

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD101221\  
 Data File : VD070688.D  
 Acq On : 12 Oct 2021 19:24  
 Operator : VA/SY  
 Sample : M4175-03  
 Misc : 5.04G/5.00ml/MSVOA\_D/SOIL  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 31123

Quant Time: Oct 13 06:39:24 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D100521S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 06 09:10:31 2021  
 Response via : Initial Calibration

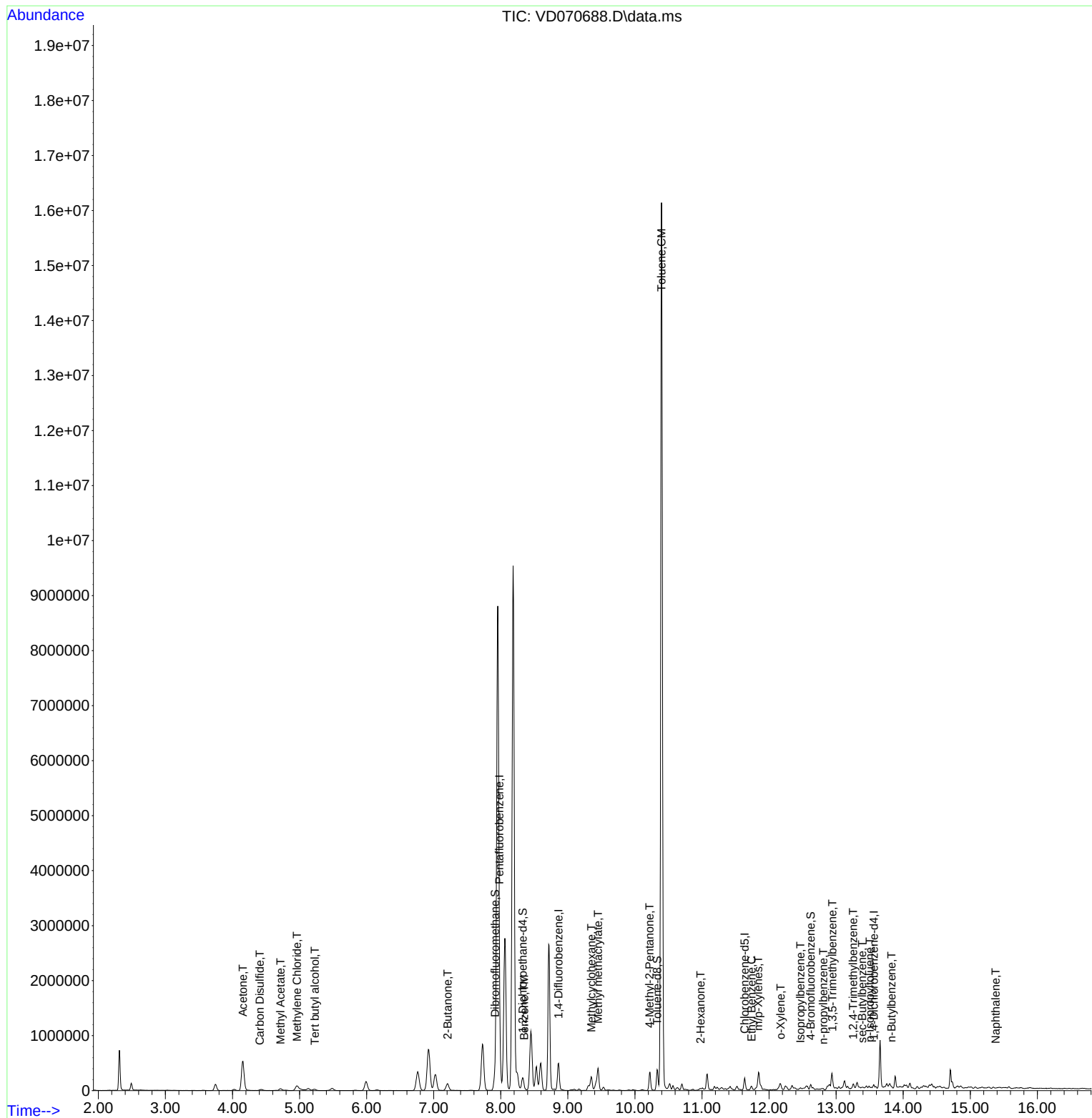
| Compound                    | R.T.           | QIon | Response   | Conc    | Units  | Dev(Min) |
|-----------------------------|----------------|------|------------|---------|--------|----------|
| -----                       |                |      |            |         |        |          |
| Internal Standards          |                |      |            |         |        |          |
| 1) Pentafluorobenzene       | 7.979          | 168  | 205468     | 50.00   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene     | 8.861          | 114  | 439437     | 50.00   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5        | 11.637         | 117  | 123971     | 50.00   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.561         | 152  | 12823      | 50.00   | ug/l   | 0.00     |
|                             |                |      |            |         |        |          |
| System Monitoring Compounds |                |      |            |         |        |          |
| 33) 1,2-Dichloroethane-d4   | 8.326          | 65   | 165465     | 68.43   | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 50 - 163 |      | Recovery = | 136.86% |        |          |
| 35) Dibromofluoromethane    | 7.914          | 113  | 187722     | 64.25   | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 54 - 147 |      | Recovery = | 128.50% |        |          |
| 50) Toluene-d8              | 10.332         | 98   | 256154     | 22.93   | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 49 - 140 |      | Recovery = | 45.86%# |        |          |
| 62) 4-Bromofluorobenzene    | 12.620         | 95   | 31240      | 8.37    | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 25 - 144 |      | Recovery = | 16.74%# |        |          |
|                             |                |      |            |         |        |          |
| Target Compounds            |                |      |            |         | Qvalue |          |
| 11) Tert butyl alcohol      | 5.226          | 59   | 43311      | 361.57  | ug/l   | 98       |
| 16) Acetone                 | 4.155          | 43   | 920747     | 2242.32 | ug/l   | 95       |
| 17) Carbon Disulfide        | 4.408          | 76   | 13080      | 1.49    | ug/l # | 86       |
| 18) Methyl Acetate          | 4.714          | 43   | 64261      | 40.55   | ug/l   | 100      |
| 20) Methylene Chloride      | 4.961          | 84   | 69305      | 18.01   | ug/l   | 94       |
| 25) 2-Butanone              | 7.208          | 43   | 115812     | 215.41  | ug/l # | 88       |
| 39) Methylcyclohexane       | 9.349          | 83   | 102349     | 19.07   | ug/l   | 96       |
| 40) Benzene                 | 8.349          | 78   | 22978      | 1.67    | ug/l # | 89       |
| 48) Methyl methacrylate     | 9.449          | 41   | 204231     | 153.34  | ug/l   | 90       |
| 51) 4-Methyl-2-Pentanone    | 10.220         | 43   | 207246     | 141.39  | ug/l   | 98       |
| 52) Toluene                 | 10.396         | 92   | 7509822    | 888.67  | ug/l   | 94       |
| 59) 2-Hexanone              | 10.979         | 43   | 17038      | 12.57   | ug/l   | 79       |
| 67) Ethyl Benzene           | 11.737         | 91   | 39499      | 8.66    | ug/l   | 96       |
| 68) m/p-Xylenes             | 11.837         | 106  | 65146      | 36.26   | ug/l   | 99       |
| 69) o-Xylene                | 12.173         | 106  | 22954      | 14.37   | ug/l   | 97       |
| 73) Isopropylbenzene        | 12.467         | 105  | 15789      | 16.89   | ug/l   | 98       |
| 78) n-propylbenzene         | 12.808         | 91   | 14635      | 12.37   | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene  | 12.943         | 105  | 20153      | 25.28   | ug/l   | 93       |
| 84) 1,2,4-Trimethylbenzene  | 13.255         | 105  | 54431      | 68.61   | ug/l   | 97       |
| 85) sec-Butylbenzene        | 13.390         | 105  | 6497       | 6.36    | ug/l # | 61       |
| 86) p-Isopropyltoluene      | 13.502         | 119  | 5656       | 6.78    | ug/l   | 91       |
| 89) n-Butylbenzene          | 13.826         | 91   | 20730      | 26.03   | ug/l # | 73       |
| 95) Naphthalene             | 15.378         | 128  | 8742       | 22.92   | ug/l # | 89       |
| -----                       |                |      |            |         |        |          |

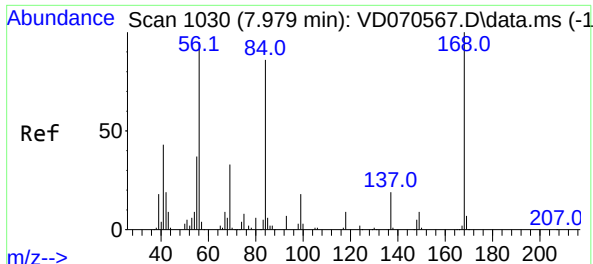
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD101221\  
Data File : VD070688.D  
Acq On : 12 Oct 2021 19:24  
Operator : VA/SY  
Sample : M4175-03  
Misc : 5.04G/5.00ml/MSVOA\_D/SOIL  
ALS Vial : 19 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

Quant Time: Oct 13 06:39:24 2021  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D100521S.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 06 09:10:31 2021  
Response via : Initial Calibration

