

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VW120721\  
 Data File : VW023823.D  
 Acq On : 07 Dec 2021 15:19  
 Operator : SY/MD  
 Sample : M4879-02  
 Misc : 25.0mL/MSVOA\_V/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Dec 08 01:15:55 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVTR112321WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Thu Dec 02 02:08:23 2021  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min)  |
|-------------------------------|--------|-------|----------|----------|--------|-----------|
| -----                         |        |       |          |          |        |           |
| Internal Standards            |        |       |          |          |        |           |
| 1) 1,4-Difluorobenzene        | 5.619  | 114   | 136251   | 5.000    | ug/L   | 0.00      |
| 28) Chlorobenzene-d5          | 8.854  | 117   | 127122   | 5.000    | ug/L   | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 11.249 | 152   | 70114    | 5.000    | ug/L   | 0.00      |
| System Monitoring Compounds   |        |       |          |          |        |           |
| 4) Vinyl Chloride-d3          | 1.307  | 65    | 55743    | 4.984    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 40 - 130 | Recovery | =      | 99.600%   |
| 7) Chloroethane-d5            | 1.568  | 69    | 41777    | 4.752    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 65 - 130 | Recovery | =      | 95.000%   |
| 11) 1,1-Dichloroethene-d2     | 2.108  | 63    | 73902    | 3.749    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 60 - 125 | Recovery | =      | 75.000%   |
| 20) 2-Butanone-d5             | 3.892  | 46    | 100684   | 74.879   | ug/L   | -0.02     |
| Spiked Amount                 | 50.000 | Range | 40 - 130 | Recovery | =      | 149.760%# |
| 24) Chloroform-d              | 4.349  | 84    | 96179    | 4.938    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 98.800%   |
| 26) 1,2-Dichloroethane-d4     | 5.034  | 65    | 46769    | 5.140    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 102.800%  |
| 32) Benzene-d6                | 5.050  | 84    | 191129   | 5.520    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 110.400%  |
| 36) 1,2-Dichloropropane-d6    | 6.069  | 67    | 53087    | 5.468    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 60 - 140 | Recovery | =      | 109.400%  |
| 41) Toluene-d8                | 7.317  | 98    | 178845   | 5.528    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 110.600%  |
| 43) trans-1,3-Dichloroprop... | 7.622  | 79    | 22069    | 5.640    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 55 - 130 | Recovery | =      | 112.800%  |
| 46) 2-Hexanone-d5             | 8.088  | 63    | 92384    | 71.056   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000 | Range | 45 - 130 | Recovery | =      | 142.120%# |
| 56) 1,1,2,2-Tetrachloroeth... | 10.217 | 84    | 37743    | 5.403    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 65 - 120 | Recovery | =      | 108.000%  |
| 66) 1,2-Dichlorobenzene-d4    | 11.622 | 152   | 72335    | 5.835    | ug/L   | 0.00      |
| Spiked Amount                 | 5.000  | Range | 80 - 120 | Recovery | =      | 116.800%  |
| Target Compounds              |        |       |          |          |        |           |
|                               |        |       |          |          | Qvalue |           |
| 5) Vinyl chloride             | 1.311  | 62    | 626      | 0.053    | ug/L # | 1         |
| 12) 1,1-Dichloroethene        | 2.108  | 96    | 646      | 0.071    | ug/L # | 1         |
| 13) Acetone                   | 2.185  | 43    | 9830     | 8.124    | ug/L   | 83        |
| 15) Methyl Acetate            | 2.433  | 43    | 2210     | 0.805    | ug/L # | 50        |
| 18) trans-1,2-Dichloroethene  | 2.764  | 96    | 4170     | 0.401    | ug/L   | 91        |
| 22) cis-1,2-Dichloroethene    | 3.912  | 96    | 124663   | 12.502   | ug/L   | 96        |
| 25) Chloroform                | 4.407  | 83    | 21871    | 1.123    | ug/L # | 26        |
| 30) Cyclohexane               | 4.677  | 56    | 42000    | 3.030    | ug/L   | 97        |
| 34) Trichloroethene           | 5.912  | 95    | 122195   | 12.587   | ug/L   | 98        |
| 35) Methylcyclohexane         | 6.130  | 83    | 21272    | 1.405    | ug/L   | 92        |
| 38) Bromodichloromethane      | 6.561  | 83    | 7754     | 0.663    | ug/L # | 27        |
| 42) Toluene                   | 7.391  | 91    | 53691    | 1.366    | ug/L   | 96        |
| 45) 1,1,2-Trichloroethane     | 7.793  | 97    | 3398     | 0.570    | ug/L # | 21        |
| 47) Tetrachloroethene         | 7.976  | 164   | 692388   | 78.355   | ug/L   | 98        |
| 49) Dibromochloromethane      | 7.976  | 129   | 615045   | 75.242   | ug/L # | 11        |
| 52) Ethylbenzene              | 9.011  | 91    | 247743   | 6.030    | ug/L   | 98        |
| 53) m,p-xylene                | 9.137  | 106   | 196762   | 12.033   | ug/L   | 96        |
| 54) o-xylene                  | 9.542  | 106   | 39162    | 2.518    | ug/L   | 98        |
| 55) Styrene                   | 9.542  | 104   | 2411     | 0.092    | ug/L # | 1         |

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 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Thu Dec 02 02:08:23 2021  
 Response via : Initial Calibration

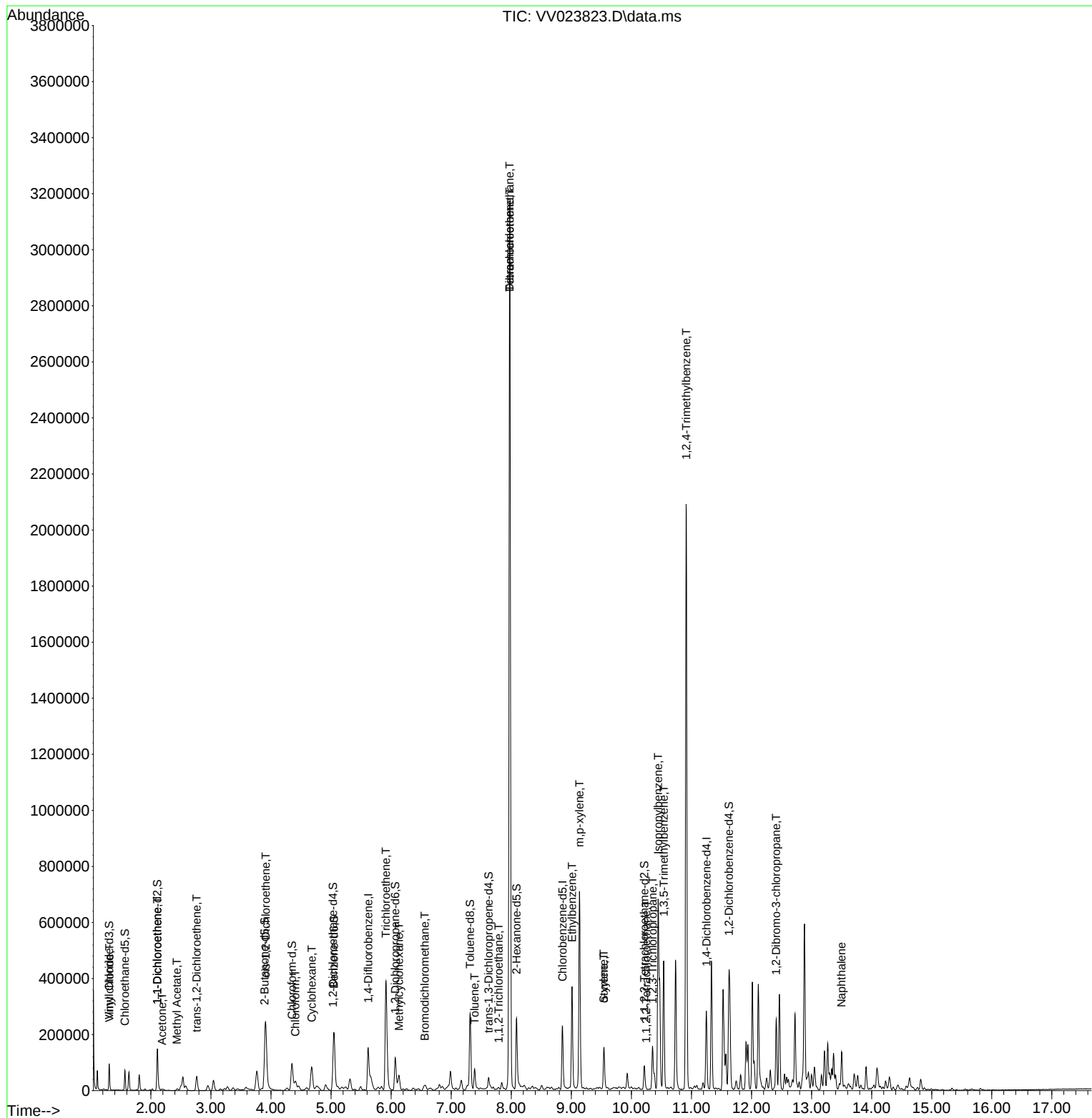
| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 57) 1,1,2,2-Tetrachloroethane | 10.246 | 83   | 900      | 0.136  | ug/L # | 26       |
| 60) Isopropylbenzene          | 10.445 | 105  | 609427   | 14.557 | ug/L # | 91       |
| 61) 1,2,3-Trichloropropane    | 10.355 | 75   | 959      | 0.193  | ug/L # | 1        |
| 62) 1,3,5-Trimethylbenzene    | 10.538 | 105  | 240943   | 6.916  | ug/L   | 99       |
| 63) 1,2,4-Trimethylbenzene    | 10.911 | 105  | 1112038  | 32.280 | ug/L   | 100      |
| 68) 1,2-Dibromo-3-chloropr... | 12.410 | 75   | 986      | 0.999  | ug/L # | 1        |
| 71) Naphthalene               | 13.500 | 128  | 99922    | 5.726  | ug/L   | 98       |

