

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U121019\  
 Data File : VU036076.D  
 Acq On : 10 Dec 2019 11:46  
 Operator : JC/MD  
 Sample : K6168-14  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Dec 11 06:30:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR120919WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Dec 11 06:27:41 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 287542   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 316961   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.84 | 152  | 96150    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61   | 65    | 157886   | 6.16     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 123.20% |
| 7) Chloroethane-d5             | 1.93   | 69    | 136677   | 5.08     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 101.60% |
| 11) 1,1-Dichloroethene-d2      | 2.59   | 63    | 184970   | 3.95     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 79.00%  |
| 20) 2-Butanone-d5              | 4.69   | 46    | 270748   | 62.00    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 124.00% |
| 24) Chloroform-d               | 5.11   | 84    | 226354   | 5.44     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 108.80% |
| 26) 1,2-Dichloroethane-d4      | 5.75   | 65    | 119159   | 5.53     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 110.60% |
| 32) Benzene-d6                 | 5.77   | 84    | 438373   | 5.46     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 109.20% |
| 36) 1,2-Dichloropropane-d6     | 6.73   | 67    | 139813   | 5.78     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 115.60% |
| 41) Toluene-d8                 | 7.93   | 98    | 344939   | 4.66     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 93.20%  |
| 43) trans-1,3-Dichloropropene- | 8.21   | 79    | 37399    | 3.71     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 74.20%  |
| 46) 2-Hexanone-d5              | 8.68   | 63    | 194194   | 53.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 106.44% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.78  | 84    | 120311   | 5.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 108.20% |
| 64) 1,2-Dichlorobenzene-d4     | 12.22  | 152   | 110161   | 5.96     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 119.20% |

## Target Compounds

| Target Compounds            | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|-----------------------------|-------|------|----------|-------|--------|--------|
| 12) 1,1-Dichloroethene      | 2.61  | 96   | 36978    | 1.478 | ug/L # | 38     |
| 13) Acetone                 | 2.67  | 43   | 13371    | 2.412 | ug/L   | 97     |
| 14) Carbon disulfide        | 2.83  | 76   | 5052     | 0.070 | ug/L   | 97     |
| 19) 1,1-Dichloroethane      | 3.92  | 63   | 237377   | 6.194 | ug/L   | 99     |
| 22) cis-1,2-Dichloroethene  | 4.72  | 96   | 2576     | 0.115 | ug/L   | 84     |
| 25) Chloroform              | 5.13  | 83   | 8992     | 0.211 | ug/L   | 99     |
| 29) 1,1,1-Trichloroethane   | 5.37  | 97   | 21746    | 0.609 | ug/L   | 99     |
| 31) Carbon tetrachloride    | 5.37  | 117  | 3067     | 0.095 | ug/L   | 95     |
| 34) Trichloroethene         | 6.58  | 95   | 27768    | 1.207 | ug/L   | 97     |
| 35) Methylcyclohexane       | 6.74  | 83   | 32948    | 1.068 | ug/L # | 19     |
| 37) 1,2-Dichloropropane     | 6.73  | 63   | 14955    | 0.688 | ug/L # | 86     |
| 39) cis-1,3-Dichloropropene | 7.61  | 75   | 2589     | 0.088 | ug/L # | 67     |
| 47) Tetrachloroethene       | 8.58  | 164  | 11773    | 0.538 | ug/L   | 95     |
| 48) 2-Hexanone              | 8.73  | 43   | 7441     | 0.914 | ug/L # | 44     |
| 49) Dibromochloromethane    | 8.58  | 129  | 9945     | 0.438 | ug/L # | 12     |
| 59) 1,2,3-Trichloropropane  | 11.83 | 75   | 10801    | 0.695 | ug/L   | 90     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU121019\  
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Operator : JC/MD  
Sample : K6168-14  
Misc : 25.0mL/MSVOA U/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: Dec 11 06:30:22 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR120919WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Dec 11 06:27:41 2019  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

