

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW061620\  
 Data File : VW015608.D  
 Acq On : 16 Jun 2020 15:31  
 Operator : SY/VA  
 Sample : L3027-03  
 Misc : 4.11G/10ML/MSVOA W/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 BG2K7

Quant Time: Jun 17 06:28:54 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM052620S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Jun 17 06:26:29 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.85  | 114  | 348029   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 281727   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 94481    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 95274    | 29.87    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 119.48% |
| 7) Chloroethane-d5             | 2.90   | 69    | 77202    | 24.34    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 97.36%  |
| 10) 1,1-Dichloroethene-d2      | 4.01   | 63    | 136768   | 17.60    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 70.40%  |
| 20) 2-Butanone-d5              | 7.09   | 46    | 30695    | 29.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 58.96%  |
| 24) Chloroform-d               | 7.65   | 84    | 167869   | 20.86    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 83.44%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 85374    | 19.07    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 76.28%  |
| 29) Benzene-d6                 | 8.28   | 84    | 332647   | 24.08    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 96.32%  |
| 33) 1,2-Dichloropropane-d6     | 9.28   | 67    | 93828    | 22.35    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 89.40%  |
| 37) Toluene-d8                 | 10.33  | 98    | 290105   | 21.60    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 86.40%  |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 34630    | 17.83    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 71.32%  |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 23919    | 32.91    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 65.82%  |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 49867    | 15.77    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 63.08%  |
| 61) 1,2-Dichlorobenzene-d4     | 13.85  | 152   | 60265    | 19.03    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 76.12%  |

## Target Compounds

|                             |       |     |        |        | Ovalue    |
|-----------------------------|-------|-----|--------|--------|-----------|
| 13) Acetone                 | 4.13  | 43  | 28806  | 35.785 | ug/L 97   |
| 16) Methylene chloride      | 4.92  | 84  | 8790   | 2.058  | ug/L 91   |
| 21) 2-Butanone              | 7.18  | 43  | 15159  | 12.259 | ug/L 100  |
| 22) cis-1,2-Dichloroethene  | 7.18  | 96  | 39065  | 8.420  | ug/L 98   |
| 34) Benzene                 | 8.33  | 78  | 9989   | 0.634  | ug/L 100  |
| 35) Trichloroethene         | 9.09  | 95  | 22811  | 5.390  | ug/L 98   |
| 36) Methylcyclohexane       | 9.34  | 83  | 10522  | 1.394  | ug/L # 88 |
| 42) cis-1,3-Dichloropropene | 10.04 | 75  | 3004   | 0.484  | ug/L # 76 |
| 44) Toluene                 | 10.39 | 91  | 14085  | 0.821  | ug/L 99   |
| 47) Tetrachloroethene       | 10.87 | 164 | 230040 | 68.573 | ug/L 99   |
| 49) 2-Hexanone              | 10.93 | 43  | 8571   | 5.583  | ug/L # 39 |
| 53) Ethylbenzene            | 11.73 | 91  | 178759 | 9.070  | ug/L 98   |
| 54) m,p-Xylene              | 11.83 | 106 | 242348 | 32.768 | ug/L 100  |
| 55) o-xylene                | 12.17 | 106 | 118667 | 16.903 | ug/L 99   |
| 56) Styrene                 | 12.17 | 104 | 8529   | 0.711  | ug/L # 1  |
| 57) Isopropylbenzene        | 12.47 | 105 | 13442  | 0.687  | ug/L # 70 |
| 64) 1,4-Dichlorobenzene     | 13.58 | 146 | 4719   | 0.833  | ug/L 100  |

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Instrument :  
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ClientSampleId :  
BG2K7

Quant Time: Jun 17 06:28:54 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM052620S.M  
Quant Title : VOC Analysis  
QLast Update : Wed Jun 17 06:26:29 2020  
Response via : Initial Calibration

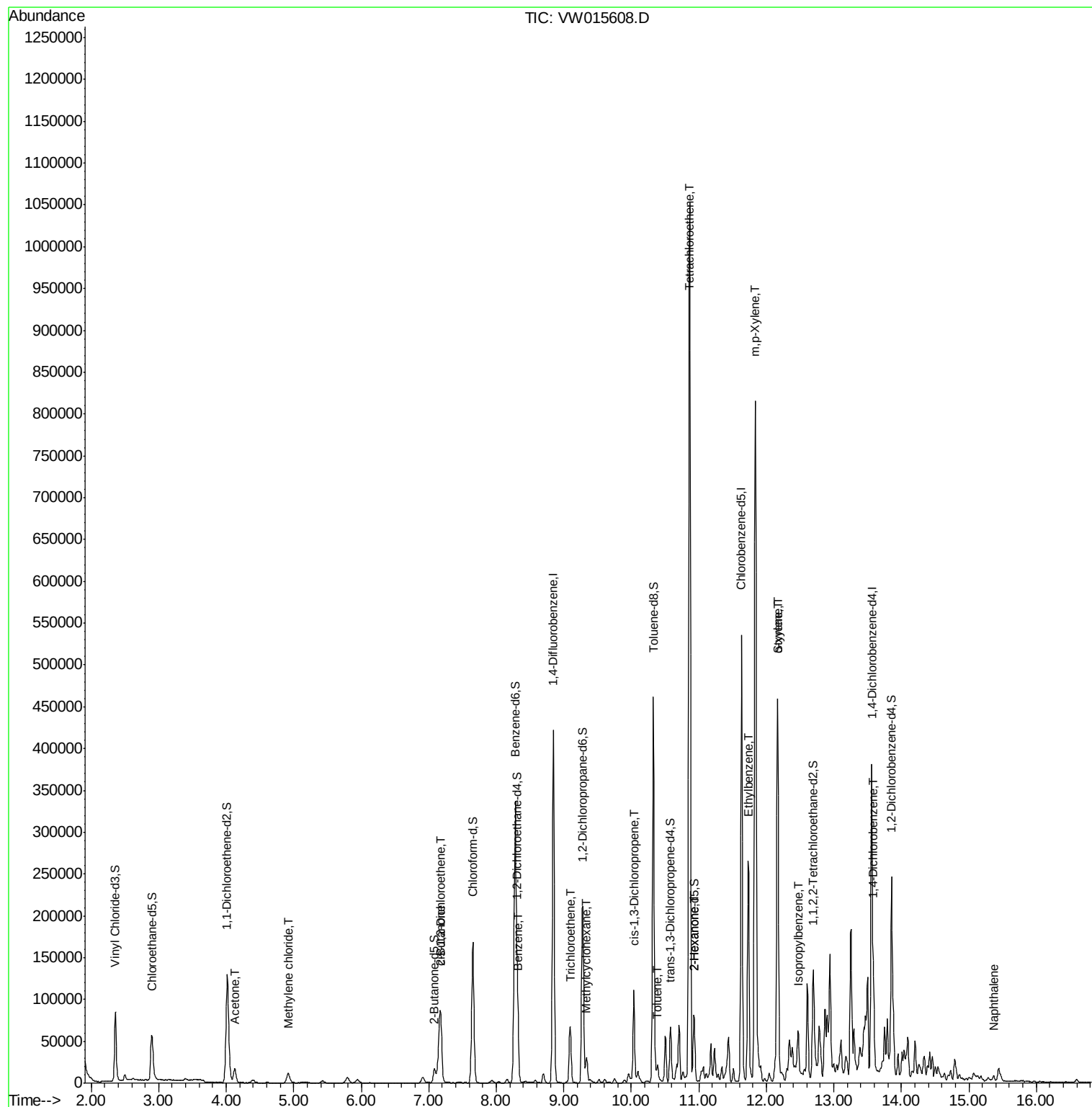
| Internal Standards | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------|-------|------|----------|-------|-------|----------|
| 69) Naphthalene    | 15.37 | 128  | 5219     | 0.892 | ug/L  | 97       |

