

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV031720\  
 Data File : VV014967.D  
 Acq On : 17 Mar 2020 12:34  
 Operator : SY/MD  
 Sample : L1890-11DL 20X  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0DD1DL

Quant Time: Mar 18 05:34:46 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM031620WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Mar 18 05:21:28 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 349150   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 340391   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 176214   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 83796    | 36.03    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 72.06% |
| 7) Chloroethane-d5             | 1.58    | 69    | 70832    | 41.00    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 82.00% |
| 11) 1,1-Dichloroethene-d2      | 2.12    | 63    | 111510   | 31.25    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 62.50% |
| 21) 2-Butanone-d5              | 3.93    | 46    | 101708   | 71.71    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 71.71% |
| 24) Chloroform-d               | 4.38    | 84    | 209818   | 43.29    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 86.58% |
| 26) 1,2-Dichloroethane-d4      | 5.05    | 65    | 137841   | 44.89    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.78% |
| 32) Benzene-d6                 | 5.07    | 84    | 426388   | 45.47    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 90.94% |
| 36) 1,2-Dichloropropane-d6     | 6.09    | 67    | 126002   | 45.12    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 90.24% |
| 41) Toluene-d8                 | 7.34    | 98    | 411993   | 44.42    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 88.84% |
| 43) trans-1,3-Dichloropropene- | 7.64    | 79    | 61917    | 41.71    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 83.42% |
| 47) 2-Hexanone-d5              | 8.12    | 63    | 103718   | 82.29    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 82.29% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.24   | 84    | 179627   | 43.94    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 87.88% |
| 64) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 181314   | 46.97    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.94% |

## Target Compounds

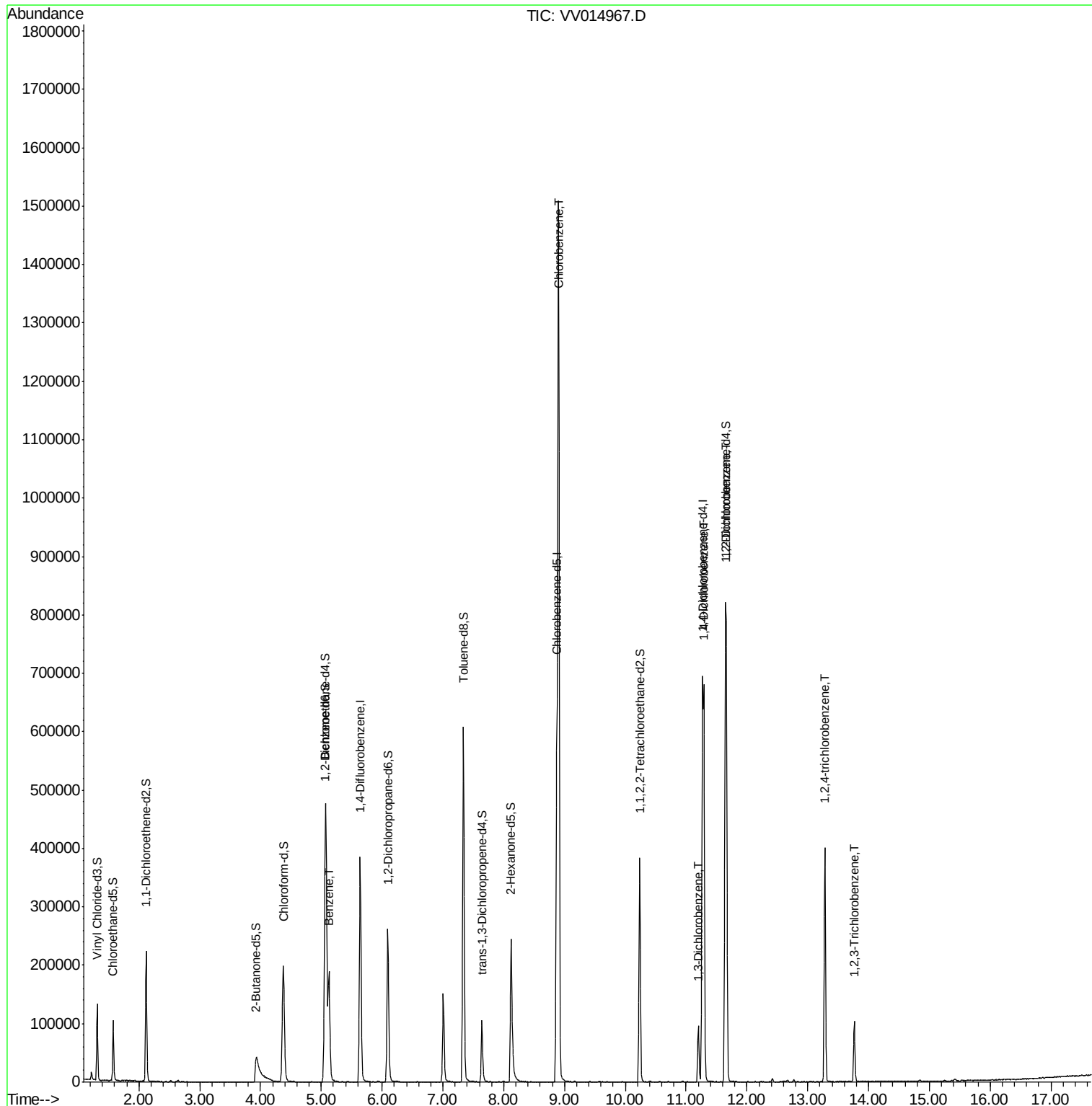
|                            |       |     |        |         | Ovalue   |
|----------------------------|-------|-----|--------|---------|----------|
| 33) Benzene                | 5.13  | 78  | 195928 | 21.153  | ug/L 100 |
| 51) Chlorobenzene          | 8.90  | 112 | 830608 | 115.729 | ug/L 99  |
| 62) 1,3-Dichlorobenzene    | 11.20 | 146 | 42596  | 7.335   | ug/L 98  |
| 63) 1,4-Dichlorobenzene    | 11.29 | 146 | 261105 | 44.637  | ug/L 97  |
| 65) 1,2-Dichlorobenzene    | 11.67 | 146 | 253386 | 43.683  | ug/L 97  |
| 68) 1,2,4-trichlorobenzene | 13.28 | 180 | 131820 | 32.484  | ug/L 99  |
| 70) 1,2,3-Trichlorobenzene | 13.77 | 180 | 32711  | 8.143   | ug/L 96  |

