

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU032019\  
 Data File : VU030237.D  
 Acq On : 20 Mar 2019 20:55  
 Operator : JC/SP  
 Sample : K2022-01  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0965

Quant Time: Mar 22 02:25:46 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM031919WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Mar 22 01:27:23 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 539705   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 516171   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 244257   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 156946   | 43.01    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 86.02% |
| 7) Chloroethane-d5             | 1.68    | 69    | 129576   | 44.40    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 88.80% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 216576   | 32.53    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 65.06% |
| 21) 2-Butanone-d5              | 4.17    | 46    | 256599   | 94.78    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 94.78% |
| 24) Chloroform-d               | 4.65    | 84    | 308580   | 46.07    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 92.14% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 183776   | 48.11    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.22% |
| 32) Benzene-d6                 | 5.34    | 84    | 657271   | 48.32    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.64% |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 208301   | 49.49    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 98.98% |
| 41) Toluene-d8                 | 7.56    | 98    | 581575   | 45.47    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 90.94% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 92493    | 45.13    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 90.26% |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 215475   | 98.73    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 98.73% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 315223   | 48.83    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 97.66% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 242890   | 49.53    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 99.06% |

## Target Compounds

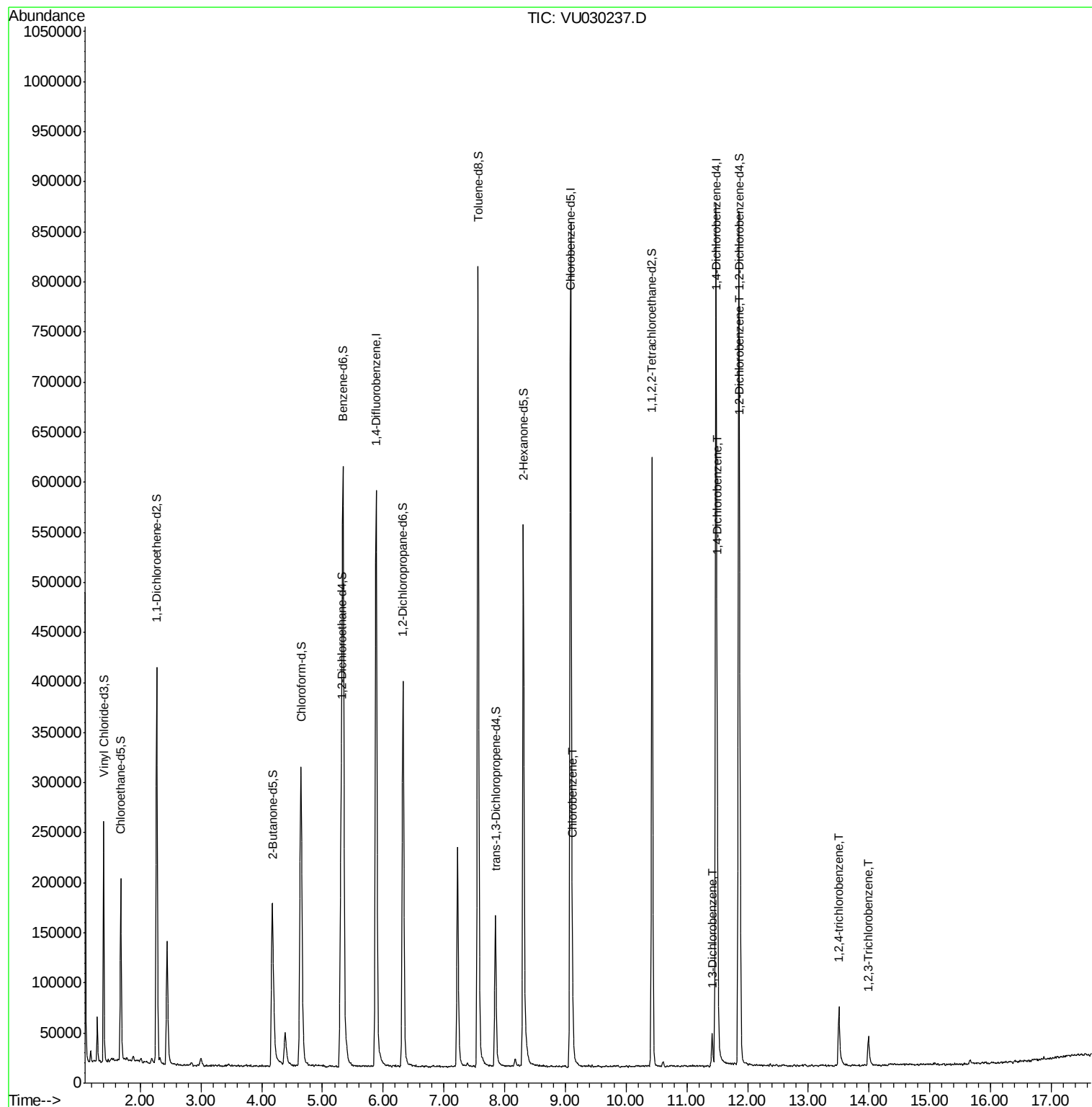
|                            |       |     |       |            | Ovalue |
|----------------------------|-------|-----|-------|------------|--------|
| 51) Chlorobenzene          | 9.12  | 112 | 39891 | 3.720 ug/L | 99     |
| 62) 1,3-Dichlorobenzene    | 11.42 | 146 | 15040 | 1.930 ug/L | 91     |
| 63) 1,4-Dichlorobenzene    | 11.50 | 146 | 78799 | 9.748 ug/L | 97     |
| 65) 1,2-Dichlorobenzene    | 11.88 | 146 | 77479 | 9.731 ug/L | 99     |
| 68) 1,2,4-trichlorobenzene | 13.50 | 180 | 23035 | 4.277 ug/L | 90     |
| 70) 1,2,3-Trichlorobenzene | 13.99 | 180 | 14304 | 2.545 ug/L | 95     |

