

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040519\  
 Data File : VU030726.D  
 Acq On : 05 Apr 2019 08:23  
 Operator : JC/SP  
 Sample : K2249-04MSD  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 43 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 E3YD9MSD

Quant Time: Apr 05 09:15:36 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM040519WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Apr 05 08:33:21 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 481502   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 460049   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 191564   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 212604   | 49.46    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 98.92%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 164514   | 50.43    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 100.86% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 367253   | 47.24    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 94.48%  |
| 21) 2-Butanone-d5              | 4.17    | 46    | 335209   | 98.40    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 98.40%  |
| 24) Chloroform-d               | 4.64    | 84    | 305898   | 46.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.18%  |
| 26) 1,2-Dichloroethane-d4      | 5.30    | 65    | 222746   | 49.72    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.44%  |
| 32) Benzene-d6                 | 5.34    | 84    | 659224   | 49.09    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.18%  |
| 36) 1,2-Dichloropropane-d6     | 6.32    | 67    | 229899   | 49.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 99.90%  |
| 41) Toluene-d8                 | 7.56    | 98    | 573762   | 48.20    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 96.40%  |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 95627    | 45.56    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 91.12%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 202296   | 96.17    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 96.17%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 299147   | 48.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 96.36%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 188642   | 50.07    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 100.14% |

## Target Compounds

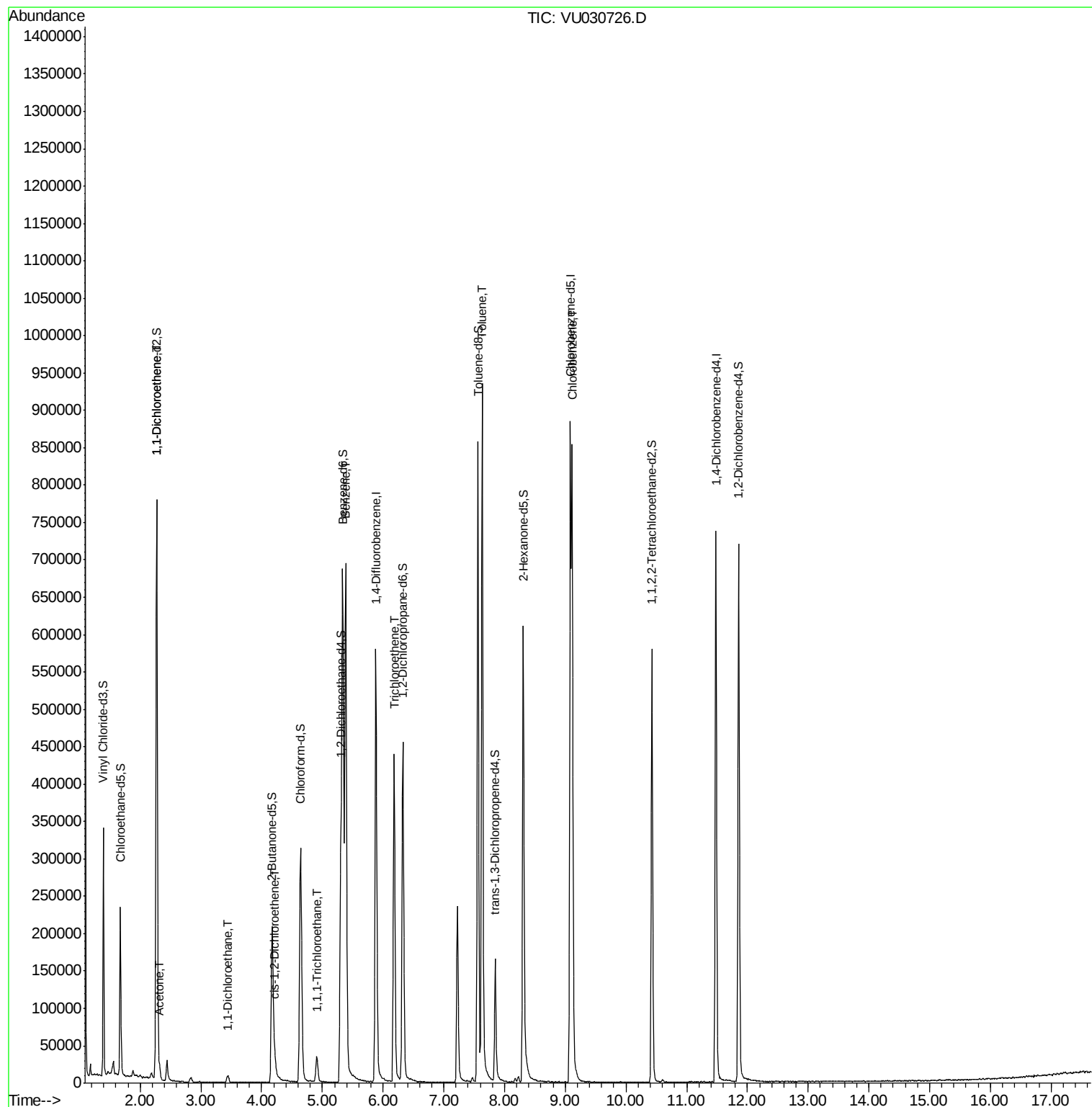
| Target Compounds           | R.T. | QIon | Response | Conc   | Units | Ovalue |
|----------------------------|------|------|----------|--------|-------|--------|
| 12) 1,1-Dichloroethene     | 2.28 | 96   | 138937   | 41.743 | ug/L  | 93     |
| 13) Acetone                | 2.32 | 43   | 15155    | 4.348  | ug/L  | 98     |
| 19) 1,1-Dichloroethane     | 3.44 | 63   | 11024    | 1.512  | ug/L  | 95     |
| 20) cis-1,2-Dichloroethene | 4.22 | 96   | 4059     | 1.040  | ug/L  | 98     |
| 30) 1,1,1-Trichloroethane  | 4.91 | 97   | 26055    | 4.647  | ug/L  | 97     |
| 33) Benzene                | 5.39 | 78   | 674258   | 44.787 | ug/L  | 100    |
| 34) Trichloroethene        | 6.18 | 95   | 161744   | 43.804 | ug/L  | 99     |
| 42) Toluene                | 7.63 | 91   | 682229   | 44.394 | ug/L  | 99     |
| 51) Chlorobenzene          | 9.12 | 112  | 425725   | 45.169 | ug/L  | 99     |