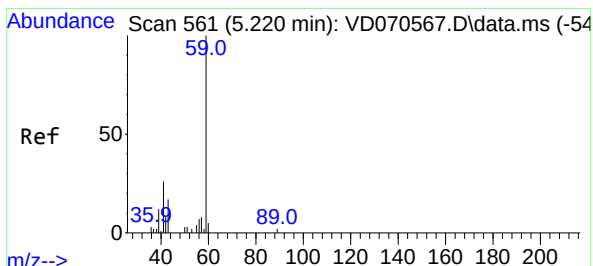
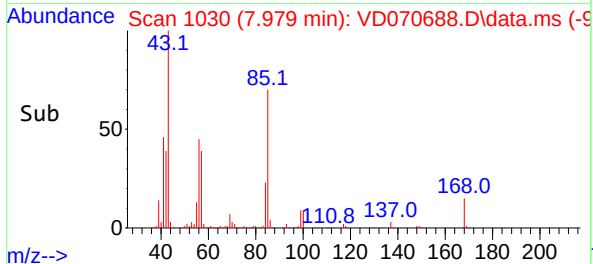
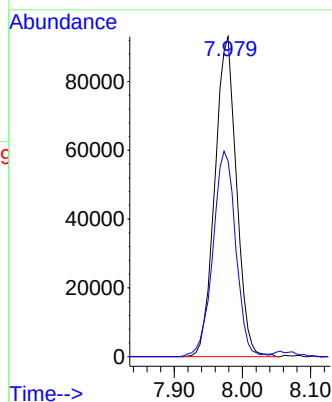
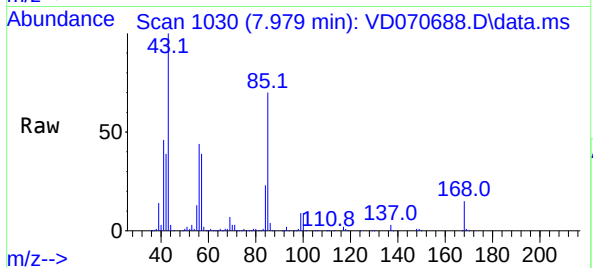




#1  
Pentafluorobenzene  
Concen: 50.00 ug/l  
RT: 7.979 min Scan# 1030  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

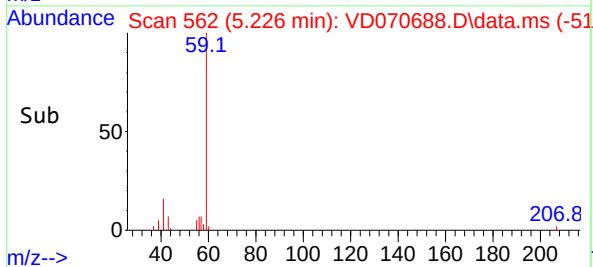
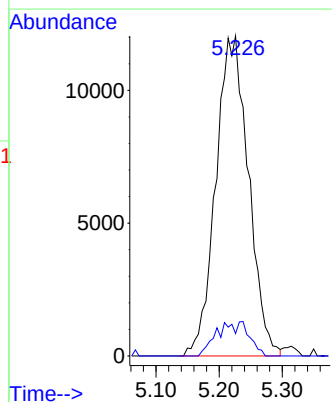
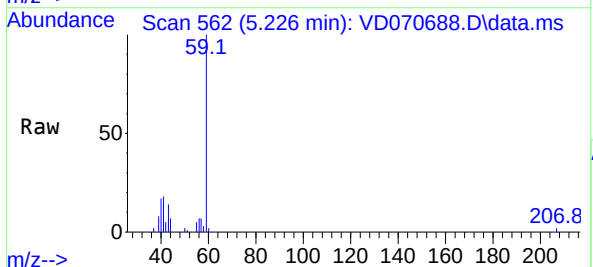
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

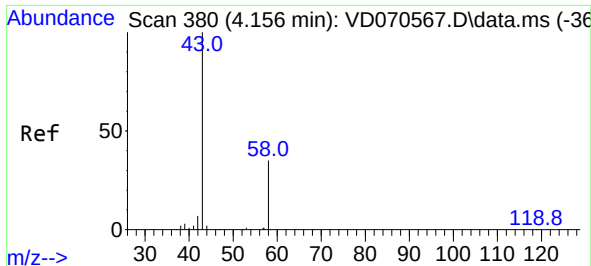
Tgt Ion:168 Resp: 205468  
Ion Ratio Lower Upper  
168 100  
99 61.2 51.4 77.0



#11  
Tert butyl alcohol  
Concen: 361.57 ug/l  
RT: 5.226 min Scan# 562  
Delta R.T. 0.006 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion: 59 Resp: 43311  
Ion Ratio Lower Upper  
59 100  
57 6.4 4.5 6.7

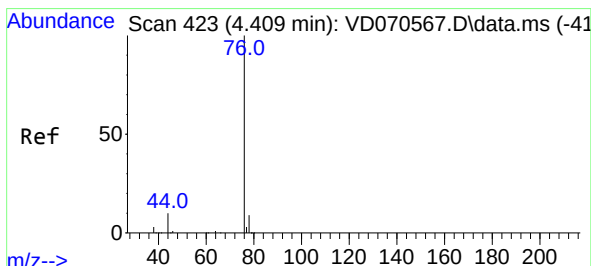
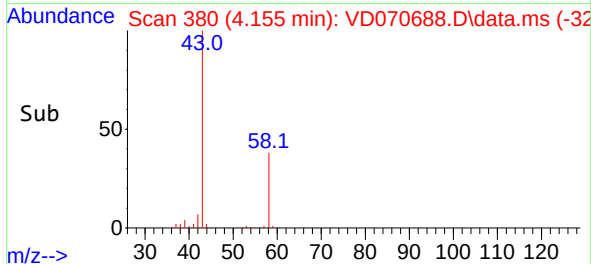
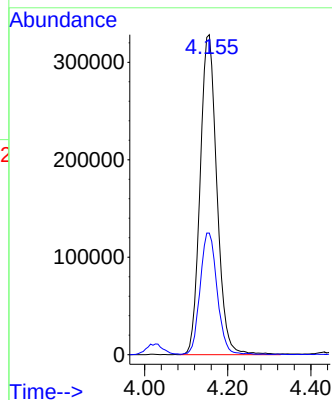
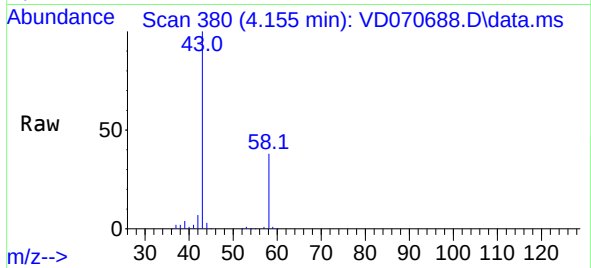




#16  
Acetone  
Concen: 2242.32 ug/l  
RT: 4.155 min Scan# 380  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

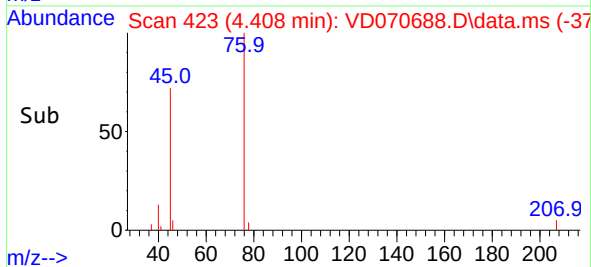
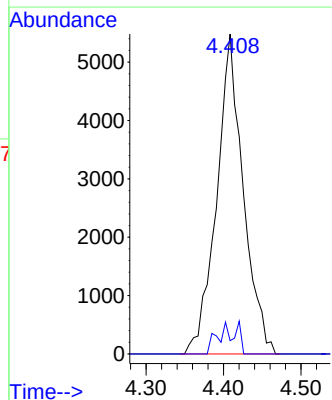
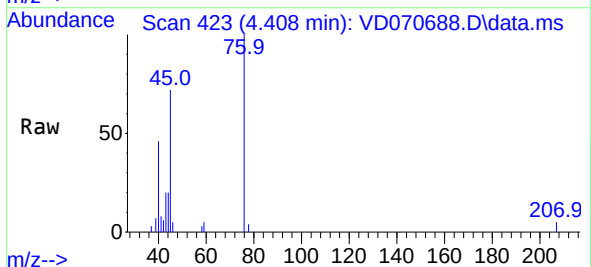
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

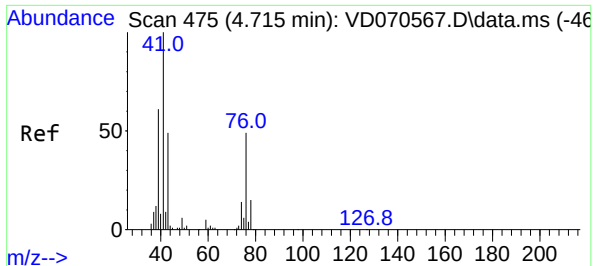
Tgt Ion: 43 Resp: 920747  
Ion Ratio Lower Upper  
43 100  
58 37.9 28.2 42.2



#17  
Carbon Disulfide  
Concen: 1.49 ug/l  
RT: 4.408 min Scan# 423  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion: 76 Resp: 13080  
Ion Ratio Lower Upper  
76 100  
78 4.1 7.4 11.2#

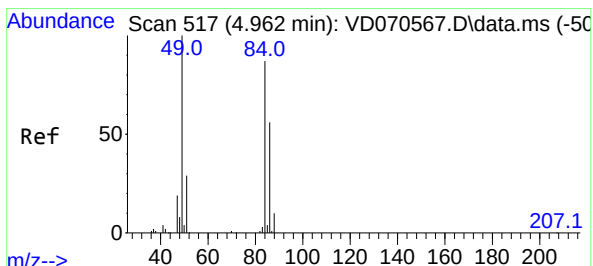
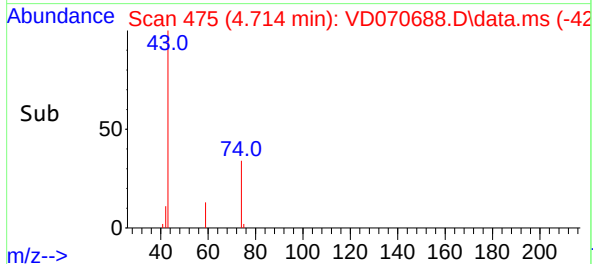
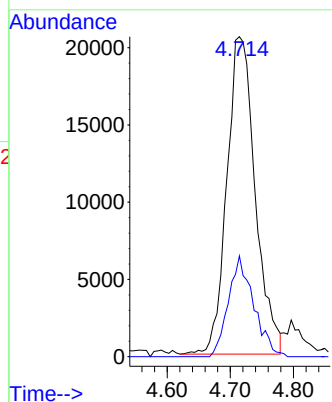
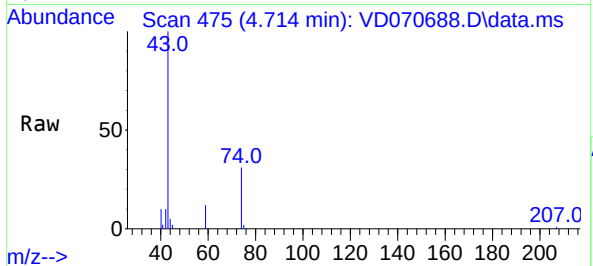




