

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040619\  
 Data File : VU030790.D  
 Acq On : 06 Apr 2019 10:36  
 Operator : JC/SP  
 Sample : K2269-03 100X  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0BR5

Quant Time: Apr 08 02:40:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM040519WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Apr 08 01:03:28 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 481889   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 482353   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 215176   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 221459   | 51.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 102.96% |
| 7) Chloroethane-d5             | 1.68    | 69    | 175301   | 53.69    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 107.38% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 308751   | 39.68    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 79.36%  |
| 21) 2-Butanone-d5              | 4.17    | 46    | 354784   | 104.06   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 104.06% |
| 24) Chloroform-d               | 4.64    | 84    | 310002   | 47.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 94.36%  |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 233250   | 52.02    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 104.04% |
| 32) Benzene-d6                 | 5.34    | 84    | 688639   | 48.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.32    | 67    | 238609   | 49.45    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 98.90%  |
| 41) Toluene-d8                 | 7.56    | 98    | 589525   | 47.23    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 94.46%  |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 97416    | 44.27    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 88.54%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 224169   | 101.64   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 101.64% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 314083   | 48.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 96.50%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 216012   | 51.05    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 102.10% |

## Target Compounds

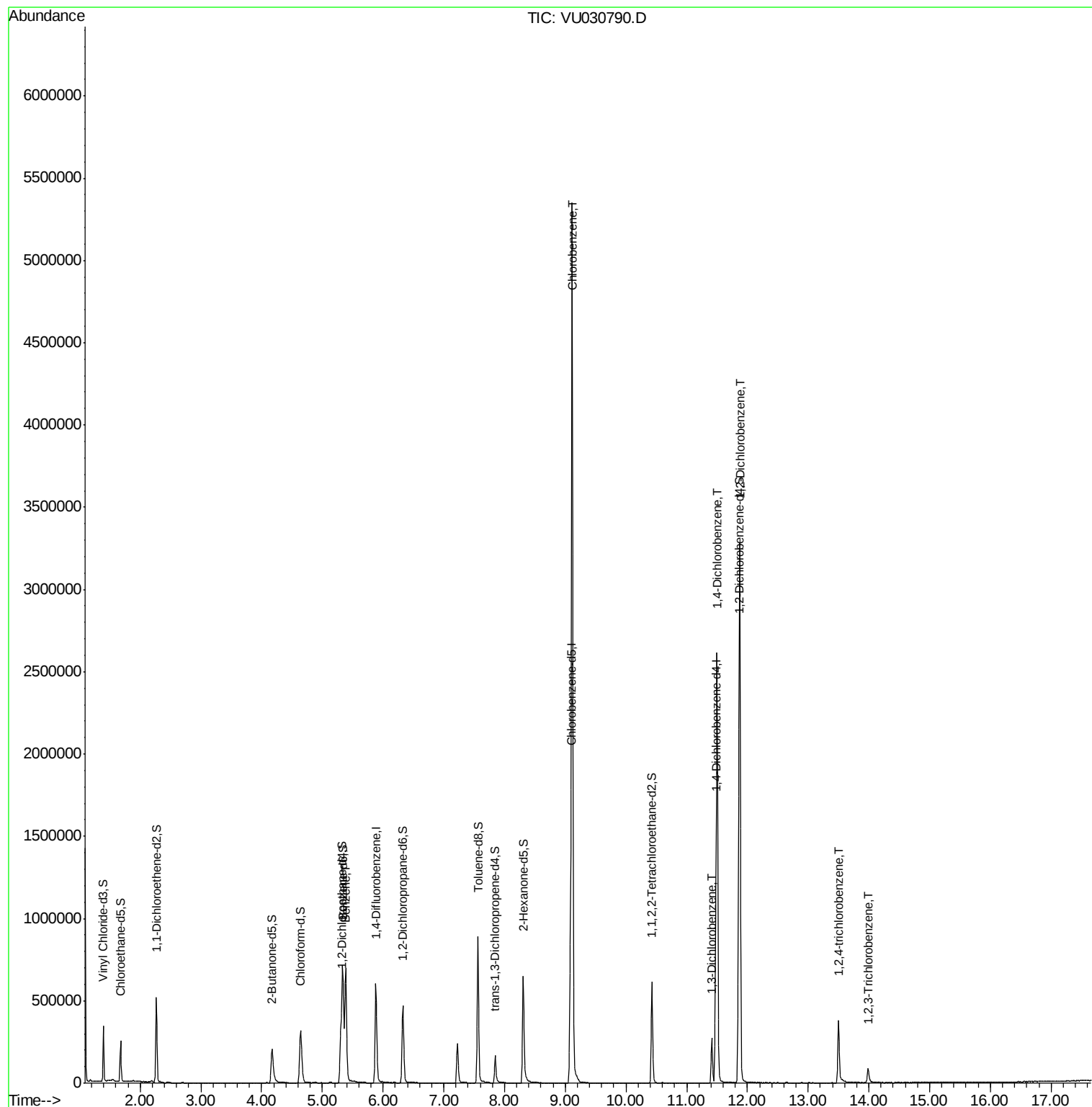
|                            |       |     |         |         | Ovalue   |
|----------------------------|-------|-----|---------|---------|----------|
| 33) Benzene                | 5.39  | 78  | 674098  | 42.706  | ug/L 100 |
| 51) Chlorobenzene          | 9.12  | 112 | 2683140 | 271.513 | ug/L 99  |
| 62) 1,3-Dichlorobenzene    | 11.41 | 146 | 105373  | 15.495  | ug/L 96  |
| 63) 1,4-Dichlorobenzene    | 11.50 | 146 | 967590  | 139.876 | ug/L 98  |
| 65) 1,2-Dichlorobenzene    | 11.87 | 146 | 1193814 | 175.004 | ug/L 100 |
| 68) 1,2,4-trichlorobenzene | 13.50 | 180 | 123692  | 29.271  | ug/L 94  |
| 70) 1,2,3-Trichlorobenzene | 13.99 | 180 | 31329   | 7.096   | ug/L 96  |

