

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU051420\  
 Data File : VU038173.D  
 Acq On : 14 May 2020 16:42  
 Operator : JC/MD  
 Sample : L2631-11  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: May 15 01:09:07 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri May 15 01:05:40 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.28  | 114  | 335694   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.44  | 117  | 323810   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 149827   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61   | 65    | 103627   | 3.38     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 67.60%  |
| 7) Chloroethane-d5             | 1.93   | 69    | 105105   | 3.96     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 79.20%  |
| 11) 1,1-Dichloroethene-d2      | 2.59   | 63    | 145102   | 2.83     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 56.60%# |
| 20) 2-Butanone-d5              | 4.66   | 46    | 432283   | 57.06    | ug/L | -0.02   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 114.12% |
| 24) Chloroform-d               | 5.10   | 84    | 210968   | 4.53     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 90.60%  |
| 26) 1,2-Dichloroethane-d4      | 5.74   | 65    | 130177   | 4.88     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 97.60%  |
| 32) Benzene-d6                 | 5.76   | 84    | 435559   | 4.49     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.72   | 67    | 146248   | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 93.40%  |
| 41) Toluene-d8                 | 7.92   | 98    | 377051   | 4.32     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 86.40%  |
| 43) trans-1,3-Dichloropropene- | 8.20   | 79    | 52675    | 4.20     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 84.00%  |
| 46) 2-Hexanone-d5              | 8.65   | 63    | 371711   | 62.75    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 125.50% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.77  | 84    | 126836   | 5.13     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 102.60% |
| 64) 1,2-Dichlorobenzene-d4     | 12.20  | 152   | 144518   | 4.96     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 99.20%  |

## Target Compounds

| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Ovalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 12) 1,1-Dichloroethene         | 2.61  | 96   | 4923     | 0.211   | ug/L # | 1      |
| 13) Acetone                    | 2.66  | 43   | 14679    | 3.088   | ug/L   | 99     |
| 15) Methyl Acetate             | 2.82  | 43   | 10986    | 0.826   | ug/L # | 53     |
| 17) Methyl tert-butyl Ether    | 3.40  | 73   | 58578    | 0.905   | ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.91  | 63   | 24194    | 0.487   | ug/L   | 95     |
| 22) cis-1,2-Dichloroethene     | 4.71  | 96   | 37693    | 1.375   | ug/L   | 94     |
| 25) Chloroform                 | 5.12  | 83   | 17500    | 0.378   | ug/L   | 94     |
| 29) 1,1,1-Trichloroethane      | 5.35  | 97   | 10227    | 0.276   | ug/L   | 96     |
| 34) Trichloroethene            | 6.57  | 95   | 5985610  | 230.795 | ug/L   | 99     |
| 35) Methylcyclohexane          | 6.72  | 83   | 33910    | 0.807   | ug/L # | 15     |
| 37) 1,2-Dichloropropane        | 6.72  | 63   | 15550    | 0.552   | ug/L # | 89     |
| 39) cis-1,3-Dichloropropene    | 7.59  | 75   | 3307     | 0.082   | ug/L # | 61     |
| 47) Tetrachloroethene          | 8.57  | 164  | 148023   | 8.160   | ug/L   | 99     |
| 48) 2-Hexanone                 | 8.70  | 43   | 21008    | 1.470   | ug/L # | 94     |
| 49) Dibromochloromethane       | 8.57  | 129  | 142021   | 6.997   | ug/L # | 10     |
| 59) 1,2,3-Trichloropropane     | 10.84 | 75   | 4290     | 0.227   | ug/L # | 87     |
| 66) 1,2-Dibromo-3-chloropropan | 12.80 | 75   | 2065     | 0.539   | ug/L # | 23     |

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Sample : L2631-11  
Misc : 25.0mL/MSVOA U/WATER  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: May 15 01:09:07 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR050720WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri May 15 01:05:40 2020  
Response via : Initial Calibration

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

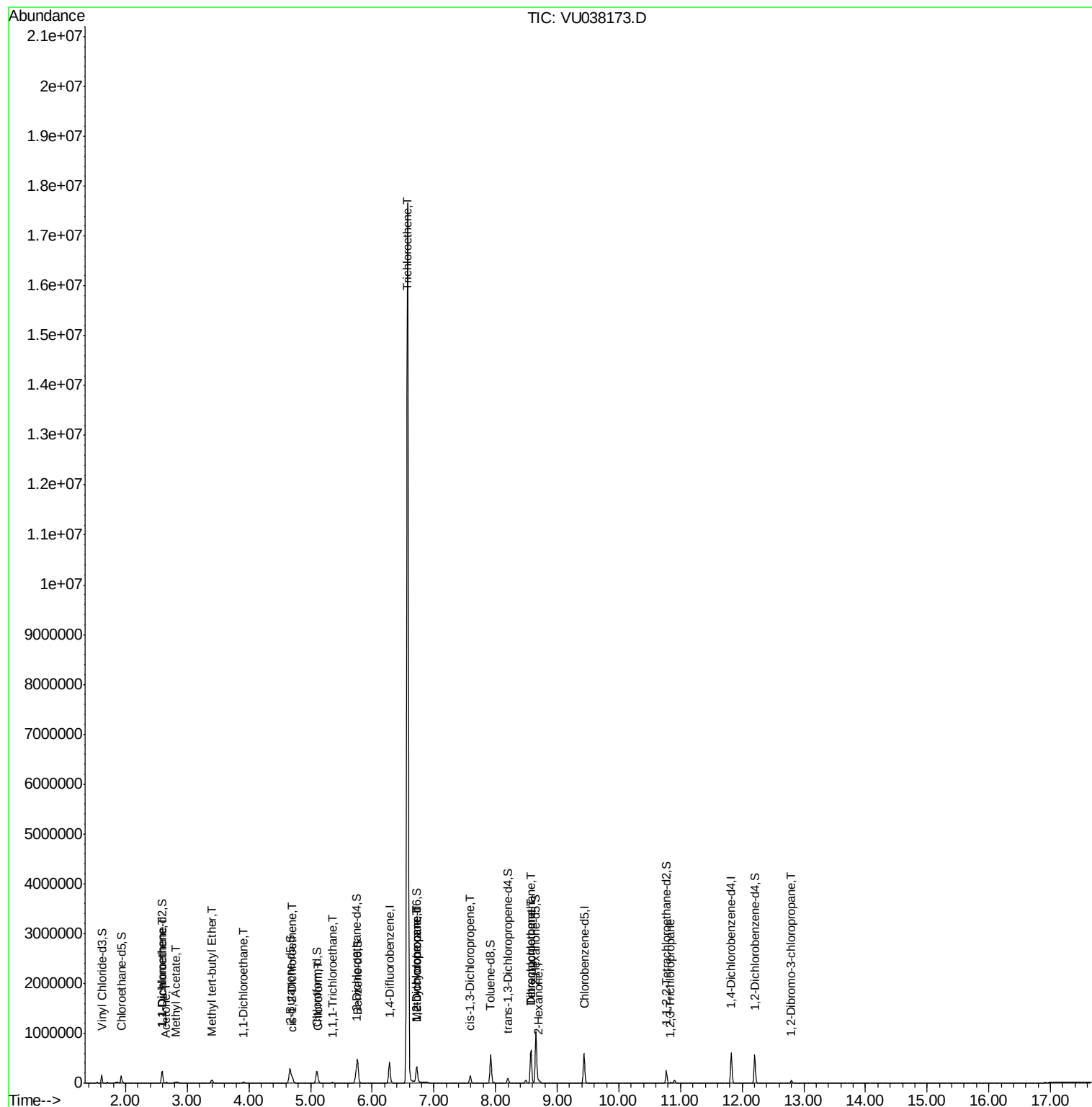
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|-------|--|--|--|--|--|--|
| ----- |  |  |  |  |  |  |
| ----- |  |  |  |  |  |  |

