

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU042319\  
 Data File : VU031453.D  
 Acq On : 23 Apr 2019 21:49  
 Operator : JC/SP  
 Sample : K2536-04DL 4X  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Apr 24 08:45:00 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM042319WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Apr 24 08:41:52 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 713418   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 630845   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 278715   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

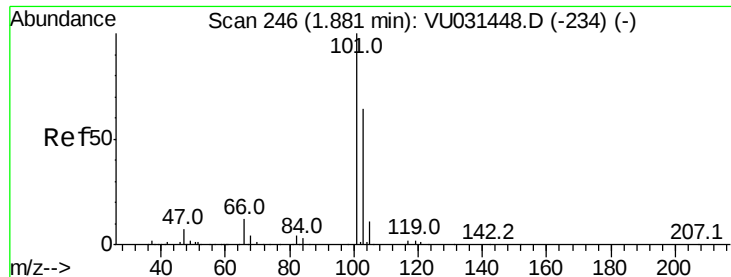
|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 221701   | 38.35    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 76.70%  |
| 7) Chloroethane-d5             | 1.68    | 69    | 186402   | 42.35    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 84.70%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 329311   | 32.75    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 65.50%  |
| 21) 2-Butanone-d5              | 4.19    | 46    | 454369   | 105.13   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 105.13% |
| 24) Chloroform-d               | 4.64    | 84    | 423245   | 45.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.90%  |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 262180   | 47.51    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 95.02%  |
| 32) Benzene-d6                 | 5.34    | 84    | 849971   | 46.64    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.28%  |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 283524   | 48.35    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 96.70%  |
| 41) Toluene-d8                 | 7.56    | 98    | 686299   | 42.16    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 84.32%  |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 113112   | 42.33    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 84.66%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 311122   | 105.89   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 105.89% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 389013   | 48.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 97.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 266727   | 46.81    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.62%  |

## Target Compounds

|                                |       |     |        |              | Ovalue |
|--------------------------------|-------|-----|--------|--------------|--------|
| 9) Trichlorofluoromethane      | 1.88  | 101 | 11288  | 1.482 ug/L   | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27  | 101 | 2822   | 0.639 ug/L # | 21     |
| 12) 1,1-Dichloroethene         | 2.27  | 96  | 2841   | 0.654 ug/L # | 1      |
| 13) Acetone                    | 2.33  | 43  | 3905   | 1.151 ug/L   | 44     |
| 34) Trichloroethene            | 6.18  | 95  | 335702 | 69.432 ug/L  | 97     |
| 46) Tetrachloroethene          | 8.22  | 164 | 9393   | 2.739 ug/L   | 95     |
| 48) 2-Hexanone                 | 8.31  | 43  | 32925  | 5.710 ug/L # | 68     |
| 49) Dibromochloromethane       | 8.22  | 129 | 8525   | 1.799 ug/L # | 11     |
| 59) 1,2,3-Trichloropropane     | 11.48 | 75  | 31738  | 5.288 ug/L   | 94     |
| 69) Naphthalene                | 13.79 | 128 | 7566   | 0.450 ug/L # | 76     |

