

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU112420\  
 Data File : VU041420.D  
 Acq On : 24 Nov 2020 16:07  
 Operator : SY/MD  
 Sample : L4849-07DL 20X  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 H4412DL

Quant Time: Nov 25 07:40:15 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR112320WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Nov 25 07:37:29 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 59668    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 62254    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 27463    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 16190    | 3.86     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 77.20%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 13357    | 4.54     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 90.80%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 26803    | 3.26     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 65.20%  |
| 20) 2-Butanone-d5              | 4.65   | 46    | 54480    | 50.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 101.98% |
| 24) Chloroform-d               | 5.08   | 84    | 39588    | 4.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.60%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 25852    | 5.20     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 104.00% |
| 32) Benzene-d6                 | 5.74   | 84    | 65476    | 4.30     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 86.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 19742    | 4.07     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 81.40%  |
| 41) Toluene-d8                 | 7.90   | 98    | 57833    | 4.02     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 80.40%  |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 9818     | 4.46     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 89.20%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 37138    | 51.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 103.18% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 19385    | 4.91     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 98.20%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 23899    | 5.22     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 104.40% |

## Target Compounds

|                               |       |    |       |              | Ovalue |
|-------------------------------|-------|----|-------|--------------|--------|
| 5) Vinyl chloride             | 1.61  | 62 | 2066  | 0.396 ug/L # | 37     |
| 8) Chloroethane               | 1.92  | 64 | 154   | 0.052 ug/L # | 40     |
| 12) 1,1-Dichloroethene        | 2.58  | 96 | 217   | 0.059 ug/L # | 1      |
| 16) Methylene chloride        | 3.06  | 84 | 867   | 0.165 ug/L # | 70     |
| 17) Methyl tert-butyl Ether   | 3.38  | 73 | 2664  | 0.291 ug/L # | 83     |
| 18) trans-1,2-Dichloroethene  | 3.37  | 96 | 1070  | 0.269 ug/L # | 91     |
| 22) cis-1,2-Dichloroethene    | 4.69  | 96 | 22790 | 5.378 ug/L   | 96     |
| 25) Chloroform                | 5.11  | 83 | 1446  | 0.166 ug/L   | 97     |
| 27) 1,2-Dichloroethane        | 5.74  | 62 | 431   | 0.076 ug/L # | 78     |
| 34) Trichloroethene           | 6.55  | 95 | 863   | 0.190 ug/L   | 93     |
| 35) Methylcyclohexane         | 6.70  | 83 | 5192  | 0.783 ug/L # | 15     |
| 37) 1,2-Dichloropropane       | 6.70  | 63 | 2992  | 0.653 ug/L # | 90     |
| 39) cis-1,3-Dichloropropene   | 7.58  | 75 | 788   | 0.125 ug/L # | 43     |
| 44) trans-1,3-Dichloropropene | 8.19  | 75 | 440   | 0.076 ug/L # | 61     |
| 59) 1,2,3-Trichloropropane    | 11.81 | 75 | 2966  | 0.991 ug/L # | 79     |

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Sample : L4849-07DL 20X  
Misc : 25.0mL/MSVOA U/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
H4412DL

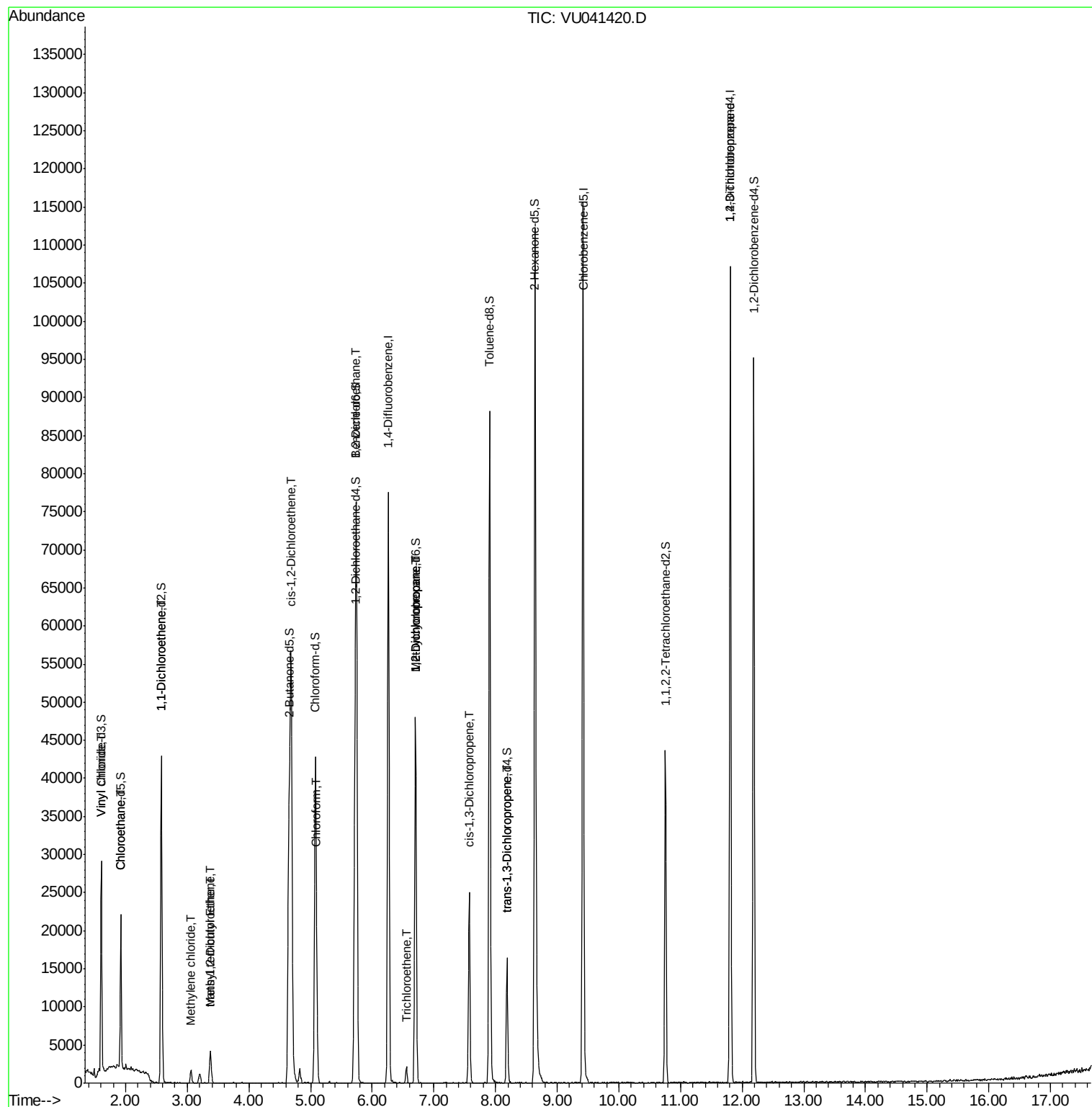
Quant Time: Nov 25 07:40:15 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR112320WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Nov 25 07:37:29 2020  
Response via : Initial Calibration

