

Data File : VV009877.D  
Acq On : 25 Mar 2019 21:58  
Operator : SY/MD  
Sample : K2070-08 400X  
Misc : 5.0mL/MSVOA\_V/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C09C9

Quant Time: Mar 26 07:20:17 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM032519WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Mar 26 07:13:38 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 172478   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 168552   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 68619    | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 83783    | 47.57    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 95.14%  |
| 7) Chloroethane-d5             | 1.56    | 69    | 93684    | 47.28    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 94.56%  |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 183901   | 35.42    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 70.84%  |
| 21) 2-Butanone-d5              | 3.93    | 46    | 78428    | 99.77    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 99.77%  |
| 24) Chloroform-d               | 4.40    | 84    | 110186   | 44.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.98%  |
| 26) 1,2-Dichloroethane-d4      | 5.08    | 65    | 77805    | 47.53    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 95.06%  |
| 32) Benzene-d6                 | 5.10    | 84    | 240294   | 52.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 105.04% |
| 36) 1,2-Dichloropropane-d6     | 6.12    | 67    | 74060    | 52.47    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 104.94% |
| 41) Toluene-d8                 | 7.36    | 98    | 216286   | 48.28    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 96.56%  |
| 43) trans-1,3-Dichloropropene- | 7.67    | 79    | 27368    | 42.45    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 84.90%  |
| 47) 2-Hexanone-d5              | 8.14    | 63    | 58056    | 100.35   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 100.35% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26   | 84    | 101035   | 44.11    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 88.22%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67   | 152   | 81815    | 51.47    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 102.94% |

#### Target Compounds

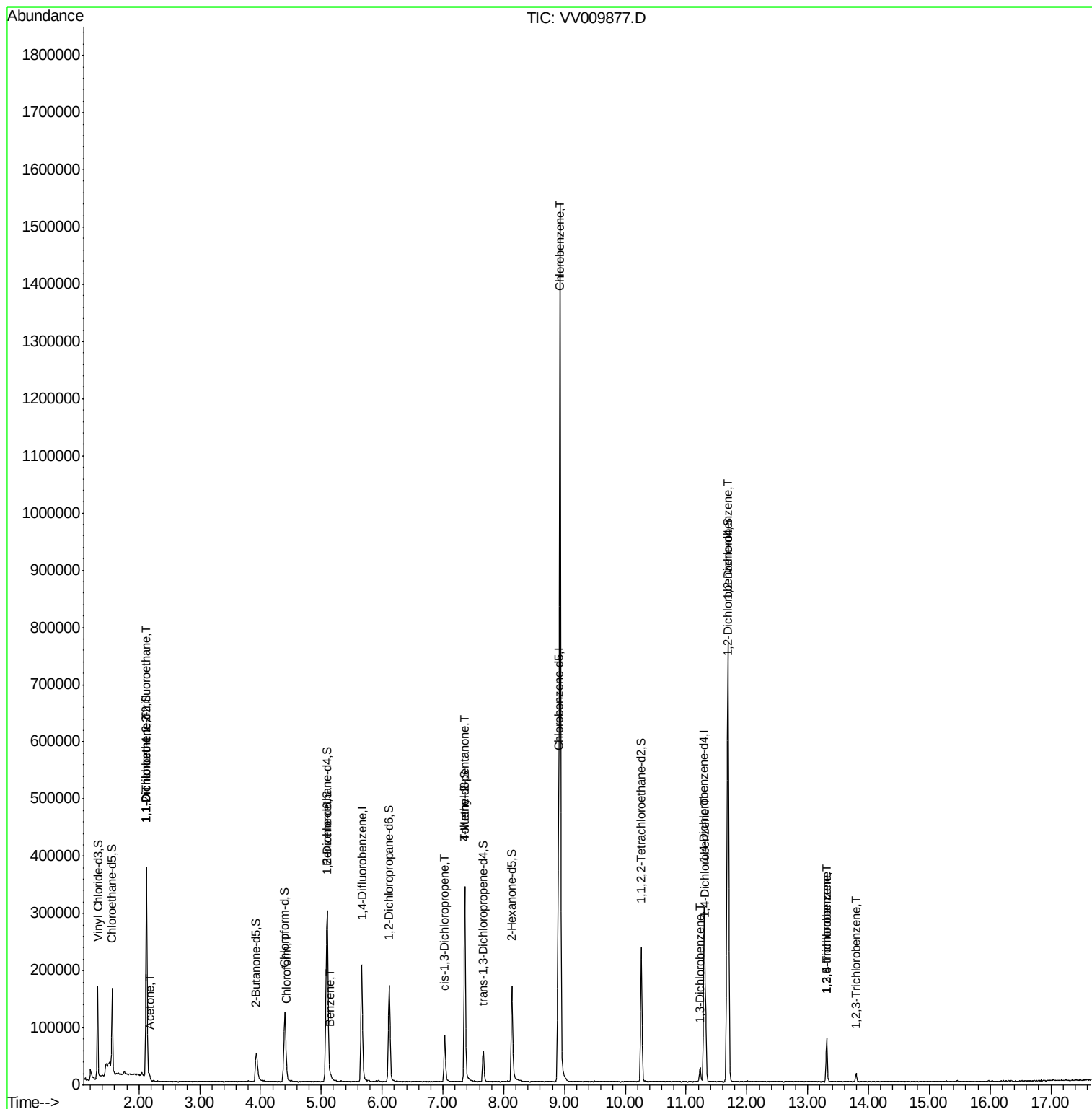
|                                |       |     |        |         |        | Qvalue |
|--------------------------------|-------|-----|--------|---------|--------|--------|
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13  | 101 | 1746   | 0.659   | ug/L # | 22     |
| 12) 1,1-Dichloroethene         | 2.13  | 96  | 1751   | 0.747   | ug/L # | 1      |
| 13) Acetone                    | 2.18  | 43  | 666    | 0.711   | ug/L   | 54     |
| 25) Chloroform                 | 4.43  | 83  | 1811   | 0.741   | ug/L   | 78     |
| 33) Benzene                    | 5.15  | 78  | 5622   | 1.143   | ug/L   | 100    |
| 39) cis-1,3-Dichloropropene    | 7.04  | 75  | 2439   | 1.338   | ug/L # | 67     |
| 40) 4-Methyl-2-pentanone       | 7.36  | 43  | 1260   | 0.727   | ug/L # | 1      |
| 51) Chlorobenzene              | 8.93  | 112 | 740844 | 198.726 | ug/L   | 99     |
| 62) 1,3-Dichlorobenzene        | 11.23 | 146 | 8918   | 3.794   | ug/L   | 96     |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146 | 43560  | 17.676  | ug/L   | 97     |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146 | 242692 | 97.733  | ug/L   | 97     |
| 67) 1,3,5-Trichlorobenzene     | 13.31 | 180 | 19958  | 12.445  | ug/L   | 99     |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180 | 19958  | 15.620  | ug/L   | 98     |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180 | 3728   | 2.884   | ug/L   | 91     |

