

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU072118\  
 Data File : VU025577.D  
 Acq On : 21 Jul 2018 12:07  
 Operator : MD/SY  
 Sample : J4097-10MSD  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Jul 23 01:12:38 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM072018WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Jul 23 01:10:42 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 324973   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 297527   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 146009   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 76731    | 41.36    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 82.72% |
| 7) Chloroethane-d5             | 1.68    | 69    | 67005    | 43.78    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 87.56% |
| 11) 1,1-Dichloroethene-d2      | 2.28    | 63    | 163590   | 42.36    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 84.72% |
| 21) 2-Butanone-d5              | 4.18    | 46    | 136380   | 95.22    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 95.22% |
| 24) Chloroform-d               | 4.65    | 84    | 185558   | 44.90    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.80% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 128046   | 46.85    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.70% |
| 32) Benzene-d6                 | 5.35    | 84    | 360143   | 47.20    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 94.40% |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 118066   | 48.02    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 96.04% |
| 41) Toluene-d8                 | 7.57    | 98    | 341842   | 46.71    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.42% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 56787    | 45.22    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 90.44% |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 101679   | 98.76    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 98.76% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 158534   | 46.10    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 92.20% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 143079   | 48.35    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 96.70% |

## Target Compounds

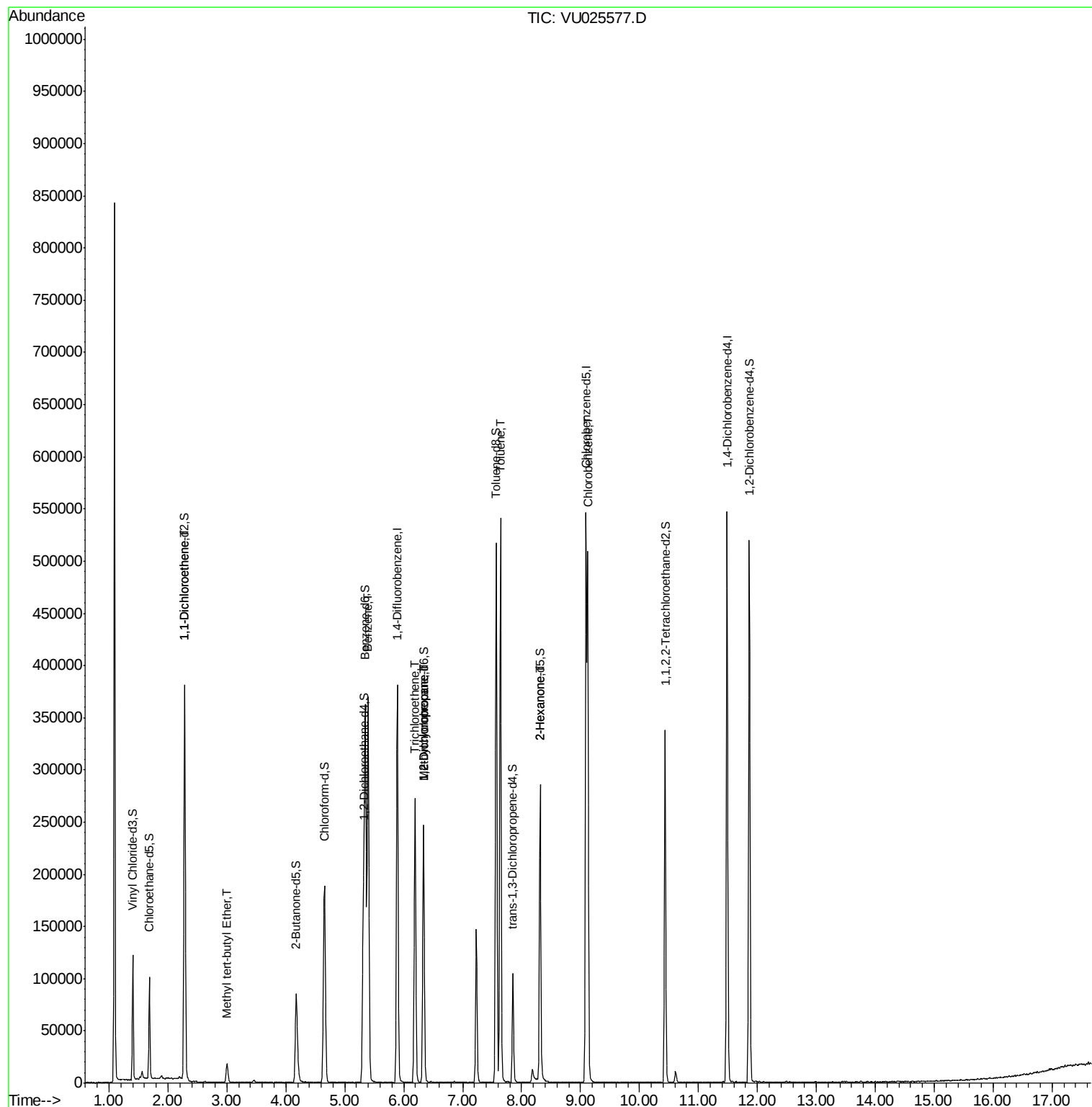
| Target Compounds            | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|-----------------------------|------|------|----------|--------|--------|--------|
| 12) 1,1-Dichloroethene      | 2.29 | 96   | 73492    | 40.072 | ug/L   | 95     |
| 18) Methyl tert-butyl Ether | 3.00 | 73   | 19339    | 2.812  | ug/L   | 97     |
| 33) Benzene                 | 5.39 | 78   | 358833   | 41.974 | ug/L   | 100    |
| 34) Trichloroethene         | 6.19 | 95   | 92980    | 40.991 | ug/L   | 96     |
| 35) Methylcyclohexane       | 6.33 | 83   | 27921    | 7.634  | ug/L # | 19     |
| 37) 1,2-Dichloropropane     | 6.34 | 63   | 13133    | 5.622  | ug/L # | 88     |
| 42) Toluene                 | 7.64 | 91   | 387943   | 42.080 | ug/L   | 99     |
| 48) 2-Hexanone              | 8.31 | 43   | 12382    | 4.777  | ug/L # | 64     |
| 51) Chlorobenzene           | 9.12 | 112  | 258475   | 41.645 | ug/L   | 99     |

