

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_W\Data\VW120821\  
 Data File : VW021225.D  
 Acq On : 08 Dec 2021 13:18  
 Operator : SY/VA  
 Sample : M4960-06  
 Misc : 6.16g/10.0mL/MSVOA\_W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Dec 08 23:01:33 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_W\Method\SFAMWLM120321SMA.M  
 Quant Title : SFAM01.0  
 QLast Update : Wed Dec 08 22:58:53 2021  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min)  |
|-------------------------------|--------|-------|----------|----------|--------|-----------|
| -----                         |        |       |          |          |        |           |
| Internal Standards            |        |       |          |          |        |           |
| 1) 1,4-Difluorobenzene        | 0.000  | 114   | 0        | 0.000    | ug/L   | -8.85     |
| 28) Chlorobenzene-d5          | 11.633 | 117   | 366      | 25.000   | ug/L   | # 0.00    |
| 58) 1,4-Dichlorobenzene-d4    | 13.554 | 152   | 341      | 25.000   | ug/L   | 0.00      |
| System Monitoring Compounds   |        |       |          |          |        |           |
| 4) Vinyl Chloride-d3          | 0.000  | 65    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 30 - 150 | Recovery | =      | 0.000%#   |
| 7) Chloroethane-d5            | 0.000  | 69    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 30 - 150 | Recovery | =      | 0.000%#   |
| 11) 1,1-Dichloroethene-d2     | 0.000  | 63    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 45 - 110 | Recovery | =      | 0.000%#   |
| 21) 2-Butanone-d5             | 0.000  | 46    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 50.000 | Range | 20 - 135 | Recovery | =      | 0.000%#   |
| 24) Chloroform-d              | 0.000  | 84    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 40 - 150 | Recovery | =      | 0.000%#   |
| 26) 1,2-Dichloroethane-d4     | 0.000  | 65    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 70 - 130 | Recovery | =      | 0.000%#   |
| 32) Benzene-d6                | 0.000  | 84    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 20 - 135 | Recovery | =      | 0.000%#   |
| 36) 1,2-Dichloropropane-d6    | 0.000  | 67    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 70 - 120 | Recovery | =      | 0.000%#   |
| 41) Toluene-d8                | 10.323 | 98    | 26       | 1.355    | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 30 - 130 | Recovery | =      | 5.400%#   |
| 43) trans-1,3-Dichloroprop... | 0.000  | 79    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 30 - 135 | Recovery | =      | 0.000%#   |
| 47) 2-Hexanone-d5             | 10.981 | 63    | 42       | 42.211   | ug/L   | 0.06      |
| Spiked Amount                 | 50.000 | Range | 20 - 135 | Recovery | =      | 84.420%   |
| 56) 1,1,2,2-Tetrachloroeth... | 0.000  | 84    | 0        | 0.000    | ug/L   |           |
| Spiked Amount                 | 25.000 | Range | 45 - 120 | Recovery | =      | 0.000%#   |
| 66) 1,2-Dichlorobenzene-d4    | 13.859 | 152   | 841      | 68.833   | ug/L   | 0.00      |
| Spiked Amount                 | 25.000 | Range | 75 - 120 | Recovery | =      | 275.320%# |
| Target Compounds              |        |       |          |          |        |           |
|                               |        |       |          |          | Qvalue |           |
| 33) Benzene                   | 8.323  | 78    | 15791    | 758.702  | ug/L   | 100       |
| 34) Trichloroethene           | 9.097  | 95    | 51       | 8.882    | ug/L # | 61        |
| 35) Methylcyclohexane         | 9.341  | 83    | 64       | 6.622    | ug/L # | 55        |
| 40) 4-Methyl-2-pentanone      | 10.207 | 43    | 454      | 141.669  | ug/L # | 78        |
| 42) Toluene                   | 10.384 | 91    | 677      | 28.478   | ug/L   | 89        |
| 45) 1,1,2-Trichloroethane     | 10.768 | 97    | 20       | 5.071    | ug/L # | 14        |
| 48) 2-Hexanone                | 10.932 | 43    | 541      | 234.020  | ug/L # | 42        |
| 49) Dibromochloromethane      | 11.286 | 129   | 31       | 6.289    | ug/L   | 89        |
| 51) Chlorobenzene             | 11.652 | 112   | 369      | 23.230   | ug/L # | 73        |
| 52) Ethylbenzene              | 11.731 | 91    | 1635     | 61.093   | ug/L # | 81        |
| 53) m,p-Xylene                | 11.847 | 106   | 2263     | 204.404  | ug/L   | 99        |
| 54) o-Xylene                  | 12.170 | 106   | 695      | 66.582   | ug/L   | 65        |
| 55) Styrene                   | 12.170 | 104   | 50       | 2.811    | ug/L # | 1         |
| 57) 1,1,2,2-Tetrachloroethane | 12.731 | 83    | 42       | 8.854    | ug/L # | 1         |
| 59) Bromoform                 | 12.377 | 173   | 34       | 6.992    | ug/L # | 1         |
| 60) Isopropylbenzene          | 12.463 | 105   | 2700     | 56.973   | ug/L # | 86        |
| 61) 1,2,3-Trichloropropane    | 12.816 | 75    | 26       | 4.552    | ug/L # | 1         |
| 62) 1,3,5-Trimethylbenzene    | 12.938 | 105   | 983      | 24.769   | ug/L   | 93        |
| 63) 1,2,4-Trimethylbenzene    | 13.249 | 105   | 4688     | 117.448  | ug/L   | 90        |

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 ClientSampleId :

Quant Time: Dec 08 23:01:33 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_W\Method\SFAMWLM120321SMA.M  
 Quant Title : SFAM01.0  
 QLast Update : Wed Dec 08 22:58:53 2021  
 Response via : Initial Calibration

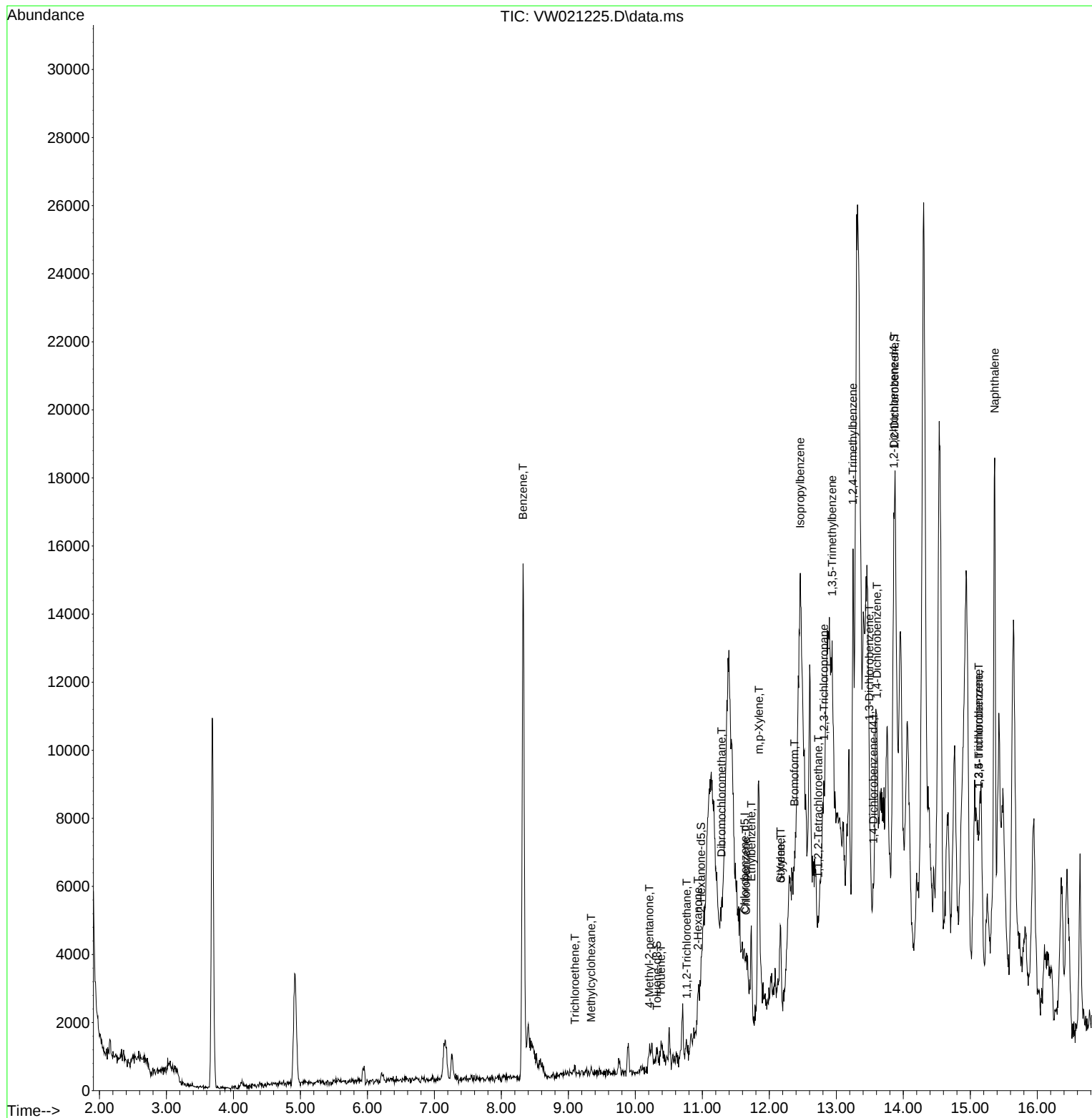
| Compound                   | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|----------------------------|--------|------|----------|---------|--------|----------|
| 64) 1,3-Dichlorobenzene    | 13.493 | 146  | 117      | 5.243   | ug/L # | 58       |
| 65) 1,4-Dichlorobenzene    | 13.609 | 146  | 73       | 3.237   | ug/L # | 18       |
| 67) 1,2-Dichlorobenzene    | 13.871 | 146  | 769      | 38.705  | ug/L # | 88       |
| 69) 1,3,5-Trichlorobenzene | 15.127 | 180  | 398      | 24.269  | ug/L # | 42       |
| 70) 1,2,4-trichlorobenzene | 15.127 | 180  | 398      | 29.534  | ug/L # | 41       |
| 71) Naphthalene            | 15.364 | 128  | 12292    | 490.663 | ug/L # | 96       |