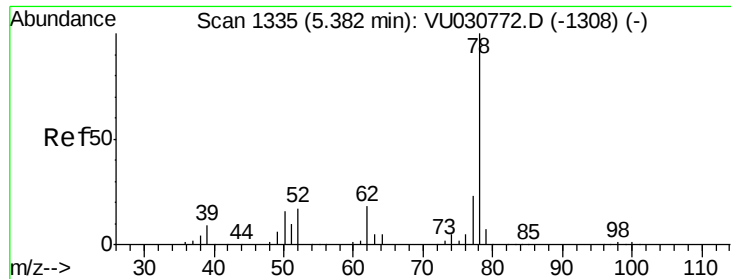
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Apr 08 01:03:28 2019  
Response via : Initial Calibration





#33

Benzene

Concen: 42.706 ug/L

RT: 5.39 min Scan# 1336

Delta R.T. 0.00 min

Lab File: VU030790.D

Acq: 06 Apr 2019 10:36

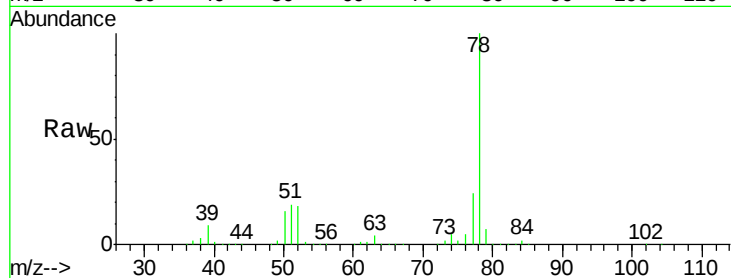
Instrument :

