

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU121321\  
 Data File : VU046341.D  
 Acq On : 14 Dec 2021 00:57  
 Operator : SY/MD  
 Sample : M5023-20ME 20X  
 Misc : 6.26g/5.0mL/100uL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 41 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BGKZ8ME

Quant Time: Dec 14 03:56:45 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM112921WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Dec 14 03:19:41 2021  
 Response via : Initial Calibration

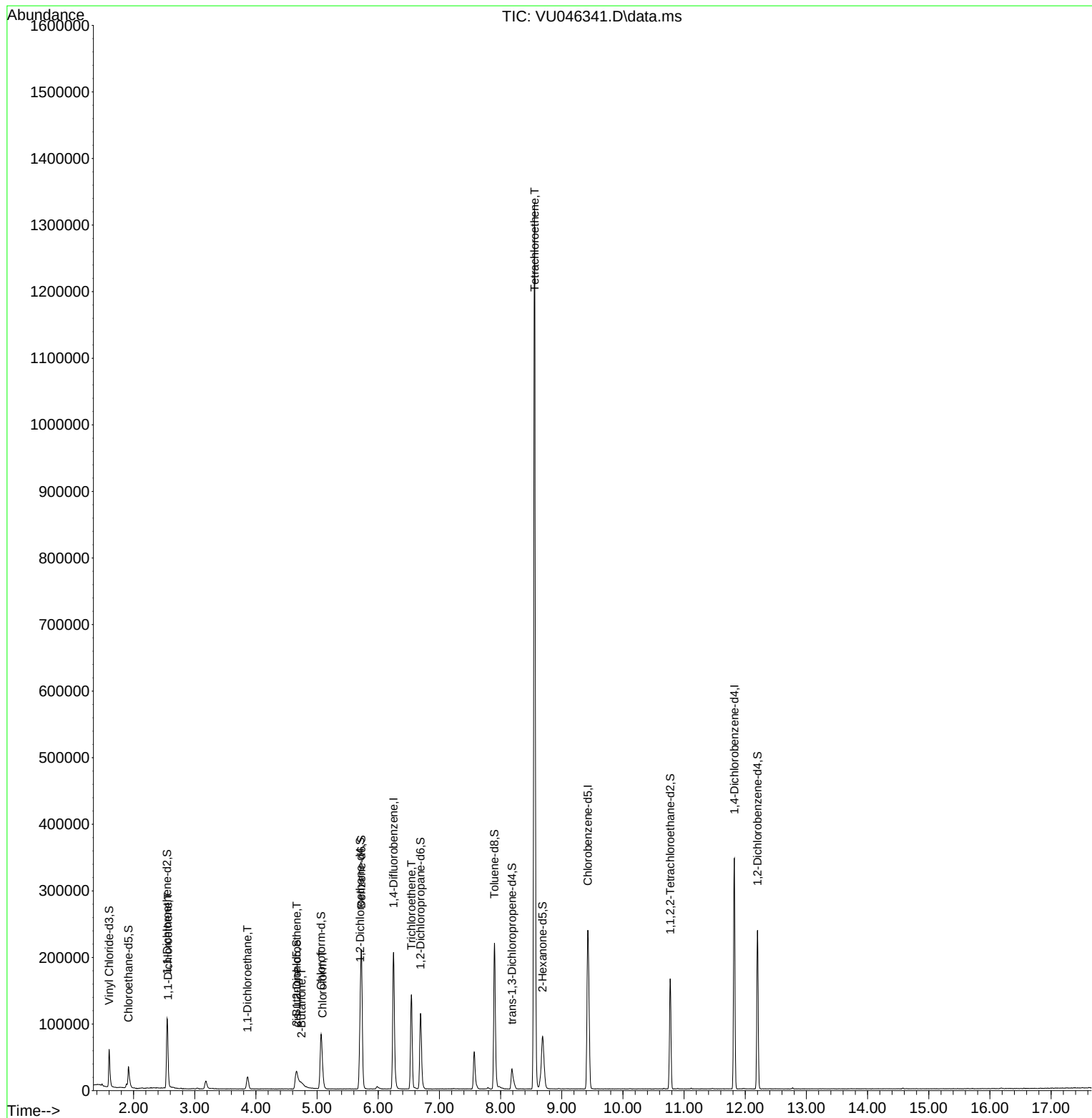
| Compound                      | R.T.    | QIon  | Response | Conc     | Units | Dev(Min) |
|-------------------------------|---------|-------|----------|----------|-------|----------|
| -----                         |         |       |          |          |       |          |
| Internal Standards            |         |       |          |          |       |          |
| 1) 1,4-Difluorobenzene        | 6.250   | 114   | 181889   | 50.000   | ug/L  | 0.00     |
| 28) Chlorobenzene-d5          | 9.426   | 117   | 188788   | 50.000   | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.822  | 152   | 89985    | 50.000   | ug/L  | 0.00     |
|                               |         |       |          |          |       |          |
| System Monitoring Compounds   |         |       |          |          |       |          |
| 4) Vinyl Chloride-d3          | 1.600   | 65    | 50944    | 34.001   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 135 | Recovery | =     | 68.000%  |
| 7) Chloroethane-d5            | 1.916   | 69    | 33475    | 29.099   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 130 | Recovery | =     | 58.200%# |
| 11) 1,1-Dichloroethene-d2     | 2.549   | 63    | 61810    | 22.980   | ug/L  | -0.03    |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =     | 45.960%# |
| 21) 2-Butanone-d5             | 4.665   | 46    | 67590    | 56.747   | ug/L  | 0.03     |
| Spiked Amount                 | 100.000 | Range | 40 - 130 | Recovery | =     | 56.750%  |
| 24) Chloroform-d              | 5.066   | 84    | 80872    | 32.322   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =     | 64.640%# |