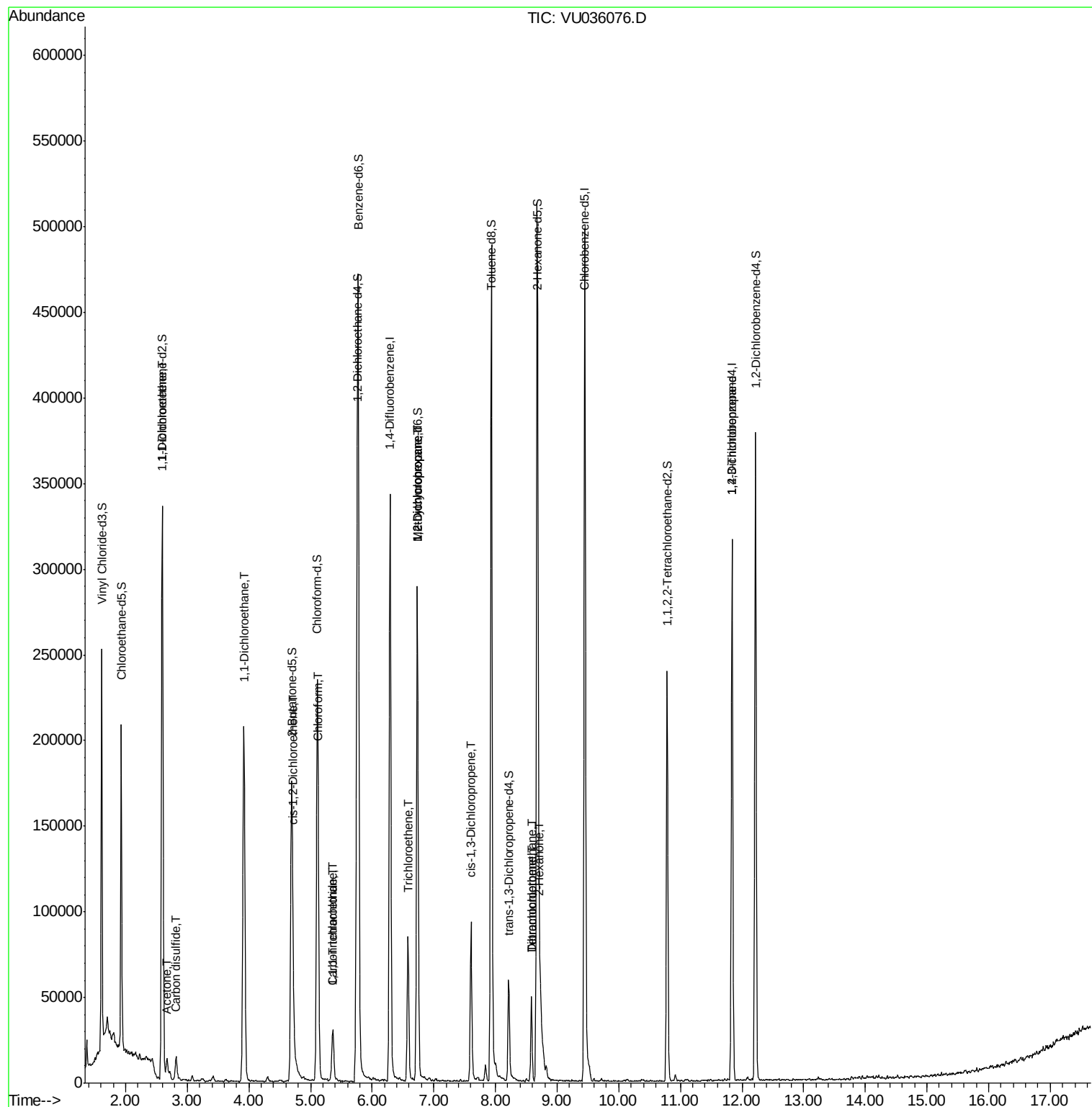
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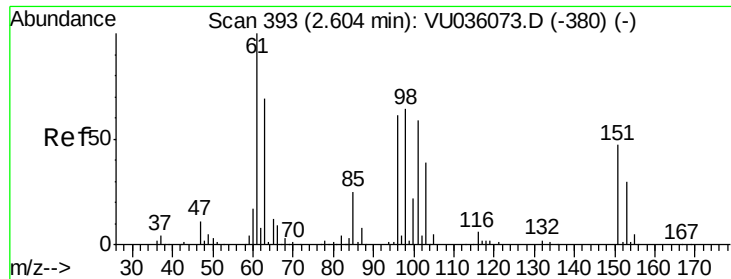
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU121019\  
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Sample : K6168-14  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR120919WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Dec 11 06:27:41 2019  
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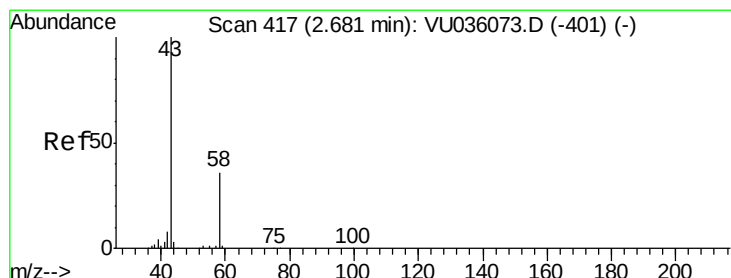
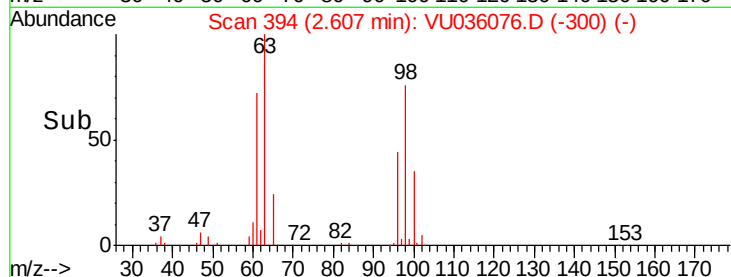
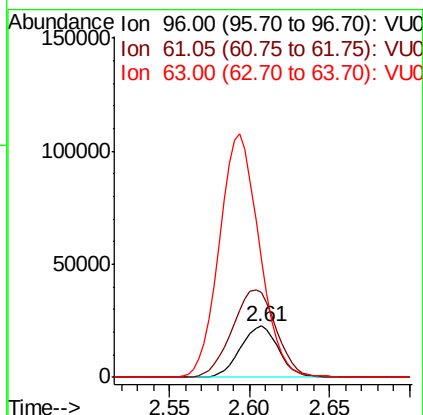
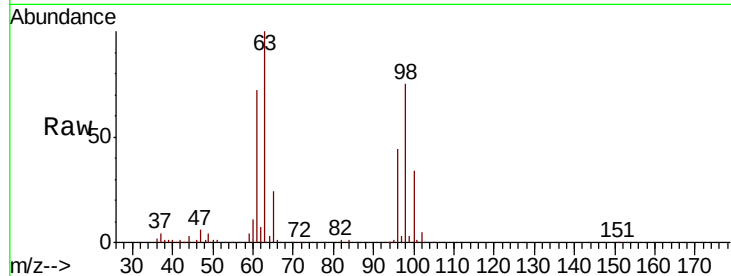




#12  
 1,1-Dichloroethene  
 Concen: 1.478 ug/L  
 RT: 2.61 min Scan# 394  
 Delta R.T. 0.00 min  
 Lab File: VU036076.D  
 Acq: 10 Dec 2019 11:46

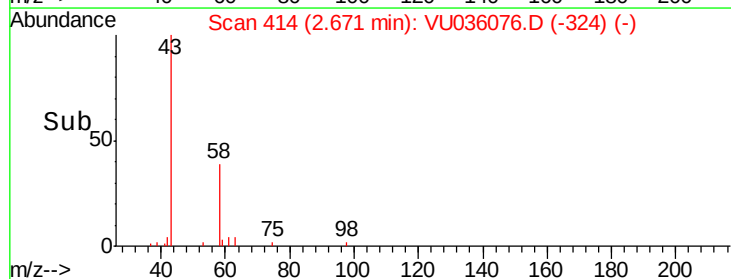
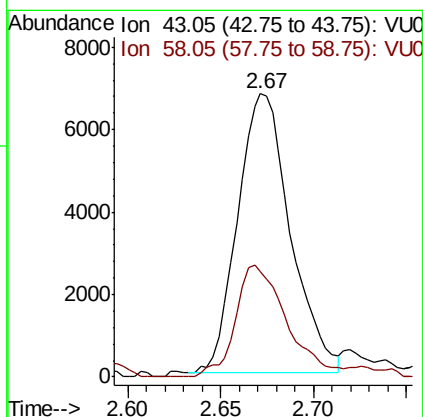
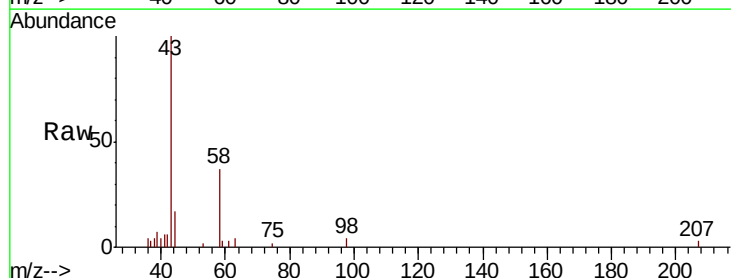
Instrument :  
 MSVOA\_U  
 ClientSampleID :