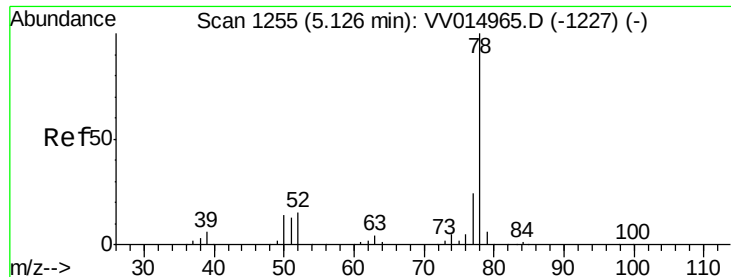
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Mar 18 05:34:46 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM031620WMA.M  
Quant Title : VOC Analysis  
QLast Update : Wed Mar 18 05:21:28 2020  
Response via : Initial Calibration





#33

Benzene

Concen: 21.153 ug/L

RT: 5.13 min Scan# 1255

Delta R.T. 0.00 min

Lab File: VV014967.D

Acq: 17 Mar 2020 12:34

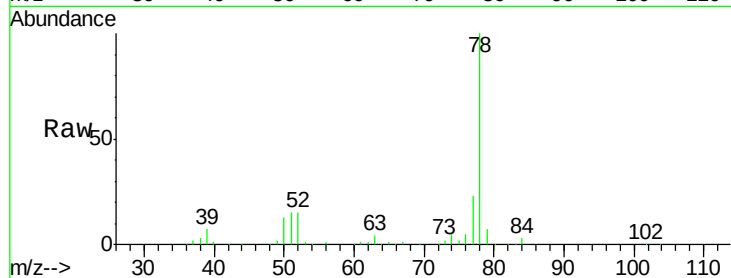
Instrument :