| 26) 1,2-Dichloroethane-d4     | 5.703   | 65    | 63240    | 37.661   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =     | 75.320%  |
| 32) Benzene-d6                | 5.726   | 84    | 184737   | 34.141   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =     | 68.280%# |
| 36) 1,2-Dichloropropane-d6    | 6.690   | 67    | 58798    | 35.062   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 70 - 120 | Recovery | =     | 70.120%  |
| 41) Toluene-d8                | 7.899   | 98    | 164026   | 33.293   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =     | 66.580%# |
| 43) trans-1,3-Dichloroprop... | 8.185   | 79    | 28431    | 35.121   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =     | 70.240%  |
| 47) 2-Hexanone-d5             | 8.687   | 63    | 55639    | 69.977   | ug/L  | 0.05     |
| Spiked Amount                 | 100.000 | Range | 45 - 130 | Recovery | =     | 69.980%  |
| 56) 1,1,2,2-Tetrachloroeth... | 10.774  | 84    | 87846    | 34.542   | ug/L  | 0.02     |
| Spiked Amount                 | 50.000  | Range | 65 - 120 | Recovery | =     | 69.080%  |
| 66) 1,2-Dichlorobenzene-d4    | 12.201  | 152   | 60584    | 34.960   | ug/L  | 0.00     |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =     | 69.920%# |
|                               |         |       |          |          |       |          |
| Target Compounds              |         |       |          |          |       | Qvalue   |
| 12) 1,1-Dichloroethene        | 2.562   | 96    | 8059     | 6.408    | ug/L  | # 1      |
| 19) 1,1-Dichloroethane        | 3.861   | 63    | 22358    | 9.239    | ug/L  | 95       |
| 20) cis-1,2-Dichloroethene    | 4.668   | 96    | 1835     | 1.271    | ug/L  | 84       |
| 22) 2-Butanone                | 4.745   | 43    | 12971m   | 8.004    | ug/L  |          |
| 25) Chloroform                | 5.089   | 83    | 14719    | 5.474    | ug/L  | 96       |
| 34) Trichloroethene           | 6.542   | 95    | 50057    | 33.254   | ug/L  | 98       |
| 46) Tetrachloroethene         | 8.555   | 164   | 295076   | 266.748  | ug/L  | 99       |
| -----                         |         |       |          |          |       |          |

