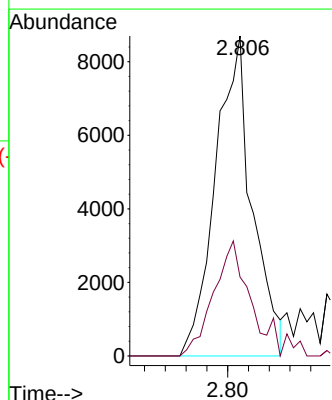
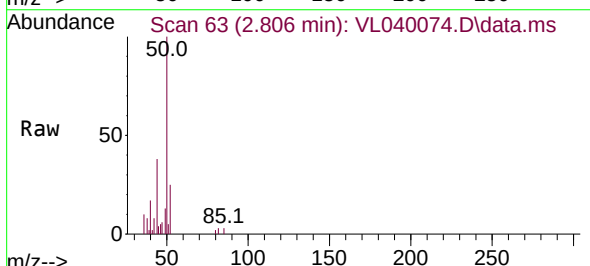
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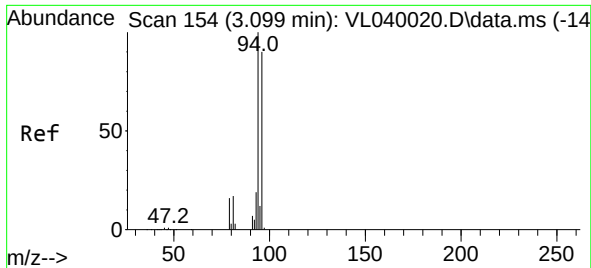
Tgt Ion: 51 Resp: 69576  
Ion Ratio Lower Upper  
51 100  
67 3.9 15.3 22.9#



#4  
Chloromethane  
Concen: 0.104 ppbv  
RT: 2.806 min Scan# 63  
Delta R.T. 0.013 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

Tgt Ion: 50 Resp: 10663  
Ion Ratio Lower Upper  
50 100  
52 24.6 25.5 38.3#





#6

Bromomethane

Concen: 0.032 ppbv

RT: 3.111 min Scan# 11

Delta R.T. 0.013 min

Lab File: VL040074.D

Acq: 9 Jan 2023 13:55

Instrument :

MSVOA\_L

ClientSampleId :

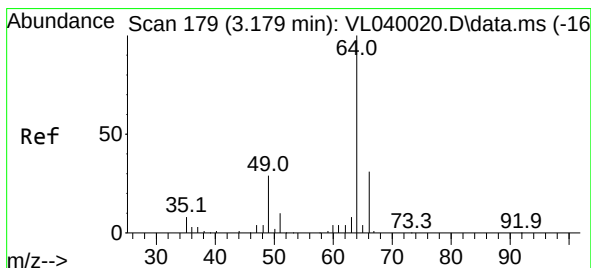
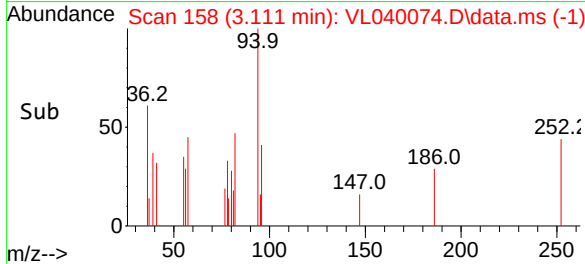
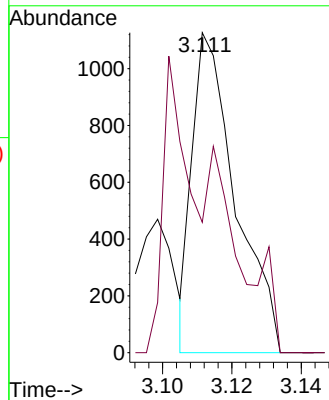
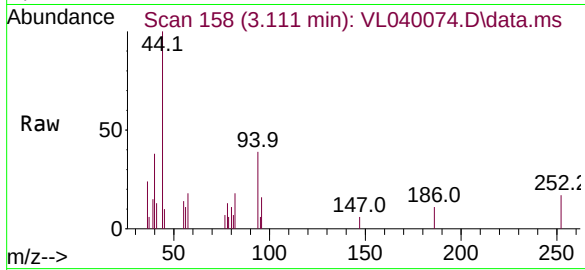
AP-110

Tgt Ion: 94 Resp: 979

Ion Ratio Lower Upper

94 100

96 40.7 72.0 108.0#



#7

Chloroethane

Concen: 0.034 ppbv

RT: 3.189 min Scan# 182

Delta R.T. 0.010 min

Lab File: VL040074.D

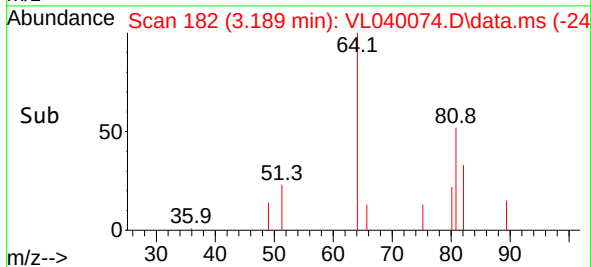
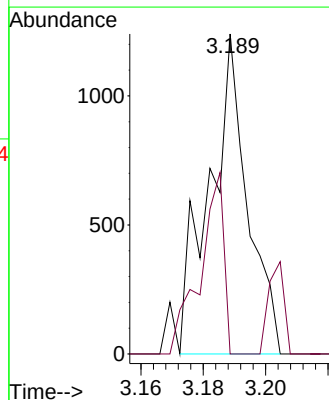
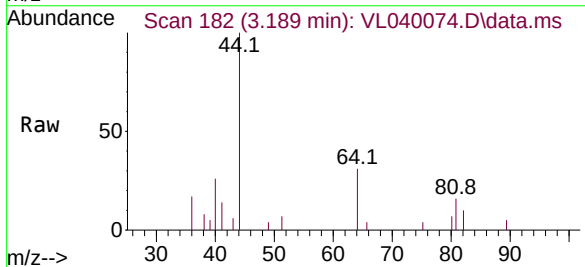
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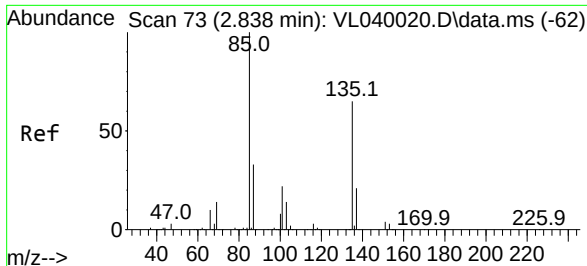
Tgt Ion: 64 Resp: 1053

