

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU111920\  
 Data File : VU041346.D  
 Acq On : 19 Nov 2020 16:26  
 Operator : SY/MD  
 Sample : L4790-03DL 5X  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 H4389DL

Quant Time: Nov 20 05:58:30 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR111620WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Nov 20 05:56:10 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 60102    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 62648    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 25455    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 15305    | 3.46     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 69.20%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 15106    | 3.99     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 79.80%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 25168    | 2.76     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 55.20%# |
| 20) 2-Butanone-d5              | 4.66   | 46    | 90907    | 49.87    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 99.74%  |
| 24) Chloroform-d               | 5.08   | 84    | 43820    | 4.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 91.60%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 28137    | 4.51     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 90.20%  |
| 32) Benzene-d6                 | 5.74   | 84    | 69521    | 4.12     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 82.40%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 25935    | 4.46     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 89.20%  |
| 41) Toluene-d8                 | 7.91   | 98    | 53280    | 3.35     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 67.00%# |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 9832     | 3.92     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 78.40%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 62337    | 46.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 93.18%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 25586    | 4.53     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 90.60%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 23225    | 4.68     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 93.60%  |

## Target Compounds

| Target Compounds              | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|-------------------------------|-------|------|----------|-------|--------|--------|
| 3) Chloromethane              | 1.52  | 50   | 245      | 0.046 | ug/L # | 65     |
| 5) Vinyl chloride             | 1.61  | 62   | 3502     | 0.671 | ug/L   | 86     |
| 12) 1,1-Dichloroethene        | 2.58  | 96   | 211      | 0.054 | ug/L # | 1      |
| 13) Acetone                   | 2.67  | 43   | 1332     | 1.102 | ug/L   | 95     |
| 14) Carbon disulfide          | 2.81  | 76   | 568      | 0.049 | ug/L # | 74     |
| 16) Methylene chloride        | 3.06  | 84   | 1399     | 0.285 | ug/L   | 96     |
| 18) trans-1,2-Dichloroethene  | 3.37  | 96   | 5602     | 1.470 | ug/L   | 97     |
| 22) cis-1,2-Dichloroethene    | 4.68  | 96   | 20332    | 4.725 | ug/L   | 99     |
| 34) Trichloroethene           | 6.55  | 95   | 25316    | 5.517 | ug/L   | 99     |
| 35) Methylcyclohexane         | 6.70  | 83   | 6027     | 0.989 | ug/L # | 13     |
| 37) 1,2-Dichloropropane       | 6.70  | 63   | 3039     | 0.612 | ug/L # | 86     |
| 39) cis-1,3-Dichloropropene   | 7.57  | 75   | 630      | 0.091 | ug/L # | 65     |
| 44) trans-1,3-Dichloropropene | 8.18  | 75   | 411      | 0.063 | ug/L # | 82     |
| 47) Tetrachloroethene         | 8.56  | 164  | 1474     | 0.435 | ug/L   | 87     |
| 48) 2-Hexanone                | 8.64  | 43   | 9620     | 3.138 | ug/L # | 71     |
| 49) Dibromochloromethane      | 8.56  | 129  | 1698     | 0.373 | ug/L # | 11     |
| 59) 1,2,3-Trichloropropane    | 11.81 | 75   | 3015     | 0.770 | ug/L # | 80     |

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Sample : L4790-03DL 5X  
Misc : 25.0mL/MSVOA U/WATER  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
H4389DL

Quant Time: Nov 20 05:58:30 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR111620WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Nov 20 05:56:10 2020  
Response via : Initial Calibration

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

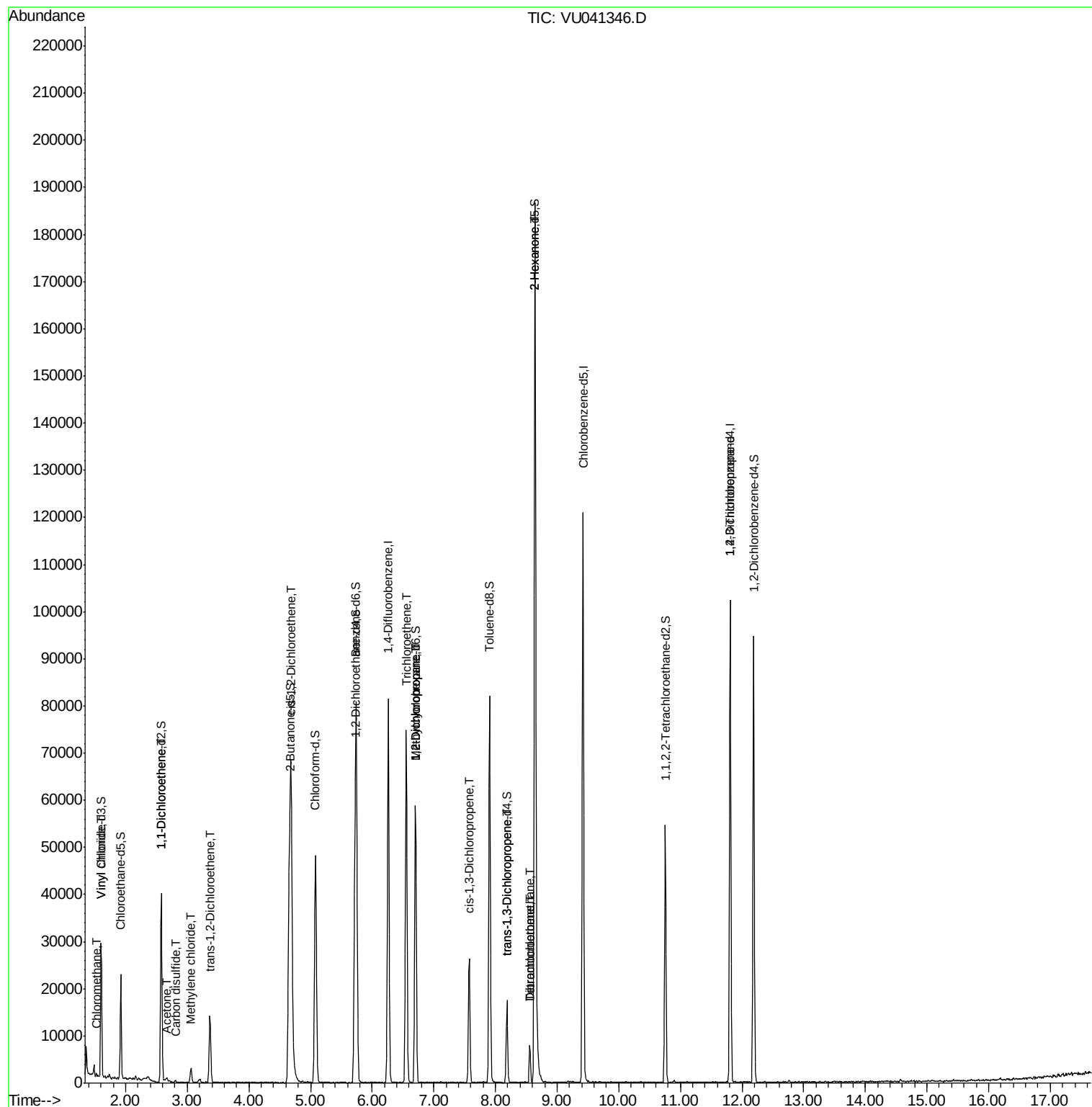
|       |  |  |  |  |  |  |
|-------|--|--|--|--|--|--|
| ----- |  |  |  |  |  |  |
| ----- |  |  |  |  |  |  |