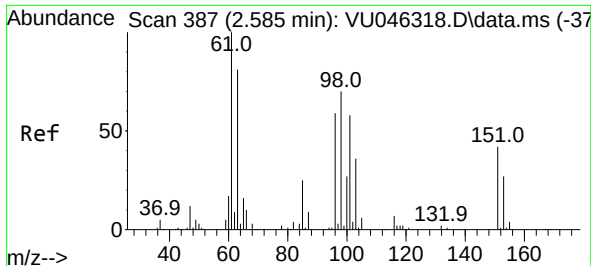
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU121321\  
Data File : VU046341.D  
Acq On : 14 Dec 2021 00:57  
Operator : SY/MD  
Sample : M5023-20ME 20X  
Misc : 6.26g/5.0mL/100uL/5.0mL/MSVOA\_U/MEOH  
ALS Vial : 41 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
BGKZ8ME

Quant Time: Dec 14 03:56:45 2021  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM112921WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Dec 14 03:19:41 2021  
Response via : Initial Calibration





#12

1,1-Dichloroethene

Concen: 6.408 ug/L

RT: 2.562 min Scan# 387

Delta R.T. -0.023 min

Lab File: VU046341.D

Acq: 14 Dec 2021 00:57

Instrument :

MSVOA\_U

ClientSampleId :

BGKZ8ME

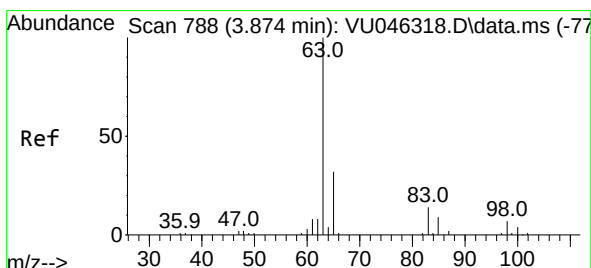
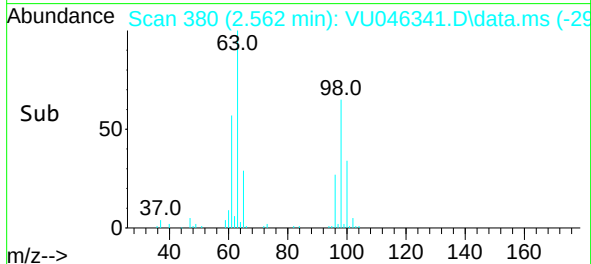
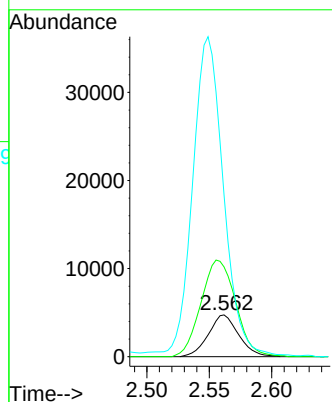
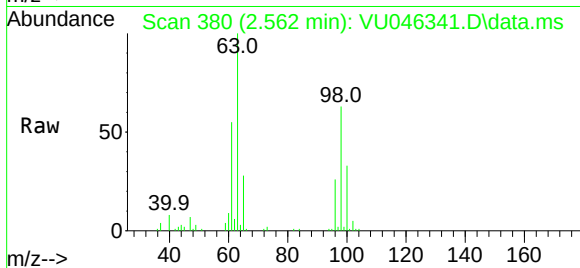
Tgt Ion: 96 Resp: 8059