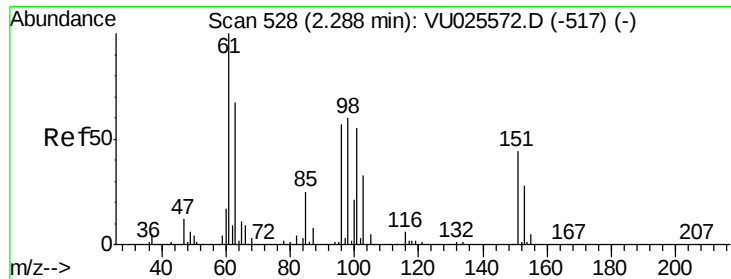
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: Jul 23 01:12:38 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM072018WMA.M  
Quant Title : VOC Analysis  
QLast Update : Mon Jul 23 01:10:42 2018  
Response via : Initial Calibration





#12

1,1-Dichloroethene

Concen: 40.072 ug/L

RT: 2.29 min Scan# 528

Delta R.T. 0.00 min

Lab File: VU025577.D

Acq: 21 Jul 2018 12:07

Instrument :  
MSVOA\_U  
ClientSampled :

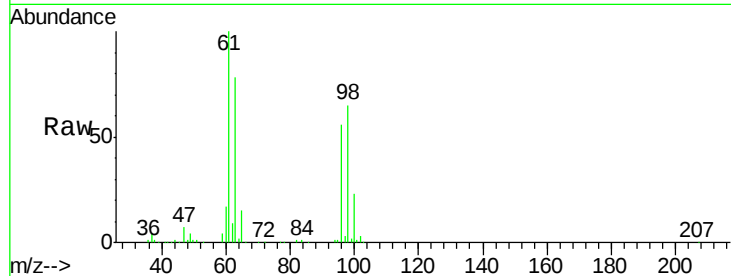
Tot Ion: 96 Resp: 73492

Ion Ratio Lower Upper

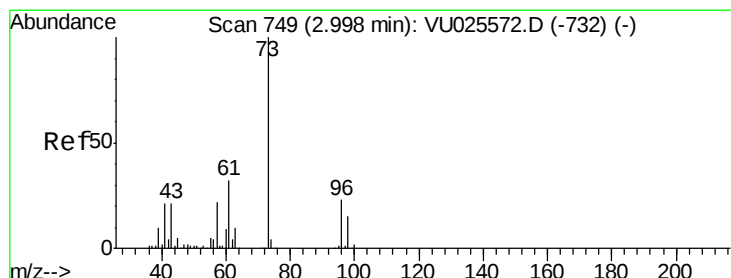
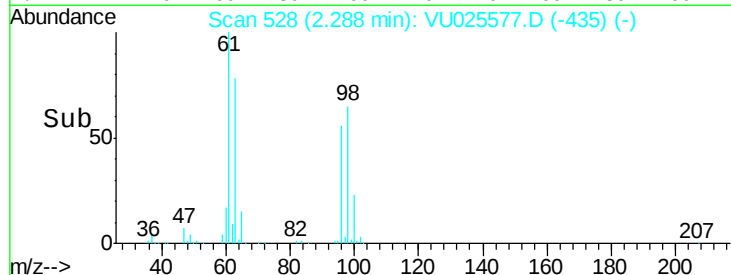
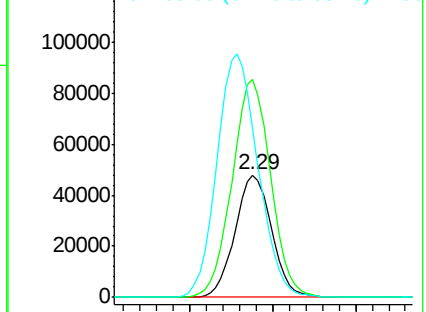
96 100

61 178.6 122.5 227.5

63 138.9 90.9 168.9



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.00 (60.70 to 61.70): VU0  
Ion 63.00 (62.70 to 63.70): VU0



#18

Methyl tert-butyl Ether

Concen: 2.812 ug/L

RT: 3.00 min Scan# 751

Delta R.T. 0.01 min

Lab File: VU025577.D

Acq: 21 Jul 2018 12:07

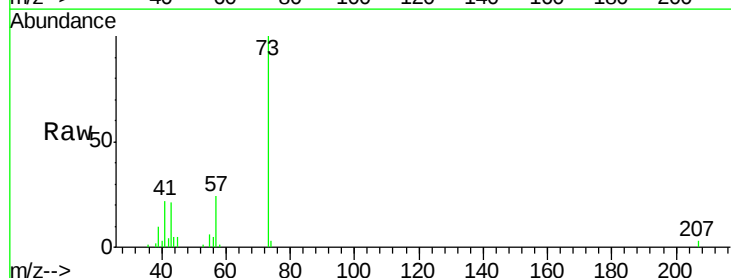
Tgt Ion: 73 Resp: 19339

Ion Ratio Lower Upper

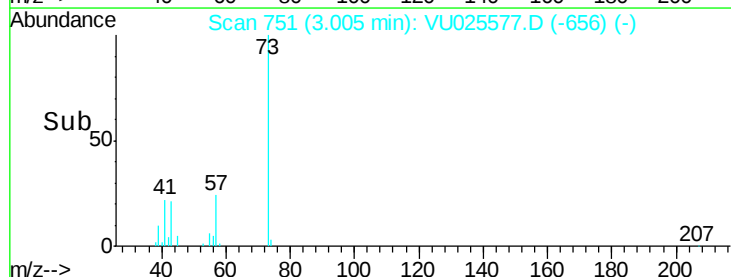
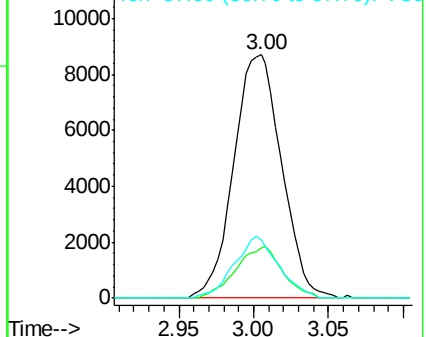
73 100

