

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU100621\  
 Data File : VU0451181.D  
 Acq On : 06 Oct 2021 13:25  
 Operator : SY/MD  
 Sample : M3996-04 4X  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Oct 07 03:02:00 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM092321WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Oct 07 03:00:32 2021  
 Response via : Initial Calibration

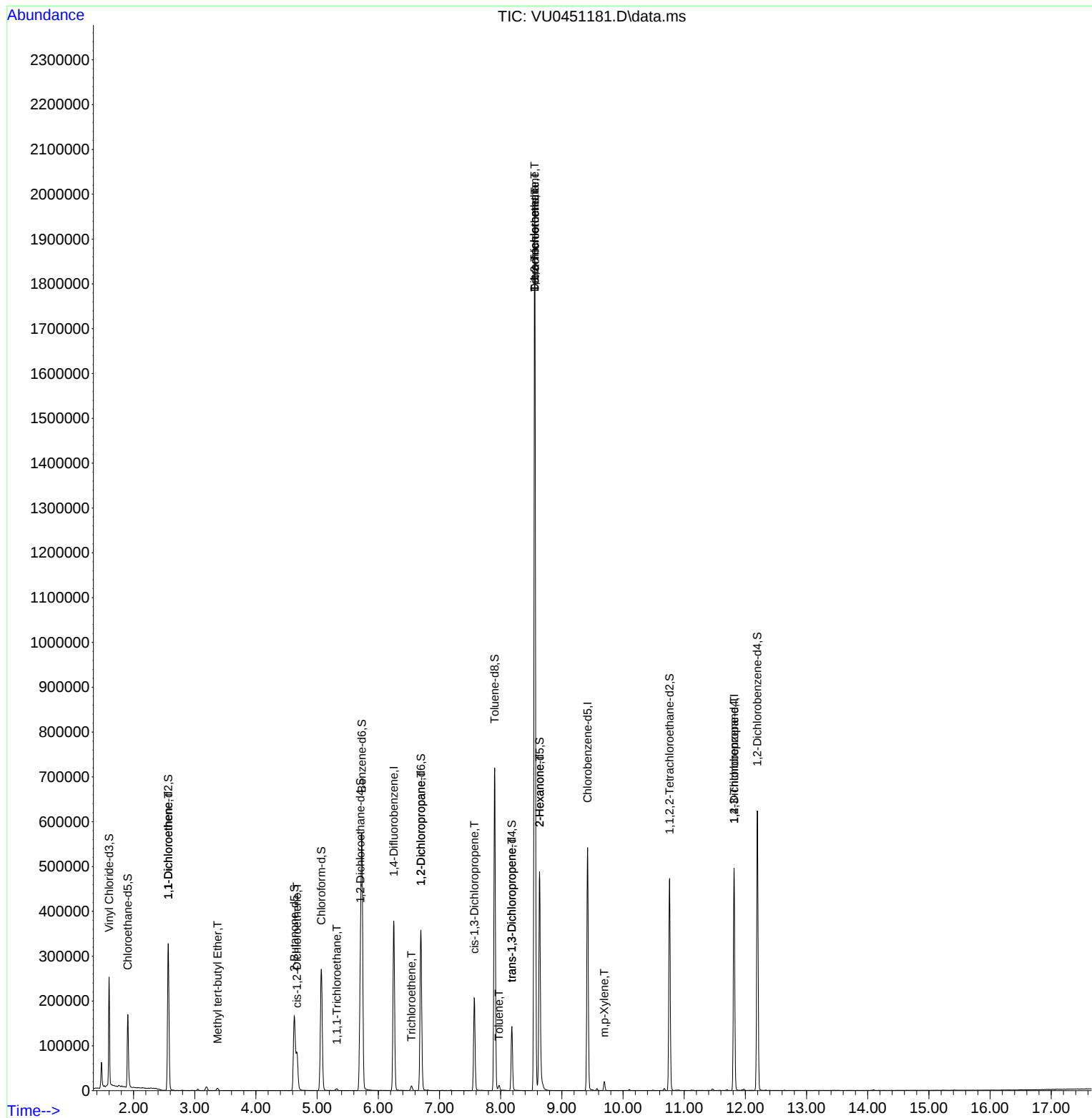
| Compound                      | R.T.    | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|---------|-------|----------|----------|--------|----------|
| -----                         |         |       |          |          |        |          |
| Internal Standards            |         |       |          |          |        |          |
| 1) 1,4-Difluorobenzene        | 6.253   | 114   | 291407   | 50.000   | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 9.420   | 117   | 280319   | 50.000   | ug/L   | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.816  | 152   | 123052   | 50.000   | ug/L   | 0.00     |
|                               |         |       |          |          |        |          |
| System Monitoring Compounds   |         |       |          |          |        |          |
| 4) Vinyl Chloride-d3          | 1.601   | 65    | 159555   | 50.016   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 135 | Recovery | =      | 100.040% |
| 7) Chloroethane-d5            | 1.906   | 69    | 126395   | 50.000   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 130 | Recovery | =      | 100.000% |
| 11) 1,1-Dichloroethene-d2     | 2.565   | 63    | 199855   | 37.306   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 74.620%  |
| 21) 2-Butanone-d5             | 4.626   | 46    | 238948   | 94.746   | ug/L   | 0.00     |
| Spiked Amount                 | 100.000 | Range | 40 - 130 | Recovery | =      | 94.750%  |
| 24) Chloroform-d              | 5.070   | 84    | 245898   | 48.805   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 97.620%  |
| 26) 1,2-Dichloroethane-d4     | 5.707   | 65    | 173166   | 50.740   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 101.480% |
| 32) Benzene-d6                | 5.732   | 84    | 510352   | 52.468   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 104.940% |
| 36) 1,2-Dichloropropane-d6    | 6.697   | 67    | 161967   | 51.067   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 120 | Recovery | =      | 102.140% |
| 41) Toluene-d8                | 7.903   | 98    | 452654   | 53.924   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 107.840% |
| 43) trans-1,3-Dichloroprop... | 8.182   | 79    | 74499    | 52.805   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 105.600% |
| 47) 2-Hexanone-d5             | 8.636   | 63    | 167717   | 95.422   | ug/L   | 0.00     |
| Spiked Amount                 | 100.000 | Range | 45 - 130 | Recovery | =      | 95.420%  |
| 56) 1,1,2,2-Tetrachloroeth... | 10.761  | 84    | 235472   | 47.678   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 65 - 120 | Recovery | =      | 95.360%  |
| 66) 1,2-Dichlorobenzene-d4    | 12.195  | 152   | 151316   | 56.504   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 113.000% |
|                               |         |       |          |          |        |          |
| Target Compounds              |         |       |          |          |        | Qvalue   |
| 12) 1,1-Dichloroethene        | 2.568   | 96    | 2413     | 1.069    | ug/L # | 1        |
| 18) Methyl tert-butyl Ether   | 3.372   | 73    | 5163     | 0.659    | ug/L   | 99       |
| 20) cis-1,2-Dichloroethene    | 4.671   | 96    | 37583    | 14.348   | ug/L   | 90       |
| 30) 1,1,1-Trichloroethane     | 5.321   | 97    | 2906     | 0.749    | ug/L   | 94       |
| 34) Trichloroethene           | 6.543   | 95    | 2632     | 1.054    | ug/L   | 94       |
| 37) 1,2-Dichloropropane       | 6.697   | 63    | 18649    | 6.588    | ug/L # | 88       |
| 39) cis-1,3-Dichloropropene   | 7.568   | 75    | 4940     | 1.220    | ug/L # | 65       |
| 42) Toluene                   | 7.973   | 91    | 7207     | 0.682    | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene | 8.182   | 75    | 3258     | 0.846    | ug/L # | 81       |
| 45) 1,1,2-Trichloroethane     | 8.555   | 97    | 3832     | 1.494    | ug/L # | 1        |
| 46) Tetrachloroethene         | 8.559   | 164   | 418261   | 234.329  | ug/L   | 98       |
| 48) 2-Hexanone                | 8.636   | 43    | 22698    | 5.413    | ug/L # | 68       |
| 49) Dibromochloromethane      | 8.555   | 129   | 405340   | 159.761  | ug/L # | 11       |
| 53) m,p-Xylene                | 9.694   | 106   | 5812     | 1.375    | ug/L   | 97       |
| 60) 1,2,3-Trichloropropane    | 11.816  | 75    | 16593    | 4.875    | ug/L # | 70       |
| -----                         |         |       |          |          |        |          |