Ion Ratio Lower Upper

64 100

66 0.0 24.6 37.0#

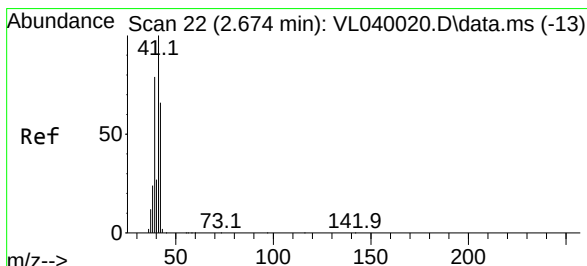
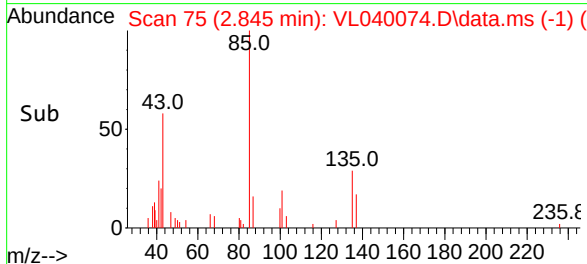
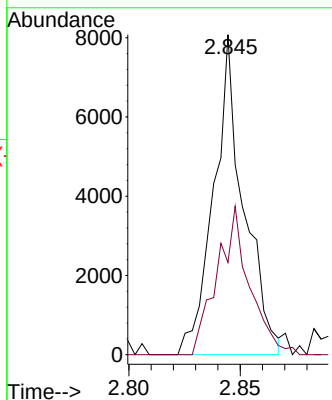
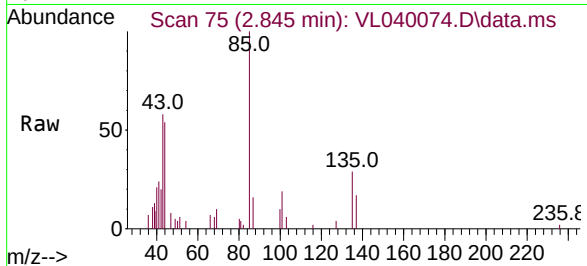




#8  
 Dichlorotetrafluoroethane  
 Concen: 0.035 ppbv  
 RT: 2.845 min Scan# 71  
 Delta R.T. 0.006 min  
 Lab File: VL040074.D  
 Acq: 9 Jan 2023 13:55

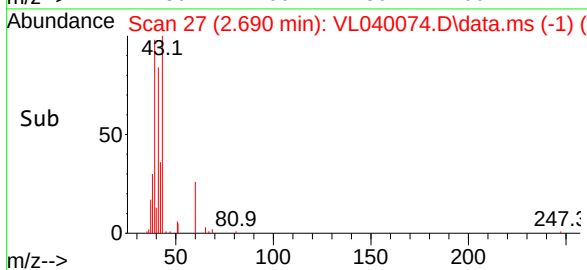
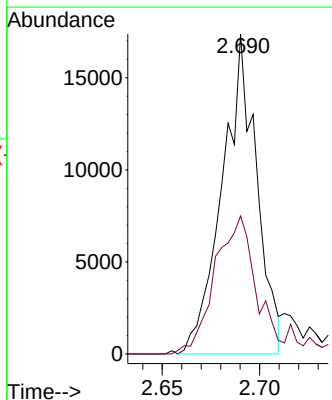
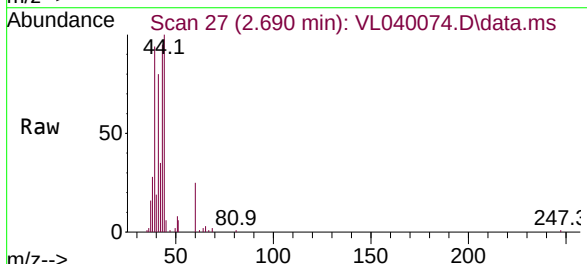
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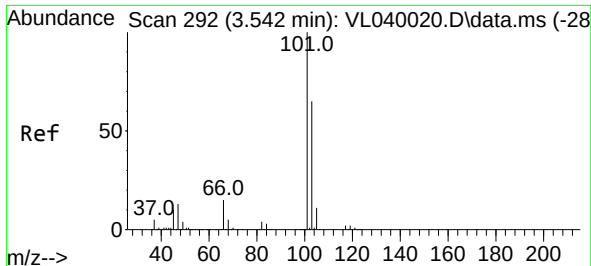
Tgt Ion: 85 Resp: 7556  
 Ion Ratio Lower Upper  
 85 100  
 135 50.1 53.2 79.8#



#9  
 Propene  
 Concen: 0.306 ppbv  
 RT: 2.690 min Scan# 27  
 Delta R.T. 0.016 min  
 Lab File: VL040074.D  
 Acq: 9 Jan 2023 13:55

Tgt Ion: 41 Resp: 21248  
 Ion Ratio Lower Upper  
 41 100  
 42 56.4 54.8 82.2

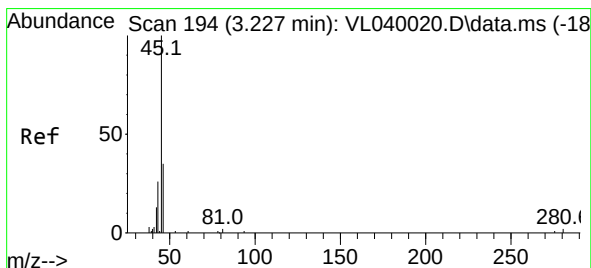
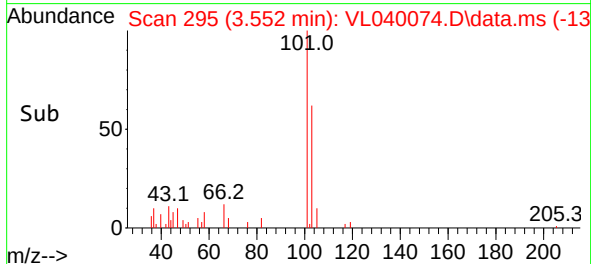
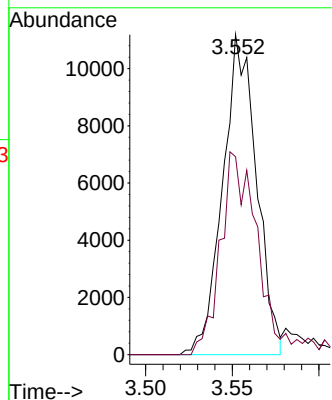
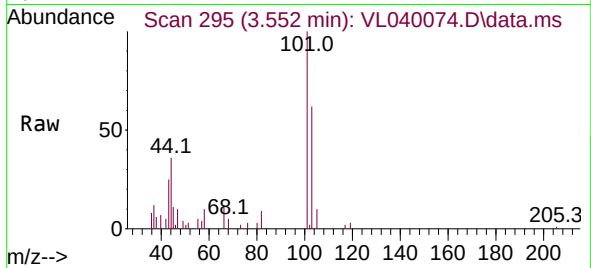




#11  
 Trichlorofluoromethane  
 Concen: 0.067 ppbv  
 RT: 3.552 min Scan# 292  
 Delta R.T. 0.010 min  
 Lab File: VL040074.D  
 Acq: 9 Jan 2023 13:55