#18  
Methyl Acetate  
Concen: 40.55 ug/l  
RT: 4.714 min Scan# 475  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

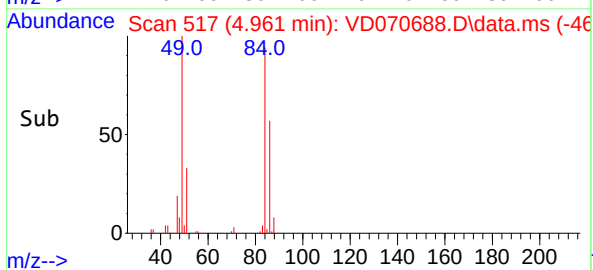
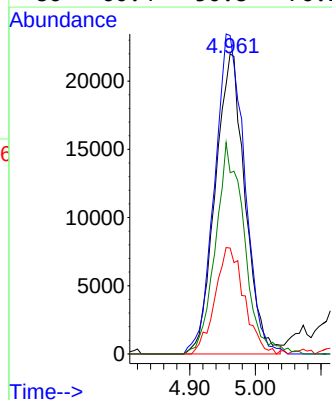
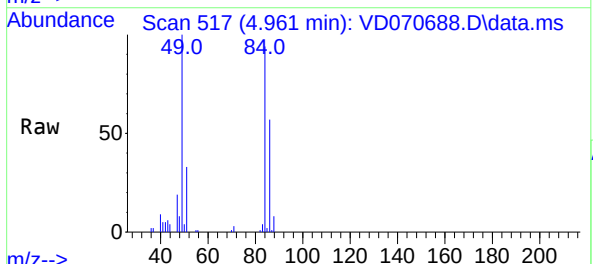
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

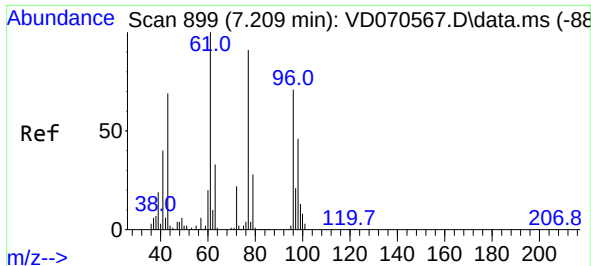
Tgt Ion: 43 Resp: 64261  
Ion Ratio Lower Upper  
43 100  
74 28.2 22.6 33.8



#20  
Methylene Chloride  
Concen: 18.01 ug/l  
RT: 4.961 min Scan# 517  
Delta R.T. -0.001 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion: 84 Resp: 69305  
Ion Ratio Lower Upper  
84 100  
49 106.1 91.4 137.2  
51 35.3 26.7 40.1  
86 60.4 50.8 76.2

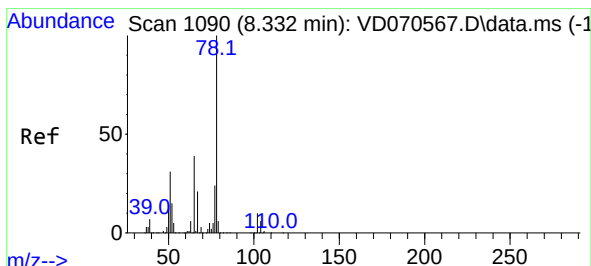
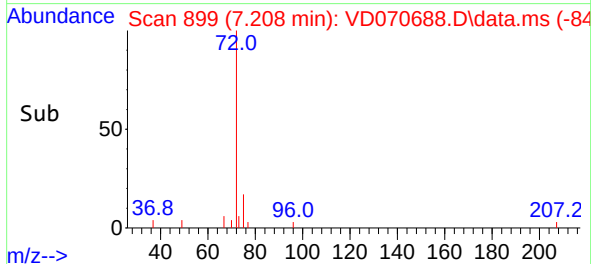
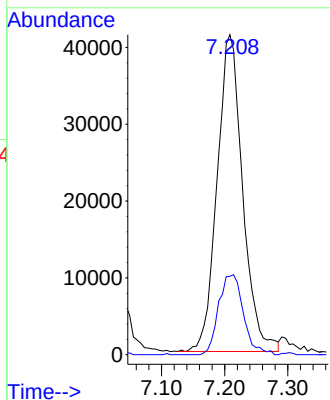
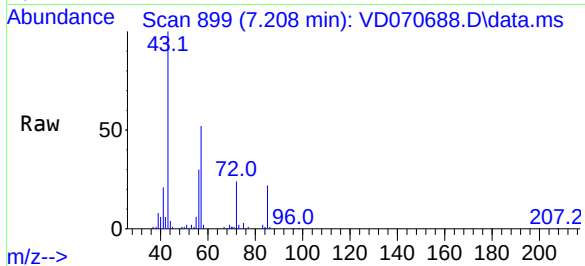




#25  
2-Butanone  
Concen: 215.41 ug/l  
RT: 7.208 min Scan# 899  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

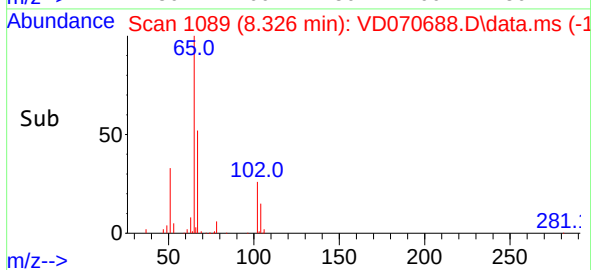
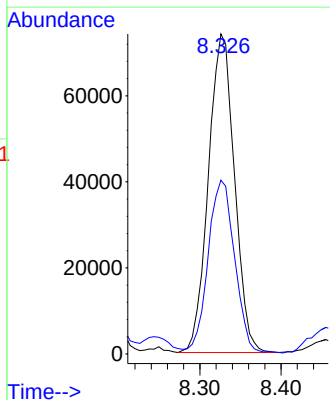
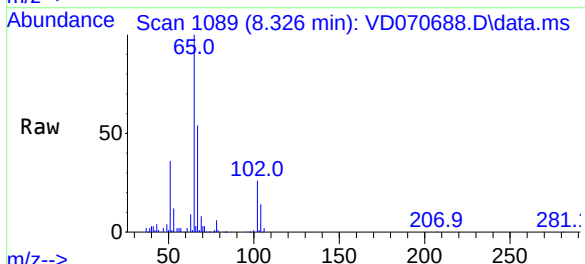
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

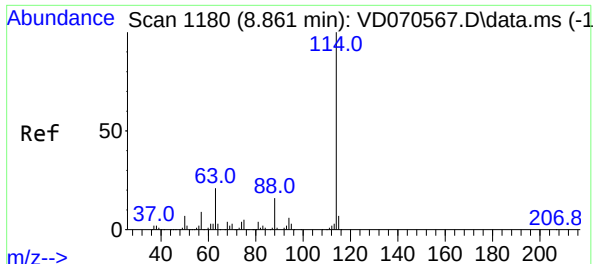
Tgt Ion: 43 Resp: 115812  
Ion Ratio Lower Upper  
43 100  
72 24.7 25.2 37.8#



#33  
1,2-Dichloroethane-d4  
Concen: 68.43 ug/l  
RT: 8.326 min Scan# 1089  
Delta R.T. -0.006 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion: 65 Resp: 165465  
Ion Ratio Lower Upper  
65 100  
67 55.1 0.0 110.2

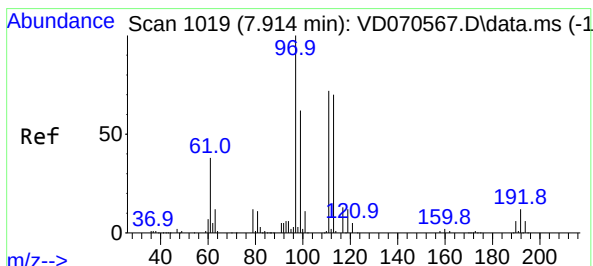
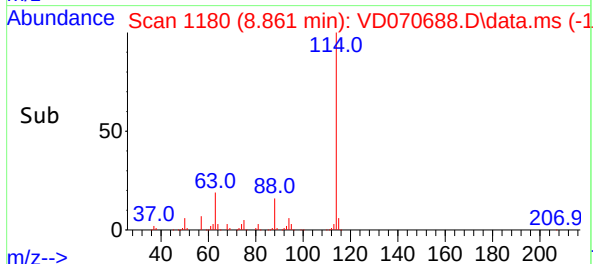
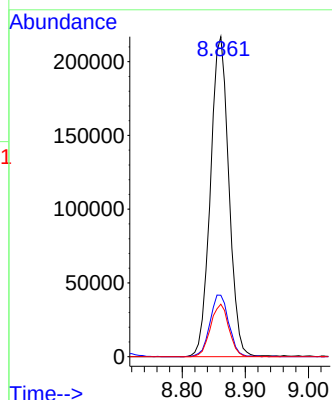
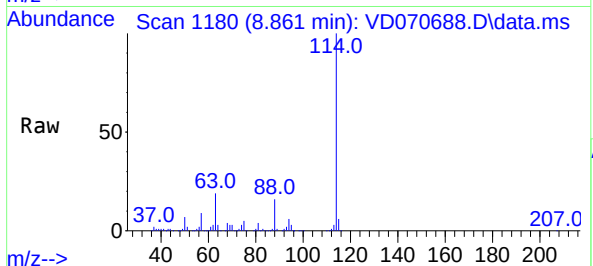




#34  
1,4-Difluorobenzene  
Concen: 50.00 ug/l  
RT: 8.861 min Scan# 1180  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