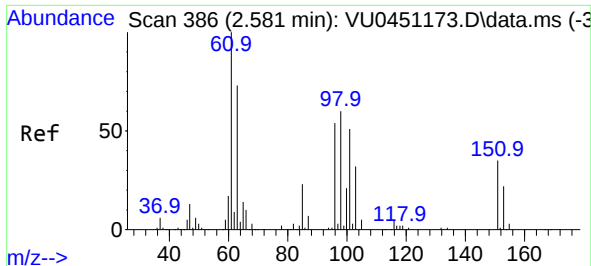
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU100621\  
Data File : VU0451181.D  
Acq On : 06 Oct 2021 13:25  
Operator : SY/MD  
Sample : M3996-04 4X  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: Oct 07 03:02:00 2021  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM092321WMA.M  
Quant Title : VOC Analysis  
QLast Update : Thu Oct 07 03:00:32 2021  
Response via : Initial Calibration





#12

1,1-Dichloroethene

Concen: 1.069 ug/L

RT: 2.568 min Scan# 382

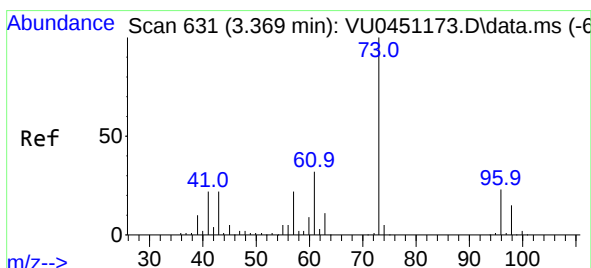
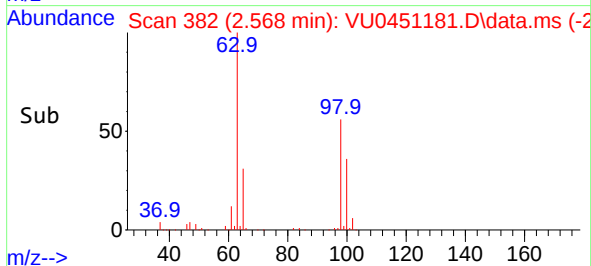
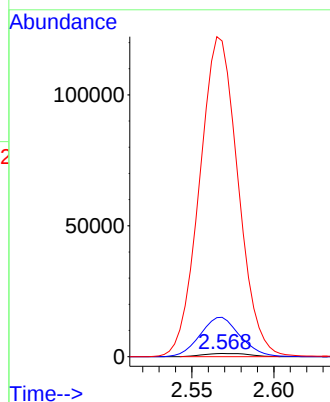
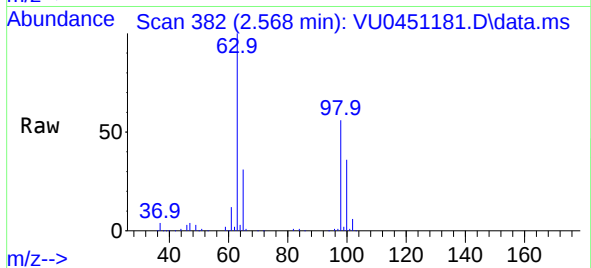
Delta R.T. -0.013 min

