

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV100920\  
 Data File : VV018798.D  
 Acq On : 09 Oct 2020 06:34  
 Operator : SY/MD  
 Sample : L4239-19 10X  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BG3W1

Quant Time: Oct 09 09:13:13 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM100820WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Oct 09 07:31:27 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 335626   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 318291   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 160705   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 132101   | 43.32    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 86.64%  |
| 7) Chloroethane-d5             | 1.58    | 69    | 111334   | 45.36    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 90.72%  |
| 11) 1,1-Dichloroethene-d2      | 2.12    | 63    | 205787   | 35.00    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 70.00%  |
| 21) 2-Butanone-d5              | 3.90    | 46    | 183050   | 97.76    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 97.76%  |
| 24) Chloroform-d               | 4.37    | 84    | 247090   | 45.92    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.84%  |
| 26) 1,2-Dichloroethane-d4      | 5.05    | 65    | 180679   | 49.54    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.08%  |
| 32) Benzene-d6                 | 5.07    | 84    | 521394   | 50.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 101.80% |
| 36) 1,2-Dichloropropane-d6     | 6.09    | 67    | 158705   | 47.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 95.04%  |
| 41) Toluene-d8                 | 7.34    | 98    | 421189   | 46.32    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.64%  |
| 43) trans-1,3-Dichloropropene- | 7.64    | 79    | 73399    | 44.96    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 89.92%  |
| 47) 2-Hexanone-d5              | 8.11    | 63    | 113969   | 97.36    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 97.36%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.23   | 84    | 190789   | 49.66    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.32%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 175640   | 49.38    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.76%  |

## Target Compounds

|                            |       |     |         |              | Ovalue |
|----------------------------|-------|-----|---------|--------------|--------|
| 13) Acetone                | 2.18  | 43  | 5019    | 3.216 ug/L   | 80     |
| 19) 1,1-Dichloroethane     | 3.21  | 63  | 23976   | 4.983 ug/L   | 95     |
| 20) cis-1,2-Dichloroethene | 3.94  | 96  | 162899  | 62.864 ug/L  | 98     |
| 29) Cyclohexane            | 4.71  | 56  | 28004   | 7.265 ug/L   | 99     |
| 30) 1,1,1-Trichloroethane  | 4.63  | 97  | 322981  | 76.136 ug/L  | 99     |
| 34) Trichloroethene        | 5.95  | 95  | 6087    | 2.094 ug/L   | 98     |
| 42) Toluene                | 7.41  | 91  | 3012486 | 290.443 ug/L | 97     |
| 46) Tetrachloroethene      | 8.00  | 164 | 1515    | 0.711 ug/L # | 73     |
| 51) Chlorobenzene          | 8.90  | 112 | 6711    | 0.975 ug/L   | 96     |
| 52) Ethylbenzene           | 9.03  | 91  | 113895  | 9.670 ug/L   | 99     |
| 53) m,p-Xylene             | 9.16  | 106 | 136541  | 31.581 ug/L  | 100    |
| 54) o-xylene               | 9.56  | 106 | 79642   | 19.395 ug/L  | 99     |
| 56) Isopropylbenzene       | 9.96  | 105 | 30920   | 2.721 ug/L   | 100    |
| 63) 1,4-Dichlorobenzene    | 11.29 | 146 | 8942    | 1.641 ug/L   | 98     |
| 65) 1,2-Dichlorobenzene    | 11.67 | 146 | 5356    | 1.018 ug/L # | 80     |
| 68) 1,2,4-trichlorobenzene | 13.29 | 180 | 4509    | 1.413 ug/L   | 93     |

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ALS Vial : 29 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
BG3W1

Quant Time: Oct 09 09:13:13 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM100820WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Oct 09 07:31:27 2020  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

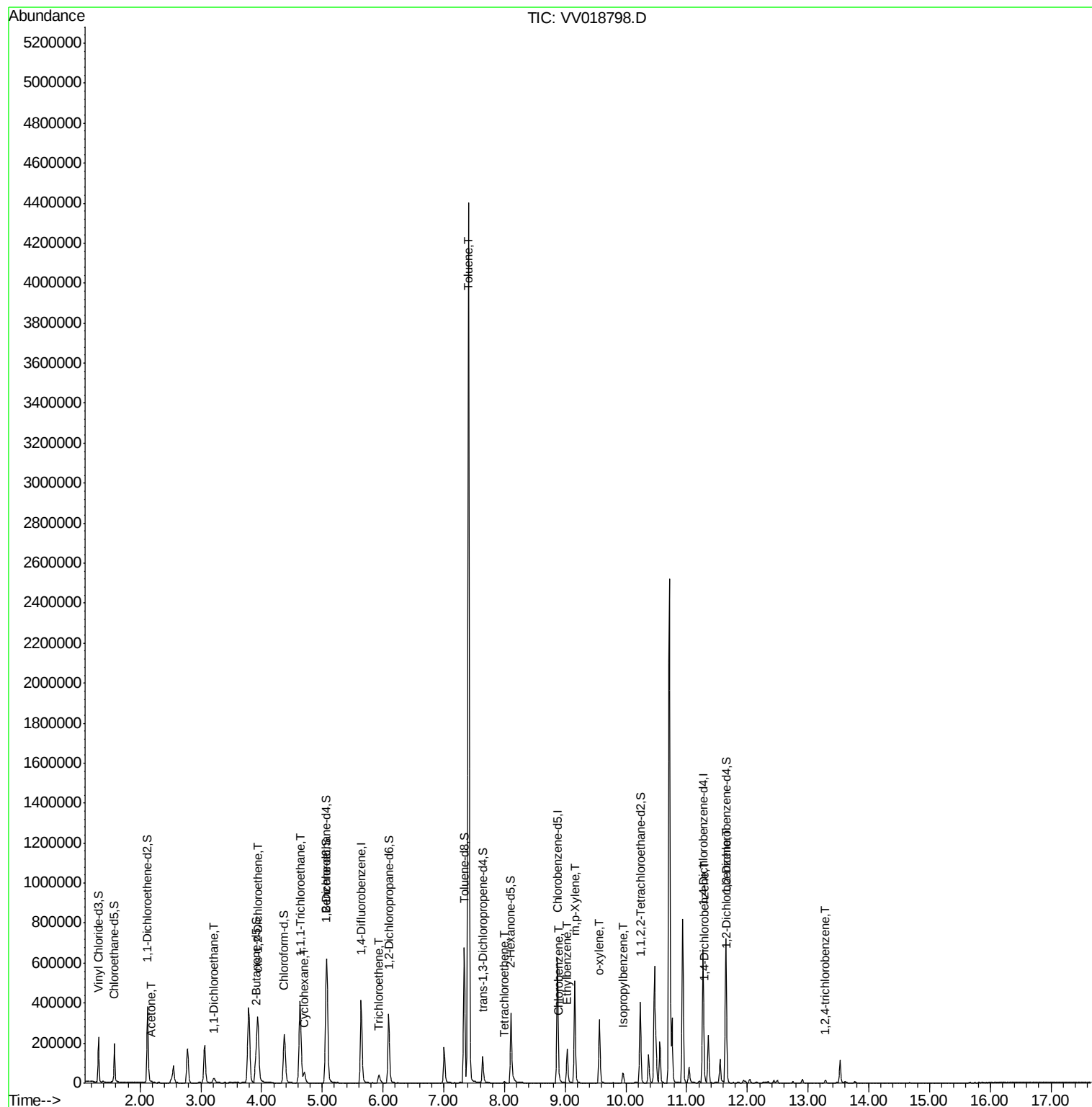
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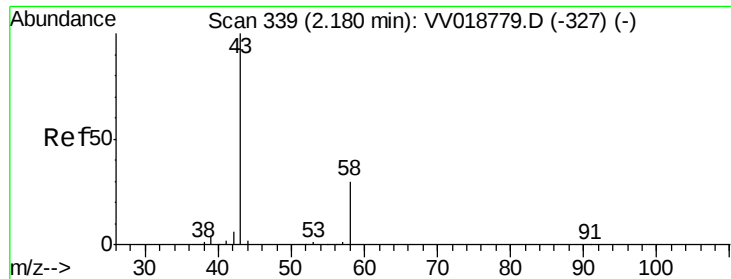
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Operator : SY/MD  
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MSVOA\_V  
ClientSampleId :  
BG3W1