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



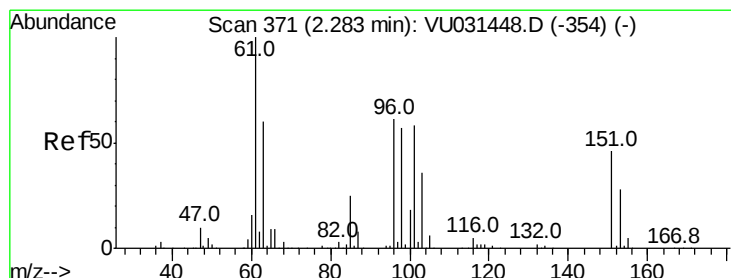
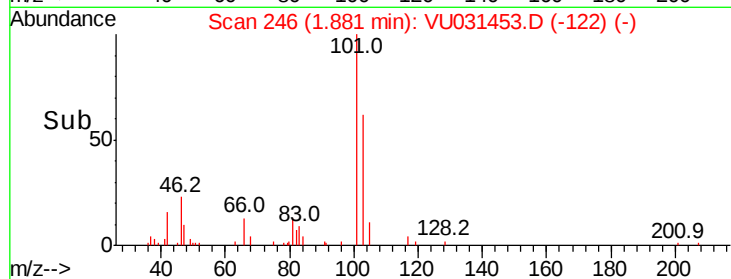
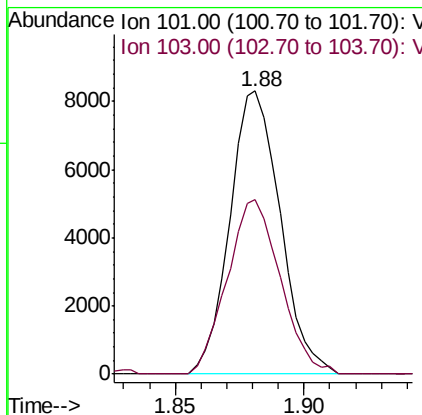
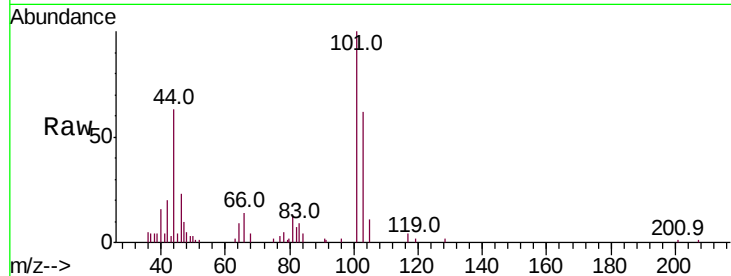


#9

Trichlorofluoromethane  
 Concen: 1.482 ug/L  
 RT: 1.88 min Scan# 246  
 Delta R.T. 0.00 min  
 Lab File: VU031453.D  
 Acq: 23 Apr 2019 21:49

Instrument :  
 MSVOA\_U  
 ClientSampleId :

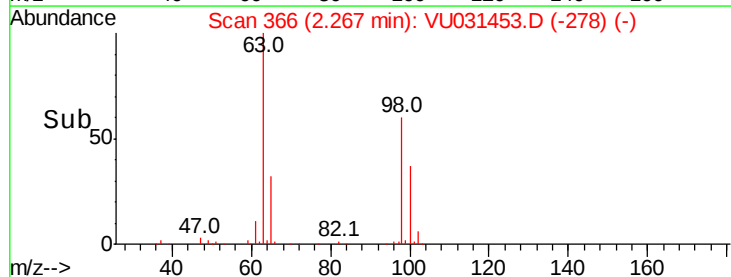
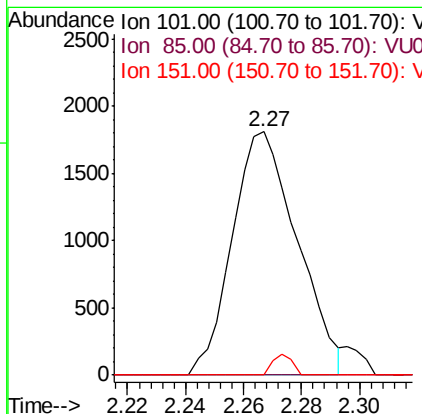
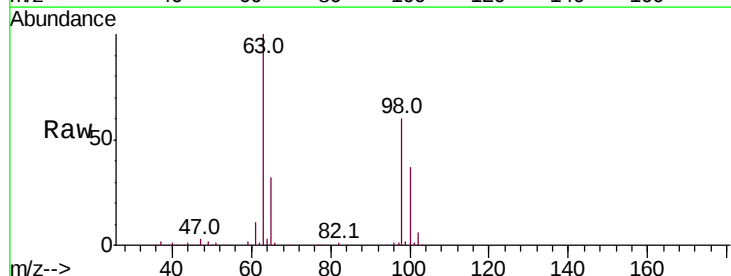
Tot Ion:101 Resp: 11288  
 Ion Ratio Lower Upper  
 101 100  
 103 65.0 51.4 77.2