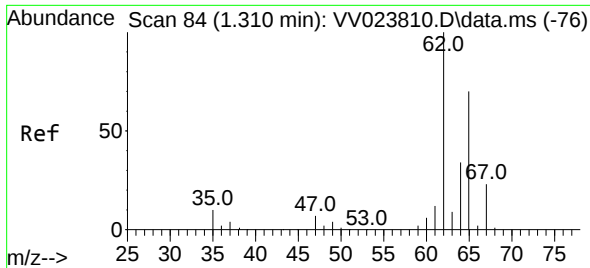
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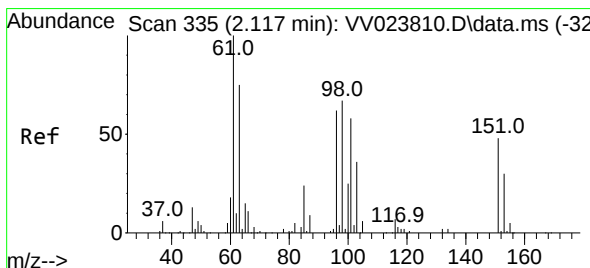
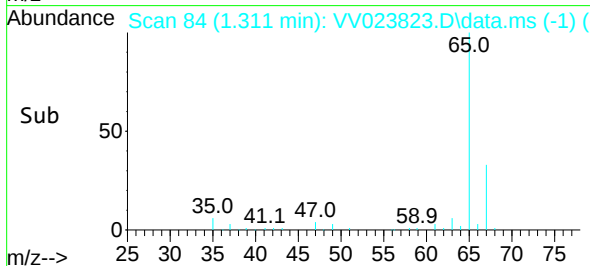
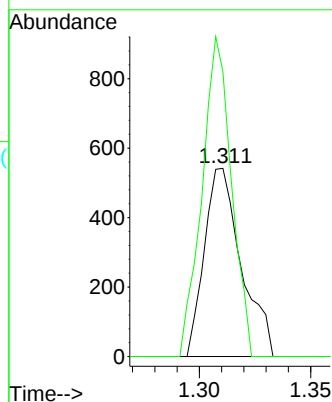
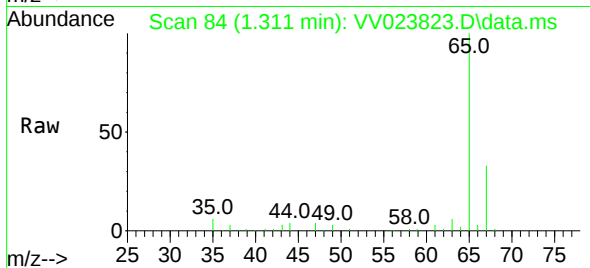




#5  
 Vinyl chloride  
 Concen: 0.053 ug/L  
 RT: 1.311 min Scan# 84  
 Delta R.T. 0.000 min  
 Lab File: VV023823.D  
 Acq: 07 Dec 2021 15:19

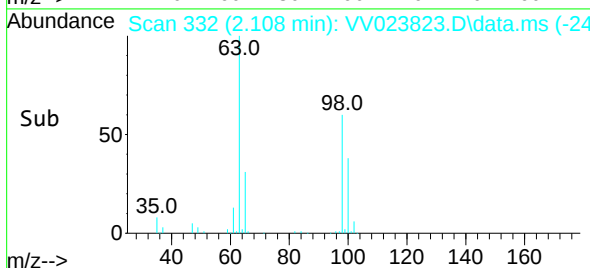
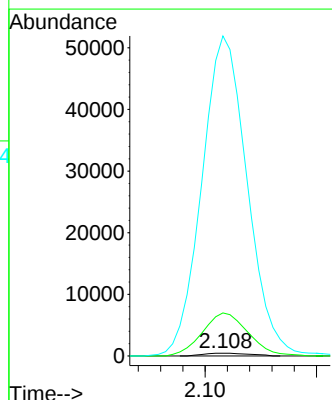
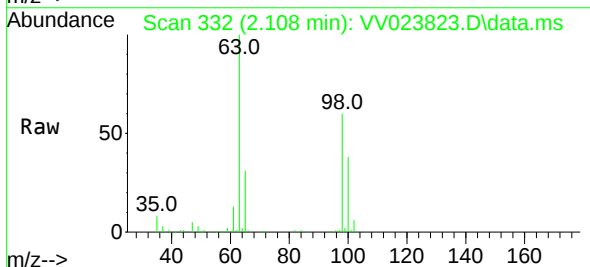
Instrument :  
 MSVOA\_V  
 ClientSampleId :

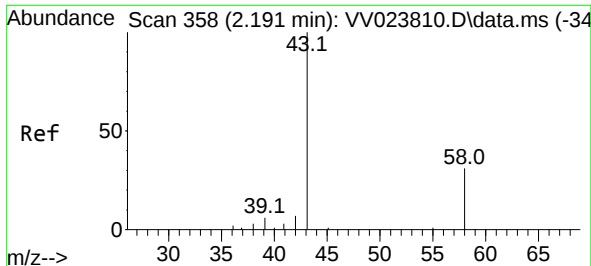
Tgt Ion: 62 Resp: 626  
 Ion Ratio Lower Upper  
 62 100  
 64 151.3 22.4 41.6#



#12  
 1,1-Dichloroethene  
 Concen: 0.071 ug/L  
 RT: 2.108 min Scan# 332  
 Delta R.T. -0.009 min  
 Lab File: VV023823.D  
 Acq: 07 Dec 2021 15:19

Tgt Ion: 96 Resp: 646  
 Ion Ratio Lower Upper  
 96 100  
 61 1552.2 116.1 215.5#  
 63 11539.6 79.4 147.4#





#13

Acetone

Concen: 8.124 ug/L

RT: 2.185 min Scan# 31

Delta R.T. -0.038 min

Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

Instrument :

MSVOA\_V

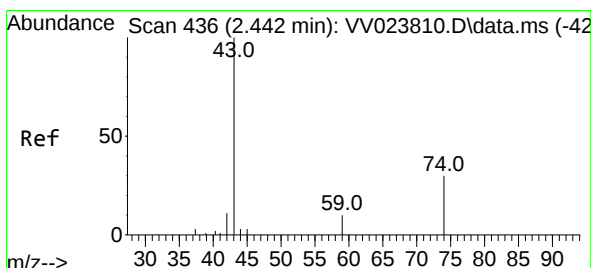
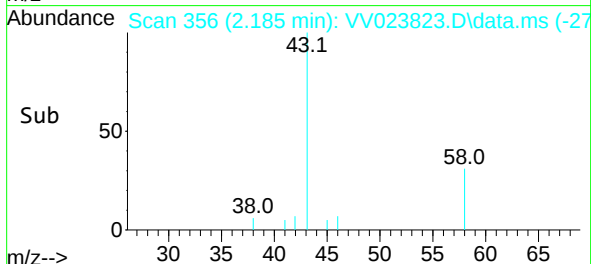
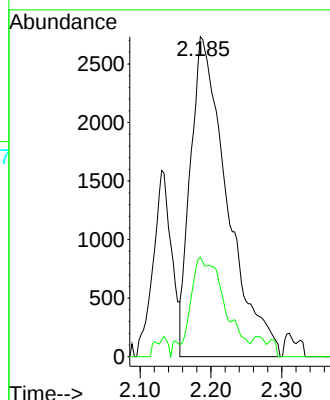
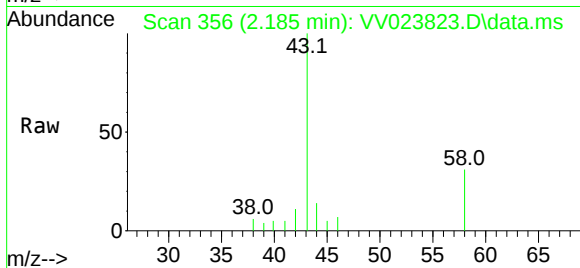
ClientSampleId :