Ion Ratio Lower Upper

96 100

61 214.5 118.6 220.2

63 386.7 93.0 172.8#



#19

1,1-Dichloroethane

Concen: 9.239 ug/L

RT: 3.861 min Scan# 784

Delta R.T. -0.013 min

Lab File: VU046341.D

Acq: 14 Dec 2021 00:57

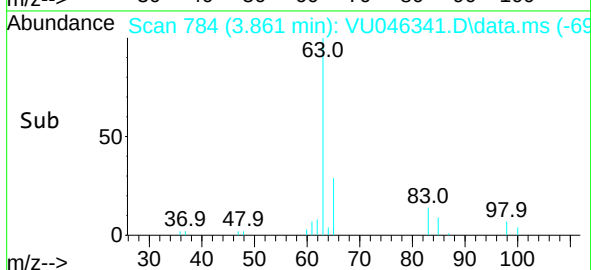
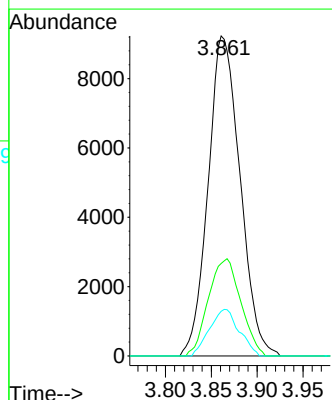
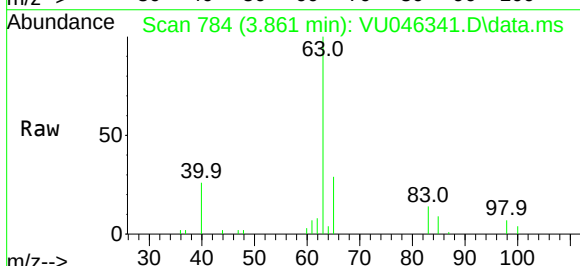
Tgt Ion: 63 Resp: 22358

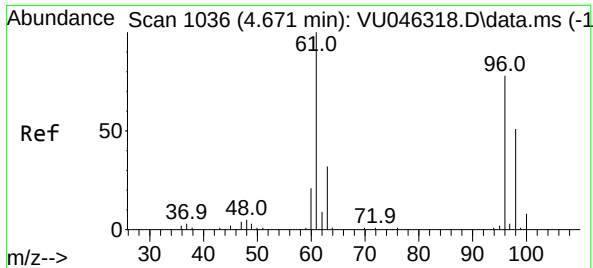
Ion Ratio Lower Upper

63 100

65 28.9 22.8 42.4

83 14.0 9.6 17.8

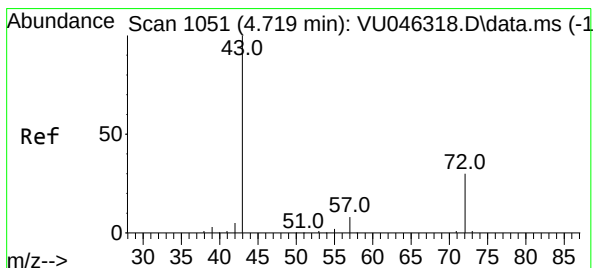
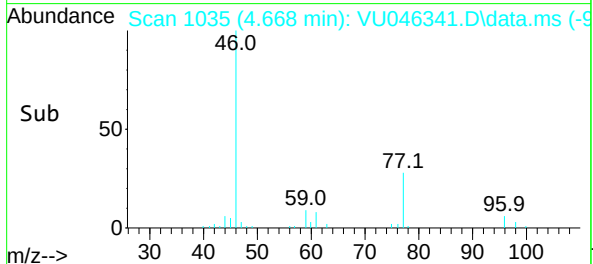
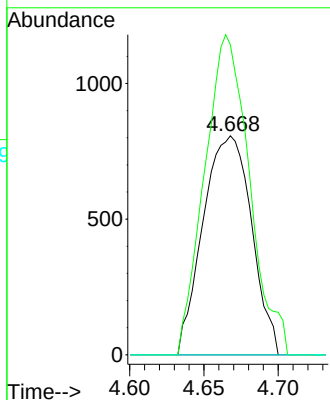
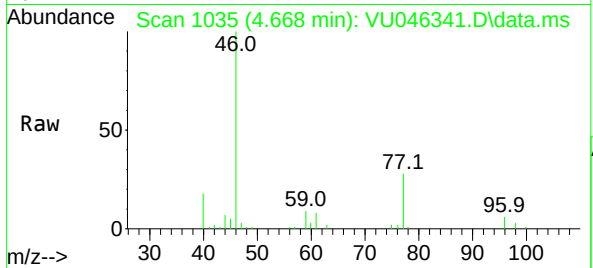




#20  
 cis-1,2-Dichloroethene  
 Concen: 1.271 ug/L  
 RT: 4.668 min Scan# 1035  
 Delta R.T. -0.003 min  
 Lab File: VU046341.D  
 Acq: 14 Dec 2021 00:57