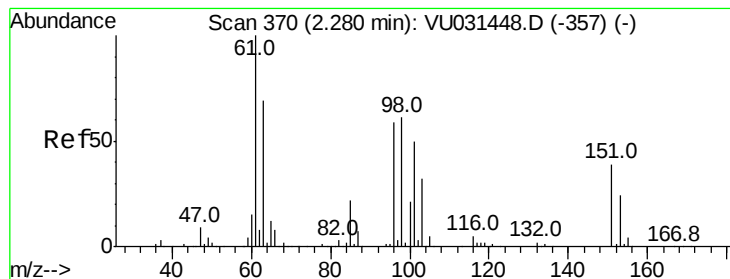


#10

1,1,2-Trichloro-1,2,2-trifluoroethane  
 Concen: 0.639 ug/L  
 RT: 2.27 min Scan# 366  
 Delta R.T. -0.02 min  
 Lab File: VU031453.D  
 Acq: 23 Apr 2019 21:49

Tgt Ion:101 Resp: 2822  
 Ion Ratio Lower Upper  
 101 100  
 85 0.0 33.1 49.7#  
 151 2.7 61.4 92.0#





#12

1,1-Dichloroethene

Concen: 0.654 ug/L

RT: 2.27 min Scan# 367

Delta R.T. -0.01 min

Lab File: VU031453.D

Acq: 23 Apr 2019 21:49

Instrument :

MSVOA\_U

ClientSampled :

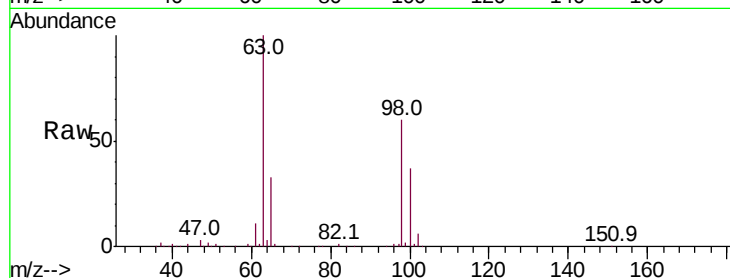
Tot Ion: 96 Resp: 2841

Ion Ratio Lower Upper

96 100

61 1365.6 118.9 220.9#

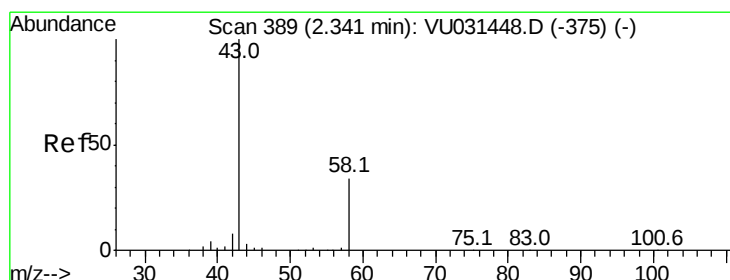
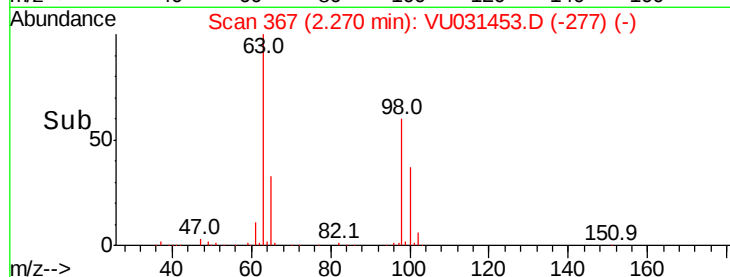
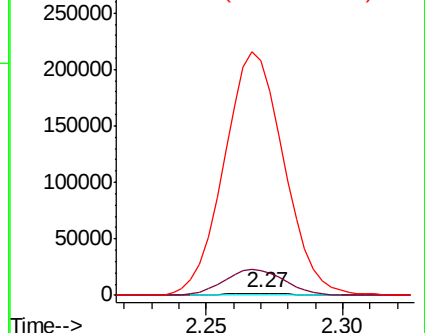
63 12710.1 99.3 184.3#