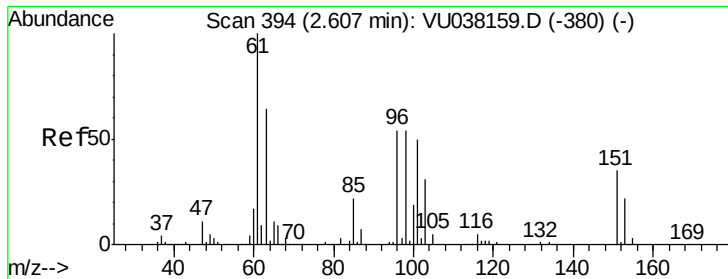
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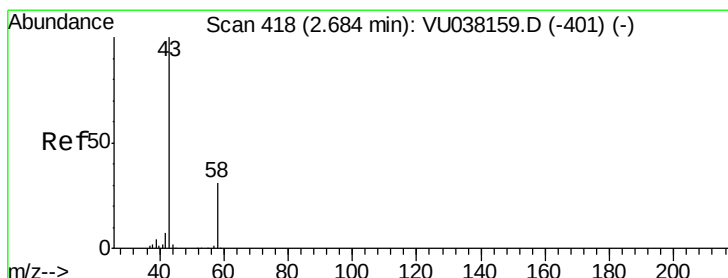
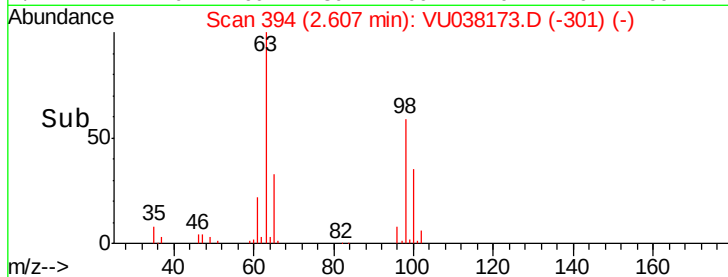
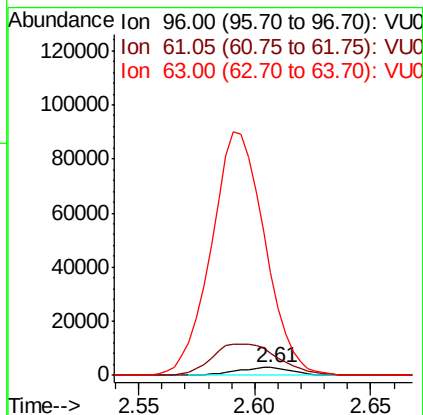
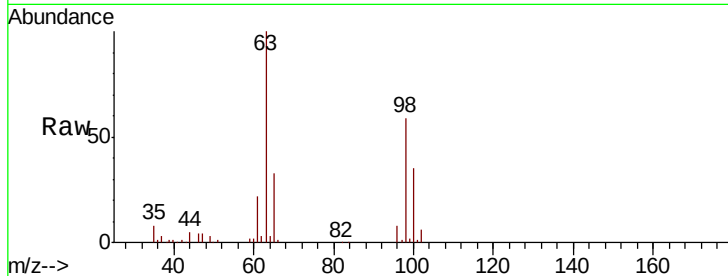




#12  
 1,1-Dichloroethene  
 Concen: 0.211 ug/L  
 RT: 2.61 min Scan# 394  
 Delta R.T. 0.00 min  
 Lab File: VU038173.D  
 Acq: 14 May 2020 16:42

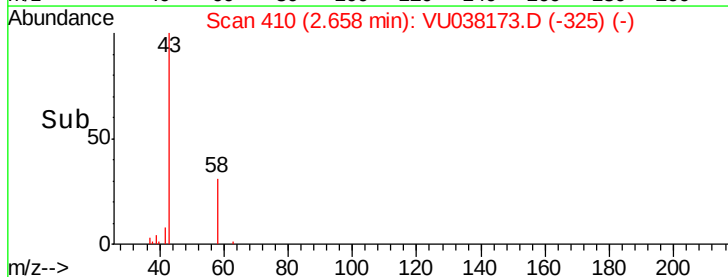
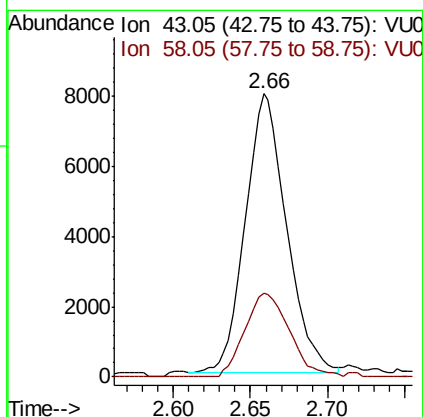
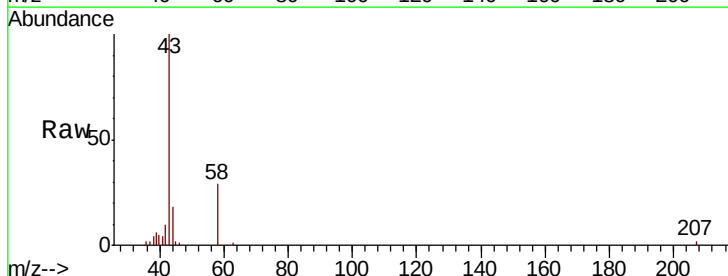
Instrument :  
 MSVOA\_U  
 ClientSampled :

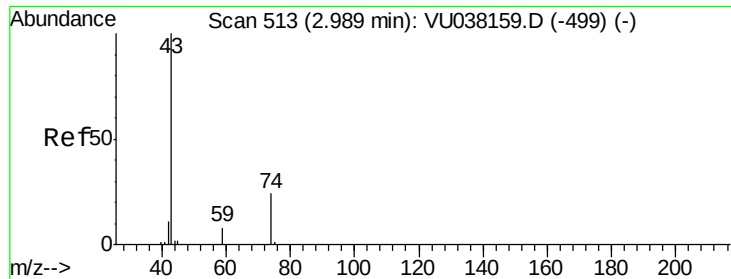
Tot Ion: 96 Resp: 4923  
 Ion Ratio Lower Upper  
 96 100  
 61 284.4 126.2 234.4#  
 63 1309.5 96.9 179.9#