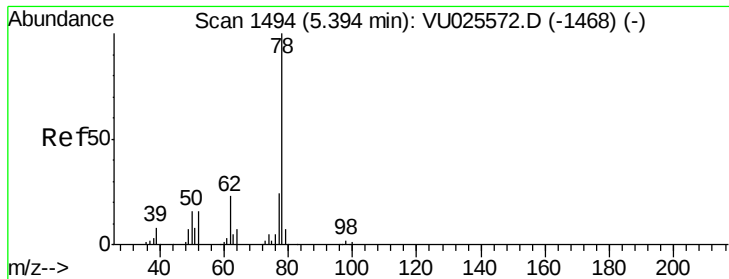
43 20.7 16.2 24.2

57 23.5 17.1 25.7



Abundance Ion 73.00 (72.70 to 73.70): VU0  
Ion 43.00 (42.70 to 43.70): VU0  
Ion 57.00 (56.70 to 57.70): VU0





#33

Benzene

Concen: 41.974 ug/L

RT: 5.39 min Scan# 1494

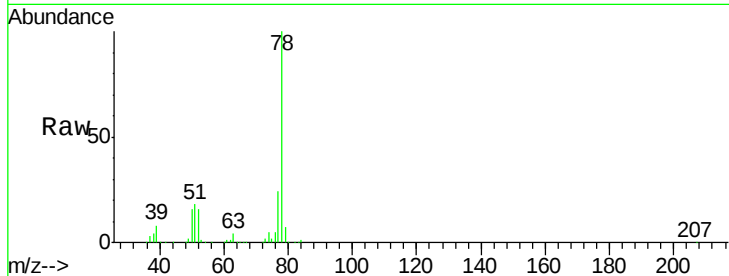
Delta R.T. 0.00 min

Lab File: VU025577.D

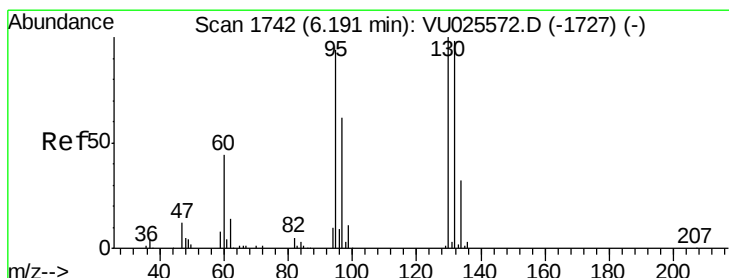
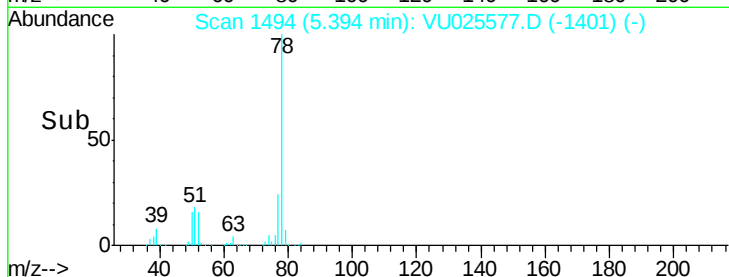
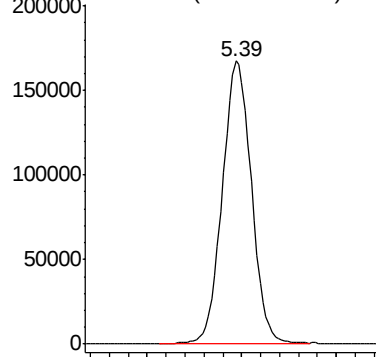
Acq: 21 Jul 2018 12:07