Lab File: VU0451181.D

Acq: 06 Oct 2021 13:25

|          |        |       |        |
|----------|--------|-------|--------|
| Tgt Ion: | 96     | Resp: | 2413   |
| Ion      | Ratio  | Lower | Upper  |
| 96       | 100    |       |        |
| 61       | 1225.5 | 131.3 | 243.9# |
| 63       | 9828.2 | 102.5 | 190.3# |

Instrument :  
MSVOA\_U  
ClientSampled :



#18

Methyl tert-butyl Ether

Concen: 0.659 ug/L

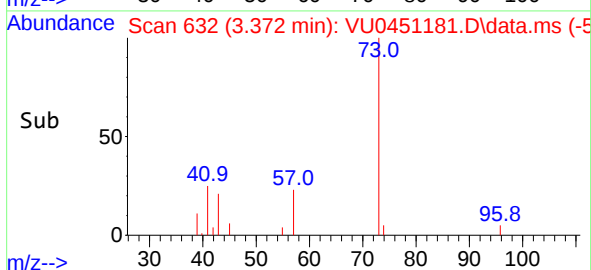
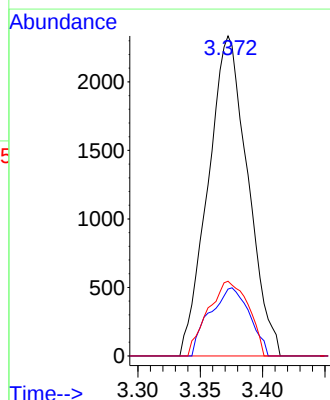
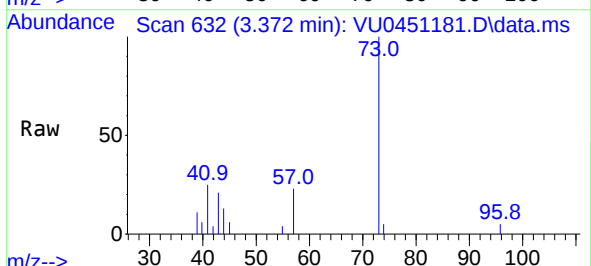
RT: 3.372 min Scan# 632

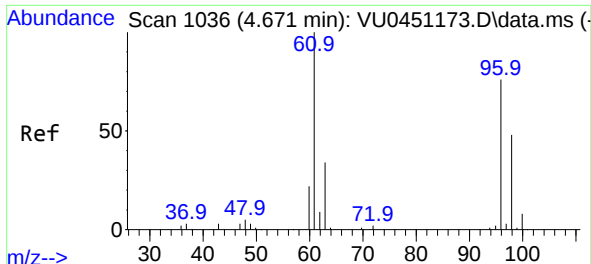
Delta R.T. 0.003 min

Lab File: VU0451181.D

Acq: 06 Oct 2021 13:25

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 73    | Resp: | 5163  |
| Ion      | Ratio | Lower | Upper |
| 73       | 100   |       |       |
| 43       | 21.4  | 17.3  | 25.9  |
| 57       | 23.8  | 18.7  | 28.1  |



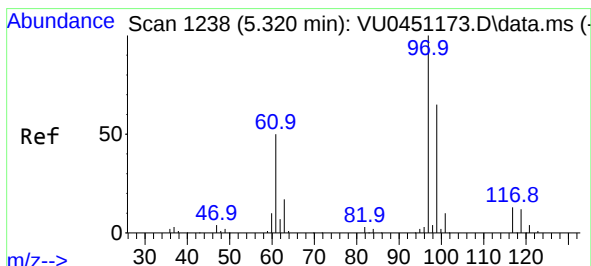
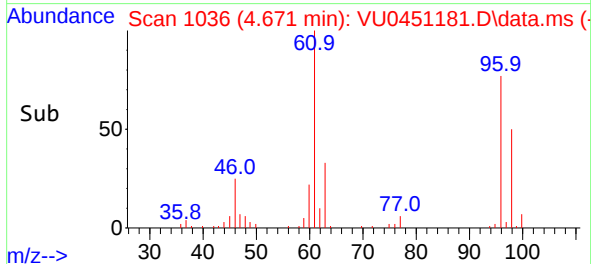
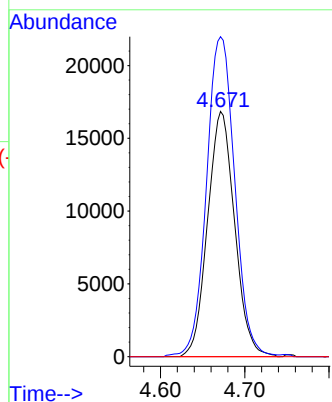
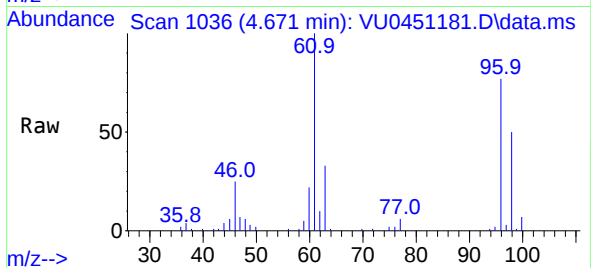