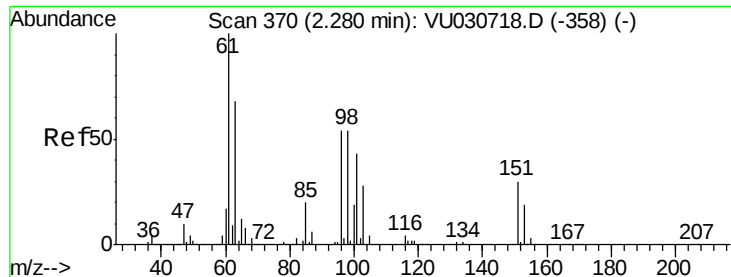
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU040519\  
Data File : VU030726.D  
Acq On : 05 Apr 2019 08:23  
Operator : JC/SP  
Sample : K2249-04MSD  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 43 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
E3YD9MSD

Quant Time: Apr 05 09:15:36 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM040519WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Apr 05 08:33:21 2019  
Response via : Initial Calibration

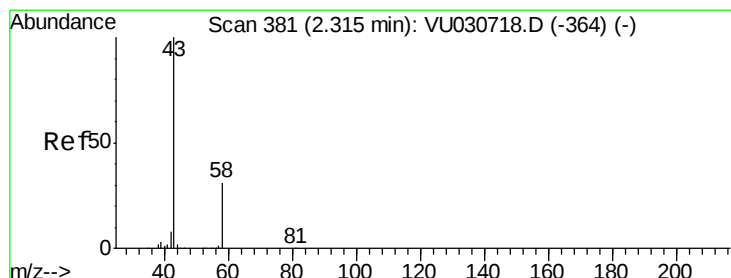
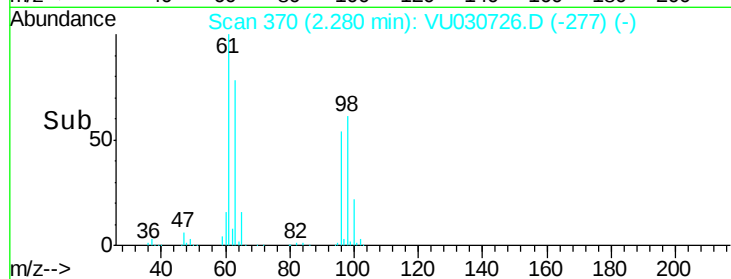
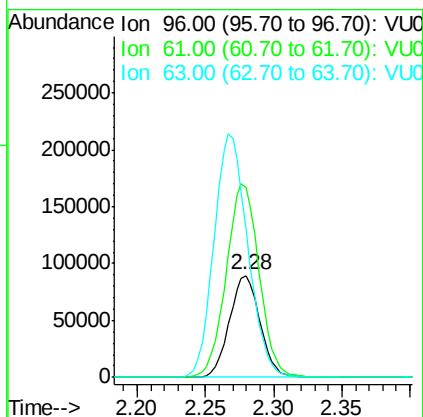
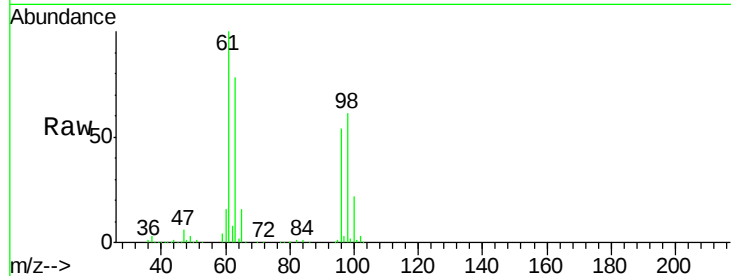




#12  
 1,1-Dichloroethene  
 Concen: 41.743 ug/L  
 RT: 2.28 min Scan# 370  
 Delta R.T. -0.00 min  
 Lab File: VU030726.D  
 Acq: 05 Apr 2019 08:23

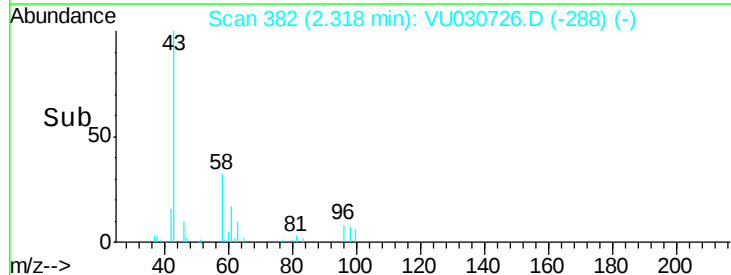
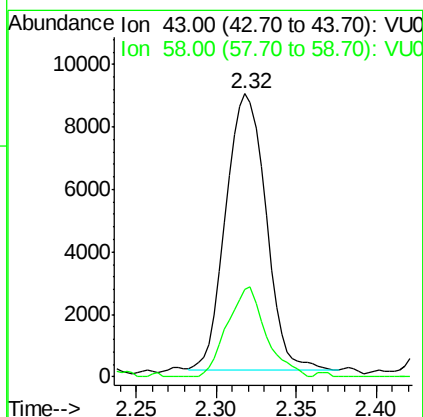
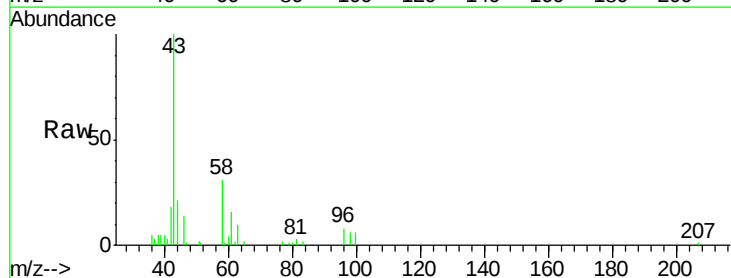
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 E3YD9MSD

