

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092118\  
 Data File : VU026953.D  
 Acq On : 20 Sep 2018 23:10  
 Operator : MD/SY  
 Sample : J5012-10 50X  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C08N2

Quant Time: Sep 21 06:50:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM091718WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Sep 21 04:24:07 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 175677   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 158760   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 76233    | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |          |
|--------------------------------|---------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 81986    | 63.09    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 126.18%  |
| 7) Chloroethane-d5             | 1.66    | 69    | 71081    | 63.90    | ug/L | -0.01    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 127.80%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 110274   | 44.85    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 89.70%   |
| 21) 2-Butanone-d5              | 4.18    | 46    | 139873   | 162.19   | ug/L | 0.00     |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 162.19%# |
| 24) Chloroform-d               | 4.65    | 84    | 150939   | 62.61    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 125.22%# |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 100452   | 66.18    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 132.36%# |
| 32) Benzene-d6                 | 5.34    | 84    | 301203   | 67.70    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 135.40%# |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 100911   | 70.39    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 140.78%# |
| 41) Toluene-d8                 | 7.57    | 98    | 248214   | 61.75    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 123.50%# |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 41316    | 64.55    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 129.10%# |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 100765   | 178.84   | ug/L | 0.00     |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 178.84%# |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 146526   | 73.30    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 146.60%# |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 117278   | 73.95    | ug/L | 0.00     |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 147.90%# |

## Target Compounds

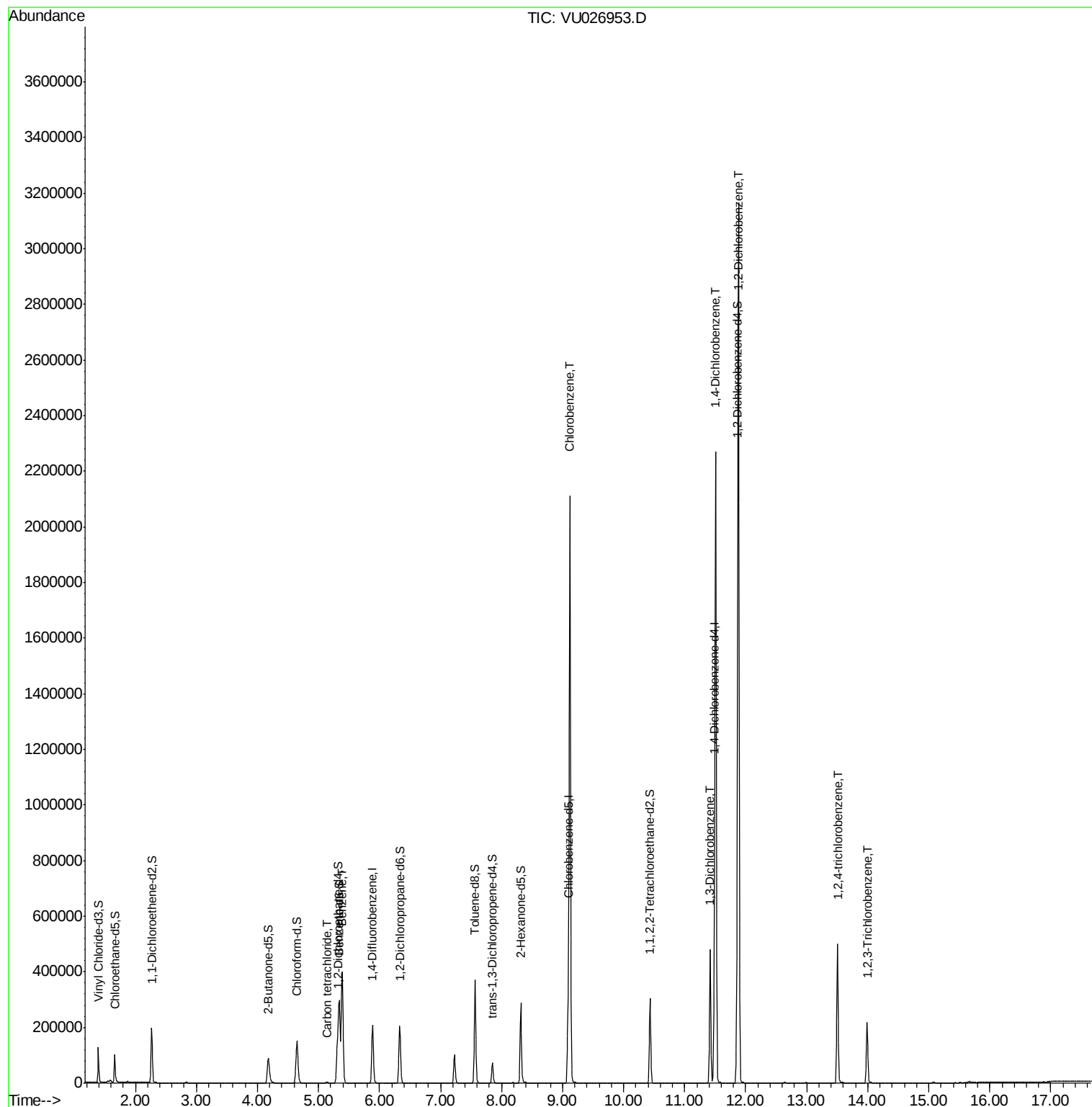
|                            |       |     |         |              | Ovalue |
|----------------------------|-------|-----|---------|--------------|--------|
| 31) Carbon tetrachloride   | 5.14  | 117 | 2232    | 1.319 ug/L   | 98     |
| 33) Benzene                | 5.39  | 78  | 398022  | 80.863 ug/L  | 100    |
| 51) Chlorobenzene          | 9.12  | 112 | 1146986 | 339.360 ug/L | 99     |
| 62) 1,3-Dichlorobenzene    | 11.42 | 146 | 205797  | 88.555 ug/L  | 99     |
| 63) 1,4-Dichlorobenzene    | 11.51 | 146 | 938466  | 366.737 ug/L | 99     |
| 65) 1,2-Dichlorobenzene    | 11.88 | 146 | 1293741 | 502.773 ug/L | 100    |
| 68) 1,2,4-trichlorobenzene | 13.50 | 180 | 165758  | 106.961 ug/L | 100    |
| 70) 1,2,3-Trichlorobenzene | 13.99 | 180 | 77443   | 45.380 ug/L  | 99     |