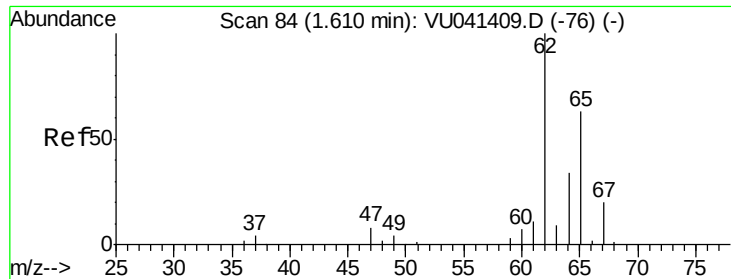
| Internal Standards                                                         | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                      |      |      |          |      |       |          |
| (#) = qualifier out of range (m) = manual integration (+) = signals summed |      |      |          |      |       |          |

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Response via : Initial Calibration





#5

Vinyl chloride

Concen: 0.396 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU041420.D

Acq: 24 Nov 2020 16:07

Instrument :

MSVOA\_U

ClientSampleId :

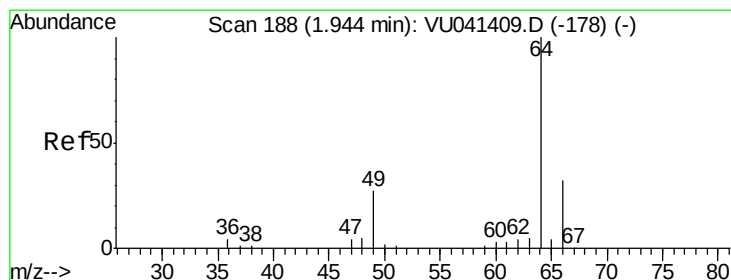
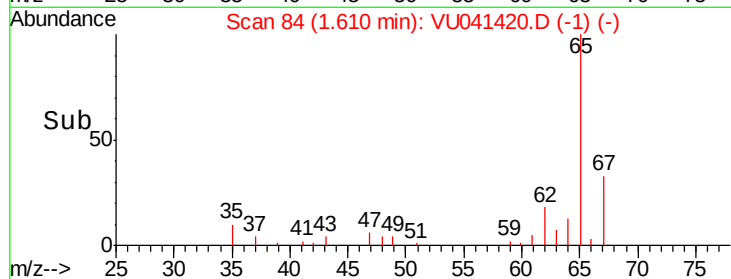
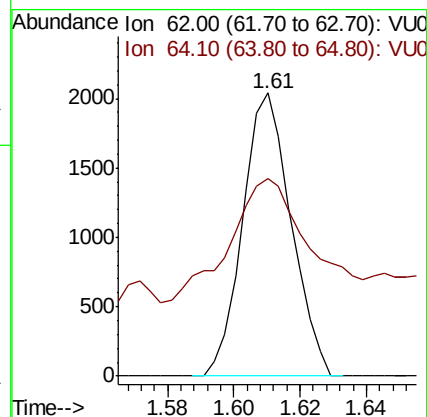
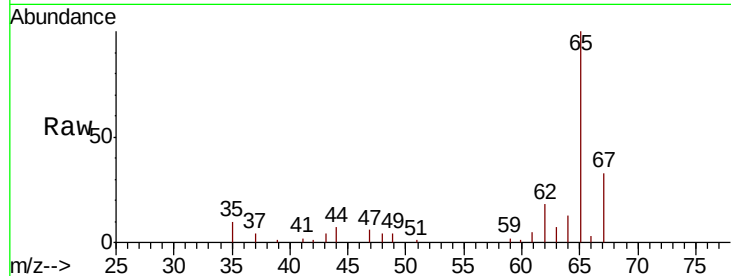
H4412DL

Tot Ion: 62 Resp: 2066

Ion Ratio Lower Upper

62 100

64 70.0 23.8 44.2#



#8

Chloroethane

Concen: 0.052 ug/L

RT: 1.92 min Scan# 181

Delta R.T. -0.02 min

Lab File: VU041420.D

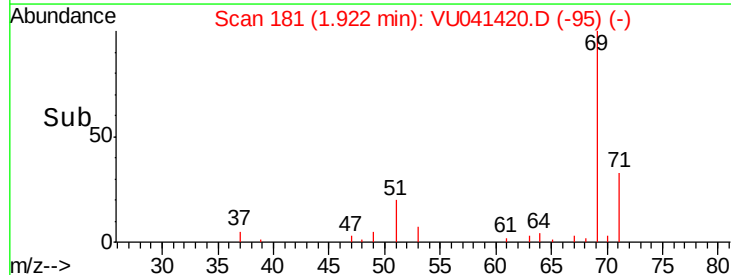
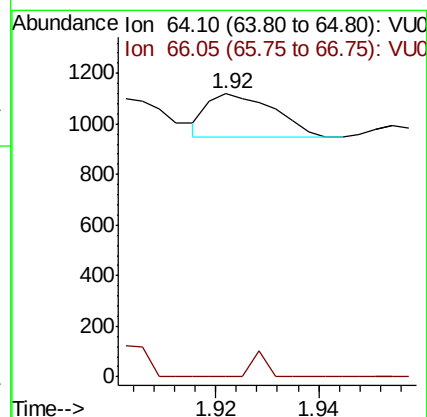
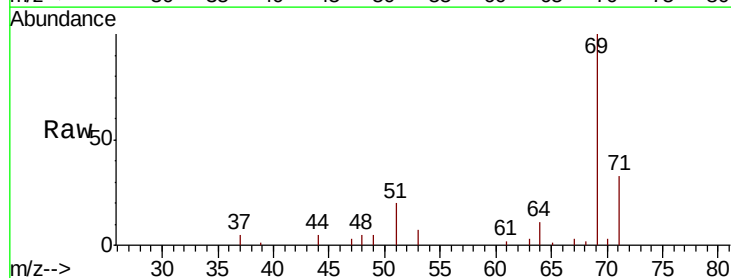
Acq: 24 Nov 2020 16:07