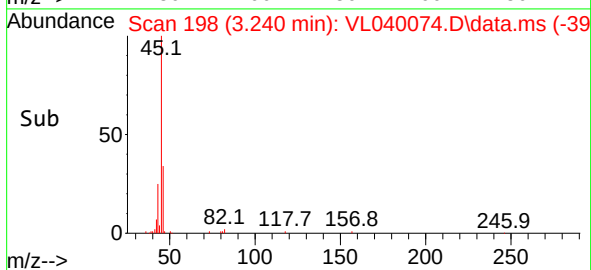
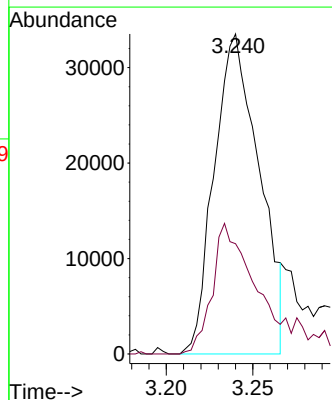
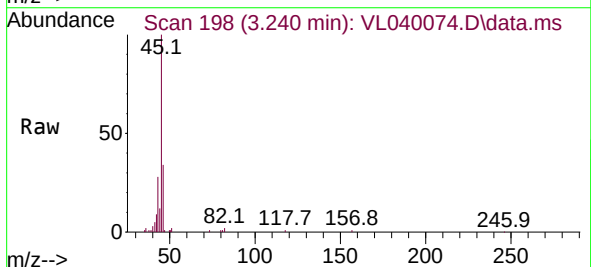
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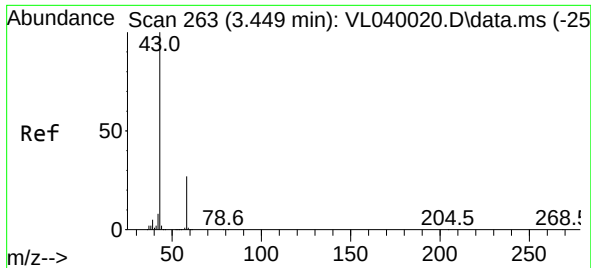
Tgt Ion:101 Resp: 15185  
 Ion Ratio Lower Upper  
 101 100  
 103 61.9 51.7 77.5



#13  
 Ethanol  
 Concen: 9.281 ppbv  
 RT: 3.240 min Scan# 198  
 Delta R.T. 0.013 min  
 Lab File: VL040074.D  
 Acq: 9 Jan 2023 13:55

Tgt Ion: 45 Resp: 60598  
 Ion Ratio Lower Upper  
 45 100  
 46 47.7 13.7 54.7





#15

Acetone

Concen: 1.316 ppbv

RT: 3.468 min Scan# 2

Delta R.T. 0.019 min

Lab File: VL040074.D

Acq: 9 Jan 2023 13:55

Instrument :

MSVOA\_L

ClientSampleId :

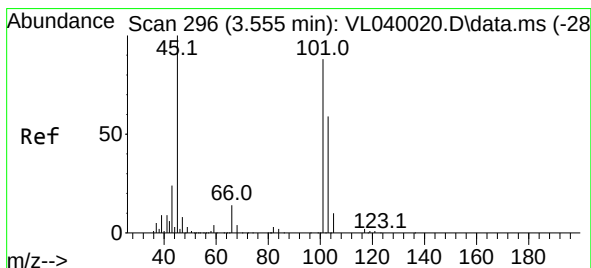
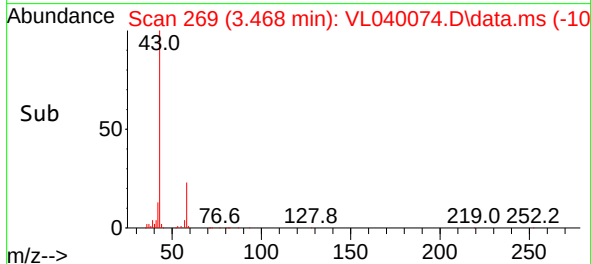
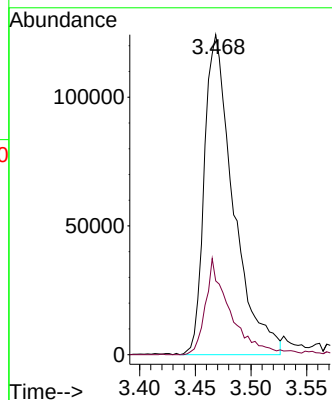
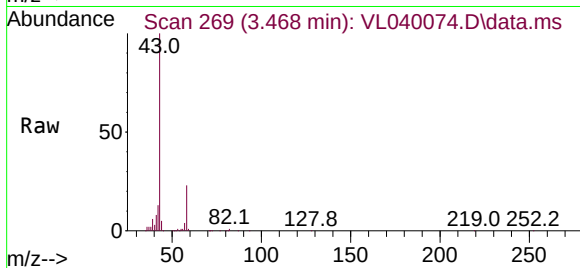
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Tgt Ion: 43 Resp: 225552

Ion Ratio Lower Upper

43 100

58 26.5 21.8 32.8



#19

Isopropyl Alcohol

Concen: 0.186 ppbv

RT: 3.584 min Scan# 305

Delta R.T. 0.029 min

Lab File: VL040074.D

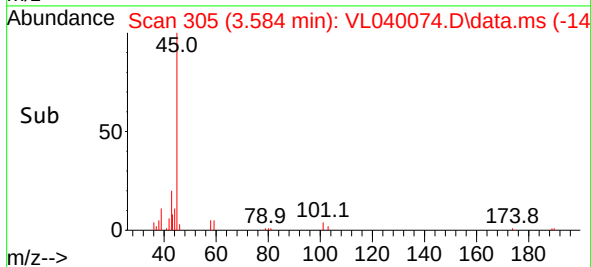
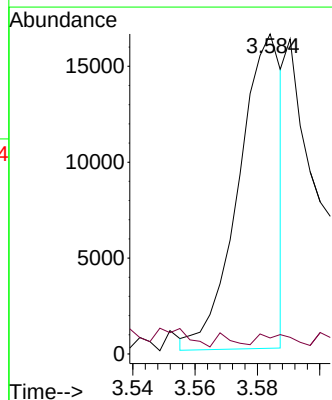
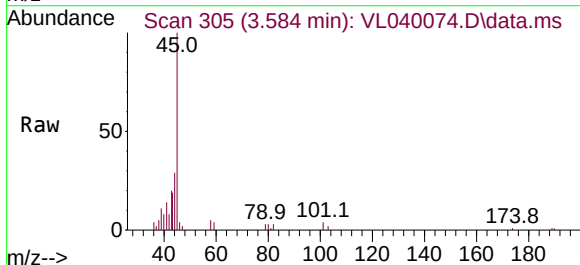
Acq: 9 Jan 2023 13:55