MSVOA\_V

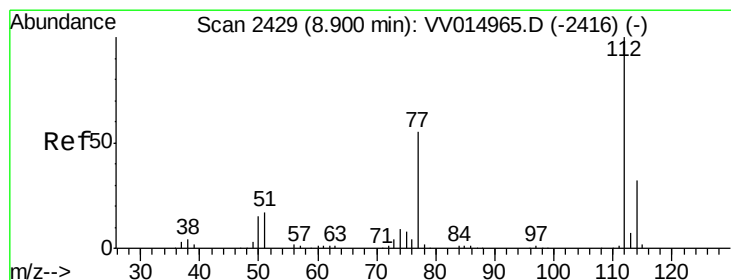
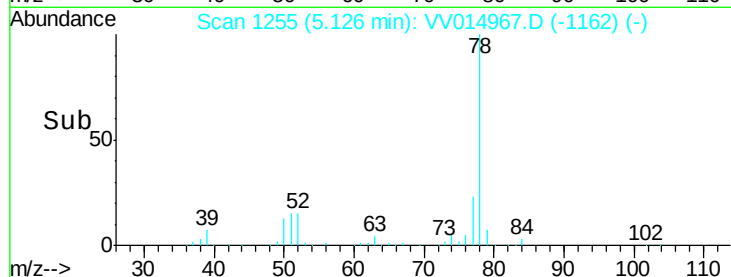
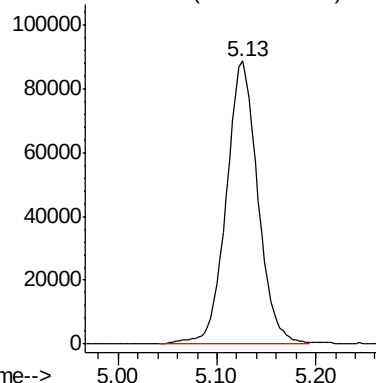
ClientSampleId :

C0DD1DL

Tgt Ion: 78 Resp: 195928



Abundance Ion 78.00 (77.70 to 78.70): VV0



#51

Chlorobenzene

Concen: 115.729 ug/L

RT: 8.90 min Scan# 2429

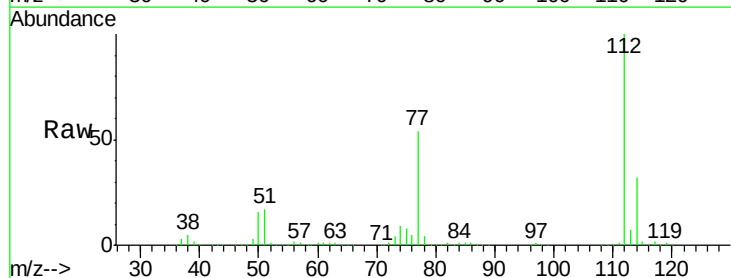
Delta R.T. 0.00 min

Lab File: VV014967.D

Acq: 17 Mar 2020 12:34

Tgt Ion: 112 Resp: 830608

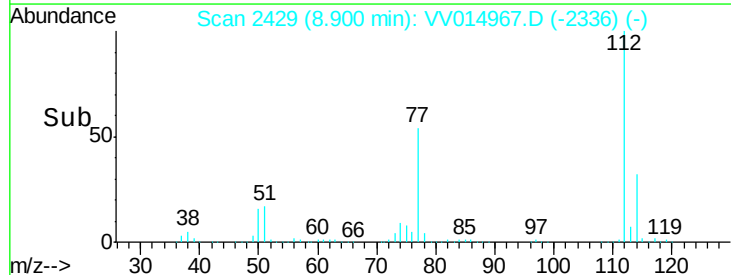
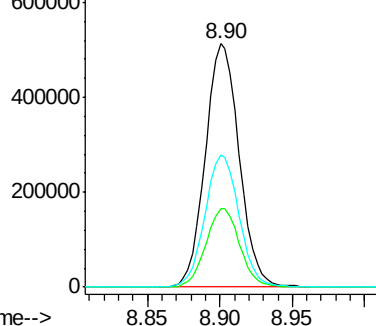
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 112 | 100   |       |       |
| 114 | 32.2  | 22.8  | 42.4  |
| 77  | 54.3  | 44.5  | 66.7  |