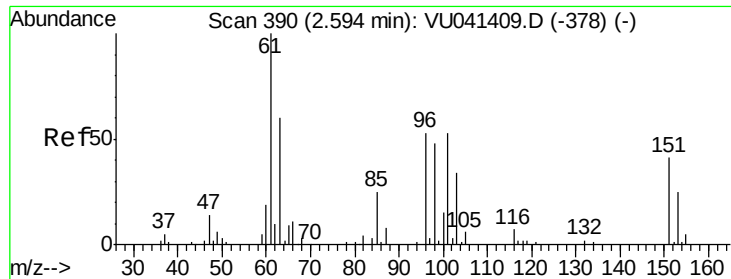
Tgt Ion: 64 Resp: 154

Ion Ratio Lower Upper

64 100

66 0.0 24.6 45.8#

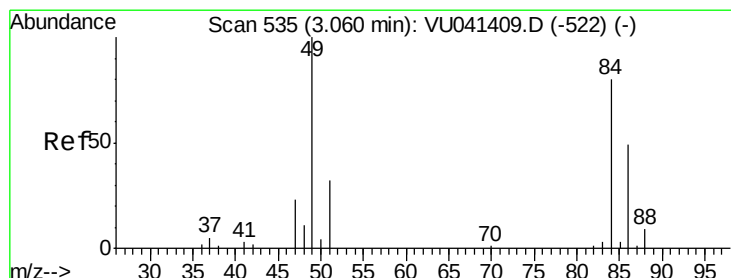
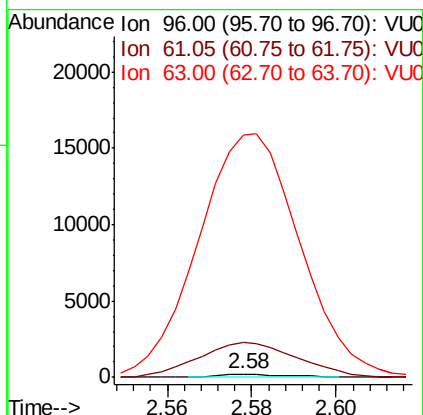
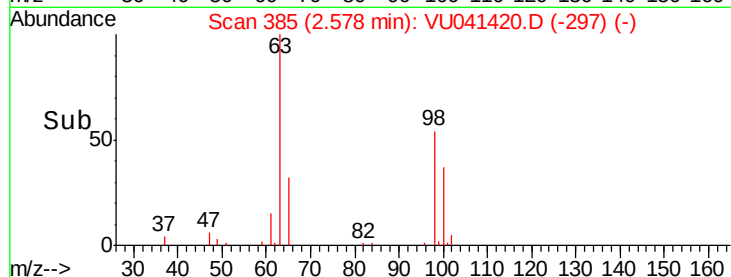
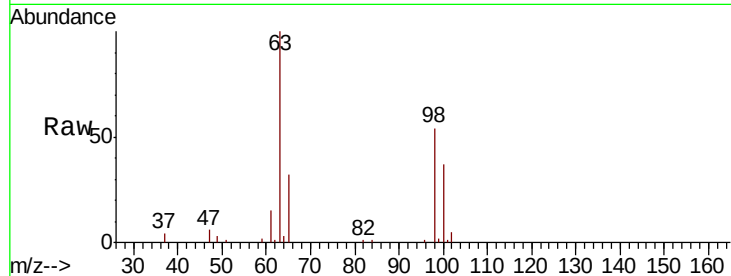




#12  
 1,1-Dichloroethene  
 Concen: 0.059 ug/L  
 RT: 2.58 min Scan# 385  
 Delta R.T. -0.02 min  
 Lab File: VU041420.D  
 Acq: 24 Nov 2020 16:07

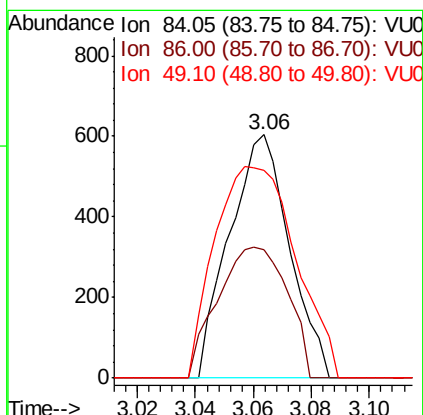
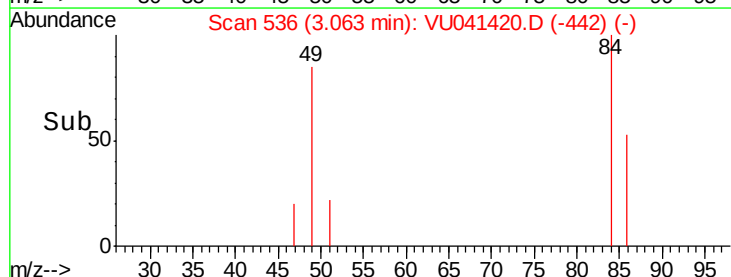
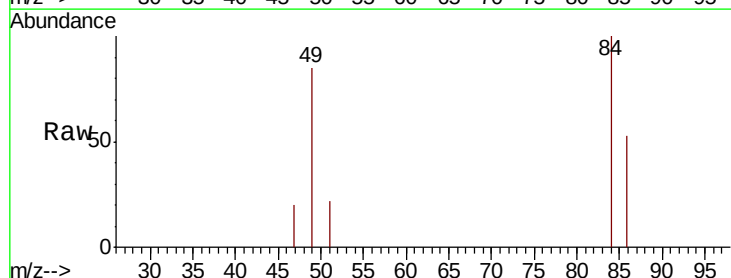
Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 H4412DL