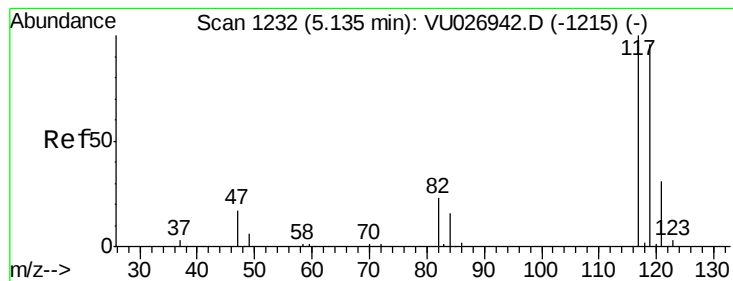
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : VOC Analysis  
QLast Update : Fri Sep 21 04:24:07 2018  
Response via : Initial Calibration





#31

Carbon tetrachloride

Concen: 1.319 ug/L

RT: 5.14 min Scan# 1234

Delta R.T. 0.00 min

Lab File: VU026953.D

Acq: 20 Sep 2018 23:10

Instrument :

MSVOA\_U

ClientSampleId :

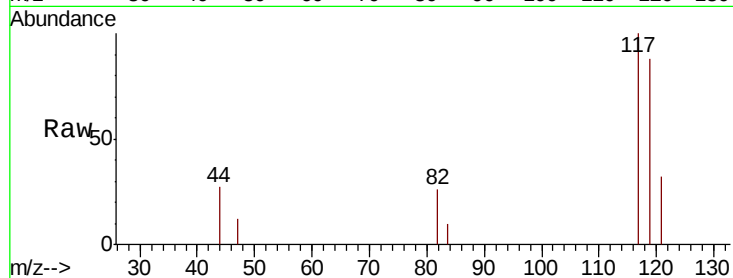
C08N2

Tot Ion:117 Resp: 2232

Ion Ratio Lower Upper

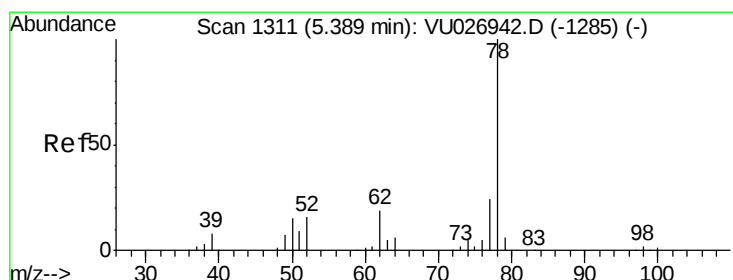
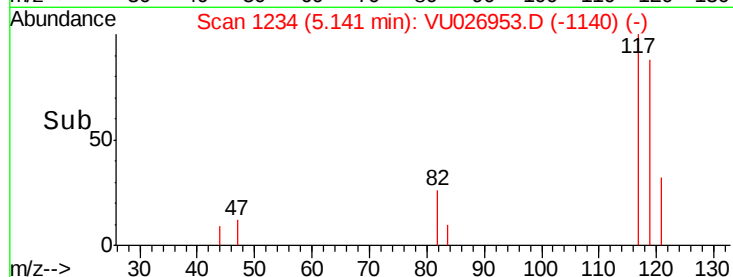
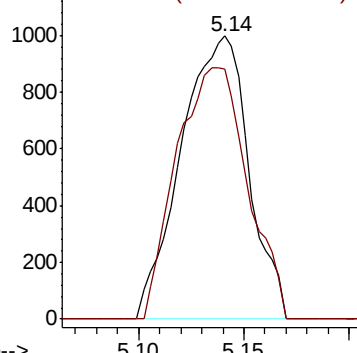
117 100

119 93.3 76.3 114.5



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#33

Benzene

Concen: 80.863 ug/L

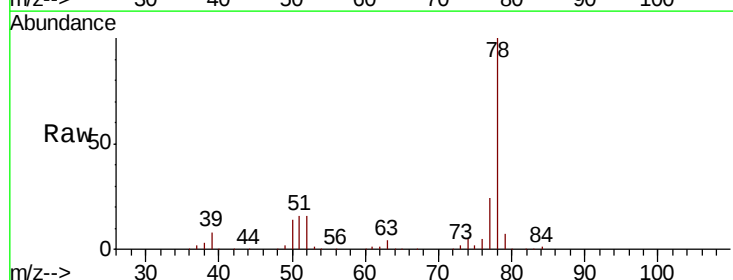
RT: 5.39 min Scan# 1311

Delta R.T. -0.00 min

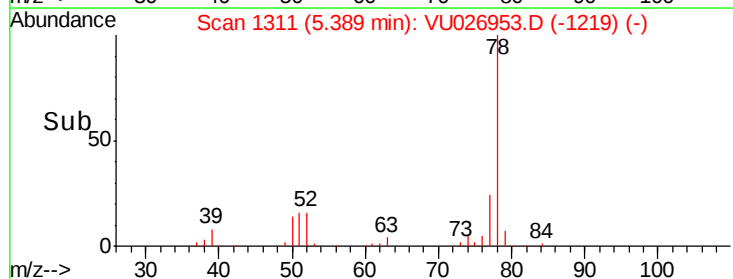
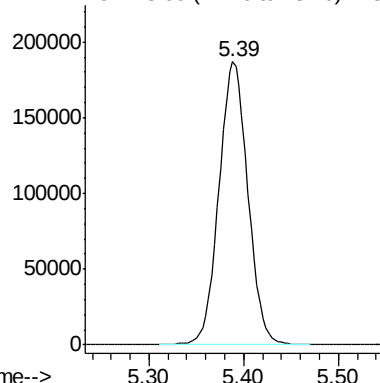
Lab File: VU026953.D