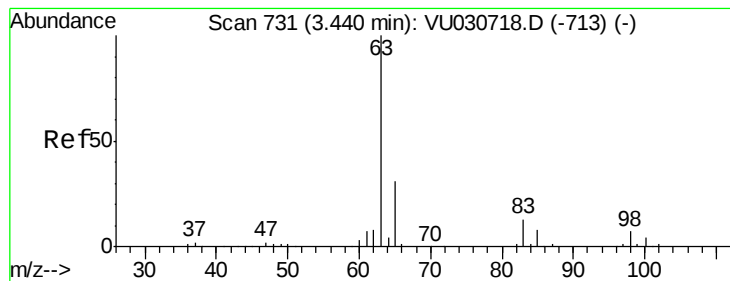
| Tot Ion | 96    | Resp  | 138937 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 96      | 100   |       |        |
| 61      | 186.5 | 132.0 | 245.2  |
| 63      | 146.0 | 90.9  | 168.9  |



#13  
 Acetone  
 Concen: 4.348 ug/L  
 RT: 2.32 min Scan# 382  
 Delta R.T. 0.00 min  
 Lab File: VU030726.D  
 Acq: 05 Apr 2019 08:23

| Tgt Ion | 43    | Resp  | 15155 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 43      | 100   |       |       |
| 58      | 31.2  | 0.0   | 64.0  |





#19

1,1-Dichloroethane

Concen: 1.512 ug/L

RT: 3.44 min Scan# 731

Delta R.T. -0.00 min

Lab File: VU030726.D

Acq: 05 Apr 2019 08:23

Instrument :

MSVOA\_U

ClientSampleId :

E3YD9MSD

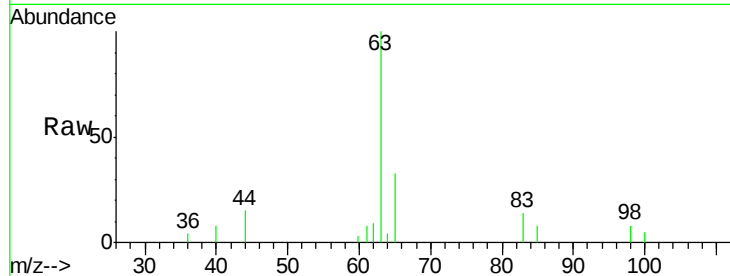
Tot Ion: 63 Resp: 11024

Ion Ratio Lower Upper

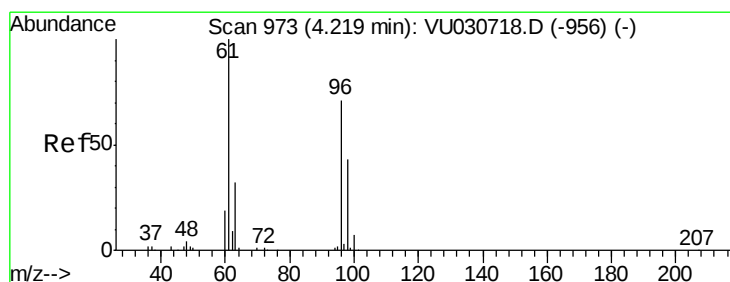
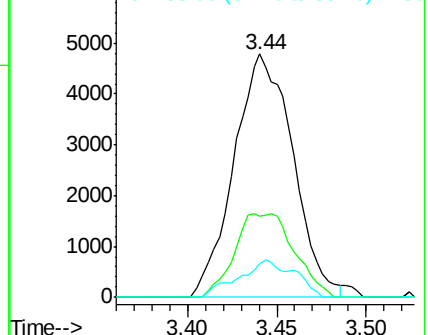
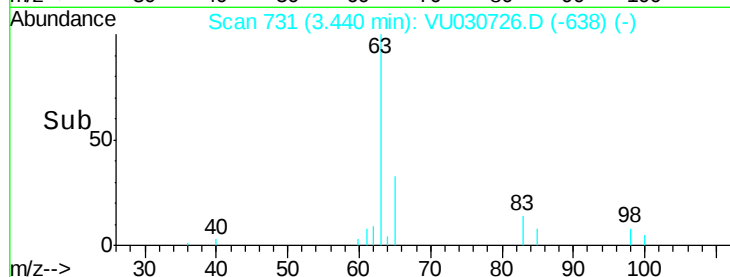
63 100