Quant Time: Oct 09 09:13:13 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM100820WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Oct 09 07:31:27 2020  
Response via : Initial Calibration





#13

Acetone

Concen: 3.216 ug/L

RT: 2.18 min Scan# 340

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

Instrument :

MSVOA\_V

ClientSampleId :

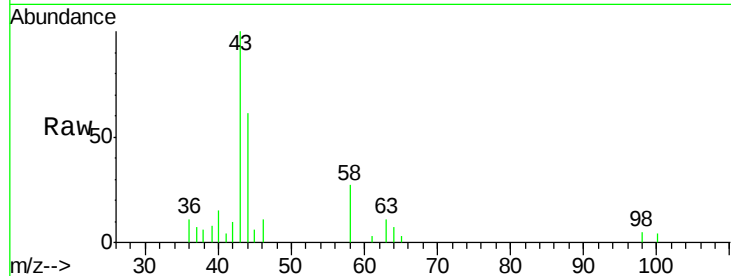
BG3W1

Tot Ion: 43 Resp: 5019

Ion Ratio Lower Upper

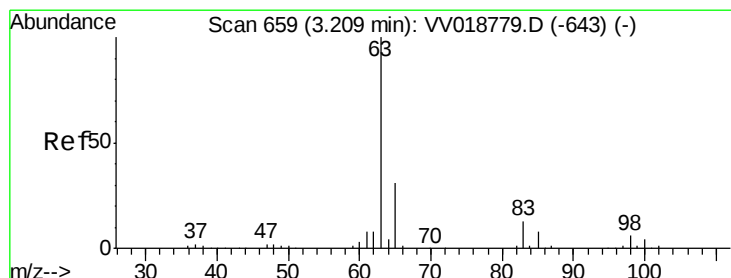
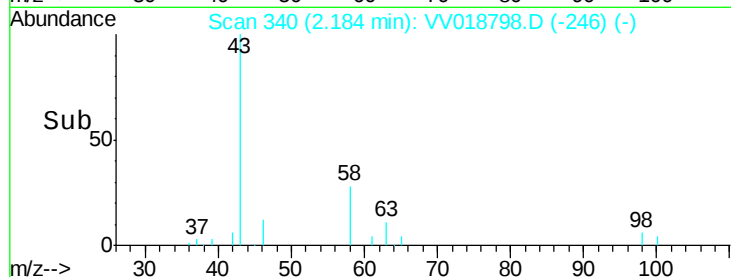
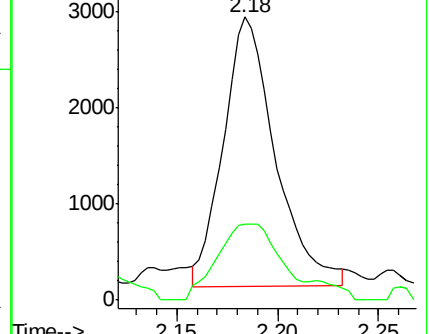
43 100

58 19.4 0.0 61.0



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0



#19

1,1-Dichloroethane

Concen: 4.983 ug/L

RT: 3.21 min Scan# 660

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

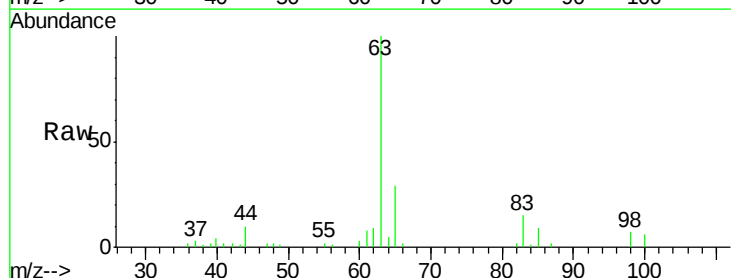
Tgt Ion: 63 Resp: 23976

Ion Ratio Lower Upper

63 100

65 28.5 22.0 40.8

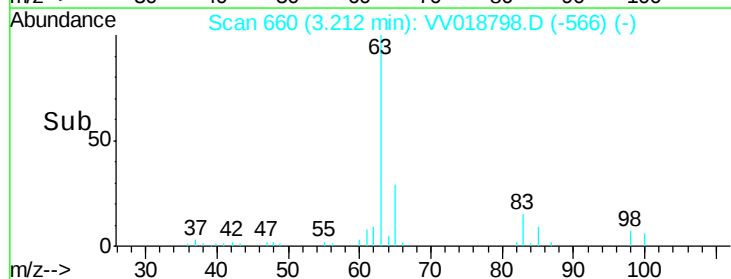
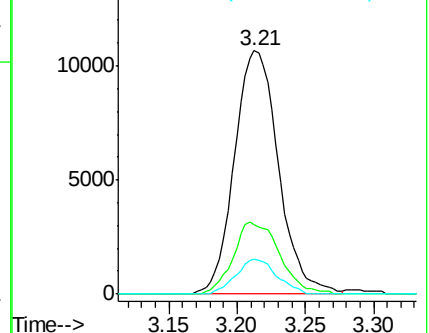
83 14.5 9.2 17.0