Tgt Ion: 43 Resp: 9830

Ion Ratio Lower Upper

43 100

58 28.4 0.0 41.4



#15

Methyl Acetate

Concen: 0.805 ug/L

RT: 2.433 min Scan# 433

Delta R.T. -0.009 min

Lab File: VV023823.D

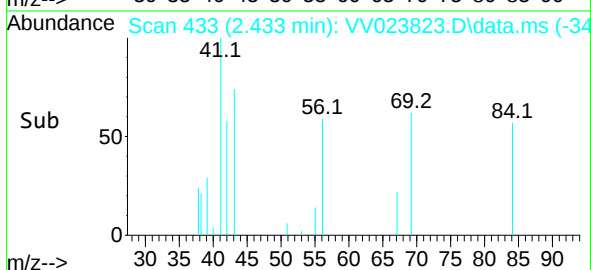
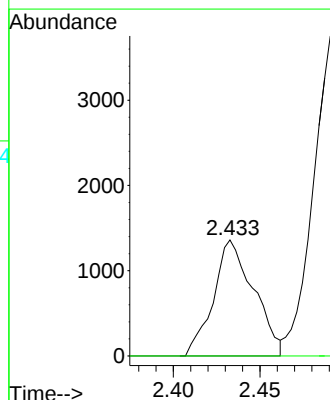
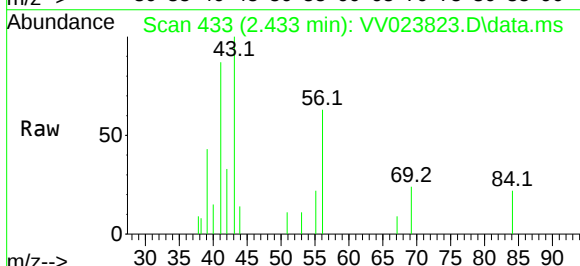
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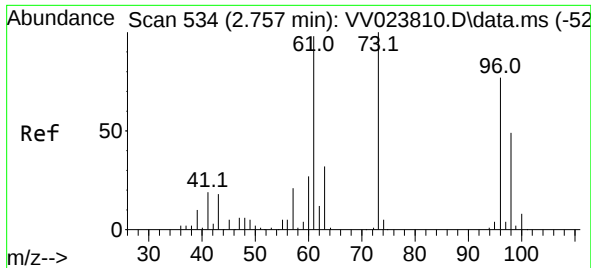
Tgt Ion: 43 Resp: 2210

Ion Ratio Lower Upper

43 100

74 0.0 20.2 30.2#

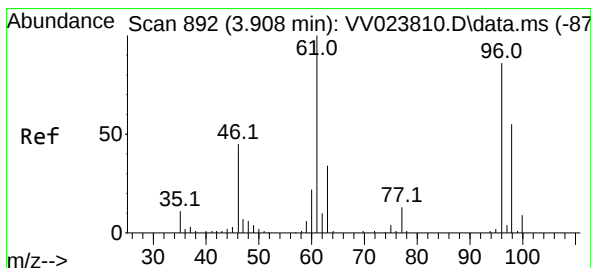
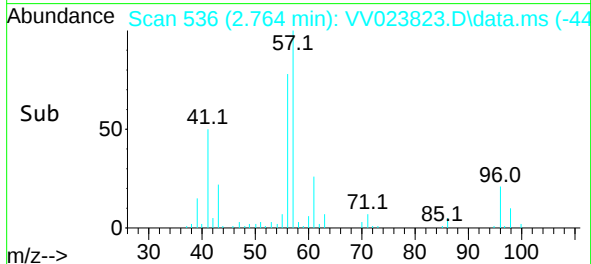
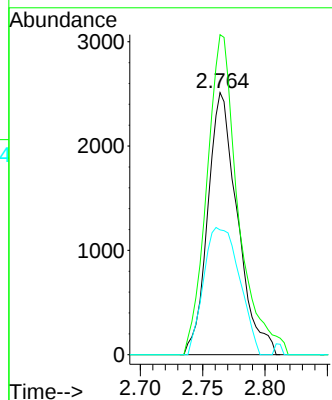
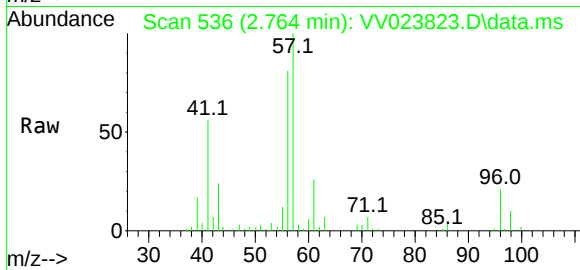




#18  
trans-1,2-Dichloroethene  
Concen: 0.401 ug/L  
RT: 2.764 min Scan# 51  
Delta R.T. 0.007 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

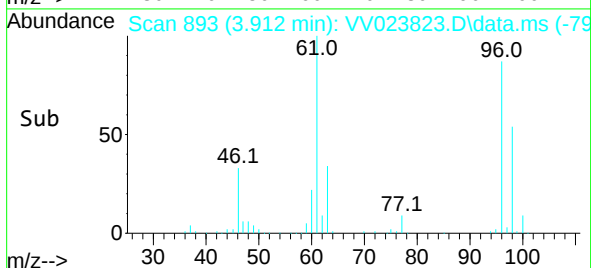
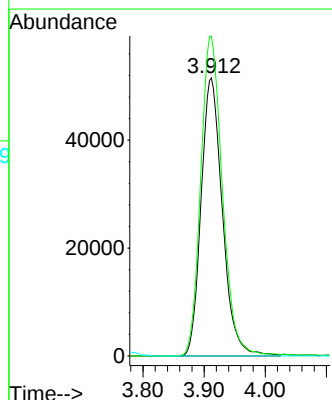
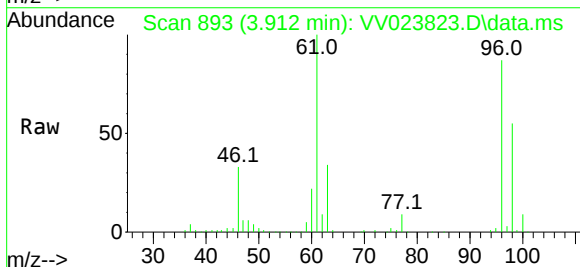
Instrument :  
MSVOA\_V  
ClientSampleId :

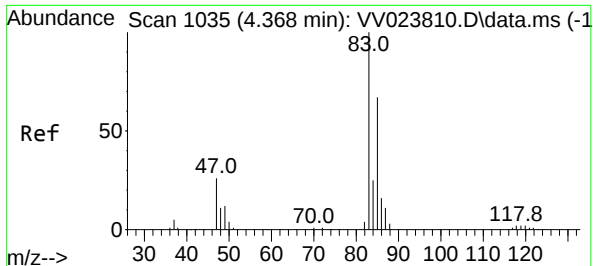
Tgt Ion: 96 Resp: 4170  
Ion Ratio Lower Upper  
96 100  
61 122.1 88.2 163.8  
98 47.6 44.9 83.5



#22  
cis-1,2-Dichloroethene  
Concen: 12.502 ug/L  
RT: 3.912 min Scan# 893  
Delta R.T. 0.003 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

Tgt Ion: 96 Resp: 124663  
Ion Ratio Lower Upper  
96 100  
61 115.1 83.4 154.8  
68 0.0 0.0 0.0





#25

Chloroform

Concen: 1.123 ug/L

RT: 4.407 min Scan# 110

Delta R.T. 0.036 min

Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

Instrument :

MSVOA\_V

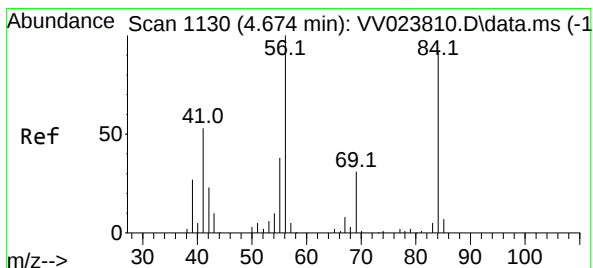
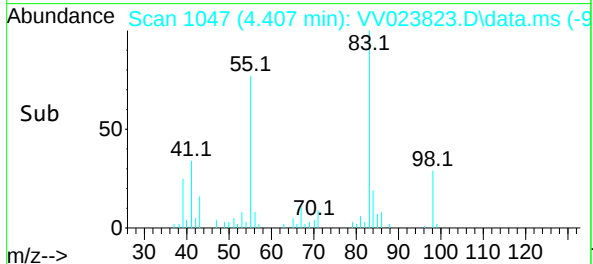
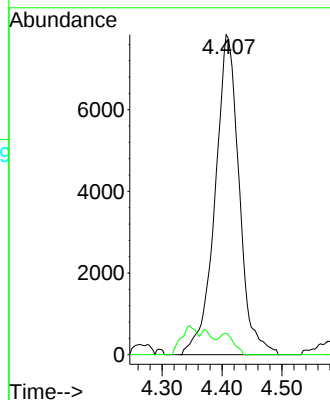
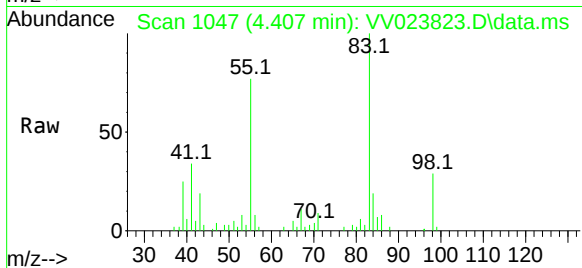
ClientSampleId :