MSVOA\_U

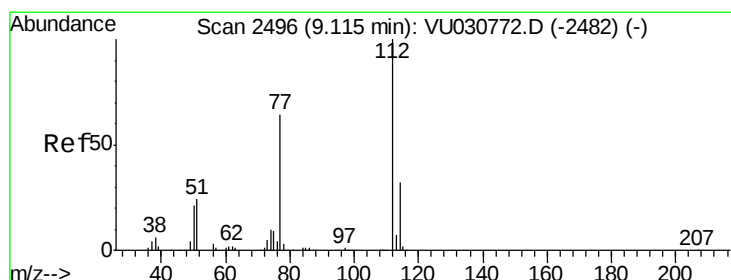
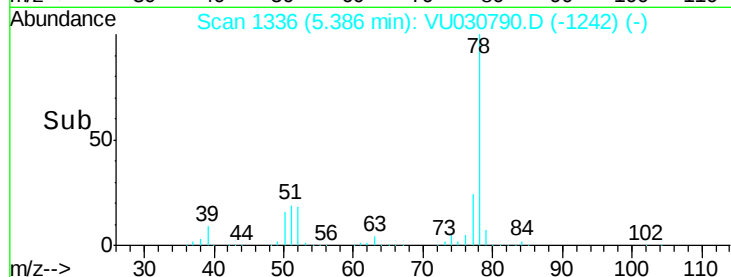
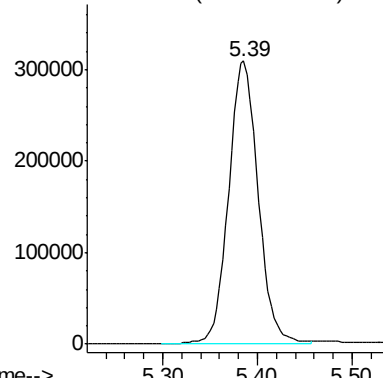
ClientSampleId :

C0BR5

Tgt Ion: 78 Resp: 674098



Abundance Ion 78.00 (77.70 to 78.70): VU0



#51

Chlorobenzene

Concen: 271.513 ug/L

RT: 9.12 min Scan# 2496

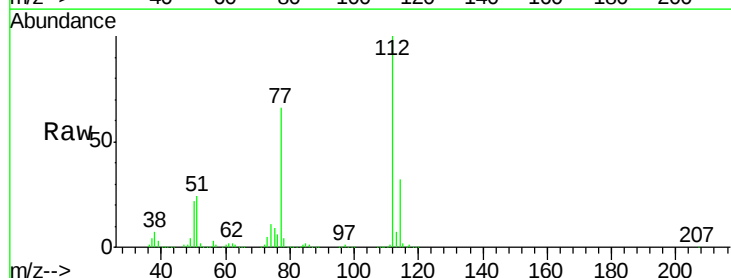
Delta R.T. 0.00 min

Lab File: VU030790.D

Acq: 06 Apr 2019 10:36

Tgt Ion: 112 Resp: 2683140

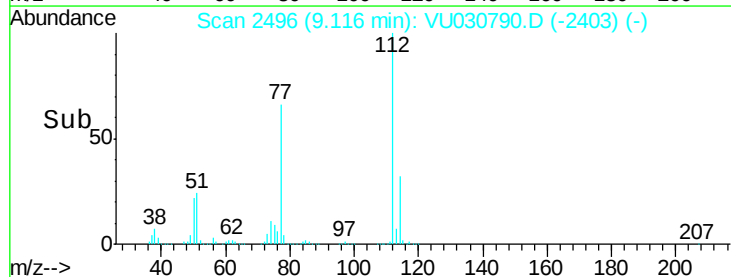
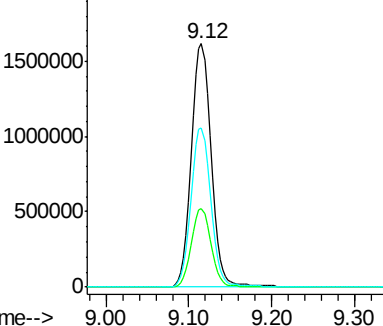
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 112 | 100   |       |       |
| 114 | 32.4  | 22.2  | 41.2  |
| 77  | 65.6  | 51.7  | 77.5  |