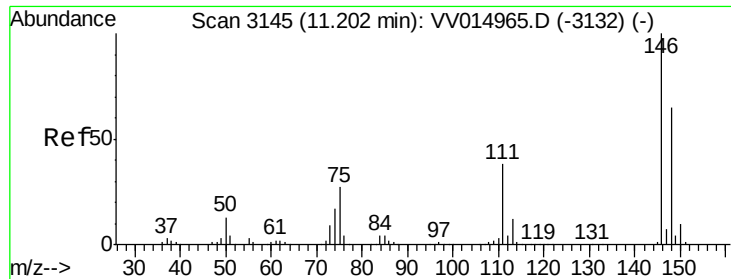


Abundance Ion 112.00 (111.70 to 112.70): V

Ion 114.00 (113.70 to 114.70): V

Ion 77.00 (76.70 to 77.70): VV0

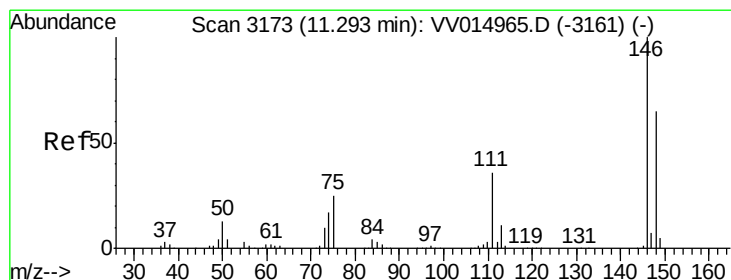
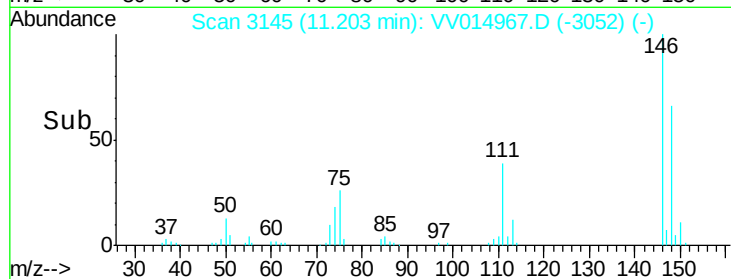
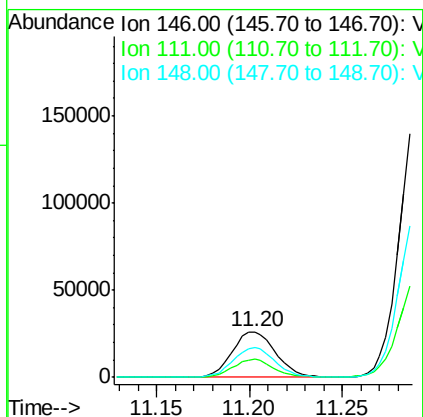
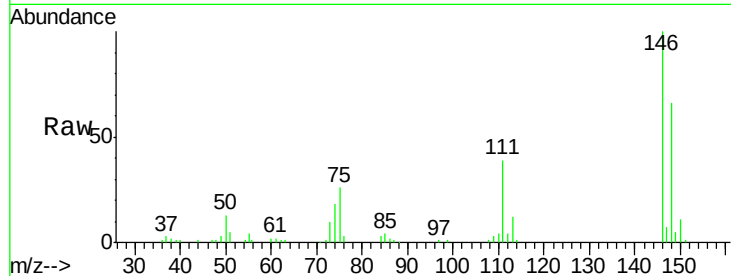




#62  
 1,3-Dichlorobenzene  
 Concen: 7.335 ug/L  
 RT: 11.20 min Scan# 3145  
 Delta R.T. 0.00 min  
 Lab File: VV014967.D  
 Acq: 17 Mar 2020 12:34

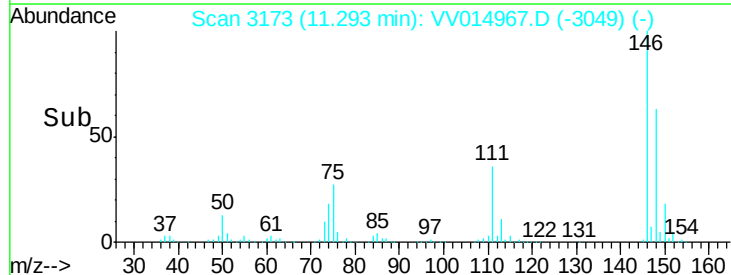
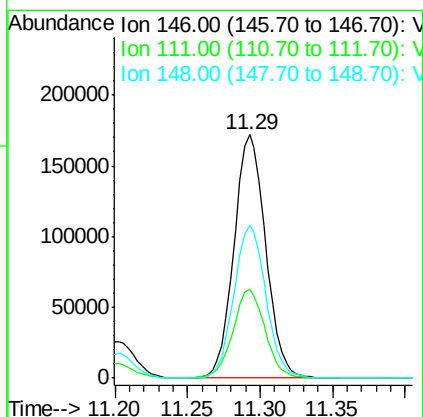
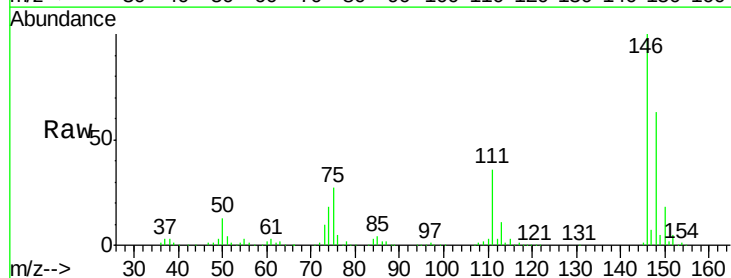
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0DD1DL