Tgt Ion: 83 Resp: 21871

Ion Ratio Lower Upper

83 100

85 6.7 45.2 84.0#



#30

Cyclohexane

Concen: 3.030 ug/L

RT: 4.677 min Scan# 1131

Delta R.T. 0.003 min

Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

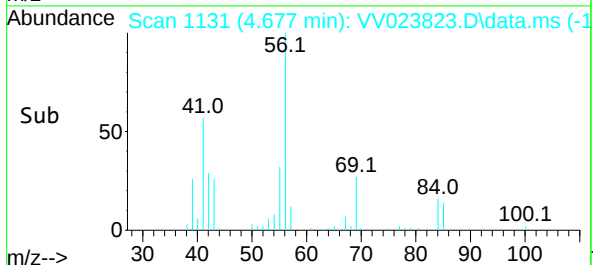
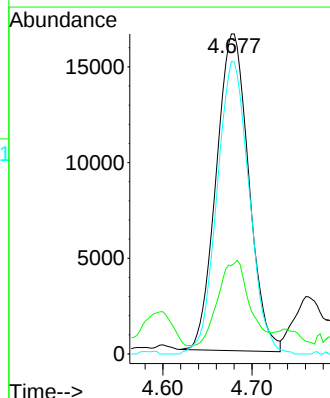
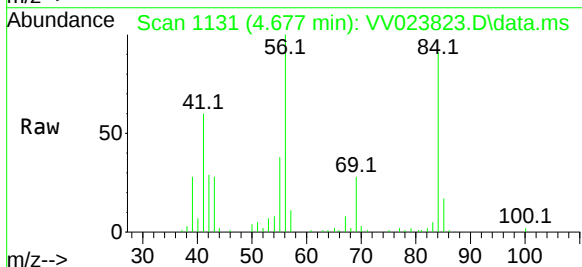
Tgt Ion: 56 Resp: 42000

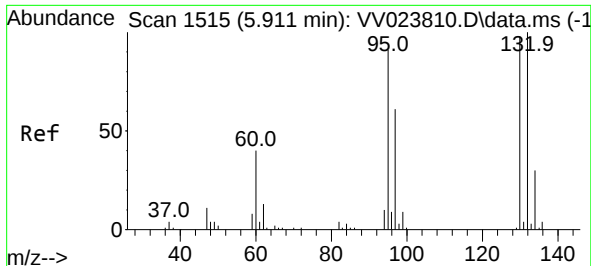
Ion Ratio Lower Upper

56 100

69 31.6 24.8 37.2

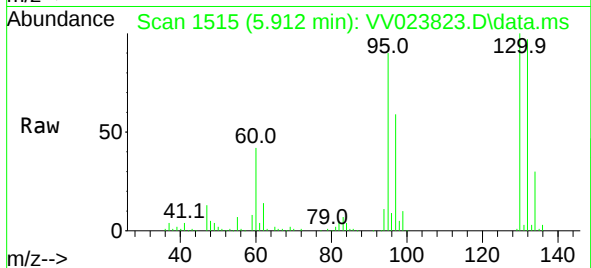
84 91.6 75.9 113.9



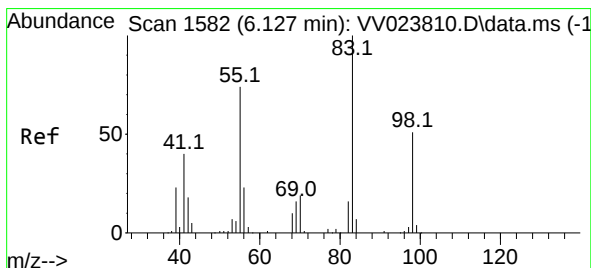
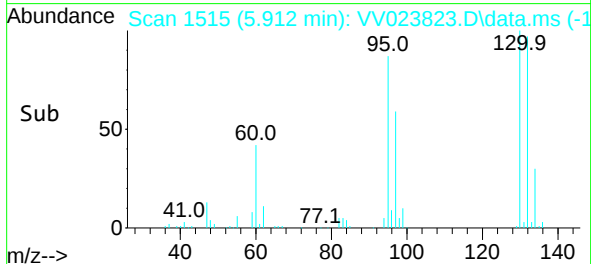
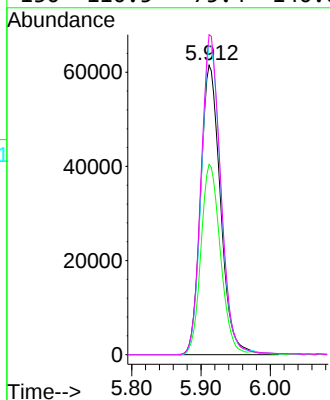


#34  
Trichloroethene  
Concen: 12.587 ug/L  
RT: 5.912 min Scan# 1515  
Delta R.T. 0.000 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

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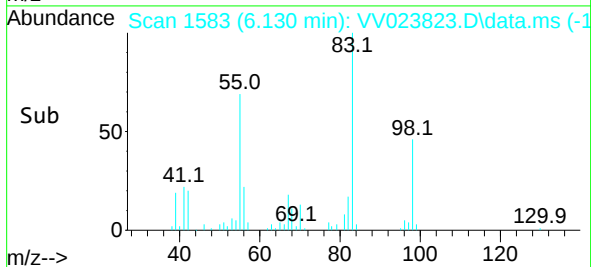
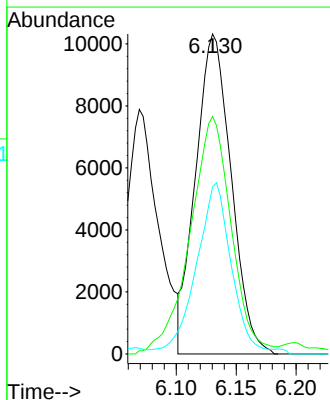
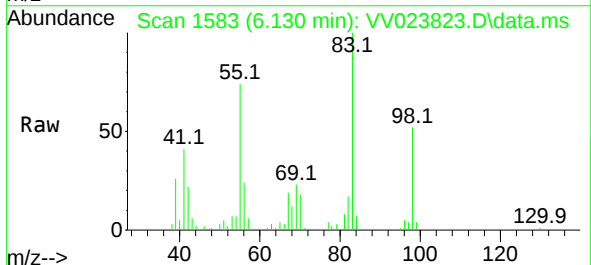


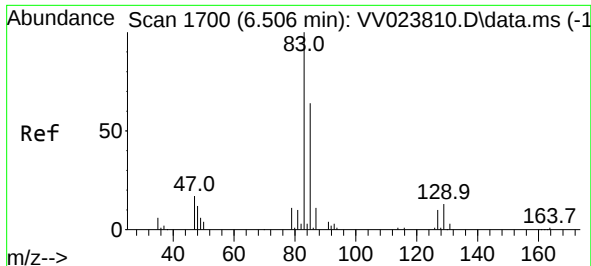
Tgt Ion: 95 Resp: 122195  
Ion Ratio Lower Upper  
95 100  
97 65.7 45.2 84.0  
132 106.9 76.1 141.3  
130 110.5 75.4 140.0



#35  
Methylcyclohexane  
Concen: 1.405 ug/L  
RT: 6.130 min Scan# 1583  
Delta R.T. 0.003 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

Tgt Ion: 83 Resp: 21272  
Ion Ratio Lower Upper  
83 100  
55 85.8 60.2 90.2  
98 50.3 41.0 61.4





#38

Bromodichloromethane

Concen: 0.663 ug/L

RT: 6.561 min Scan# 1

Delta R.T. 0.055 min

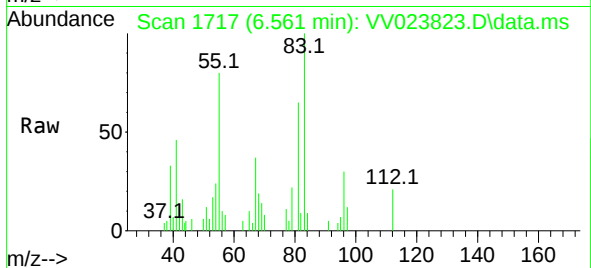
Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

Instrument :