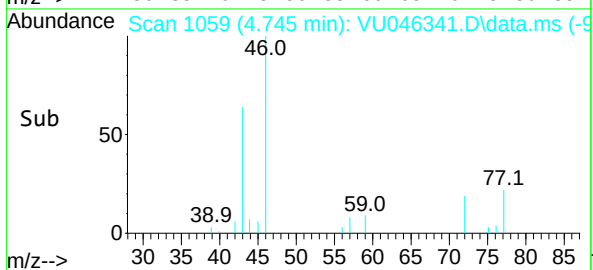
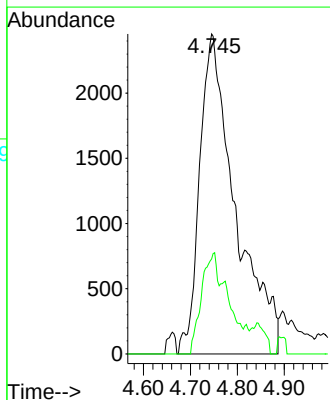
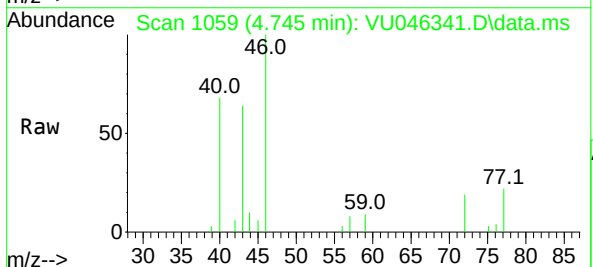
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BGKZ8ME

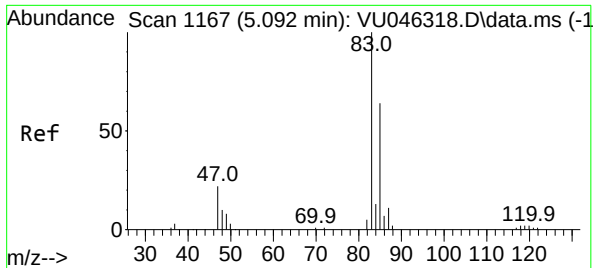
|             |             |
|-------------|-------------|
| Tgt Ion: 96 | Resp: 1835  |
| Ion Ratio   | Lower Upper |
| 96 100      |             |
| 61 141.6    | 86.8 161.2  |
| 68 0.0      | 0.0 0.0     |



#22  
 2-Butanone  
 Concen: 8.004 ug/L m  
 RT: 4.745 min Scan# 1059  
 Delta R.T. 0.026 min  
 Lab File: VU046341.D  
 Acq: 14 Dec 2021 00:57

|             |             |       |       |
|-------------|-------------|-------|-------|
| Tgt Ion: 43 | Resp: 12971 |       |       |
| Ion Ratio   | Lower       | Upper |       |
| 43          | 100         |       |       |
| 72          | 14.4        | 14.5  | 43.6# |





#25

Chloroform

Concen: 5.474 ug/L

RT: 5.089 min Scan# 1166

Delta R.T. -0.003 min

Lab File: VU046341.D

Acq: 14 Dec 2021 00:57

Instrument :

MSVOA\_U

ClientSampleId :

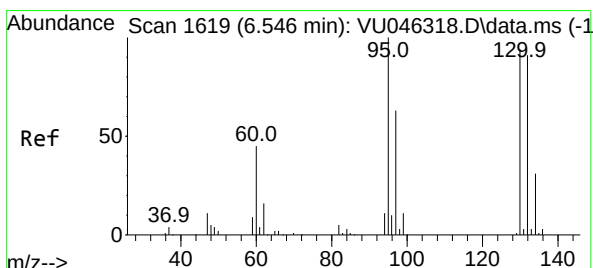
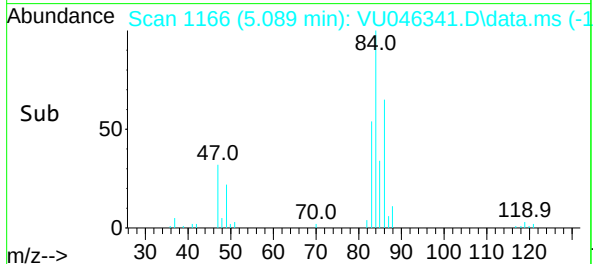
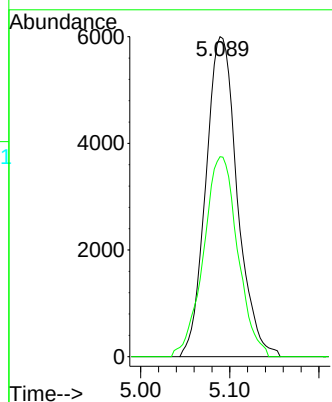
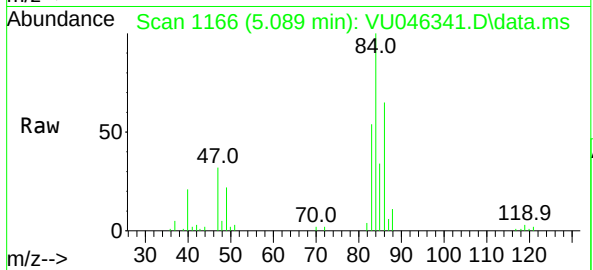
BGKZ8ME