#13  
 Acetone  
 Concen: 3.088 ug/L  
 RT: 2.66 min Scan# 410  
 Delta R.T. -0.03 min  
 Lab File: VU038173.D  
 Acq: 14 May 2020 16:42

Tgt Ion: 43 Resp: 14679  
 Ion Ratio Lower Upper  
 43 100  
 58 32.4 0.0 63.6

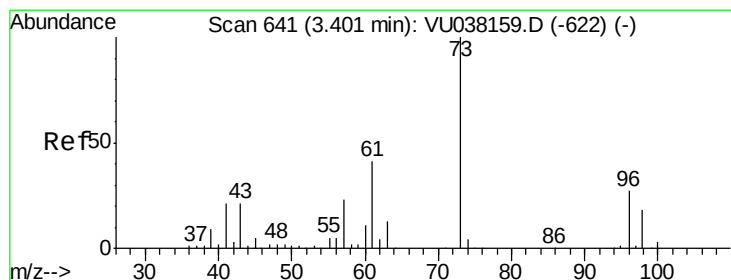
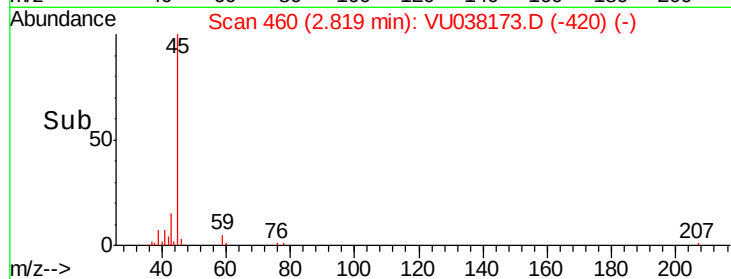
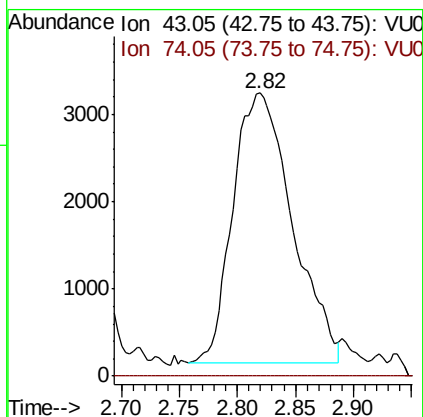
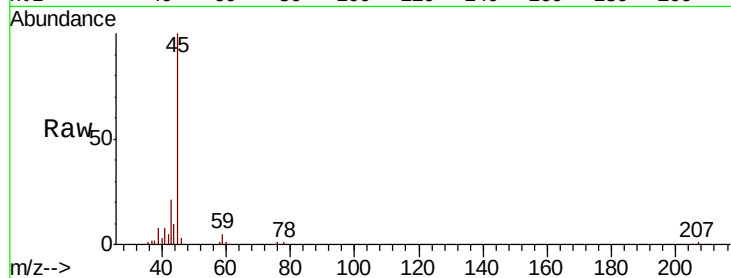




#15  
Methvl Acetate  
Concen: 0.826 ug/L  
RT: 2.82 min Scan# 460  
Delta R.T. -0.17 min  
Lab File: VU038173.D  
Acq: 14 May 2020 16:42

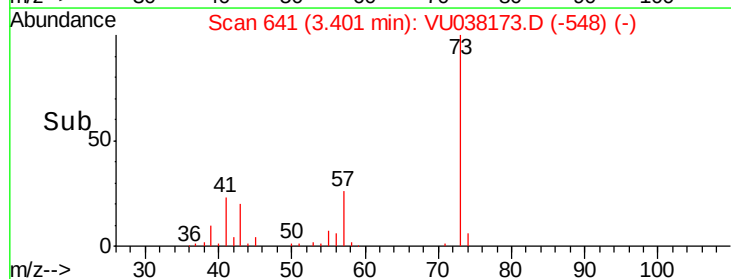
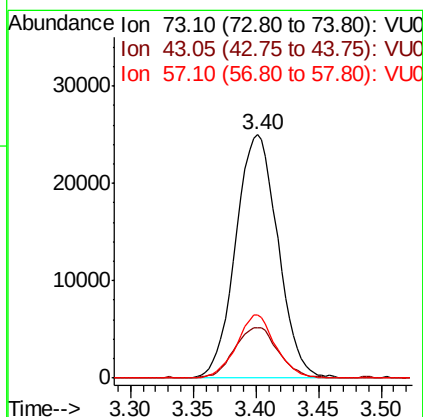
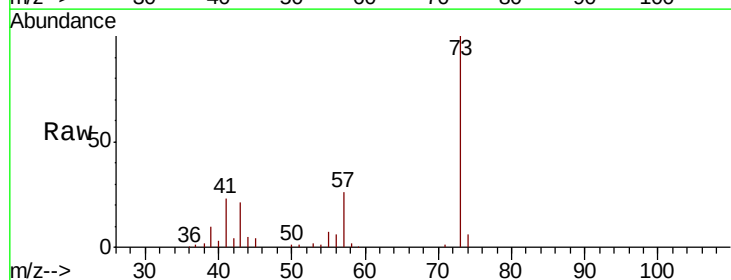
Instrument :  
MSVOA\_U  
ClientSampleId :

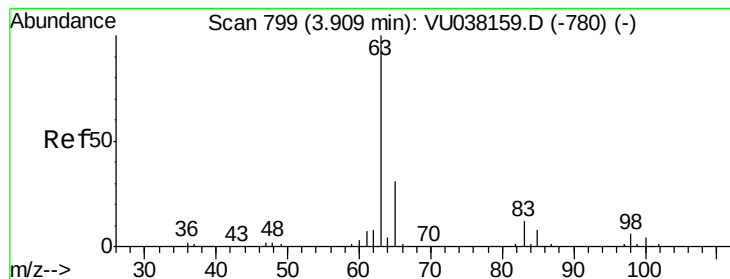
Tot Ion: 43 Resp: 10986  
Ion Ratio Lower Upper  
43 100  
74 0.0 18.0 27.0#



#17  
Methyl tert-butyl Ether  
Concen: 0.905 ug/L  
RT: 3.40 min Scan# 641  
Delta R.T. 0.00 min  
Lab File: VU038173.D  
Acq: 14 May 2020 16:42

Tgt Ion: 73 Resp: 58578  
Ion Ratio Lower Upper  
73 100  
43 21.6 16.9 25.3  
57 23.9 18.2 27.2





#19

1,1-Dichloroethane

Concen: 0.487 ug/L

RT: 3.91 min Scan# 799

Delta R.T. 0.00 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

Instrument :

MSVOA\_U

ClientSampled :