Instrument :  
MSVOA\_U  
ClientSampled :

Tgt Ion: 78 Resp: 358833



Abundance Ion 78.00 (77.70 to 78.70): VU0



#34

Trichloroethene

Concen: 40.991 ug/L

RT: 6.19 min Scan# 1742

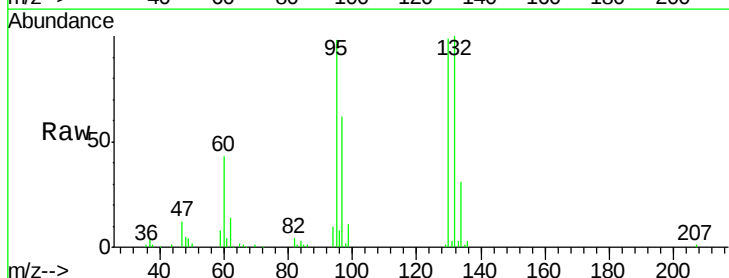
Delta R.T. 0.00 min

Lab File: VU025577.D

Acq: 21 Jul 2018 12:07

Tgt Ion: 95 Resp: 92980

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 62.6  | 45.9  | 85.3  |
| 132 | 101.7 | 72.2  | 134.2 |
| 130 | 101.1 | 74.9  | 139.1 |

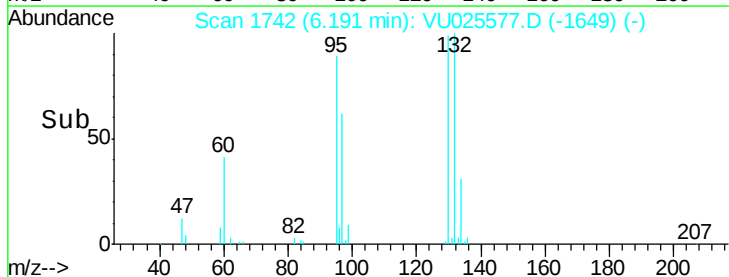
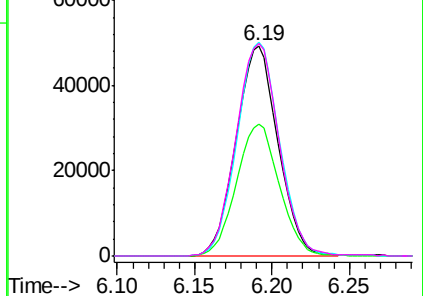


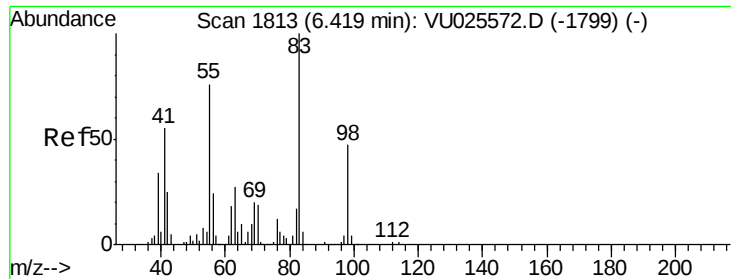
Abundance Ion 95.00 (94.70 to 95.70): VU0