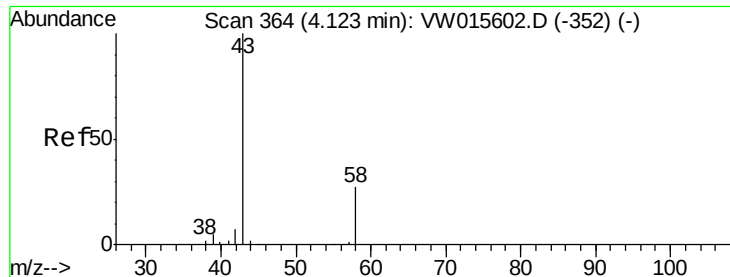
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW061620\  
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Quant Time: Jun 17 06:28:54 2020  
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Quant Title : VOC Analysis  
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Response via : Initial Calibration





#13

Acetone

Concen: 35.785 ug/L

RT: 4.13 min Scan# 365

Delta R.T. 0.01 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Instrument :

MSVOA\_W

ClientSampleId :

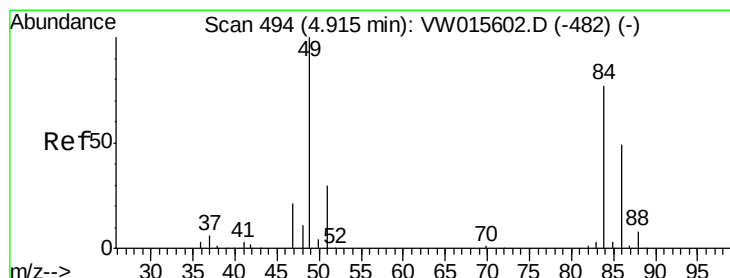
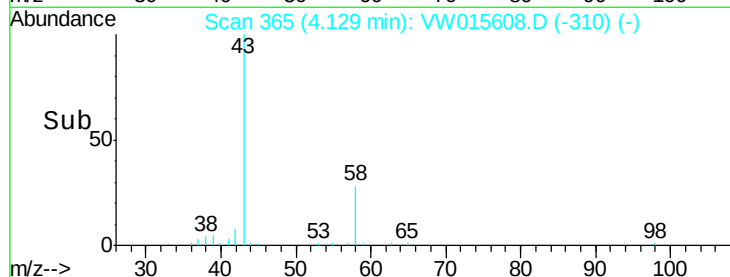
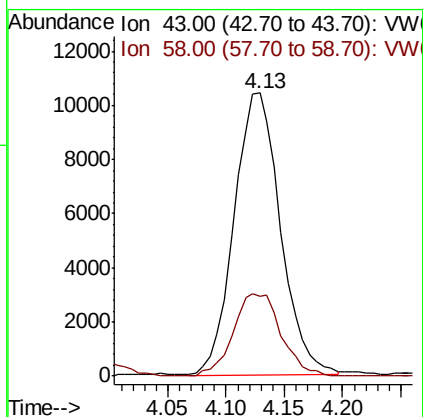
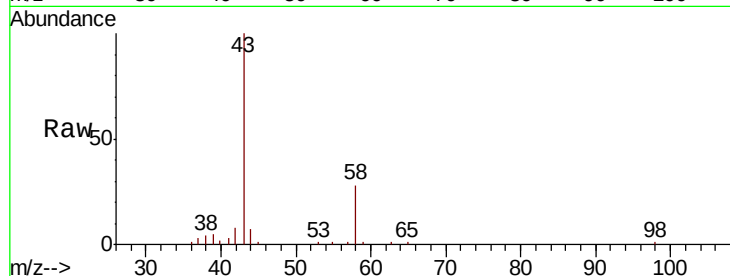
BG2K7

Tot Ion: 43 Resp: 28806

Ion Ratio Lower Upper

43 100

58 30.1 0.0 56.8



#16

Methylene chloride

Concen: 2.058 ug/L

RT: 4.92 min Scan# 494

Delta R.T. -0.00 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

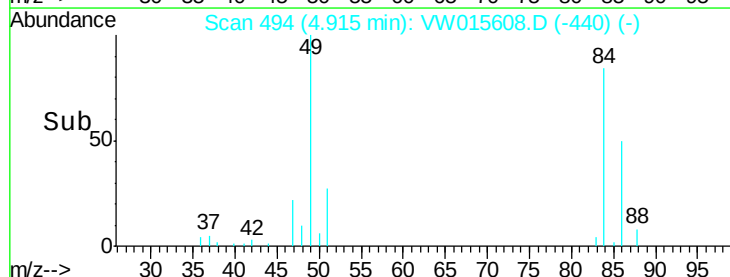
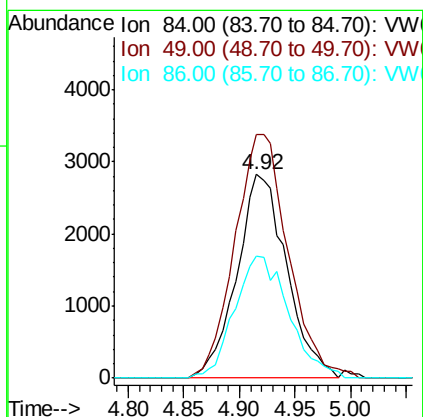
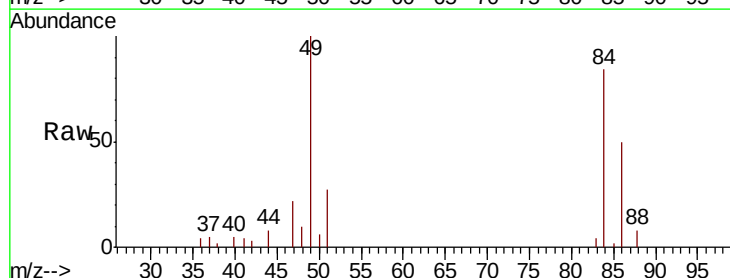
Tgt Ion: 84 Resp: 8790

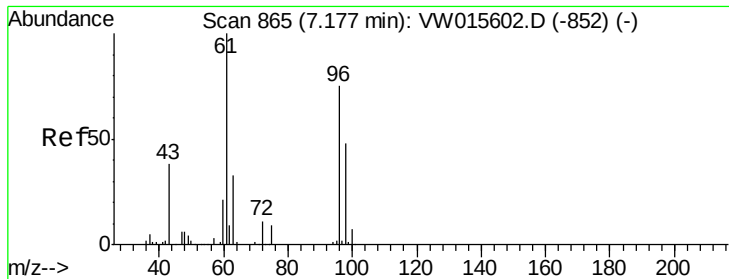
Ion Ratio Lower Upper

84 100

49 119.5 93.0 172.8

86 59.8 44.7 83.1





#21

2-Butanone

Concen: 12.259 ug/L

RT: 7.18 min Scan# 865

Delta R.T. -0.00 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Instrument :

MSVOA\_W

ClientSampled :