#20  
 cis-1,2-Dichloroethene  
 Concen: 14.348 ug/L  
 RT: 4.671 min Scan# 1036  
 Delta R.T. 0.000 min  
 Lab File: VU0451181.D  
 Acq: 06 Oct 2021 13:25

Instrument :  
 MSVOA\_U  
 ClientSampled :

Tgt Ion: 96 Resp: 37583  

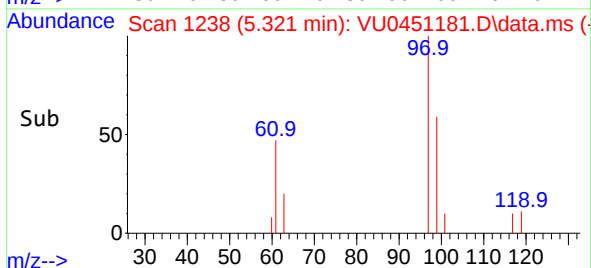
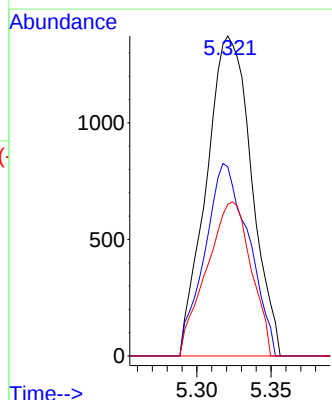
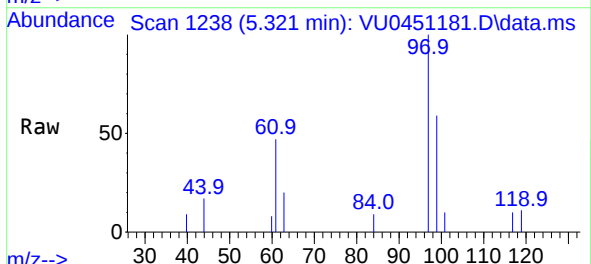
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 130.5 | 100.2 | 186.0 |
| 68  | 0.0   | 0.0   | 0.0   |

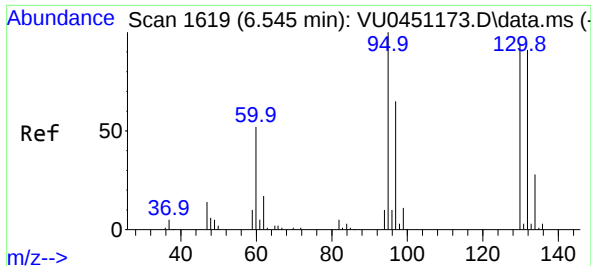


#30  
 1,1,1-Trichloroethane  
 Concen: 0.749 ug/L  
 RT: 5.321 min Scan# 1238  
 Delta R.T. 0.000 min  
 Lab File: VU0451181.D  
 Acq: 06 Oct 2021 13:25

Tgt Ion: 97 Resp: 2906  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 99  | 58.5  | 50.6  | 75.8  |
| 61  | 47.4  | 41.3  | 61.9  |

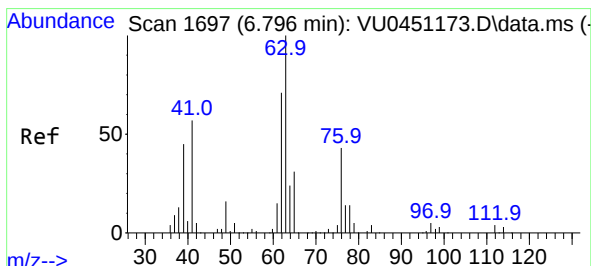
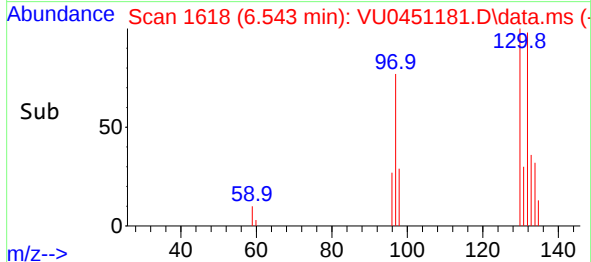
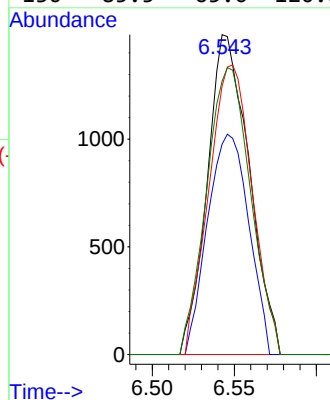
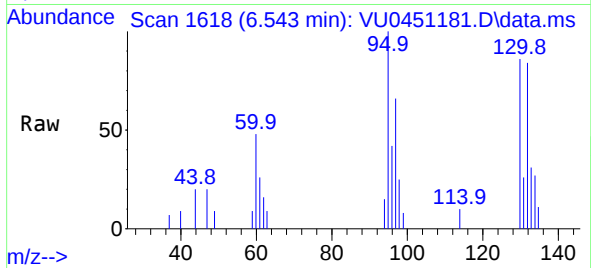




#34  
Trichloroethene  
Concen: 1.054 ug/L  
RT: 6.543 min Scan# 1618  
Delta R.T. -0.003 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