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

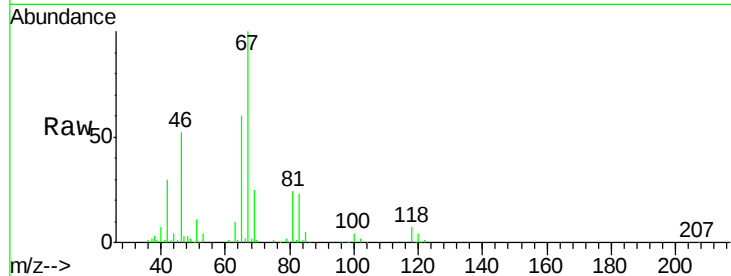




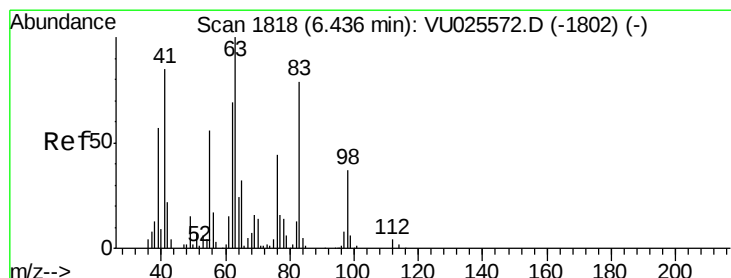
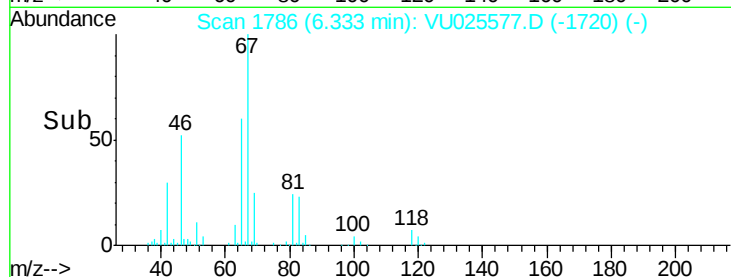
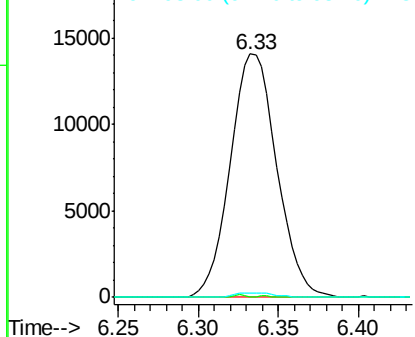
#35  
Methvlcvclohexane  
Concen: 7.634 ug/L  
RT: 6.33 min Scan# 1786  
Delta R.T. -0.09 min  
Lab File: VU025577.D  
Acq: 21 Jul 2018 12:07

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 83 Resp: 27921  
Ion Ratio Lower Upper  
83 100  
55 0.2 61.1 91.7#  
98 1.4 38.6 57.8#

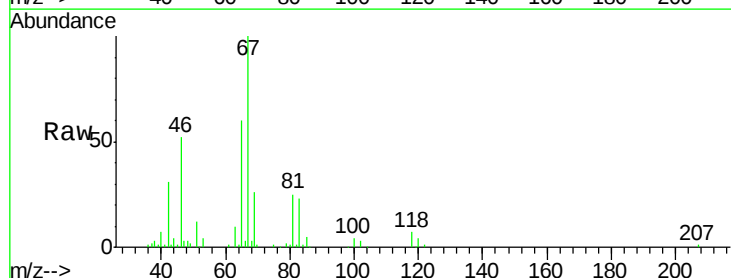


Abundance Ion 83.00 (82.70 to 83.70): VU0  
Ion 55.00 (54.70 to 55.70): VU0  
Ion 98.00 (97.70 to 98.70): VU0

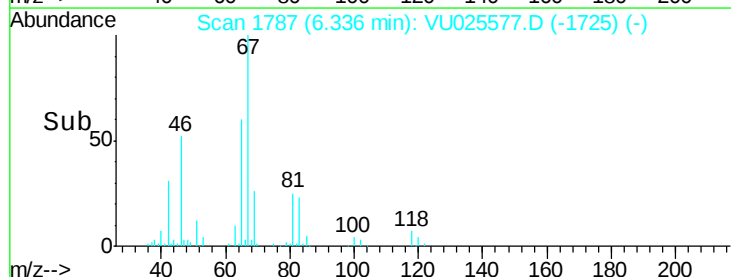
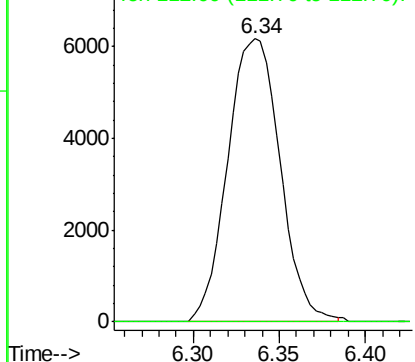