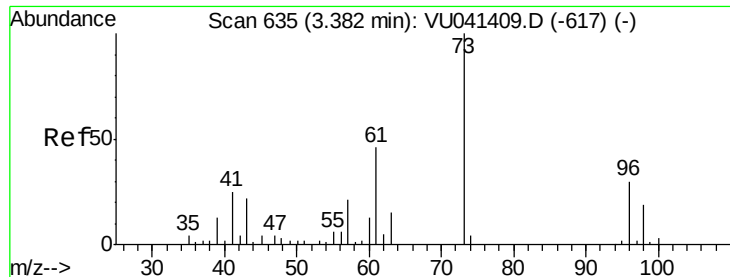
Tot Ion: 96 Resp: 217  
 Ion Ratio Lower Upper  
 96 100  
 61 1143.1 129.8 241.2#  
 63 7800.5 79.2 147.0#



#16  
 Methylene chloride  
 Concen: 0.165 ug/L  
 RT: 3.06 min Scan# 536  
 Delta R.T. 0.00 min  
 Lab File: VU041420.D  
 Acq: 24 Nov 2020 16:07

Tgt Ion: 84 Resp: 867  
 Ion Ratio Lower Upper  
 84 100  
 86 52.8 44.4 82.5  
 49 85.3 89.9 167.0#

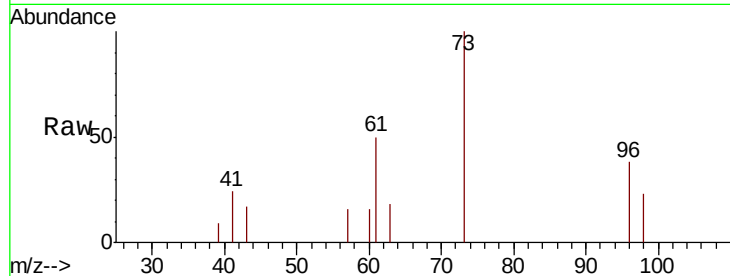




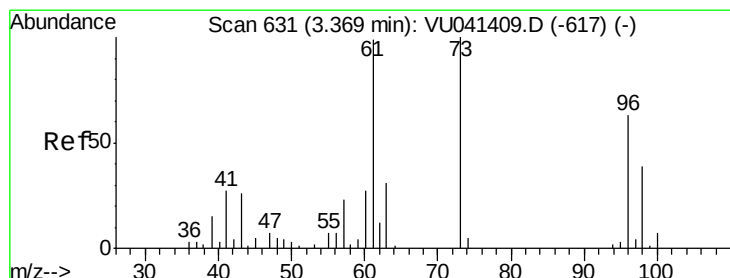
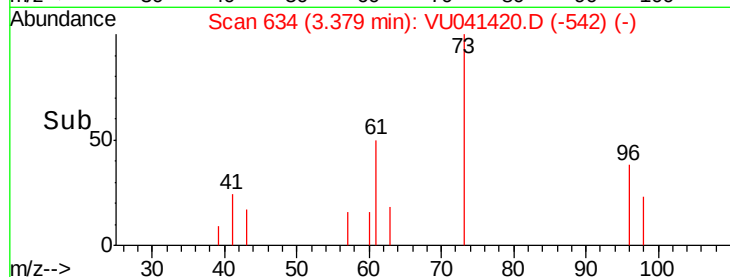
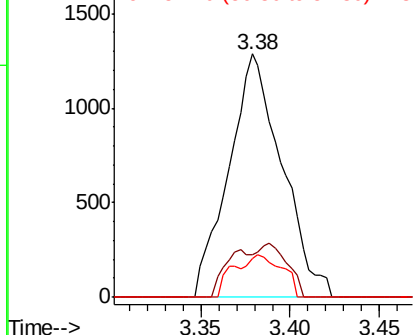
#17  
Methyl tert-butyl Ether  
Concen: 0.291 ug/L  
RT: 3.38 min Scan# 634  
Delta R.T. -0.00 min  
Lab File: VU041420.D  
Acq: 24 Nov 2020 16:07

Instrument :  
MSVOA\_U  
ClientSampleId :  
H4412DL

Tot Ion: 73 Resp: 2664  
Ion Ratio Lower Upper  
73 100  
43 12.6 18.3 27.5#  
57 15.8 17.7 26.5#

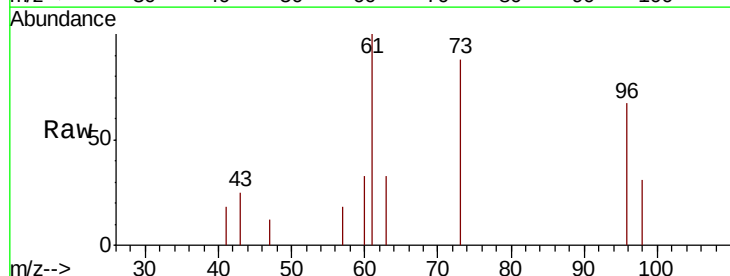


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

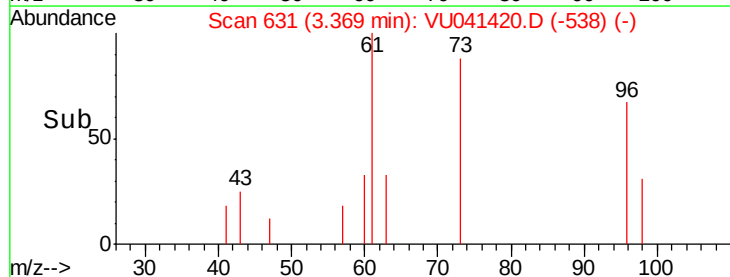
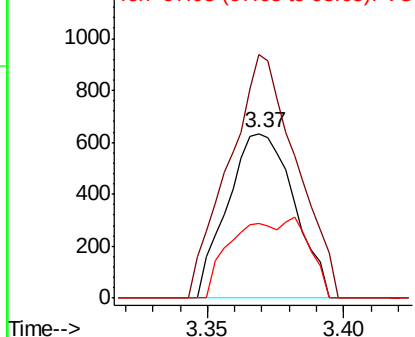


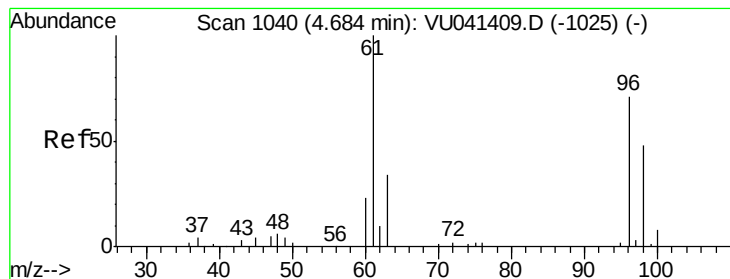
#18  
trans-1,2-Dichloroethene  
Concen: 0.269 ug/L  
RT: 3.37 min Scan# 631  
Delta R.T. 0.00 min  
Lab File: VU041420.D  
Acq: 24 Nov 2020 16:07