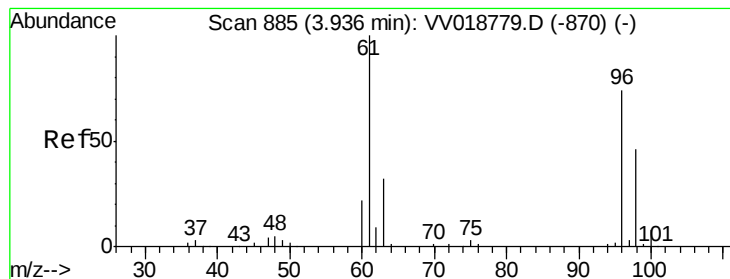


Abundance Ion 63.00 (62.70 to 63.70): VV0

Ion 65.00 (64.70 to 65.70): VV0

Ion 83.00 (82.70 to 83.70): VV0



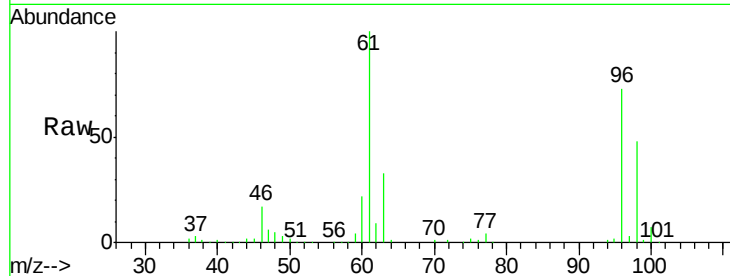


#20

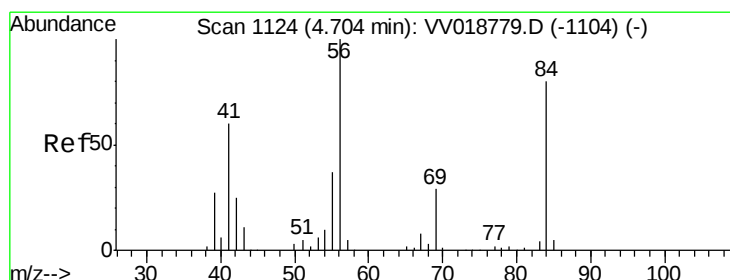
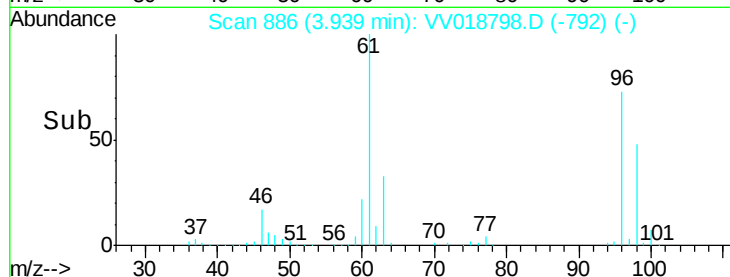
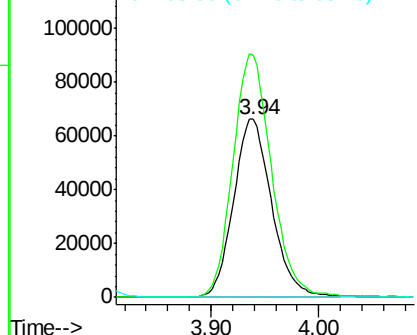
cis-1,2-Dichloroethene  
Concen: 62.864 ug/L  
RT: 3.94 min Scan# 886  
Delta R.T. 0.00 min  
Lab File: VV018798.D  
Acq: 09 Oct 2020 06:34

Instrument :  
MSVOA\_V  
ClientSampleId :  
BG3W1

Tot Ion: 96 Resp: 162899  
Ion Ratio Lower Upper  
96 100  
61 136.4 97.3 180.7  
68 0.0 0.0 0.0



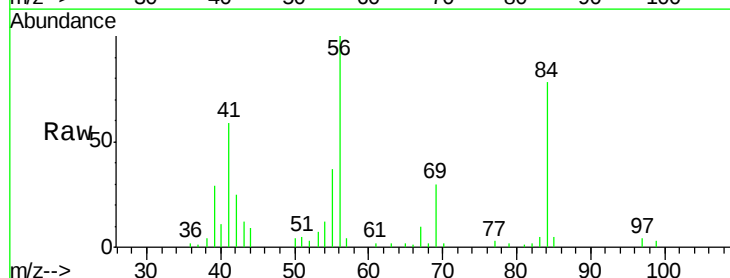
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.00 (60.70 to 61.70): VV0  
Ion 68.00 (67.70 to 68.70): VV0



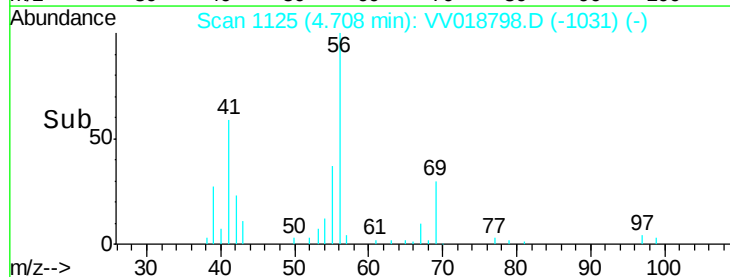
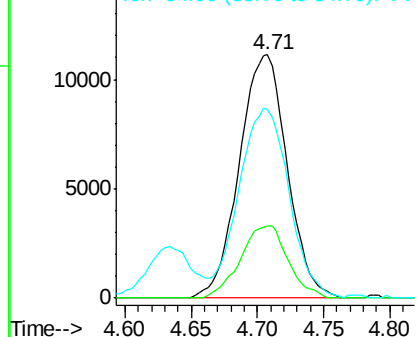
#29

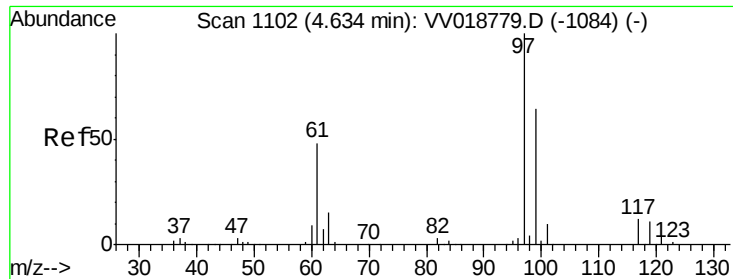
Cyclohexane  
Concen: 7.265 ug/L  
RT: 4.71 min Scan# 1125  
Delta R.T. 0.00 min  
Lab File: VV018798.D  
Acq: 09 Oct 2020 06:34