Tgt Ion: 45 Resp: 15693

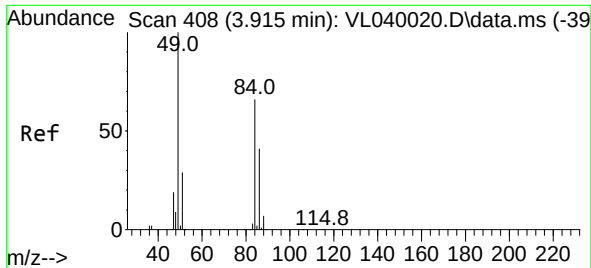
Ion Ratio Lower Upper

45 100

58 0.0 1.7 2.5#



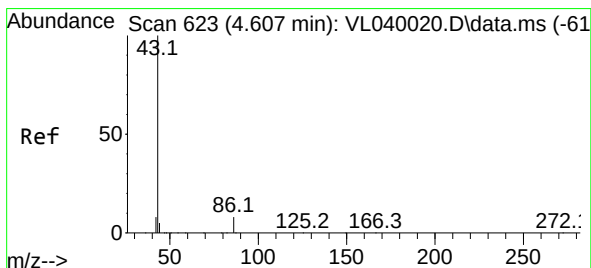
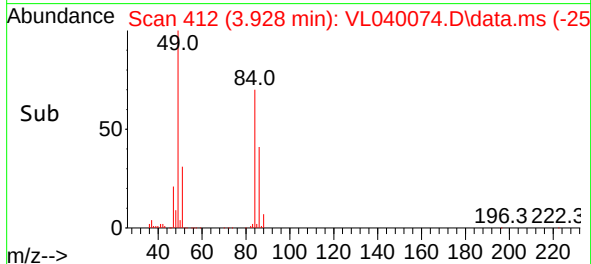
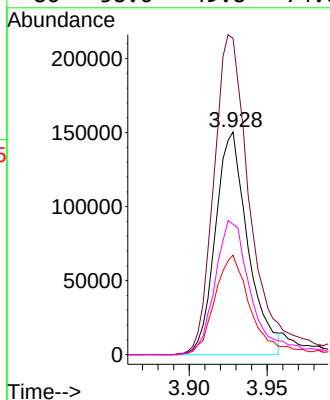
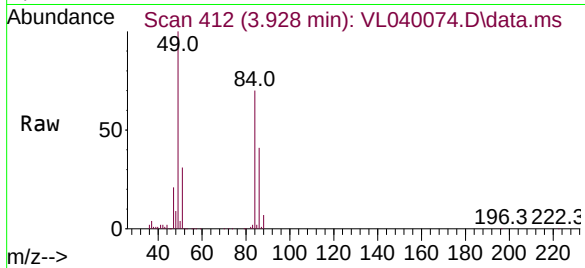




#20  
Methylene Chloride  
Concen: 3.003 ppbv  
RT: 3.928 min Scan# 411  
Delta R.T. 0.013 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

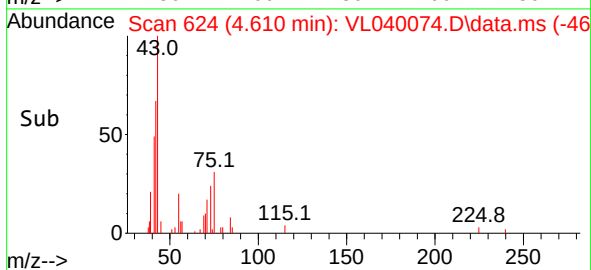
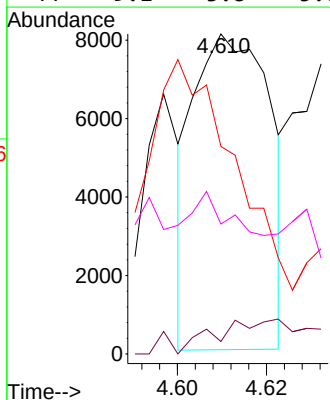
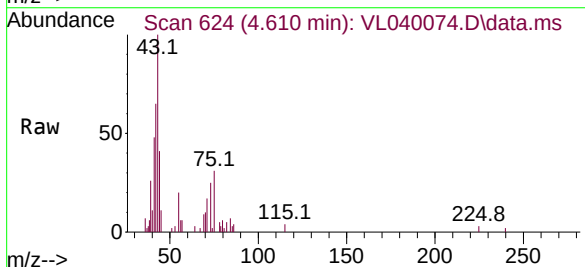
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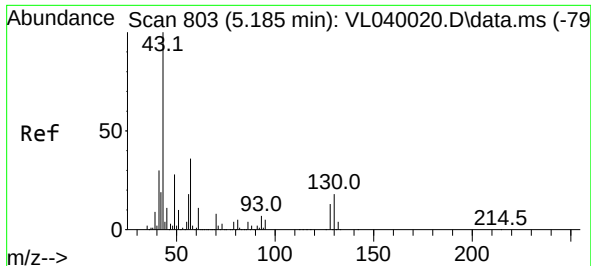
Tgt Ion: 84 Resp: 218756  
Ion Ratio Lower Upper  
84 100  
49 141.6 120.5 180.7  
51 44.4 35.2 52.8  
86 58.6 49.8 74.6



#23  
Vinyl Acetate  
Concen: 0.176 ppbv  
RT: 4.610 min Scan# 624  
Delta R.T. 0.003 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

Tgt Ion: 43 Resp: 9552  
Ion Ratio Lower Upper  
43 100  
86 11.3 5.3 7.9#  
42 101.0 7.4 11.0#  
44 9.1 3.8 5.6#

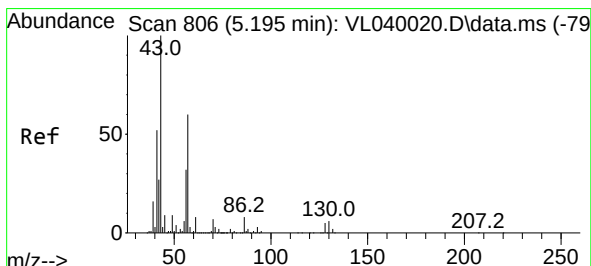
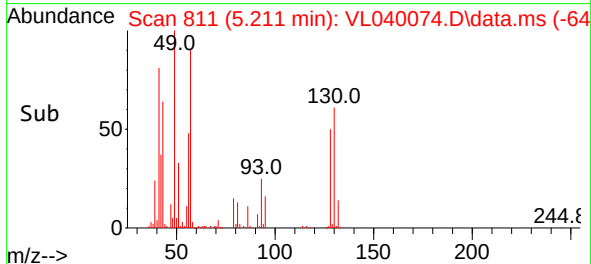
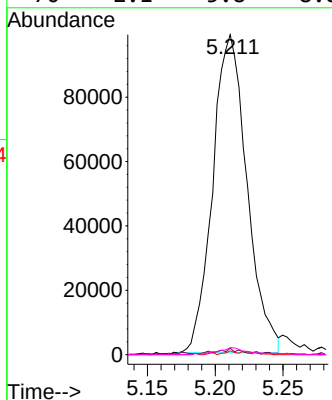
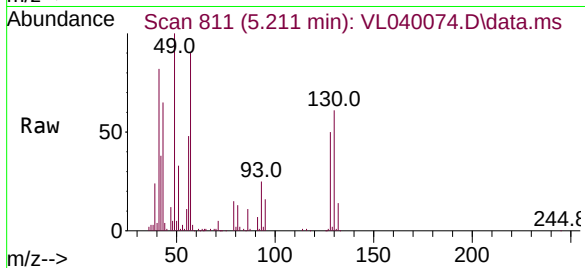