Abundance Ion 96.00 (95.70 to 96.70): VU031448.D (-357) (-)

Ion 61.00 (60.70 to 61.70): VU031448.D (-357) (-)

Ion 63.00 (62.70 to 63.70): VU031448.D (-357) (-)



#13

Acetone

Concen: 1.151 ug/L

RT: 2.33 min Scan# 386

Delta R.T. -0.01 min

Lab File: VU031453.D

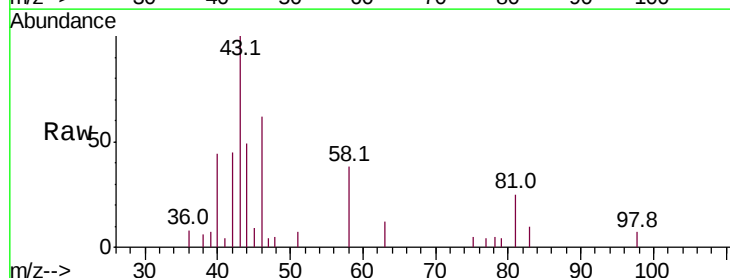
Acq: 23 Apr 2019 21:49

Tgt Ion: 43 Resp: 3905

Ion Ratio Lower Upper

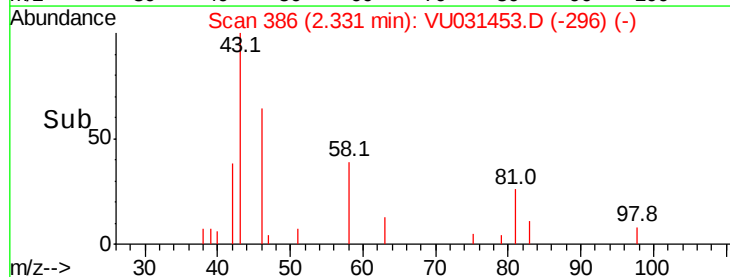
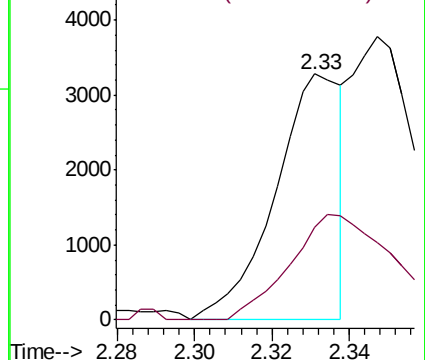
43 100

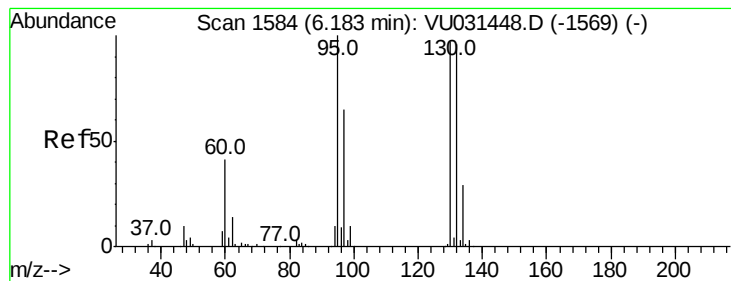
58 65.0 0.0 66.4



Abundance Ion 43.00 (42.70 to 43.70): VU031448.D (-375) (-)

Ion 58.00 (57.70 to 58.70): VU031448.D (-375) (-)