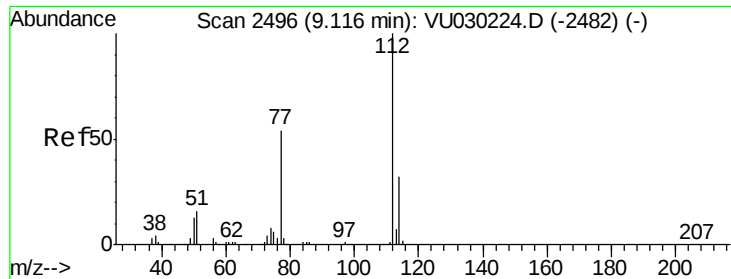
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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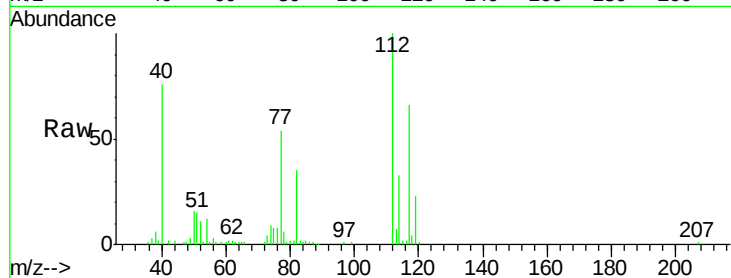




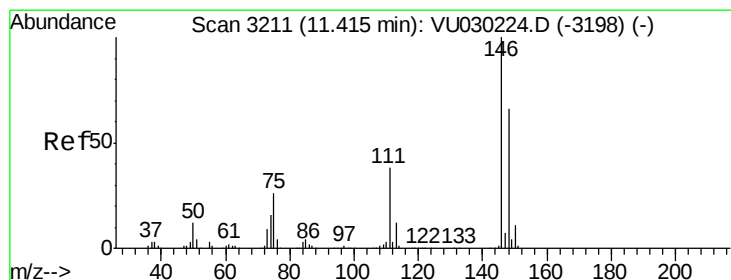
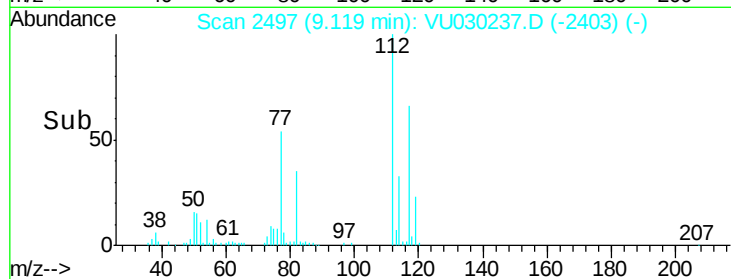
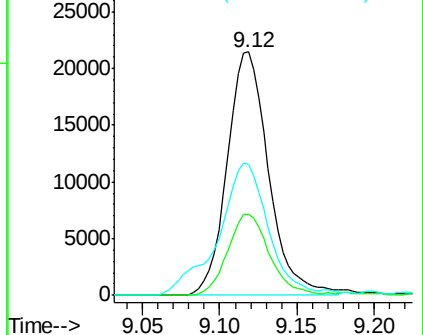
#51  
Chlorobenzene  
Concen: 3.720 ug/L  
RT: 9.12 min Scan# 2497  
Delta R.T. 0.00 min  
Lab File: VU030237.D  
Acq: 20 Mar 2019 20:55