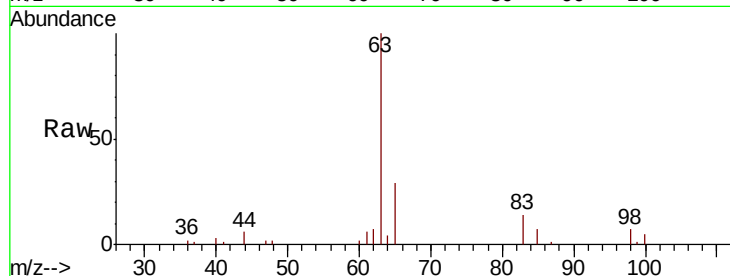
Tot Ion: 63 Resp: 24194

Ion Ratio Lower Upper

63 100

65 29.5 22.5 41.7

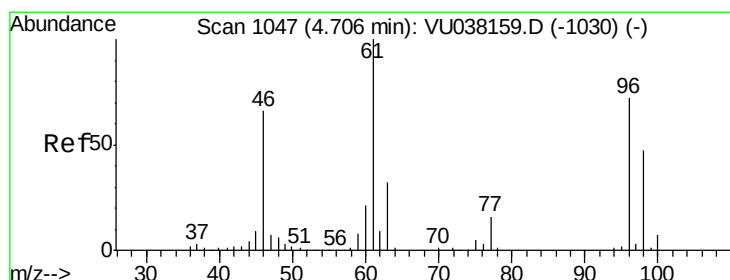
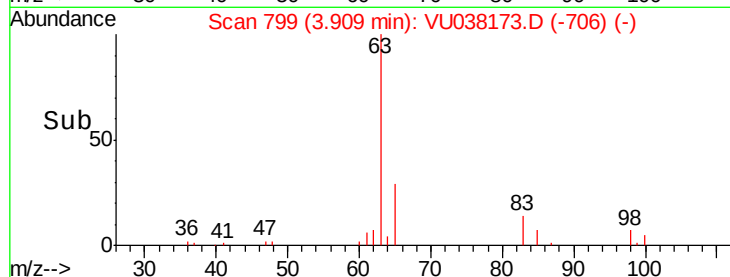
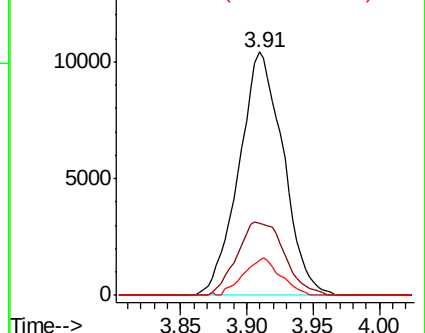
83 14.3 8.9 16.5



Abundance Ion 63.10 (62.80 to 63.80): VU038173.D (-706) (-)

Ion 65.10 (64.80 to 65.80): VU038173.D (-706) (-)

Ion 83.05 (82.75 to 83.75): VU038173.D (-706) (-)



#22

cis-1,2-Dichloroethene

Concen: 1.375 ug/L

RT: 4.71 min Scan# 1047

Delta R.T. 0.00 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

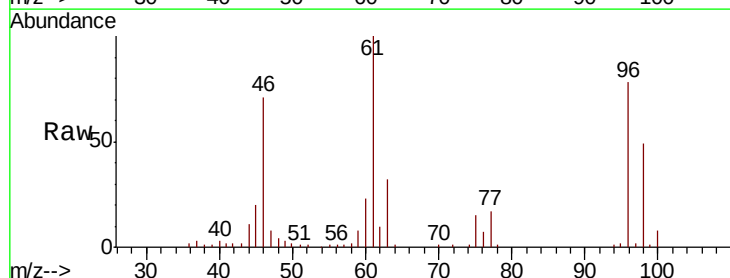
Tgt Ion: 96 Resp: 37693

Ion Ratio Lower Upper

96 100

61 129.0 95.3 176.9

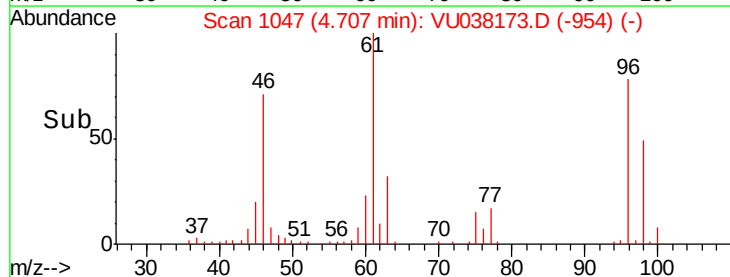
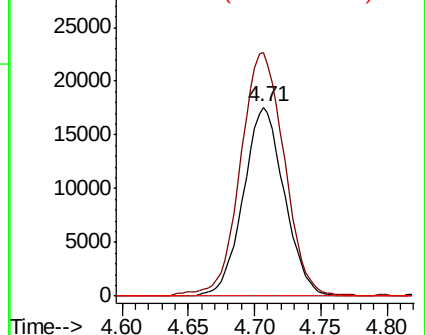
68 0.0 0.0 0.0

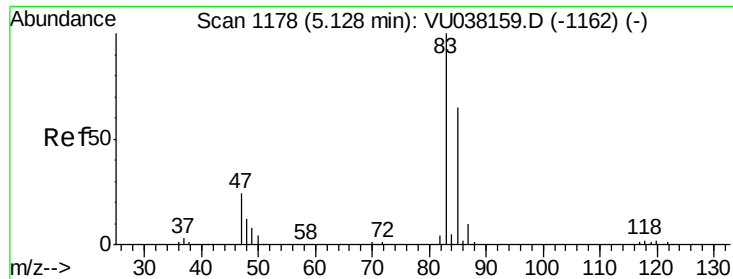


Abundance Ion 96.00 (95.70 to 96.70): VU038173.D (-954) (-)

Ion 61.05 (60.75 to 61.75): VU038173.D (-954) (-)

Ion 68.15 (67.85 to 68.85): VU038173.D (-954) (-)

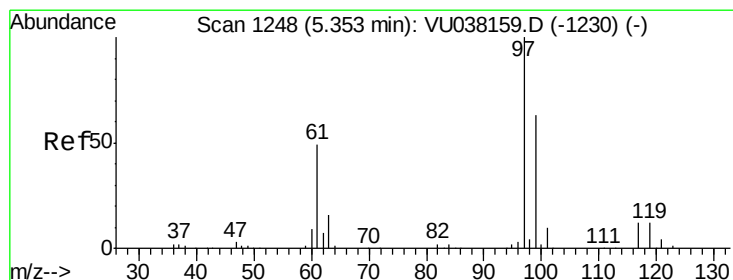
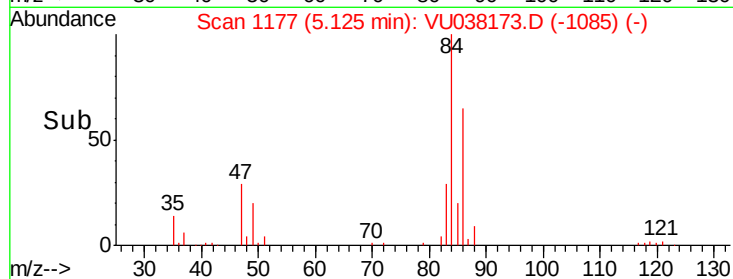
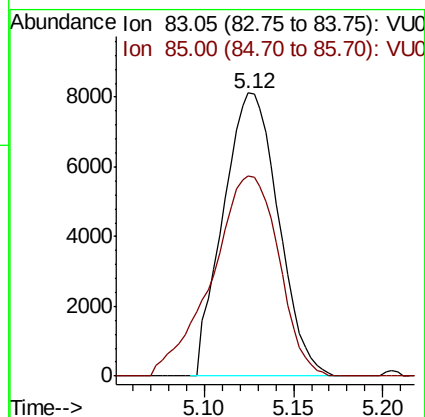
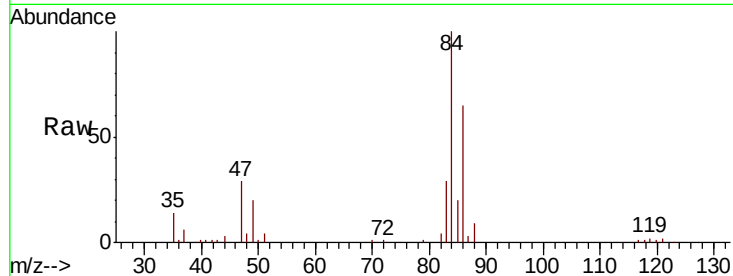