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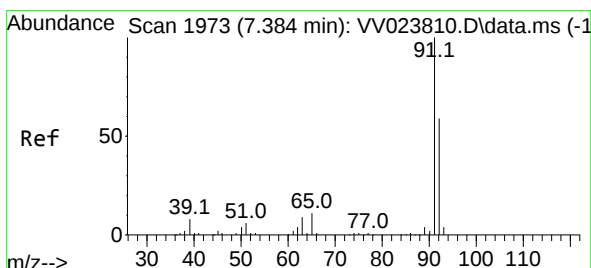
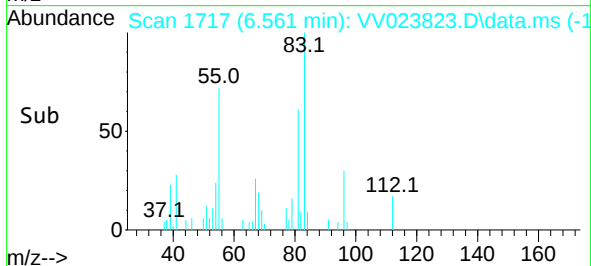
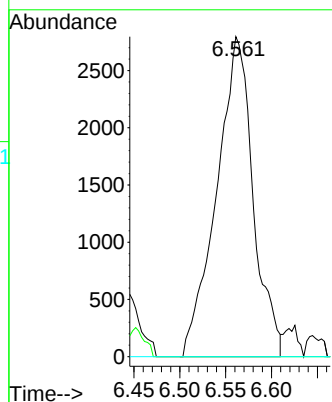
Tgt Ion: 83 Resp: 7754

Ion Ratio Lower Upper

83 100

85 0.0 44.0 81.8#

127 0.0 8.6 12.8#



#42

Toluene

Concen: 1.366 ug/L

RT: 7.391 min Scan# 1975

Delta R.T. 0.007 min

Lab File: VV023823.D

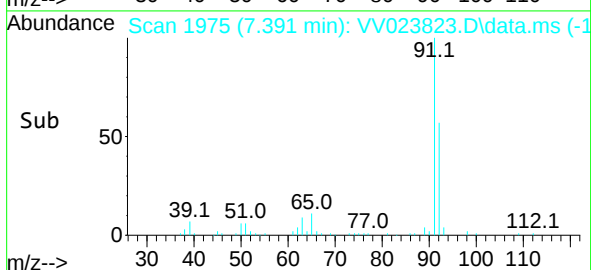
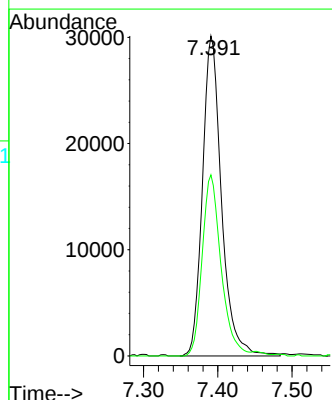
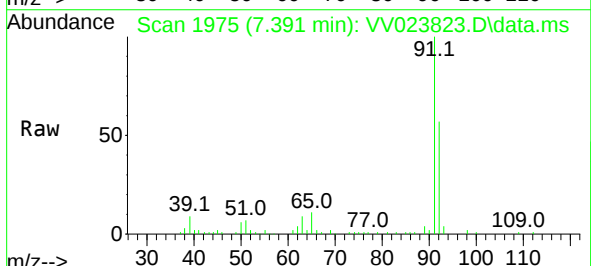
Acq: 07 Dec 2021 15:19

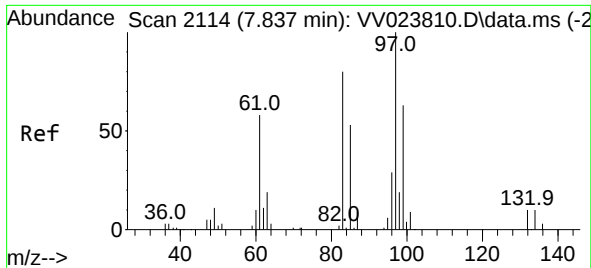
Tgt Ion: 91 Resp: 53691

Ion Ratio Lower Upper

91 100

92 56.6 41.5 77.1





#45

1,1,2-Trichloroethane

Concen: 0.570 ug/L

RT: 7.793 min Scan# 2114

Delta R.T. -0.045 min

Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

Instrument :

MSVOA\_V

ClientSampleId :

Tgt Ion: 97 Resp: 3398

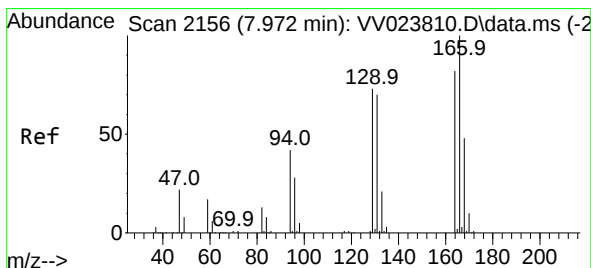
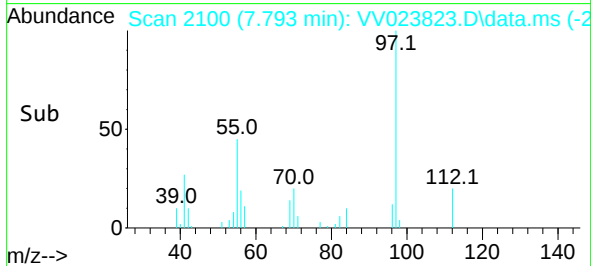
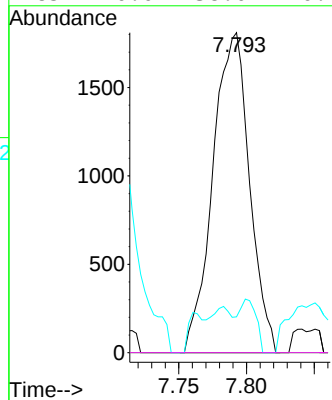
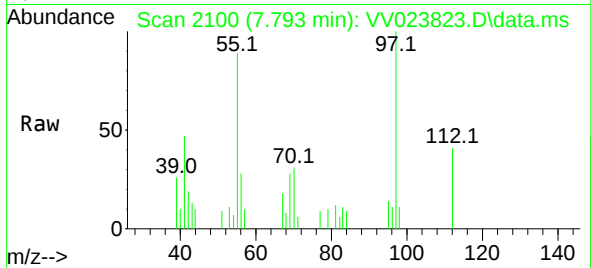
Ion Ratio Lower Upper

97 100

99 0.0 43.1 80.1#

83 11.2 57.9 107.5#

85 0.0 38.0 70.6#



#47

Tetrachloroethene

Concen: 78.355 ug/L

RT: 7.976 min Scan# 2157

Delta R.T. 0.003 min

Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

Tgt Ion: 164 Resp: 692388

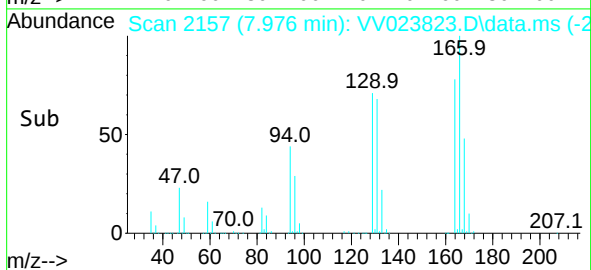
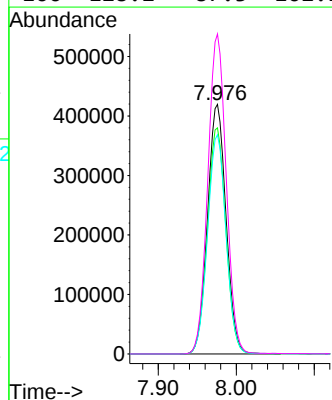
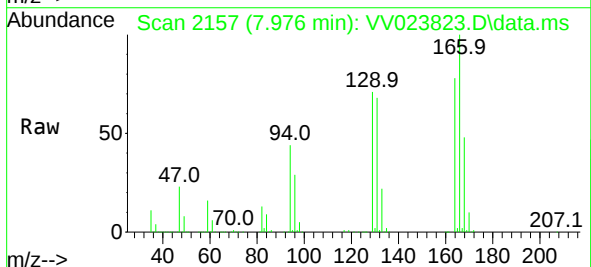
Ion Ratio Lower Upper

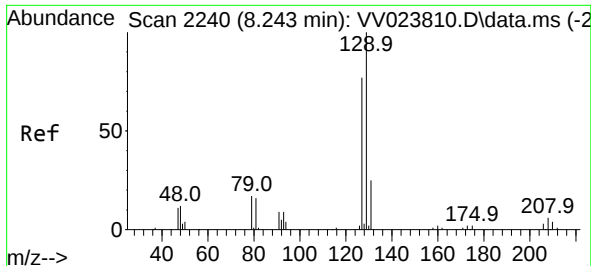
164 100

129 90.6 62.6 116.2

131 87.8 61.0 113.4

166 128.2 87.3 162.1





#49

Dibromochloromethane

Concen: 75.242 ug/L

RT: 7.976 min Scan# 2157

Delta R.T. -0.267 min

Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

Instrument :