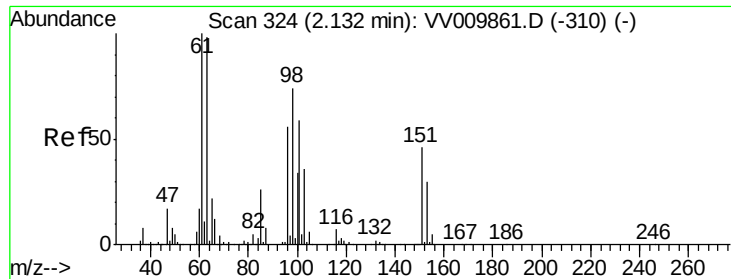
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : VV009877.D  
Acq On : 25 Mar 2019 21:58  
Operator : SY/MD  
Sample : K2070-08 400X  
Misc : 5.0mL/MSVOA\_V/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C09C9

Quant Time: Mar 26 07:20:17 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM032519WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Mar 26 07:13:38 2019  
Response via : Initial Calibration





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 0.659 ug/L

RT: 2.13 min Scan# 323

Delta R.T. -0.00 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

Instrument :

MSVOA\_V

ClientSampleId :

C09C9

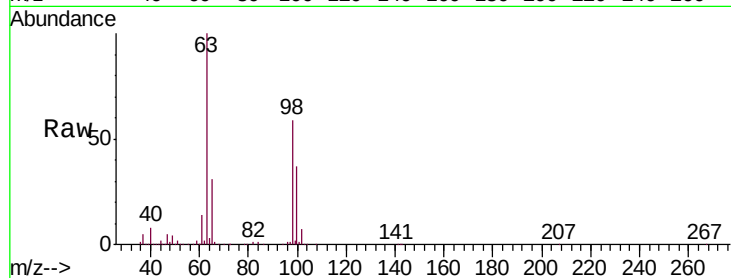
Tgt Ion:101 Resp: 1746

Ion Ratio Lower Upper

101 100

85 4.1 37.0 55.4#

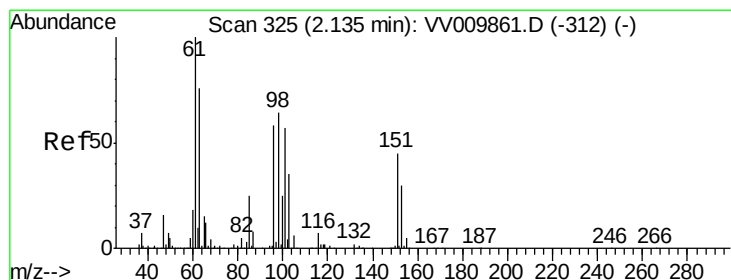
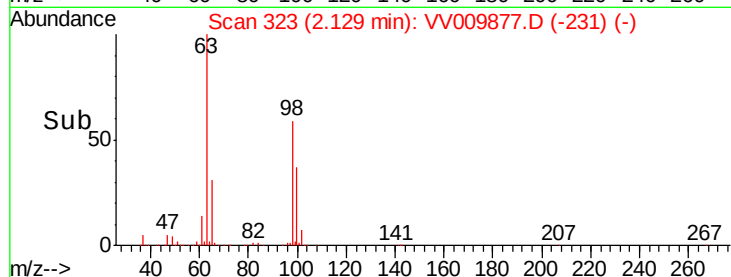
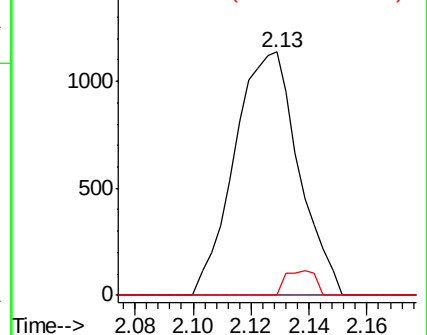
151 4.7 65.4 98.2#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 0.747 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.01 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