#25  
Ethyl Acetate  
Concen: 0.585 ppbv  
RT: 5.211 min Scan# 811  
Delta R.T. 0.026 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

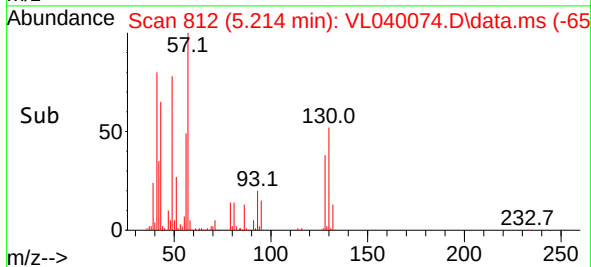
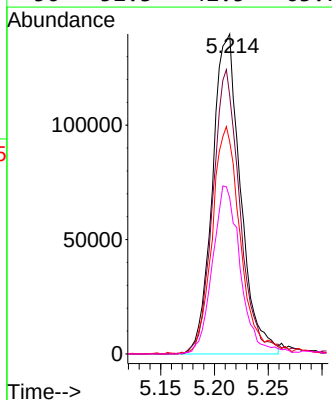
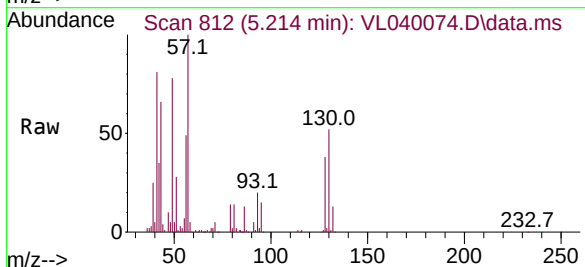
Instrument :  
MSVOA\_L  
ClientSampleId :  
AP-110

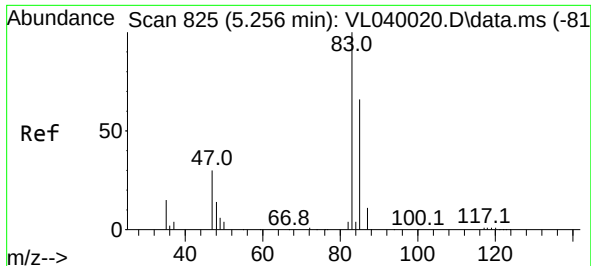
Tgt Ion: 43 Resp: 173665  
Ion Ratio Lower Upper  
43 100  
45 2.4 8.6 12.8#  
61 0.9 8.5 12.7#  
70 2.1 5.8 8.8#



#26  
Hexane  
Concen: 2.038 ppbv  
RT: 5.214 min Scan# 812  
Delta R.T. 0.019 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

Tgt Ion: 57 Resp: 254227  
Ion Ratio Lower Upper  
57 100  
41 88.1 72.1 108.1  
43 72.8 192.1 288.1#  
56 52.3 42.5 63.7





#29

Chloroform

Concen: 0.031 ppbv

RT: 5.269 min Scan# 81

Delta R.T. 0.013 min

Lab File: VL040074.D

Acq: 9 Jan 2023 13:55

Instrument :

MSVOA\_L

ClientSampleId :

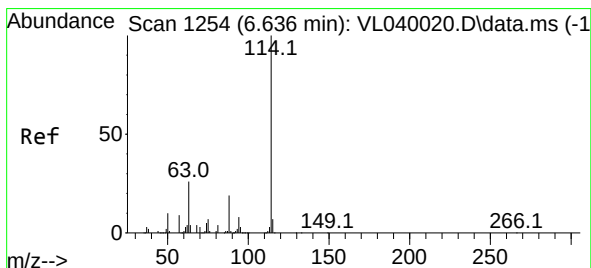
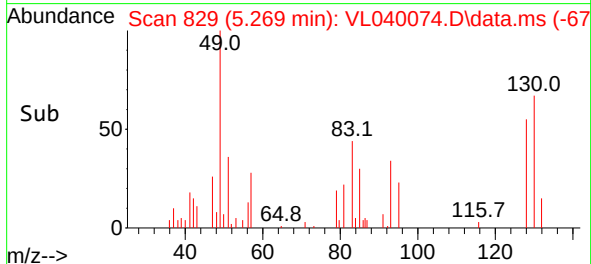
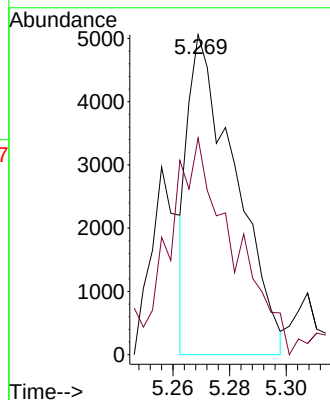
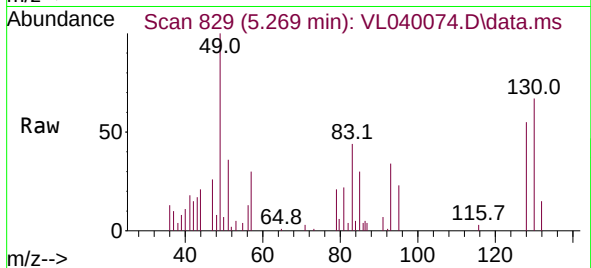
AP-110

Tgt Ion: 83 Resp: 5822

Ion Ratio Lower Upper

83 100

85 61.6 52.4 78.6



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.655 min Scan# 1260

Delta R.T. 0.019 min

Lab File: VL040074.D

Acq: 9 Jan 2023 13:55

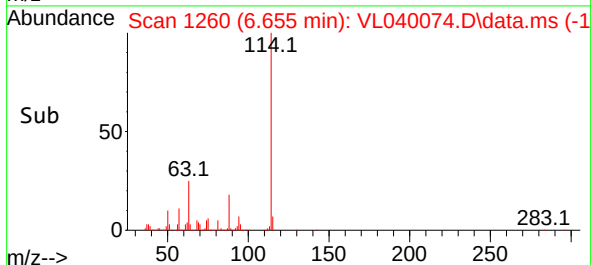
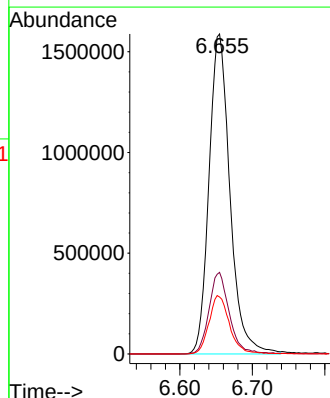
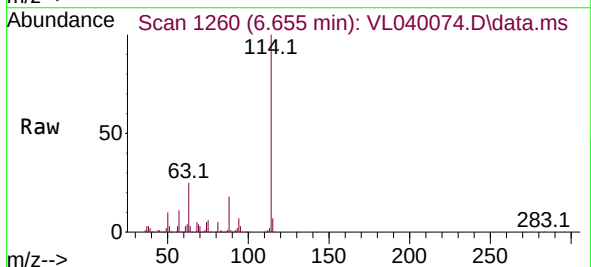
Tgt Ion: 114 Resp: 3187739