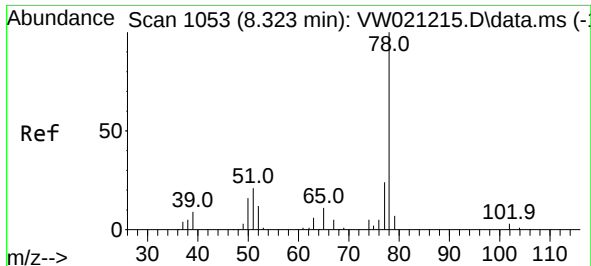
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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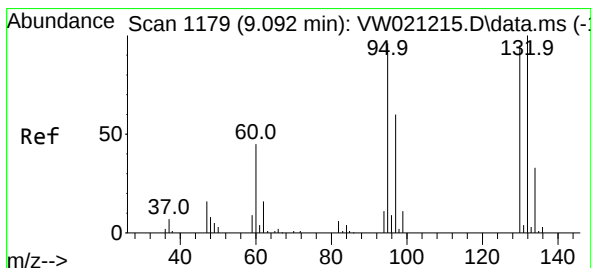
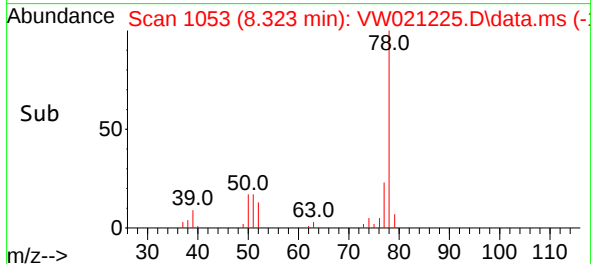
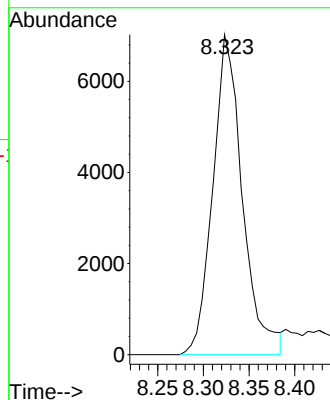
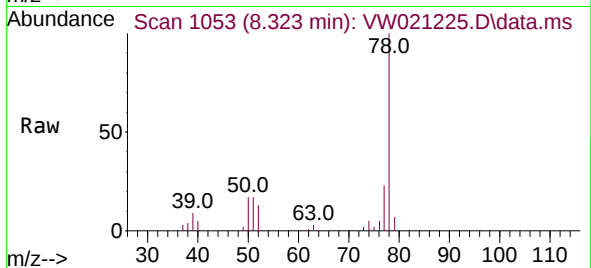




#33  
Benzene  
Concen: 758.702 ug/L  
RT: 8.323 min Scan# 1180  
Delta R.T. -0.000 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

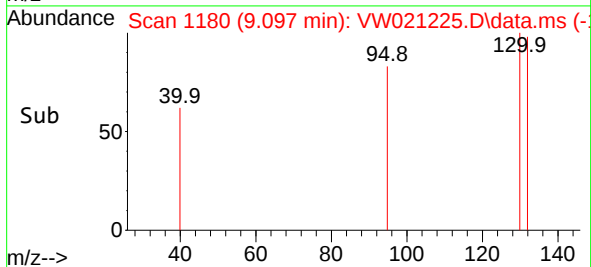
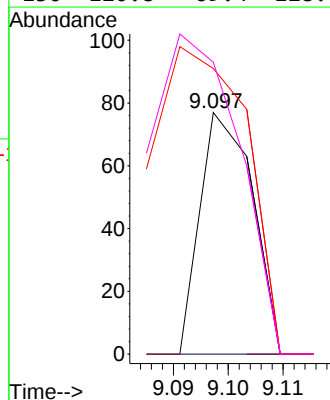
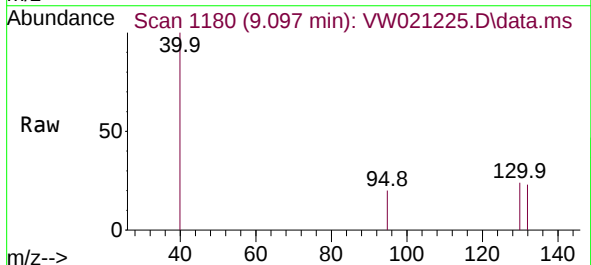
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MSVOA\_W  
ClientSampleId :

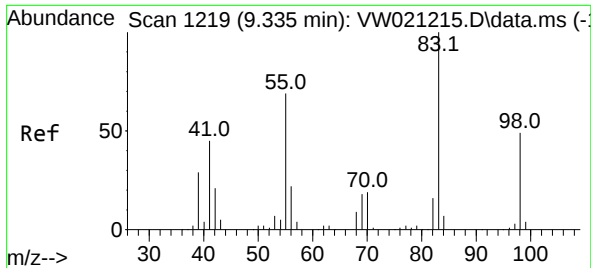
Tgt Ion: 78 Resp: 15791



#34  
Trichloroethene  
Concen: 8.882 ug/L  
RT: 9.097 min Scan# 1180  
Delta R.T. 0.006 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

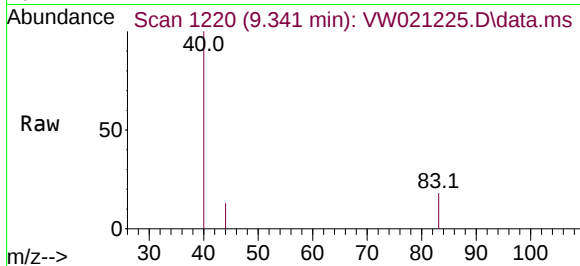
Tgt Ion: 95 Resp: 51  
Ion Ratio Lower Upper  
95 100  
97 0.0 47.0 87.2#  
132 118.2 65.5 121.6  
130 120.8 69.4 128.8



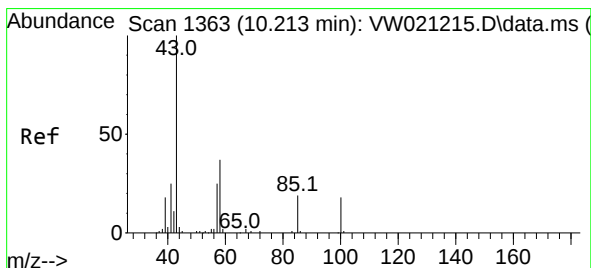
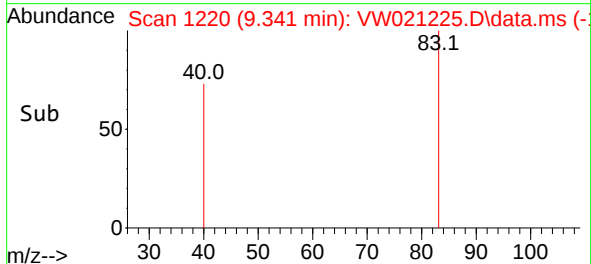
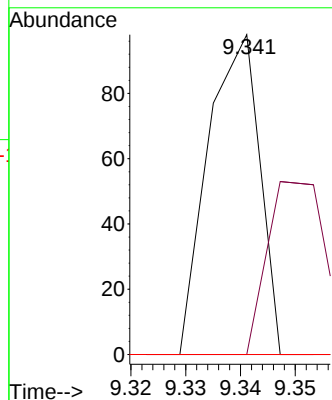