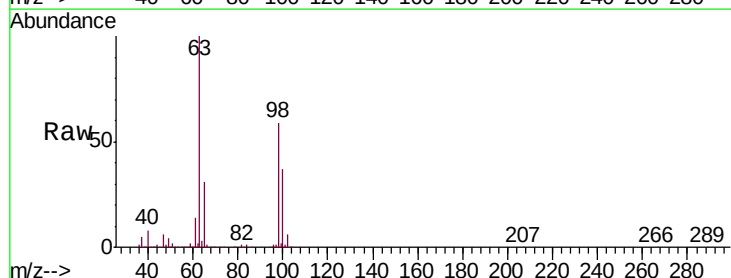
Tgt Ion: 96 Resp: 1751

Ion Ratio Lower Upper

96 100

61 1608.5 125.3 232.7#

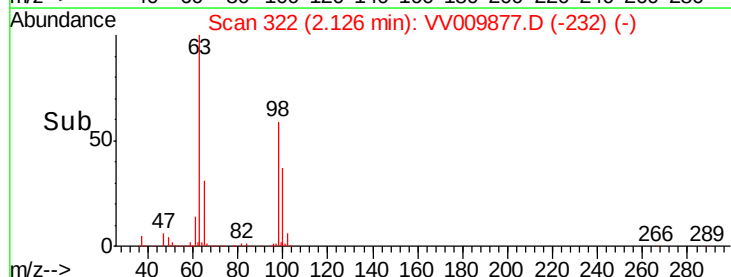
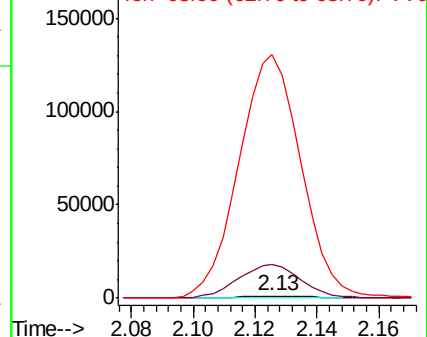
63 11564.5 109.7 203.7#

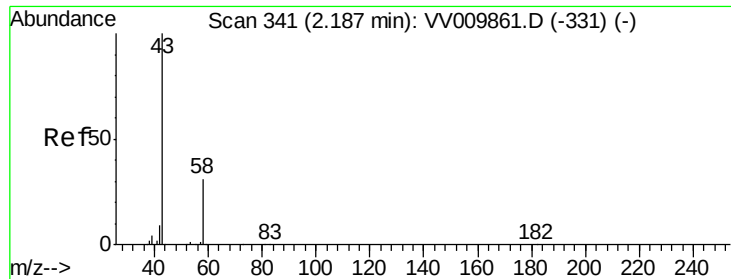


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 0.711 ug/L

RT: 2.18 min Scan# 340

Delta R.T. -0.00 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

Instrument :

MSVOA\_V

ClientSampleId :

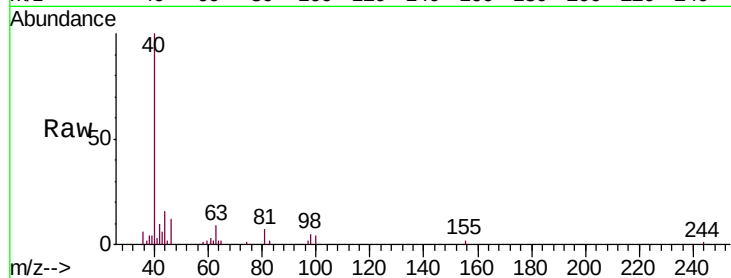
C09C9

Tgt Ion: 43 Resp: 666

Ion Ratio Lower Upper

43 100

58 6.6 0.0 65.2



Abundance Ion 43.00 (42.70 to 43.70): VV009861.D (-331) (-)

Ion 58.00 (57.70 to 58.70): VV009861.D (-331) (-)

2.18

400

300

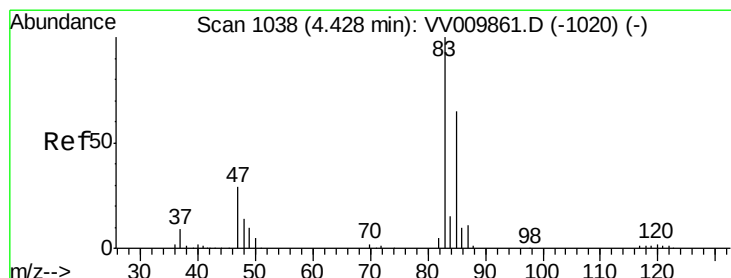
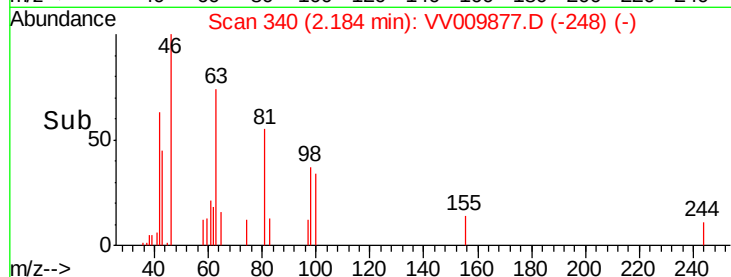
200

100

0

2.16 2.18 2.20 2.22

Time-->



#25

Chloroform

Concen: 0.741 ug/L

RT: 4.43 min Scan# 1039

Delta R.T. 0.00 min

Lab File: VV009877.D

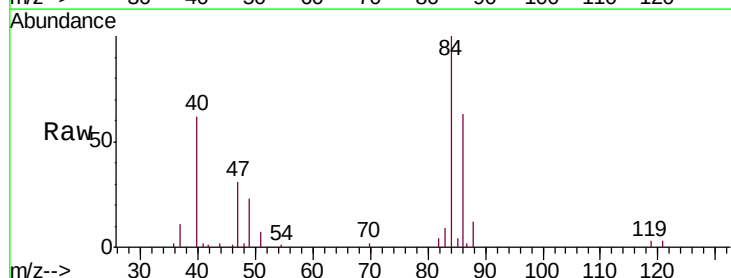
Acq: 25 Mar 2019 21:58

Tgt Ion: 83 Resp: 1811

Ion Ratio Lower Upper

83 100

85 46.4 44.7 82.9



Abundance Ion 83.00 (82.70 to 83.70): VV009861.D (-1020) (-)