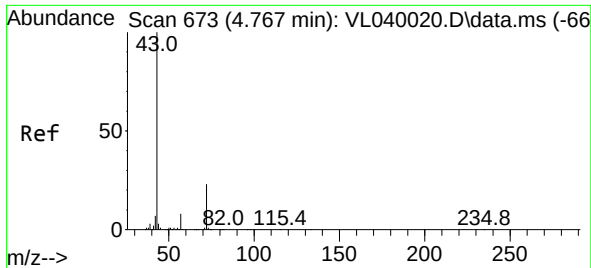
Ion Ratio Lower Upper

114 100

63 24.9 20.2 30.2

88 18.0 14.6 21.8

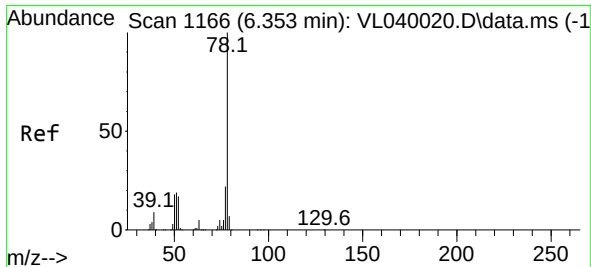
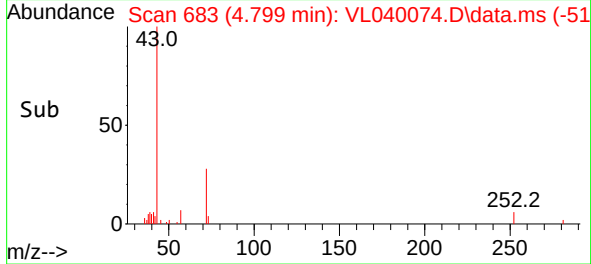
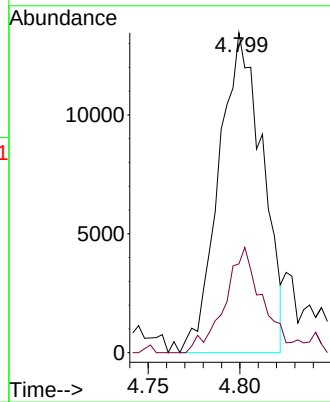
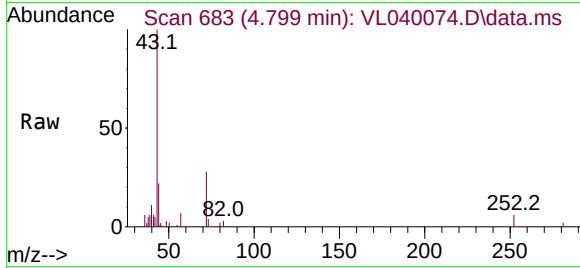




#34  
2-Butanone  
Concen: 0.129 ppbv  
RT: 4.799 min Scan# 61  
Delta R.T. 0.032 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

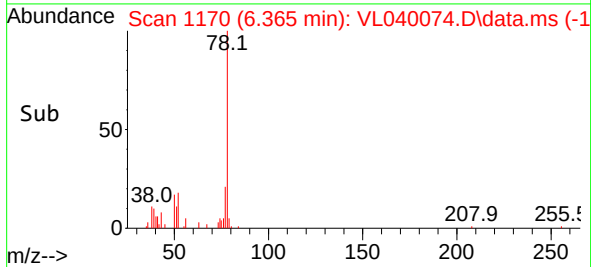
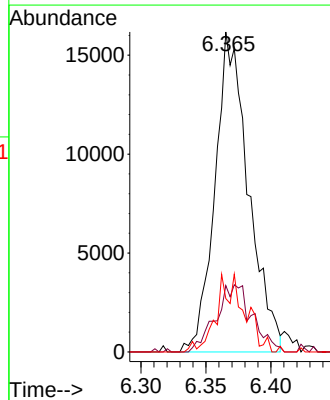
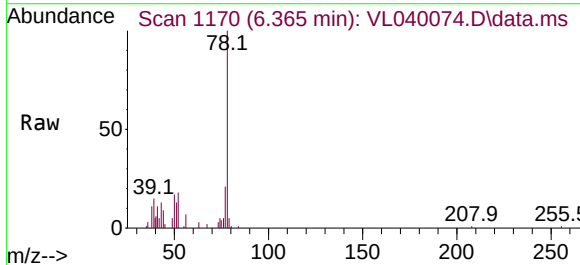
Instrument :  
MSVOA\_L  
ClientSampleId :  
AP-110

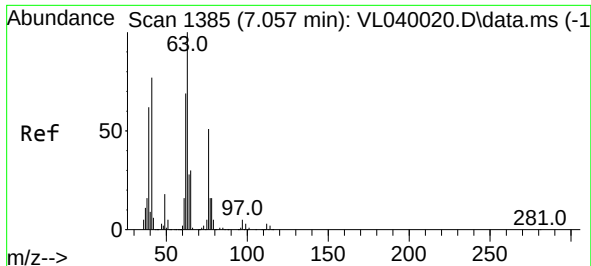
Tgt Ion: 43 Resp: 22229  
Ion Ratio Lower Upper  
43 100  
72 30.8 18.0 27.0#



#36  
Benzene  
Concen: 0.102 ppbv  
RT: 6.365 min Scan# 1170  
Delta R.T. 0.013 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

Tgt Ion: 78 Resp: 28952  
Ion Ratio Lower Upper  
78 100  
77 21.4 17.5 26.3  
50 17.2 14.2 21.2





#39

1,2-Dichloropropane

Concen: 7.322 ppbv

RT: 6.655 min Scan# 11

Delta R.T. -0.402 min

Lab File: VL040074.D

Acq: 9 Jan 2023 13:55

Instrument :

MSVOA\_L

ClientSampleId :

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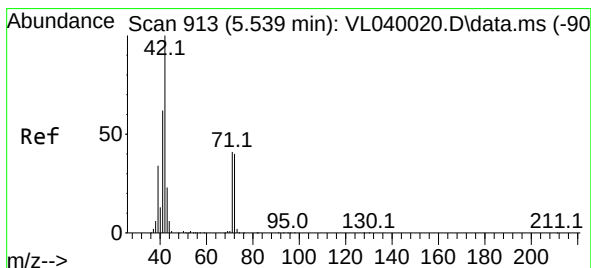
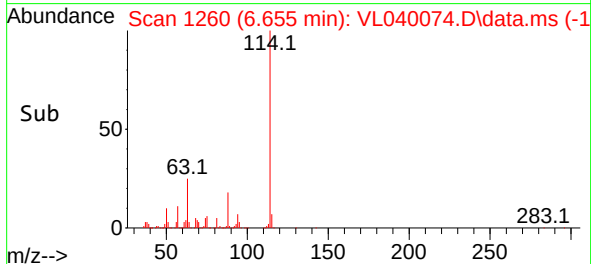
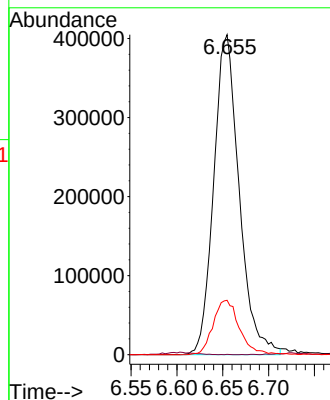
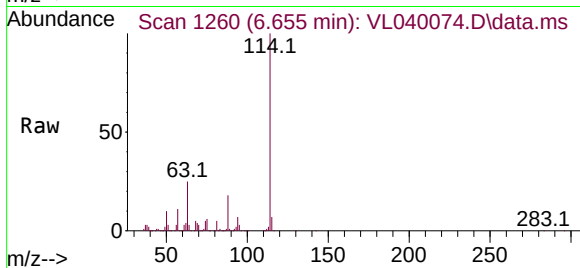
Tgt Ion: 63 Resp: 781338