#35  
Methylcyclohexane  
Concen: 6.622 ug/L  
RT: 9.341 min Scan# 11  
Delta R.T. 0.006 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

Instrument :  
MSVOA\_W  
ClientSampleId :

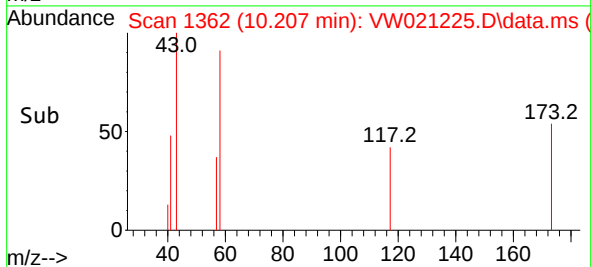
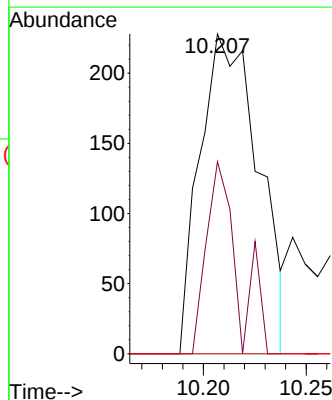
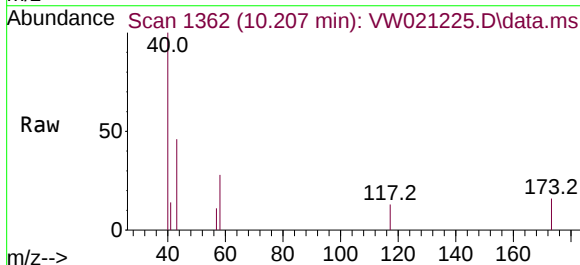


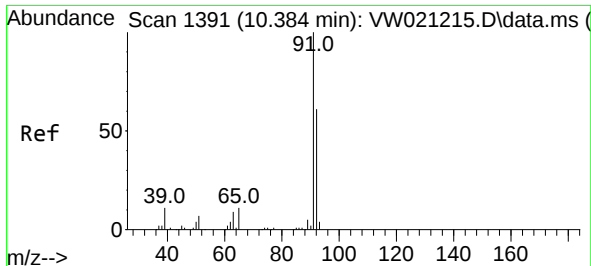
Tgt Ion: 83 Resp: 64  
Ion Ratio Lower Upper  
83 100  
55 59.4 70.8 106.2#  
98 0.0 37.7 56.5#



#40  
4-Methyl-2-pentanone  
Concen: 141.669 ug/L  
RT: 10.207 min Scan# 1362  
Delta R.T. -0.007 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

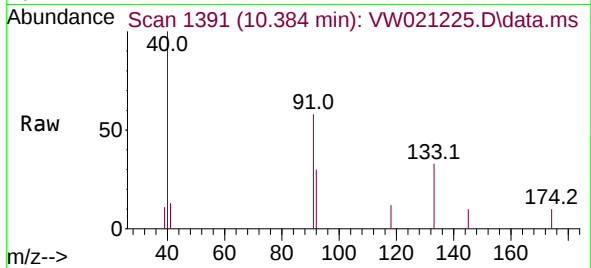
Tgt Ion: 43 Resp: 454  
Ion Ratio Lower Upper  
43 100  
58 25.3 28.8 43.2#  
100 0.0 10.0 15.0#



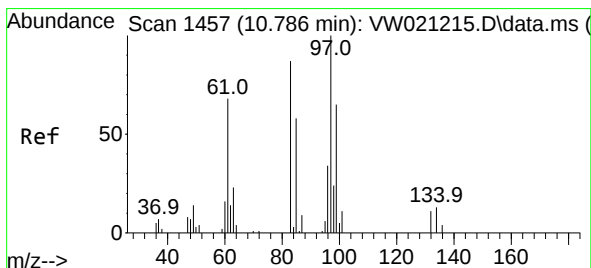
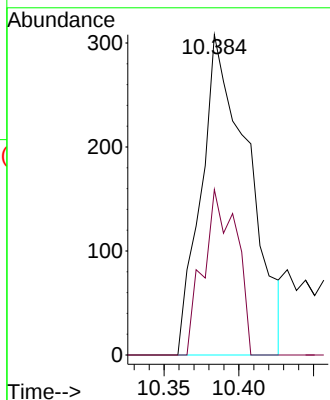
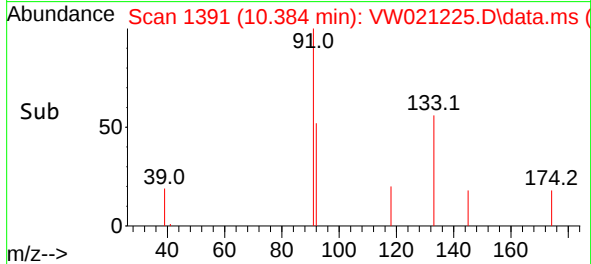


#42  
Toluene  
Concen: 28.478 ug/L  
RT: 10.384 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

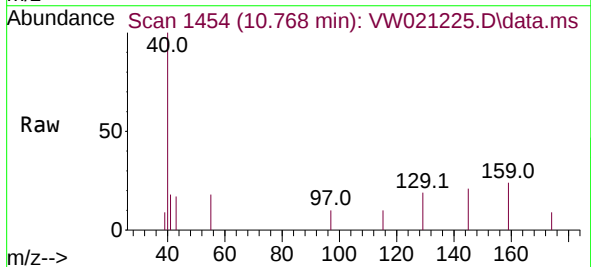
Instrument :  
MSVOA\_W  
ClientSampleId :



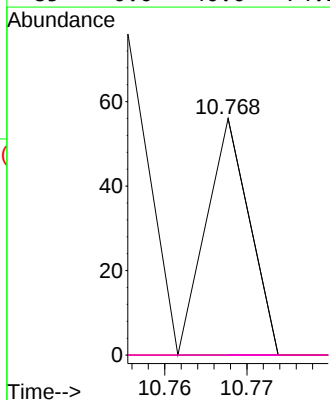
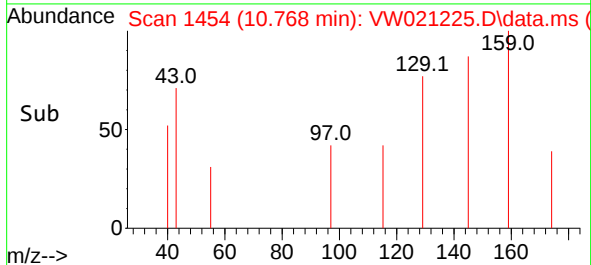
Tgt Ion: 91 Resp: 677  
Ion Ratio Lower Upper  
91 100  
92 51.6 41.7 77.5

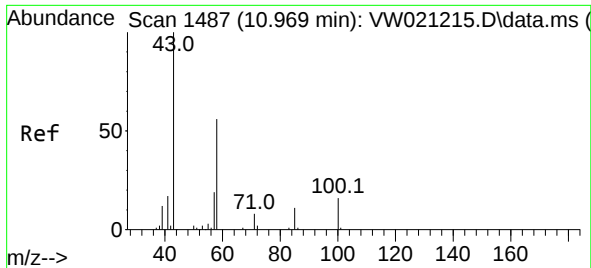


#45  
1,1,2-Trichloroethane  
Concen: 5.071 ug/L  
RT: 10.768 min Scan# 1454  
Delta R.T. -0.019 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18



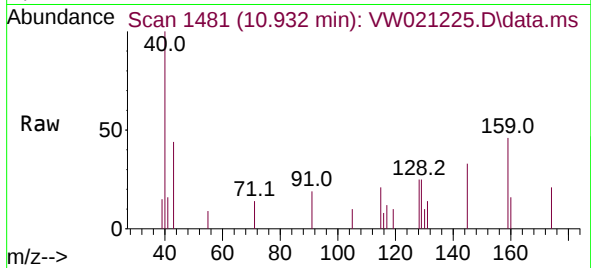
Tgt Ion: 97 Resp: 20  
Ion Ratio Lower Upper  
97 100  
99 0.0 43.0 79.8#  
83 0.0 62.6 116.3#  
85 0.0 40.0 74.2#