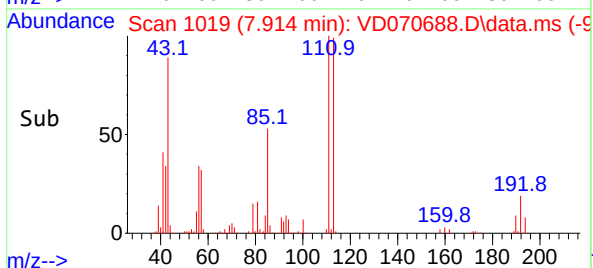
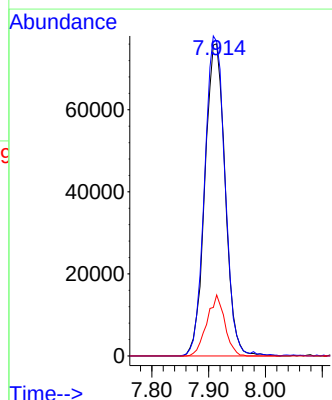
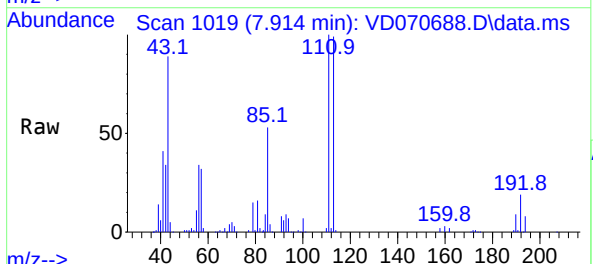
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

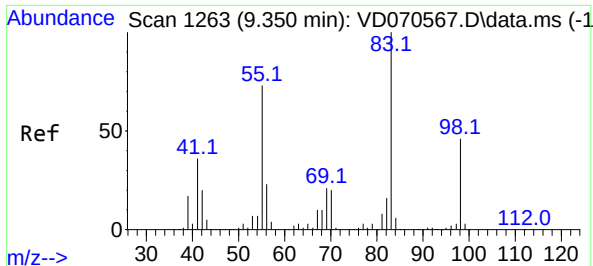
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 439437 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 19.2  | 0.0   | 41.8   |
| 88       | 16.4  | 0.0   | 32.6   |



#35  
Dibromofluoromethane  
Concen: 64.25 ug/l  
RT: 7.914 min Scan# 1019  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 113   | Resp: | 187722 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 103.1 | 83.1  | 124.7  |
| 192      | 17.3  | 12.7  | 19.1   |

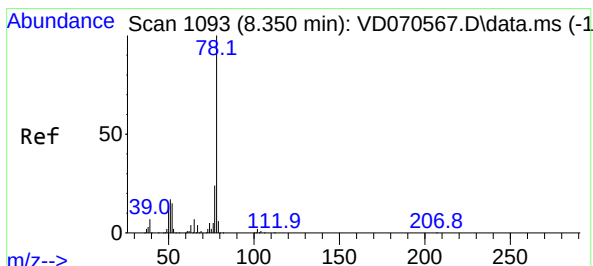
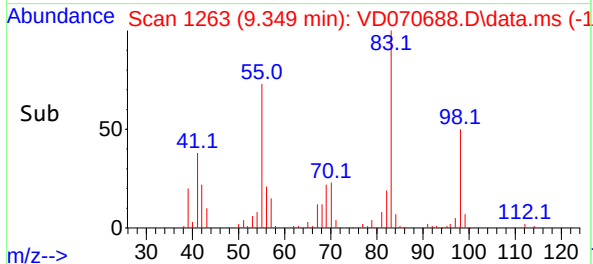
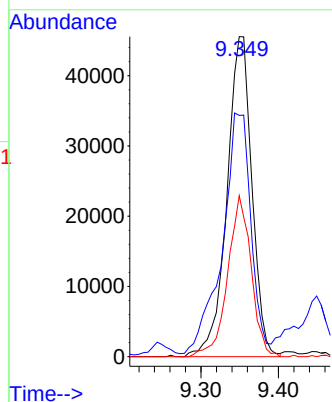
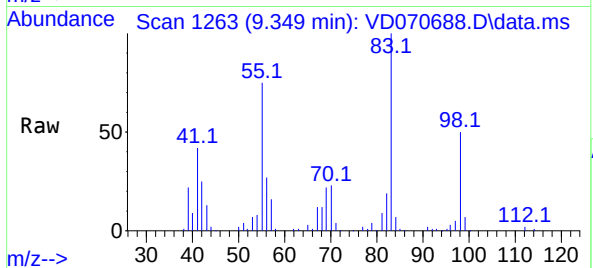




#39  
Methylcyclohexane  
Concen: 19.07 ug/l  
RT: 9.349 min Scan# 1263  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

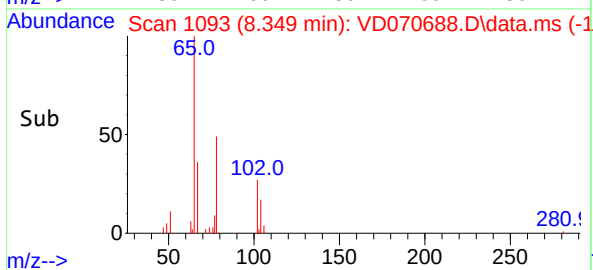
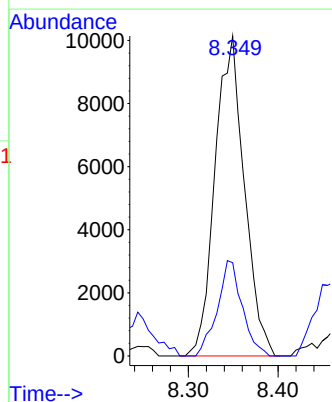
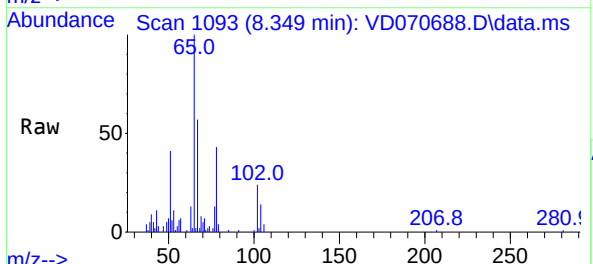
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

Tgt Ion: 83 Resp: 102349  
Ion Ratio Lower Upper  
83 100  
55 74.5 58.2 87.4  
98 50.3 36.9 55.3

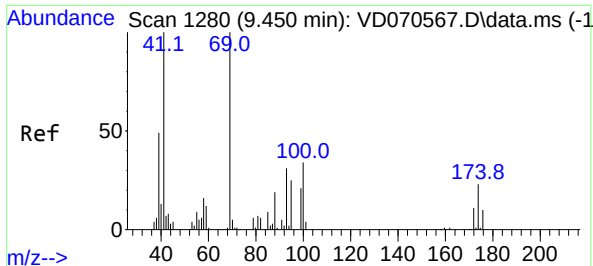


#40  
Benzene  
Concen: 1.67 ug/l  
RT: 8.349 min Scan# 1093  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion: 78 Resp: 22978  
Ion Ratio Lower Upper  
78 100  
77 29.1 18.9 28.3#







#48

Methyl methacrylate

Concen: 153.34 ug/l

RT: 9.449 min Scan# 1280

Delta R.T. -0.000 min

Lab File: VD070688.D

Acq: 12 Oct 2021 19:24

Instrument :

MSVOA\_D

ClientSampleId :

31123

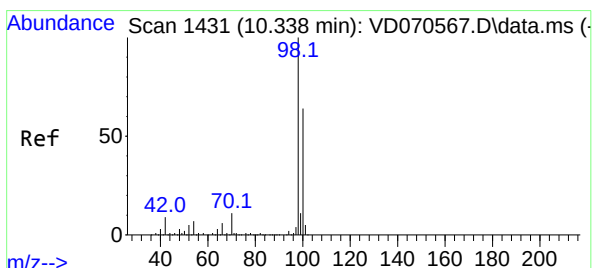
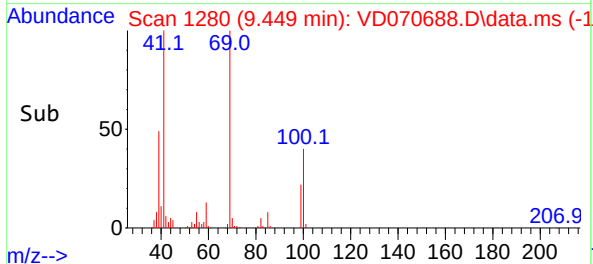
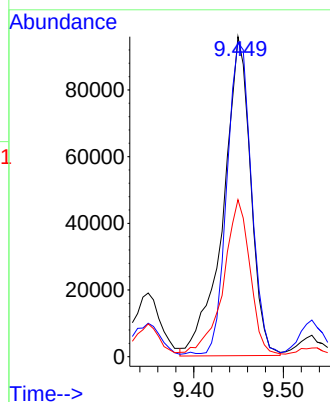
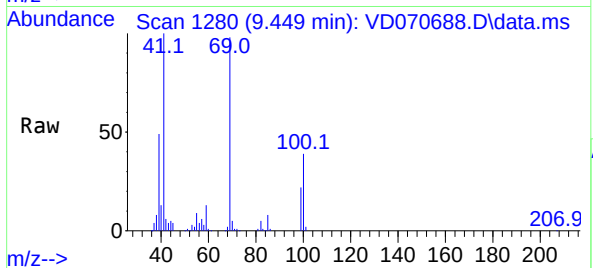
Tgt Ion: 41 Resp: 204231