Ion Ratio Lower Upper

63 100

41 0.0 61.4 92.0#

62 17.0 55.4 83.2#



#41

Tetrahydrofuran

Concen: 0.256 ppbv

RT: 5.587 min Scan# 928

Delta R.T. 0.048 min

Lab File: VL040074.D

Acq: 9 Jan 2023 13:55

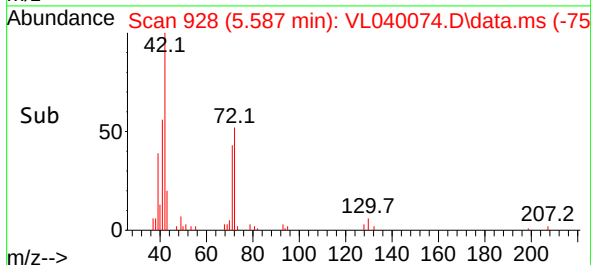
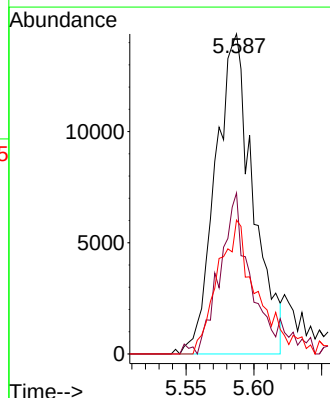
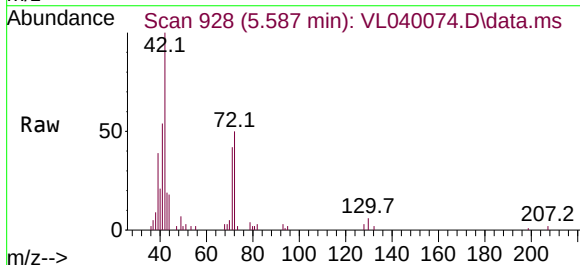
Tgt Ion: 42 Resp: 27622

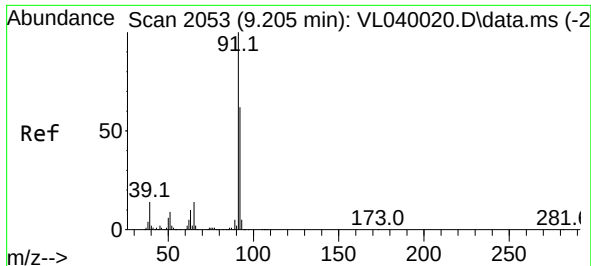
Ion Ratio Lower Upper

42 100

72 45.5 32.9 49.3

71 45.6 32.2 48.2

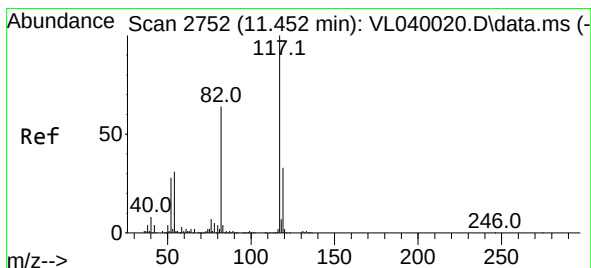
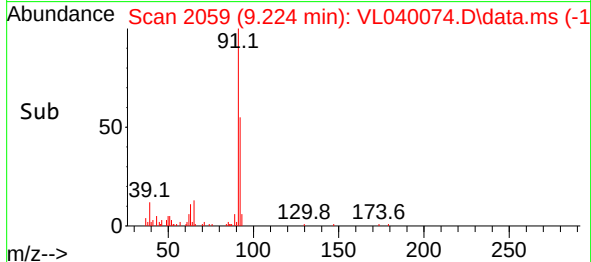
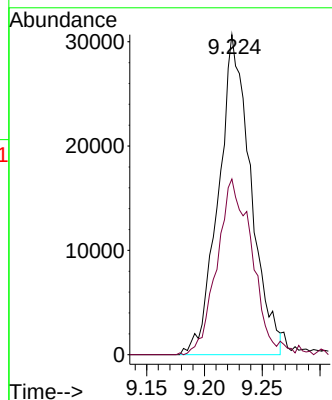
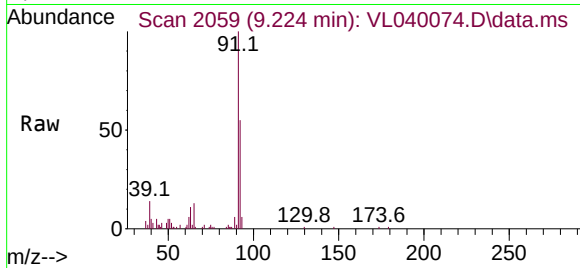




#53  
Toluene  
Concen: 0.190 ppbv  
RT: 9.224 min Scan# 2053  
Delta R.T. 0.019 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

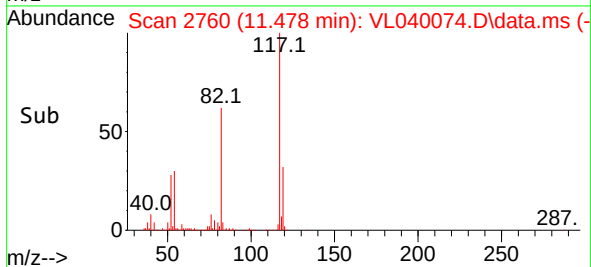
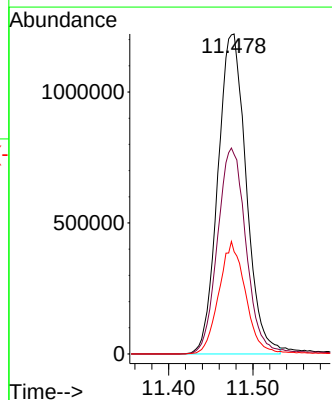
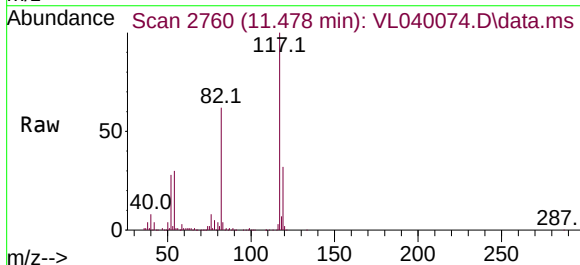
Instrument :  
MSVOA\_L  
ClientSampleId :  
AP-110