65 33.4 21.4 39.8

83 14.0 8.5 15.7



Abundance Ion 63.00 (62.70 to 63.70): VU030726.D (-638) (-)



#20

cis-1,2-Dichloroethene

Concen: 1.040 ug/L

RT: 4.22 min Scan# 974

Delta R.T. 0.00 min

Lab File: VU030726.D

Acq: 05 Apr 2019 08:23

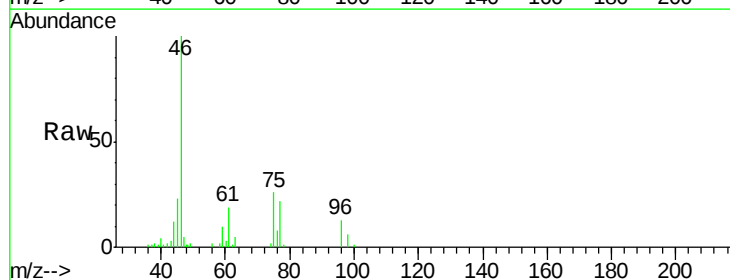
Tgt Ion: 96 Resp: 4059

Ion Ratio Lower Upper

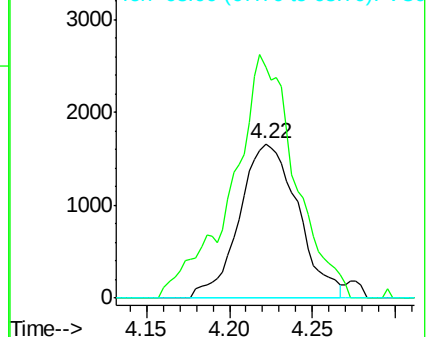
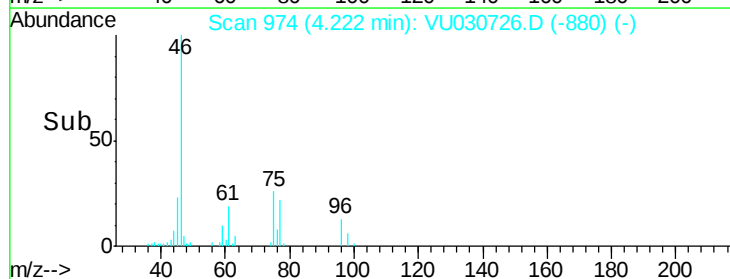
96 100

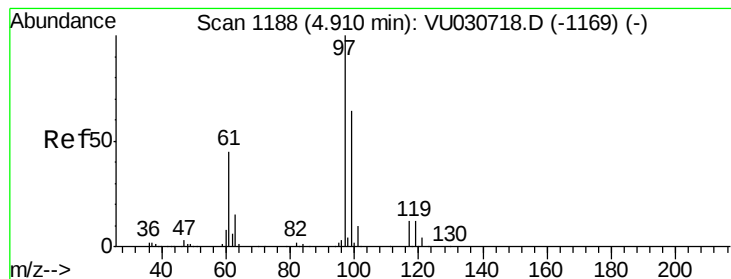
61 149.2 102.9 191.1

68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU030726.D (-880) (-)





#30

1,1,1-Trichloroethane

Concen: 4.647 ug/L

RT: 4.91 min Scan# 1188

Delta R.T. -0.00 min

Lab File: VU030726.D

Acq: 05 Apr 2019 08:23

Instrument :

MSVOA\_U

ClientSampleId :