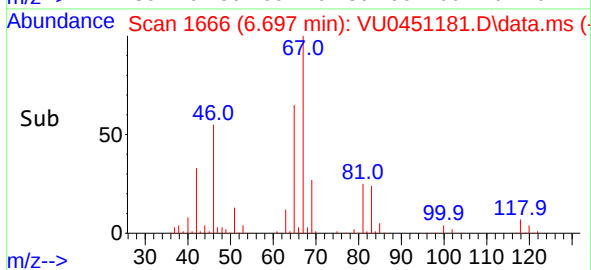
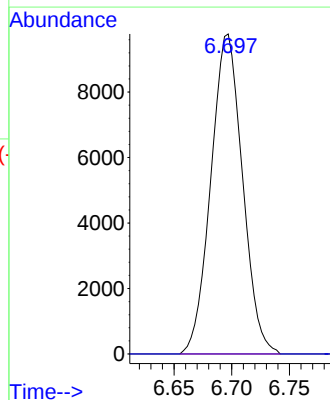
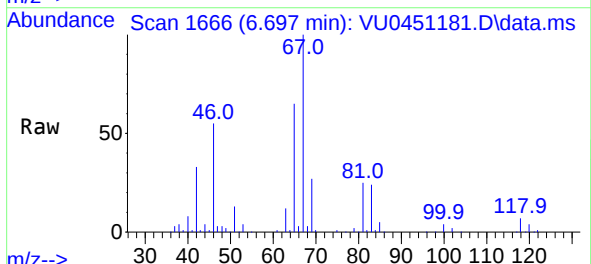
Instrument :  
MSVOA\_U  
ClientSampled :

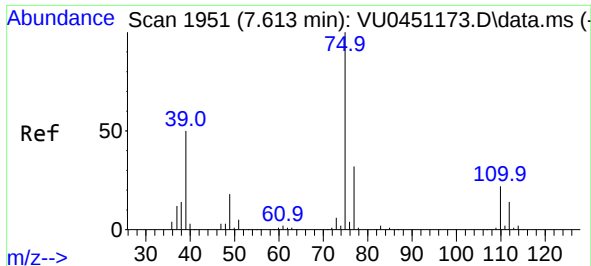
Tgt Ion: 95 Resp: 2632  
Ion Ratio Lower Upper  
95 100  
97 65.8 44.4 82.4  
132 84.0 62.9 116.9  
130 85.5 65.0 120.8



#37  
1,2-Dichloropropane  
Concen: 6.588 ug/L  
RT: 6.697 min Scan# 1666  
Delta R.T. -0.099 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

Tgt Ion: 63 Resp: 18649  
Ion Ratio Lower Upper  
63 100  
112 0.0 3.2 4.8#

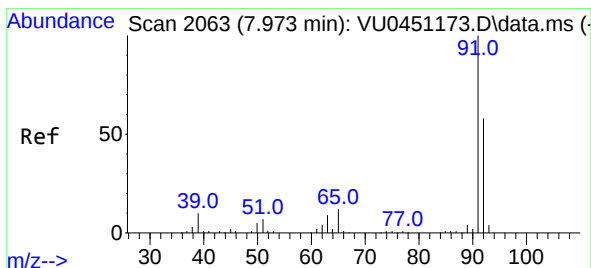
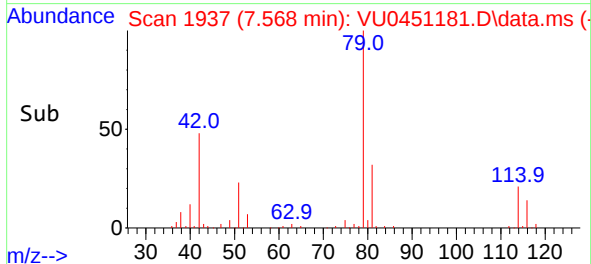
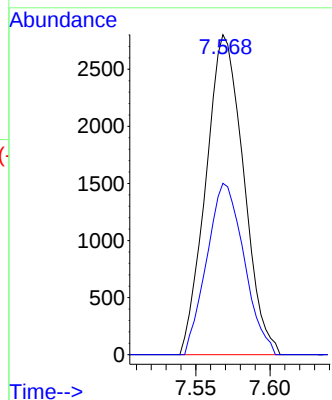
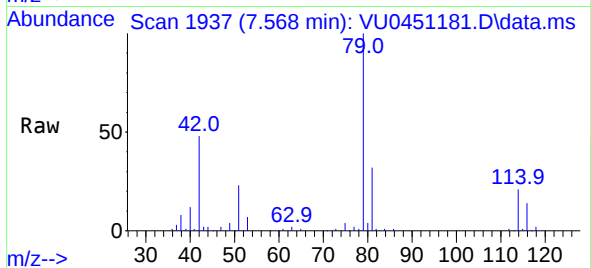




#39  
 cis-1,3-Dichloropropene  
 Concen: 1.220 ug/L  
 RT: 7.568 min Scan# 1937  
 Delta R.T. -0.045 min  
 Lab File: VU0451181.D  
 Acq: 06 Oct 2021 13:25

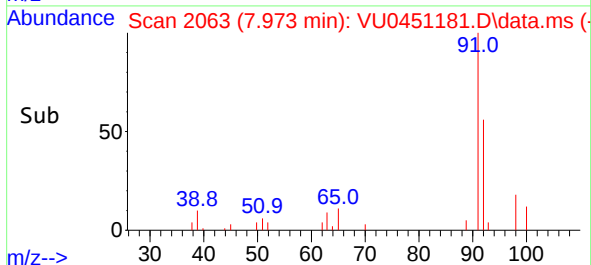
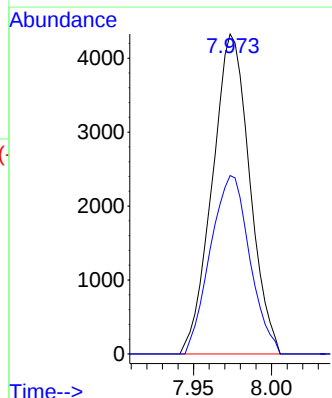
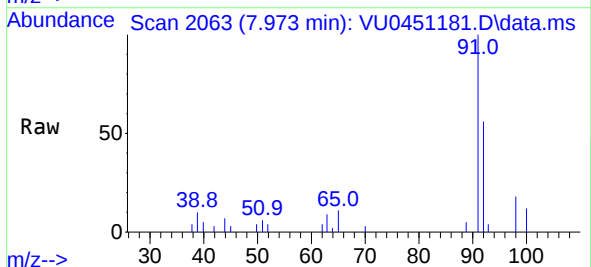
Instrument :  
 MSVOA\_U  
 ClientSampled :