#34

Trichloroethene

Concen: 69.432 ug/L

RT: 6.18 min Scan# 1584

Delta R.T. 0.00 min

Lab File: VU031453.D

Acq: 23 Apr 2019 21:49

Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 95 Resp: 335702

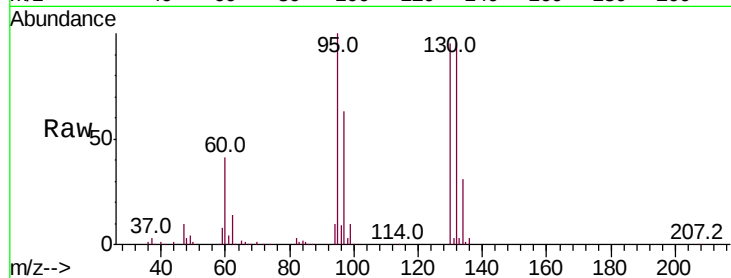
Ion Ratio Lower Upper

95 100

97 63.2 44.9 83.5

132 94.9 68.0 126.2

130 94.9 70.1 130.1



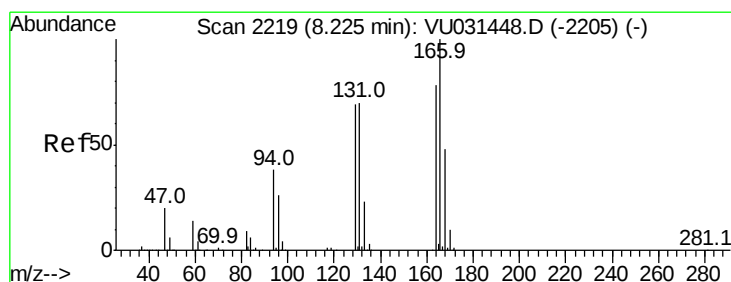
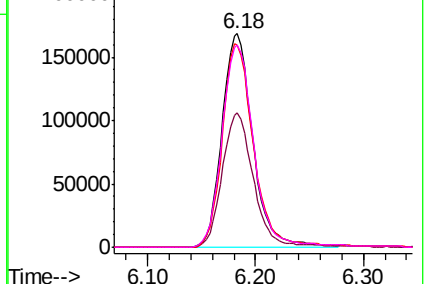
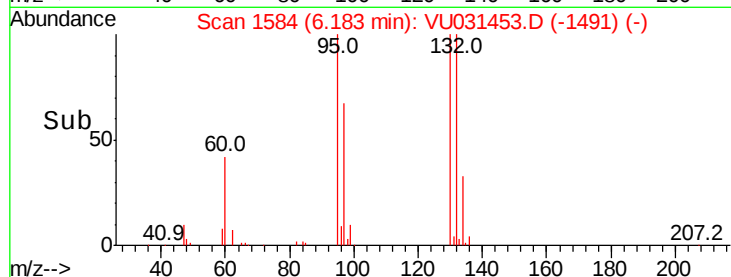
Abundance

Ion 95.00 (94.70 to 95.70): VU031453.D (-2126) (-)

Ion 97.00 (96.70 to 97.70): VU031453.D (-2126) (-)

Ion 132.00 (131.70 to 132.70): VU031453.D (-2126) (-)

Ion 130.00 (129.70 to 130.70): VU031453.D (-2126) (-)