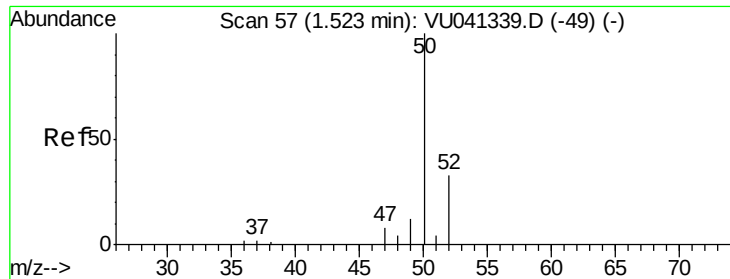
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU111920\  
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Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Nov 20 05:56:10 2020  
Response via : Initial Calibration





#3

Chloromethane

Concen: 0.046 ug/L

RT: 1.52 min Scan# 57

Delta R.T. 0.00 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

Instrument :

MSVOA\_U

ClientSampleId :

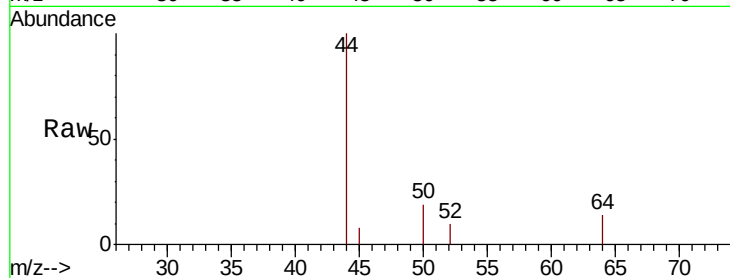
H4389DL

Tot Ion: 50 Resp: 245

Ion Ratio Lower Upper

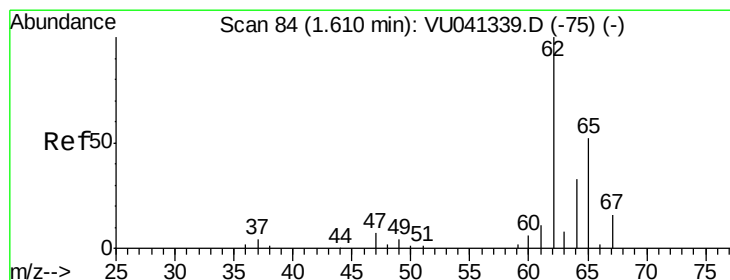
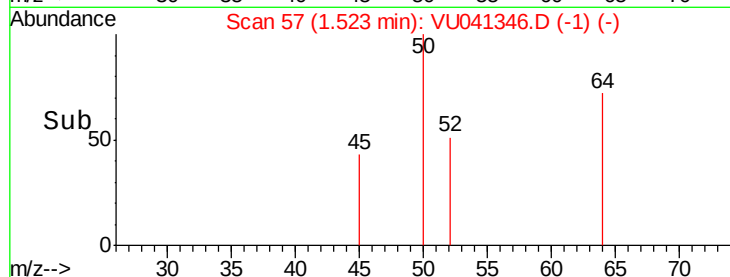
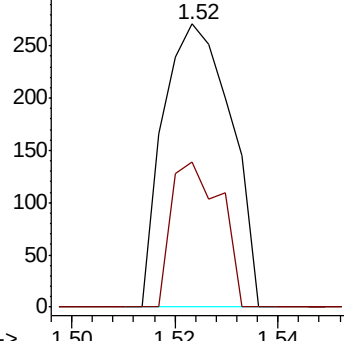
50 100

52 51.3 22.4 41.6#



Abundance Ion 50.05 (49.75 to 50.75): VU0

Ion 52.05 (51.75 to 52.75): VU0



#5

Vinyl chloride

Concen: 0.671 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU041346.D

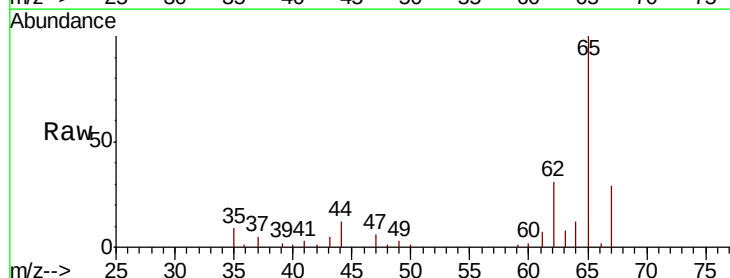
Acq: 19 Nov 2020 16:26

Tgt Ion: 62 Resp: 3502

Ion Ratio Lower Upper

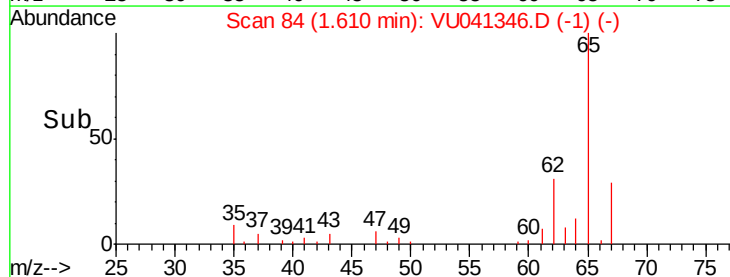
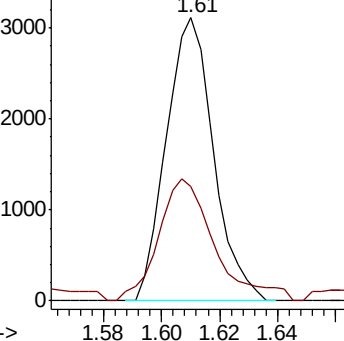
62 100