Instrument :  
MSVOA\_U  
ClientSampleId :  
C0965

Tot Ion:112 Resp: 39891  
Ion Ratio Lower Upper  
112 100  
114 33.4 22.5 41.7  
77 53.9 43.4 65.0

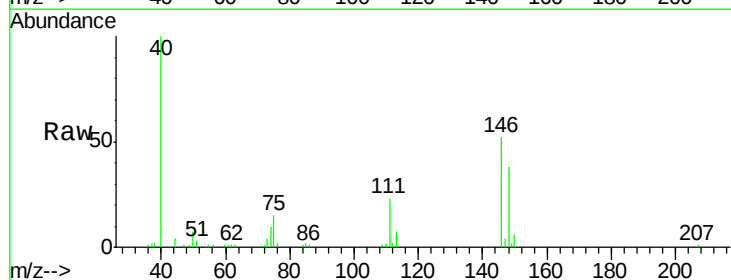


Abundance Ion 112.00 (111.70 to 112.70): V  
Ion 114.00 (113.70 to 114.70): V  
Ion 77.00 (76.70 to 77.70): V

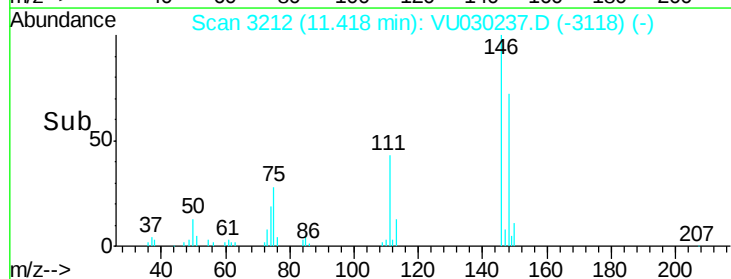
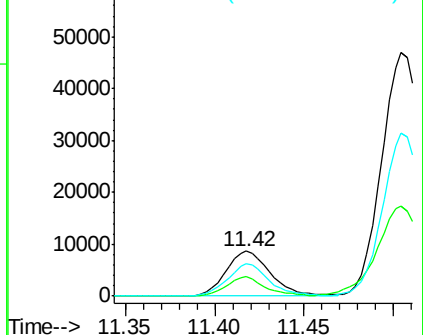


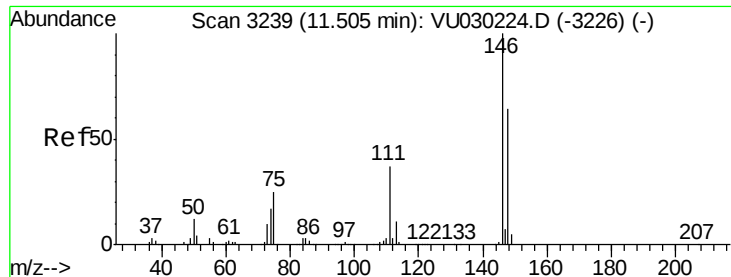
#62  
1,3-Dichlorobenzene  
Concen: 1.930 ug/L  
RT: 11.42 min Scan# 3212  
Delta R.T. 0.00 min  
Lab File: VU030237.D  
Acq: 20 Mar 2019 20:55

Tgt Ion:146 Resp: 15040  
Ion Ratio Lower Upper  
146 100  
111 43.2 27.2 50.4  
148 71.6 44.4 82.5