Tgt Ion: 56 Resp: 28004  
Ion Ratio Lower Upper  
56 100  
69 29.5 23.1 34.7  
84 82.0 65.2 97.8



Abundance Ion 56.00 (55.70 to 56.70): VV0  
Ion 69.00 (68.70 to 69.70): VV0  
Ion 84.00 (83.70 to 84.70): VV0

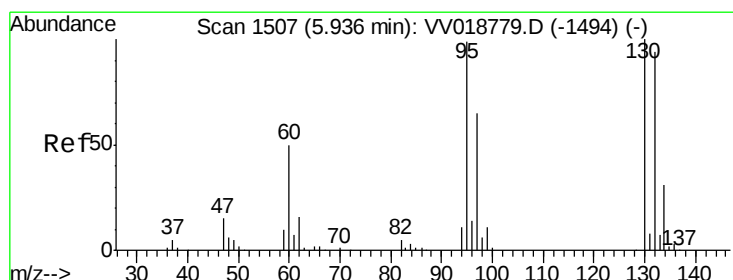
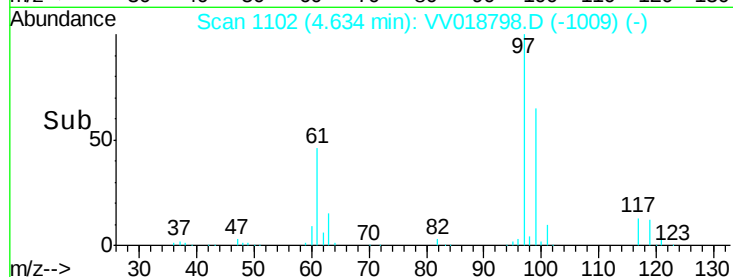
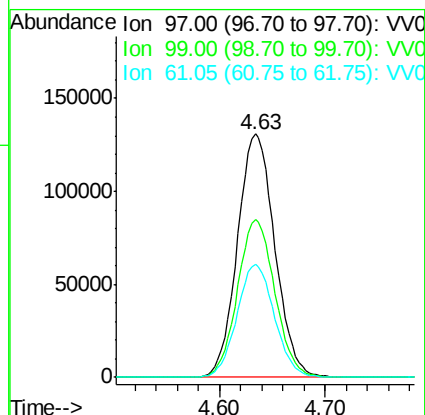
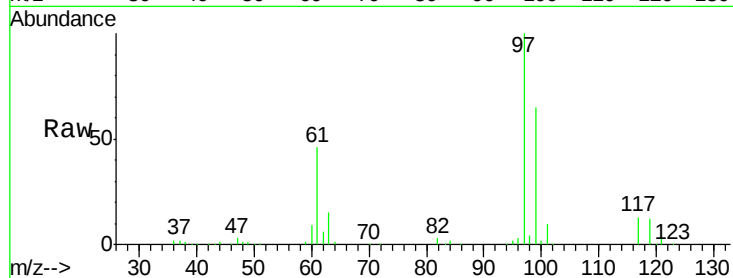




#30  
1,1,1-Trichloroethane  
Concen: 76.136 ug/L  
RT: 4.63 min Scan# 1102  
Delta R.T. 0.00 min  
Lab File: VV018798.D  
Acq: 09 Oct 2020 06:34

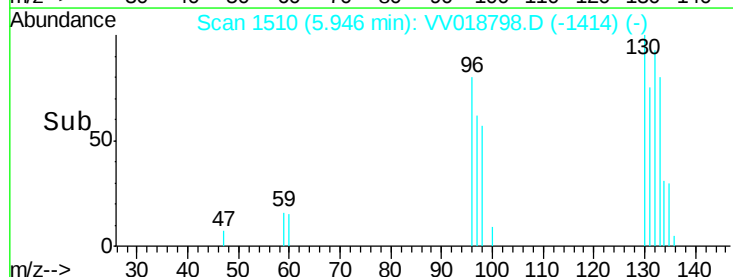
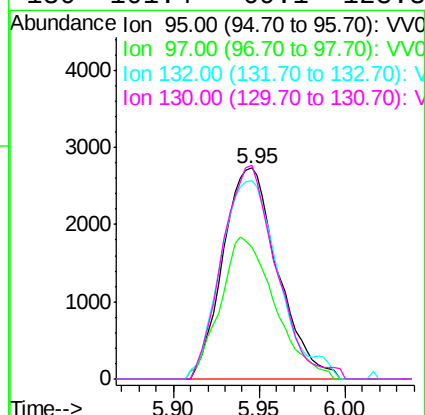
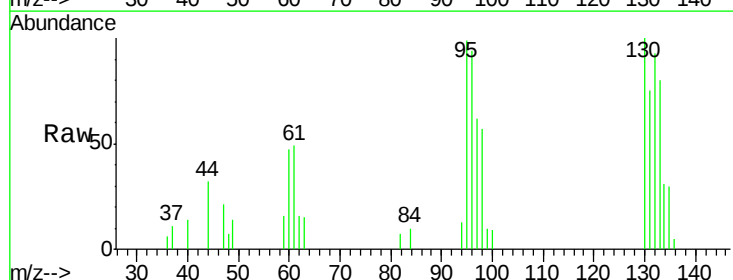
Instrument :  
MSVOA\_V  
ClientSampleId :  
BG3W1

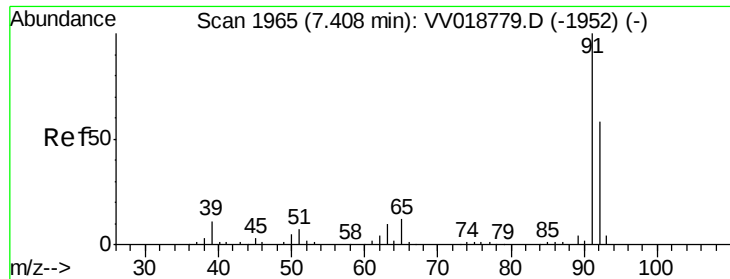
Tot Ion: 97 Resp: 322981  
Ion Ratio Lower Upper  
97 100  
99 64.6 51.0 76.4  
61 46.6 37.0 55.4



#34  
Trichloroethene  
Concen: 2.094 ug/L  
RT: 5.95 min Scan# 1510  
Delta R.T. 0.01 min  
Lab File: VV018798.D  
Acq: 09 Oct 2020 06:34

Tgt Ion: 95 Resp: 6087  
Ion Ratio Lower Upper  
95 100  
97 62.5 45.1 83.9  
132 94.1 66.2 123.0  
130 101.4 69.1 128.3