#46

Tetrachloroethene

Concen: 2.739 ug/L

RT: 8.22 min Scan# 2219

Delta R.T. 0.00 min

Lab File: VU031453.D

Acq: 23 Apr 2019 21:49

Tgt Ion: 164 Resp: 9393

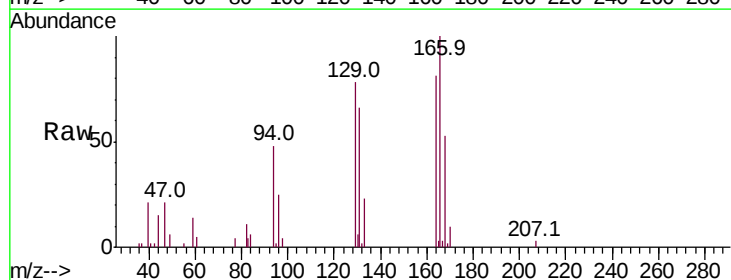
Ion Ratio Lower Upper

164 100

129 96.1 65.2 121.0

131 80.8 61.4 114.0

166 122.9 89.2 165.6



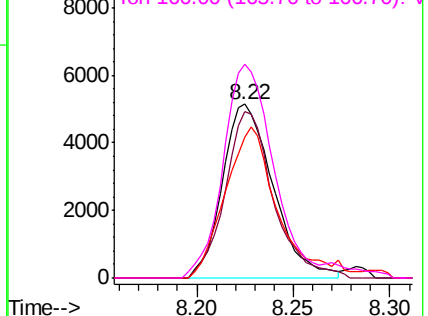
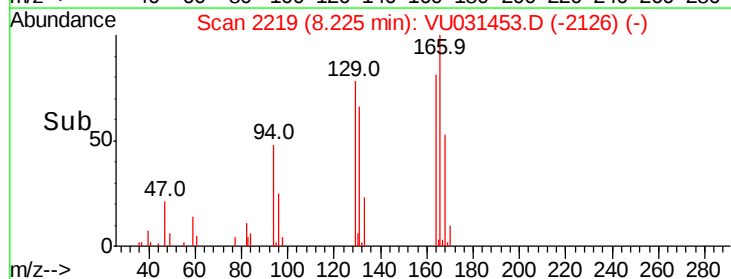
Abundance

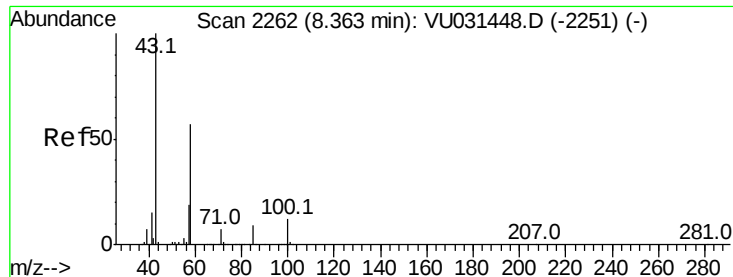
Ion 164.00 (163.70 to 164.70): VU031453.D (-2126) (-)

Ion 129.00 (128.70 to 129.70): VU031453.D (-2126) (-)

Ion 131.00 (130.70 to 131.70): VU031453.D (-2126) (-)

Ion 166.00 (165.70 to 166.70): VU031453.D (-2126) (-)

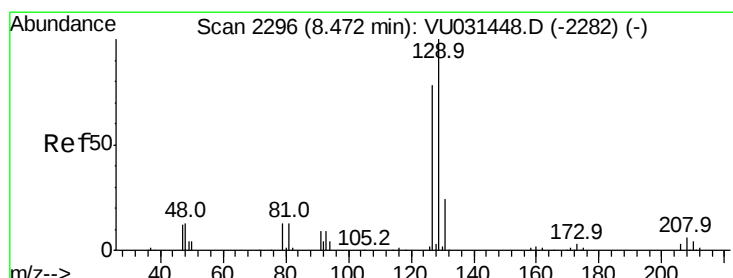
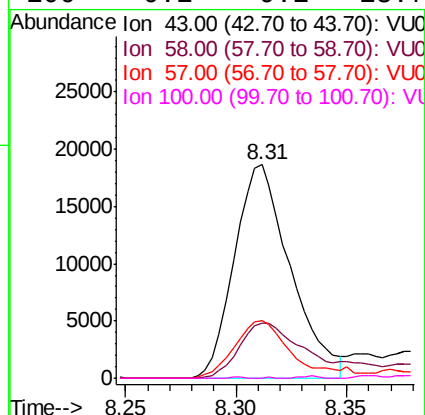
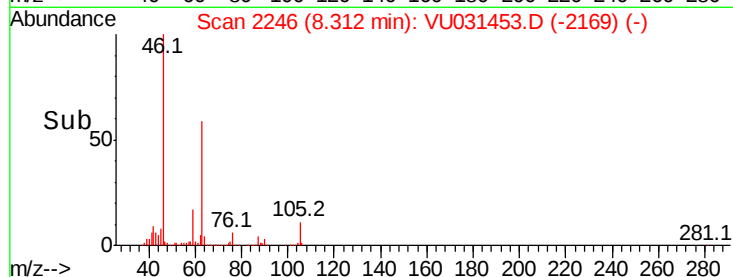
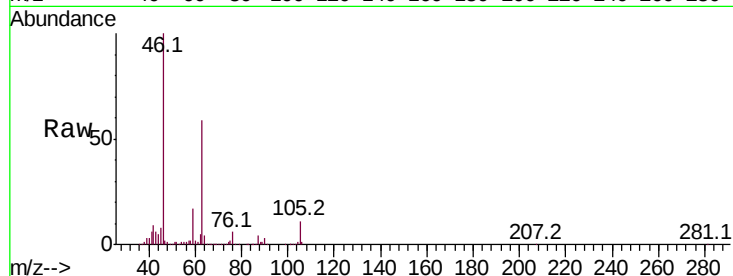