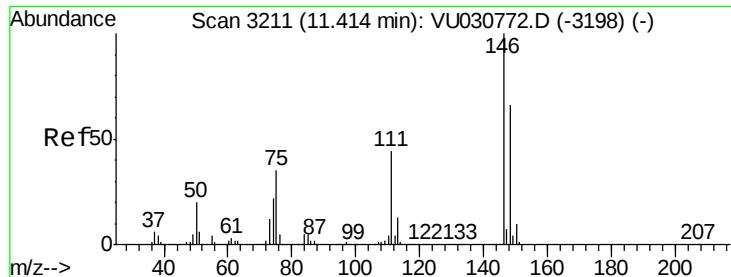


Abundance Ion 112.00 (111.70 to 112.70): V

Ion 114.00 (113.70 to 114.70): V

Ion 77.00 (76.70 to 77.70): VU0

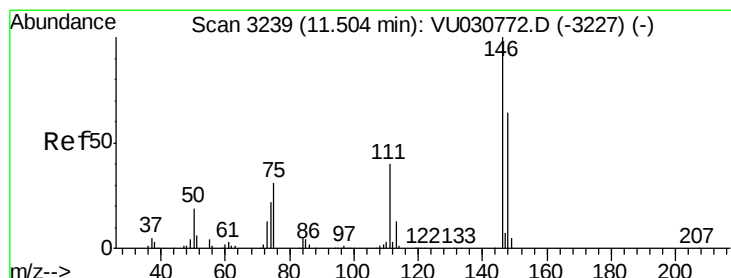
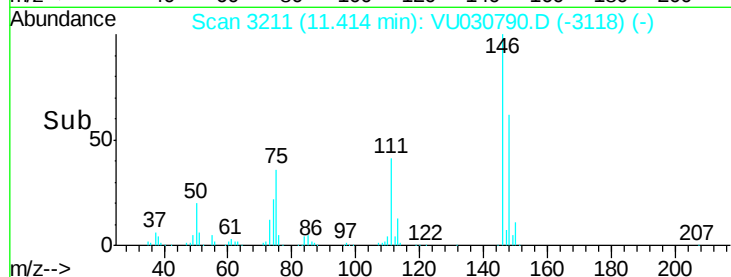
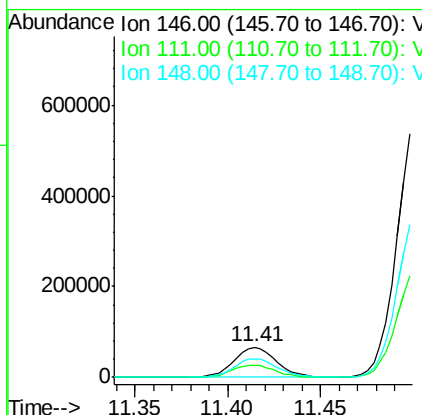
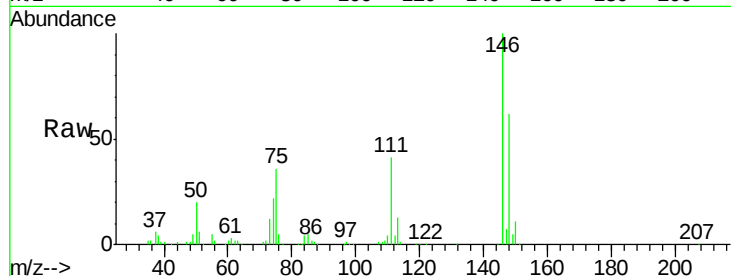




#62  
 1,3-Dichlorobenzene  
 Concen: 15.495 ug/L  
 RT: 11.41 min Scan# 3211  
 Delta R.T. 0.00 min  
 Lab File: VU030790.D  
 Acq: 06 Apr 2019 10:36

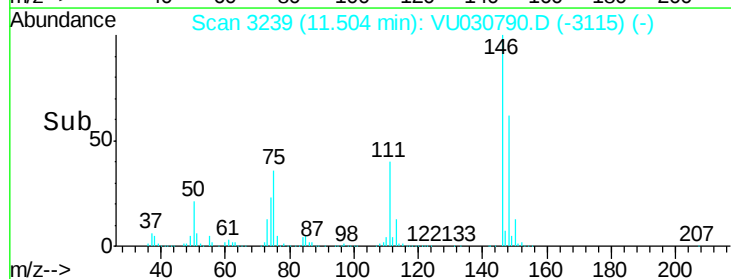
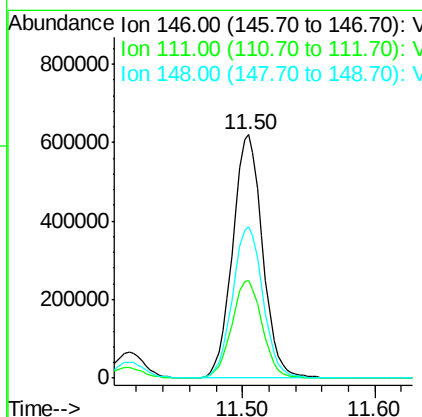
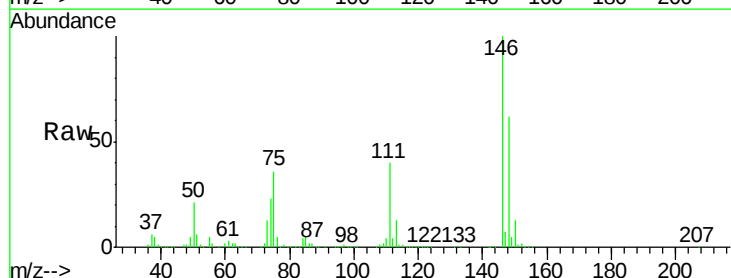
Instrument :  
 MSVOA\_U  
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 C0BR5

