

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW111120\  
 Data File : VW017161.D  
 Acq On : 11 Nov 2020 13:39  
 Operator : SY/VA  
 Sample : L4693-09  
 Misc : 5.33G/10ML/MSVOA W/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 BG4D9

Manual Integrations  
 APPROVED

MMDadoda  
 11/13/2020 11:41:02 AM

Quant Time: Nov 12 03:51:15 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM110420S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Nov 12 03:07:51 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.85  | 114  | 474848   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 385031   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 149598   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.35   | 65    | 142629   | 23.85    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 95.40%  |
| 7) Chloroethane-d5             | 2.90   | 69    | 119149   | 25.85    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 103.40% |
| 10) 1,1-Dichloroethene-d2      | 4.03   | 63    | 194476   | 18.18    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 72.72%  |
| 20) 2-Butanone-d5              | 7.09   | 46    | 45121    | 33.73    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 67.46%  |
| 24) Chloroform-d               | 7.65   | 84    | 269513   | 24.31    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 97.24%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 128961m  | 23.40    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 93.60%  |
| 29) Benzene-d6                 | 8.28   | 84    | 549656   | 28.03    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 112.12% |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 147845   | 27.26    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 109.04% |
| 37) Toluene-d8                 | 10.33  | 98    | 510784   | 27.63    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 110.52% |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 56928    | 23.28    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 93.12%  |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 32174    | 33.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 67.98%  |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 93509    | 19.79    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 79.16%  |
| 61) 1,2-Dichlorobenzene-d4     | 13.85  | 152   | 136271   | 25.85    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 103.40% |

## Target Compounds

|                            |       |     |           |          | Ovalue    |
|----------------------------|-------|-----|-----------|----------|-----------|
| 13) Acetone                | 4.14  | 43  | 7390      | 8.252    | ug/L 98   |
| 14) Carbon disulfide       | 4.38  | 76  | 24013     | 1.497    | ug/L 99   |
| 16) Methylene chloride     | 4.92  | 84  | 9355      | 1.461    | ug/L 99   |
| 22) cis-1,2-Dichloroethene | 7.18  | 96  | 7875      | 1.221    | ug/L 92   |
| 34) Benzene                | 8.32  | 78  | 83512     | 4.131    | ug/L 100  |
| 35) Trichloroethene        | 9.10  | 95  | 1070823   | 189.074  | ug/L 99   |
| 43) 4-Methyl-2-pentanone   | 10.21 | 43  | 4078      | 1.399    | ug/L 92   |
| 44) Toluene                | 10.40 | 91  | 8565      | 0.385    | ug/L 96   |
| 47) Tetrachloroethene      | 10.87 | 164 | 23453305m | 4589.861 | ug/L      |
| 54) m,p-Xylene             | 11.84 | 106 | 3424      | 0.352    | ug/L 78   |
| 64) 1,4-Dichlorobenzene    | 13.58 | 146 | 4291      | 0.459    | ug/L 95   |
| 65) 1,2-Dichlorobenzene    | 13.87 | 146 | 3916      | 0.467    | ug/L # 92 |