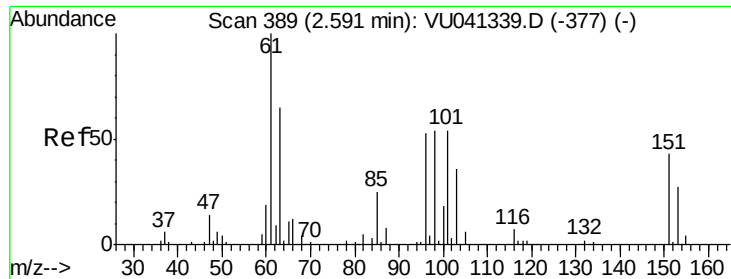
64 40.2 22.7 42.3



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0

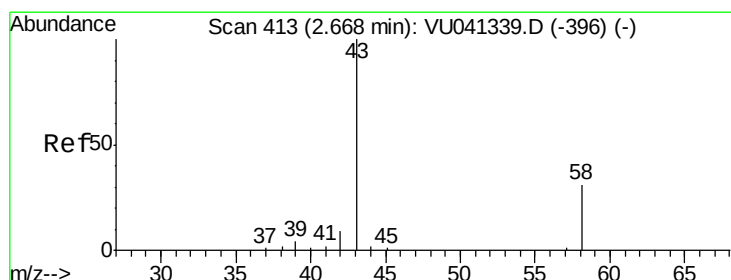
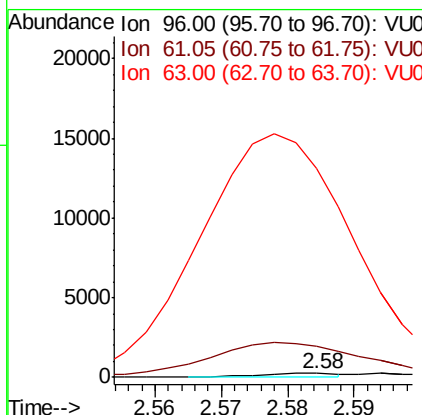
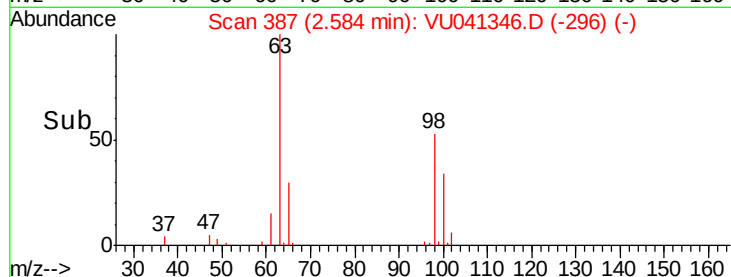
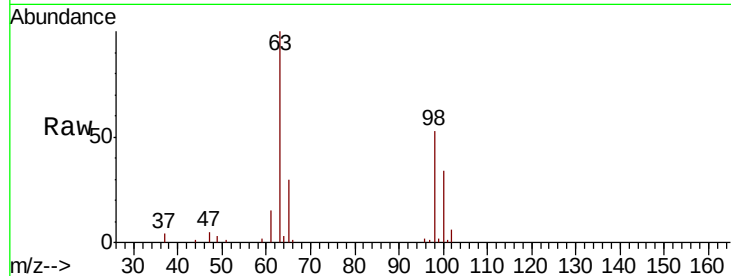




#12  
 1,1-Dichloroethene  
 Concen: 0.054 ug/L  
 RT: 2.58 min Scan# 387  
 Delta R.T. -0.01 min  
 Lab File: VU041346.D  
 Acq: 19 Nov 2020 16:26

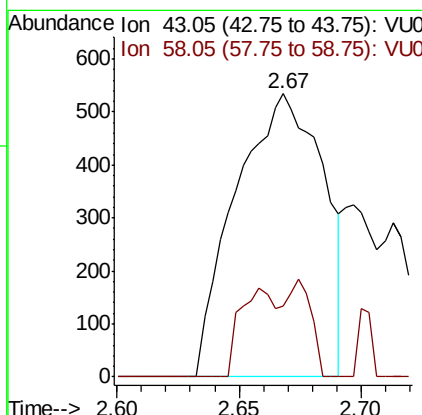
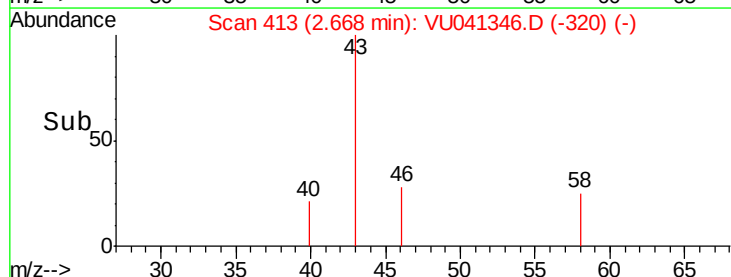
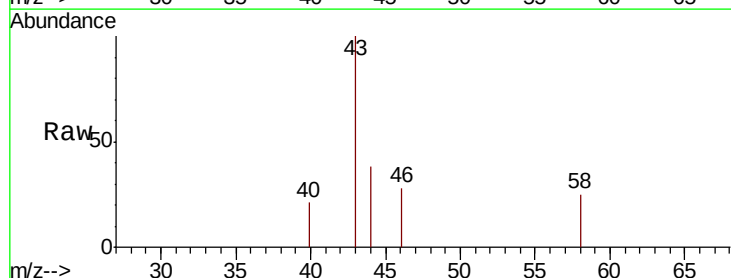
Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 H4389DL

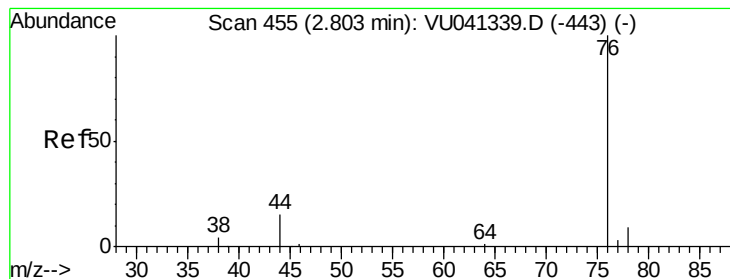
Tot Ion: 96 Resp: 211  
 Ion Ratio Lower Upper  
 96 100  
 61 797.5 134.3 249.5#  
 63 5444.0 95.0 176.4#



#13  
 Acetone  
 Concen: 1.102 ug/L  
 RT: 2.67 min Scan# 413  
 Delta R.T. 0.00 min  
 Lab File: VU041346.D  
 Acq: 19 Nov 2020 16:26

Tgt Ion: 43 Resp: 1332  
 Ion Ratio Lower Upper  
 43 100  
 58 10.7 0.0 25.4





#14

Carbon disulfide

Concen: 0.049 ug/L

RT: 2.81 min Scan# 457

Delta R.T. 0.01 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

Instrument :

MSVOA\_U

ClientSampleId :