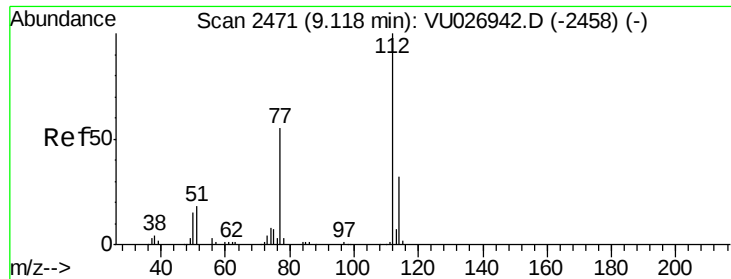
Acq: 20 Sep 2018 23:10

Tgt Ion: 78 Resp: 398022



Abundance Ion 78.00 (77.70 to 78.70): VU0





#51

Chlorobenzene

Concen: 339.360 ug/L

RT: 9.12 min Scan# 2472

Delta R.T. 0.00 min

Lab File: VU026953.D

Acq: 20 Sep 2018 23:10

Instrument :

MSVOA\_U

ClientSampleId :

C08N2

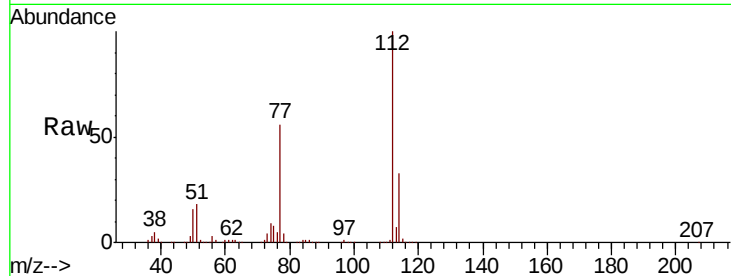
Tot Ion:112 Resp: 1146986

Ion Ratio Lower Upper

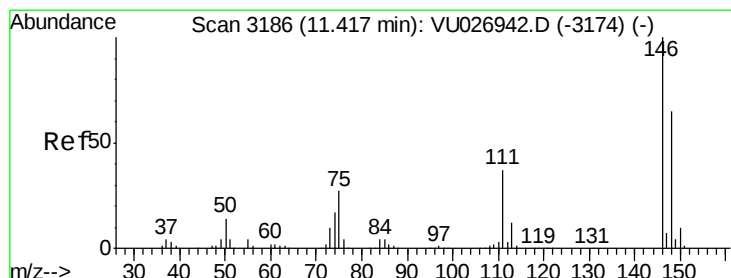
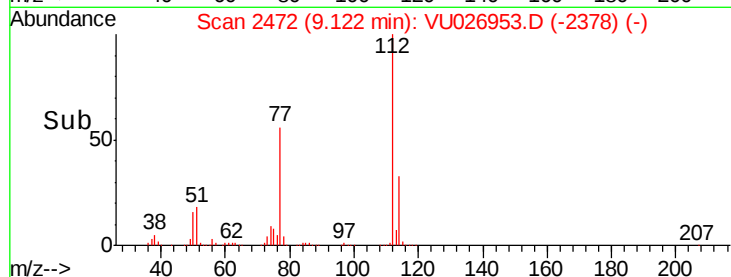
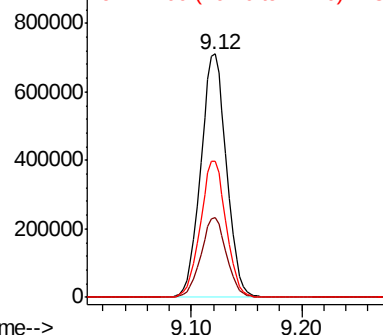
112 100

114 32.8 22.3 41.5

77 56.1 45.1 67.7



Abundance Ion 112.00 (111.70 to 112.70): V  
Ion 114.00 (113.70 to 114.70): V  
Ion 77.00 (76.70 to 77.70): V