Ion 85.00 (84.70 to 85.70): VV009861.D (-1020) (-)

4.43

1000

800

600

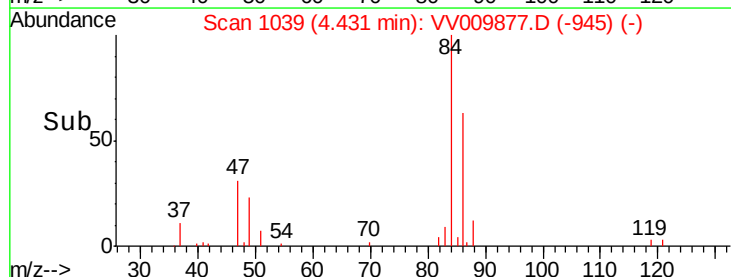
400

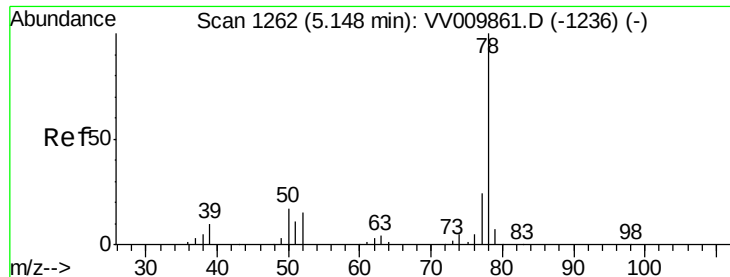
200

0

4.40 4.43 4.45

Time-->





#33

Benzene

Concen: 1.143 ug/L

RT: 5.15 min Scan# 1263

Delta R.T. 0.00 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

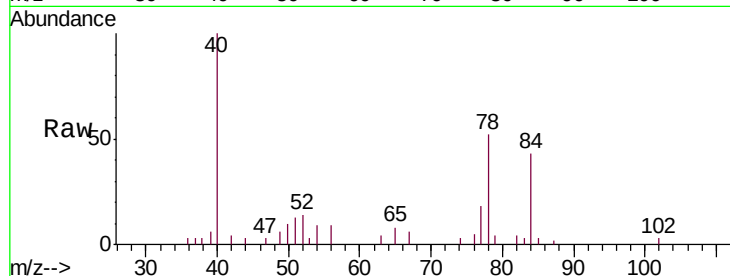
Instrument :

MSVOA\_V

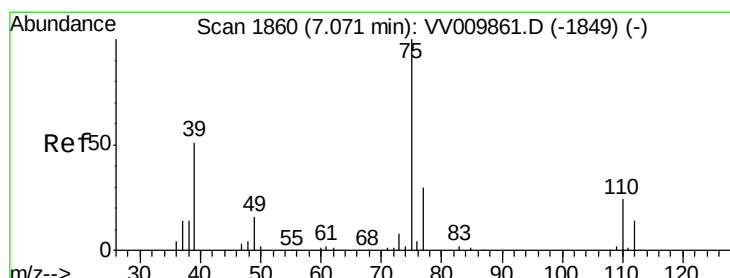
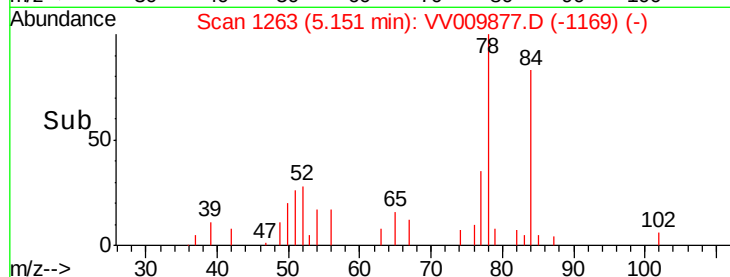
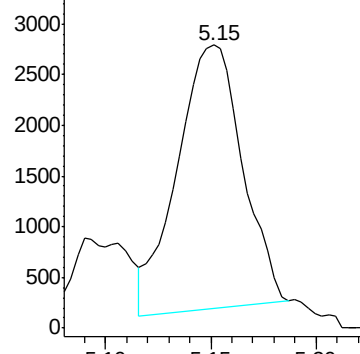
ClientSampled :

C09C9

Tgt Ion: 78 Resp: 5622



Abundance Ion 78.00 (77.70 to 78.70): VV0



#39

cis-1,3-Dichloropropene

Concen: 1.338 ug/L

RT: 7.04 min Scan# 1849

Delta R.T. -0.04 min

Lab File: VV009877.D

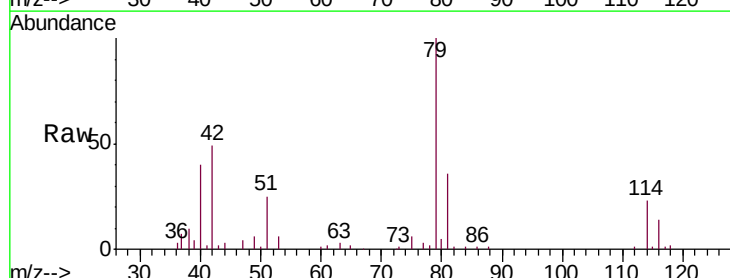
Acq: 25 Mar 2019 21:58

Tgt Ion: 75 Resp: 2439

Ion Ratio Lower Upper

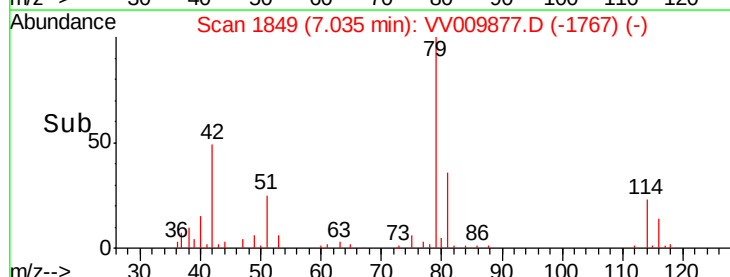
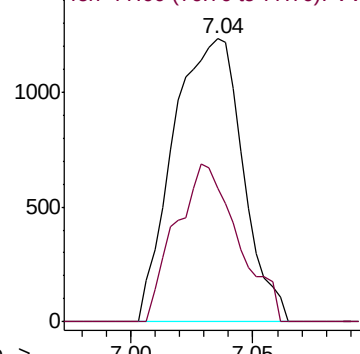
75 100