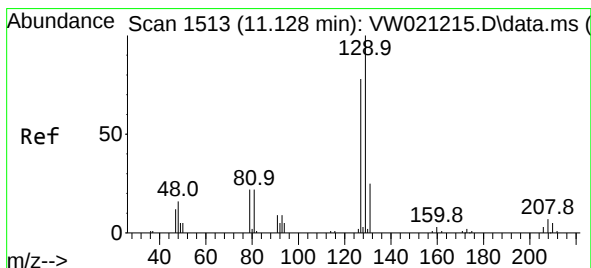
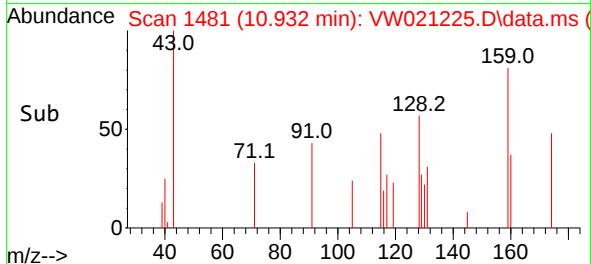
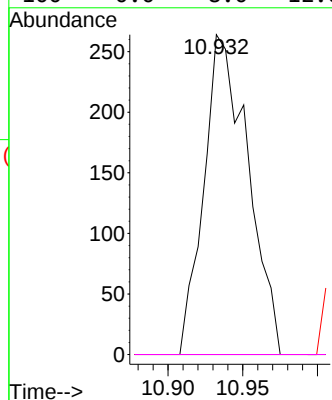


#48  
2-Hexanone  
Concen: 234.020 ug/L  
RT: 10.932 min Scan# 1481  
Delta R.T. -0.037 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

Instrument :  
MSVOA\_W  
ClientSampleId :

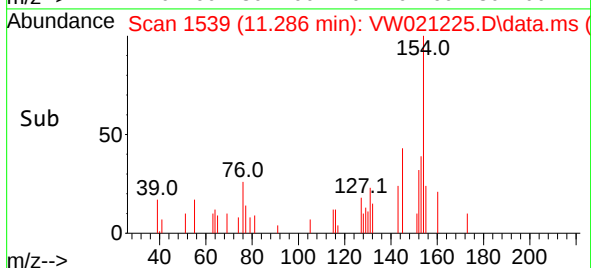
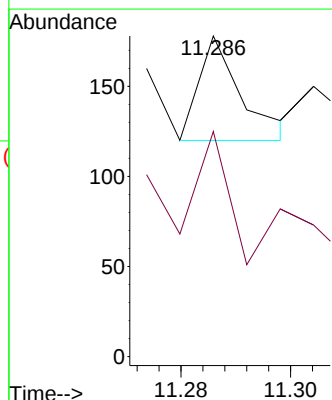
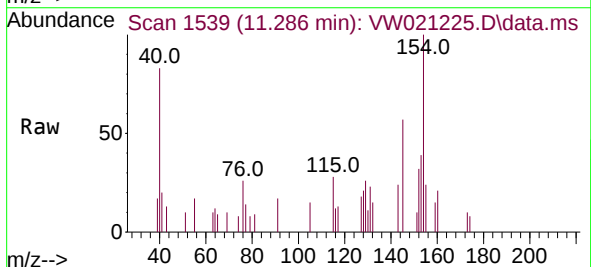


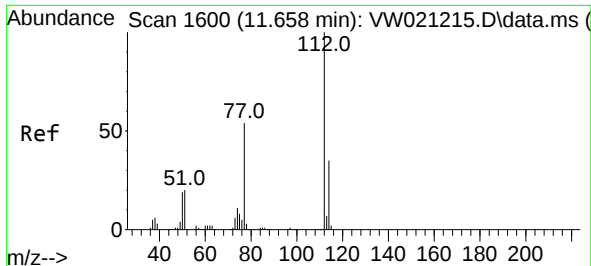
Tgt Ion: 43 Resp: 541  
Ion Ratio Lower Upper  
43 100  
58 0.0 40.2 60.2#  
57 3.7 14.3 21.5#  
100 0.0 8.0 12.0#



#49  
Dibromochloromethane  
Concen: 6.289 ug/L  
RT: 11.286 min Scan# 1539  
Delta R.T. 0.158 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

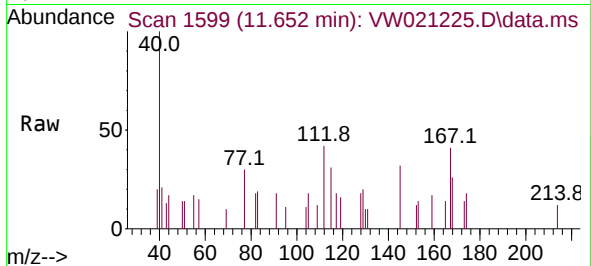
Tgt Ion: 129 Resp: 31  
Ion Ratio Lower Upper  
129 100  
127 70.2 55.7 103.5



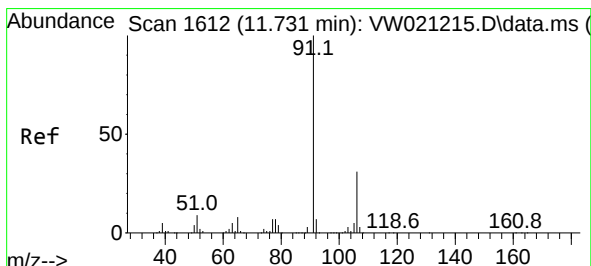
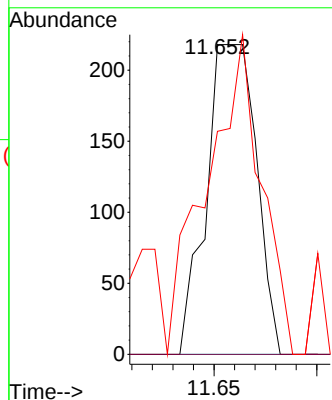
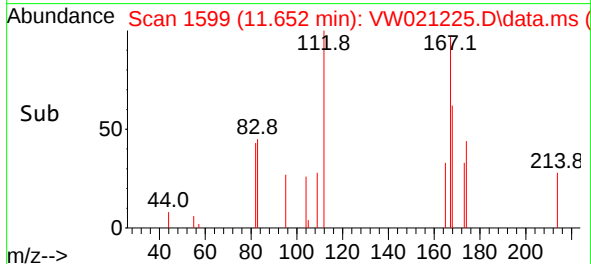


#51  
Chlorobenzene  
Concen: 23.230 ug/L  
RT: 11.652 min Scan# 11  
Delta R.T. -0.007 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

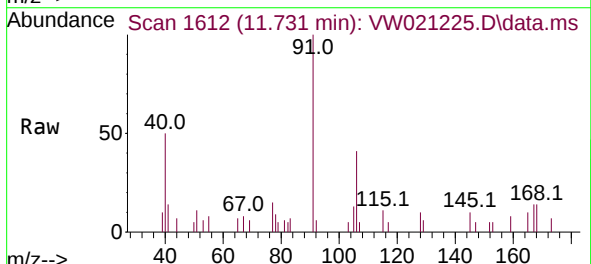
Instrument :  
MSVOA\_W  
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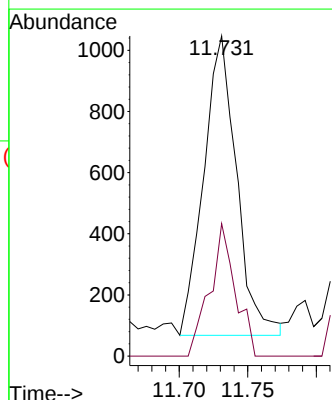
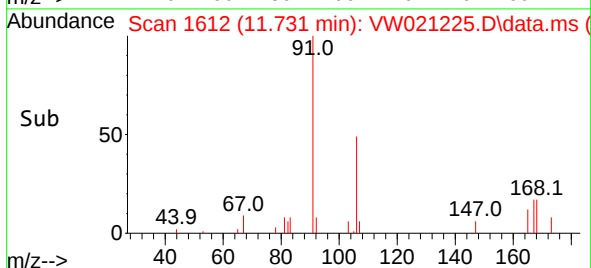
Tgt Ion:112 Resp: 369  
Ion Ratio Lower Upper  
112 100  
114 0.0 22.4 41.6#  
77 72.0 50.2 75.4

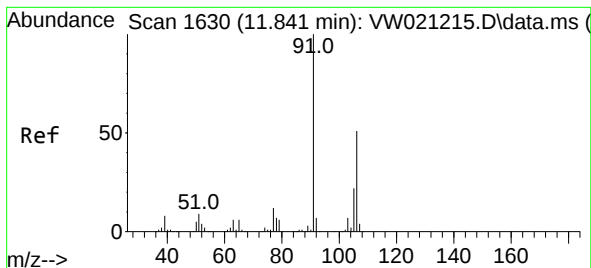


#52  
Ethylbenzene  
Concen: 61.093 ug/L  
RT: 11.731 min Scan# 1612  
Delta R.T. -0.000 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18