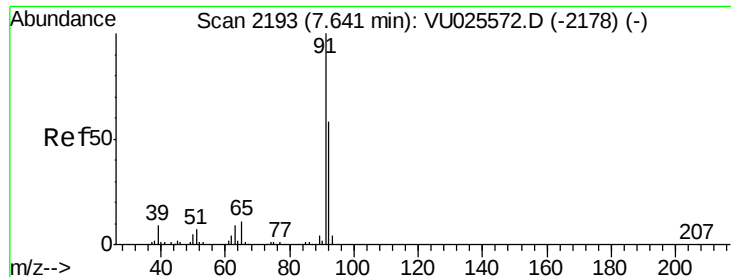
#37  
1,2-Dichloropropane  
Concen: 5.622 ug/L  
RT: 6.34 min Scan# 1787  
Delta R.T. -0.10 min  
Lab File: VU025577.D  
Acq: 21 Jul 2018 12:07

Tgt Ion: 63 Resp: 13133  
Ion Ratio Lower Upper  
63 100  
112 0.0 3.3 4.9#



Abundance Ion 63.00 (62.70 to 63.70): VU0  
Ion 112.00 (111.70 to 112.70): V





#42

Toluene

Concen: 42.080 ug/L

RT: 7.64 min Scan# 2193

Delta R.T. 0.00 min

Lab File: VU025577.D

Acq: 21 Jul 2018 12:07

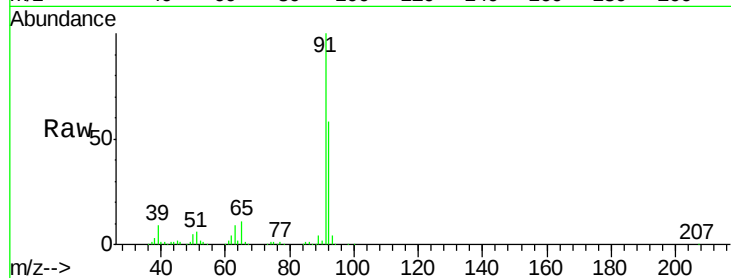
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 91 Resp: 387943

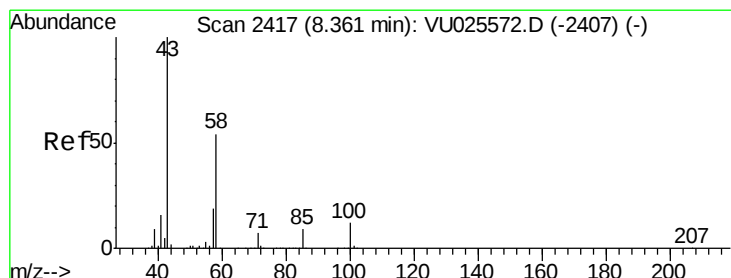
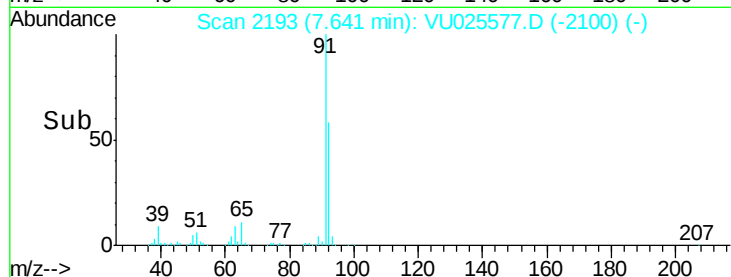
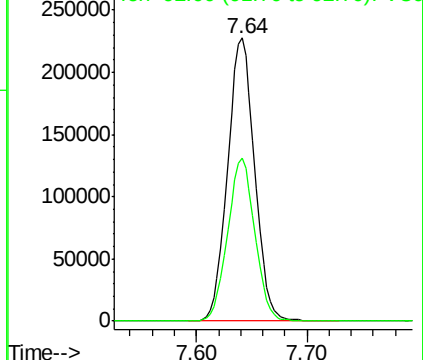
Ion Ratio Lower Upper