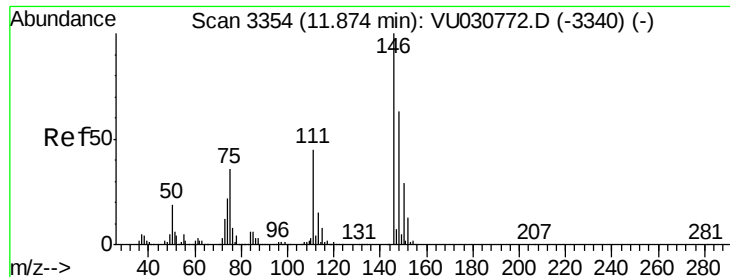
Tot Ion:146 Resp: 105373  
 Ion Ratio Lower Upper  
 146 100  
 111 40.8 30.9 57.5  
 148 61.9 44.7 82.9



#63  
 1,4-Dichlorobenzene  
 Concen: 139.876 ug/L  
 RT: 11.50 min Scan# 3239  
 Delta R.T. 0.00 min  
 Lab File: VU030790.D  
 Acq: 06 Apr 2019 10:36

Tgt Ion:146 Resp: 967590  
 Ion Ratio Lower Upper  
 146 100  
 111 40.0 27.7 51.5  
 148 62.4 45.4 84.4

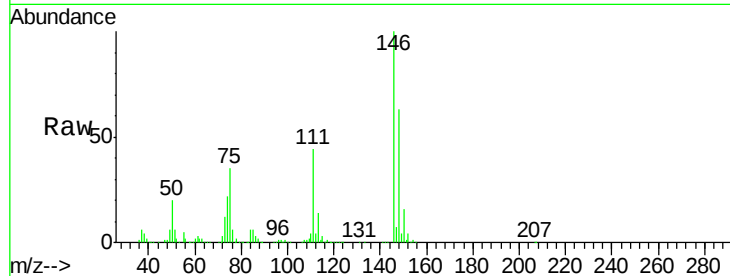




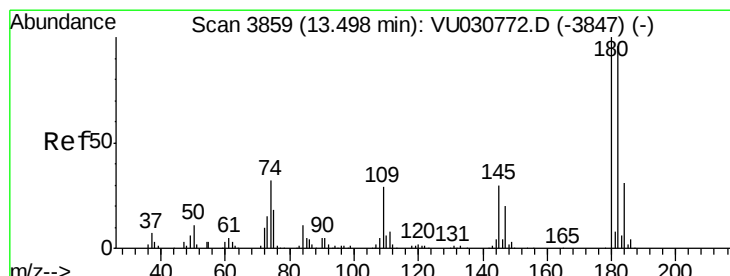
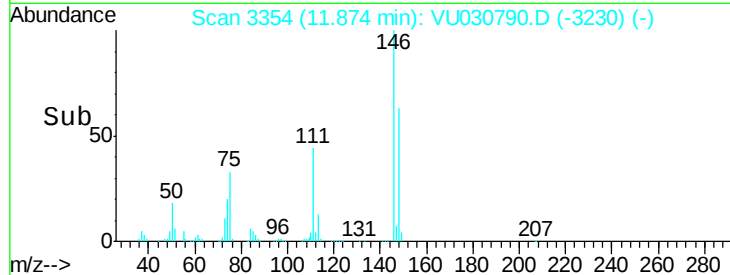
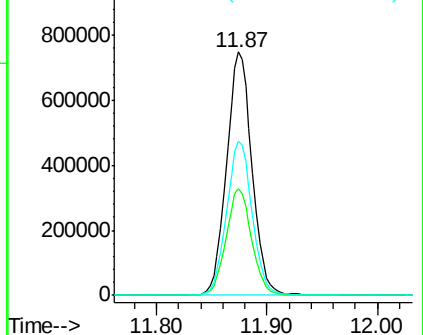
#65  
 1,2-Dichlorobenzene  
 Concen: 175.004 ug/L  
 RT: 11.87 min Scan# 3354  
 Delta R.T. 0.00 min  
 Lab File: VU030790.D  
 Acq: 06 Apr 2019 10:36