Tgt Ion: 91 Resp: 1635  
Ion Ratio Lower Upper  
91 100  
106 41.4 21.5 39.9#

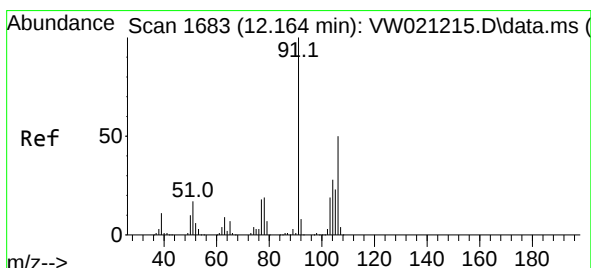
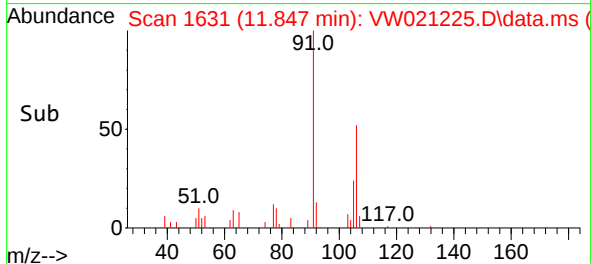
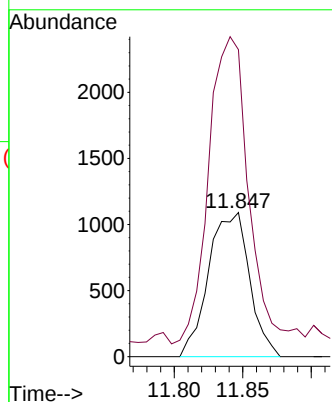
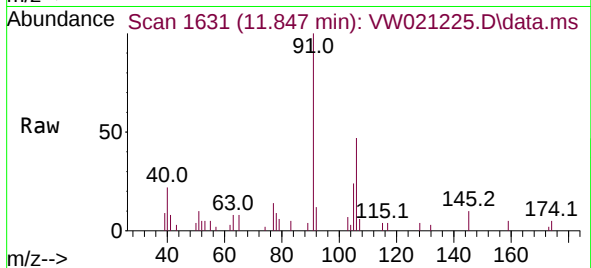




#53  
m,p-Xylene  
Concen: 204.404 ug/L  
RT: 11.847 min Scan# 1631  
Delta R.T. 0.006 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

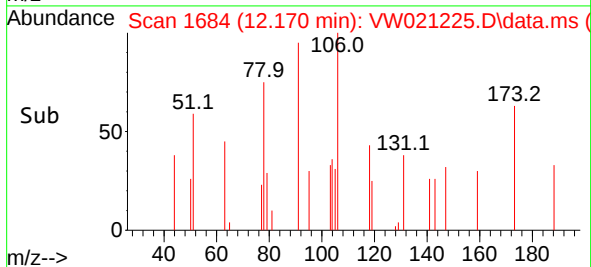
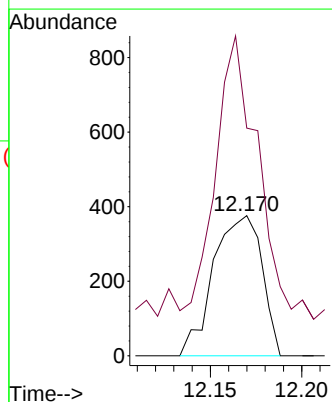
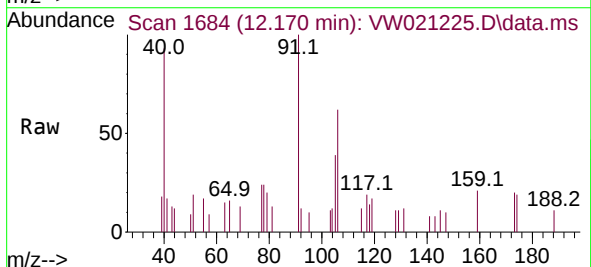
Instrument :  
MSVOA\_W  
ClientSampleId :

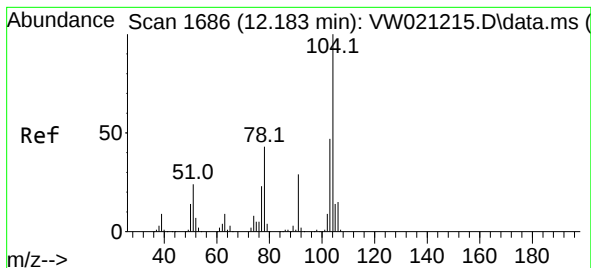
Tgt Ion:106 Resp: 2263  
Ion Ratio Lower Upper  
106 100  
91 212.9 149.9 278.3



#54  
o-Xylene  
Concen: 66.582 ug/L  
RT: 12.170 min Scan# 1684  
Delta R.T. 0.006 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

Tgt Ion:106 Resp: 695  
Ion Ratio Lower Upper  
106 100  
91 162.5 153.6 285.3





#55

Styrene

Concen: 2.811 ug/L

RT: 12.170 min Scan# 1

Delta R.T. -0.013 min

Lab File: VW021225.D

Acq: 08 Dec 2021 13:18

Instrument :

MSVOA\_W

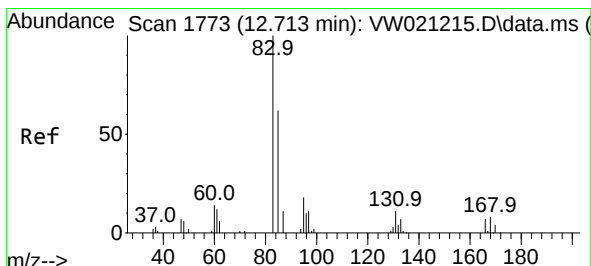
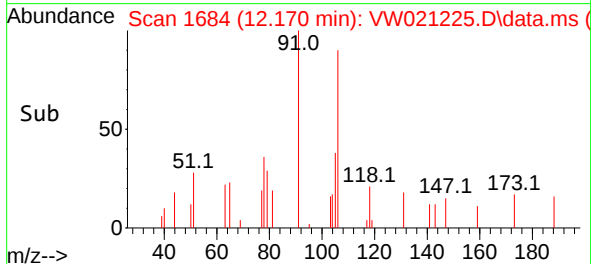
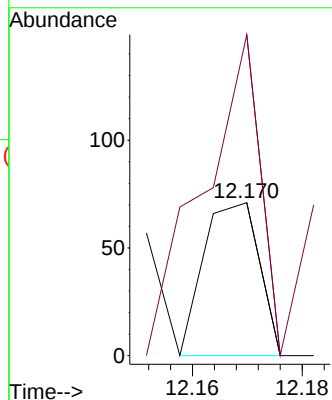
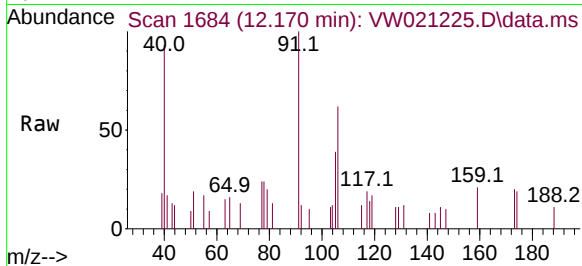
ClientSampleId :

Tgt Ion:104 Resp: 50

Ion Ratio Lower Upper

104 100

78 209.9 34.4 64.0#



#57

1,1,2,2-Tetrachloroethane

Concen: 8.854 ug/L

RT: 12.731 min Scan# 1776

Delta R.T. 0.018 min

Lab File: VW021225.D

Acq: 08 Dec 2021 13:18

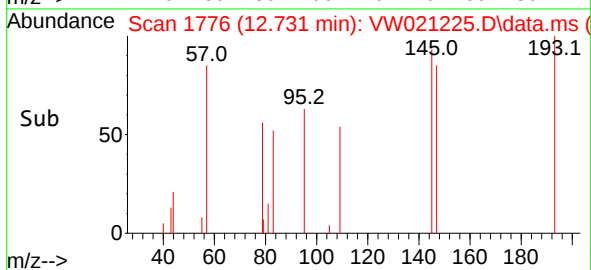
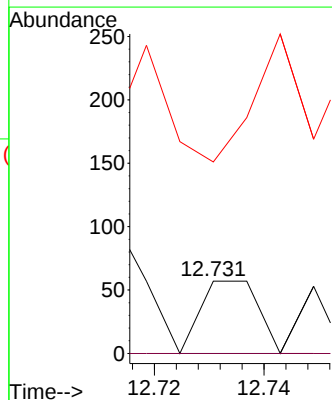
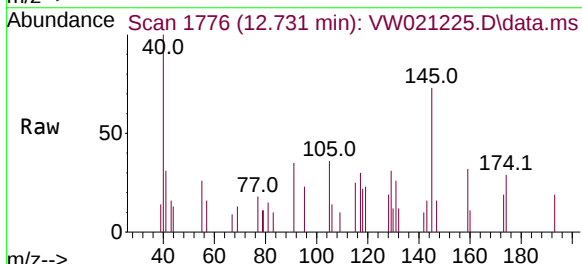
Tgt Ion: 83 Resp: 42