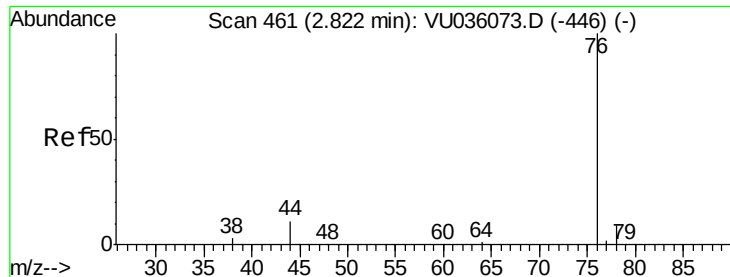
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 165.1 | 104.3 | 193.7 |
| 63      | 229.6 | 65.6  | 121.8 |



#13  
 Acetone  
 Concen: 2.412 ug/L  
 RT: 2.67 min Scan# 414  
 Delta R.T. -0.01 min  
 Lab File: VU036076.D  
 Acq: 10 Dec 2019 11:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 39.2  | 0.0   | 74.2  |





#14

Carbon disulfide

Concen: 0.070 ug/L

RT: 2.83 min Scan# 462

Delta R.T. 0.00 min

Lab File: VU036076.D

Acq: 10 Dec 2019 11:46

Instrument :

MSVOA\_U

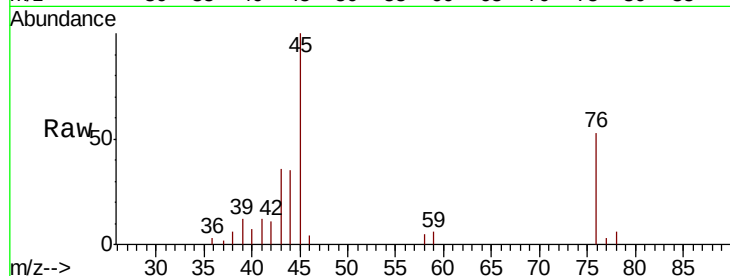
ClientSampled :

Tot Ion: 76 Resp: 5052

Ion Ratio Lower Upper

76 100

78 10.6 7.7 11.5



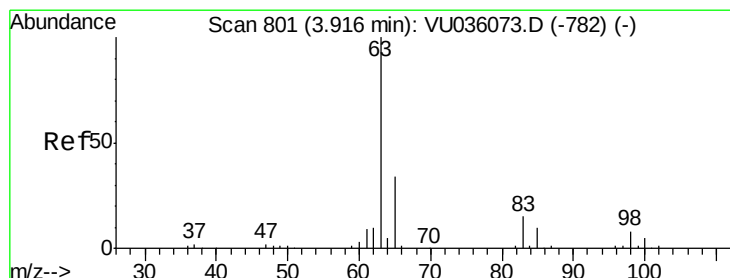
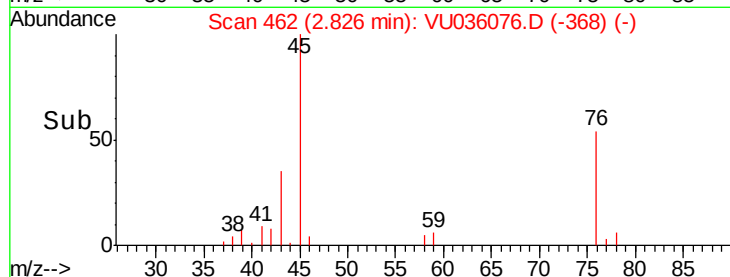
Abundance Ion 76.05 (75.75 to 76.75): VU036073.D (-446) (-)

Ion 78.00 (77.70 to 78.70): VU036073.D (-446) (-)

2.83

2.80 2.85

Time-->



#19

1,1-Dichloroethane

Concen: 6.194 ug/L

RT: 3.92 min Scan# 802

Delta R.T. 0.00 min

Lab File: VU036076.D

Acq: 10 Dec 2019 11:46

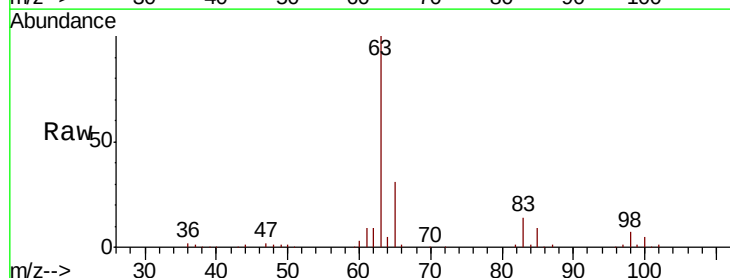
Tgt Ion: 63 Resp: 237377

Ion Ratio Lower Upper

63 100

65 31.1 21.8 40.4

83 13.7 10.1 18.9



Abundance Ion 63.10 (62.80 to 63.80): VU036073.D (-782) (-)

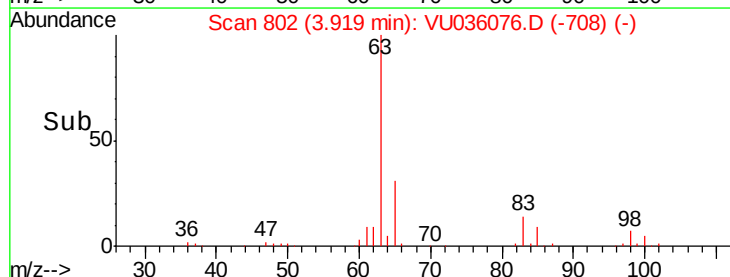
Ion 65.10 (64.80 to 65.80): VU036073.D (-782) (-)

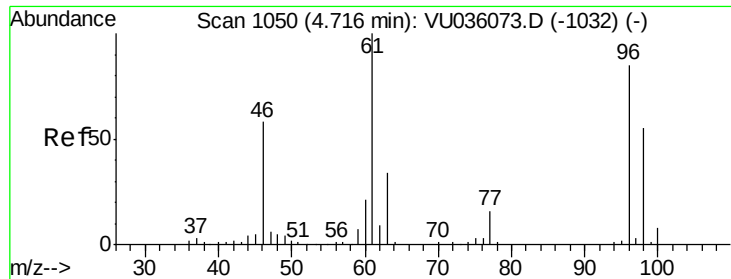
Ion 83.05 (82.75 to 83.75): VU036073.D (-782) (-)