Tgt Ion: 96 Resp: 1070  
Ion Ratio Lower Upper  
96 100  
61 148.2 103.7 192.5  
98 45.8 47.5 88.3#



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 97.95 (97.65 to 98.65): VU0





#22

cis-1,2-Dichloroethene

Concen: 5.378 ug/L

RT: 4.69 min Scan# 1041

Delta R.T. 0.00 min

Lab File: VU041420.D

Acq: 24 Nov 2020 16:07

Instrument :

MSVOA\_U

ClientSampleId :

H4412DL

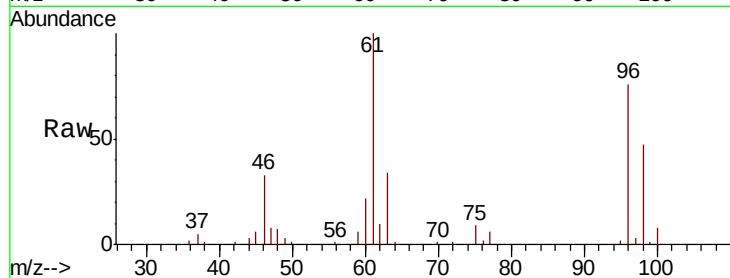
Tot Ion: 96 Resp: 22790

Ion Ratio Lower Upper

96 100

61 130.9 95.3 176.9

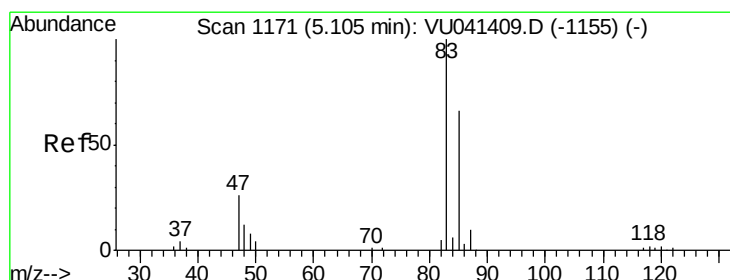
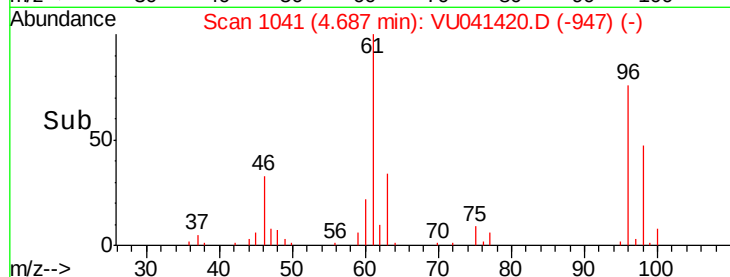
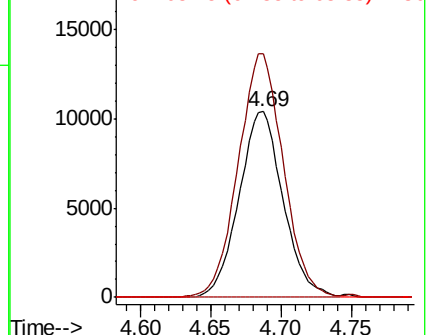
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU041420.D (-947) (-)

Ion 61.05 (60.75 to 61.75): VU041420.D (-947) (-)

Ion 68.15 (67.85 to 68.85): VU041420.D (-947) (-)



#25

Chloroform

Concen: 0.166 ug/L

RT: 5.11 min Scan# 1171

Delta R.T. 0.00 min

Lab File: VU041420.D

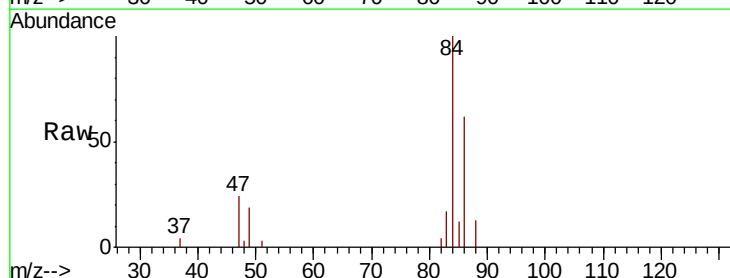
Acq: 24 Nov 2020 16:07

Tgt Ion: 83 Resp: 1446

Ion Ratio Lower Upper

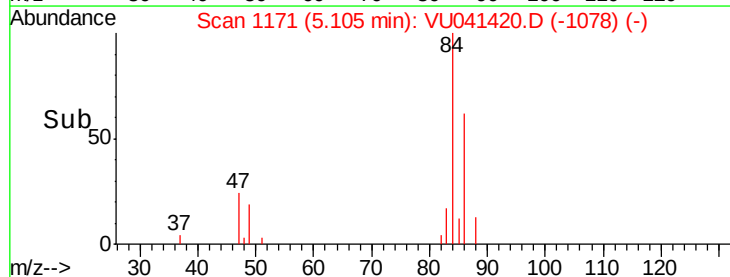
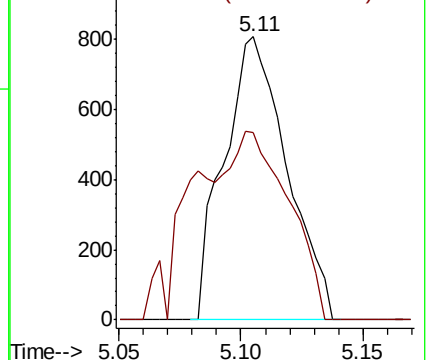
83 100

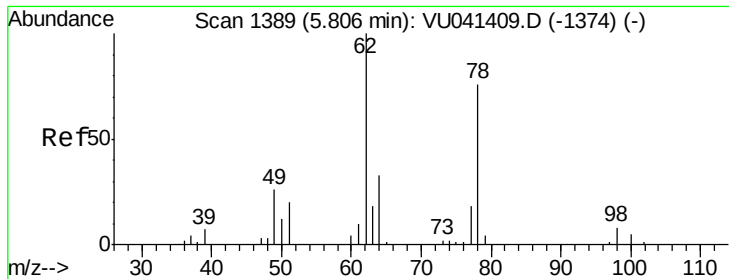
85 66.3 44.7 82.9



Abundance Ion 83.05 (82.75 to 83.75): VU041420.D (-1078) (-)