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

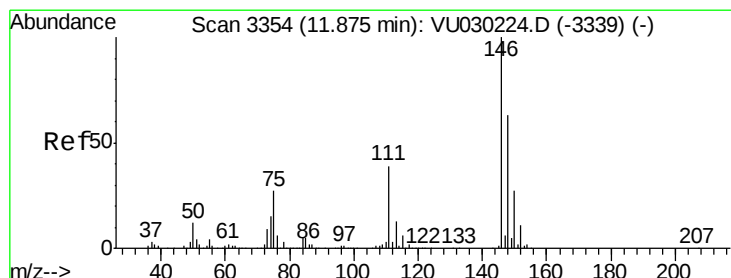
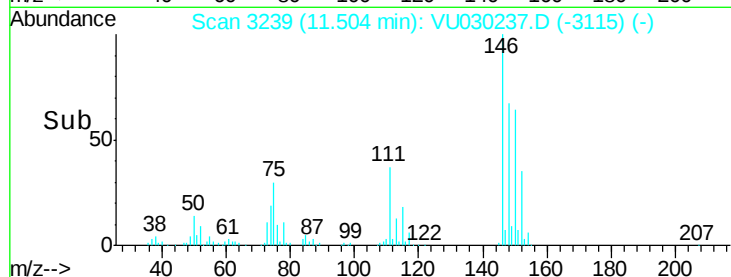
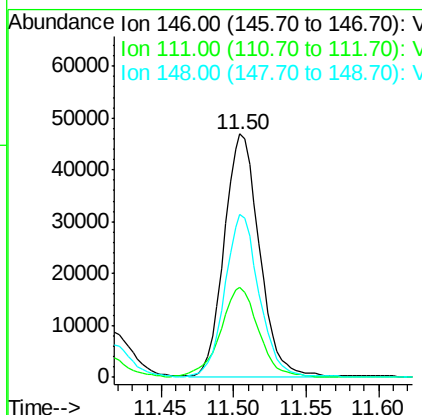
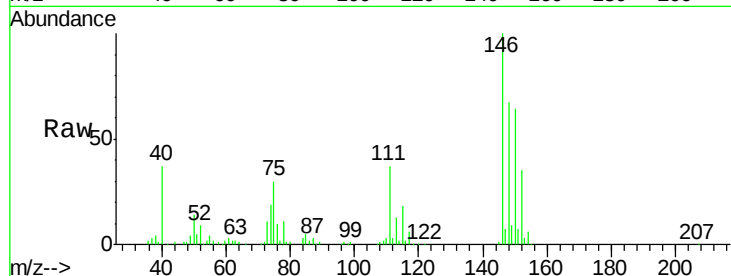




#63  
 1,4-Dichlorobenzene  
 Concen: 9.748 ug/L  
 RT: 11.50 min Scan# 3239  
 Delta R.T. -0.00 min  
 Lab File: VU030237.D  
 Acq: 20 Mar 2019 20:55

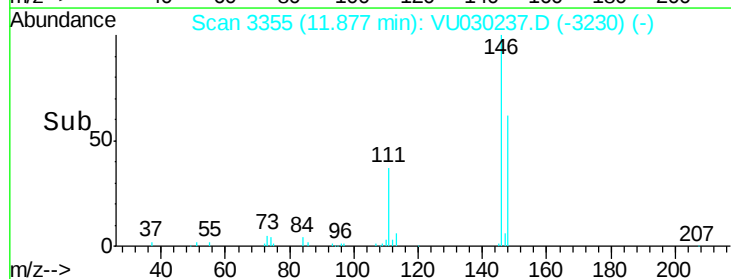
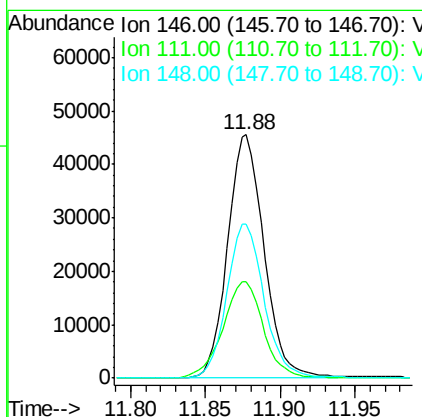
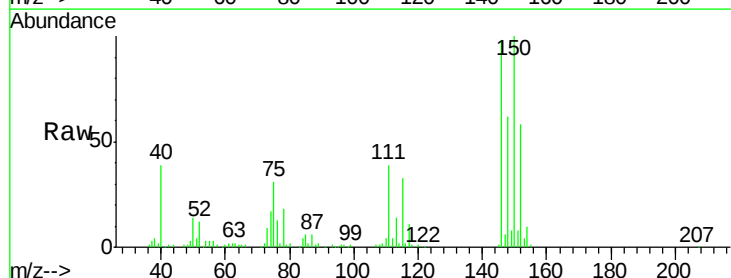
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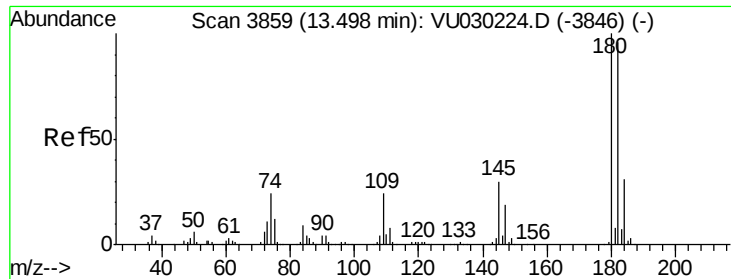
Tot Ion:146 Resp: 78799  
 Ion Ratio Lower Upper  
 146 100  
 111 37.0 25.3 46.9  
 148 66.8 44.7 82.9