3.92

3.80 3.90 4.00

Time-->

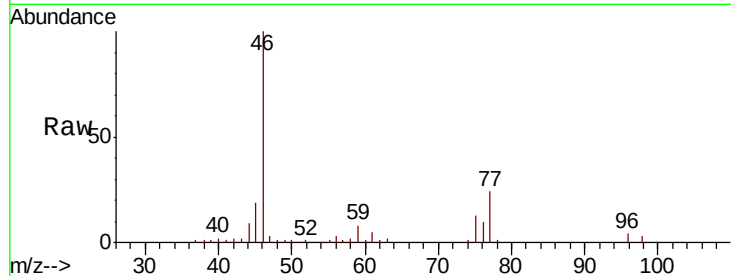




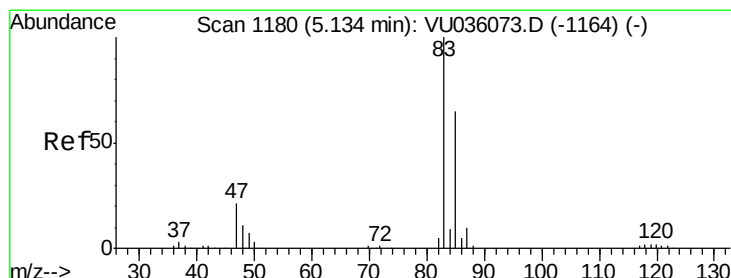
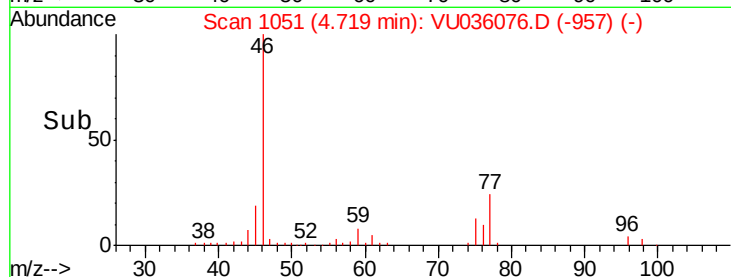
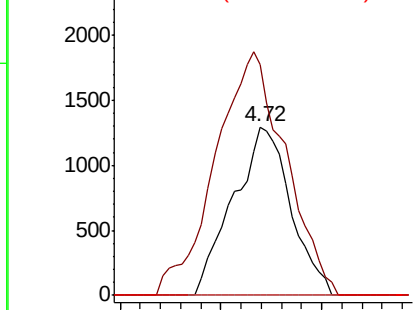
#22  
 cis-1,2-Dichloroethene  
 Concen: 0.115 ug/L  
 RT: 4.72 min Scan# 1051  
 Delta R.T. 0.00 min  
 Lab File: VU036076.D  
 Acq: 10 Dec 2019 11:46

Instrument :  
 MSVOA\_U  
 ClientSampleID :

Tot Ion: 96 Resp: 2576  
 Ion Ratio Lower Upper  
 96 100  
 61 136.7 83.0 154.2  
 68 0.0 0.0 0.0

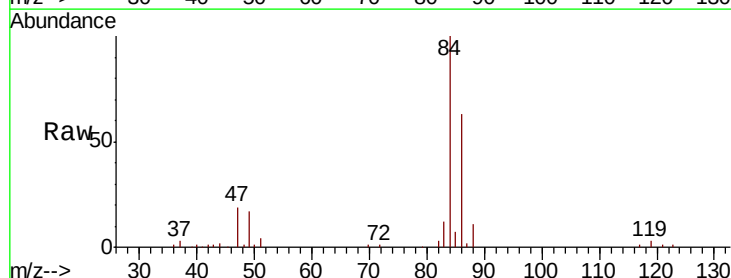


Abundance Ion 96.00 (95.70 to 96.70): VU0  
 Ion 61.05 (60.75 to 61.75): VU0  
 Ion 68.15 (67.85 to 68.85): VU0

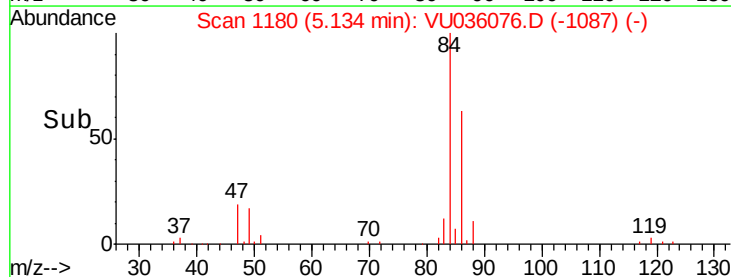
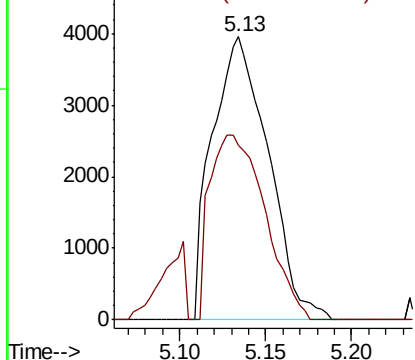


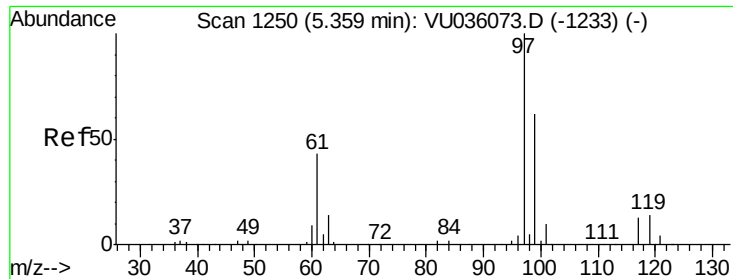
#25  
 Chloroform  
 Concen: 0.211 ug/L  
 RT: 5.13 min Scan# 1180  
 Delta R.T. 0.00 min  
 Lab File: VU036076.D  
 Acq: 10 Dec 2019 11:46

Tgt Ion: 83 Resp: 8992  
 Ion Ratio Lower Upper  
 83 100  
 85 61.8 43.9 81.5



Abundance Ion 83.05 (82.75 to 83.75): VU0  
 Ion 85.00 (84.70 to 85.70): VU0





#29

1,1,1-Trichloroethane

Concen: 0.609 ug/L

RT: 5.37 min Scan# 1252

Delta R.T. 0.01 min

Lab File: VU036076.D

Acq: 10 Dec 2019 11:46

Instrument :

MSVOA\_U

ClientSampleId :