#25  
Chloroform  
Concen: 0.378 ug/L  
RT: 5.12 min Scan# 1177  
Delta R.T. -0.00 min  
Lab File: VU038173.D  
Acq: 14 May 2020 16:42

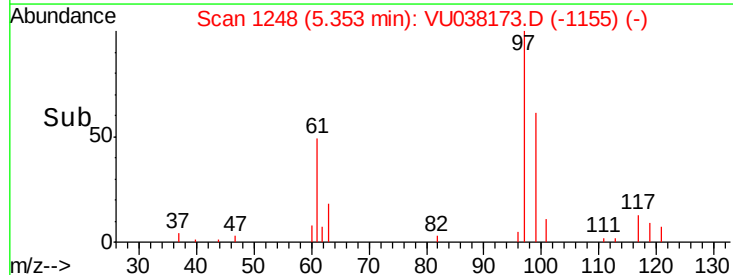
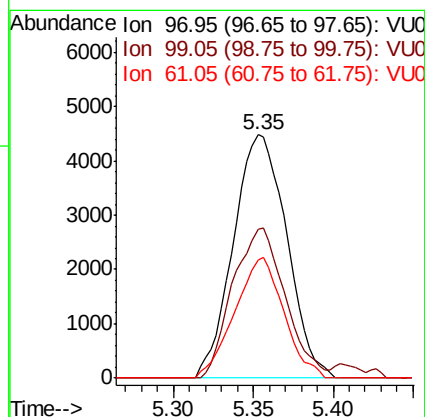
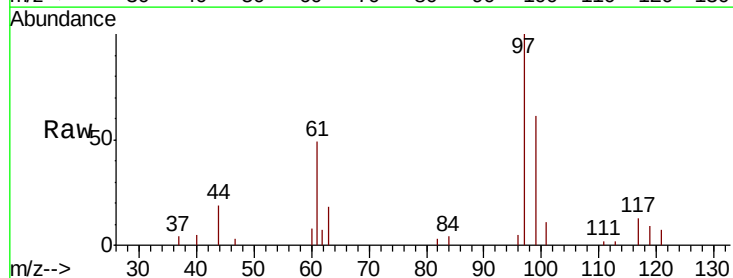
Instrument :  
MSVOA\_U  
ClientSampleId :

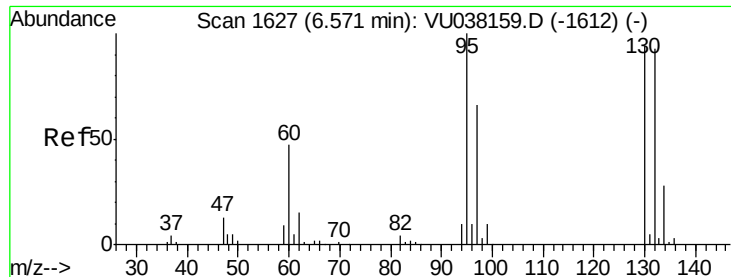
Tot Ion: 83 Resp: 17500  
Ion Ratio Lower Upper  
83 100  
85 70.5 46.2 85.8



#29  
1,1,1-Trichloroethane  
Concen: 0.276 ug/L  
RT: 5.35 min Scan# 1248  
Delta R.T. 0.00 min  
Lab File: VU038173.D  
Acq: 14 May 2020 16:42

Tgt Ion: 97 Resp: 10227  
Ion Ratio Lower Upper  
97 100  
99 60.8 51.0 76.4  
61 45.3 38.2 57.4





#34

Trichloroethene

Concen: 230.795 ug/L

RT: 6.57 min Scan# 1628

Delta R.T. 0.00 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

Instrument :

MSVOA\_U

ClientSampled :

Tot Ion: 95 Resp: 5985610

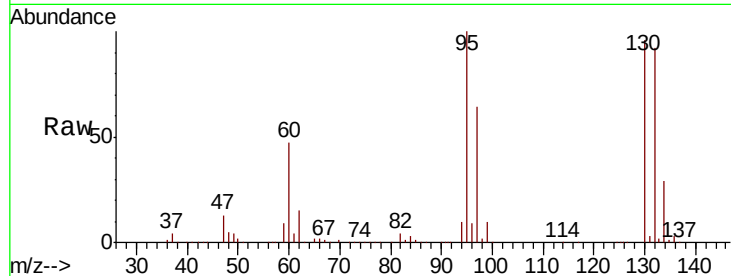
Ion Ratio Lower Upper

95 100

97 63.7 44.9 83.3

132 91.6 63.3 117.5

130 95.7 65.7 122.1

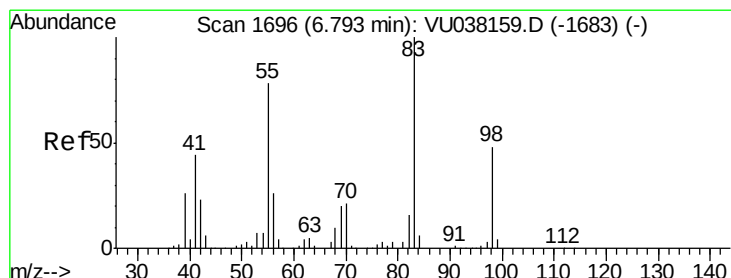
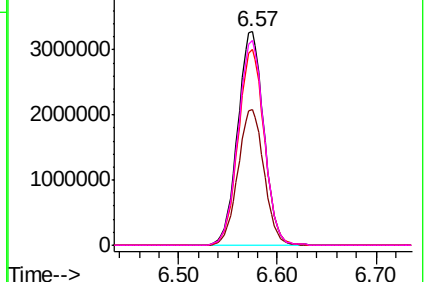
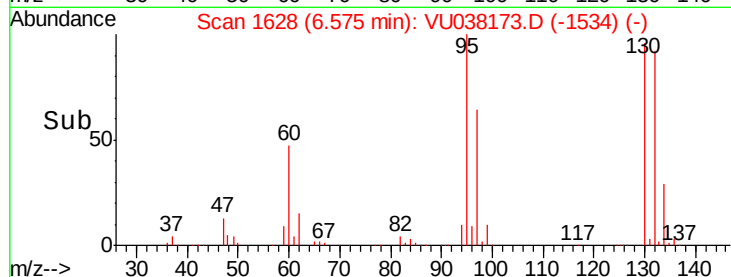