#42

Toluene

Concen: 290.443 ug/L

RT: 7.41 min Scan# 1965

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

Instrument :

MSVOA\_V

ClientSampled :

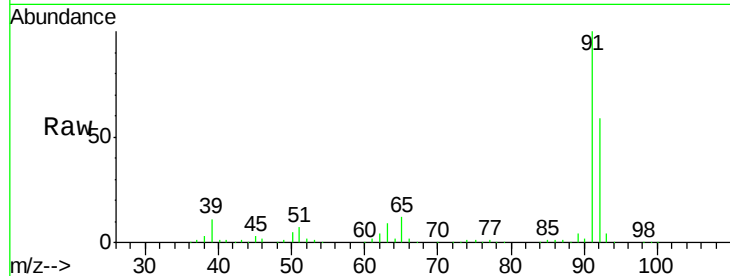
BG3W1

Tot Ion: 91 Resp: 3012486

Ion Ratio Lower Upper

91 100

92 58.8 39.8 74.0



Abundance Ion 91.00 (90.70 to 91.70): VV0

Ion 92.00 (91.70 to 92.70): VV0

7.41

2000000

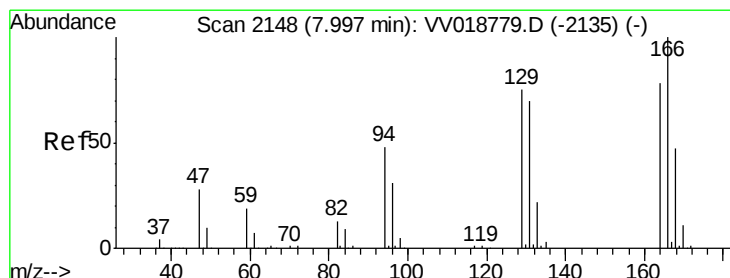
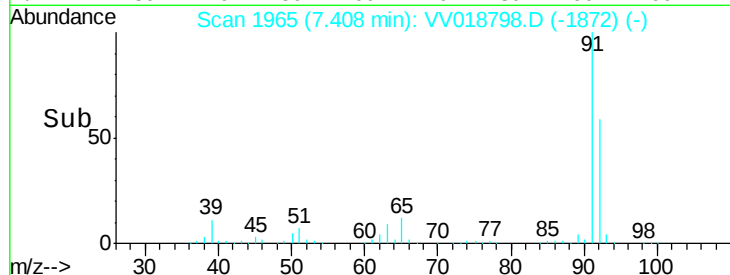
1500000

1000000

500000

0

Time--> 7.30 7.40 7.50



#46

Tetrachloroethene

Concen: 0.711 ug/L

RT: 8.00 min Scan# 2149

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

Tgt Ion:164 Resp: 1515

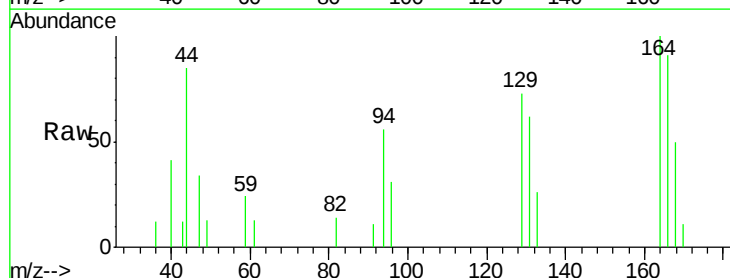
Ion Ratio Lower Upper

164 100

129 73.4 64.6 120.0

131 61.9 63.6 118.0#

166 91.0 88.3 164.1



Abundance Ion 164.00 (163.70 to 164.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V

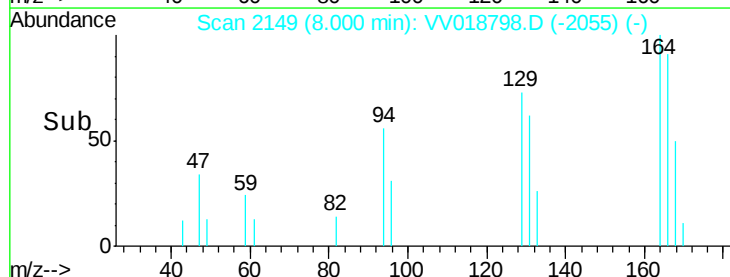
1500

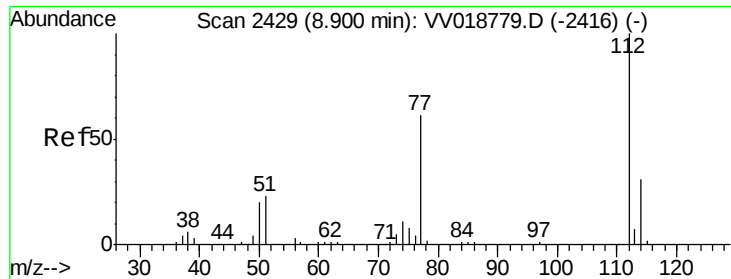
1000

500

0

Time--> 7.95 8.00 8.05

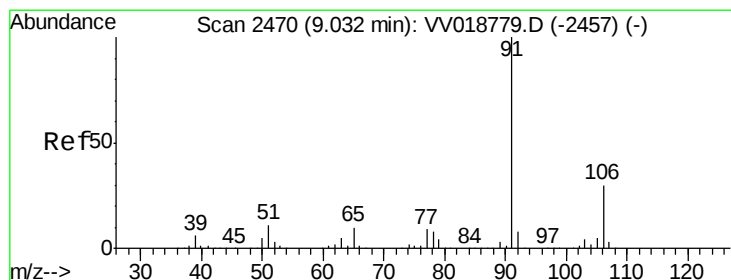
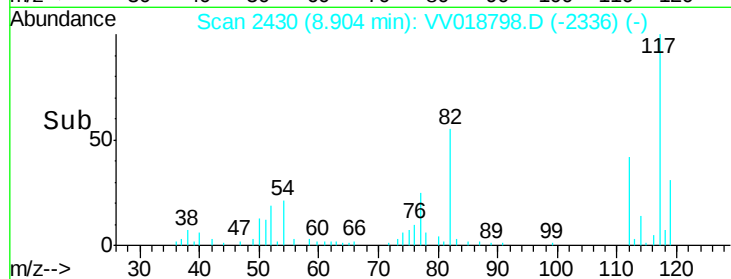
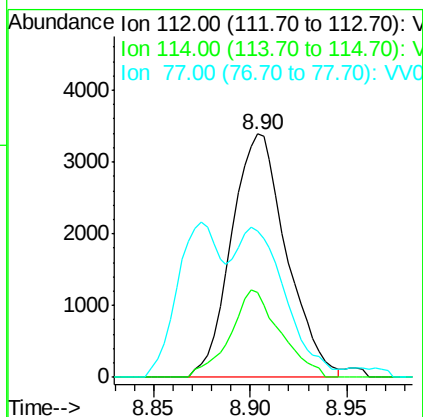
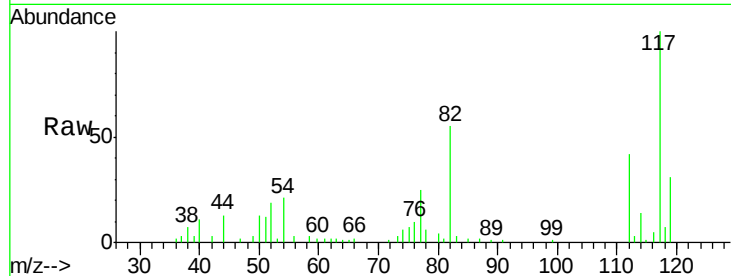