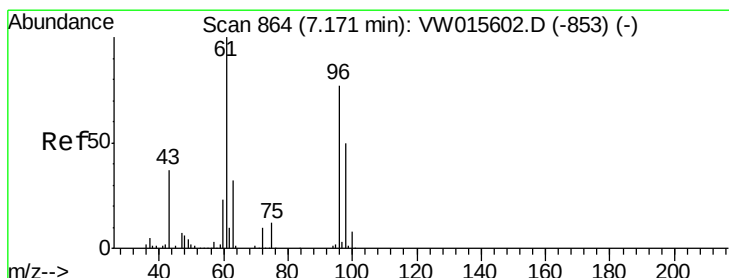
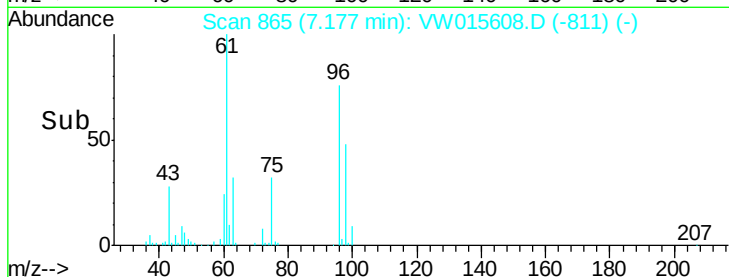
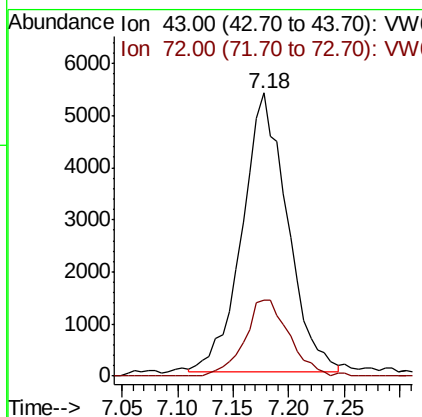
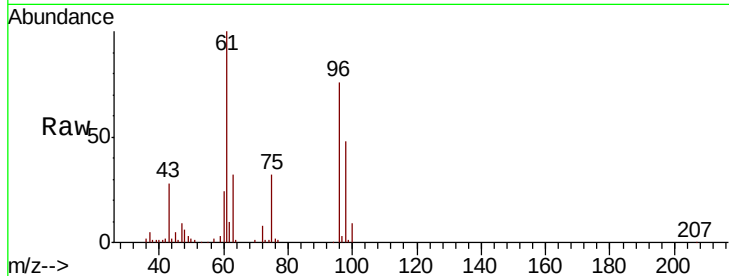
BG2K7

Tot Ion: 43 Resp: 15159

Ion Ratio Lower Upper

43 100

72 26.7 13.3 39.9



#22

cis-1,2-Dichloroethene

Concen: 8.420 ug/L

RT: 7.18 min Scan# 865

Delta R.T. 0.01 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

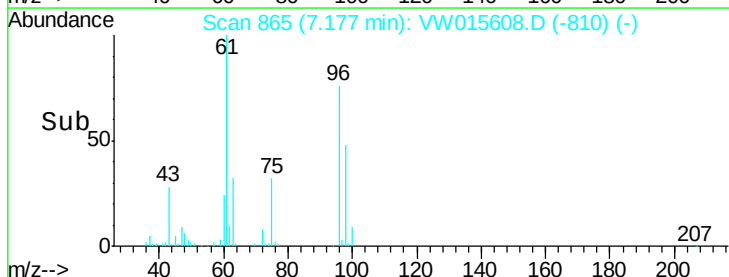
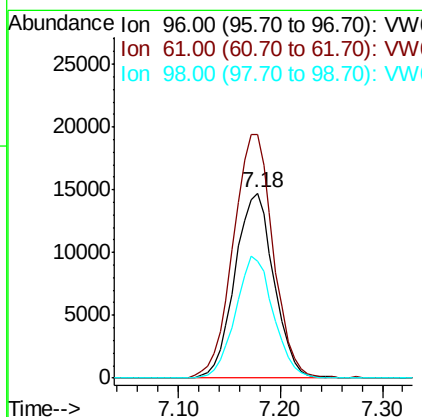
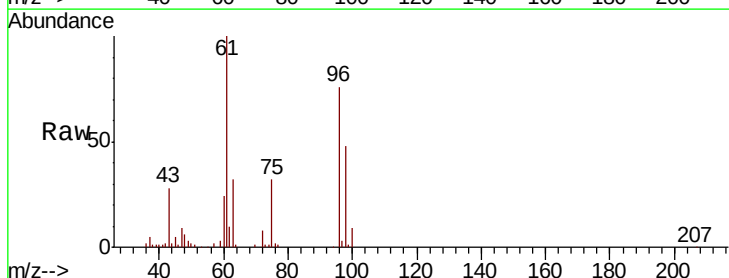
Tgt Ion: 96 Resp: 39065

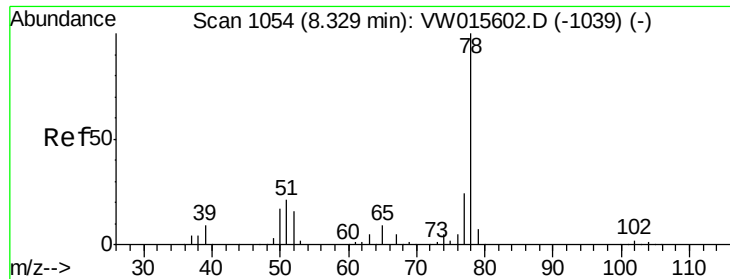
Ion Ratio Lower Upper

96 100

61 131.6 93.7 173.9

98 63.2 45.1 83.9





#34

Benzene

Concen: 0.634 ug/L

RT: 8.33 min Scan# 1054

Delta R.T. -0.00 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

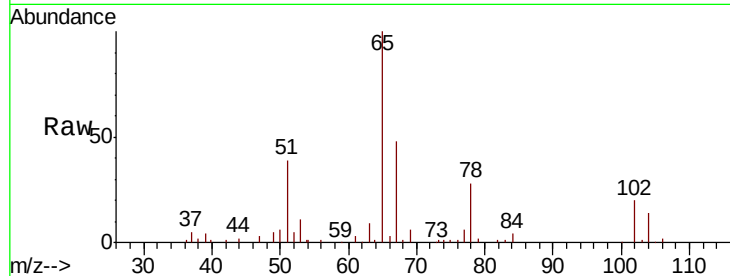
Instrument :

MSVOA\_W

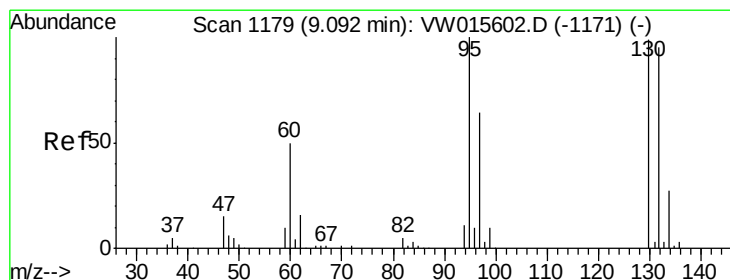
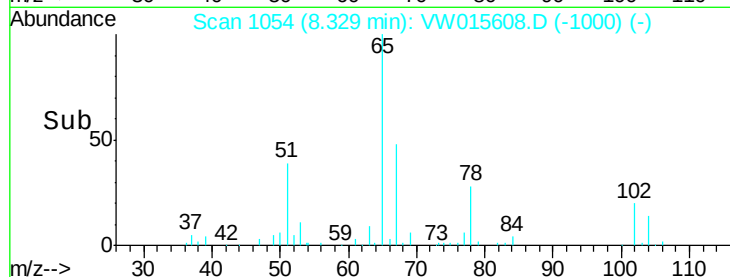
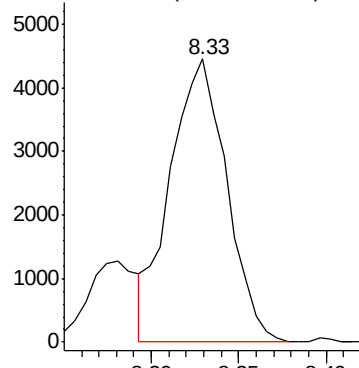
ClientSampleId :