Abundance Ion 95.00 (94.70 to 95.70): VU038173.D (-1612) (-)

Ion 96.95 (96.65 to 97.65): VU038173.D (-1612) (-)

Ion 131.95 (131.65 to 132.65): VU038173.D (-1612) (-)

Ion 129.95 (129.65 to 130.65): VU038173.D (-1612) (-)



#35

Methylcyclohexane

Concen: 0.807 ug/L

RT: 6.72 min Scan# 1673

Delta R.T. -0.07 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

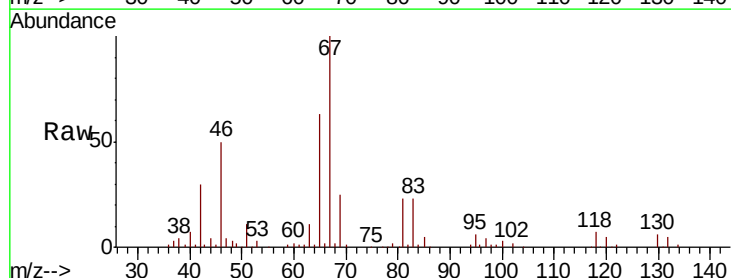
Tgt Ion: 83 Resp: 33910

Ion Ratio Lower Upper

83 100

55 0.2 66.7 100.1#

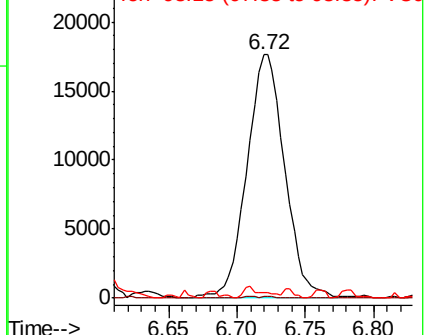
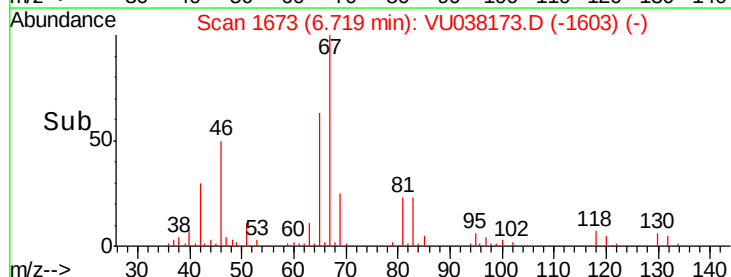
98 0.0 39.4 59.2#



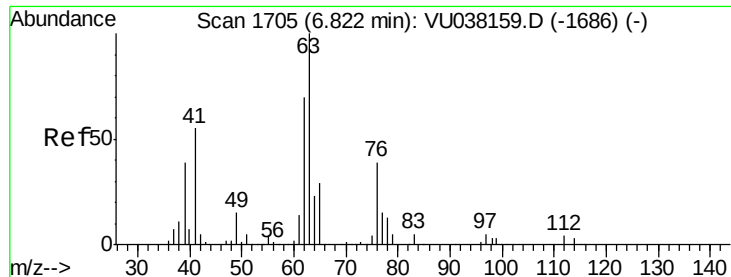
Abundance Ion 83.15 (82.85 to 83.85): VU038173.D (-1603) (-)

Ion 55.10 (54.80 to 55.80): VU038173.D (-1603) (-)

Ion 98.15 (97.85 to 98.85): VU038173.D (-1603) (-)



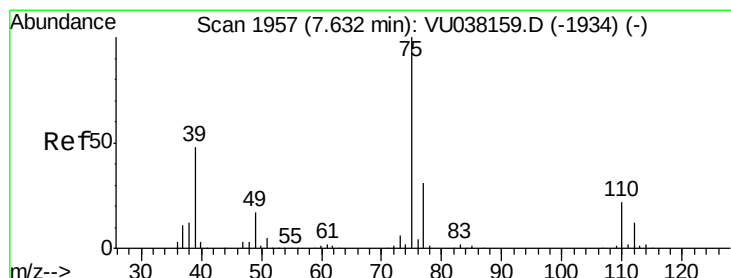
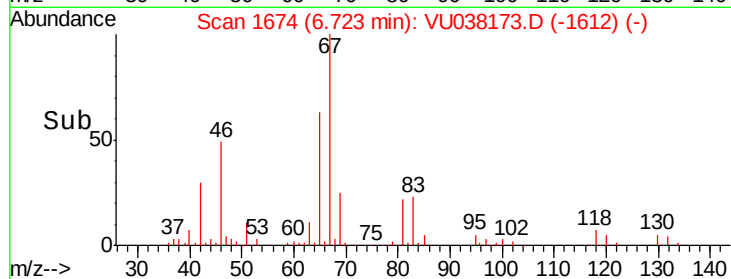
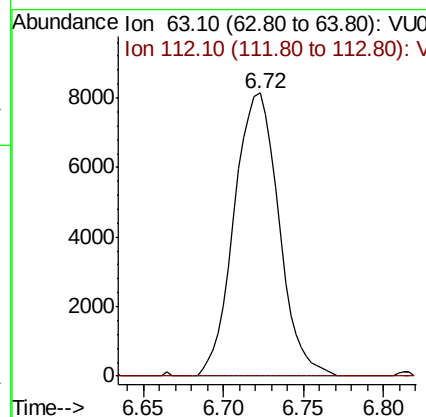
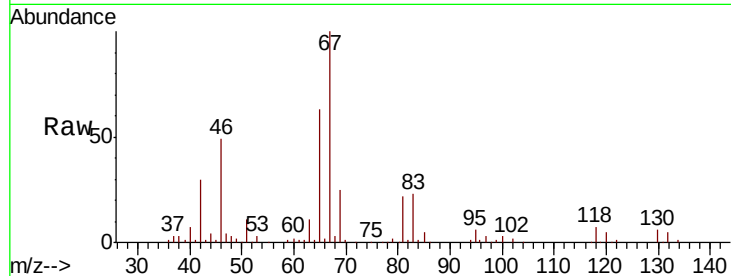




#37  
 1,2-Dichloropropane  
 Concen: 0.552 ug/L  
 RT: 6.72 min Scan# 1674  
 Delta R.T. -0.10 min  
 Lab File: VU038173.D  
 Acq: 14 May 2020 16:42