Ion Ratio Lower Upper

41 100

69 87.1 78.5 117.7

39 48.0 34.9 52.3



#50

Toluene-d8

Concen: 22.93 ug/l

RT: 10.332 min Scan# 1430

Delta R.T. -0.006 min

Lab File: VD070688.D

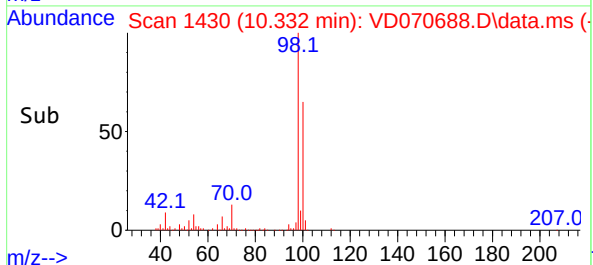
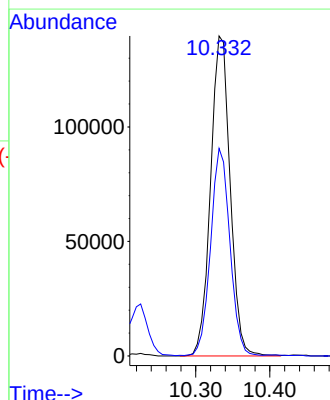
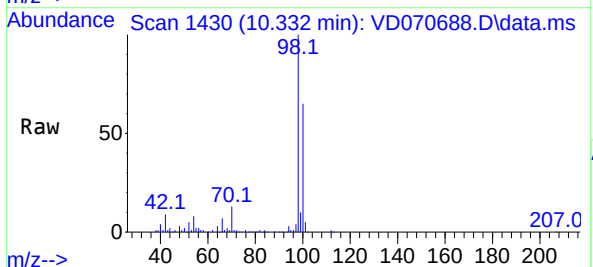
Acq: 12 Oct 2021 19:24

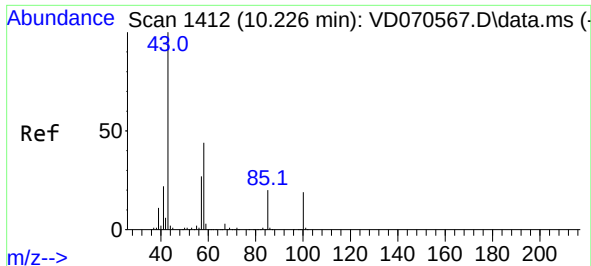
Tgt Ion: 98 Resp: 256154

Ion Ratio Lower Upper

98 100

100 63.7 52.2 78.4

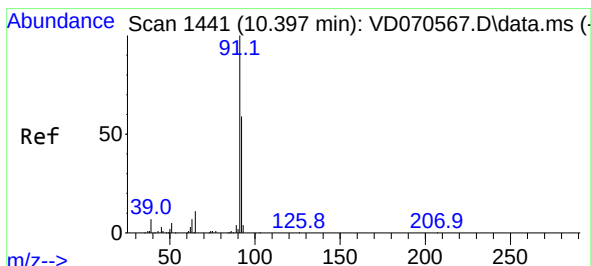
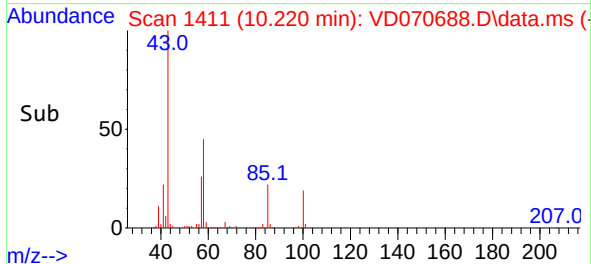
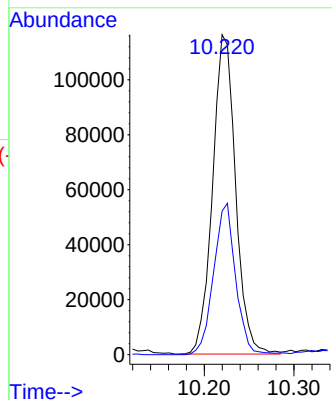
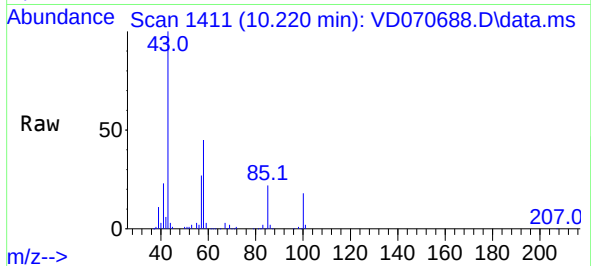




#51  
4-Methyl-2-Pentanone  
Concen: 141.39 ug/l  
RT: 10.220 min Scan# 1411  
Delta R.T. -0.006 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

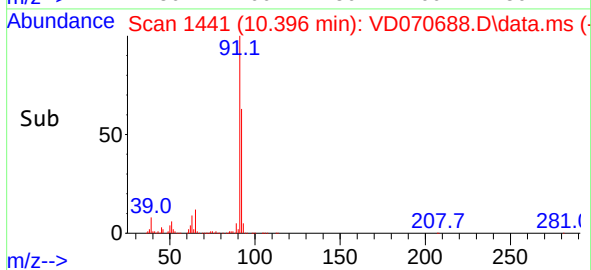
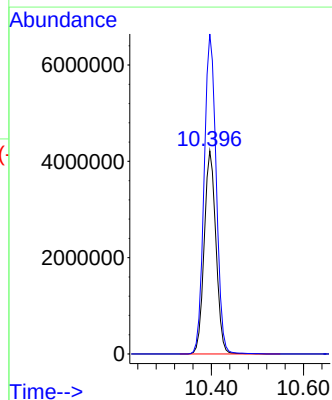
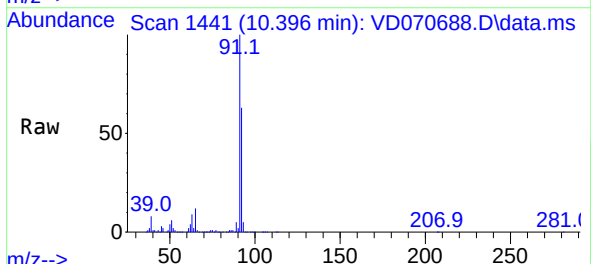
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

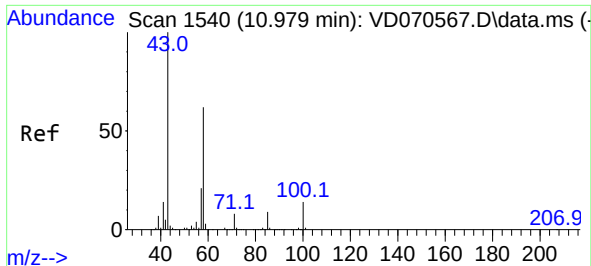
Tgt Ion: 43 Resp: 207246  
Ion Ratio Lower Upper  
43 100  
58 45.2 35.0 52.6



#52  
Toluene  
Concen: 888.67 ug/l  
RT: 10.396 min Scan# 1441  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion: 92 Resp: 7509822  
Ion Ratio Lower Upper  
92 100  
91 162.2 136.3 204.5

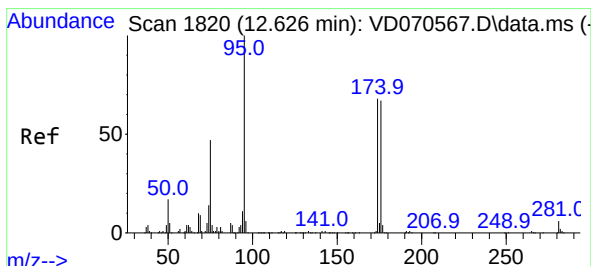
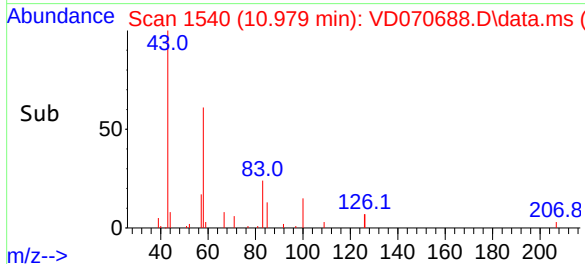
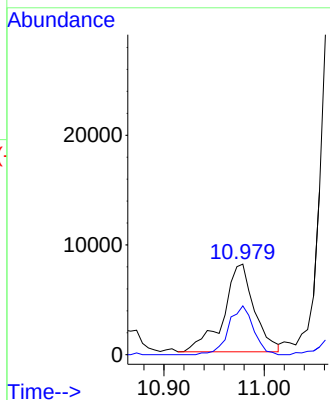
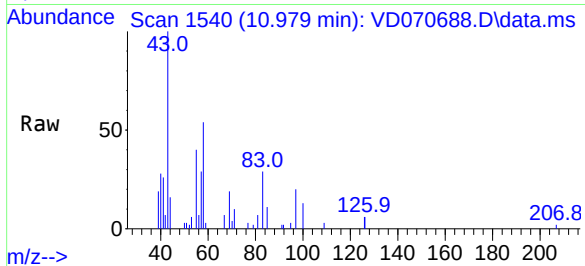




#59  
2-Hexanone  
Concen: 12.57 ug/l  
RT: 10.979 min Scan# 1540  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

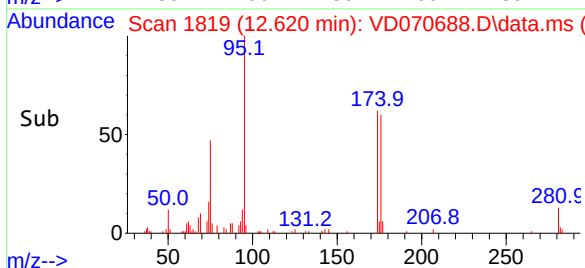
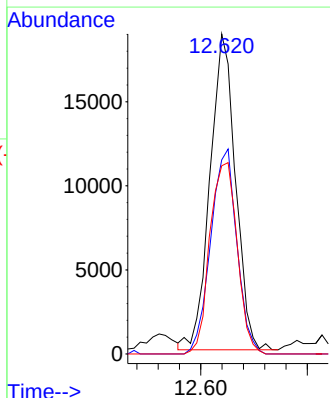
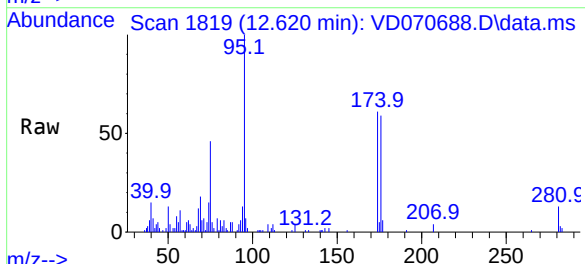
Instrument :  
MSVOA\_D  
ClientSampled :  
31123