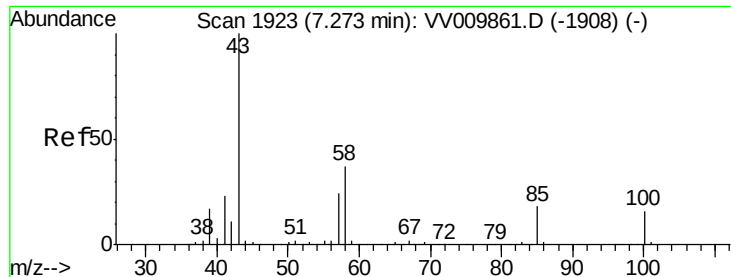
77 47.2 20.5 38.1#



Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0

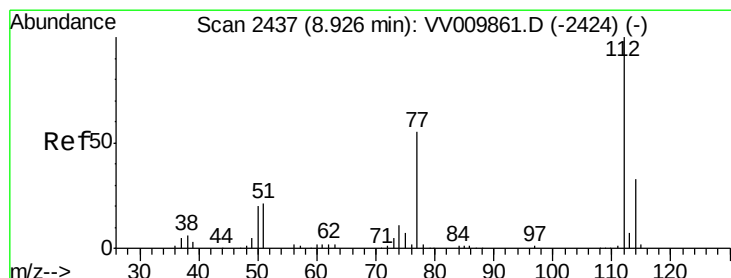
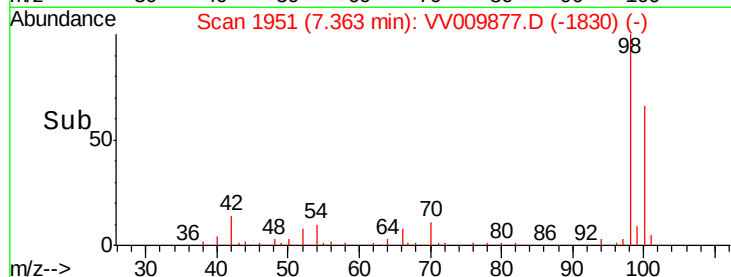
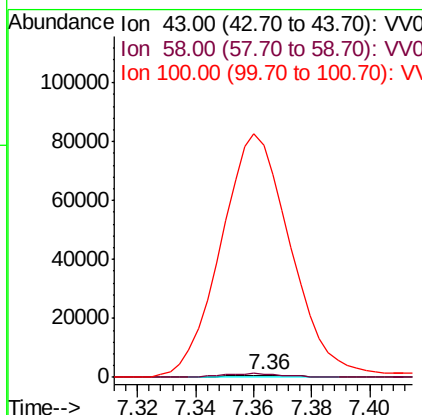
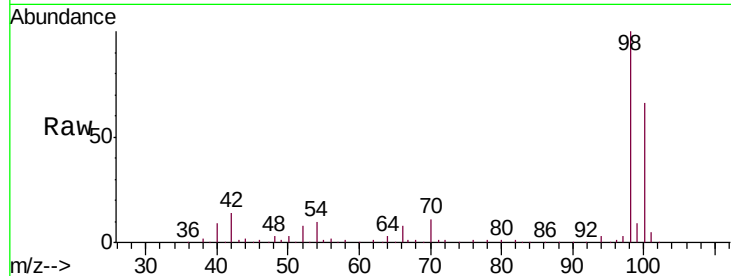




#40  
 4-Methyl-2-pentanone  
 Concen: 0.727 ug/L  
 RT: 7.36 min Scan# 1951  
 Delta R.T. 0.09 min  
 Lab File: VV009877.D  
 Acq: 25 Mar 2019 21:58

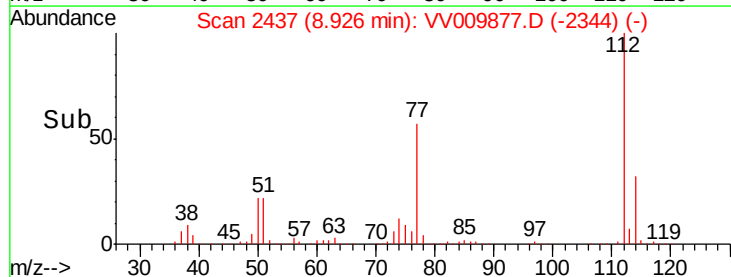
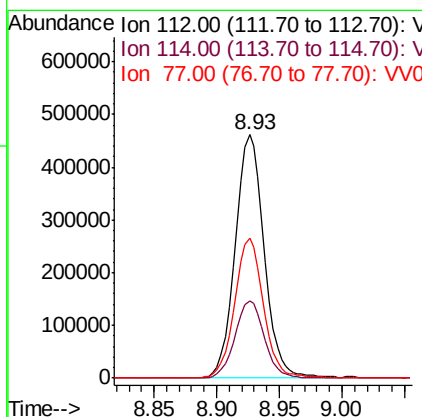
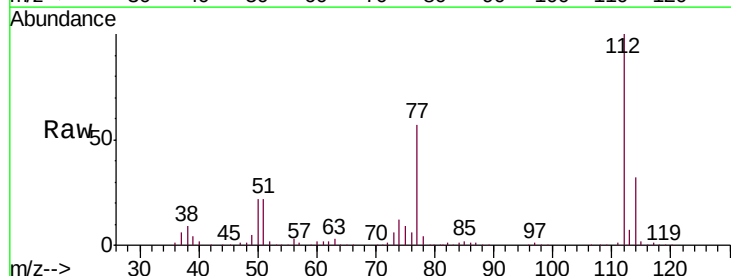
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 C09C9