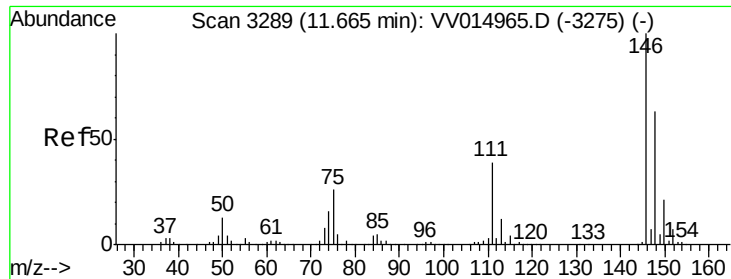
Tot Ion:146 Resp: 42596  
 Ion Ratio Lower Upper  
 146 100  
 111 39.3 26.5 49.3  
 148 66.4 45.4 84.2



#63  
 1,4-Dichlorobenzene  
 Concen: 44.637 ug/L  
 RT: 11.29 min Scan# 3173  
 Delta R.T. 0.00 min  
 Lab File: VV014967.D  
 Acq: 17 Mar 2020 12:34

Tgt Ion:146 Resp: 261105  
 Ion Ratio Lower Upper  
 146 100  
 111 36.5 26.0 48.2  
 148 62.7 46.1 85.5

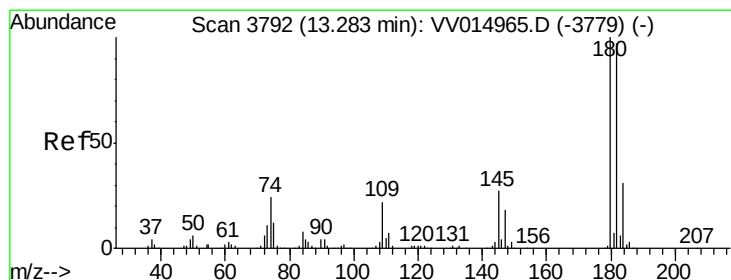
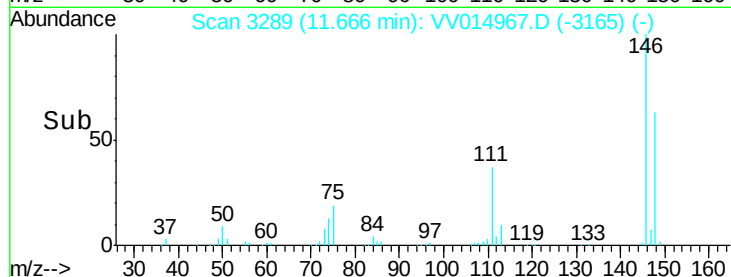
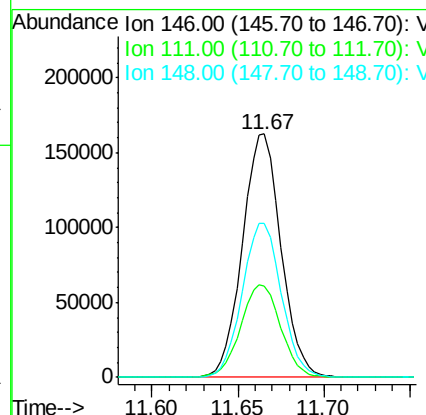
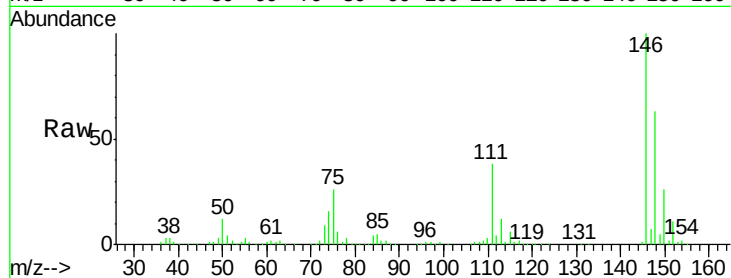