BG2K7

Tgt Ion: 78 Resp: 9989



Abundance Ion 78.00 (77.70 to 78.70): VW



#35

Trichloroethene

Concen: 5.390 ug/L

RT: 9.09 min Scan# 1179

Delta R.T. -0.00 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Tgt Ion: 95 Resp: 22811

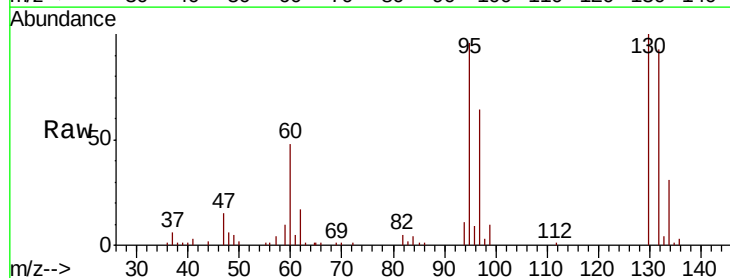
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 66.0  | 45.4  | 84.2  |
| 132 | 97.8  | 67.1  | 124.7 |
| 130 | 101.6 | 69.4  | 128.8 |

95 100

97 66.0 45.4 84.2

132 97.8 67.1 124.7

130 101.6 69.4 128.8

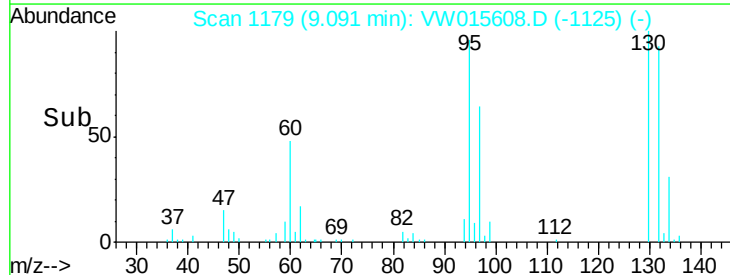
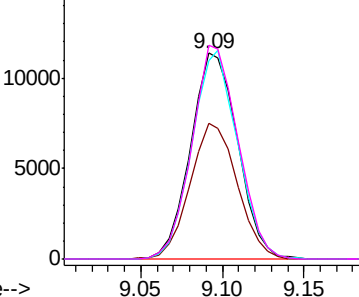


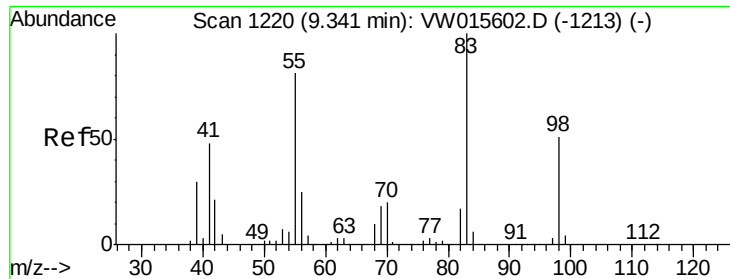
Abundance Ion 95.00 (94.70 to 95.70): VW

Ion 97.00 (96.70 to 97.70): VW

Ion 132.00 (131.70 to 132.70): VW

Ion 130.00 (129.70 to 130.70): VW

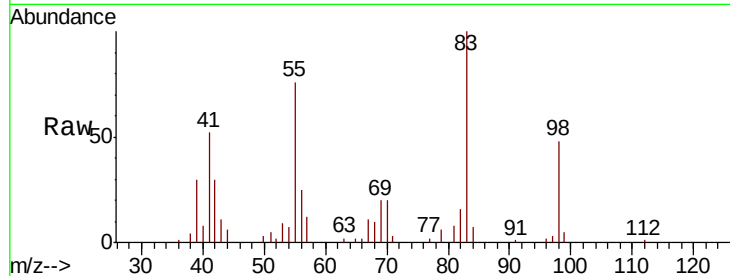




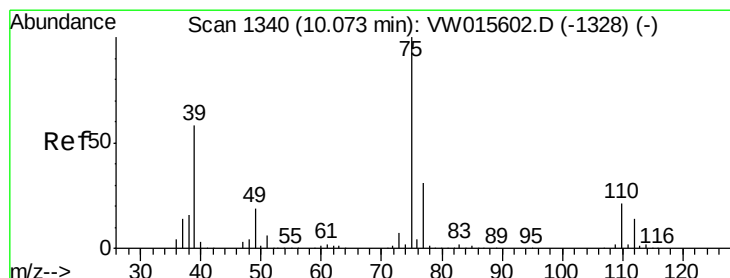
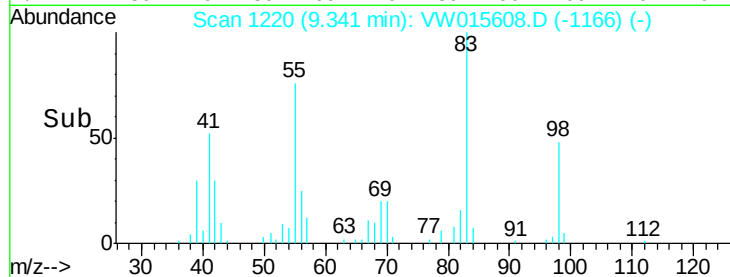
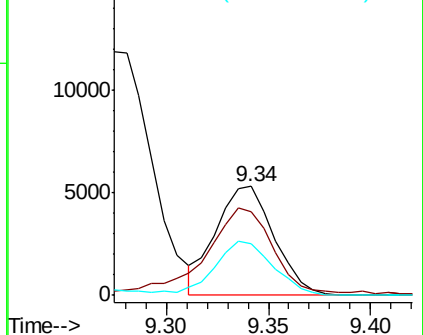
#36  
Methvlcvclohexane  
Concen: 1.394 ug/L  
RT: 9.34 min Scan# 1220  
Delta R.T. -0.00 min  
Lab File: VW015608.D  
Acq: 16 Jun 2020 15:31

Instrument :  
MSVOA\_W  
ClientSampleId :  
BG2K7

Tot Ion: 83 Resp: 10522  
Ion Ratio Lower Upper  
83 100  
55 95.8 62.8 94.2#  
98 49.3 39.2 58.8

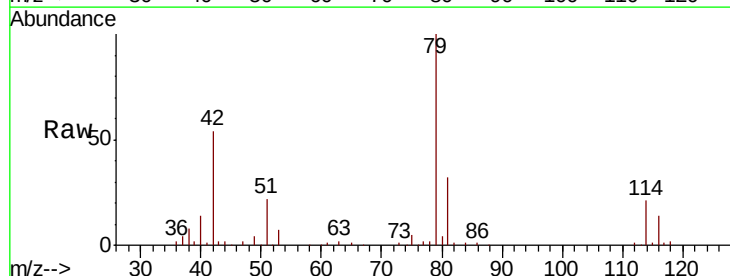


Abundance Ion 83.00 (82.70 to 83.70): VW  
Ion 55.00 (54.70 to 55.70): VW  
Ion 98.00 (97.70 to 98.70): VW