E3YD9MSD

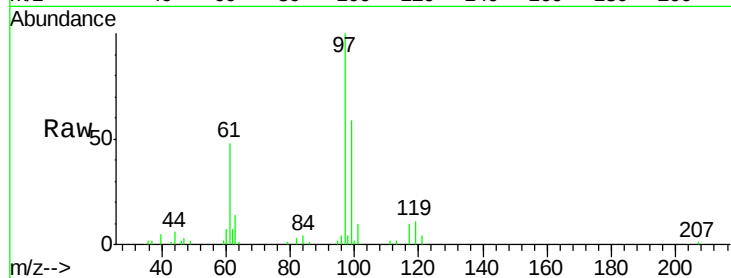
Tot Ion: 97 Resp: 26055

Ion Ratio Lower Upper

97 100

99 62.4 51.4 77.2

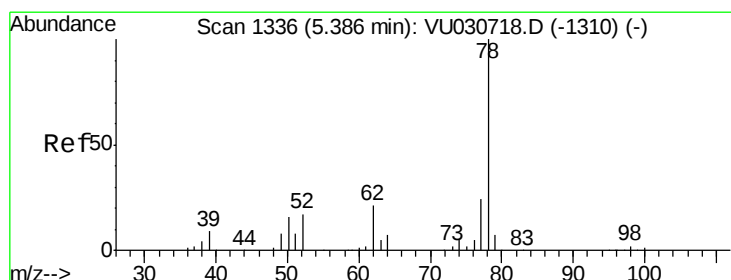
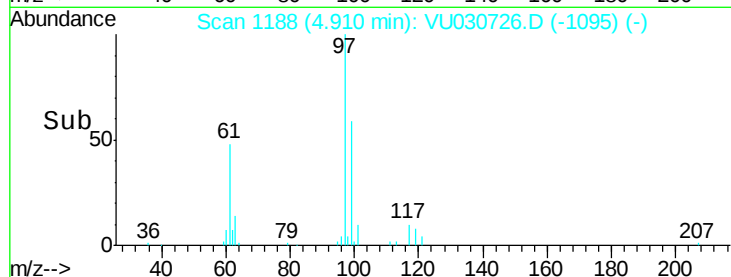
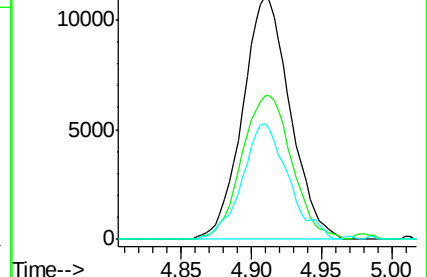
61 44.0 37.1 55.7



Abundance Ion 97.00 (96.70 to 97.70): VU030718.D (-1169) (-)

Ion 99.00 (98.70 to 99.70): VU030718.D (-1169) (-)

Ion 61.05 (60.75 to 61.75): VU030718.D (-1169) (-)



#33

Benzene

Concen: 44.787 ug/L

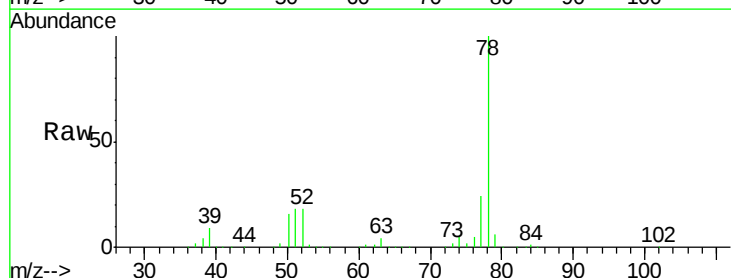
RT: 5.39 min Scan# 1336

Delta R.T. -0.00 min

Lab File: VU030726.D

Acq: 05 Apr 2019 08:23

Tgt Ion: 78 Resp: 674258



Abundance Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

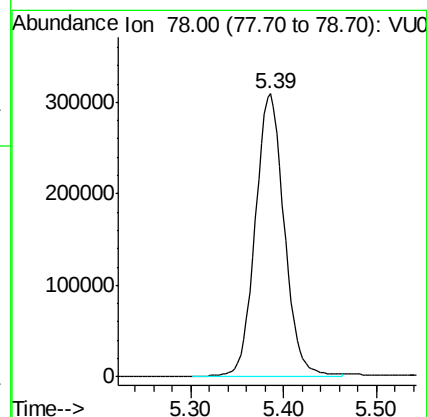
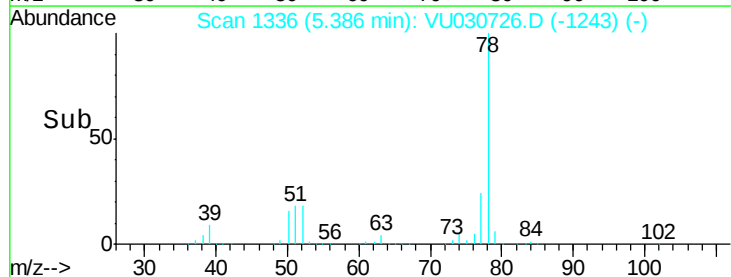
Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