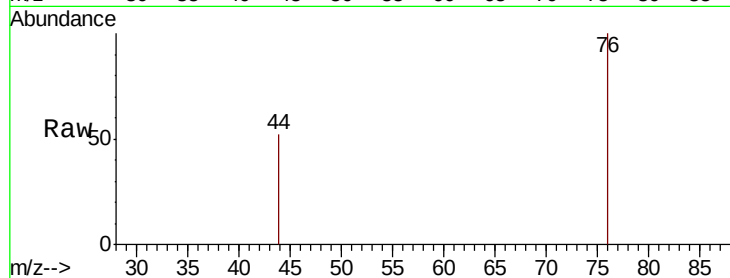
H4389DL

Tot Ion: 76 Resp: 568

Ion Ratio Lower Upper

76 100

78 0.0 7.5 11.3#



Abundance Ion 76.05 (75.75 to 76.75): VU0

Ion 78.00 (77.70 to 78.70): VU0

2.81

400

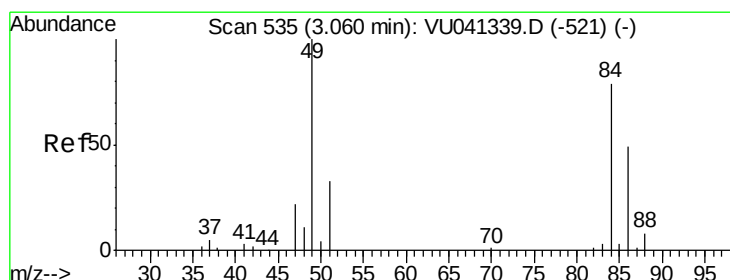
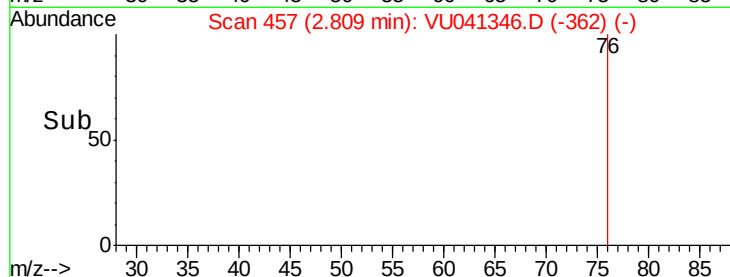
300

200

100

0

Time-->



#16

Methylene chloride

Concen: 0.285 ug/L

RT: 3.06 min Scan# 534

Delta R.T. -0.00 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

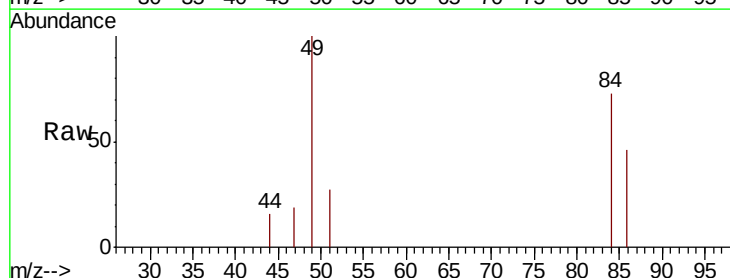
Tgt Ion: 84 Resp: 1399

Ion Ratio Lower Upper

84 100

86 63.4 42.8 79.6

49 136.4 99.5 184.7



Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0

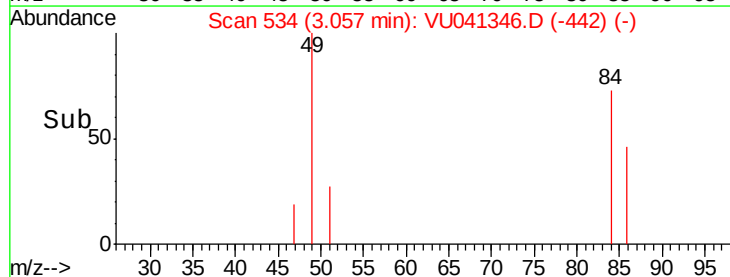
1500

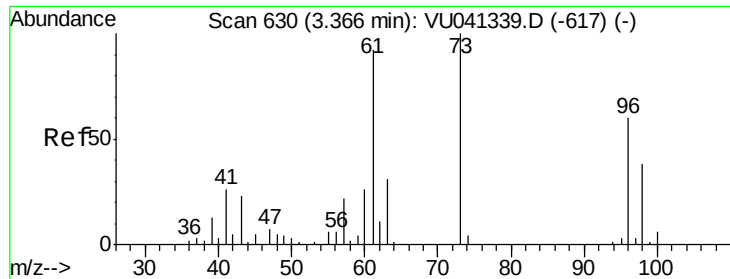
1000

500

0

Time-->

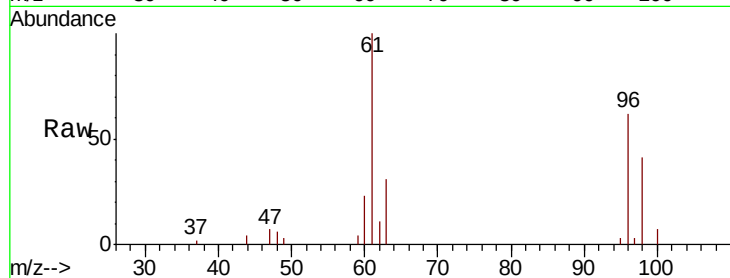




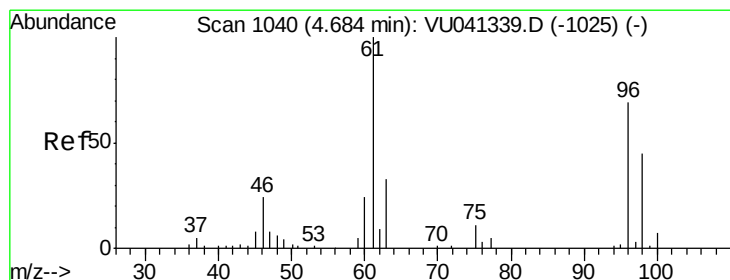
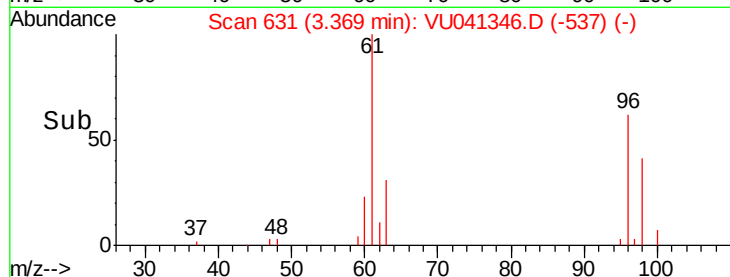
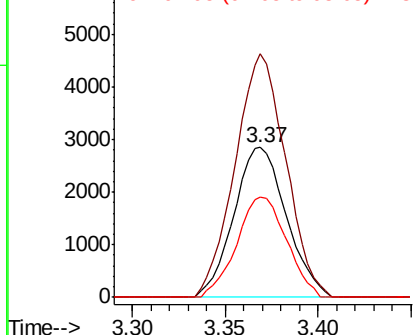
#18  
 trans-1,2-Dichloroethene  
 Concen: 1.470 ug/L  
 RT: 3.37 min Scan# 631  
 Delta R.T. 0.00 min  
 Lab File: VU041346.D  
 Acq: 19 Nov 2020 16:26