Ion 85.00 (84.70 to 85.70): VU041420.D (-1078) (-)

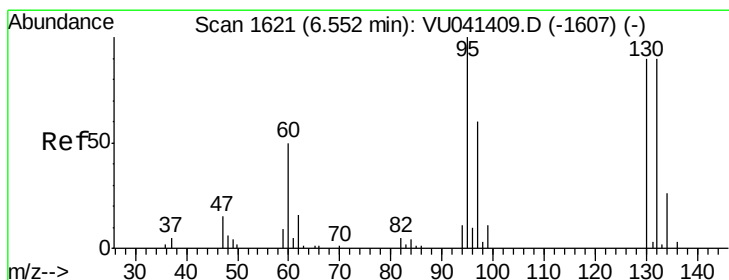
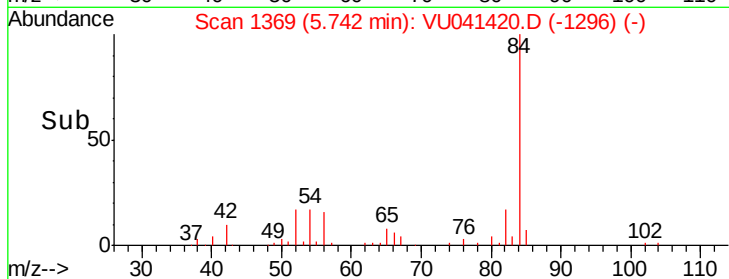
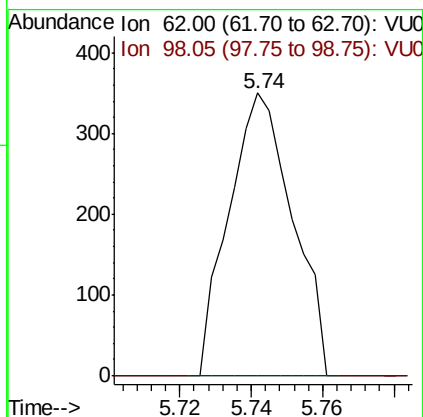
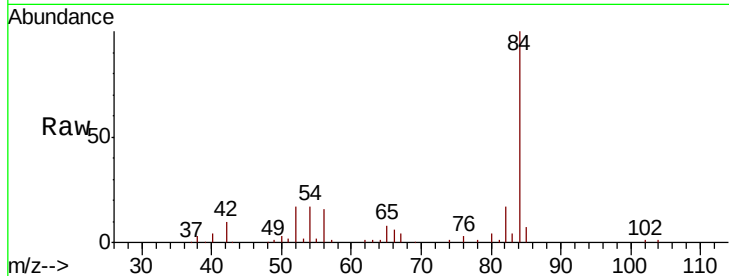




#27  
 1,2-Dichloroethane  
 Concen: 0.076 ug/L  
 RT: 5.74 min Scan# 1369  
 Delta R.T. -0.06 min  
 Lab File: VU041420.D  
 Acq: 24 Nov 2020 16:07

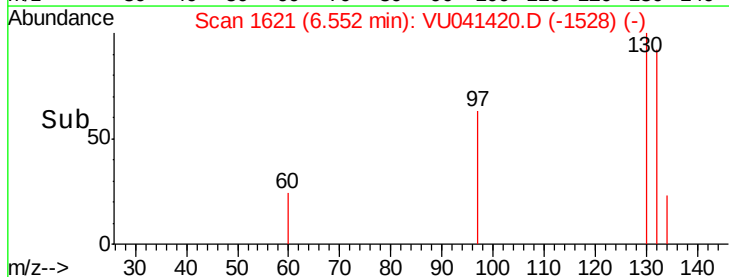
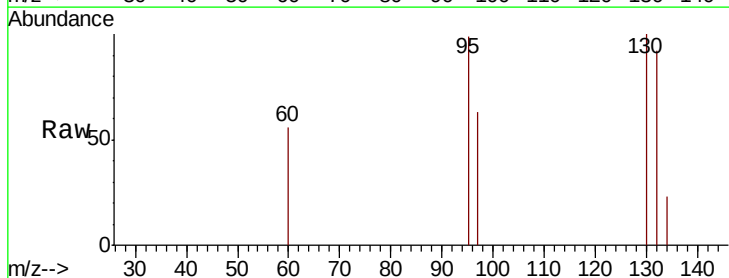
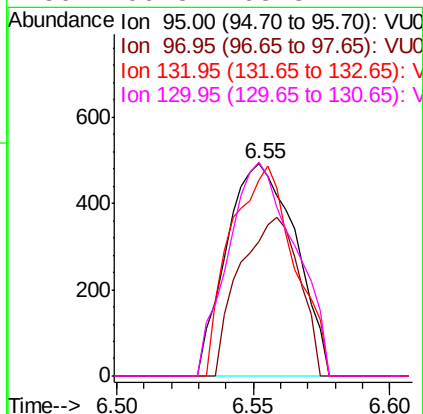
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 H4412DL

Tot Ion: 62 Resp: 431  
 Ion Ratio Lower Upper  
 62 100  
 98 0.0 6.0 9.0#

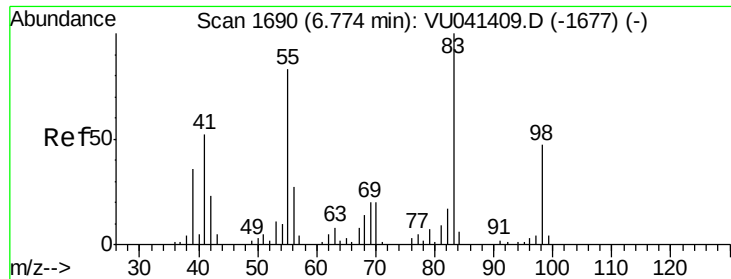


#34  
 Trichloroethene  
 Concen: 0.190 ug/L  
 RT: 6.55 min Scan# 1621  
 Delta R.T. 0.00 min  
 Lab File: VU041420.D  
 Acq: 24 Nov 2020 16:07

Tgt Ion: 95 Resp: 863  
 Ion Ratio Lower Upper  
 95 100  
 97 63.3 46.5 86.5  
 132 92.7 60.8 113.0  
 130 100.8 63.3 117.7