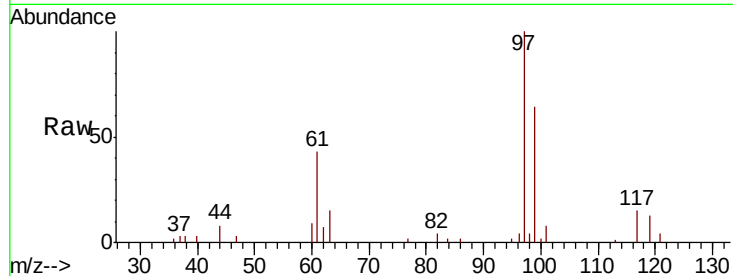
Tot Ion: 97 Resp: 21746

Ion Ratio Lower Upper

97 100

99 66.0 52.2 78.2

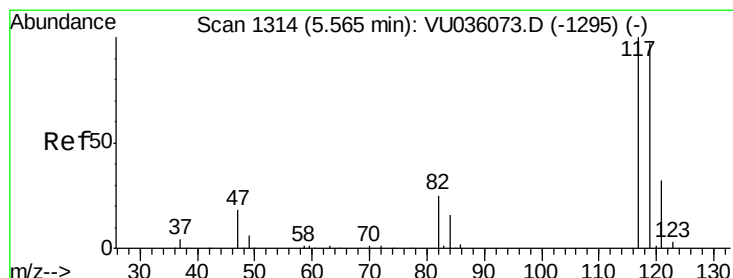
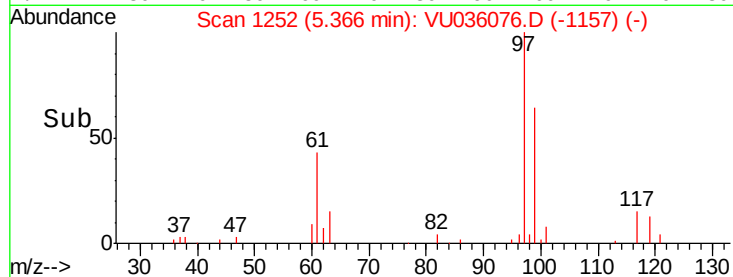
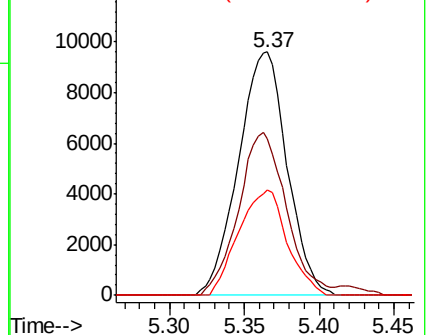
61 43.1 34.7 52.1



Abundance Ion 96.95 (96.65 to 97.65): VU036076.D (-1157) (-)

Ion 99.05 (98.75 to 99.75): VU036076.D (-1157) (-)

Ion 61.05 (60.75 to 61.75): VU036076.D (-1157) (-)



#31

Carbon tetrachloride

Concen: 0.095 ug/L

RT: 5.37 min Scan# 1252

Delta R.T. -0.20 min

Lab File: VU036076.D

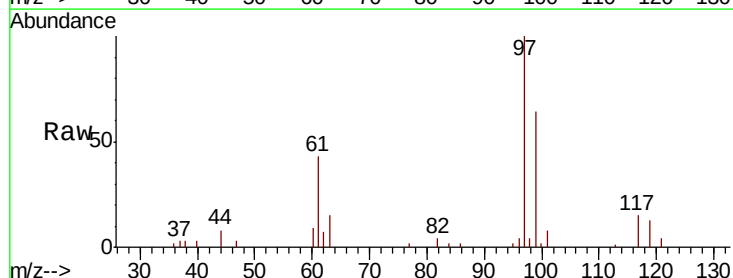
Acq: 10 Dec 2019 11:46

Tgt Ion: 117 Resp: 3067

Ion Ratio Lower Upper

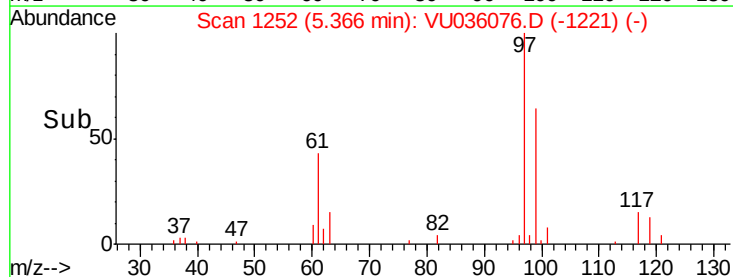
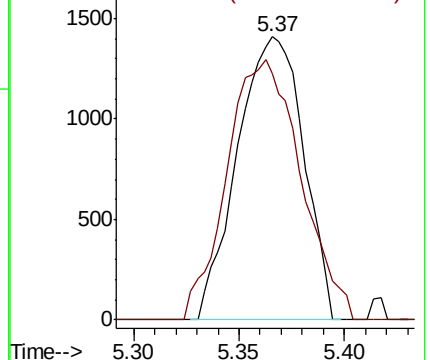
117 100

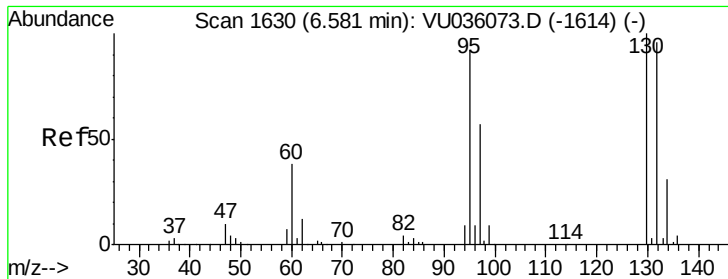
119 102.7 78.2 117.4



Abundance Ion 116.90 (116.60 to 117.60): VU036076.D (-1221) (-)

Ion 118.90 (118.60 to 119.60): VU036076.D (-1221) (-)





#34

Trichloroethene

Concen: 1.207 ug/L

RT: 6.58 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VU036076.D

Acq: 10 Dec 2019 11:46

Instrument :

MSVOA\_U

ClientSampleId :