91 100

92 57.5 40.0 74.2



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



#48

2-Hexanone

Concen: 4.777 ug/L

RT: 8.31 min Scan# 2402

Delta R.T. -0.05 min

Lab File: VU025577.D

Acq: 21 Jul 2018 12:07

Tgt Ion: 43 Resp: 12382

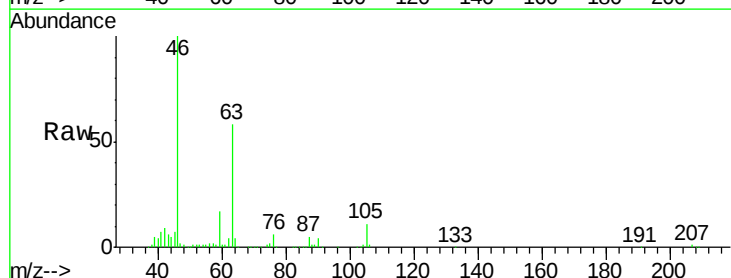
Ion Ratio Lower Upper

43 100

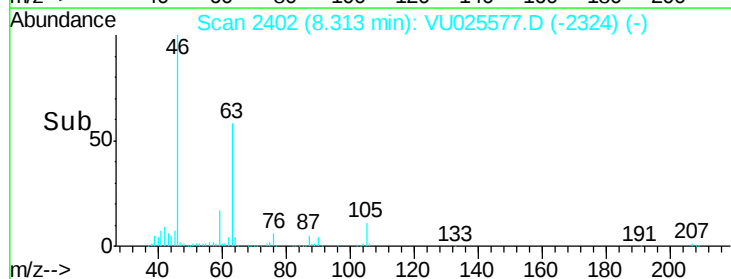
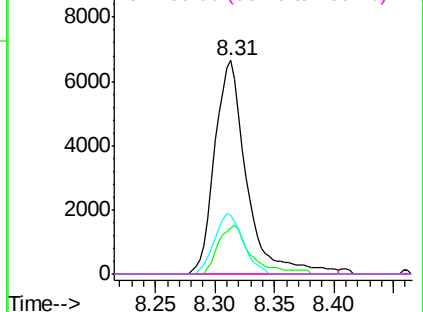
58 20.7 42.9 64.3#

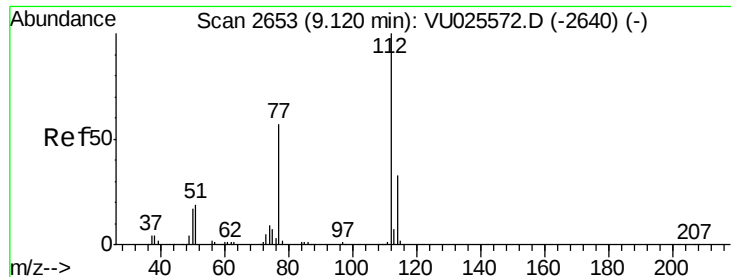
57 25.2 15.4 23.2#

100 0.0 9.6 14.4#



Abundance Ion 43.00 (42.70 to 43.70): VU0  
Ion 58.00 (57.70 to 58.70): VU0  
Ion 57.00 (56.70 to 57.70): VU0  
Ion 100.00 (99.70 to 100.70): VU0





#51

Chlorobenzene

Concen: 41.645 ug/L

RT: 9.12 min Scan# 2653

Delta R.T. 0.00 min

Lab File: VU025577.D

Acq: 21 Jul 2018 12:07

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:112 Resp: 258475

Ion Ratio Lower Upper

112 100

114 32.5 22.5 41.9

77 56.6 45.8 68.8