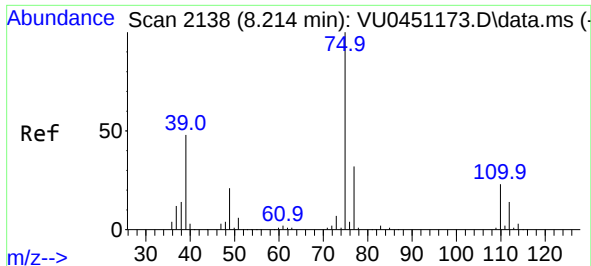
Tgt Ion: 75 Resp: 4940  
 Ion Ratio Lower Upper  
 75 100  
 77 51.5 22.4 41.6#



#42  
 Toluene  
 Concen: 0.682 ug/L  
 RT: 7.973 min Scan# 2063  
 Delta R.T. 0.000 min  
 Lab File: VU0451181.D  
 Acq: 06 Oct 2021 13:25

Tgt Ion: 91 Resp: 7207  
 Ion Ratio Lower Upper  
 91 100  
 92 55.8 40.5 75.1

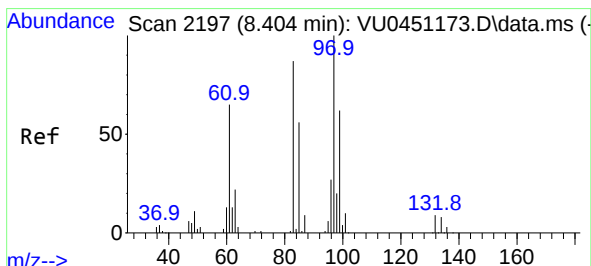
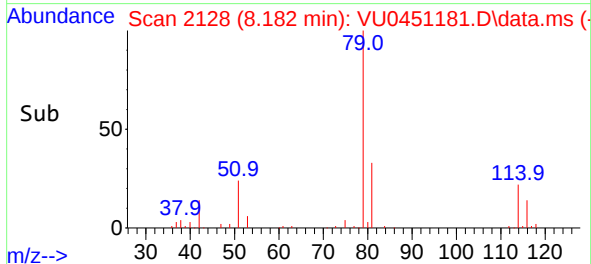
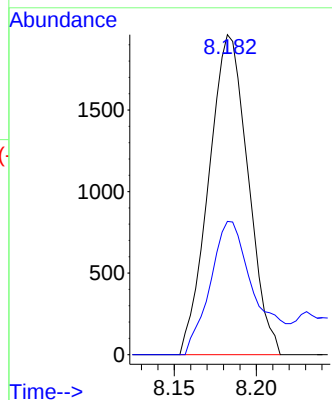
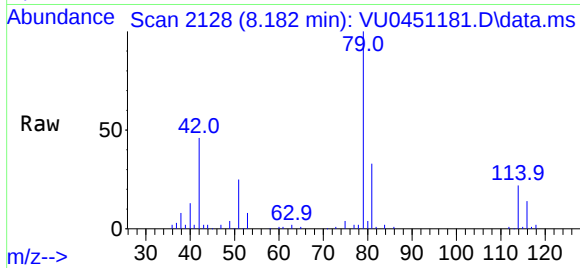




#44  
trans-1,3-Dichloropropene  
Concen: 0.846 ug/L  
RT: 8.182 min Scan# 2128  
Delta R.T. -0.032 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

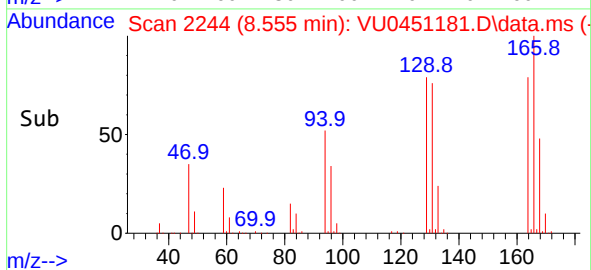
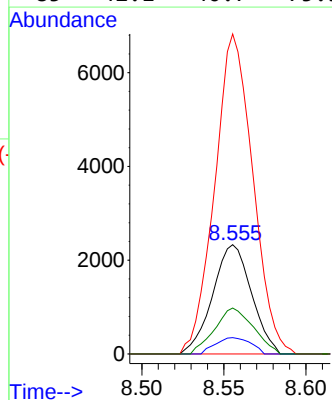
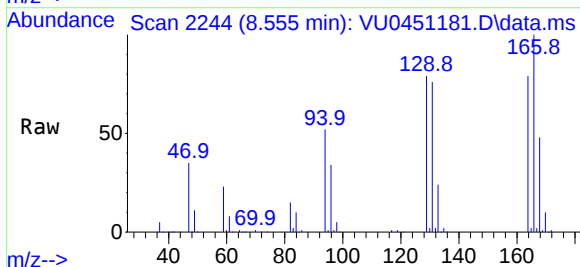
Instrument :  
MSVOA\_U  
ClientSampled :