#62

1,3-Dichlorobenzene

Concen: 88.555 ug/L

RT: 11.42 min Scan# 3186

Delta R.T. -0.00 min

Lab File: VU026953.D

Acq: 20 Sep 2018 23:10

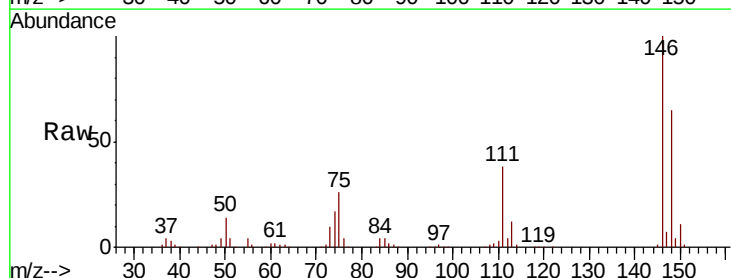
Tgt Ion:146 Resp: 205797

Ion Ratio Lower Upper

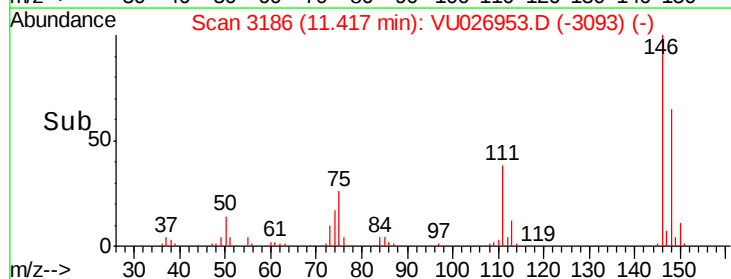
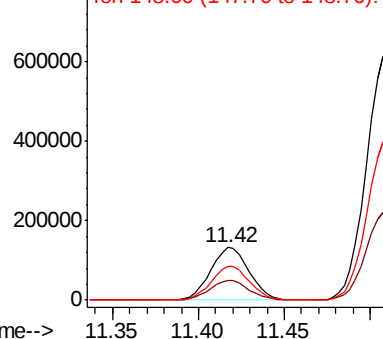
146 100

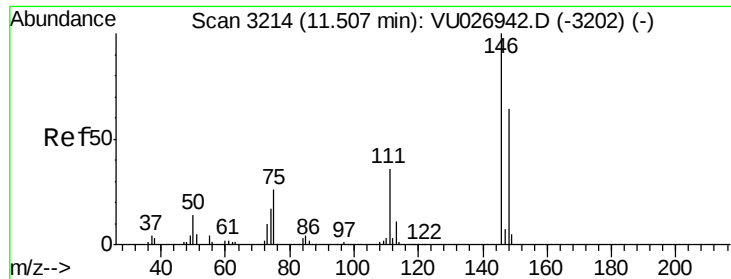
111 37.7 26.7 49.7

148 64.6 44.9 83.5



Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V

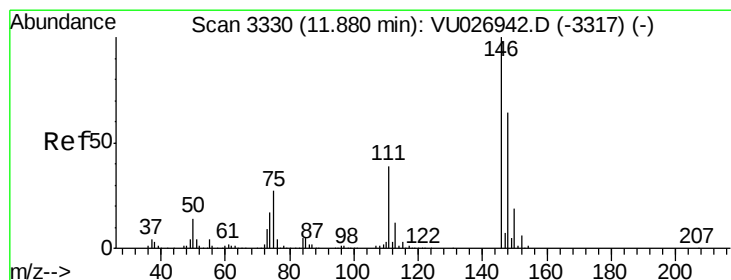
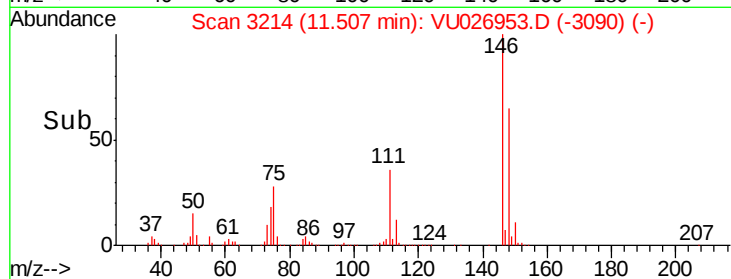
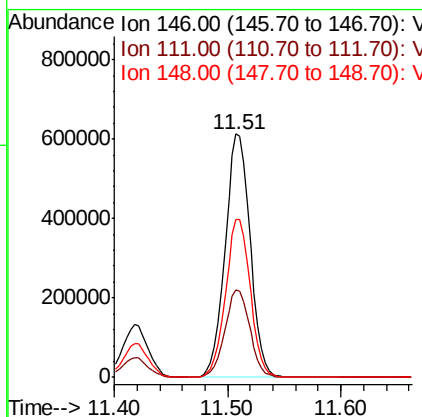
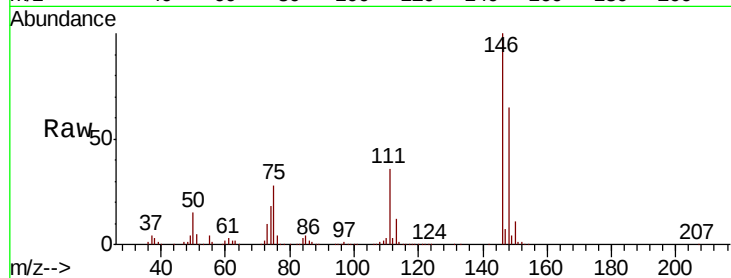