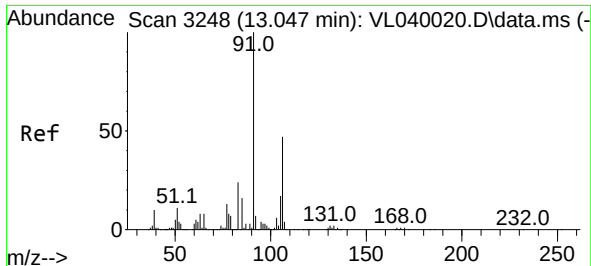
Tgt Ion: 91 Resp: 59766  
Ion Ratio Lower Upper  
91 100  
92 60.8 48.7 73.1



#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.478 min Scan# 2760  
Delta R.T. 0.026 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

Tgt Ion: 117 Resp: 2847124  
Ion Ratio Lower Upper  
117 100  
82 65.9 51.2 76.8  
119 33.5 23.2 34.8

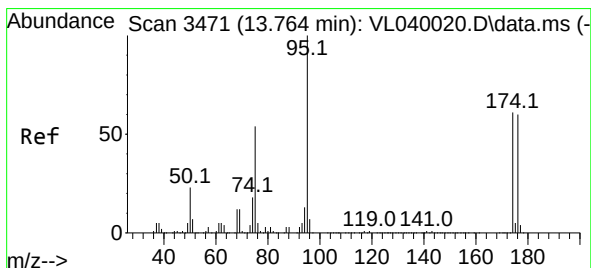
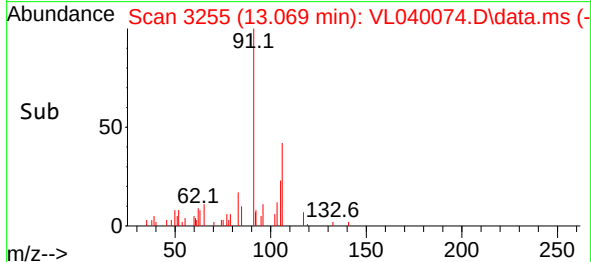
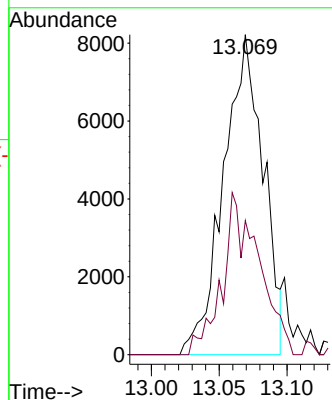
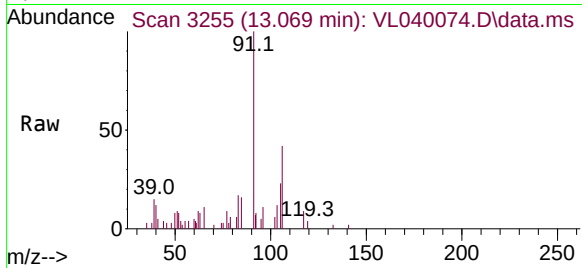




#60  
o-Xylene  
Concen: 0.049 ppbv  
RT: 13.069 min Scan# 31  
Delta R.T. 0.022 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

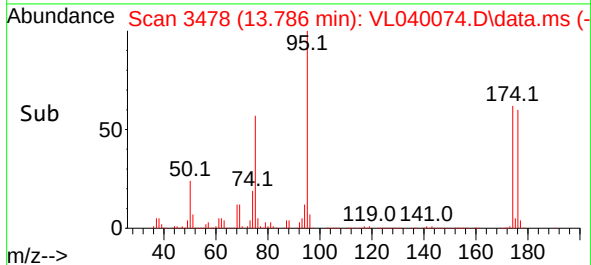
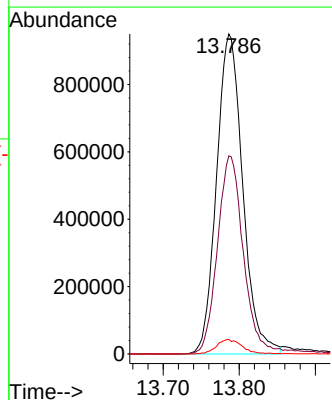
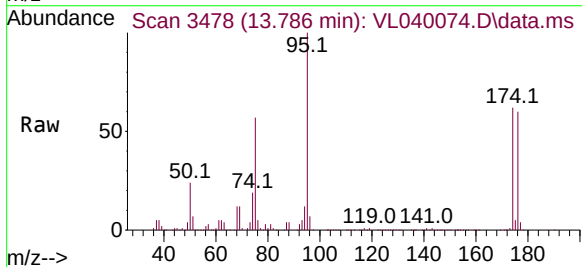
Instrument :  
MSVOA\_L  
ClientSampleId :  
AP-110

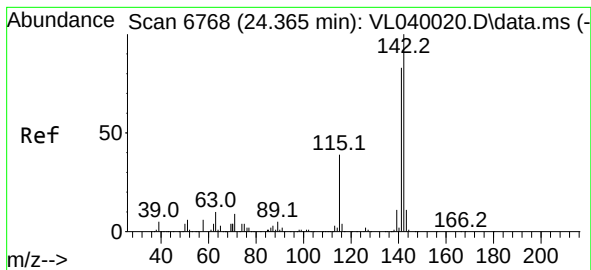
Tgt Ion: 91 Resp: 16702  
Ion Ratio Lower Upper  
91 100  
106 48.0 22.4 67.0



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.460 ppbv  
RT: 13.786 min Scan# 3478  
Delta R.T. 0.022 min  
Lab File: VL040074.D  
Acq: 9 Jan 2023 13:55

Tgt Ion: 95 Resp: 2274801  
Ion Ratio Lower Upper  
95 100  
174 62.9 48.6 73.0  
175 4.5 3.4 5.2





#80

Naphthalene, 2-methyl-

Concen: 0.076 ppbv

RT: 24.390 min Scan# 61

Delta R.T. 0.026 min

Lab File: VL040074.D

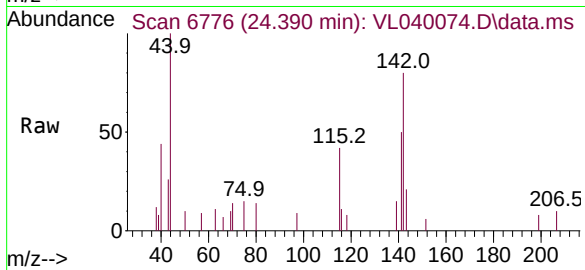
Acq: 9 Jan 2023 13:55

Instrument :

MSVOA\_L

ClientSampleId :

AP-110



Tgt Ion:142 Resp: 5192

Ion Ratio Lower Upper

142 100

141 39.0 65.3 97.9#

115 20.7 31.9 47.9#