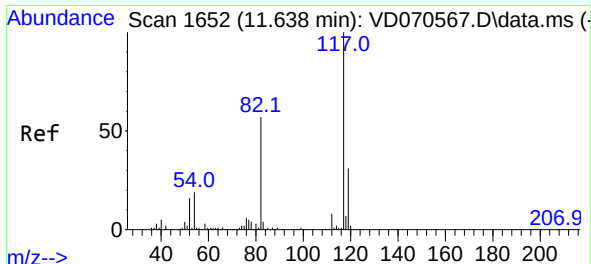
Tgt Ion: 43 Resp: 17038  
Ion Ratio Lower Upper  
43 100  
58 44.8 30.4 91.3



#62  
4-Bromofluorobenzene  
Concen: 8.37 ug/l  
RT: 12.620 min Scan# 1819  
Delta R.T. -0.006 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

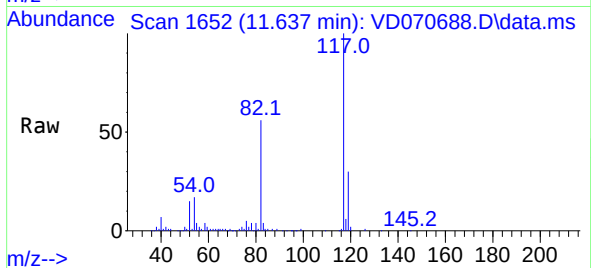
Tgt Ion: 95 Resp: 31240  
Ion Ratio Lower Upper  
95 100  
174 66.4 0.0 138.0  
176 64.8 0.0 135.6



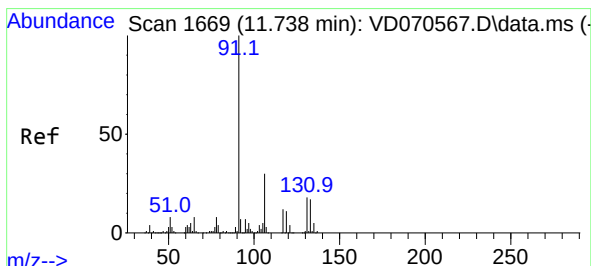
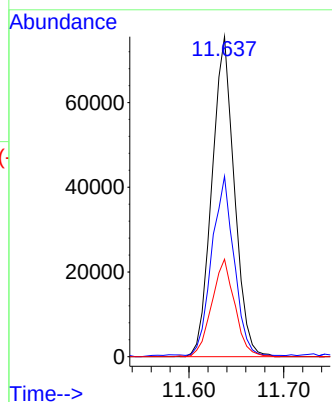
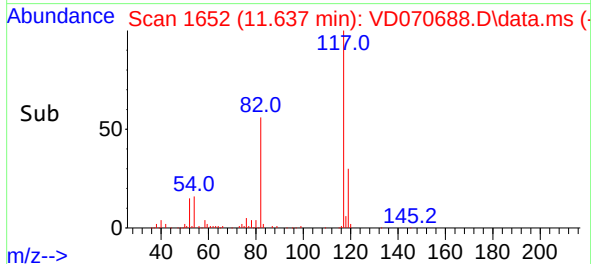


#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 11.637 min Scan# 1652  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

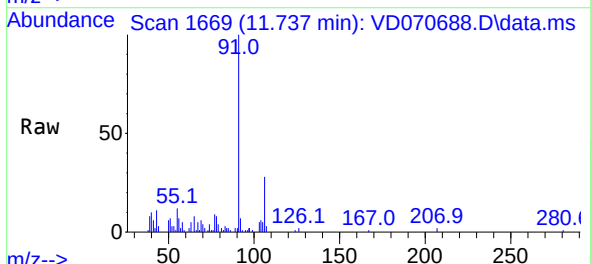
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123



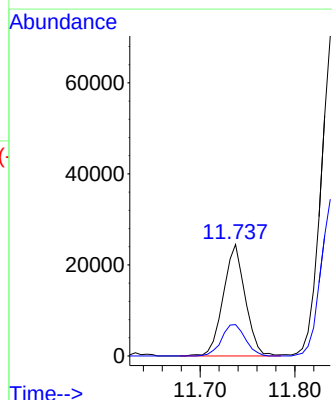
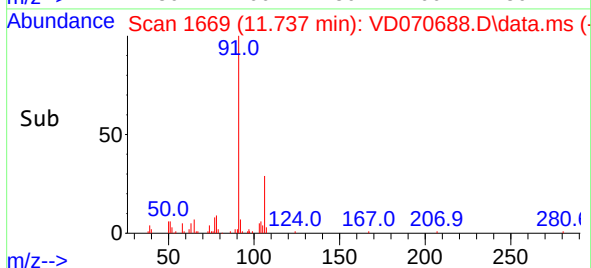
Tgt Ion:117 Resp: 123971  
Ion Ratio Lower Upper  
117 100  
82 56.0 45.4 68.2  
119 30.4 24.7 37.1

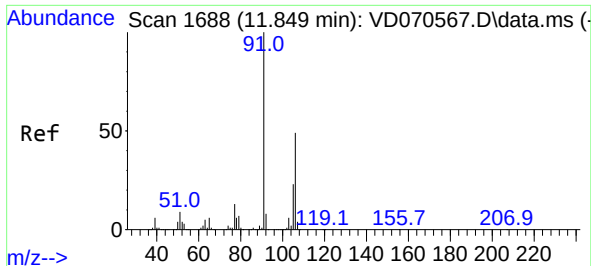


#67  
Ethyl Benzene  
Concen: 8.66 ug/l  
RT: 11.737 min Scan# 1669  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24



Tgt Ion: 91 Resp: 39499  
Ion Ratio Lower Upper  
91 100  
106 28.1 24.2 36.2

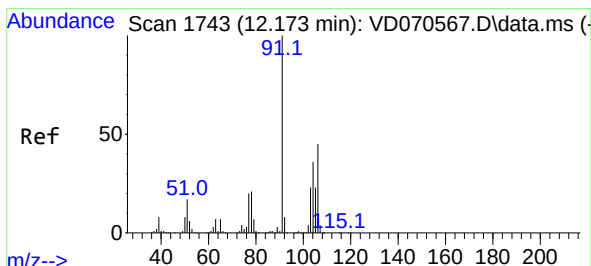
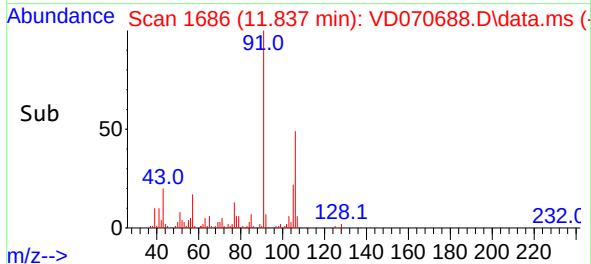
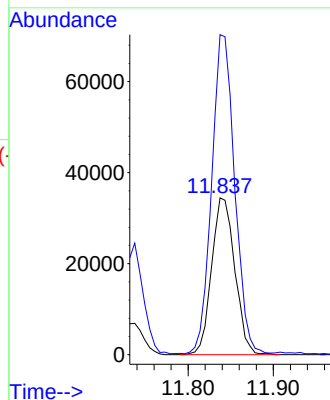
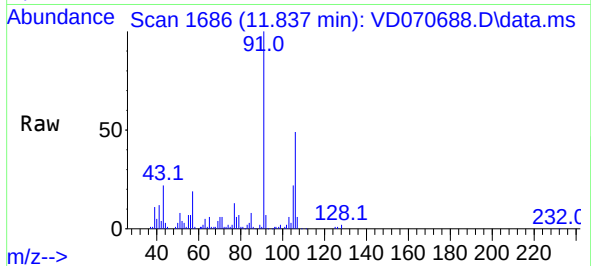




#68  
m/p-Xylenes  
Concen: 36.26 ug/l  
RT: 11.837 min Scan# 1686  
Delta R.T. -0.012 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

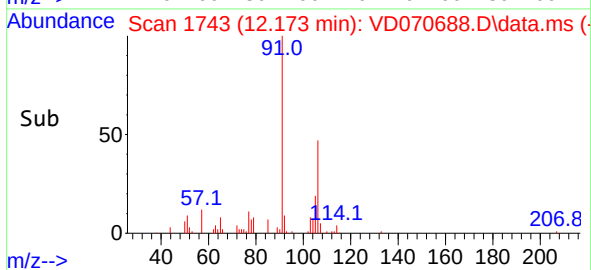
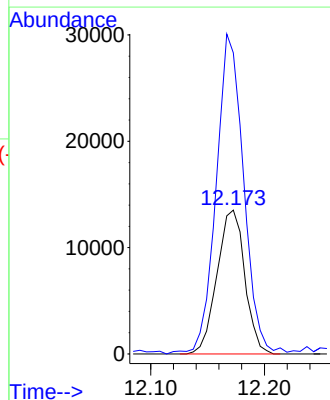
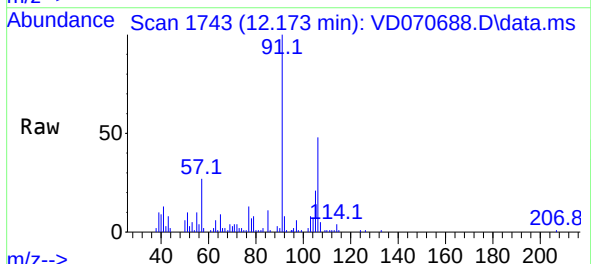
Instrument :  
MSVOA\_D  
ClientSampled :  
31123