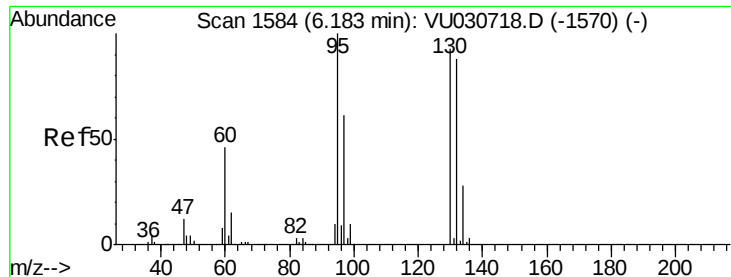
Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

Ion 78.00 (77.70 to 78.70): VU030718.D (-1310) (-)

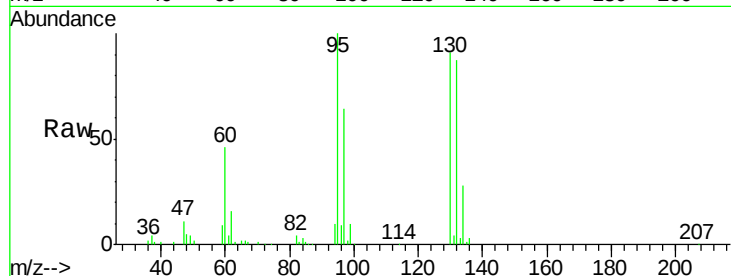




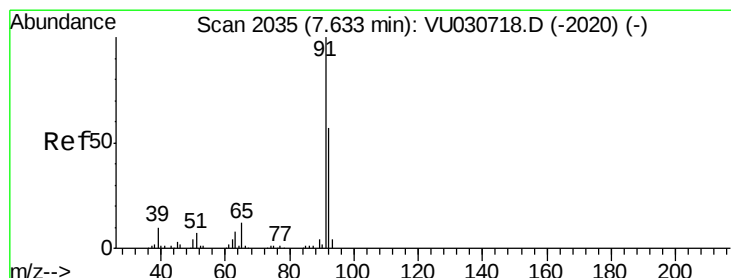
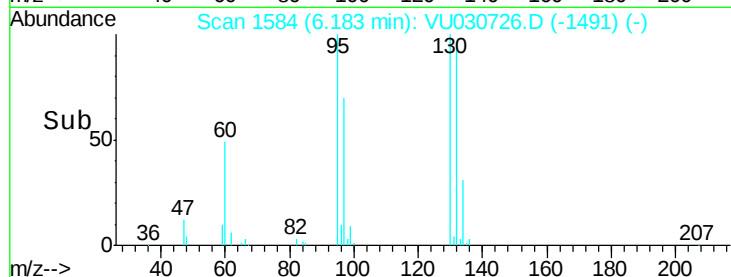
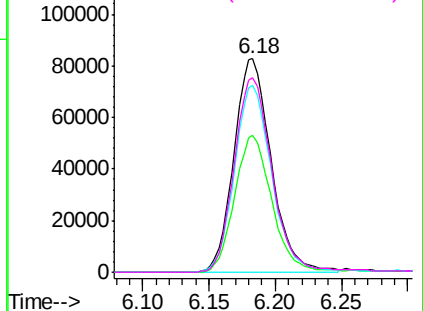
#34  
 Trichloroethene  
 Concen: 43.804 ug/L  
 RT: 6.18 min Scan# 1584  
 Delta R.T. -0.00 min  
 Lab File: VU030726.D  
 Acq: 05 Apr 2019 08:23