#63  
 1,4-Dichlorobenzene  
 Concen: 366.737 ug/L  
 RT: 11.51 min Scan# 3214  
 Delta R.T. -0.00 min  
 Lab File: VU026953.D  
 Acq: 20 Sep 2018 23:10

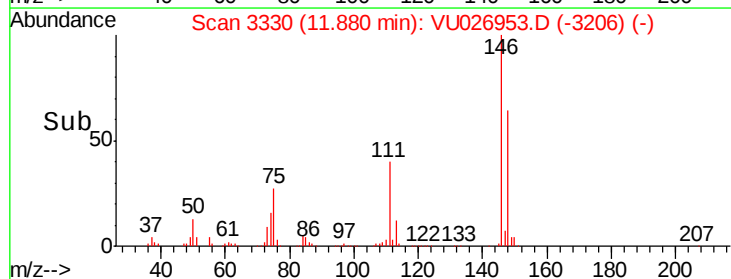
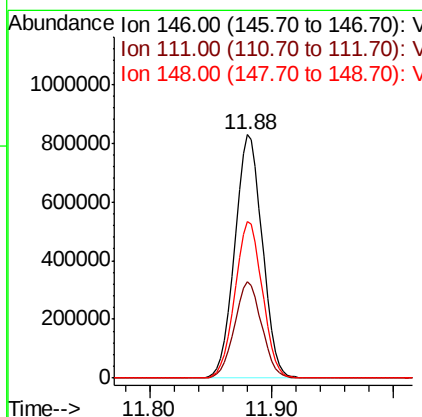
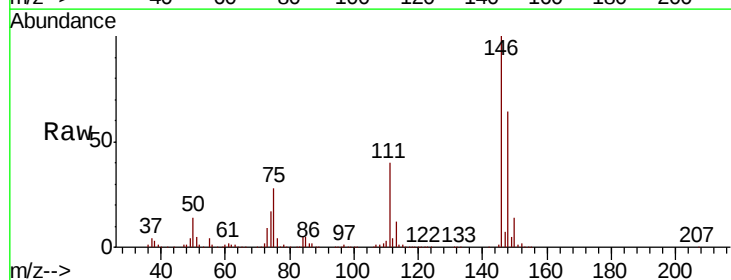
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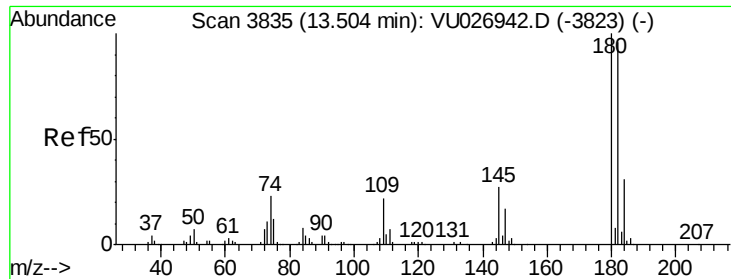
Tot Ion:146 Resp: 938466  
 Ion Ratio Lower Upper  
 146 100  
 111 35.9 26.0 48.2  
 148 64.9 45.8 85.2