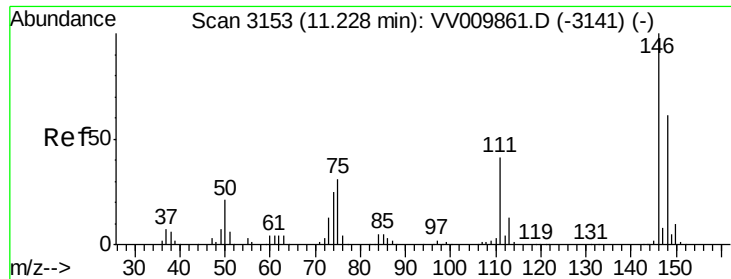
Tgt Ion: 43 Resp: 1260  
 Ion Ratio Lower Upper  
 43 100  
 58 172.1 29.8 44.8#  
 100 11054.5 12.2 18.4#



#51  
 Chlorobenzene  
 Concen: 198.726 ug/L  
 RT: 8.93 min Scan# 2437  
 Delta R.T. 0.00 min  
 Lab File: VV009877.D  
 Acq: 25 Mar 2019 21:58

Tgt Ion: 112 Resp: 740844  
 Ion Ratio Lower Upper  
 112 100  
 114 31.5 23.3 43.3  
 77 57.3 45.8 68.6





#62

1,3-Dichlorobenzene

Concen: 3.794 ug/L

RT: 11.23 min Scan# 3154

Delta R.T. 0.00 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

Instrument :

MSVOA\_V

ClientSampleId :

C09C9

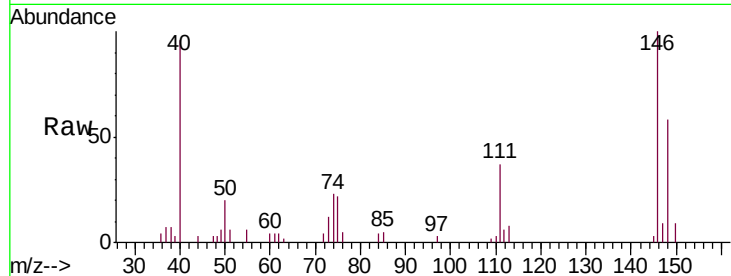
Tgt Ion:146 Resp: 8918

Ion Ratio Lower Upper

146 100

111 37.1 27.5 51.1

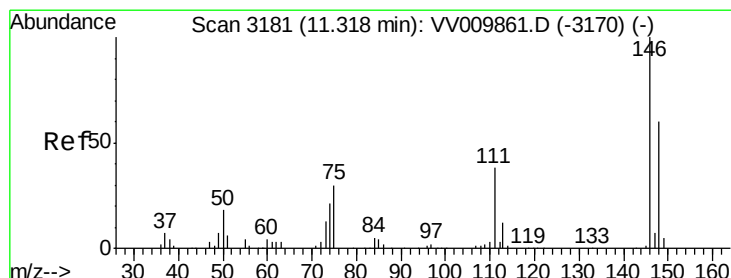
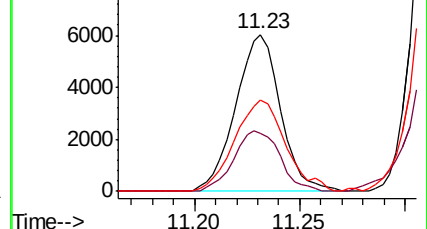
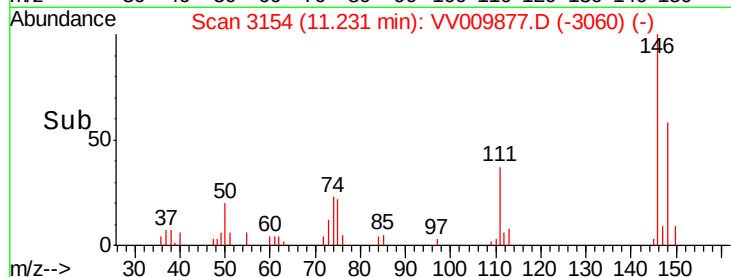
148 57.9 43.0 80.0



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: 17.676 ug/L

RT: 11.32 min Scan# 3181

Delta R.T. 0.00 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

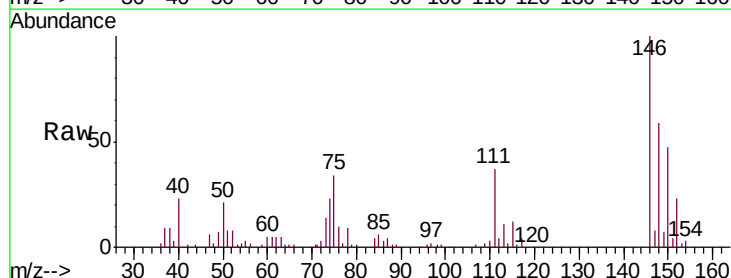
Tgt Ion:146 Resp: 43560

Ion Ratio Lower Upper

146 100

111 37.0 26.5 49.3

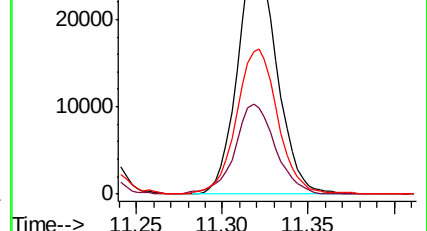
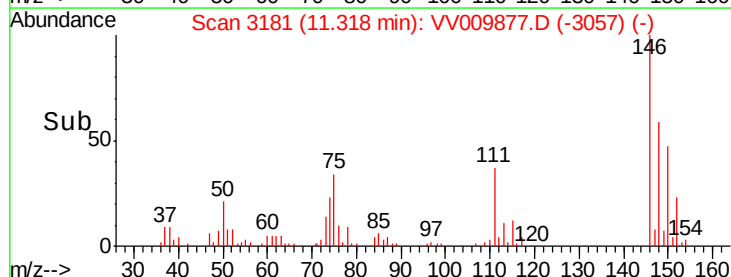
148 58.8 43.2 80.2