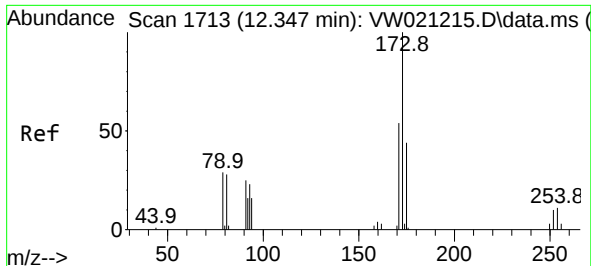
Ion Ratio Lower Upper

83 100

85 0.0 44.0 81.6#

131 264.9 6.9 10.3#

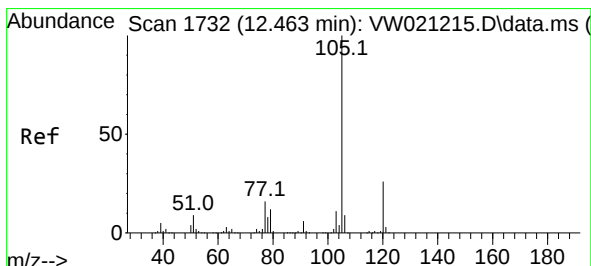
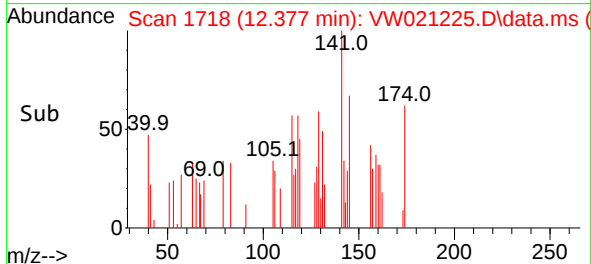
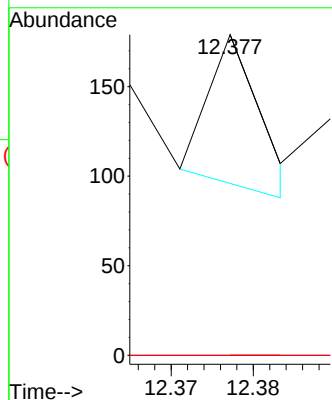
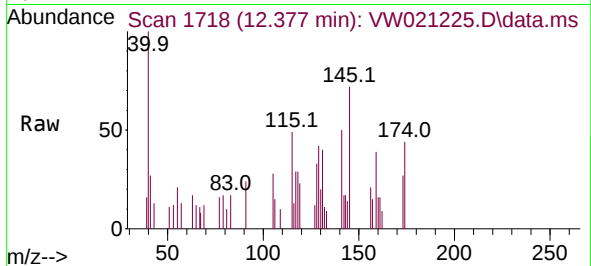




#59  
Bromoform  
Concen: 6.992 ug/L  
RT: 12.377 min Scan# 1713  
Delta R.T. 0.030 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

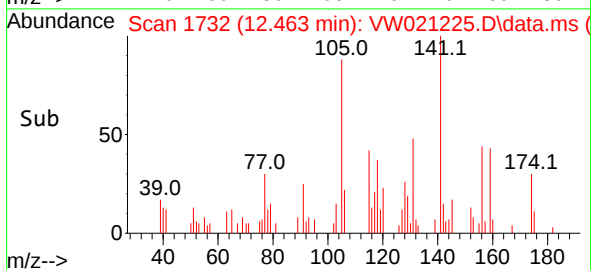
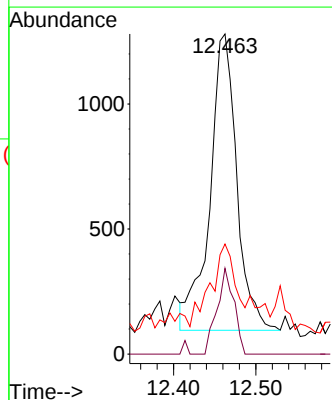
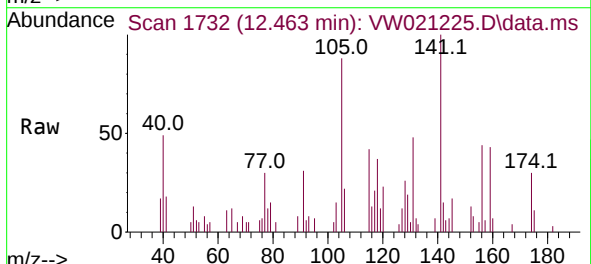
Instrument :  
MSVOA\_W  
ClientSampleId :

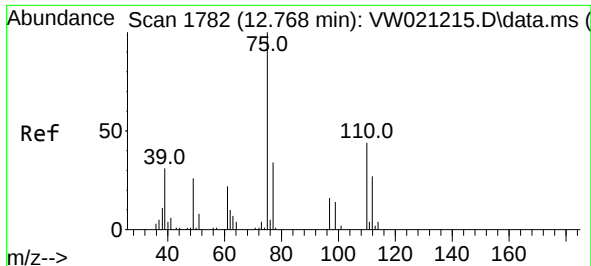
Tgt Ion:173 Resp: 34  
Ion Ratio Lower Upper  
173 100  
175 135.3 39.6 59.4#  
254 0.0 7.4 11.0#



#60  
Isopropylbenzene  
Concen: 56.973 ug/L  
RT: 12.463 min Scan# 1732  
Delta R.T. -0.000 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

Tgt Ion:105 Resp: 2700  
Ion Ratio Lower Upper  
105 100  
120 18.2 20.1 30.1#  
77 11.3 13.8 20.8#





#61

1,2,3-Trichloropropane

Concen: 4.552 ug/L

RT: 12.816 min Scan# 11

Delta R.T. 0.048 min

Lab File: VW021225.D

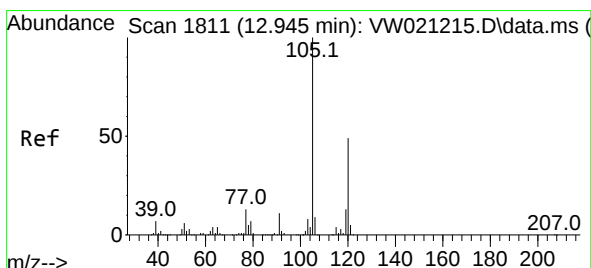
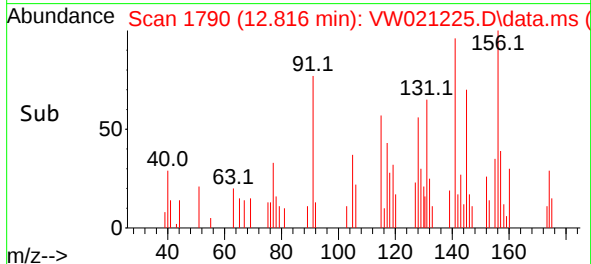
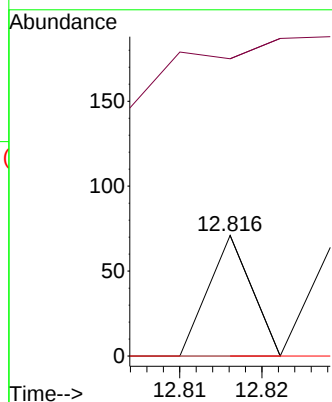
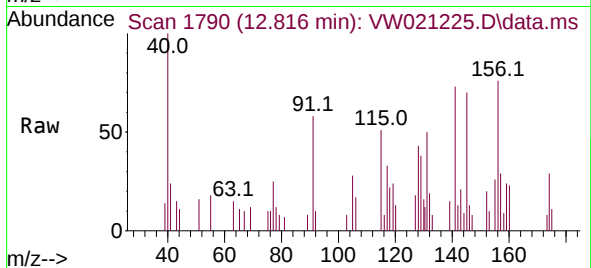
Acq: 08 Dec 2021 13:18

Instrument :

MSVOA\_W

ClientSampleId :

|             |                  |
|-------------|------------------|
| Tgt Ion: 75 | Resp: 26         |
| Ion Ratio   | Lower Upper      |
| 75          | 100              |
| 77          | 238.5 25.8 38.8# |
| 110         | 0.0 29.0 43.4#   |