MSVOA\_V

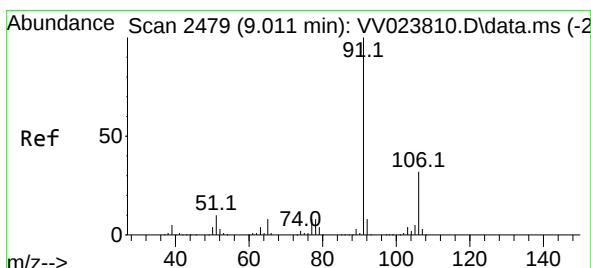
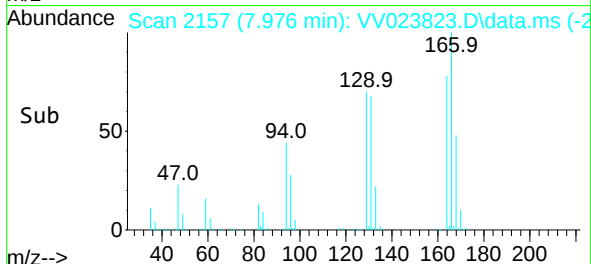
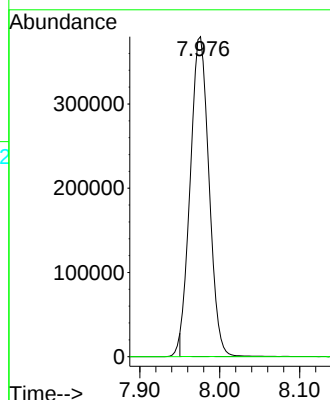
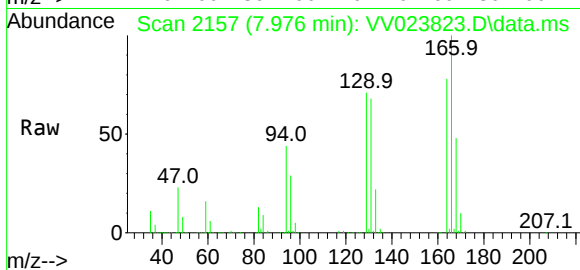
ClientSampleId :

Tgt Ion:129 Resp: 615045

Ion Ratio Lower Upper

129 100

127 0.0 53.5 99.3#



#52

Ethylbenzene

Concen: 6.030 ug/L

RT: 9.011 min Scan# 2479

Delta R.T. 0.000 min

Lab File: VV023823.D

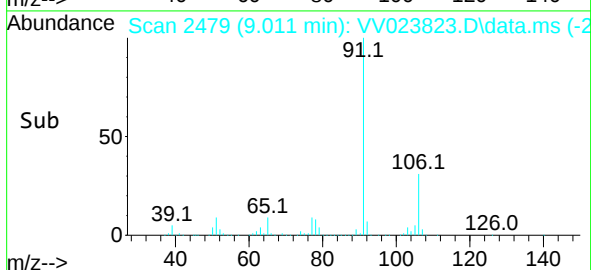
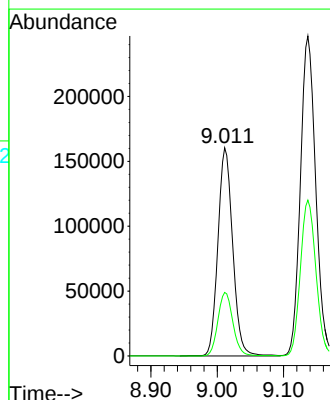
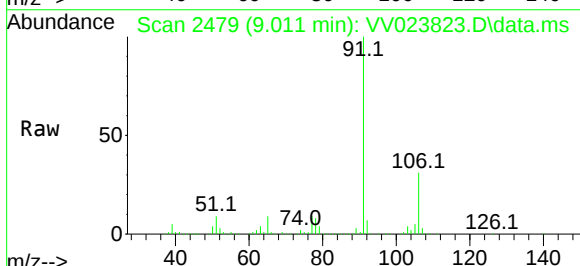
Acq: 07 Dec 2021 15:19

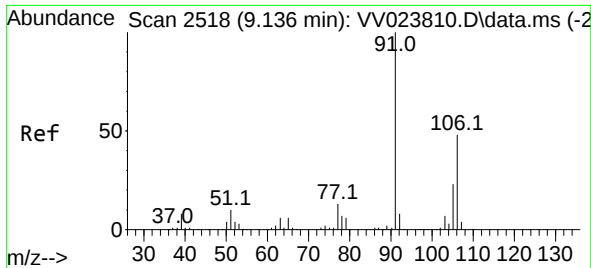
Tgt Ion: 91 Resp: 247743

Ion Ratio Lower Upper

91 100

106 30.5 22.0 41.0

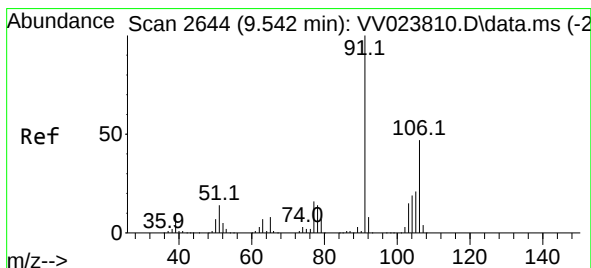
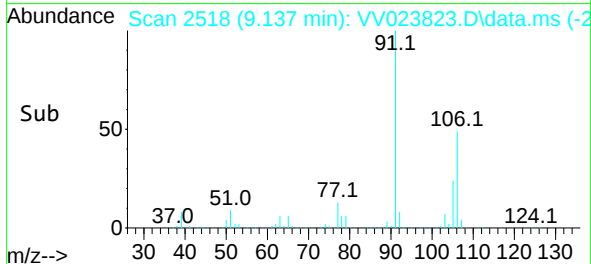
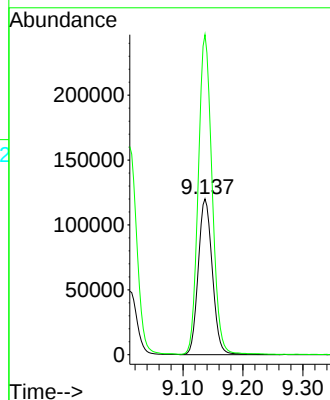
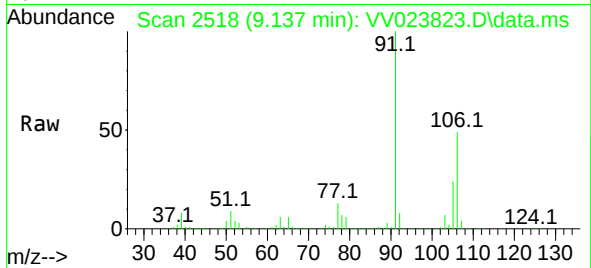




#53  
m,p-xylene  
Concen: 12.033 ug/L  
RT: 9.137 min Scan# 2518  
Delta R.T. 0.000 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

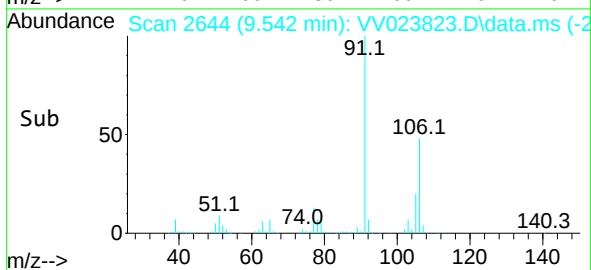
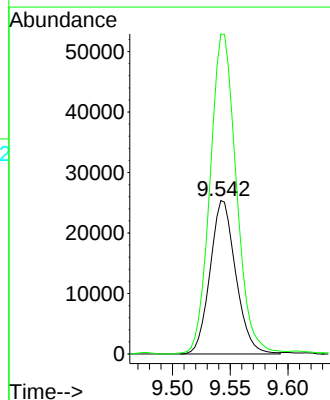
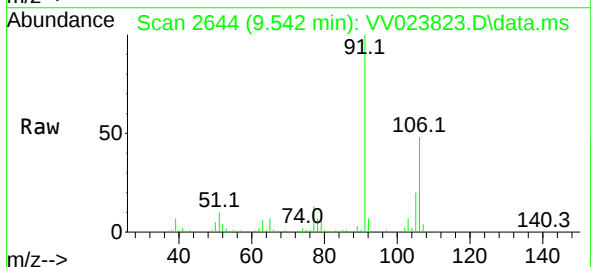
Instrument :  
MSVOA\_V  
ClientSampleId :

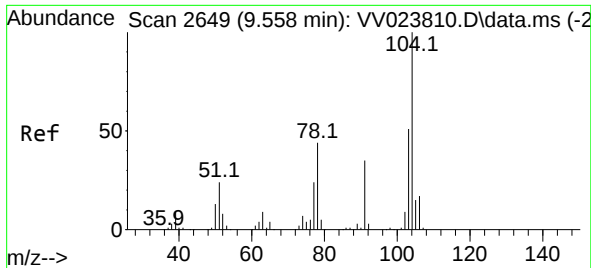
Tgt Ion:106 Resp: 196762  
Ion Ratio Lower Upper  
106 100  
91 205.2 139.5 259.1