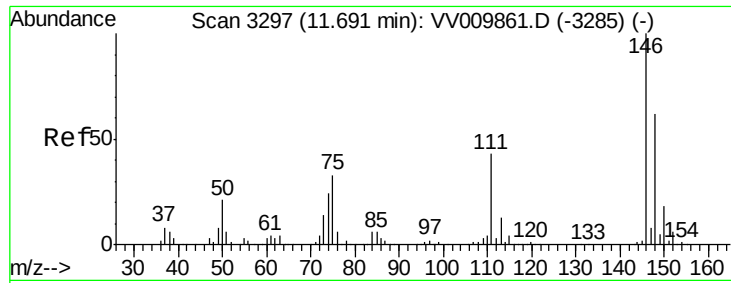


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 97.733 ug/L

RT: 11.69 min Scan# 3297

Delta R.T. 0.00 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

Instrument :

MSVOA\_V

ClientSampleId :

C09C9

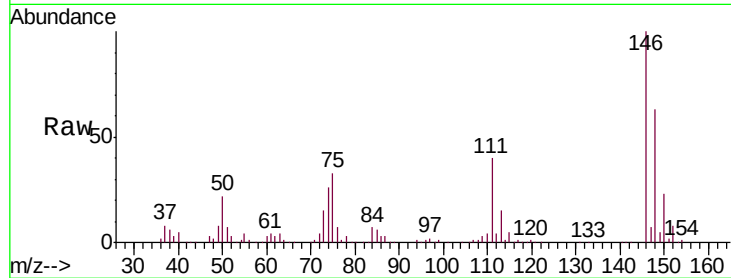
Tgt Ion:146 Resp: 242692

Ion Ratio Lower Upper

146 100

111 40.5 33.0 49.6

148 63.5 53.2 79.8

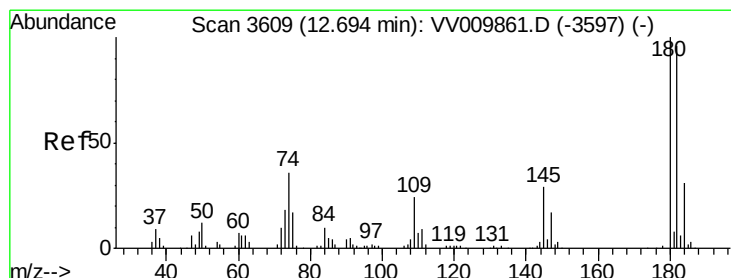
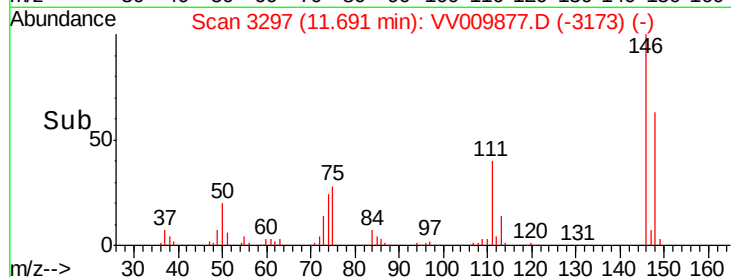
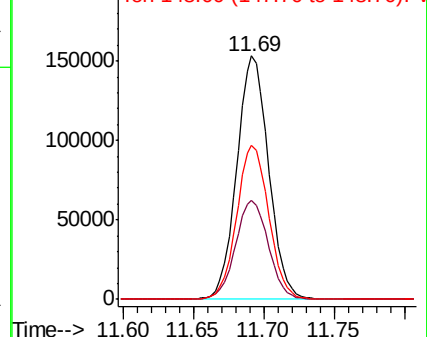