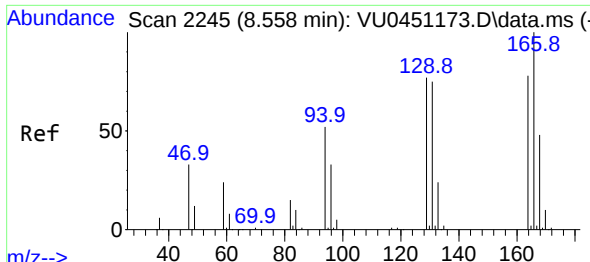
Tgt Ion: 75 Resp: 3258  
Ion Ratio Lower Upper  
75 100  
77 41.6 21.7 40.3#



#45  
1,1,2-Trichloroethane  
Concen: 1.494 ug/L  
RT: 8.555 min Scan# 2244  
Delta R.T. 0.151 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

Tgt Ion: 97 Resp: 3832  
Ion Ratio Lower Upper  
97 100  
99 14.9 43.7 81.1#  
83 292.8 61.9 115.1#  
85 42.1 40.7 75.5

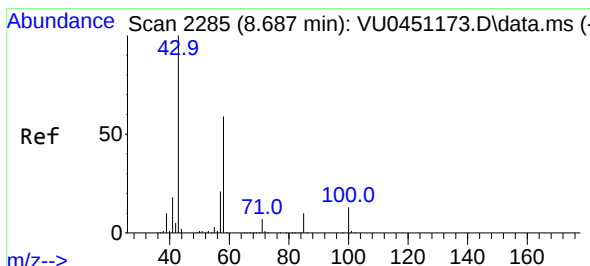
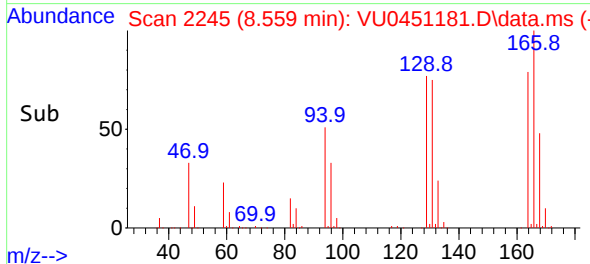
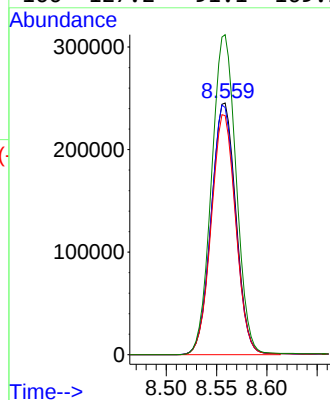
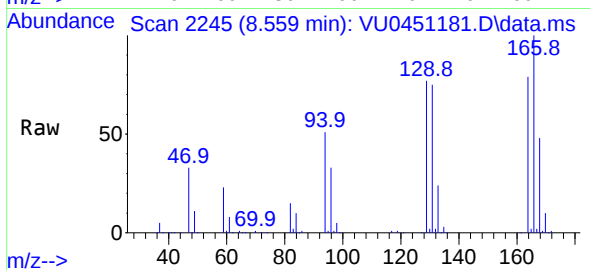




#46  
Tetrachloroethene  
Concen: 234.329 ug/L  
RT: 8.559 min Scan# 2245  
Delta R.T. 0.000 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

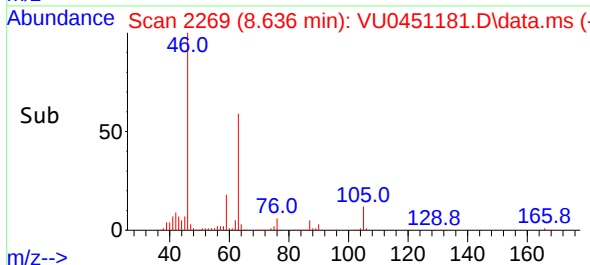
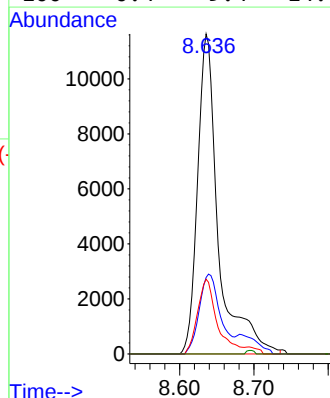
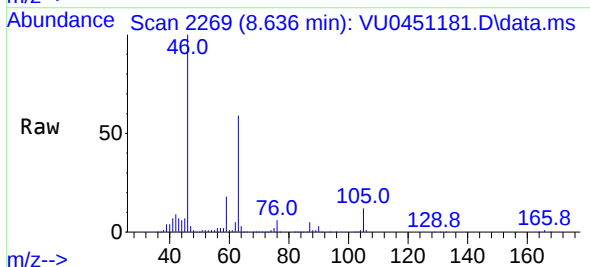
Instrument :  
MSVOA\_U  
ClientSampled :

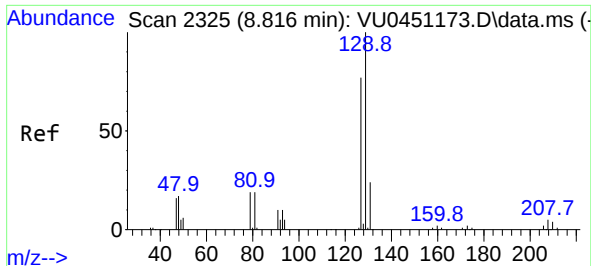
Tgt Ion:164 Resp: 418261  
Ion Ratio Lower Upper  
164 100  
129 98.3 69.8 129.6  
131 95.0 66.4 123.2  
166 127.2 91.1 169.3