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 H4389DL

Tot Ion: 96 Resp: 5602  
 Ion Ratio Lower Upper  
 96 100  
 61 162.3 110.9 205.9  
 98 67.1 45.4 84.2

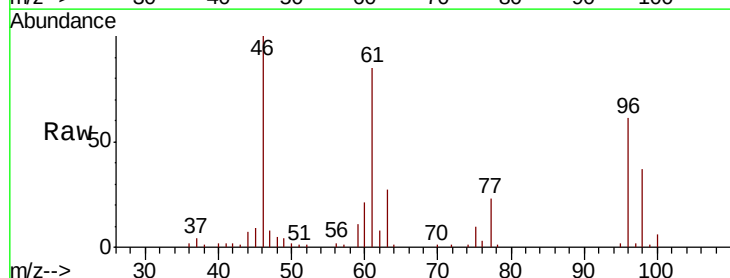


Abundance Ion 96.00 (95.70 to 96.70): VU0  
 Ion 61.05 (60.75 to 61.75): VU0  
 Ion 97.95 (97.65 to 98.65): VU0

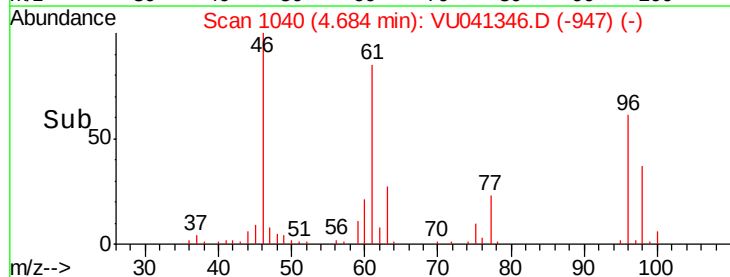
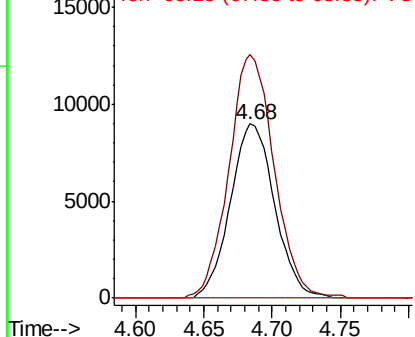


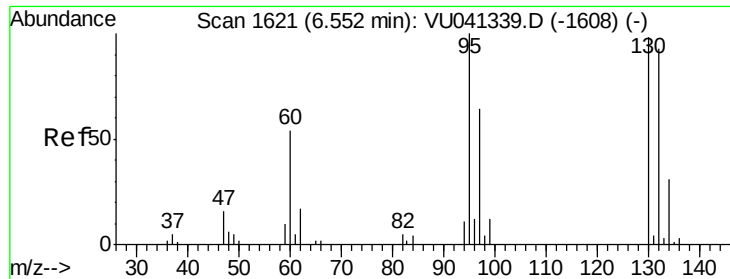
#22  
 cis-1,2-Dichloroethene  
 Concen: 4.725 ug/L  
 RT: 4.68 min Scan# 1040  
 Delta R.T. 0.00 min  
 Lab File: VU041346.D  
 Acq: 19 Nov 2020 16:26

Tgt Ion: 96 Resp: 20332  
 Ion Ratio Lower Upper  
 96 100  
 61 139.7 97.2 180.4  
 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





#34

Trichloroethene

Concen: 5.517 ug/L

RT: 6.55 min Scan# 1621

Delta R.T. 0.00 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

Instrument :

MSVOA\_U

ClientSampleID :

H4389DL

Tot Ion: 95 Resp: 25316

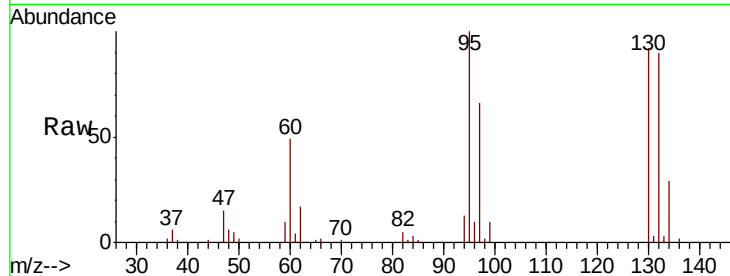
Ion Ratio Lower Upper

95 100

97 66.0 45.6 84.6

132 90.0 64.8 120.4

130 92.4 64.8 120.4

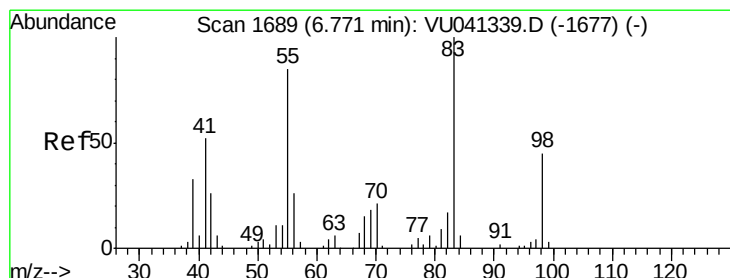
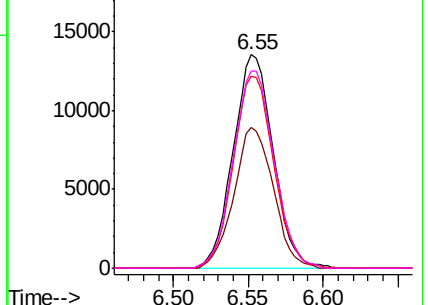
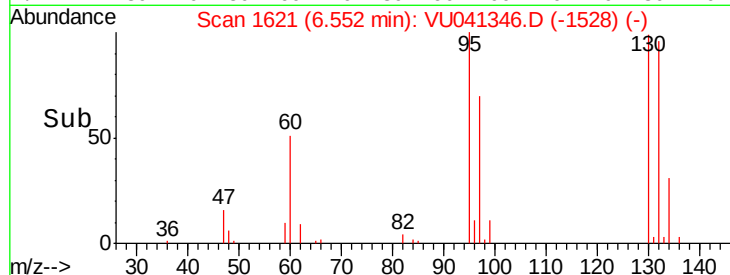