Instrument :  
 MSVOA\_U  
 ClientSampled :  
 C0BR5

Tot Ion:146 Resp: 1193814  
 Ion Ratio Lower Upper  
 146 100  
 111 43.9 34.9 52.3  
 148 63.3 50.4 75.6

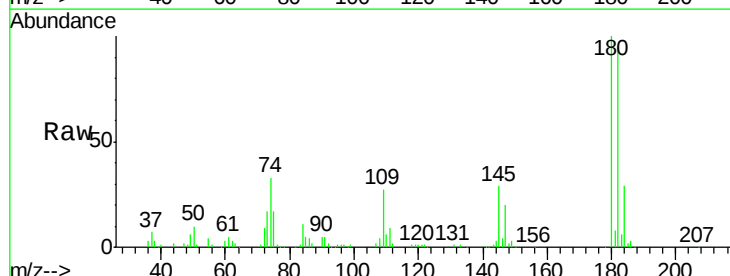


Abundance Ion 146.00 (145.70 to 146.70): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

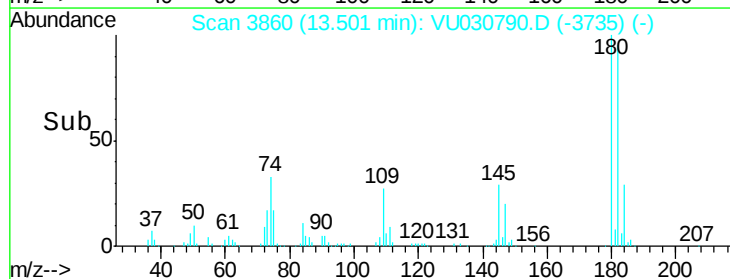
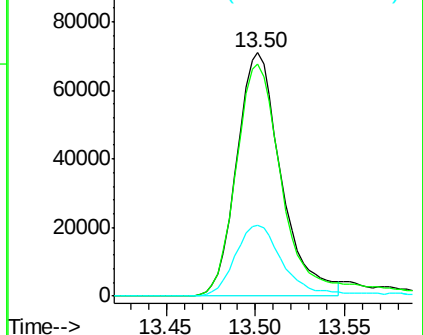


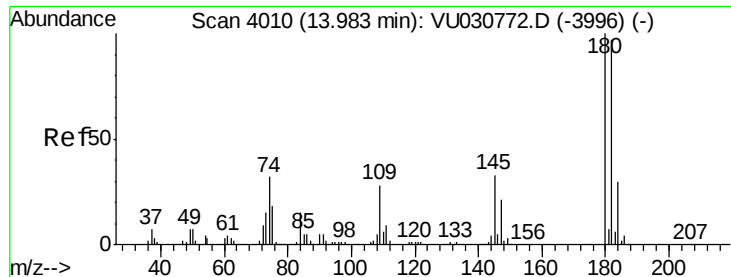
#68  
 1,2,4-trichlorobenzene  
 Concen: 29.271 ug/L  
 RT: 13.50 min Scan# 3860  
 Delta R.T. 0.00 min  
 Lab File: VU030790.D  
 Acq: 06 Apr 2019 10:36

Tgt Ion:180 Resp: 123692  
 Ion Ratio Lower Upper  
 180 100  
 182 102.8 76.7 115.1  
 145 30.8 24.4 36.6



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V





#70  
 1,2,3-Trichlorobenzene  
 Concen: 7.096 ug/L  
 RT: 13.99 min Scan# 4011  
 Delta R.T. 0.00 min  
 Lab File: VU030790.D  
 Acq: 06 Apr 2019 10:36

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0BR5

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 180     | 100  |       |       |       |
| 182     | 94.3 | 78.1  | 117.1 |       |
| 145     | 36.9 | 26.6  | 40.0  |       |