#48  
2-Hexanone  
Concen: 5.413 ug/L  
RT: 8.636 min Scan# 2269  
Delta R.T. -0.051 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

Tgt Ion: 43 Resp: 22698  
Ion Ratio Lower Upper  
43 100  
58 25.4 44.9 67.3#  
57 22.1 15.5 23.3  
100 0.4 9.4 14.0#

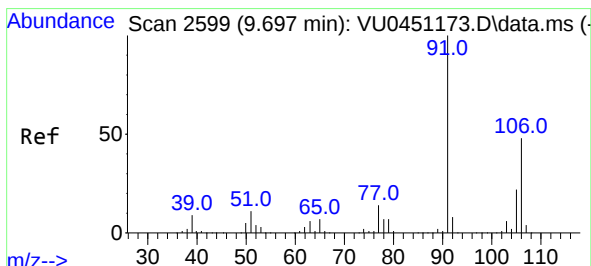
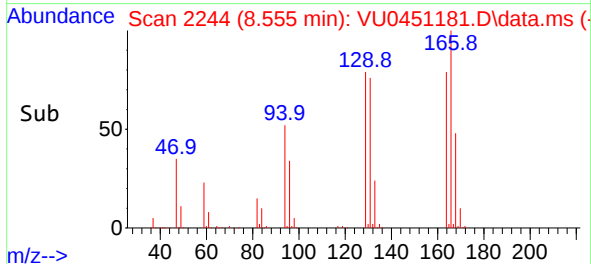
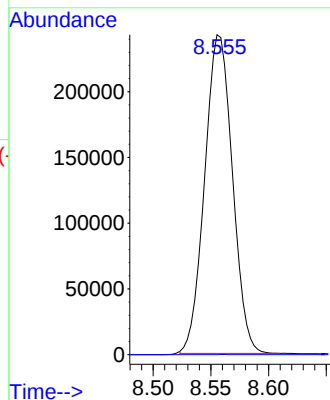
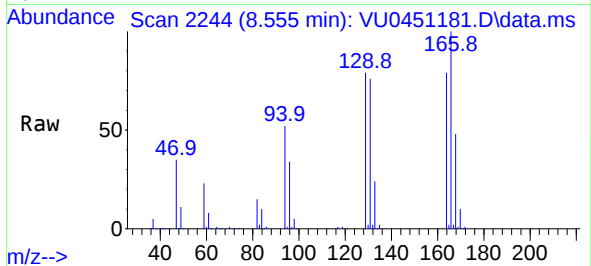




#49  
Dibromochloromethane  
Concen: 159.761 ug/L  
RT: 8.555 min Scan# 2244  
Delta R.T. -0.260 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

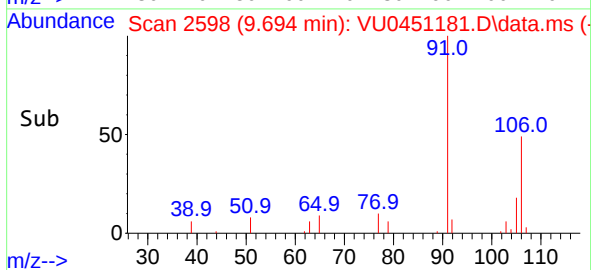
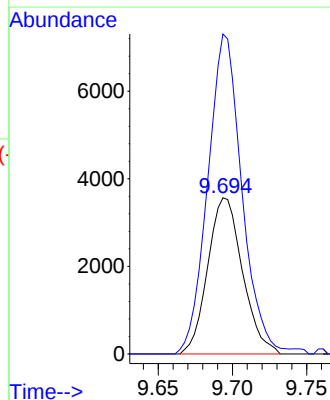
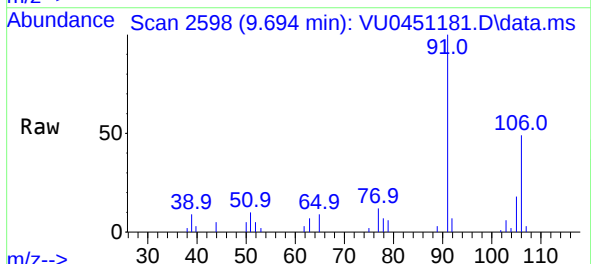
Instrument :  
MSVOA\_U  
ClientSampled :

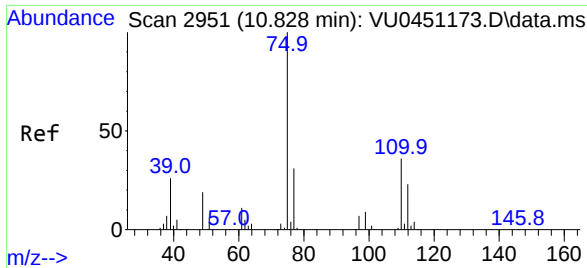
Tgt Ion:129 Resp: 405340  
Ion Ratio Lower Upper  
129 100  
127 0.0 54.3 100.8#



#53  
m,p-Xylene  
Concen: 1.375 ug/L  
RT: 9.694 min Scan# 2598  
Delta R.T. -0.003 min  
Lab File: VU0451181.D  
Acq: 06 Oct 2021 13:25

Tgt Ion:106 Resp: 5812  
Ion Ratio Lower Upper  
106 100  
91 204.9 146.7 272.4





#60  
 1,2,3-Trichloropropane  
 Concen: 4.875 ug/L  
 RT: 11.816 min Scan# 3258  
 Delta R.T. 0.987 min  
 Lab File: VU0451181.D  
 Acq: 06 Oct 2021 13:25

Instrument :  
 MSVOA\_U  
 ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 16593 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 32.3  | 25.5  | 38.3  |
| 110      | 2.8   | 29.0  | 43.4# |