Abundance Ion 95.00 (94.70 to 95.70): VU0

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: 0.989 ug/L

RT: 6.70 min Scan# 1668

Delta R.T. -0.07 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

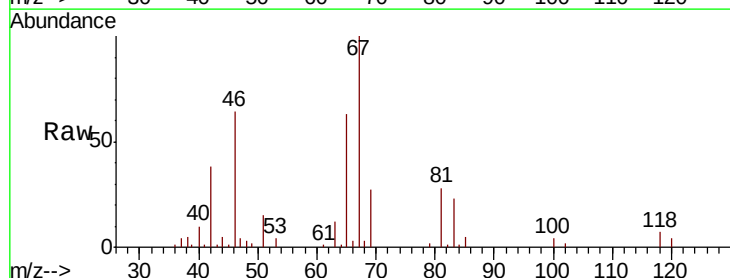
Tgt Ion: 83 Resp: 6027

Ion Ratio Lower Upper

83 100

55 0.0 72.0 108.0#

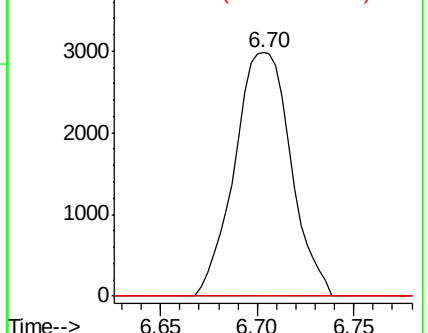
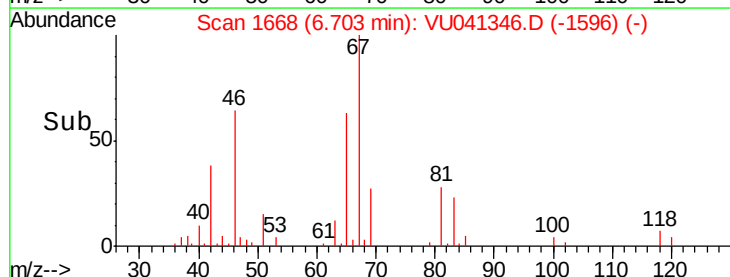
98 0.0 36.6 55.0#



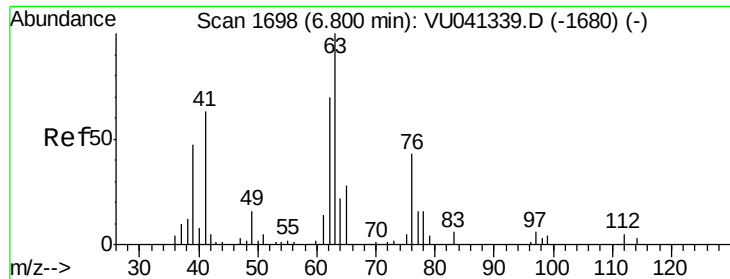
Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



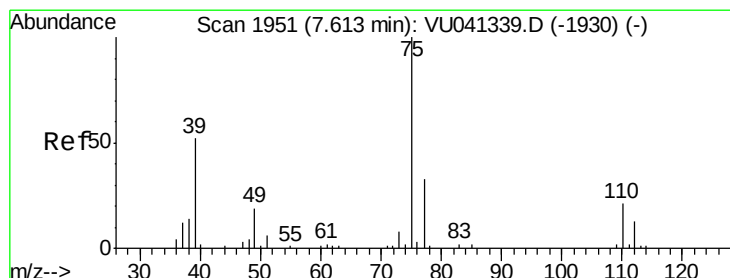
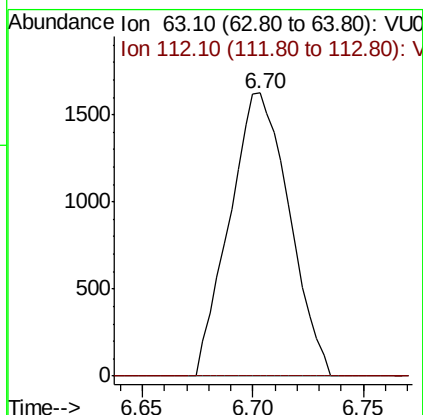
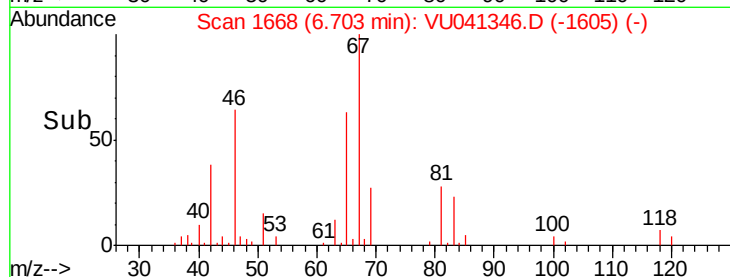
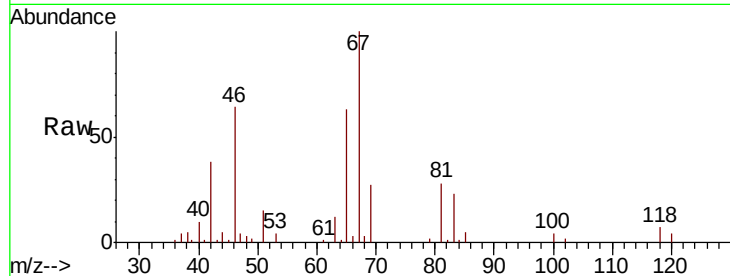




#37  
 1,2-Dichloropropane  
 Concen: 0.612 ug/L  
 RT: 6.70 min Scan# 1668  
 Delta R.T. -0.10 min  
 Lab File: VU041346.D  
 Acq: 19 Nov 2020 16:26

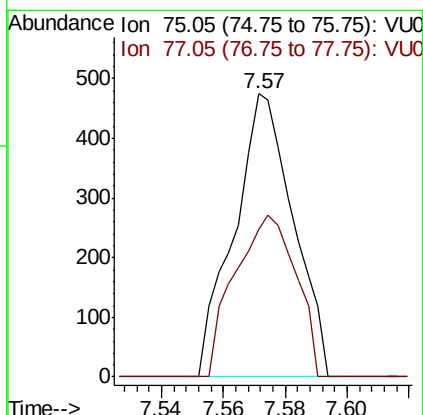
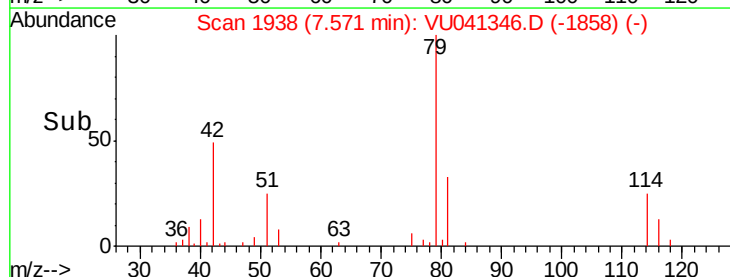
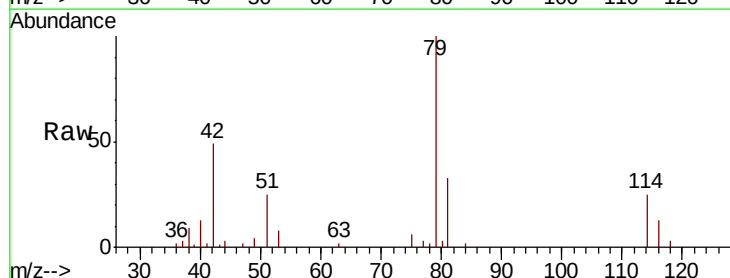
Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 H4389DL