#65  
 1,2-Dichlorobenzene  
 Concen: 43.683 ug/L  
 RT: 11.67 min Scan# 3289  
 Delta R.T. 0.00 min  
 Lab File: VV014967.D  
 Acq: 17 Mar 2020 12:34

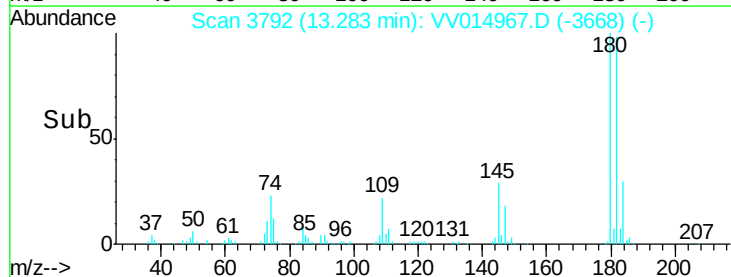
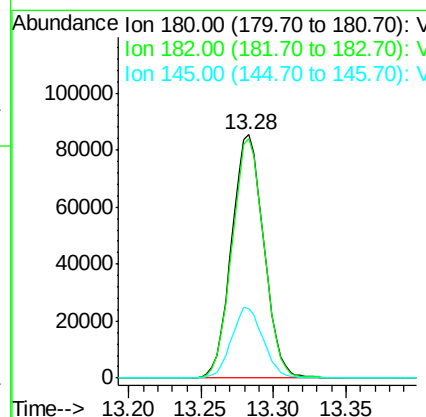
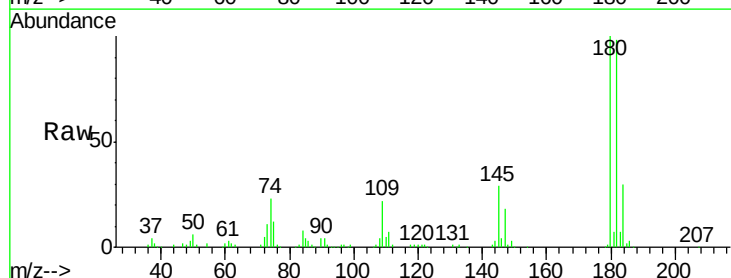
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0DD1DL

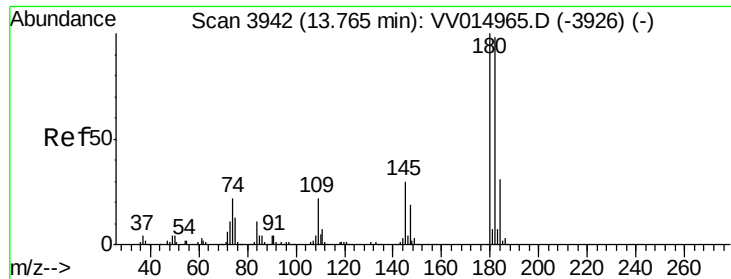
Tot Ion:146 Resp: 253386  
 Ion Ratio Lower Upper  
 146 100  
 111 37.7 31.6 47.4  
 148 63.4 52.2 78.4



#68  
 1,2,4-trichlorobenzene  
 Concen: 32.484 ug/L  
 RT: 13.28 min Scan# 3792  
 Delta R.T. 0.00 min  
 Lab File: VV014967.D  
 Acq: 17 Mar 2020 12:34

Tgt Ion:180 Resp: 131820  
 Ion Ratio Lower Upper  
 180 100  
 182 96.9 76.3 114.5  
 145 28.4 23.1 34.7





#70  
 1,2,3-Trichlorobenzene  
 Concen: 8.143 ug/L  
 RT: 13.77 min Scan# 3942  
 Delta R.T. 0.00 min  
 Lab File: VV014967.D  
 Acq: 17 Mar 2020 12:34

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0DD1DL

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 180   | Resp: | 32711 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 98.9  | 76.2  | 114.4 |
| 145      | 32.0  | 24.1  | 36.1  |