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 E3YD9MSD

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 95    | Resp: | 161744 |
| Ion      | Ratio | Lower | Upper  |
| 95       | 100   |       |        |
| 97       | 64.0  | 44.5  | 82.7   |
| 132      | 87.4  | 61.5  | 114.1  |
| 130      | 91.1  | 64.9  | 120.5  |

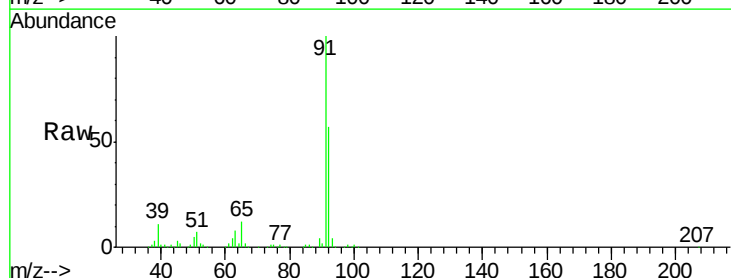


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 97.00 (96.70 to 97.70): VU0  
 Ion 132.00 (131.70 to 132.70): V  
 Ion 130.00 (129.70 to 130.70): V

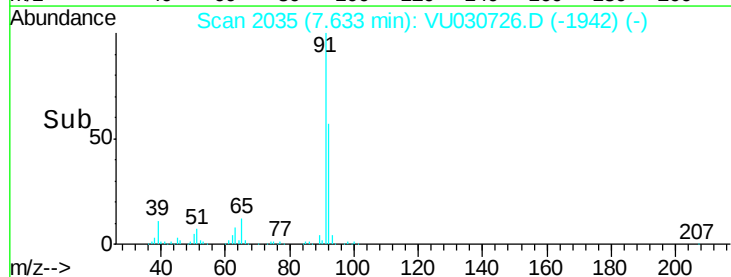
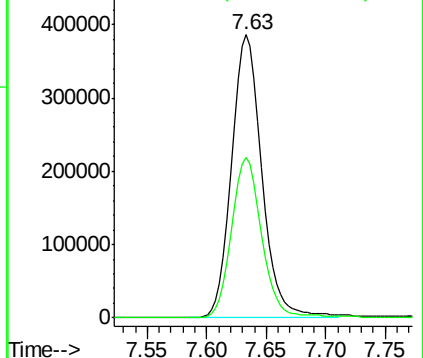


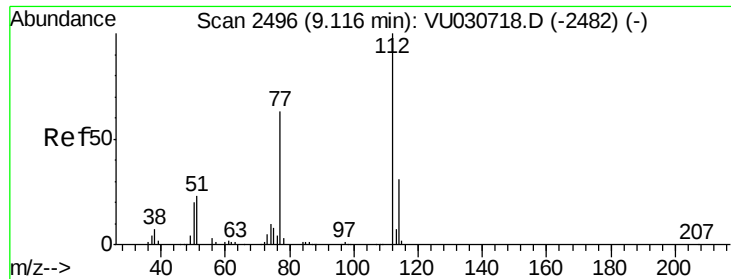
#42  
 Toluene  
 Concen: 44.394 ug/L  
 RT: 7.63 min Scan# 2035  
 Delta R.T. -0.00 min  
 Lab File: VU030726.D  
 Acq: 05 Apr 2019 08:23

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 91    | Resp: | 682229 |
| Ion      | Ratio | Lower | Upper  |
| 91       | 100   |       |        |
| 92       | 56.6  | 40.0  | 74.4   |



Abundance Ion 91.00 (90.70 to 91.70): VU0  
 Ion 92.00 (91.70 to 92.70): VU0





#51  
 Chlorobenzene  
 Concen: 45.169 ug/L  
 RT: 9.12 min Scan# 2496  
 Delta R.T. -0.00 min  
 Lab File: VU030726.D  
 Acq: 05 Apr 2019 08:23

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 E3YD9MSD

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 112   | Resp: | 425725 |
| Ion Ratio | Lower | Upper |        |
| 112       | 100   |       |        |
| 114       | 31.8  | 22.2  | 41.2   |
| 77        | 63.3  | 51.7  | 77.5   |