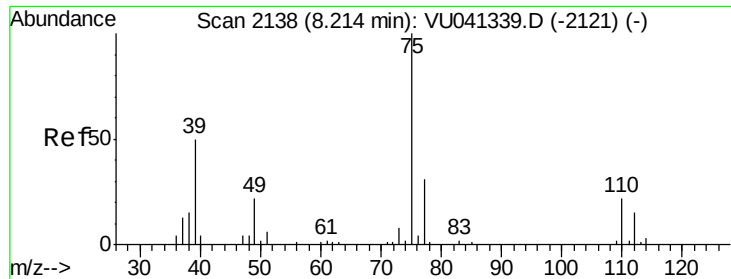
Tot Ion: 63 Resp: 3039  
 Ion Ratio Lower Upper  
 63 100  
 112 0.0 3.6 5.4#



#39  
 cis-1,3-Dichloropropene  
 Concen: 0.091 ug/L  
 RT: 7.57 min Scan# 1938  
 Delta R.T. -0.04 min  
 Lab File: VU041346.D  
 Acq: 19 Nov 2020 16:26

Tgt Ion: 75 Resp: 630  
 Ion Ratio Lower Upper  
 75 100  
 77 52.1 22.7 42.3#





#44

trans-1,3-Dichloropropene

Concen: 0.063 ug/L

RT: 8.18 min Scan# 2127

Delta R.T. -0.04 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

Instrument :

MSVOA\_U

ClientSampleId :

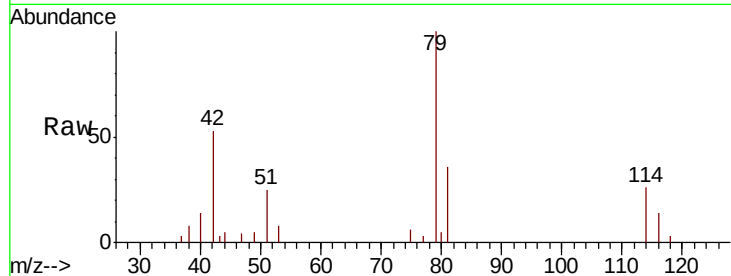
H4389DL

Tot Ion: 75 Resp: 411

Ion Ratio Lower Upper

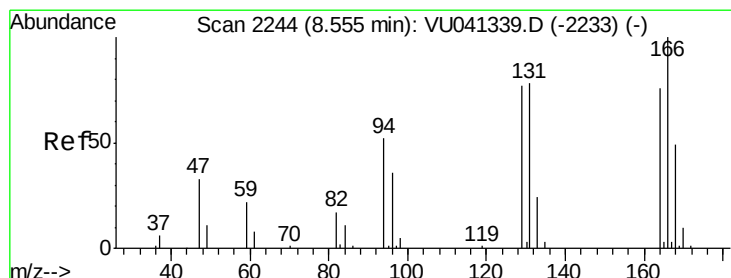
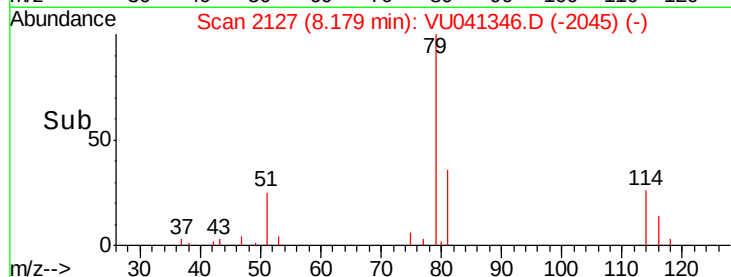
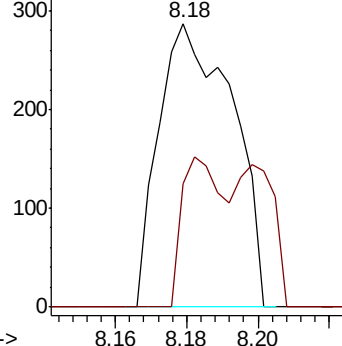
75 100

77 43.6 23.3 43.3#



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0



#47

Tetrachloroethene

Concen: 0.435 ug/L

RT: 8.56 min Scan# 2244

Delta R.T. 0.00 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

Tgt Ion:164 Resp: 1474

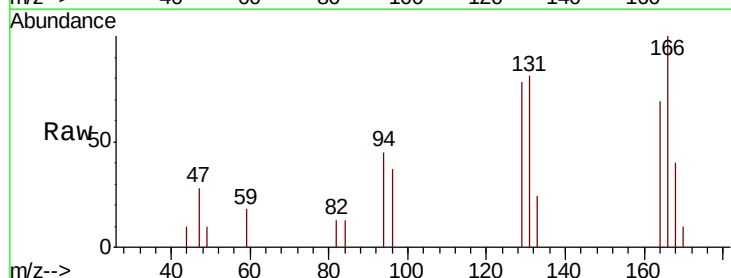
Ion Ratio Lower Upper

164 100

129 112.9 70.3 130.7

131 117.3 70.8 131.4

166 144.1 92.0 170.8

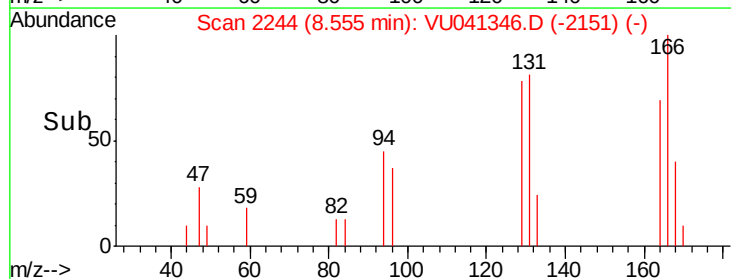
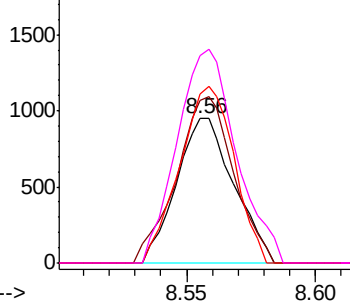