#51  
Chlorobenzene  
Concen: 0.975 ug/L  
RT: 8.90 min Scan# 2430  
Delta R.T. 0.00 min  
Lab File: VV018798.D  
Acq: 09 Oct 2020 06:34

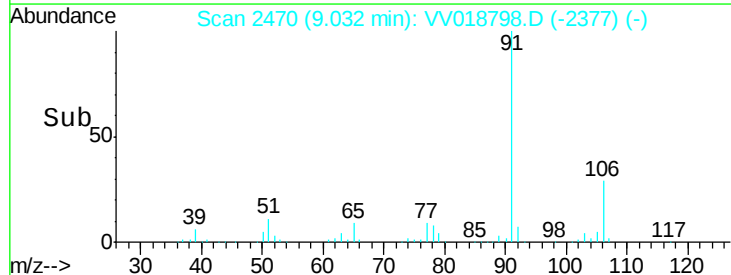
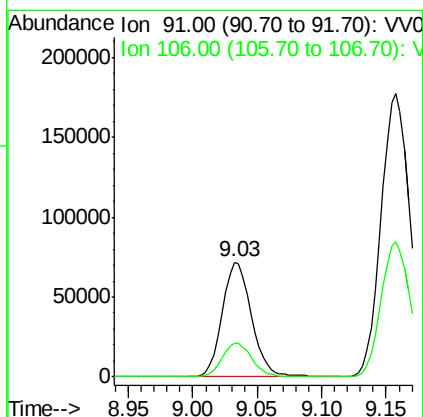
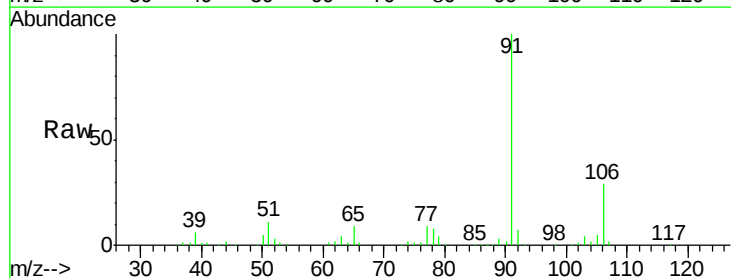
Instrument :  
MSVOA\_V  
ClientSampled :  
BG3W1

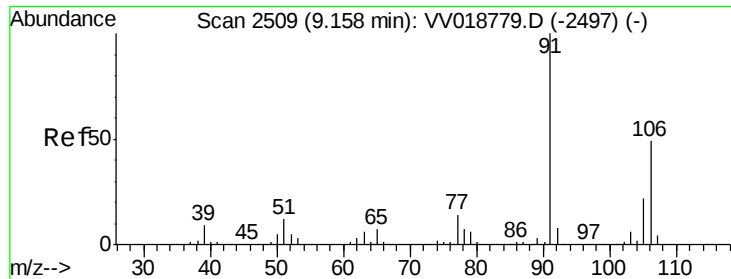
Tot Ion:112 Resp: 6711  
Ion Ratio Lower Upper  
112 100  
114 34.7 22.0 41.0  
77 59.9 49.8 74.6



#52  
Ethylbenzene  
Concen: 9.670 ug/L  
RT: 9.03 min Scan# 2470  
Delta R.T. 0.00 min  
Lab File: VV018798.D  
Acq: 09 Oct 2020 06:34

Tgt Ion: 91 Resp: 113895  
Ion Ratio Lower Upper  
91 100  
106 29.4 20.9 38.9





#53

m,p-Xylene

Concen: 31.581 ug/L

RT: 9.16 min Scan# 2509

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

Instrument :

MSVOA\_V

ClientSampleId :

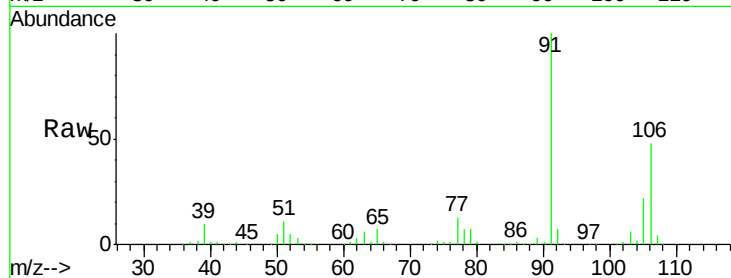
BG3W1

Tot Ion:106 Resp: 136541

Ion Ratio Lower Upper

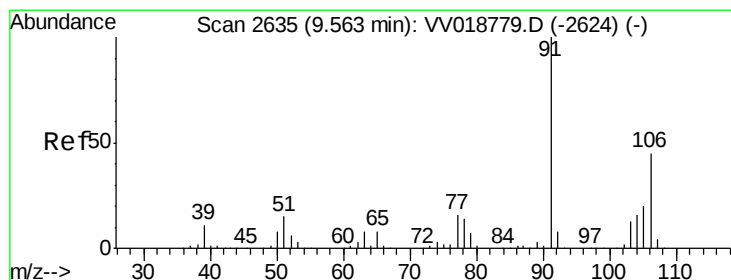
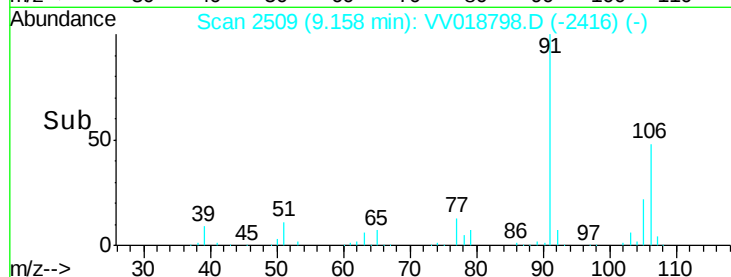
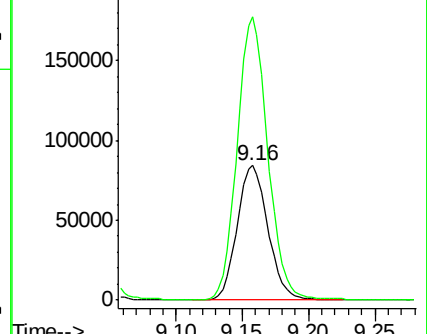
106 100