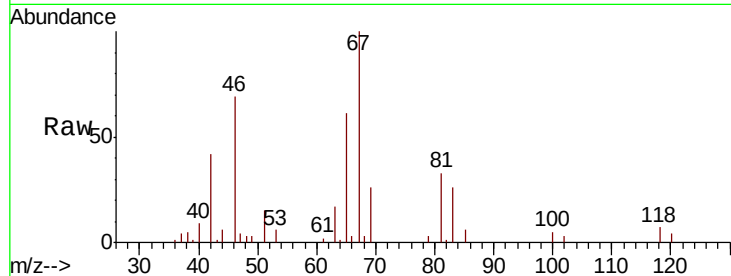




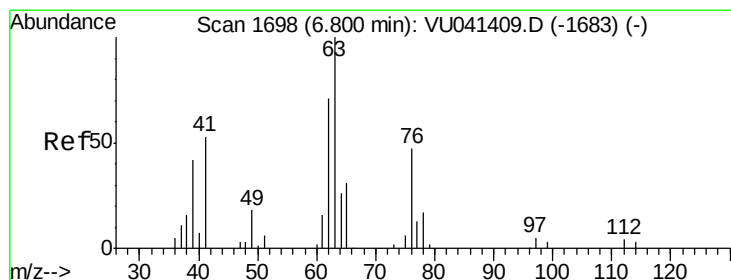
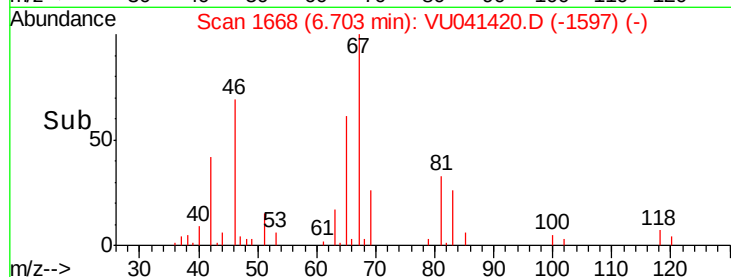
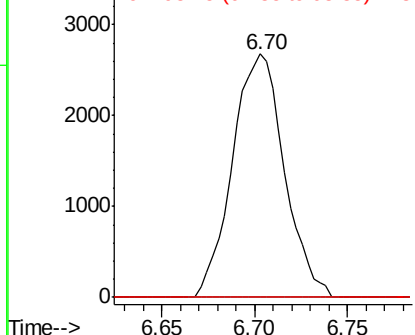
#35  
Methylvlcyclohexane  
Concen: 0.783 ug/L  
RT: 6.70 min Scan# 1668  
Delta R.T. -0.07 min  
Lab File: VU041420.D  
Acq: 24 Nov 2020 16:07

Instrument :  
MSVOA\_U  
ClientSampleId :  
H4412DL

Tot Ion: 83 Resp: 5192  
Ion Ratio Lower Upper  
83 100  
55 0.0 68.4 102.6#  
98 0.0 36.5 54.7#

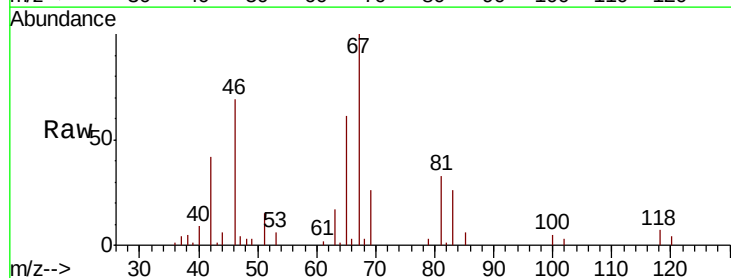


Abundance Ion 83.15 (82.85 to 83.85): VU0  
Ion 55.10 (54.80 to 55.80): VU0  
Ion 98.15 (97.85 to 98.85): VU0

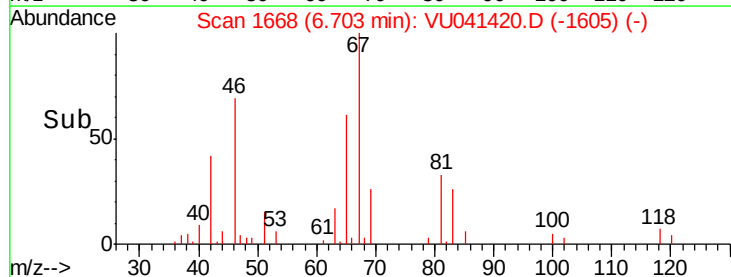
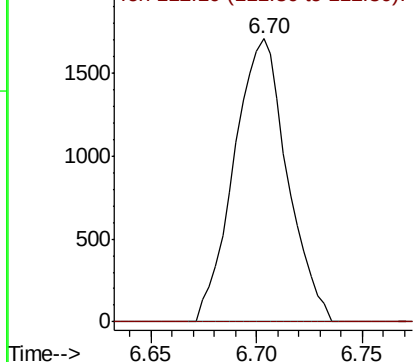


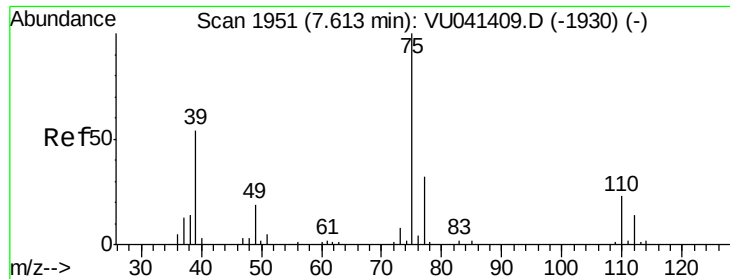
#37  
1,2-Dichloropropane  
Concen: 0.653 ug/L  
RT: 6.70 min Scan# 1668  
Delta R.T. -0.10 min  
Lab File: VU041420.D  
Acq: 24 Nov 2020 16:07