Tot Ion: 95 Resp: 27768

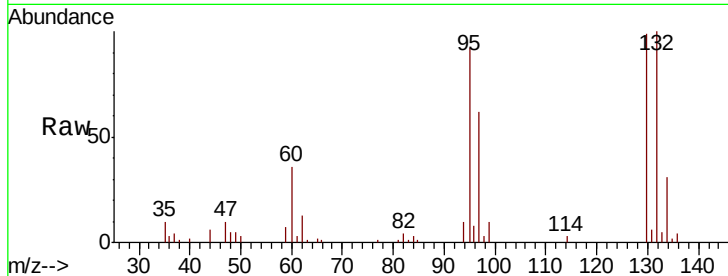
Ion Ratio Lower Upper

95 100

97 66.9 44.4 82.4

132 108.5 73.4 136.4

130 107.5 75.9 141.1

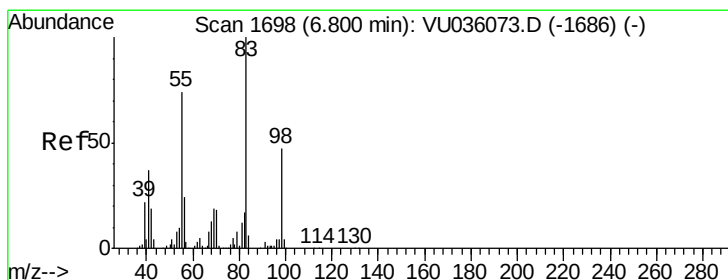
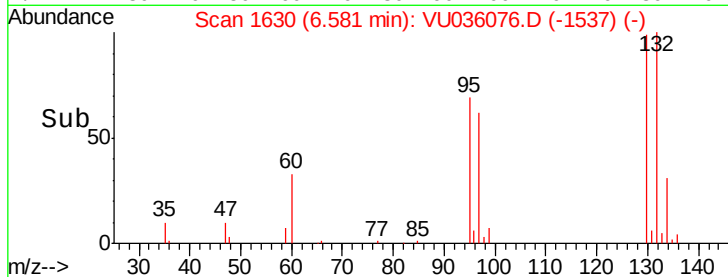
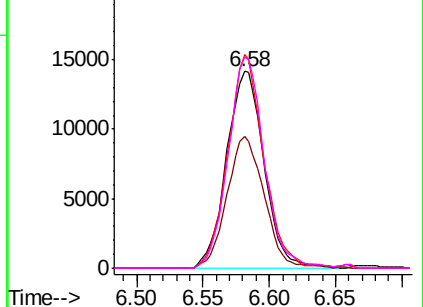


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 96.95 (96.65 to 97.65): VU0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35

Methylcyclohexane

Concen: 1.068 ug/L

RT: 6.74 min Scan# 1678

Delta R.T. -0.06 min

Lab File: VU036076.D

Acq: 10 Dec 2019 11:46

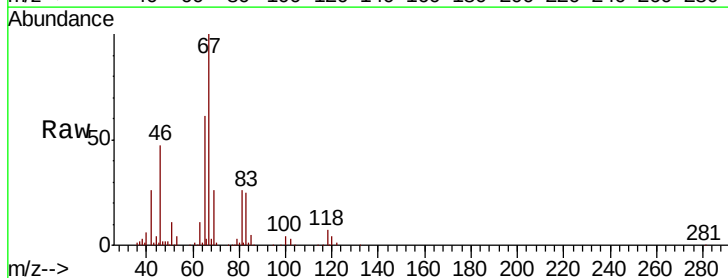
Tgt Ion: 83 Resp: 32948

Ion Ratio Lower Upper

83 100

55 0.0 62.1 93.1#

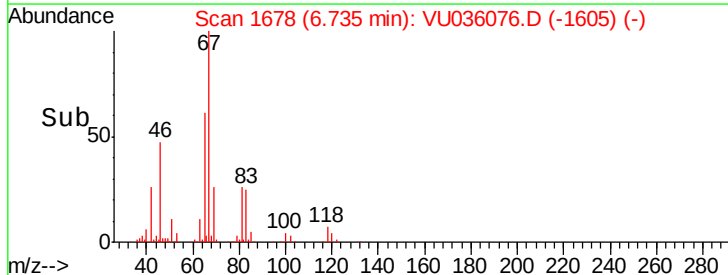
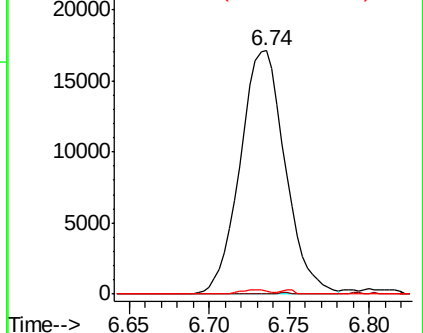
98 1.1 37.0 55.4#



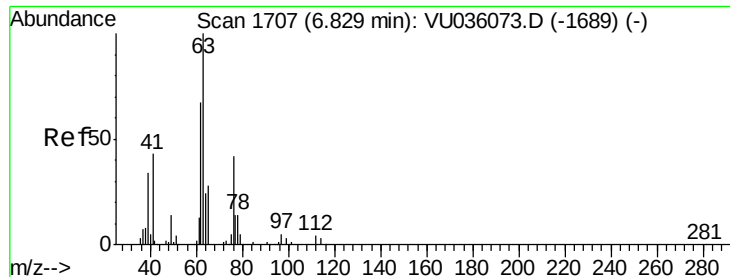
Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



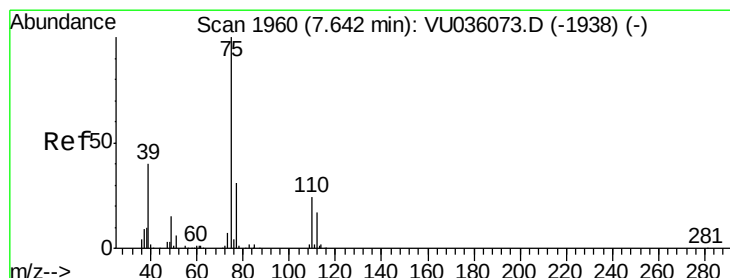
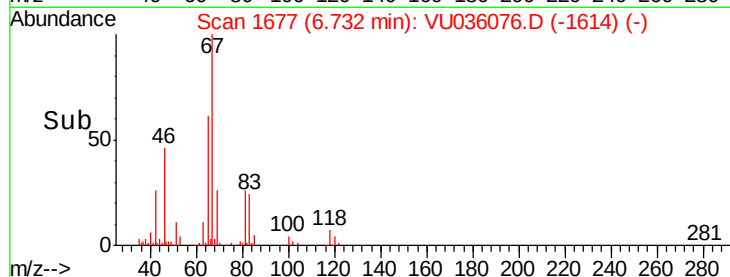
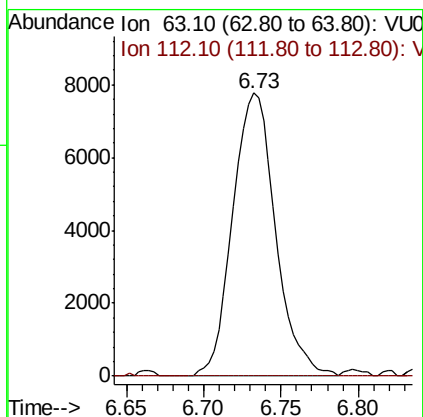
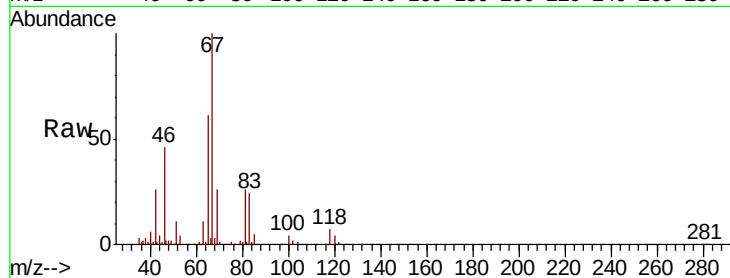