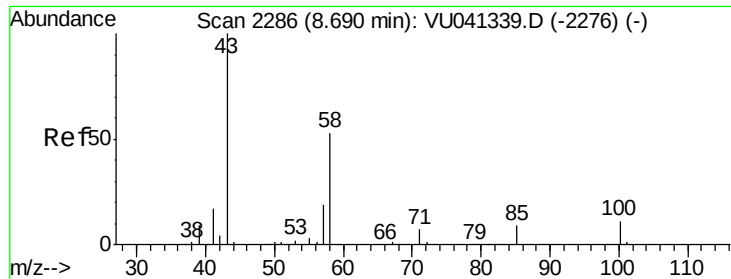
Abundance Ion 163.90 (163.60 to 164.60): V

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

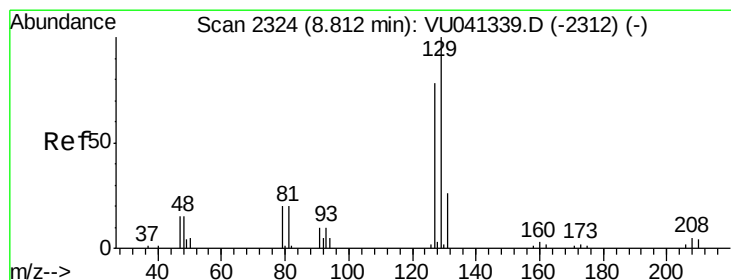
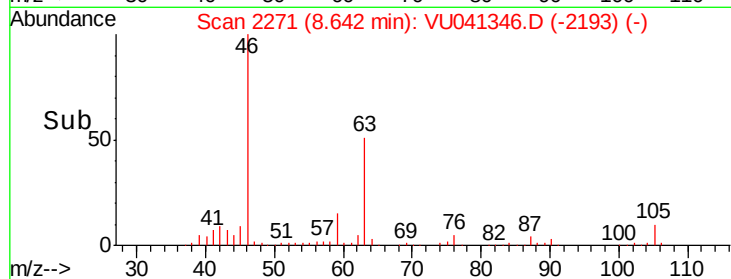
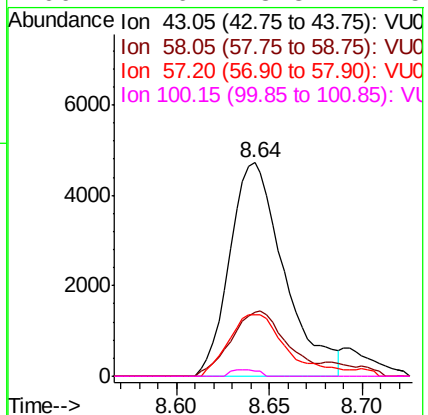
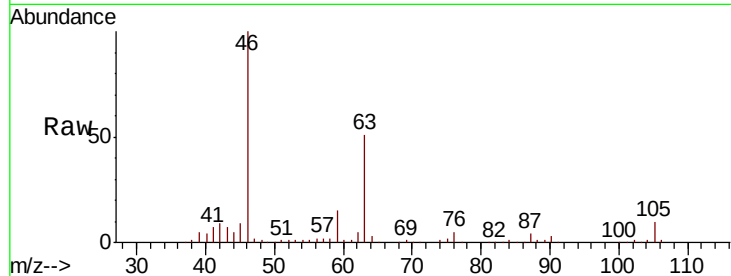




#48  
2-Hexanone  
Concen: 3.138 ug/L  
RT: 8.64 min Scan# 2271  
Delta R.T. -0.05 min  
Lab File: VU041346.D  
Acq: 19 Nov 2020 16:26

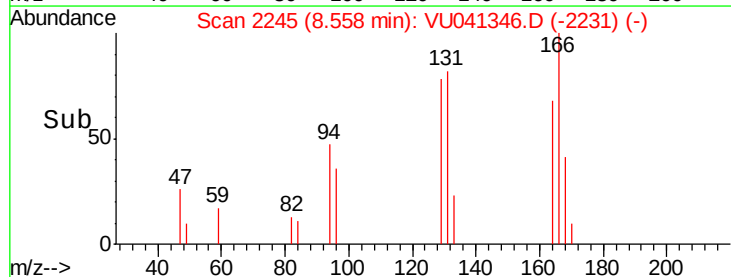
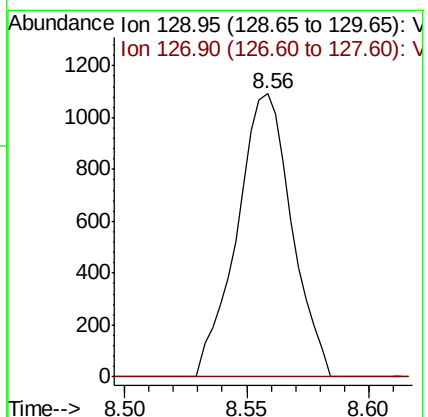
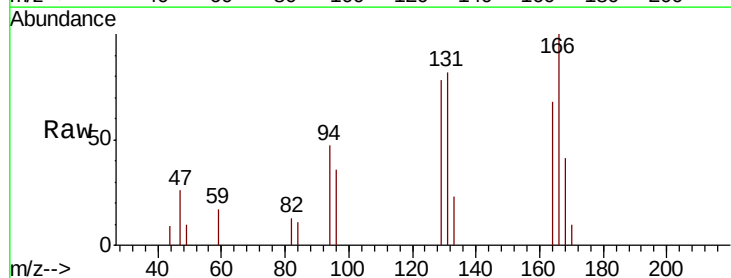
Instrument :  
MSVOA\_U  
ClientSampleID :  
H4389DL

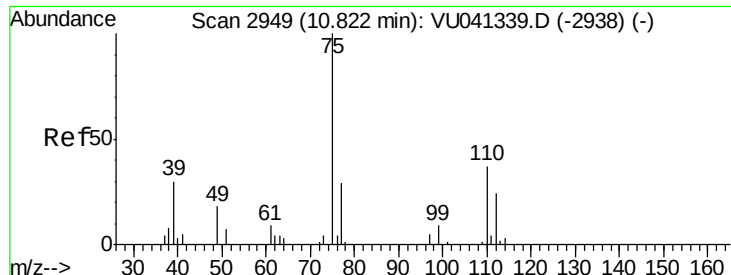
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 9620  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 31.3  | 41.4  | 62.2# |
| 57       | 31.2  | 14.6  | 21.8# |
| 100      | 1.6   | 8.3   | 12.5# |



#49  
Dibromochloromethane  
Concen: 0.373 ug/L  
RT: 8.56 min Scan# 2245  
Delta R.T. -0.25 min  
Lab File: VU041346.D  
Acq: 19 Nov 2020 16:26

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 1698  |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 0.0   | 53.4  | 99.2# |





#59

1,2,3-Trichloropropane

Concen: 0.770 ug/L

RT: 11.81 min Scan# 3256

Delta R.T. 0.99 min

Lab File: VU041346.D

Acq: 19 Nov 2020 16:26

Instrument :

MSVOA\_U

ClientSampleId :

H4389DL

Tot Ion: 75 Resp: 3015

Ion Ratio Lower Upper

75 100

77 43.2 25.7 38.5#