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

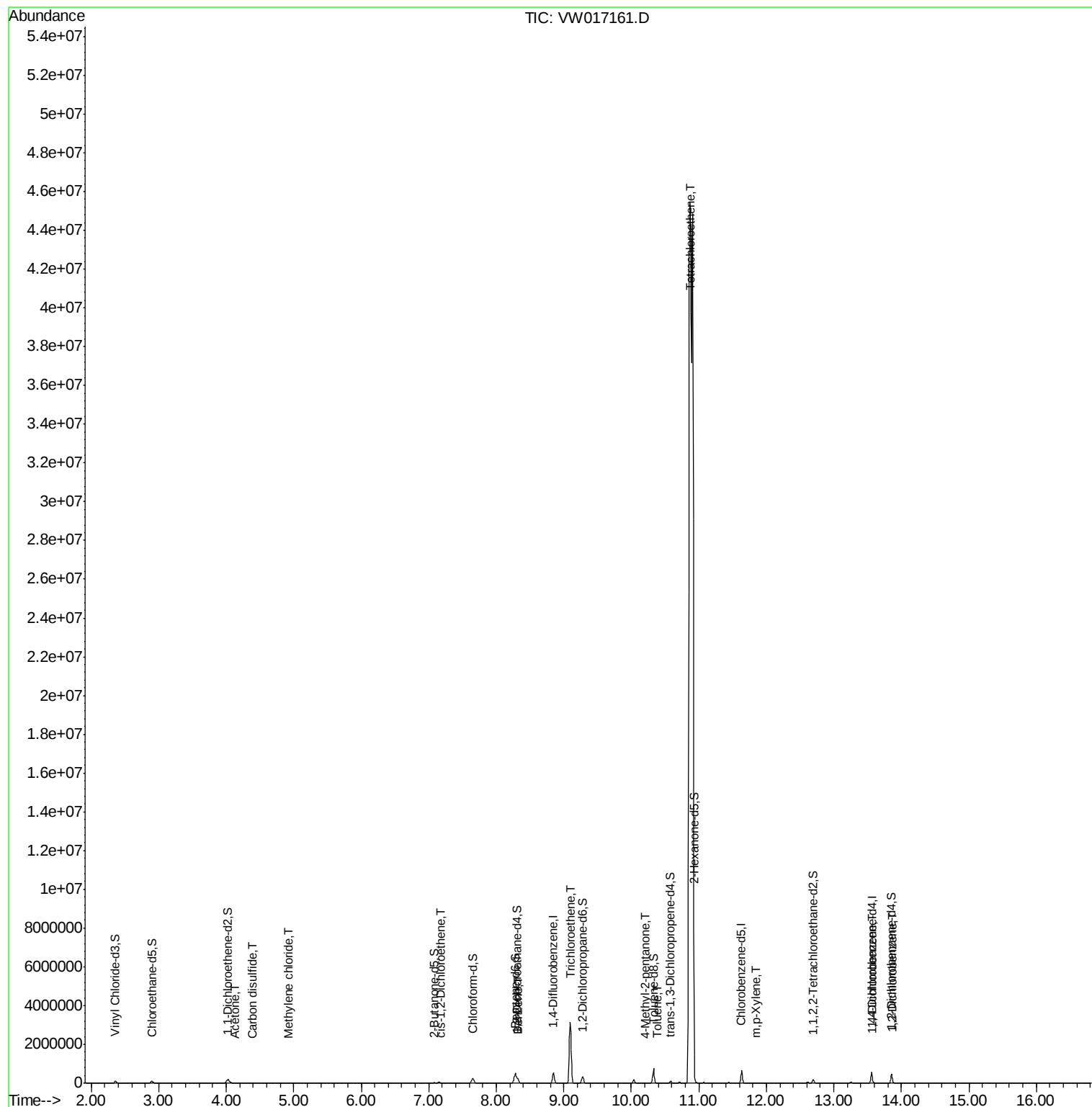
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW111120\  
Data File : VW017161.D  
Acq On : 11 Nov 2020 13:39  
Operator : SY/VA  
Sample : L4693-09  
Misc : 5.33G/10ML/MSVOA W/SOIL  
ALS Vial : 11 Sample Multiplier: 1

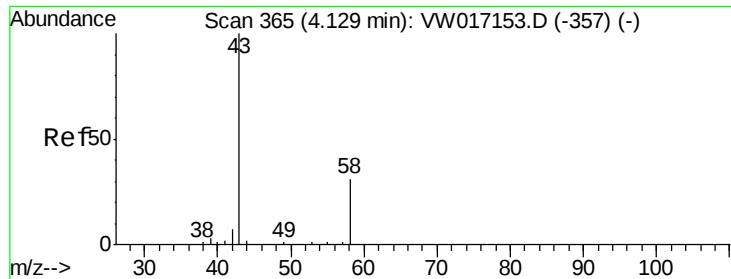
Instrument :  
MSVOA\_W  
ClientSampleId :  
BG4D9

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11/13/2020 11:41:02 AM

Quant Time: Nov 12 03:51:15 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM110420S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Nov 12 03:07:51 2020  
Response via : Initial Calibration





#13

Acetone

Concen: 8.252 ug/L

RT: 4.14 min Scan# 366

Delta R.T. 0.01 min

Lab File: VW017161.D

Acq: 11 Nov 2020 13:39

Instrument :

MSVOA\_W

ClientSampled :