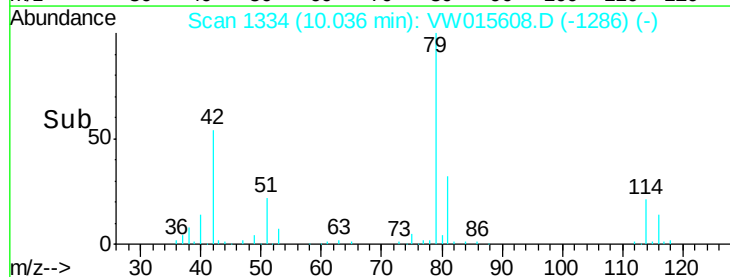
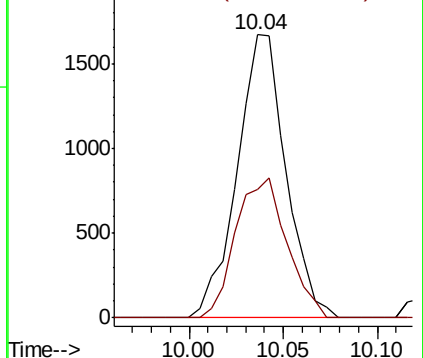


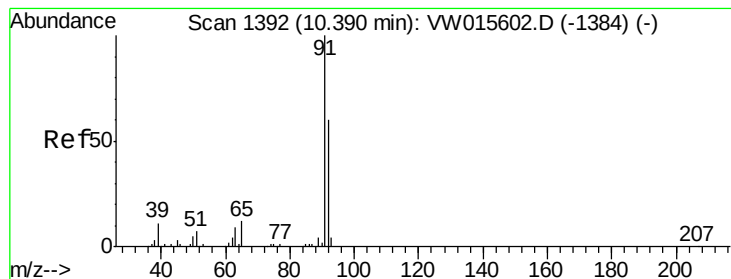
#42  
cis-1,3-Dichloropropene  
Concen: 0.484 ug/L  
RT: 10.04 min Scan# 1334  
Delta R.T. -0.04 min  
Lab File: VW015608.D  
Acq: 16 Jun 2020 15:31

Tgt Ion: 75 Resp: 3004  
Ion Ratio Lower Upper  
75 100  
77 45.3 22.3 41.5#



Abundance Ion 75.00 (74.70 to 75.70): VW  
Ion 77.00 (76.70 to 77.70): VW





#44

Toluene

Concen: 0.821 ug/L

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Instrument :

MSVOA\_W

ClientSampleId :

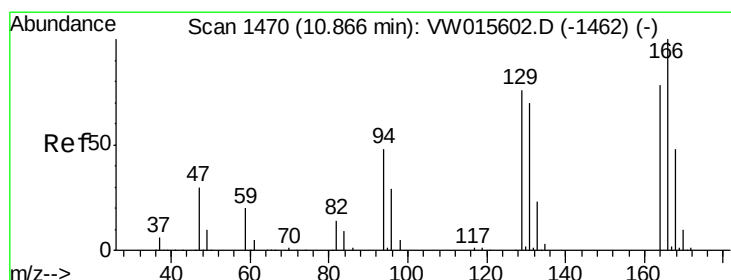
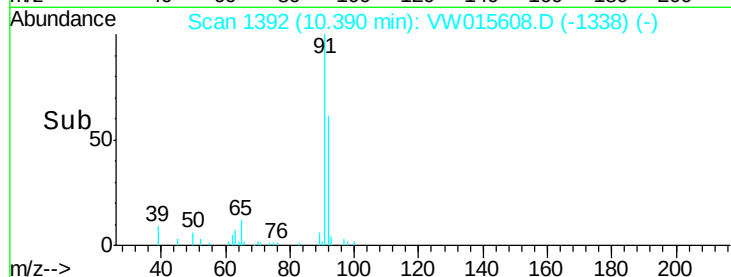
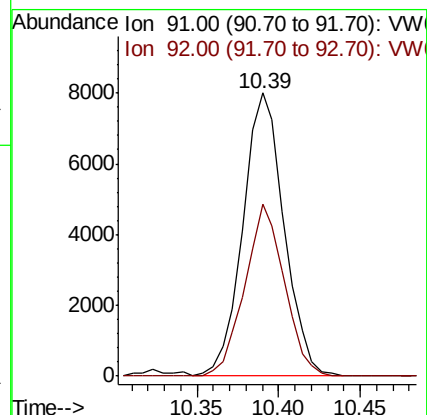
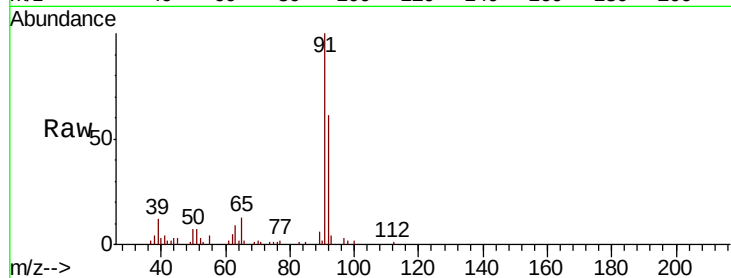
BG2K7

Tot Ion: 91 Resp: 14085

Ion Ratio Lower Upper

91 100

92 60.6 41.7 77.5



#47

Tetrachloroethene

Concen: 68.573 ug/L

RT: 10.87 min Scan# 1470

Delta R.T. -0.00 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Tgt Ion: 164 Resp: 230040

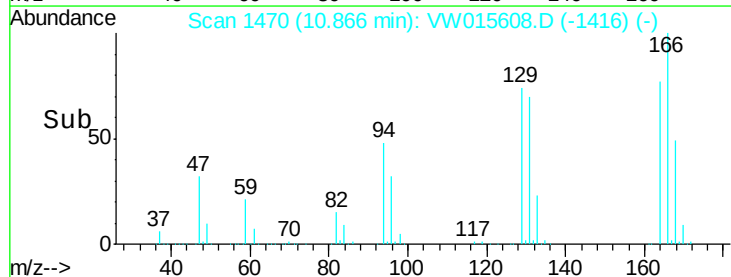
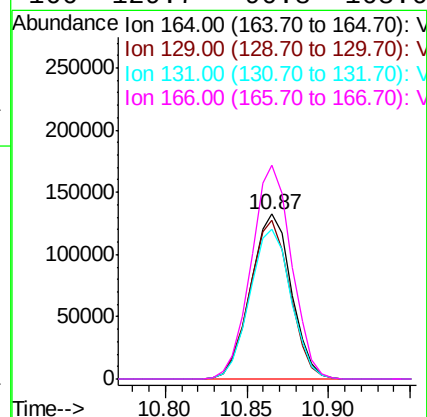
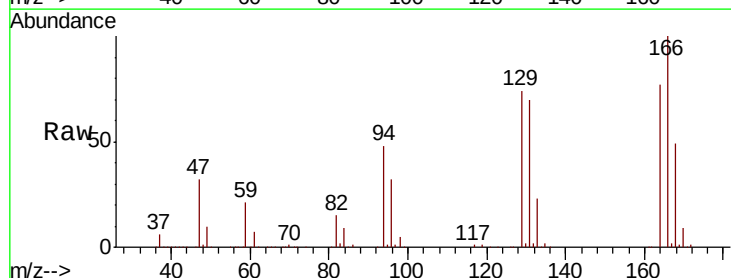
Ion Ratio Lower Upper