#37  
 1,2-Dichloropropane  
 Concen: 0.688 ug/L  
 RT: 6.73 min Scan# 1677  
 Delta R.T. -0.10 min  
 Lab File: VU036076.D  
 Acq: 10 Dec 2019 11:46

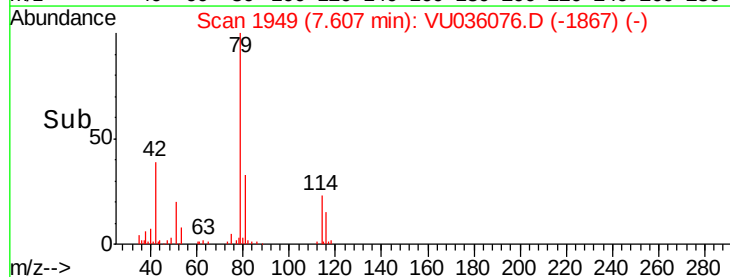
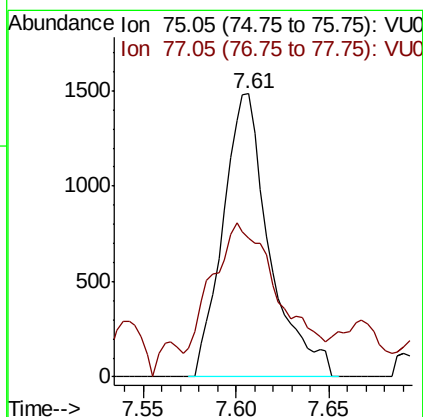
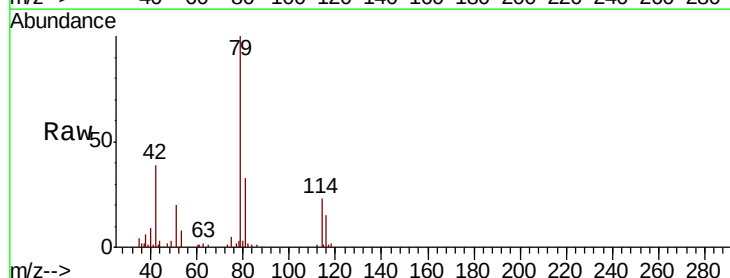
Instrument :  
 MSVOA\_U  
 ClientSampleId :

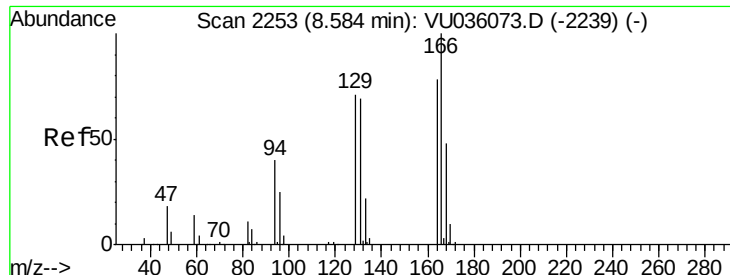
Tot Ion: 63 Resp: 14955  
 Ion Ratio Lower Upper  
 63 100  
 112 0.1 3.8 5.8#



#39  
 cis-1,3-Dichloropropene  
 Concen: 0.088 ug/L  
 RT: 7.61 min Scan# 1949  
 Delta R.T. -0.04 min  
 Lab File: VU036076.D  
 Acq: 10 Dec 2019 11:46

Tgt Ion: 75 Resp: 2589  
 Ion Ratio Lower Upper  
 75 100  
 77 49.0 21.7 40.3#

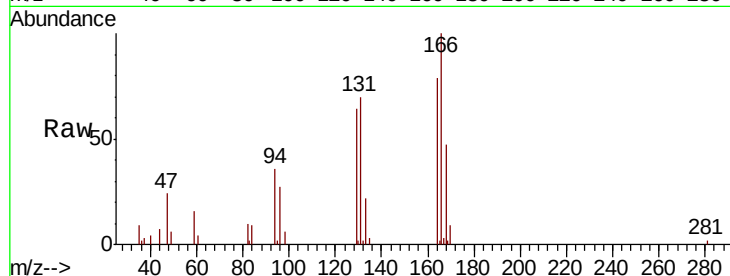




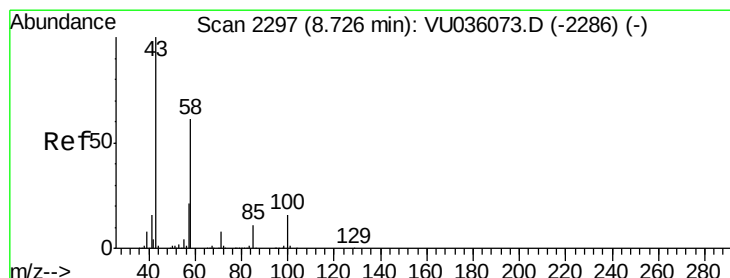
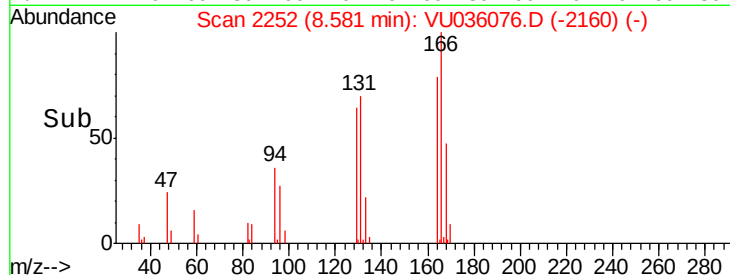
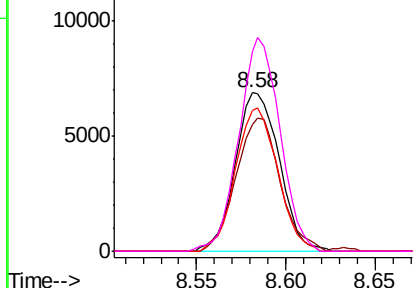
#47  
Tetrachloroethene  
Concen: 0.538 ug/L  
RT: 8.58 min Scan# 2252  
Delta R.T. -0.00 min  
Lab File: VU036076.D  
Acq: 10 Dec 2019 11:46

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:164 Resp: 11773  
Ion Ratio Lower Upper  
164 100  
129 80.1 63.1 117.3  
131 88.8 61.5 114.1  
166 125.9 91.0 169.0