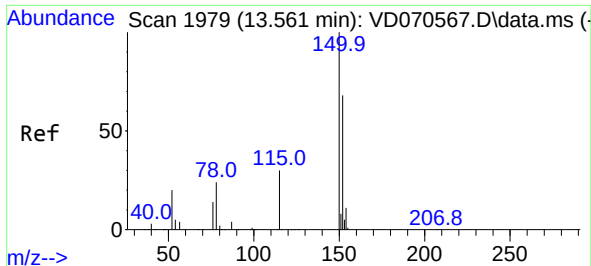
Tgt Ion:106 Resp: 65146  
Ion Ratio Lower Upper  
106 100  
91 201.5 162.7 244.1



#69  
o-Xylene  
Concen: 14.37 ug/l  
RT: 12.173 min Scan# 1743  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion:106 Resp: 22954  
Ion Ratio Lower Upper  
106 100  
91 220.1 107.8 323.6

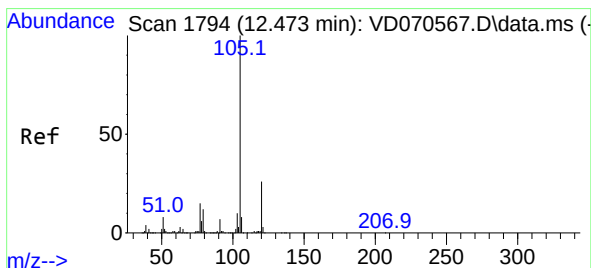
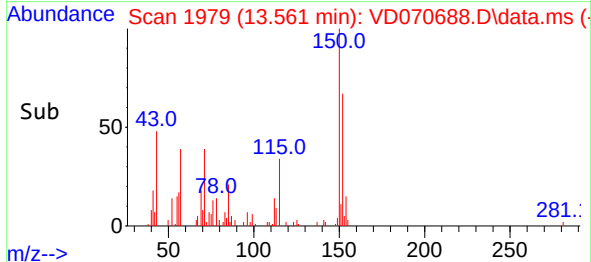
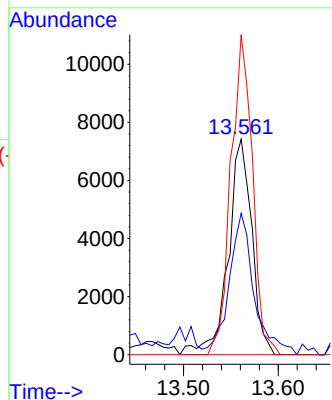
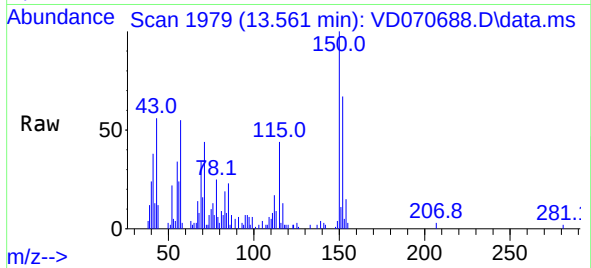




#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 13.561 min Scan# 1799  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

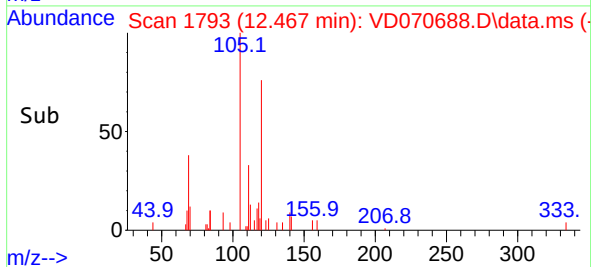
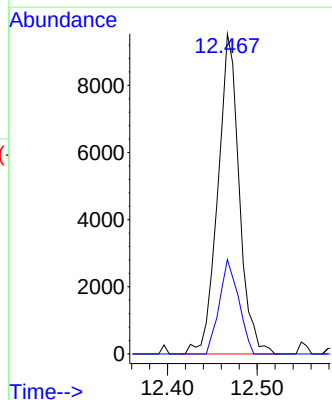
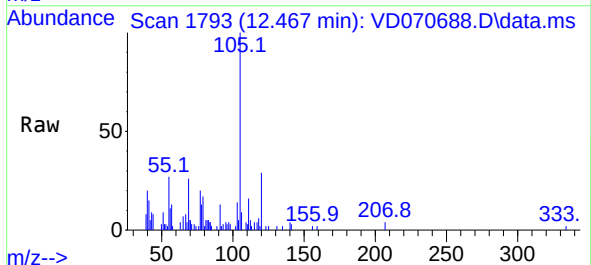
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

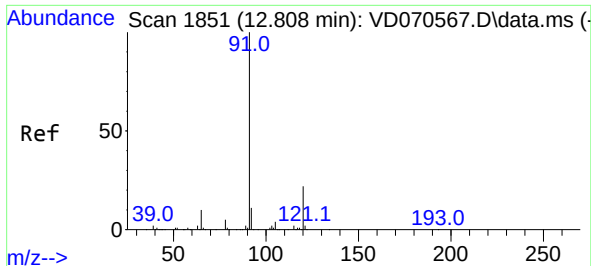
Tgt Ion:152 Resp: 12823  
Ion Ratio Lower Upper  
152 100  
115 69.7 31.9 95.7  
150 136.1 0.0 350.0



#73  
Isopropylbenzene  
Concen: 16.89 ug/l  
RT: 12.467 min Scan# 1793  
Delta R.T. -0.006 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion:105 Resp: 15789  
Ion Ratio Lower Upper  
105 100  
120 26.5 12.8 38.3

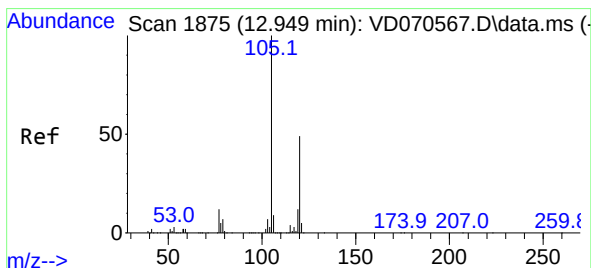
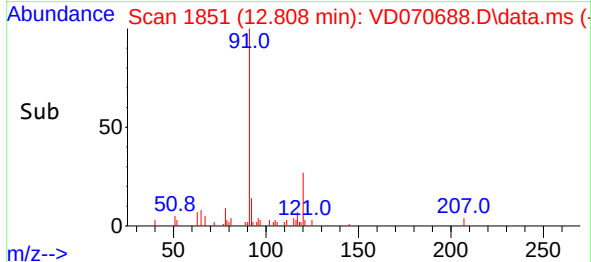
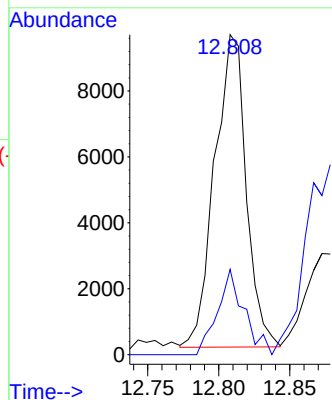
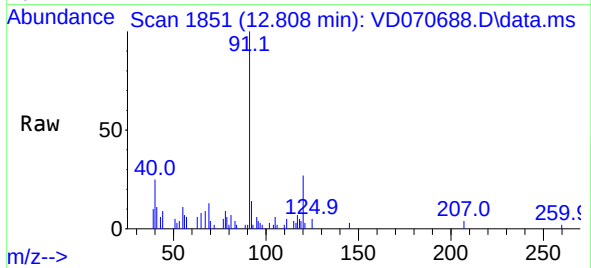




#78  
n-propylbenzene  
Concen: 12.37 ug/l  
RT: 12.808 min Scan# 1851  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

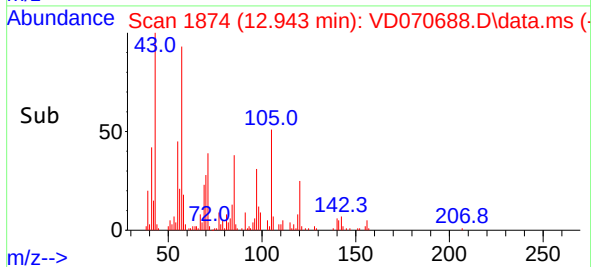
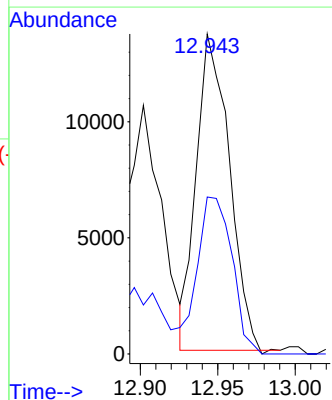
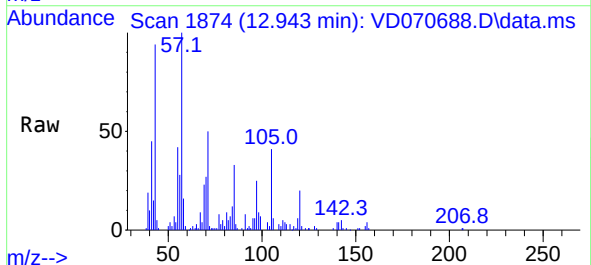
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

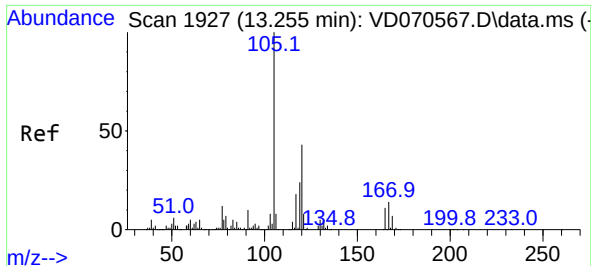
Tgt Ion: 91 Resp: 14635  
Ion Ratio Lower Upper  
91 100  
120 23.0 10.9 32.6



#80  
1,3,5-Trimethylbenzene  
Concen: 25.28 ug/l  
RT: 12.943 min Scan# 1874  
Delta R.T. -0.006 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion: 105 Resp: 20153  
Ion Ratio Lower Upper  
105 100  
120 53.9 24.4 73.2