#62

1,3,5-Trimethylbenzene

Concen: 24.769 ug/L

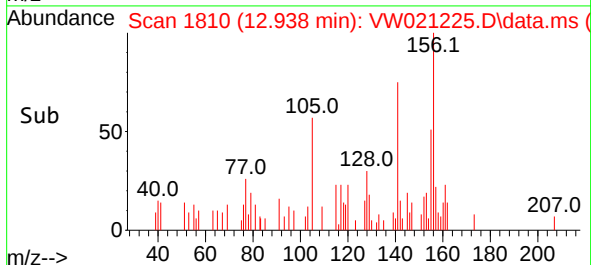
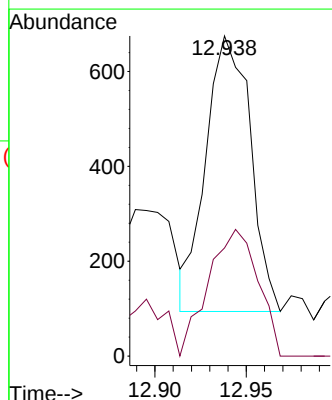
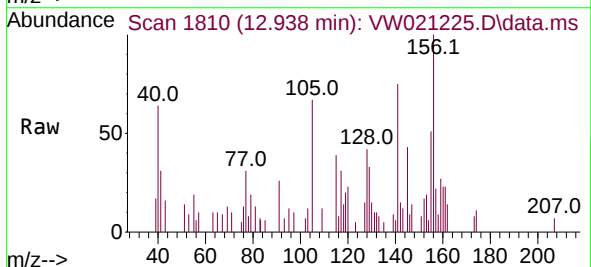
RT: 12.938 min Scan# 1810

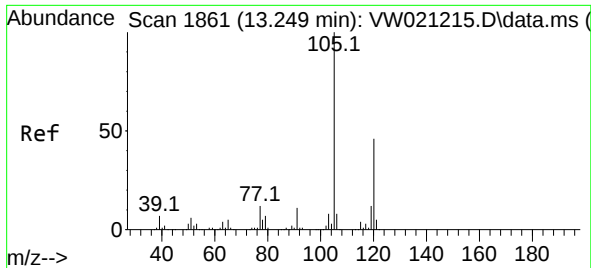
Delta R.T. -0.007 min

Lab File: VW021225.D

Acq: 08 Dec 2021 13:18

|              |                |
|--------------|----------------|
| Tgt Ion: 105 | Resp: 983      |
| Ion Ratio    | Lower Upper    |
| 105          | 100            |
| 120          | 51.5 37.4 56.2 |

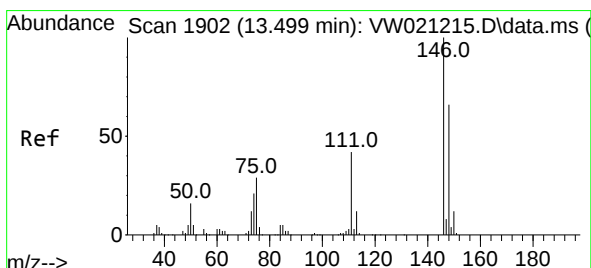
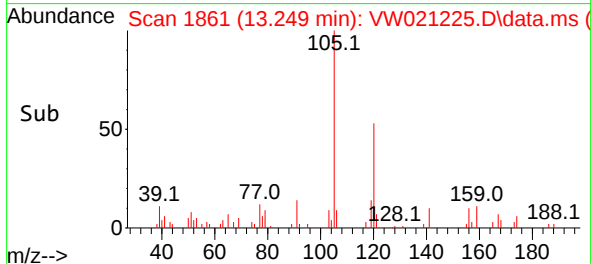
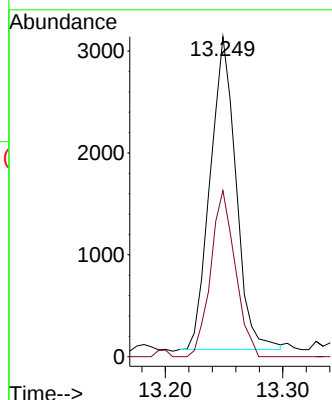
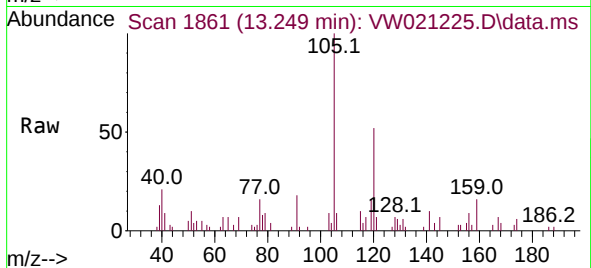




#63  
1,2,4-Trimethylbenzene  
Concen: 117.448 ug/L  
RT: 13.249 min Scan# 1861  
Delta R.T. -0.000 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

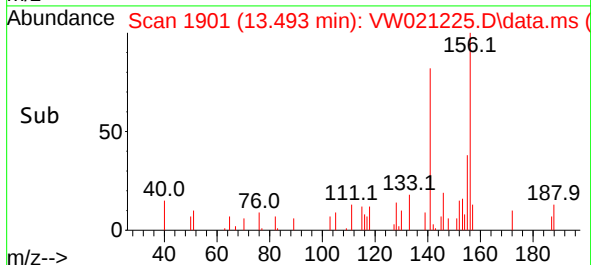
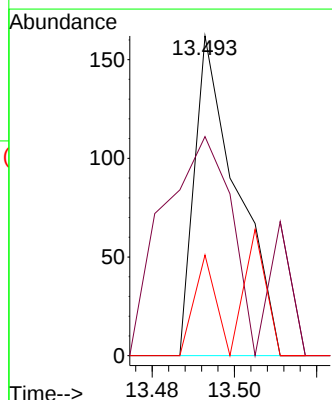
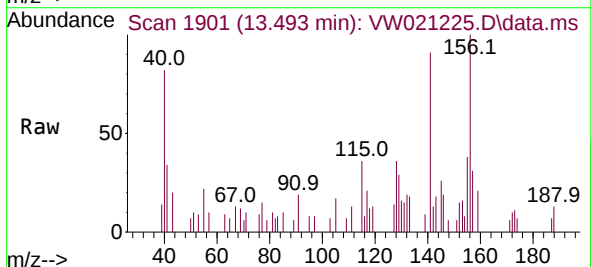
Instrument :  
MSVOA\_W  
ClientSampleId :

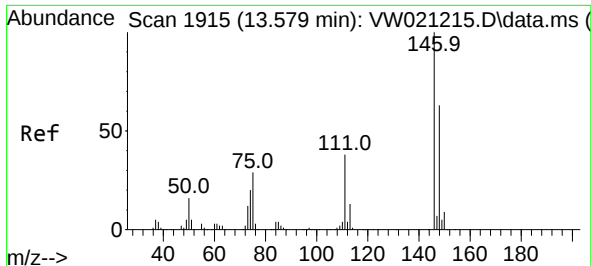
Tgt Ion:105 Resp: 4688  
Ion Ratio Lower Upper  
105 100  
120 50.3 35.0 52.6



#64  
1,3-Dichlorobenzene  
Concen: 5.243 ug/L  
RT: 13.493 min Scan# 1901  
Delta R.T. -0.007 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

Tgt Ion:146 Resp: 117  
Ion Ratio Lower Upper  
146 100  
111 68.5 29.8 55.3#  
148 31.5 46.2 85.8#

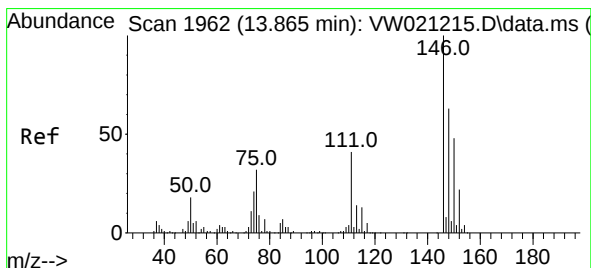
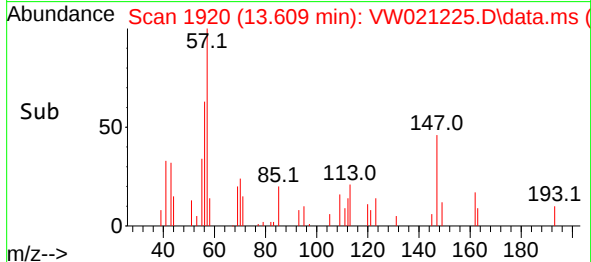
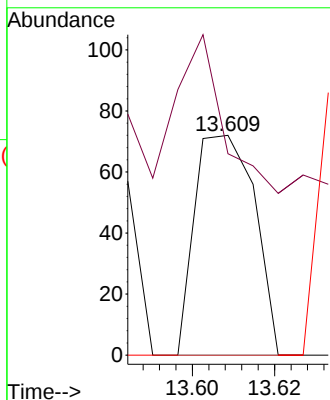
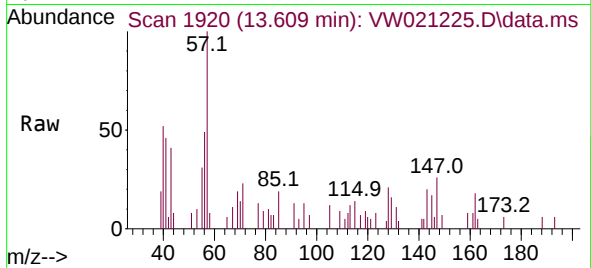




#65  
1,4-Dichlorobenzene  
Concen: 3.237 ug/L  
RT: 13.609 min Scan# 1915  
Delta R.T. 0.030 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