#48  
2-Hexanone  
Concen: 5.710 ug/L  
RT: 8.31 min Scan# 2246  
Delta R.T. -0.05 min  
Lab File: VU031453.D  
Acq: 23 Apr 2019 21:49

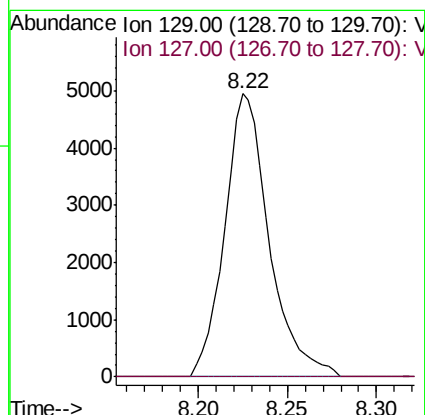
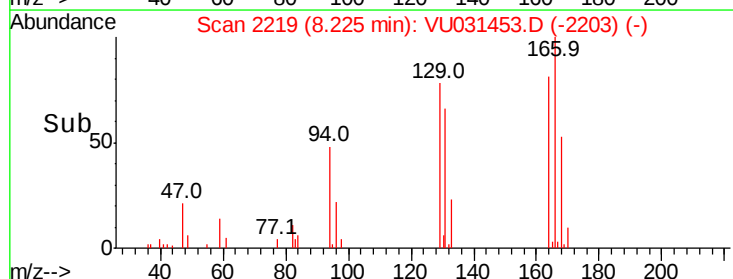
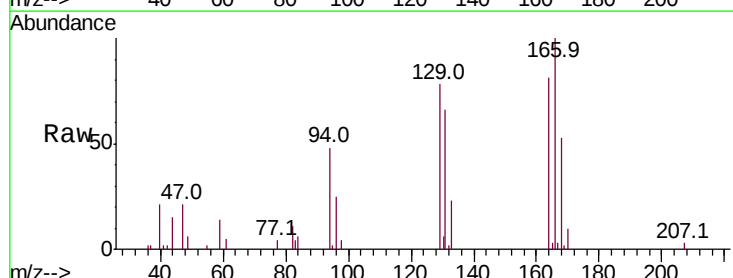
Instrument :  
MSVOA\_U  
ClientSampleId :

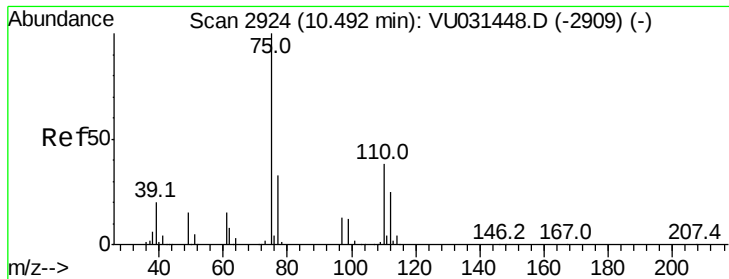
Tot Ion: 43 Resp: 32925  
Ion Ratio Lower Upper  
43 100  
58 28.7 45.5 68.3#  
57 25.2 15.2 22.8#  
100 0.1 9.1 13.7#