Abundance

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



#67

1,3,5-Trichlorobenzene

Concen: 12.445 ug/L

RT: 13.31 min Scan# 3801

Delta R.T. 0.62 min

Lab File: VV009877.D

Acq: 25 Mar 2019 21:58

Tgt Ion:180 Resp: 19958

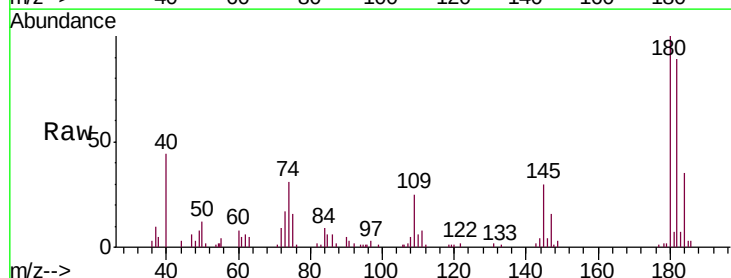
Ion Ratio Lower Upper

180 100

182 93.9 75.0 112.6

184 32.2 24.1 36.1

145 30.0 24.2 36.4



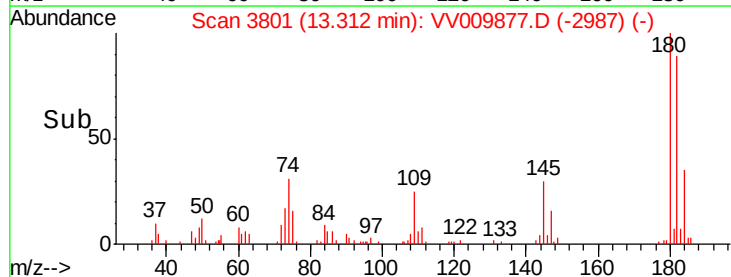
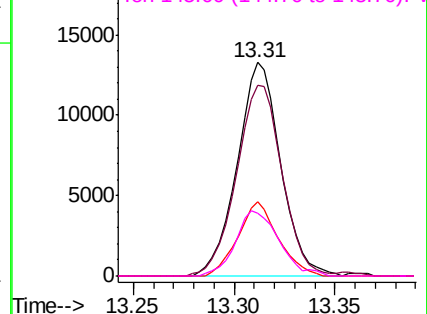
Abundance

Ion 180.00 (179.70 to 180.70): V

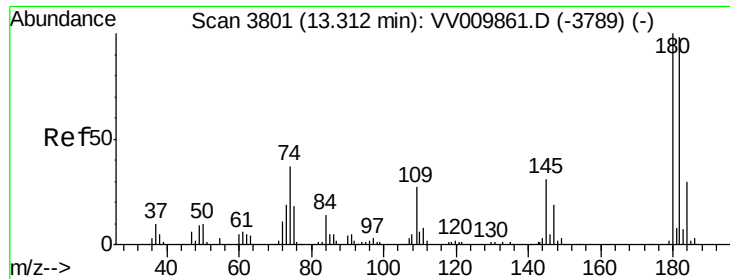
Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



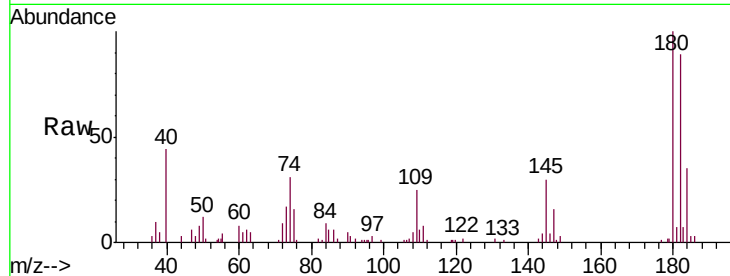




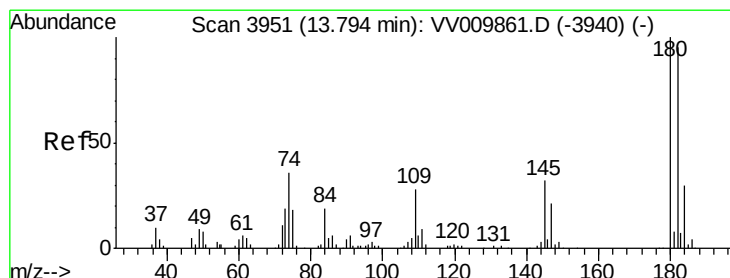
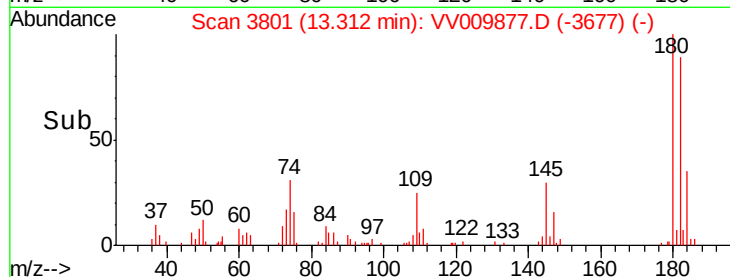
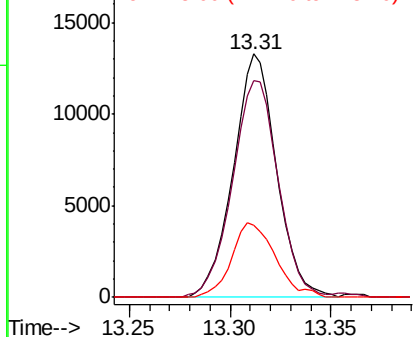
#68  
 1,2,4-trichlorobenzene  
 Concen: 15.620 ug/L  
 RT: 13.31 min Scan# 3801  
 Delta R.T. 0.00 min  
 Lab File: VV009877.D  
 Acq: 25 Mar 2019 21:58

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C09C9

Tgt Ion:180 Resp: 19958  
 Ion Ratio Lower Upper  
 180 100  
 182 93.9 77.1 115.7  
 145 30.0 24.3 36.5

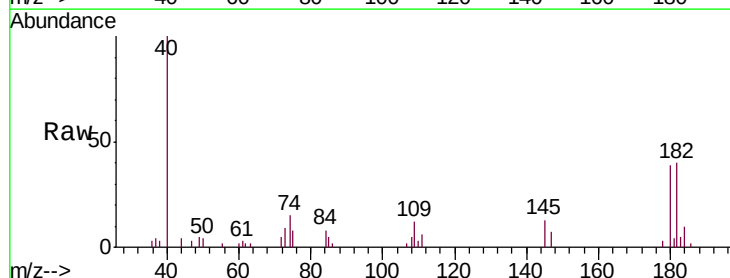


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V



#70  
 1,2,3-Trichlorobenzene  
 Concen: 2.884 ug/L  
 RT: 13.80 min Scan# 3952  
 Delta R.T. 0.00 min  
 Lab File: VV009877.D  
 Acq: 25 Mar 2019 21:58

Tgt Ion:180 Resp: 3728  
 Ion Ratio Lower Upper  
 180 100  
 182 105.0 75.6 113.4  
 145 32.4 24.8 37.2



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