164 100

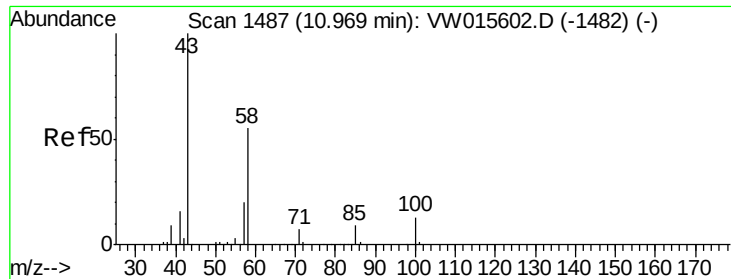
129 96.6 66.3 123.1

131 91.1 65.1 120.9

166 129.7 90.8 168.6



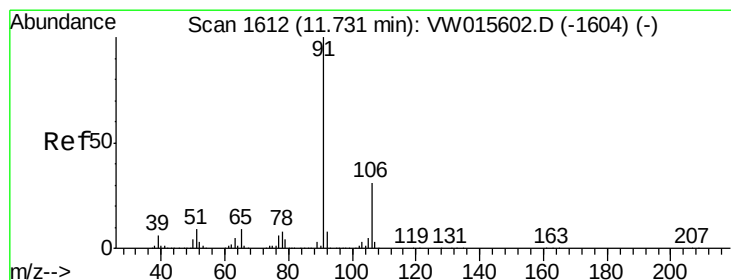
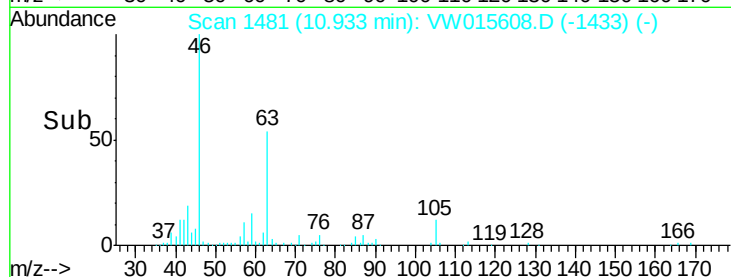
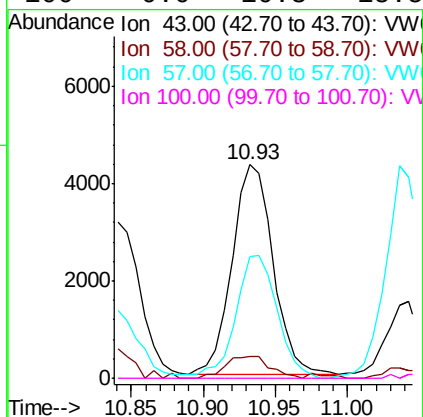
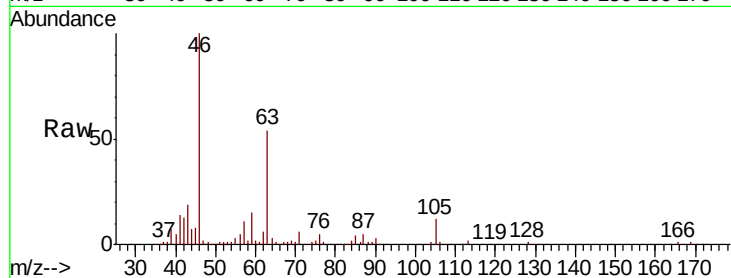




#49  
2-Hexanone  
Concen: 5.583 ug/L  
RT: 10.93 min Scan# 1481  
Delta R.T. -0.04 min  
Lab File: VW015608.D  
Acq: 16 Jun 2020 15:31

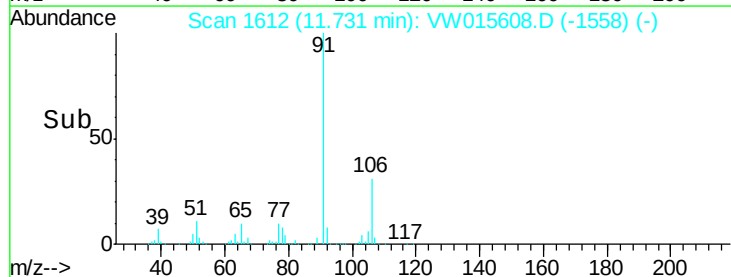
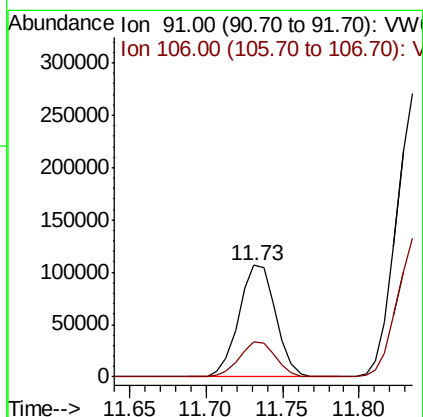
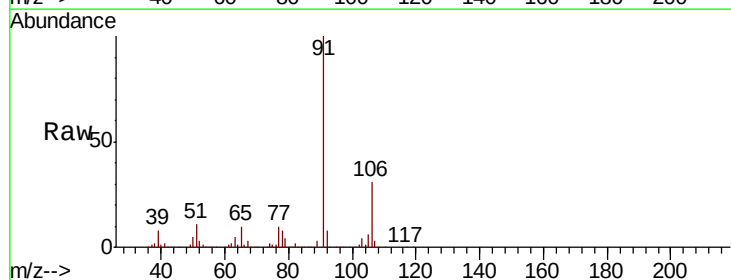
Instrument :  
MSVOA\_W  
ClientSampled :  
BG2K7

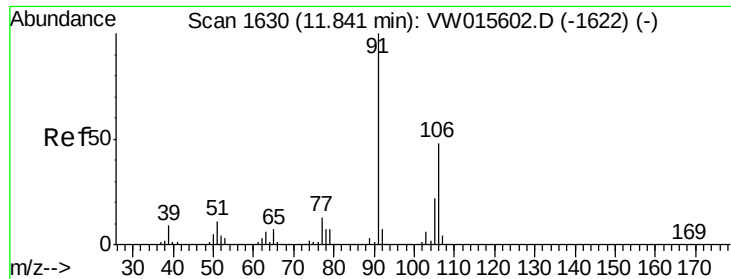
Tot Ion: 43 Resp: 8571  
Ion Ratio Lower Upper  
43 100  
58 11.3 42.6 64.0#  
57 58.8 15.5 23.3#  
100 0.0 10.3 15.5#



#53  
Ethylbenzene  
Concen: 9.070 ug/L  
RT: 11.73 min Scan# 1612  
Delta R.T. -0.00 min  
Lab File: VW015608.D  
Acq: 16 Jun 2020 15:31

Tgt Ion: 91 Resp: 178759  
Ion Ratio Lower Upper  
91 100  
106 31.4 21.3 39.6





#54

m,p-Xylene

Concen: 32.768 ug/L

RT: 11.83 min Scan# 1629

Delta R.T. -0.01 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Instrument :

MSVOA\_W

ClientSampled :