Tgt Ion: 83 Resp: 14719

Ion Ratio Lower Upper

83 100

85 62.5 45.8 85.2



#34

Trichloroethene

Concen: 33.254 ug/L

RT: 6.542 min Scan# 1618

Delta R.T. -0.003 min

Lab File: VU046341.D

Acq: 14 Dec 2021 00:57

Tgt Ion: 95 Resp: 50057

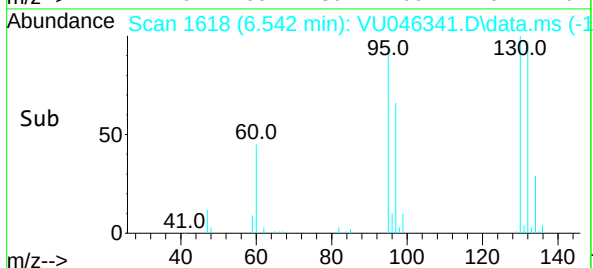
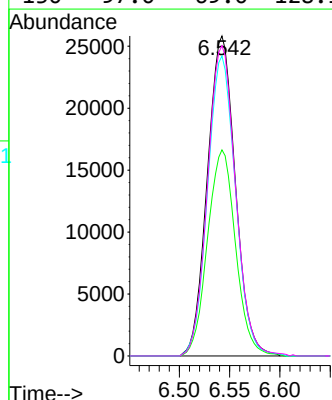
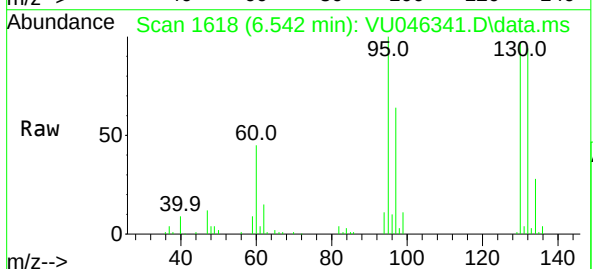
Ion Ratio Lower Upper

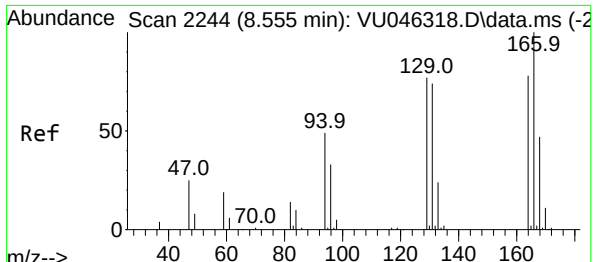
95 100

97 64.4 44.1 81.9

132 93.7 66.8 124.0

130 97.0 69.0 128.1





#46  
 Tetrachloroethene  
 Concen: 266.748 ug/L  
 RT: 8.555 min Scan# 21  
 Delta R.T. -0.000 min  
 Lab File: VU046341.D  
 Acq: 14 Dec 2021 00:57

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BGKZ8ME

Tgt Ion:164 Resp: 295076

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 99.3  | 71.1  | 132.1 |
| 131 | 96.3  | 67.8  | 126.0 |
| 166 | 128.0 | 90.6  | 168.2 |