#65  
 1,2-Dichlorobenzene  
 Concen: 9.731 ug/L  
 RT: 11.88 min Scan# 3355  
 Delta R.T. 0.00 min  
 Lab File: VU030237.D  
 Acq: 20 Mar 2019 20:55

Tgt Ion:146 Resp: 77479  
 Ion Ratio Lower Upper  
 146 100  
 111 39.6 31.7 47.5  
 148 63.1 52.0 78.0

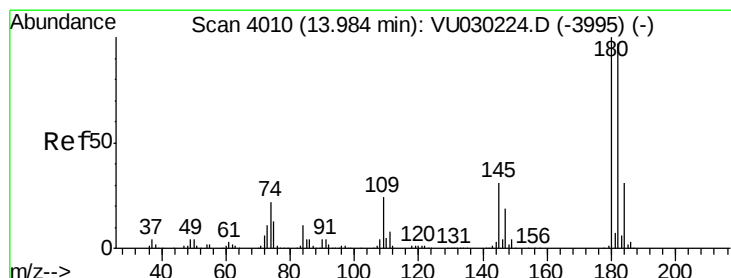
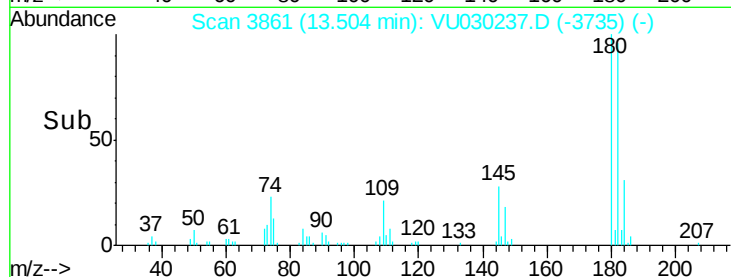
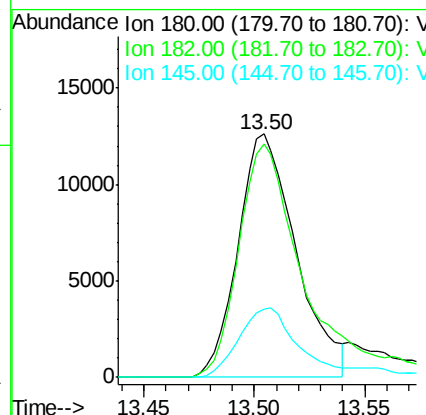
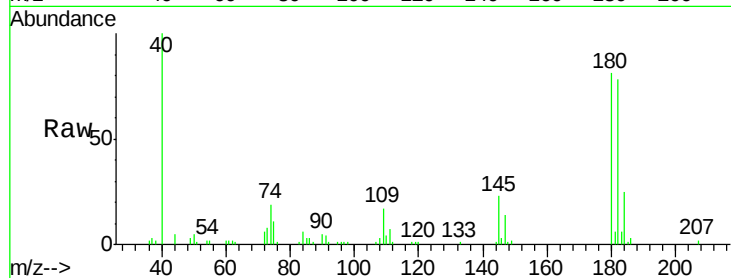




#68  
 1,2,4-trichlorobenzene  
 Concen: 4.277 ug/L  
 RT: 13.50 min Scan# 3861  
 Delta R.T. 0.01 min  
 Lab File: VU030237.D  
 Acq: 20 Mar 2019 20:55

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0965

Tot Ion:180 Resp: 23035  
 Ion Ratio Lower Upper  
 180 100  
 182 107.3 76.4 114.6  
 145 29.6 22.7 34.1



#70  
 1,2,3-Trichlorobenzene  
 Concen: 2.545 ug/L  
 RT: 13.99 min Scan# 4012  
 Delta R.T. 0.01 min  
 Lab File: VU030237.D  
 Acq: 20 Mar 2019 20:55

Tgt Ion:180 Resp: 14304  
 Ion Ratio Lower Upper  
 180 100  
 182 89.9 75.9 113.9  
 145 28.2 24.1 36.1