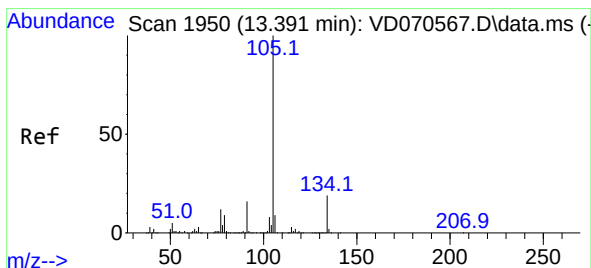
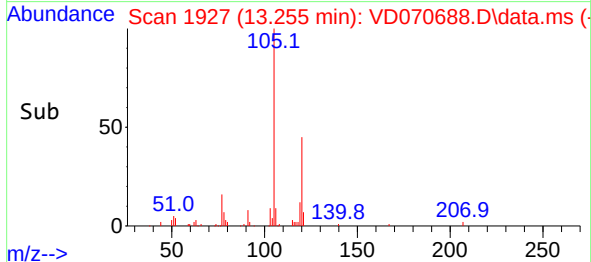
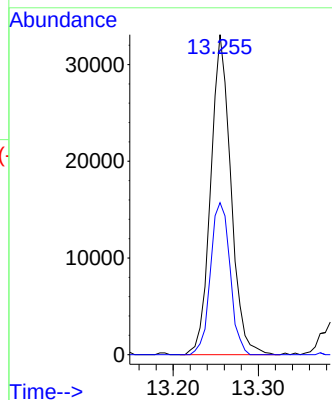
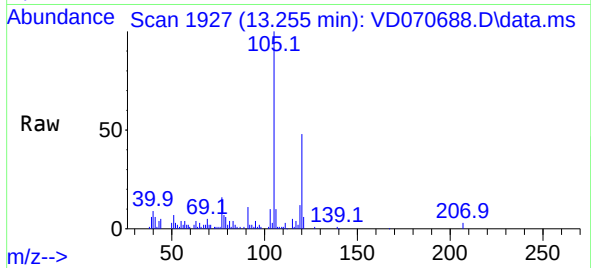




#84  
1,2,4-Trimethylbenzene  
Concen: 68.61 ug/l  
RT: 13.255 min Scan# 1927  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

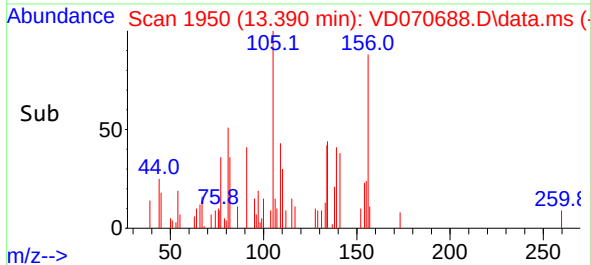
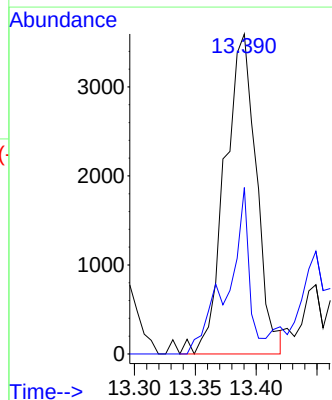
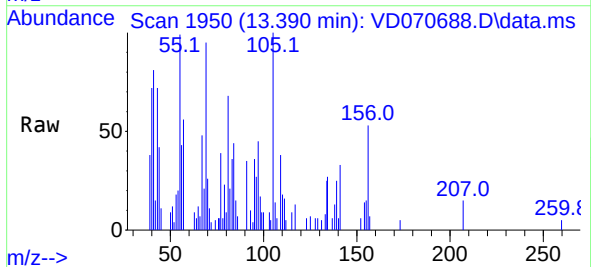
Instrument :  
MSVOA\_D  
ClientSampled :  
31123

Tgt Ion:105 Resp: 54431  
Ion Ratio Lower Upper  
105 100  
120 46.0 21.9 65.8

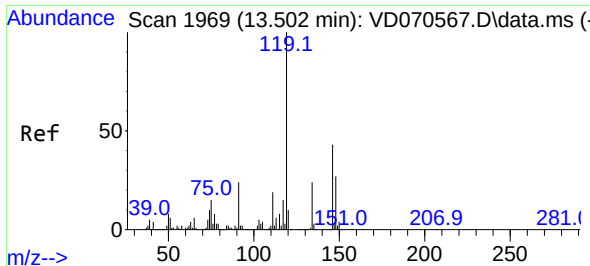


#85  
sec-Butylbenzene  
Concen: 6.36 ug/l  
RT: 13.390 min Scan# 1950  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Tgt Ion:105 Resp: 6497  
Ion Ratio Lower Upper  
105 100  
134 36.1 9.3 28.0#



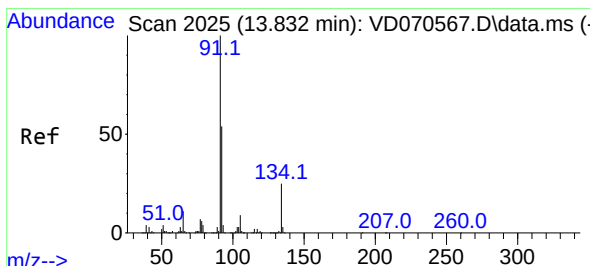
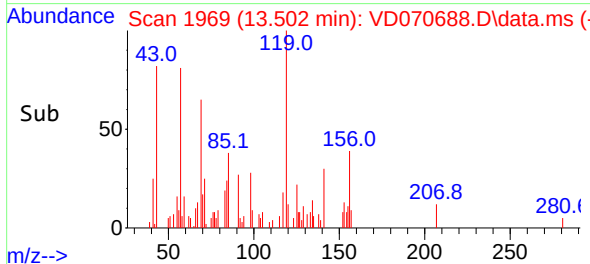
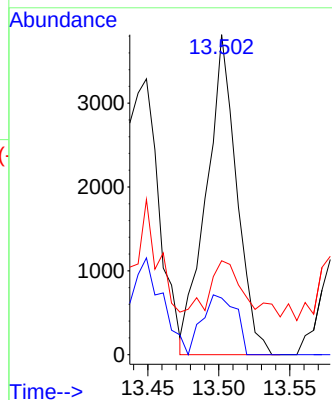
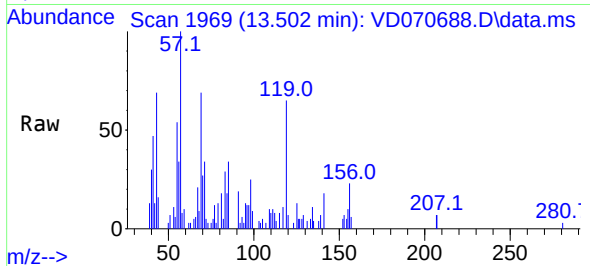




#86  
p-Isopropyltoluene  
Concen: 6.78 ug/l  
RT: 13.502 min Scan# 1969  
Delta R.T. -0.000 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

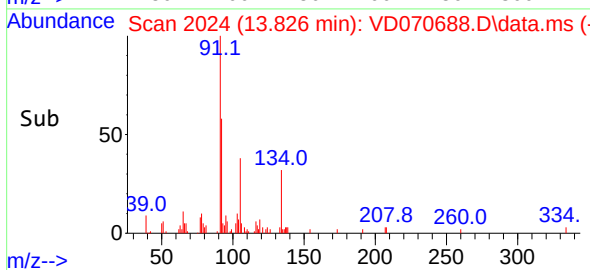
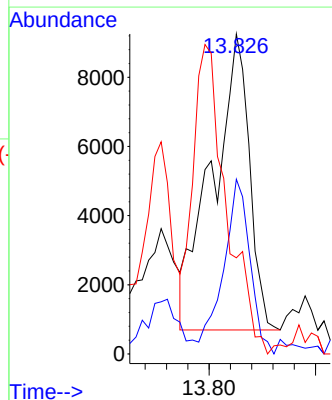
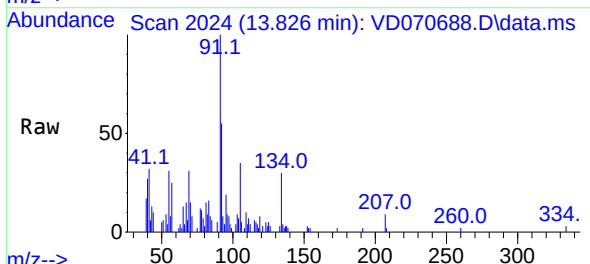
Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

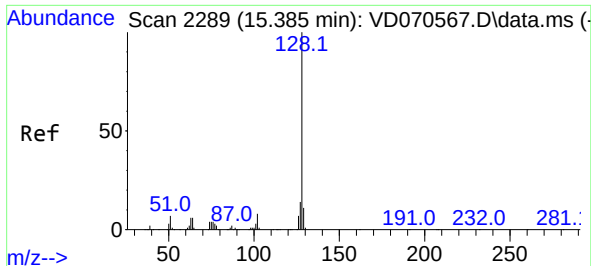
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 119   | Resp: | 5656  |
| Ion      | Ratio | Lower | Upper |
| 119      | 100   |       |       |
| 134      | 20.6  | 12.5  | 37.5  |
| 91       | 19.4  | 11.9  | 35.5  |



#89  
n-Butylbenzene  
Concen: 26.03 ug/l  
RT: 13.826 min Scan# 2024  
Delta R.T. -0.006 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 20730 |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 92       | 41.9  | 26.8  | 80.4  |
| 134      | 0.0   | 12.2  | 36.4# |





#95  
Naphthalene  
Concen: 22.92 ug/l  
RT: 15.378 min Scan# 2288  
Delta R.T. -0.007 min  
Lab File: VD070688.D  
Acq: 12 Oct 2021 19:24

Instrument :  
MSVOA\_D  
ClientSampleId :  
31123

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 8742  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 15.6  | 10.9  | 16.3  |
| 129      | 17.6  | 8.6   | 12.8# |