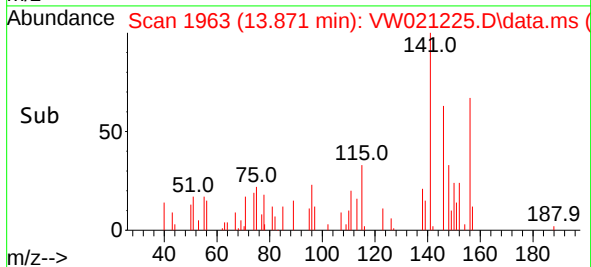
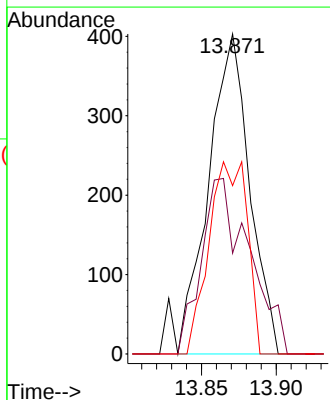
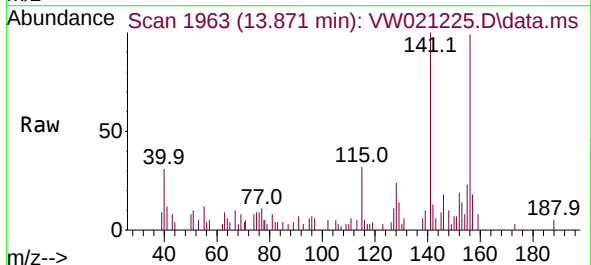
Instrument :  
MSVOA\_W  
ClientSampleId :

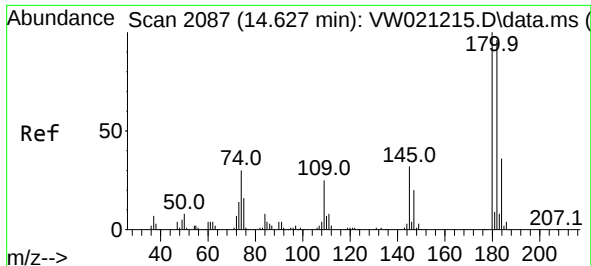
Tgt Ion:146 Resp: 73  
Ion Ratio Lower Upper  
146 100  
111 91.7 29.0 53.9#  
148 0.0 46.9 87.1#



#67  
1,2-Dichlorobenzene  
Concen: 38.705 ug/L  
RT: 13.871 min Scan# 1963  
Delta R.T. 0.006 min  
Lab File: VW021225.D  
Acq: 08 Dec 2021 13:18

Tgt Ion:146 Resp: 769  
Ion Ratio Lower Upper  
146 100  
111 31.5 33.1 49.7#  
148 52.6 47.4 71.2





#69

1,3,5-Trichlorobenzene

Concen: 24.269 ug/L

RT: 15.127 min Scan# 2169

Delta R.T. 0.499 min

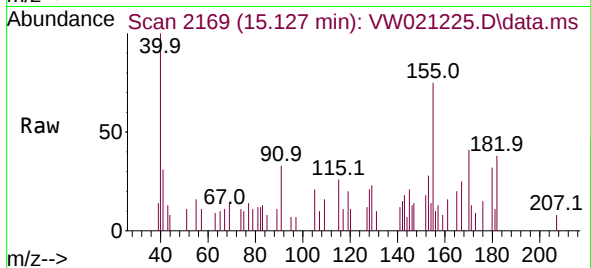
Lab File: VW021225.D

Acq: 08 Dec 2021 13:18

Instrument :

MSVOA\_W

ClientSampleId :



Tgt Ion:180 Resp: 398

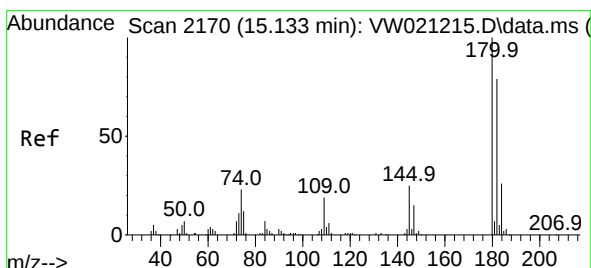
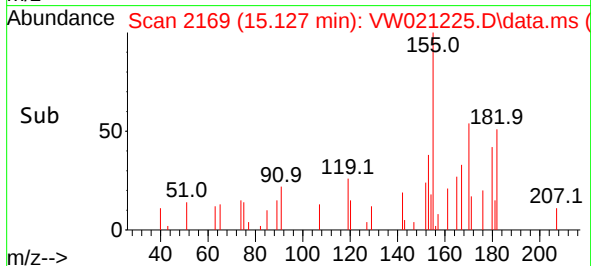
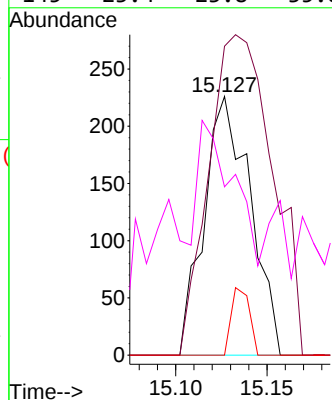
Ion Ratio Lower Upper

180 100

182 171.4 75.4 113.0#

184 10.3 23.8 35.8#

145 23.4 23.8 35.8#



#70

1,2,4-trichlorobenzene

Concen: 29.534 ug/L

RT: 15.127 min Scan# 2169

Delta R.T. -0.007 min

Lab File: VW021225.D

Acq: 08 Dec 2021 13:18

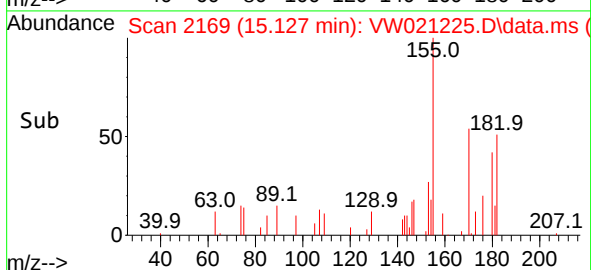
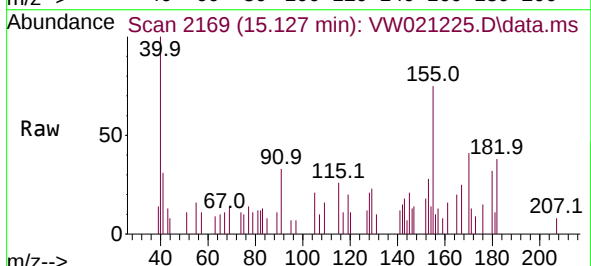
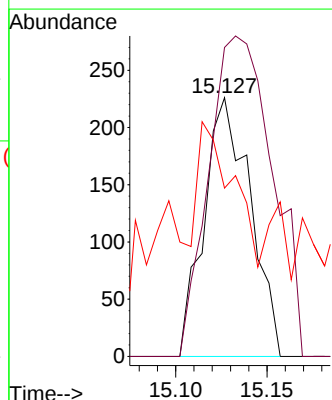
Tgt Ion:180 Resp: 398

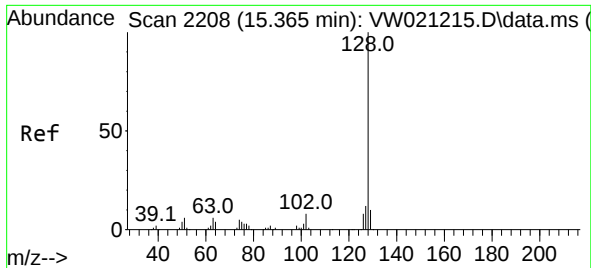
Ion Ratio Lower Upper

180 100

182 171.4 79.0 118.6#

145 23.4 26.0 39.0#





#71

Naphthalene

Concen: 490.663 ug/L

RT: 15.364 min Scan# 21

Delta R.T. -0.000 min

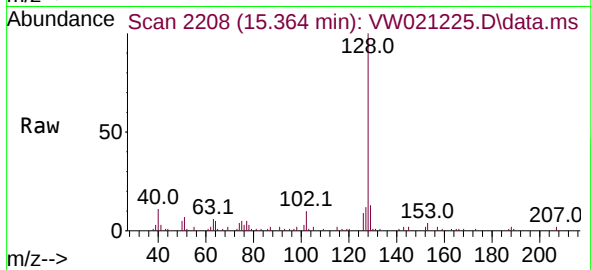
Lab File: VW021225.D

Acq: 08 Dec 2021 13:18

Instrument :

MSVOA\_W

ClientSampleId :



Tgt Ion:128 Resp: 12292

Ion Ratio Lower Upper

128 100

127 13.4 10.7 16.1

129 14.1 8.6 12.8#