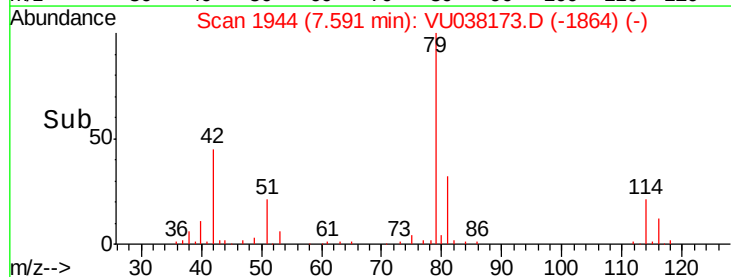
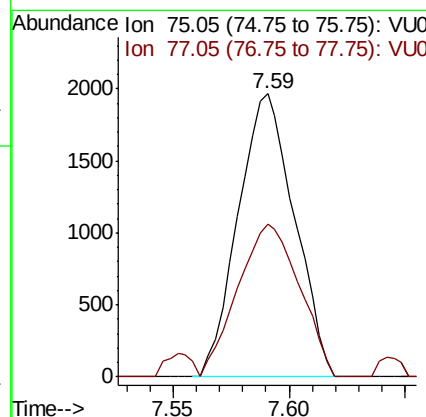
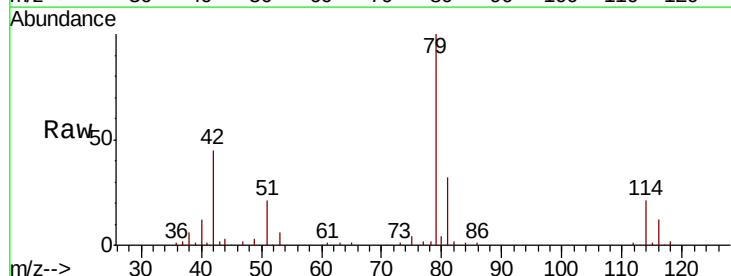
Instrument :  
 MSVOA\_U  
 ClientSampleId :

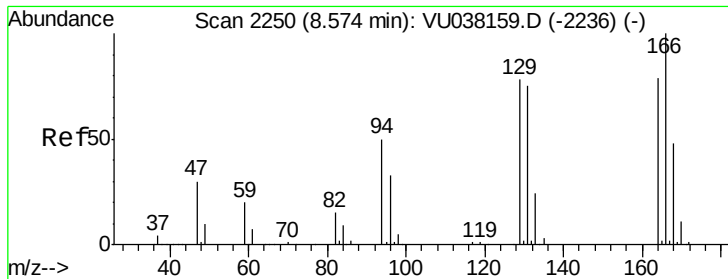
Tot Ion: 63 Resp: 15550  
 Ion Ratio Lower Upper  
 63 100  
 112 0.3 3.1 4.7#



#39  
 cis-1,3-Dichloropropene  
 Concen: 0.082 ug/L  
 RT: 7.59 min Scan# 1944  
 Delta R.T. -0.04 min  
 Lab File: VU038173.D  
 Acq: 14 May 2020 16:42

Tgt Ion: 75 Resp: 3307  
 Ion Ratio Lower Upper  
 75 100  
 77 54.0 22.4 41.6#





#47

Tetrachloroethene

Concen: 8.160 ug/L

RT: 8.57 min Scan# 2250

Delta R.T. 0.00 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:164 Resp: 148023

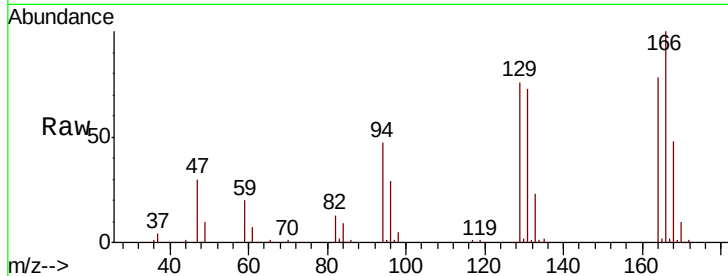
Ion Ratio Lower Upper

164 100

129 97.5 68.8 127.8

131 93.2 66.8 124.2

166 128.2 88.9 165.1

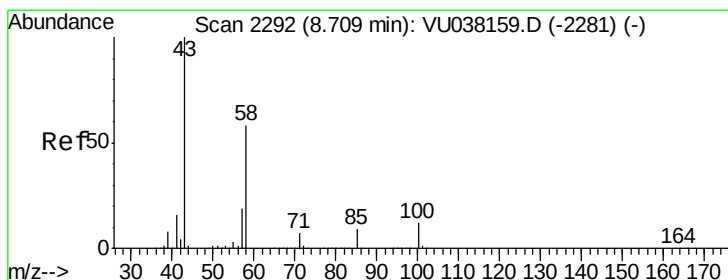
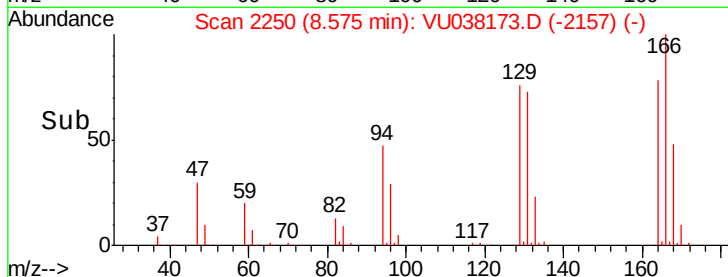
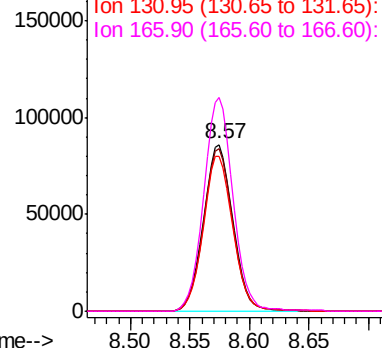


Abundance Ion 163.90 (163.60 to 164.60): V

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: 1.470 ug/L

RT: 8.70 min Scan# 2290

Delta R.T. -0.01 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

Tgt Ion: 43 Resp: 21008

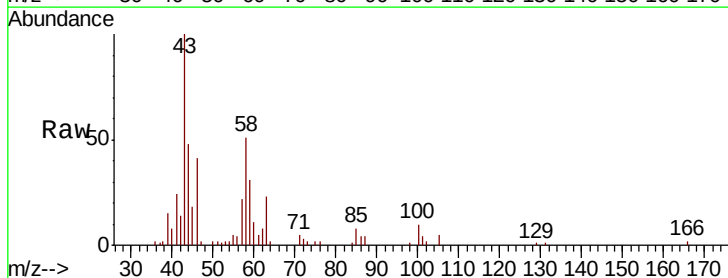
Ion Ratio Lower Upper

43 100

58 51.9 45.2 67.8

57 22.4 15.5 23.3

100 9.4 9.5 14.3#

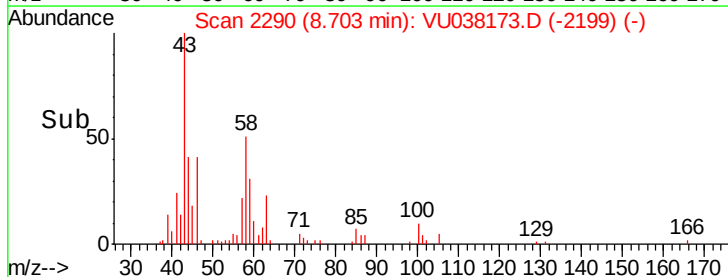
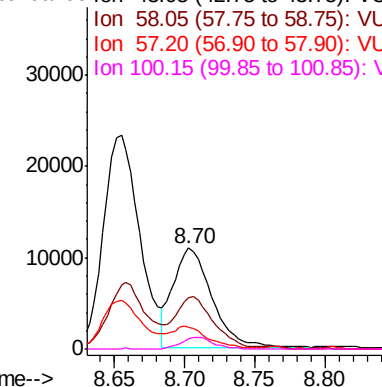