91 210.4 147.1 273.1



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#54

o-xylene

Concen: 19.395 ug/L

RT: 9.56 min Scan# 2635

Delta R.T. 0.00 min

Lab File: VV018798.D

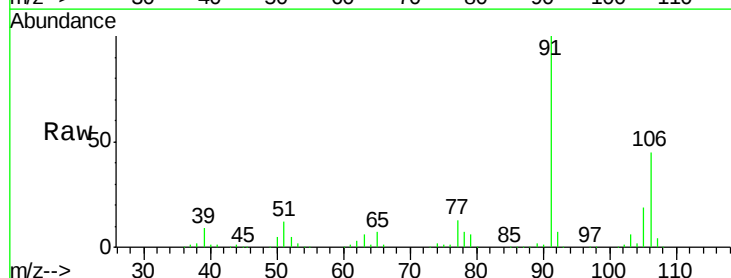
Acq: 09 Oct 2020 06:34

Tgt Ion:106 Resp: 79642

Ion Ratio Lower Upper

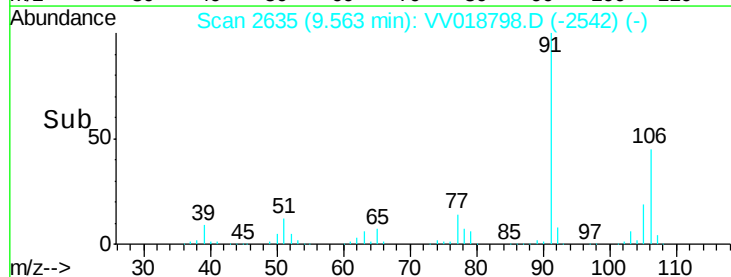
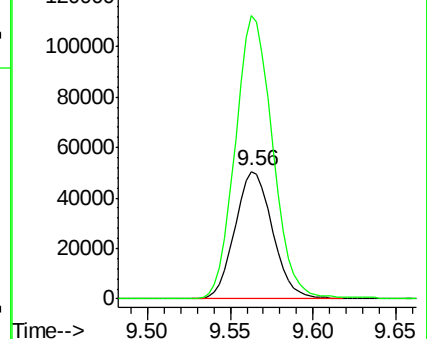
106 100

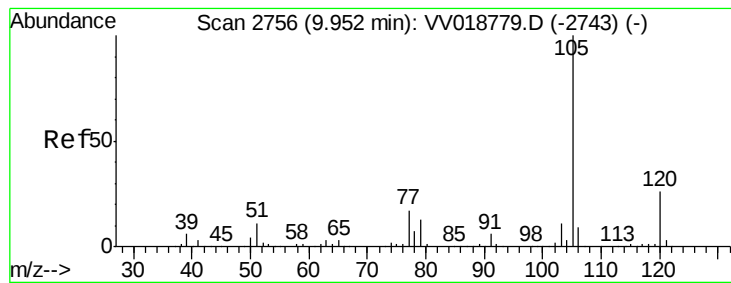
91 221.8 156.8 291.2



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0





#56

Isopropylbenzene

Concen: 2.721 ug/L

RT: 9.96 min Scan# 2757

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

Instrument :

MSVOA\_V

ClientSampled :

BG3W1

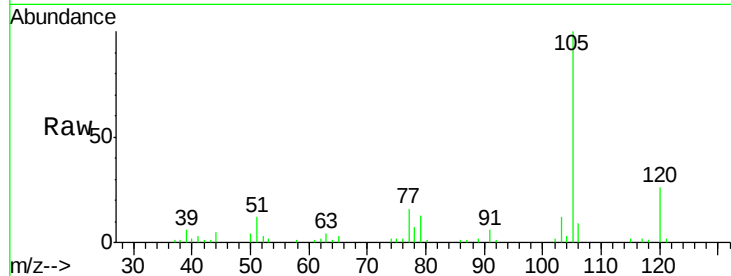
Tot Ion:105 Resp: 30920

Ion Ratio Lower Upper

105 100

120 25.4 20.4 30.6

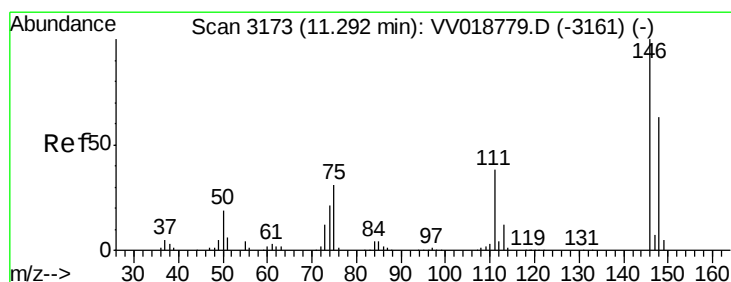
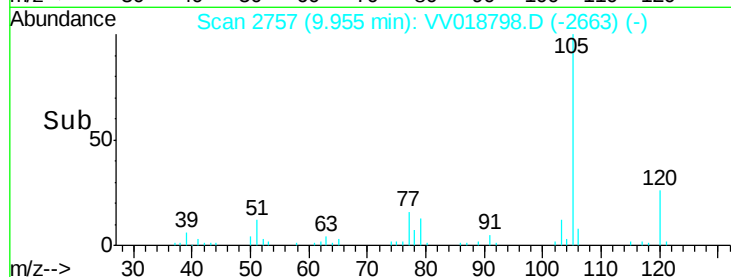
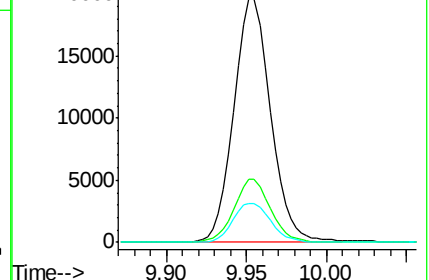
77 16.2 13.0 19.6