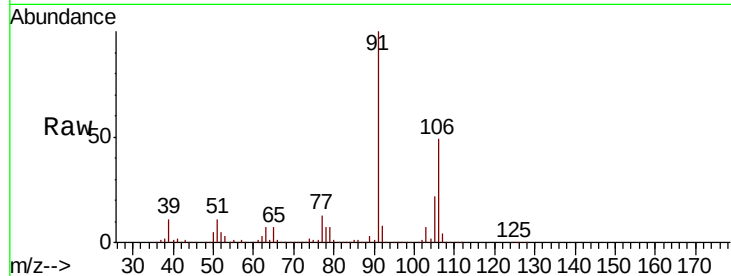
BG2K7

Tot Ion:106 Resp: 242348

Ion Ratio Lower Upper

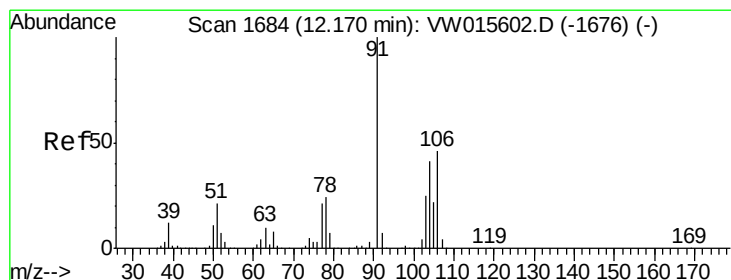
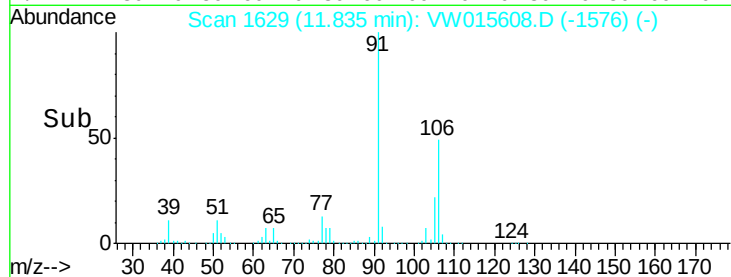
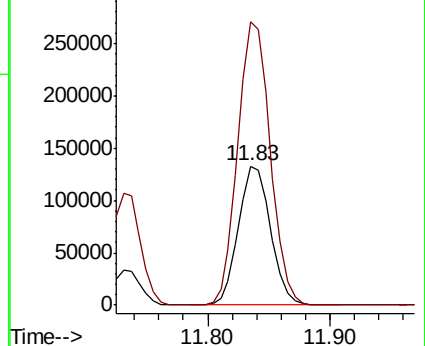
106 100

91 203.5 142.6 264.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#55

o-xylene

Concen: 16.903 ug/L

RT: 12.17 min Scan# 1684

Delta R.T. -0.00 min

Lab File: VW015608.D

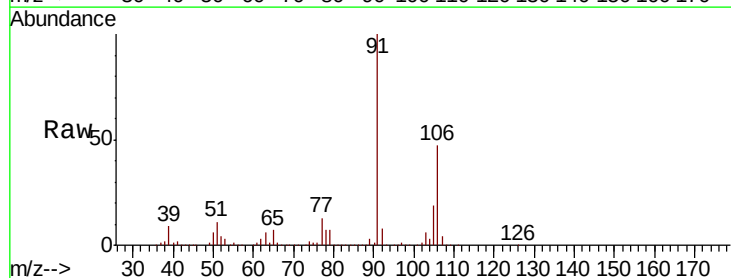
Acq: 16 Jun 2020 15:31

Tgt Ion:106 Resp: 118667

Ion Ratio Lower Upper

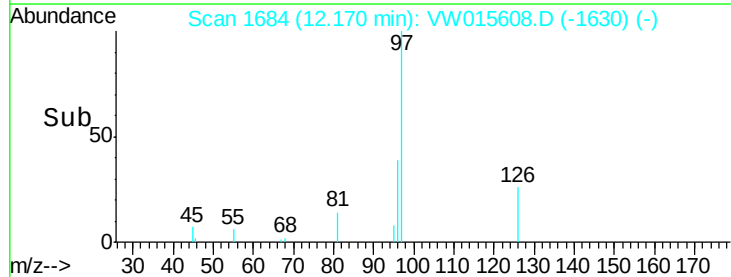
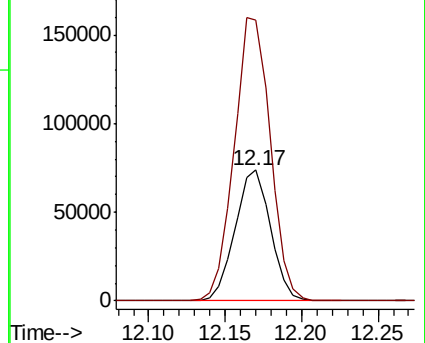
106 100

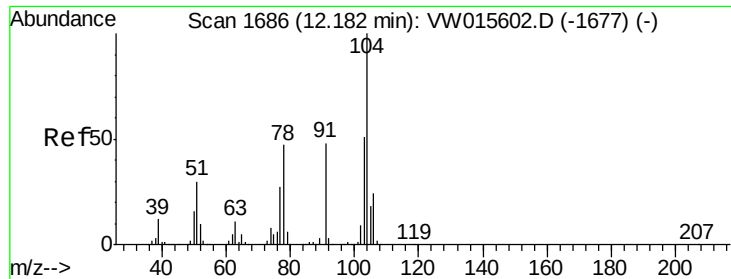
91 215.0 149.0 276.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW





#56

Stvrene

Concen: 0.711 ug/L

RT: 12.17 min Scan# 1684

Delta R.T. -0.01 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Instrument :

MSVOA\_W

ClientSampleId :

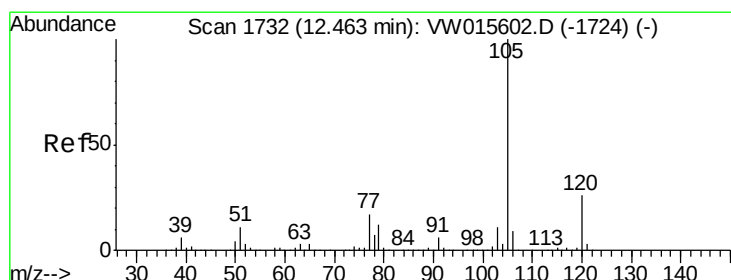
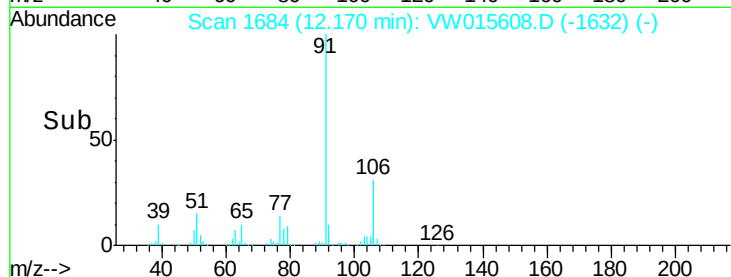
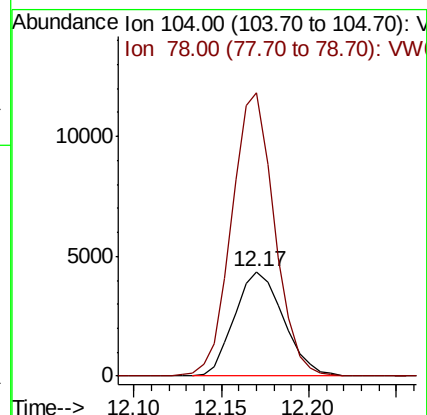
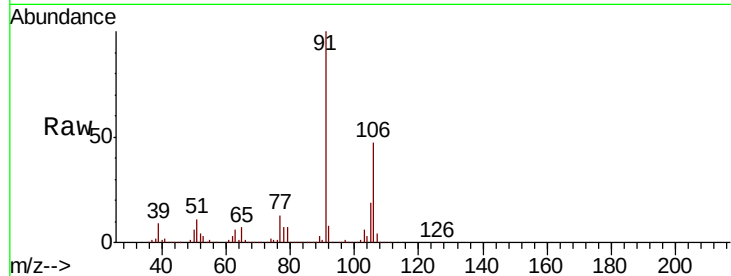
BG2K7