#49  
Dibromochloromethane  
Concen: 1.799 ug/L  
RT: 8.22 min Scan# 2219  
Delta R.T. -0.25 min  
Lab File: VU031453.D  
Acq: 23 Apr 2019 21:49

Tgt Ion: 129 Resp: 8525  
Ion Ratio Lower Upper  
129 100  
127 0.0 54.2 100.6#

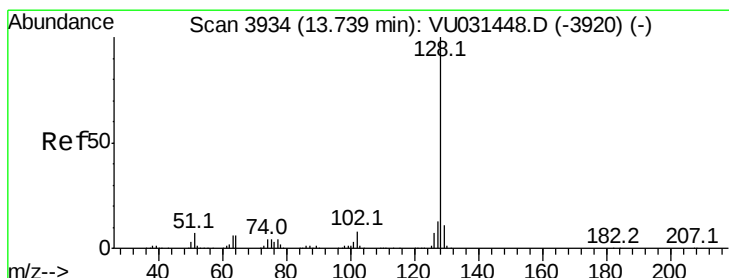
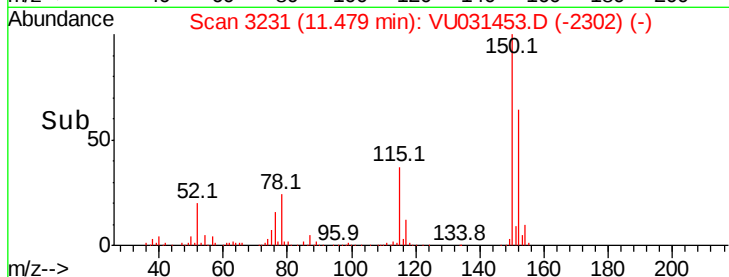
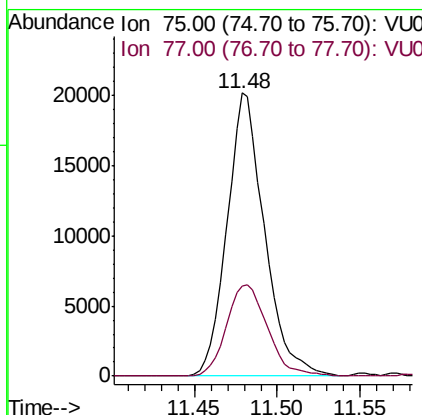
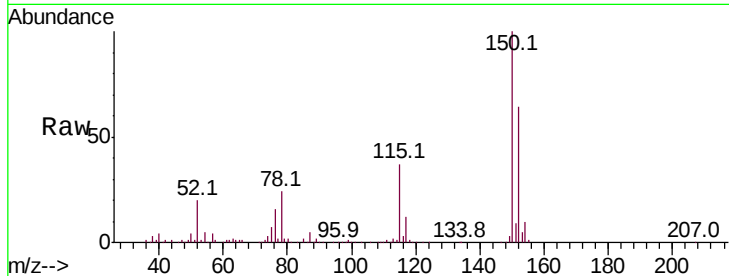




#59  
 1,2,3-Trichloropropane  
 Concen: 5.288 ug/L  
 RT: 11.48 min Scan# 3231  
 Delta R.T. 0.99 min  
 Lab File: VU031453.D  
 Acq: 23 Apr 2019 21:49

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Tot Ion: 75 Resp: 31738  
 Ion Ratio Lower Upper  
 75 100  
 77 35.1 25.6 38.4



#69  
 Naphthalene  
 Concen: 0.450 ug/L  
 RT: 13.79 min Scan# 3949  
 Delta R.T. 0.05 min  
 Lab File: VU031453.D  
 Acq: 23 Apr 2019 21:49

Tgt Ion: 128 Resp: 7566  
 Ion Ratio Lower Upper  
 128 100  
 127 3.4 10.2 15.4#  
 129 1.8 8.6 13.0#