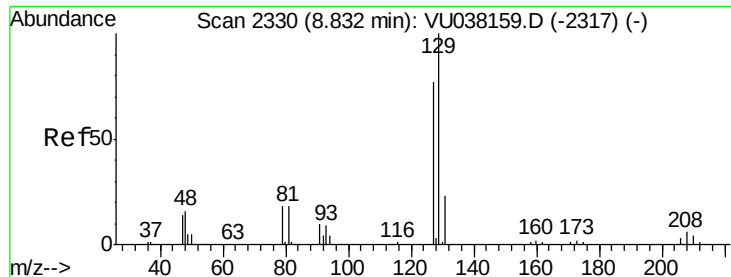
Abundance Ion 43.05 (42.75 to 43.75): VU0

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: 6.997 ug/L

RT: 8.57 min Scan# 2250

Delta R.T. -0.26 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

Instrument :

MSVOA\_U

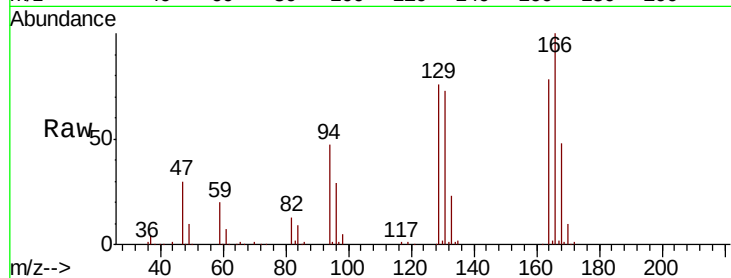
ClientSampleId :

Tot Ion:129 Resp: 142021

Ion Ratio Lower Upper

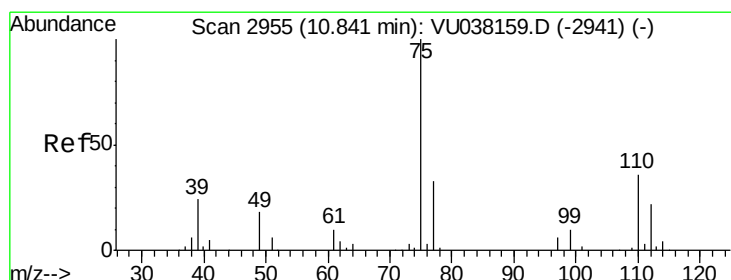
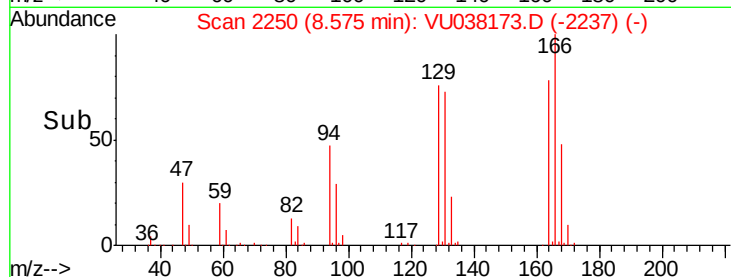
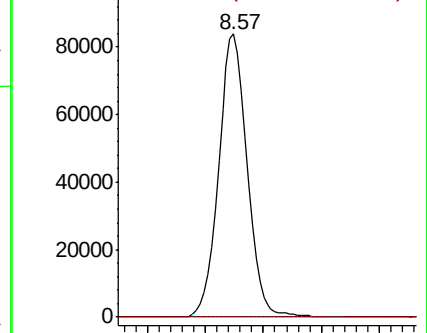
129 100

127 0.0 55.6 103.4#



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: 0.227 ug/L

RT: 10.84 min Scan# 2954

Delta R.T. -0.00 min

Lab File: VU038173.D

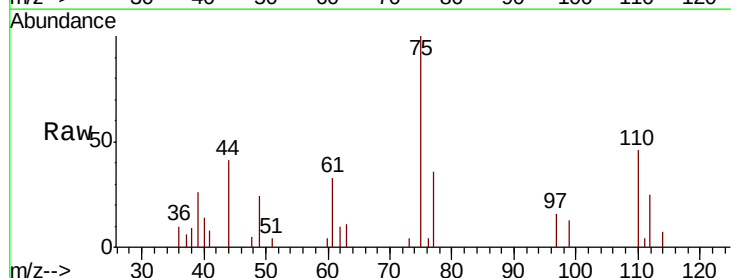
Acq: 14 May 2020 16:42

Tgt Ion: 75 Resp: 4290

Ion Ratio Lower Upper

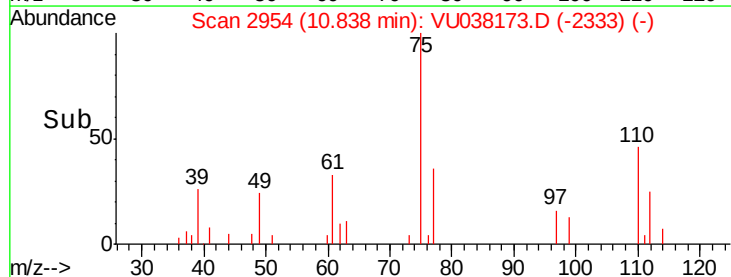
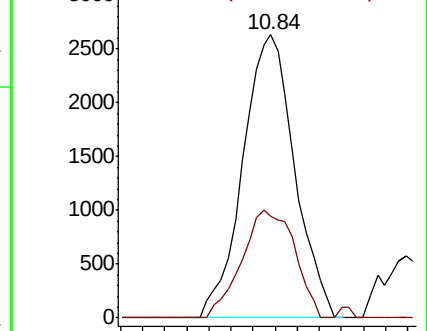
75 100

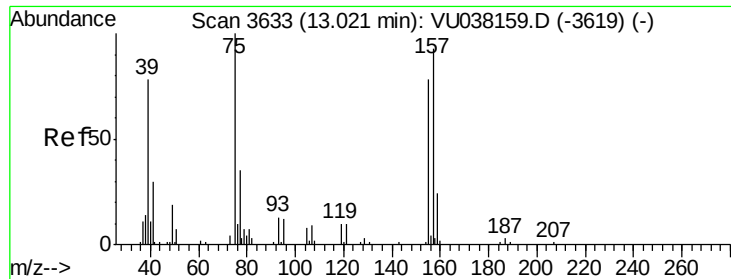
77 38.8 25.4 38.0#



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0





#66

1,2-Dibromo-3-chloropropane

Concen: 0.539 ug/L

RT: 12.80 min Scan# 3563

Delta R.T. -0.22 min

Lab File: VU038173.D

Acq: 14 May 2020 16:42

Instrument :

MSVOA\_U

ClientSampleId :

Tot Ion: 75 Resp: 2065

Ion Ratio Lower Upper

75 100

155 27.3 58.2 87.2#

157 0.0 72.9 109.3#