#65  
 1,2-Dichlorobenzene  
 Concen: 502.773 ug/L  
 RT: 11.88 min Scan# 3330  
 Delta R.T. -0.00 min  
 Lab File: VU026953.D  
 Acq: 20 Sep 2018 23:10

Tgt Ion:146 Resp: 1293741  
 Ion Ratio Lower Upper  
 146 100  
 111 39.5 31.4 47.0  
 148 64.3 51.4 77.2

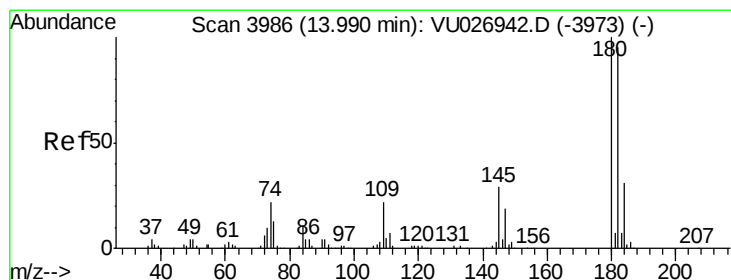
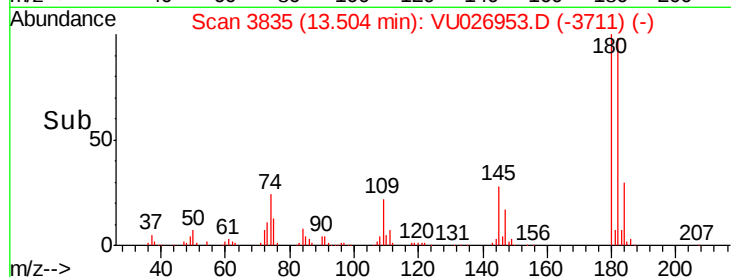
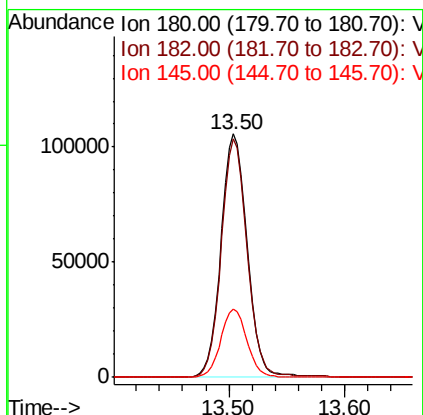
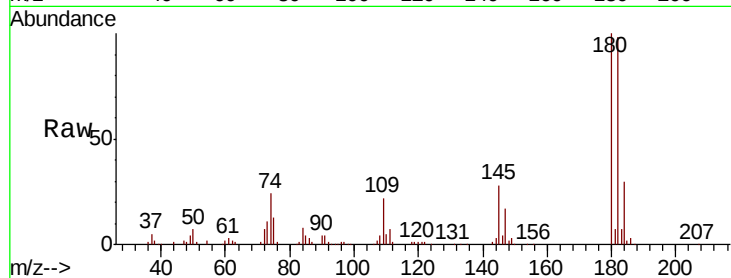




#68  
 1,2,4-trichlorobenzene  
 Concen: 106.961 ug/L  
 RT: 13.50 min Scan# 3835  
 Delta R.T. -0.00 min  
 Lab File: VU026953.D  
 Acq: 20 Sep 2018 23:10

Instrument :  
 MSVOA\_U  
 ClientSampled :  
 C08N2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.0  | 76.8  | 115.2 |
| 145     | 27.9  | 22.2  | 33.2  |



#70  
 1,2,3-Trichlorobenzene  
 Concen: 45.380 ug/L  
 RT: 13.99 min Scan# 3986  
 Delta R.T. 0.00 min  
 Lab File: VU026953.D  
 Acq: 20 Sep 2018 23:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.4  | 75.6  | 113.4 |
| 145     | 28.8  | 23.8  | 35.6  |