Tgt Ion: 63 Resp: 2992  
Ion Ratio Lower Upper  
63 100  
112 0.0 2.6 4.0#



Abundance Ion 63.10 (62.80 to 63.80): VU0  
Ion 112.10 (111.80 to 112.80): V

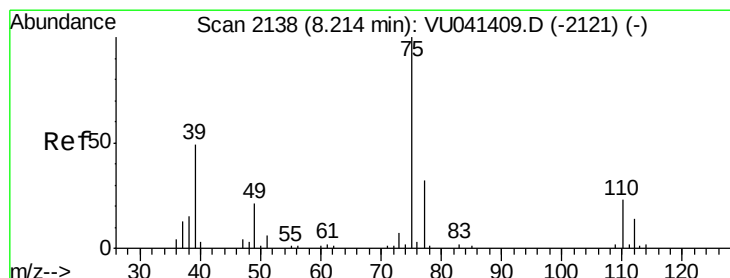
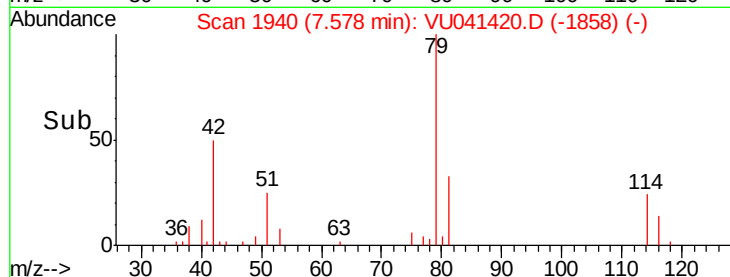
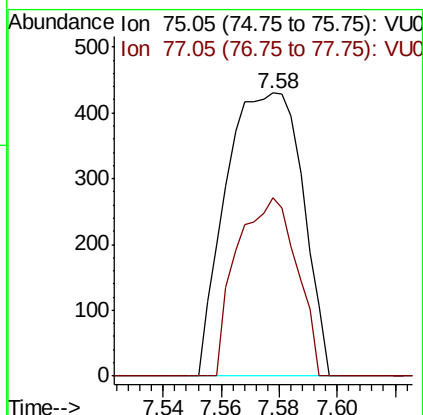
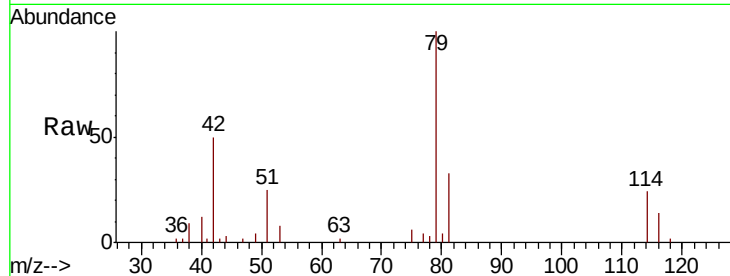




#39  
 cis-1,3-Dichloropropene  
 Concen: 0.125 ug/L  
 RT: 7.58 min Scan# 1940  
 Delta R.T. -0.04 min  
 Lab File: VU041420.D  
 Acq: 24 Nov 2020 16:07

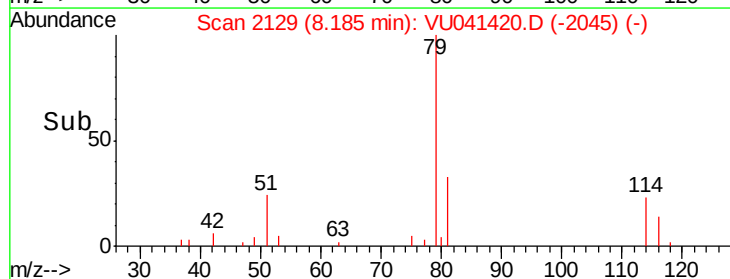
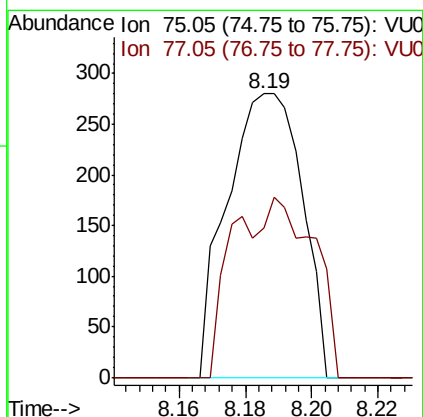
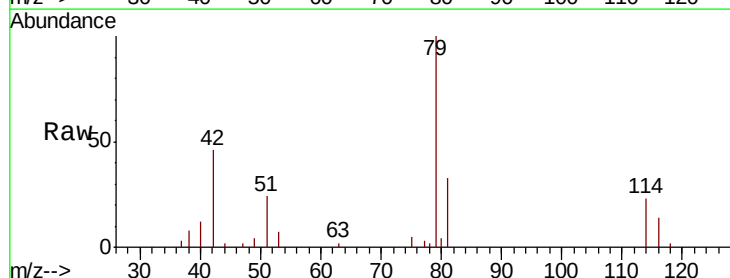
Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 H4412DL

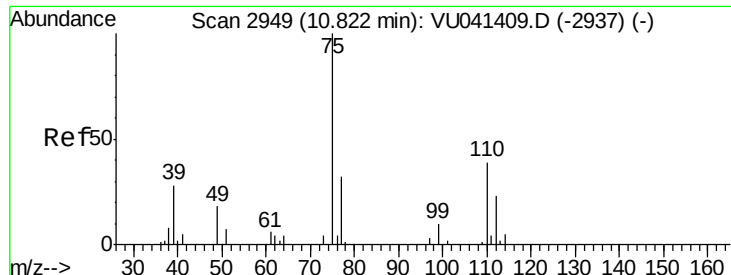
Tot Ion: 75 Resp: 788  
 Ion Ratio Lower Upper  
 75 100  
 77 63.0 22.1 41.1#



#44  
 trans-1,3-Dichloropropene  
 Concen: 0.076 ug/L  
 RT: 8.19 min Scan# 2129  
 Delta R.T. -0.03 min  
 Lab File: VU041420.D  
 Acq: 24 Nov 2020 16:07

Tgt Ion: 75 Resp: 440  
 Ion Ratio Lower Upper  
 75 100  
 77 52.5 21.7 40.3#





#59

1,2,3-Trichloropropane

Concen: 0.991 ug/L

RT: 11.81 min Scan# 3255

Delta R.T. 0.98 min

Lab File: VU041420.D

Acq: 24 Nov 2020 16:07

Instrument :

MSVOA\_U

ClientSampleId :

H4412DL

Tot Ion: 75 Resp: 2966

Ion Ratio Lower Upper

75 100

77 43.3 25.1 37.7#