#54  
o-xylene  
Concen: 2.518 ug/L  
RT: 9.542 min Scan# 2644  
Delta R.T. 0.000 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

Tgt Ion:106 Resp: 39162  
Ion Ratio Lower Upper  
106 100  
91 208.5 147.9 274.7

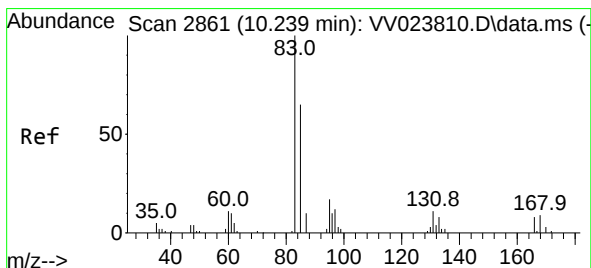
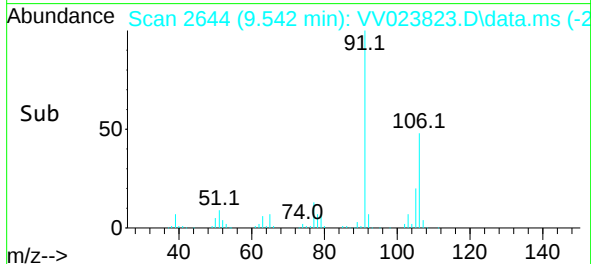
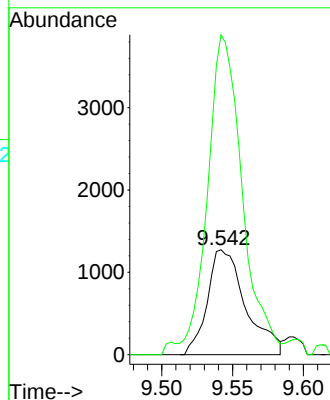
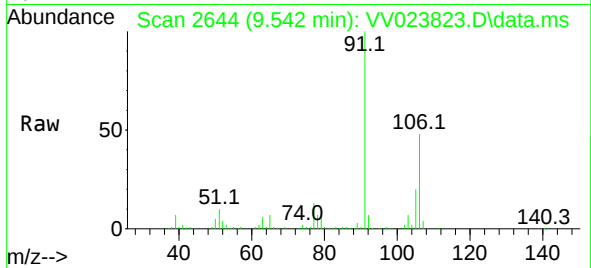




#55  
Styrene  
Concen: 0.092 ug/L  
RT: 9.542 min Scan# 2644  
Delta R.T. -0.016 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

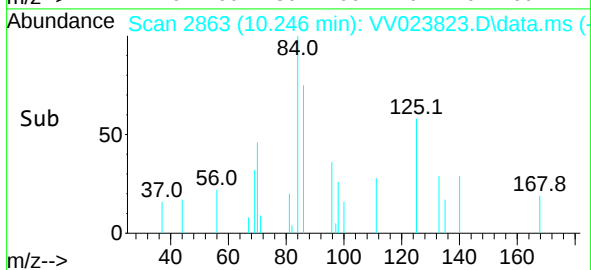
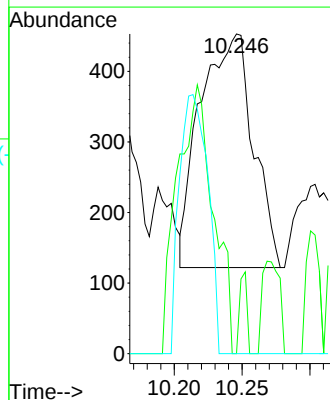
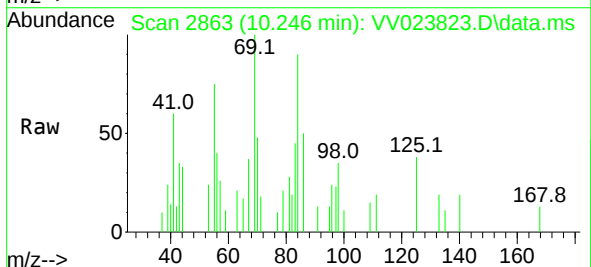
Instrument :  
MSVOA\_V  
ClientSampleId :

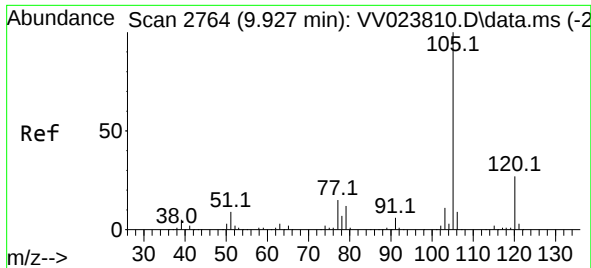
Tgt Ion:104 Resp: 2411  
Ion Ratio Lower Upper  
104 100  
78 304.9 31.0 57.6#



#57  
1,1,2,2-Tetrachloroethane  
Concen: 0.136 ug/L  
RT: 10.246 min Scan# 2863  
Delta R.T. 0.007 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

Tgt Ion: 83 Resp: 900  
Ion Ratio Lower Upper  
83 100  
85 0.0 44.6 82.8#  
131 0.0 8.3 12.5#

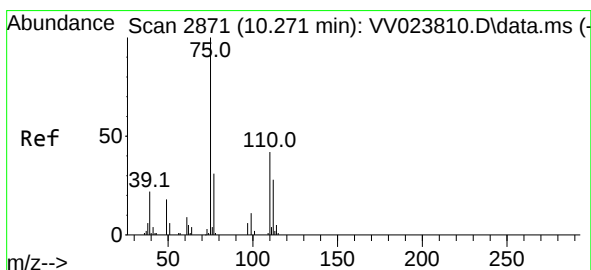
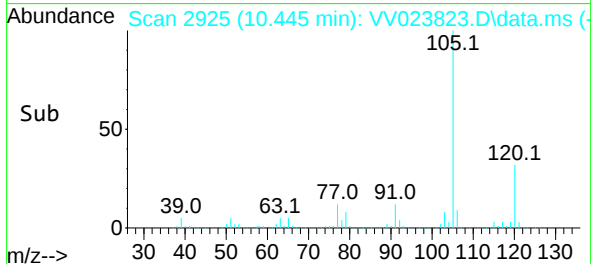
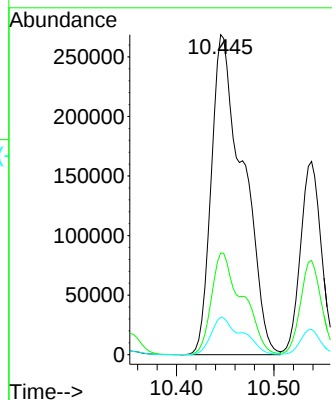
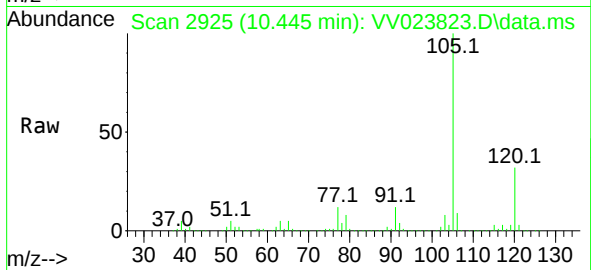




#60  
Isopropylbenzene  
Concen: 14.557 ug/L  
RT: 10.445 min Scan# 2925  
Delta R.T. 0.515 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

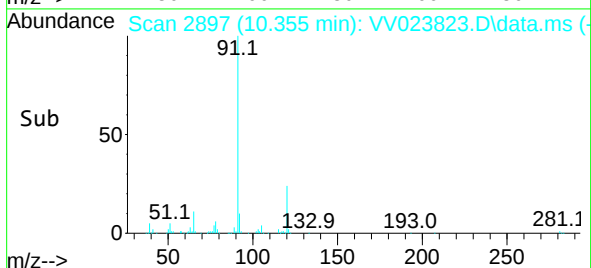
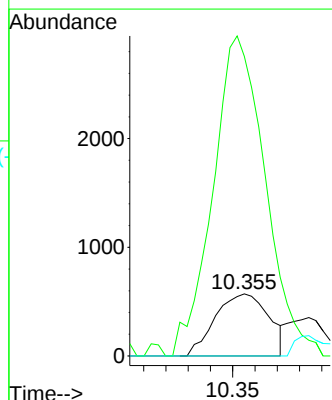
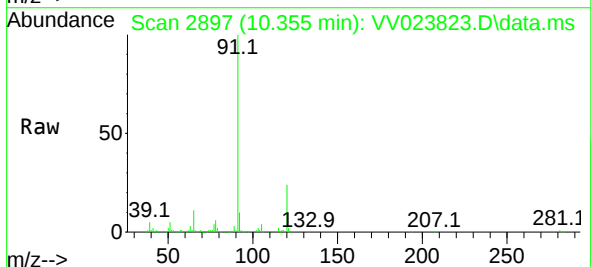
Instrument :  
MSVOA\_V  
ClientSampleId :