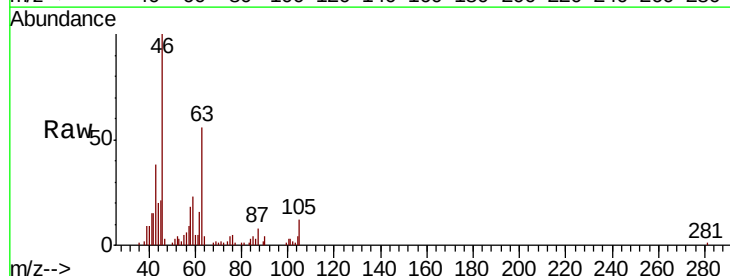


Abundance Ion 163.90 (163.60 to 164.60): V  
Ion 128.95 (128.65 to 129.65): V  
Ion 130.95 (130.65 to 131.65): V  
Ion 165.90 (165.60 to 166.60): V

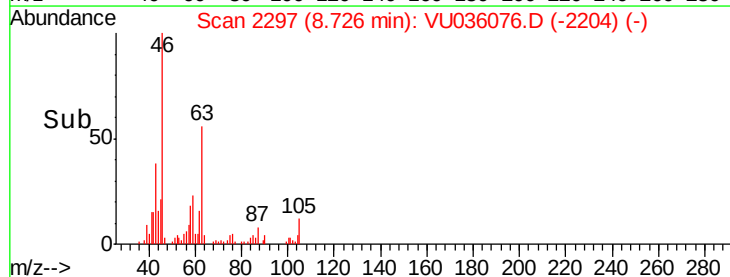
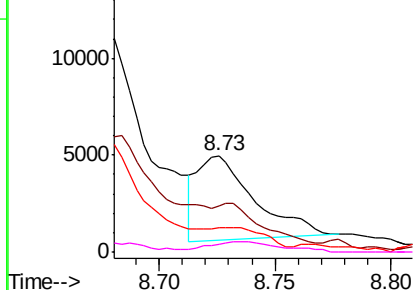


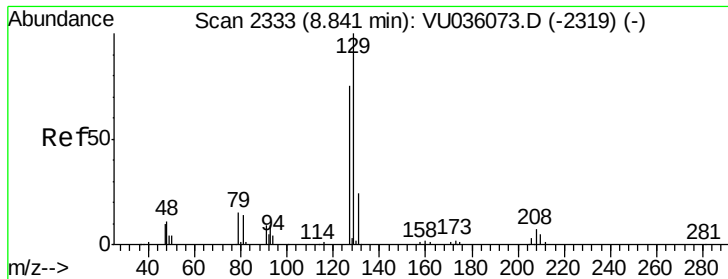
#48  
2-Hexanone  
Concen: 0.914 ug/L  
RT: 8.73 min Scan# 2297  
Delta R.T. 0.00 min  
Lab File: VU036076.D  
Acq: 10 Dec 2019 11:46

Tgt Ion: 43 Resp: 7441  
Ion Ratio Lower Upper  
43 100  
58 0.0 46.9 70.3#  
57 8.5 16.4 24.6#  
100 15.5 11.0 16.4



Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0





#49

Dibromochloromethane

Concen: 0.438 ug/L

RT: 8.58 min Scan# 2253

Delta R.T. -0.26 min

Lab File: VU036076.D

Acq: 10 Dec 2019 11:46

Instrument :

MSVOA\_U

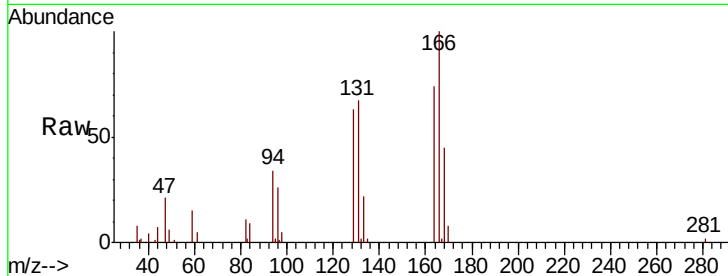
ClientSampleId :

Tot Ion:129 Resp: 9945

Ion Ratio Lower Upper

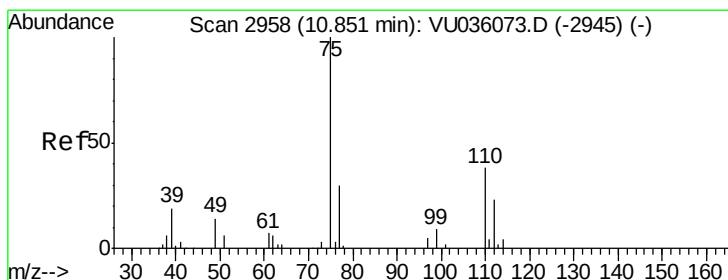
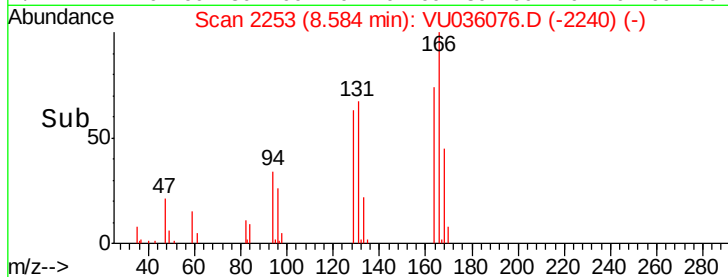
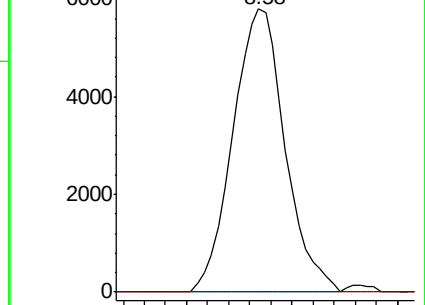
129 100

127 0.0 52.5 97.5#



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V



#59

1,2,3-Trichloropropane

Concen: 0.695 ug/L

RT: 11.83 min Scan# 3264

Delta R.T. 0.98 min

Lab File: VU036076.D

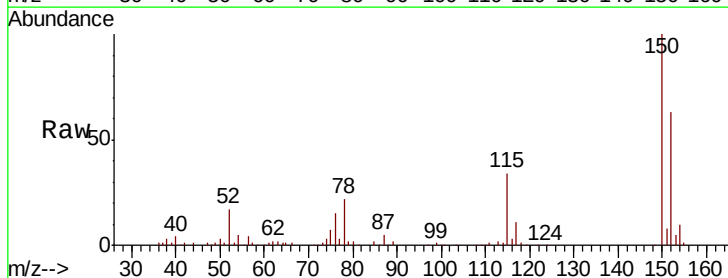
Acq: 10 Dec 2019 11:46

Tgt Ion: 75 Resp: 10801

Ion Ratio Lower Upper

75 100

77 39.3 26.7 40.1



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0