Tot Ion:104 Resp: 8529

Ion Ratio Lower Upper

104 100

78 270.1 32.9 61.1#



#57

Isopropylbenzene

Concen: 0.687 ug/L

RT: 12.47 min Scan# 1733

Delta R.T. 0.01 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

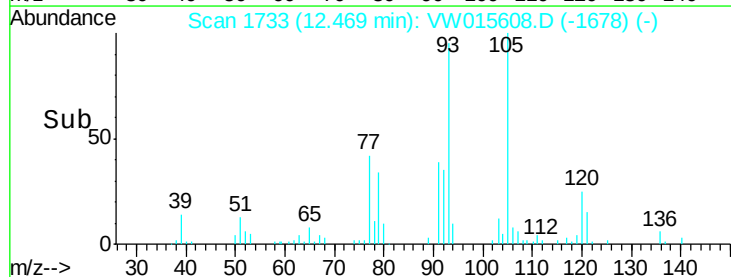
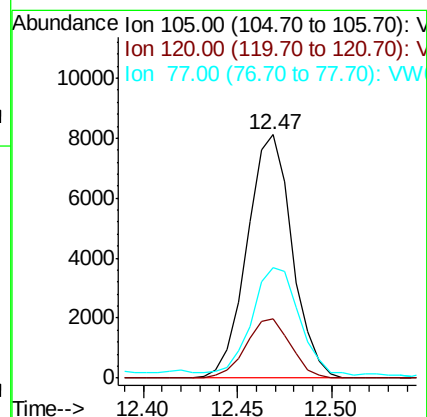
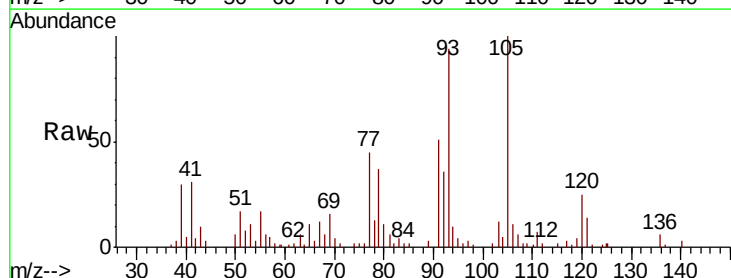
Tgt Ion:105 Resp: 13442

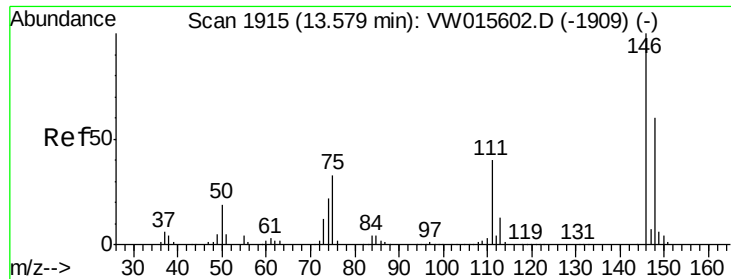
Ion Ratio Lower Upper

105 100

120 24.1 21.0 31.4

77 47.1 13.0 19.6#





#64

1,4-Dichlorobenzene

Concen: 0.833 ug/L

RT: 13.58 min Scan# 1916

Delta R.T. 0.01 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

Instrument :

MSVOA\_W

ClientSampleId :

BG2K7

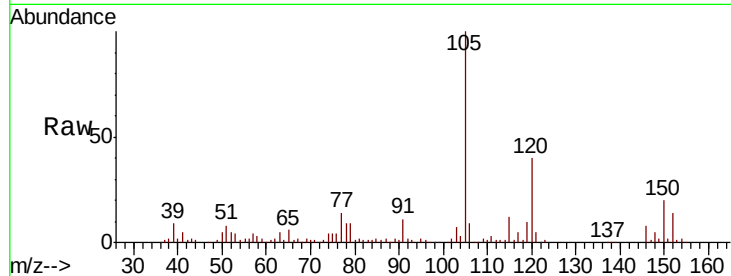
Tot Ion:146 Resp: 4719

Ion Ratio Lower Upper

146 100

111 40.2 28.1 52.1

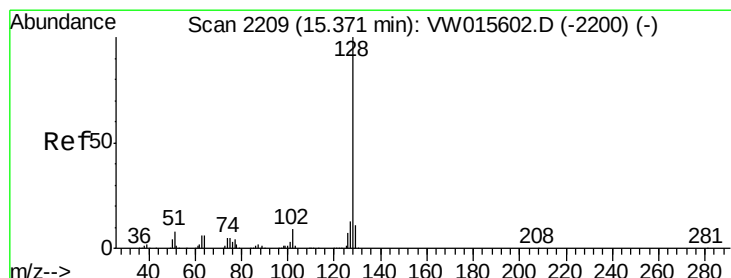
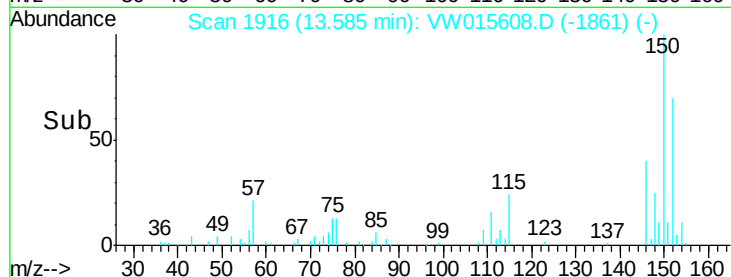
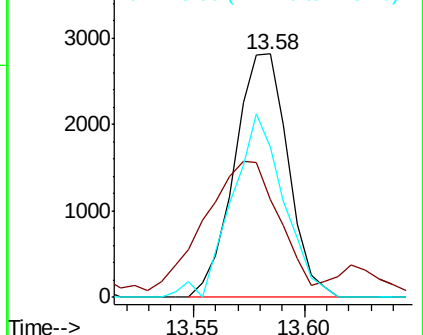
148 61.9 43.3 80.3



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



#69

Naphthalene

Concen: 0.892 ug/L

RT: 15.37 min Scan# 2209

Delta R.T. -0.00 min

Lab File: VW015608.D

Acq: 16 Jun 2020 15:31

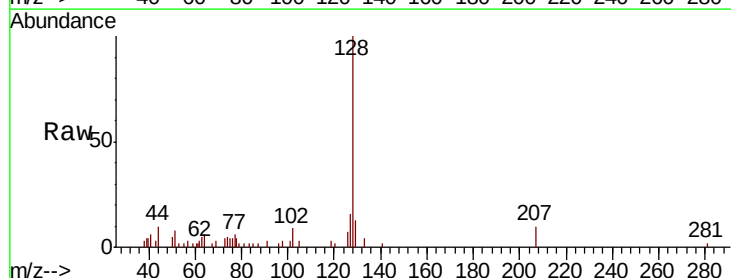
Tgt Ion:128 Resp: 5219

Ion Ratio Lower Upper

128 100

129 11.9 8.6 12.8

127 14.4 10.6 15.8



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