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#63

1,4-Dichlorobenzene

Concen: 1.641 ug/L

RT: 11.29 min Scan# 3173

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

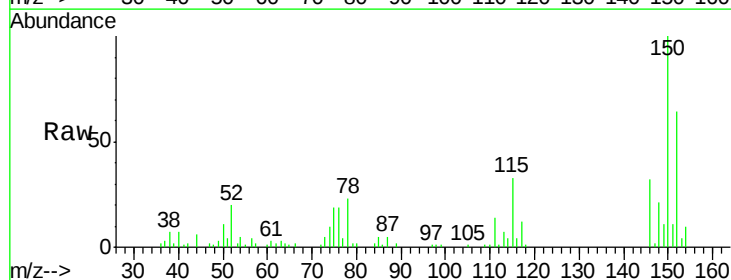
Tgt Ion:146 Resp: 8942

Ion Ratio Lower Upper

146 100

111 42.1 27.1 50.3

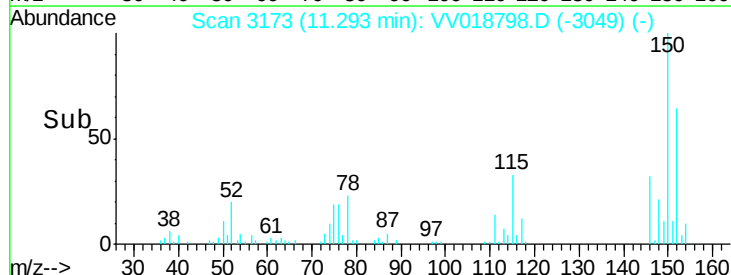
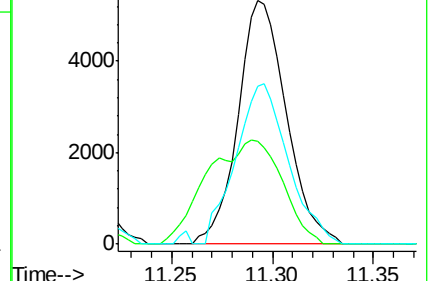
148 64.9 45.4 84.4

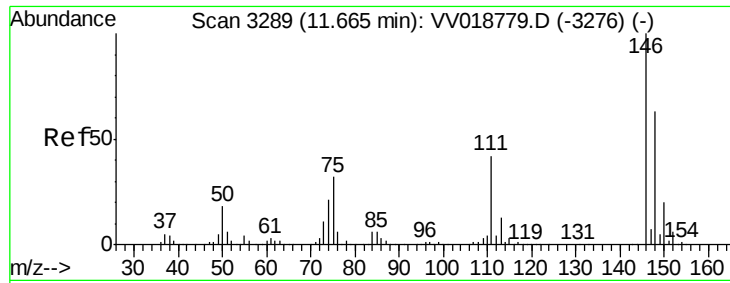


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 1.018 ug/L

RT: 11.67 min Scan# 3289

Delta R.T. 0.00 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

Instrument :

MSVOA\_V

ClientSampleId :

BG3W1

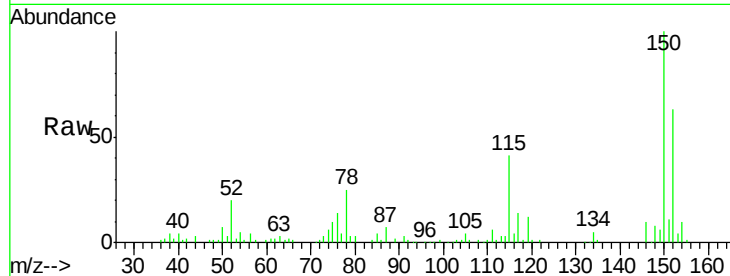
Tot Ion:146 Resp: 5356

Ion Ratio Lower Upper

146 100

111 56.4 33.8 50.6#

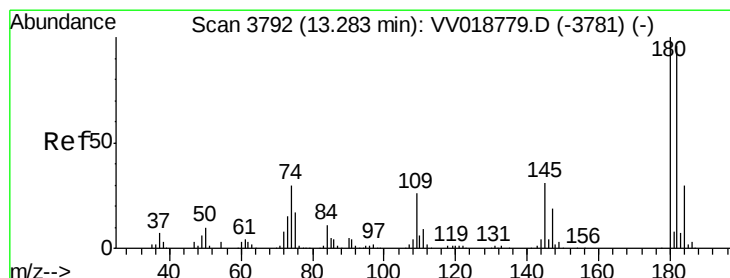
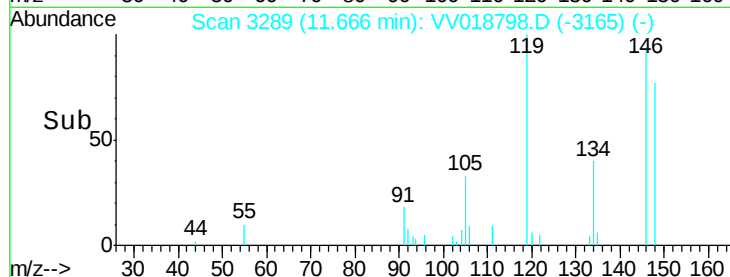
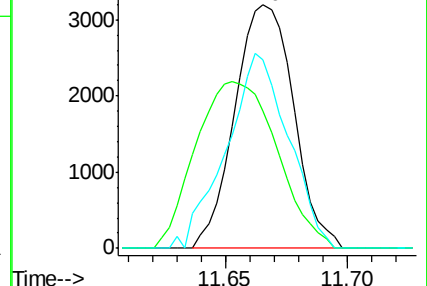
148 77.3 50.3 75.5#



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



#68

1,2,4-trichlorobenzene

Concen: 1.413 ug/L

RT: 13.29 min Scan# 3794

Delta R.T. 0.01 min

Lab File: VV018798.D

Acq: 09 Oct 2020 06:34

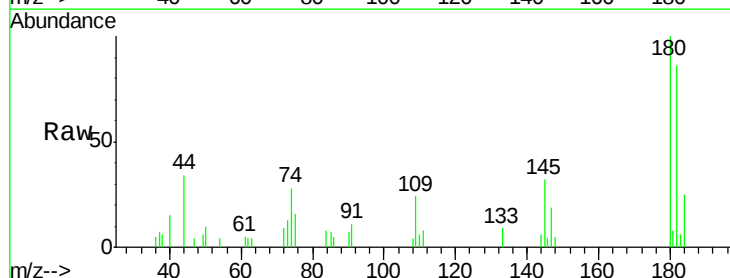
Tgt Ion:180 Resp: 4509

Ion Ratio Lower Upper

180 100

182 87.1 76.7 115.1

145 29.5 24.0 36.0



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