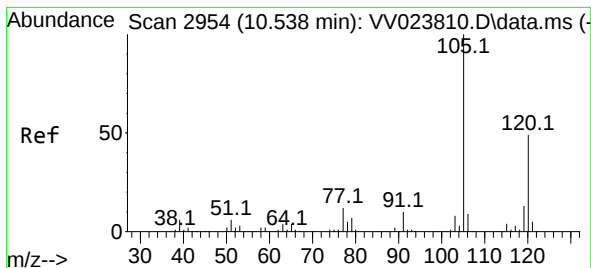
Tgt Ion:105 Resp: 609427  
Ion Ratio Lower Upper  
105 100  
120 31.0 21.4 32.0  
77 11.4 12.2 18.4#



#61  
1,2,3-Trichloropropane  
Concen: 0.193 ug/L  
RT: 10.355 min Scan# 2897  
Delta R.T. 0.084 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

Tgt Ion: 75 Resp: 959  
Ion Ratio Lower Upper  
75 100  
77 502.9 26.4 39.6#  
110 17.6 34.2 51.2#





#62

1,3,5-Trimethylbenzene

Concen: 6.916 ug/L

RT: 10.538 min Scan# 2954

Delta R.T. 0.000 min

Lab File: VV023823.D

Acq: 07 Dec 2021 15:19

Instrument :

MSVOA\_V

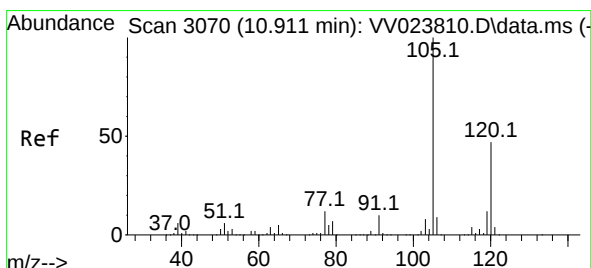
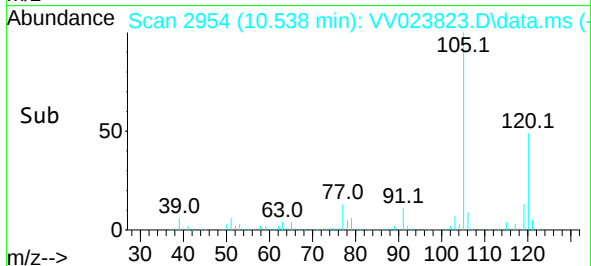
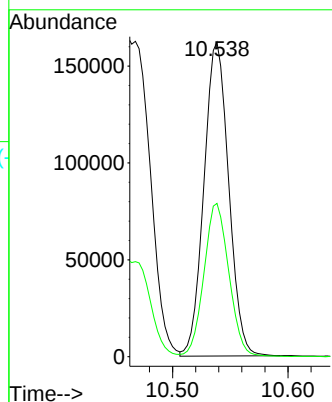
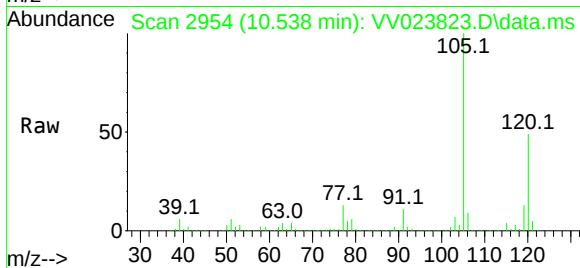
ClientSampleId :

Tgt Ion:105 Resp: 240943

Ion Ratio Lower Upper

105 100

120 49.2 40.1 60.1



#63

1,2,4-Trimethylbenzene

Concen: 32.280 ug/L

RT: 10.911 min Scan# 3070

Delta R.T. 0.000 min

Lab File: VV023823.D

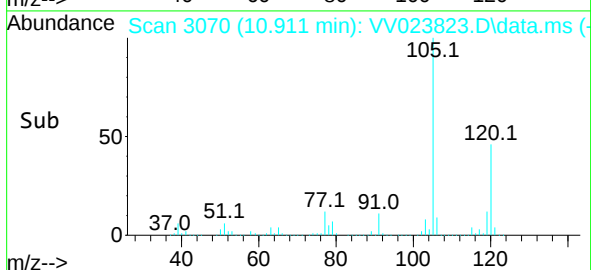
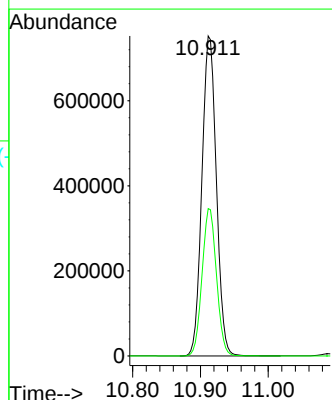
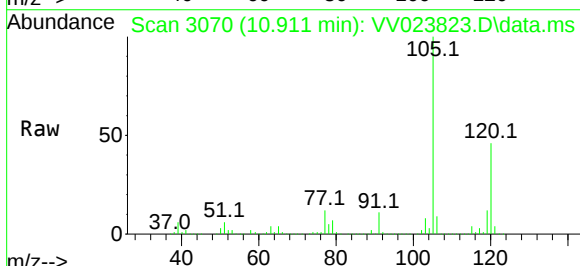
Acq: 07 Dec 2021 15:19

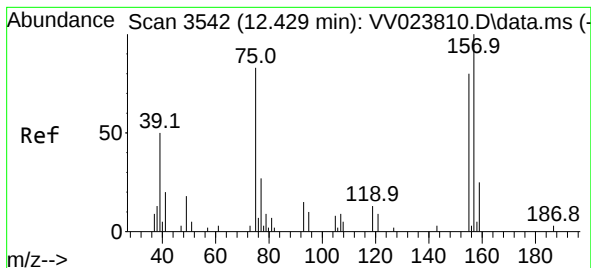
Tgt Ion:105 Resp: 1112038

Ion Ratio Lower Upper

105 100

120 45.9 36.7 55.1

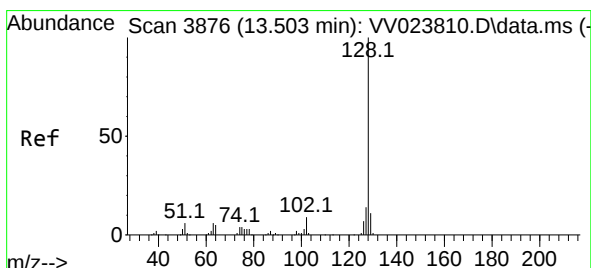
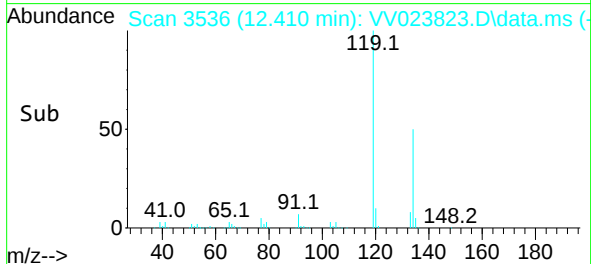
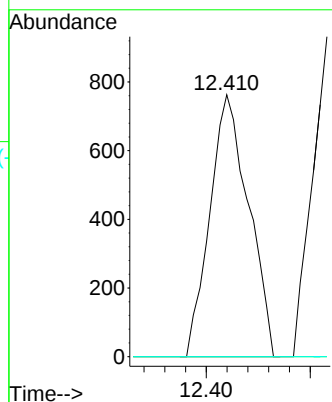
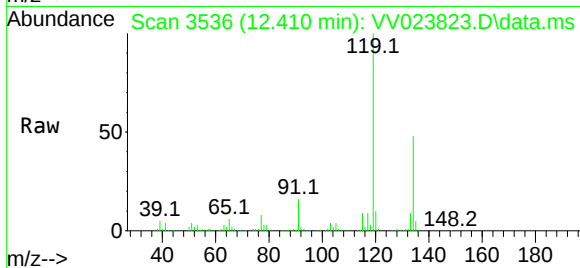




#68  
1,2-Dibromo-3-chloropropane  
Concen: 0.999 ug/L  
RT: 12.410 min Scan# 3536  
Delta R.T. -0.016 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

Instrument :  
MSVOA\_V  
ClientSampleId :

Tgt Ion: 75 Resp: 986  
Ion Ratio Lower Upper  
75 100  
155 0.0 71.7 107.5#  
157 0.0 103.3 154.9#



#71  
Naphthalene  
Concen: 5.726 ug/L  
RT: 13.500 min Scan# 3875  
Delta R.T. -0.003 min  
Lab File: VV023823.D  
Acq: 07 Dec 2021 15:19

Tgt Ion: 128 Resp: 99922  
Ion Ratio Lower Upper  
128 100  
129 12.0 9.0 13.4  
127 13.6 10.2 15.4