BG4D9

Tot Ion: 43 Resp: 7390

Ion Ratio Lower Upper

43 100

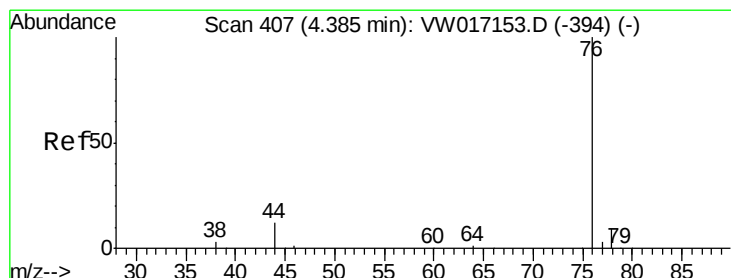
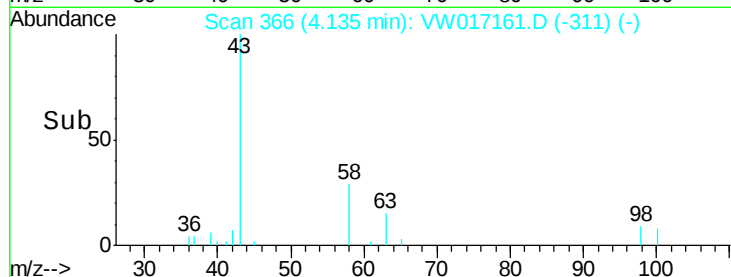
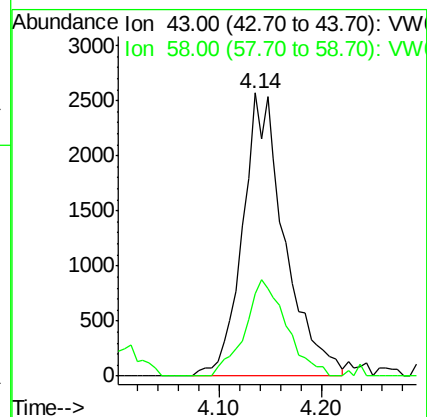
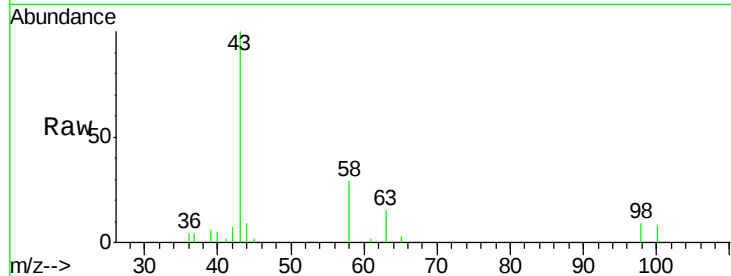
58 33.4 0.0 69.2

Manual Integrations

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#14

Carbon disulfide

Concen: 1.497 ug/L

RT: 4.38 min Scan# 407

Delta R.T. -0.00 min

Lab File: VW017161.D

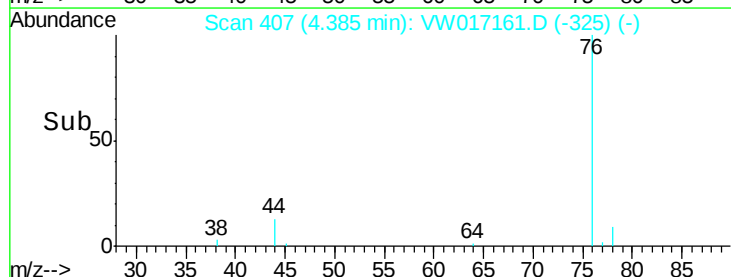
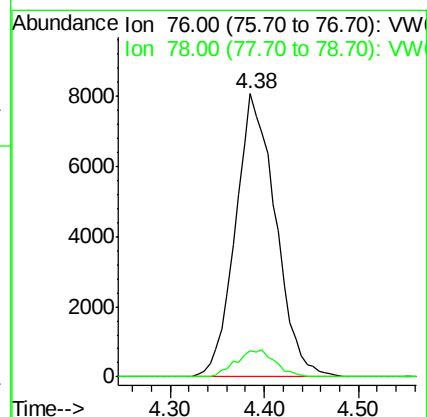
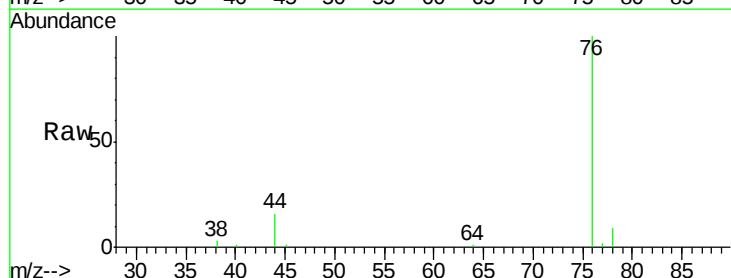
Acq: 11 Nov 2020 13:39

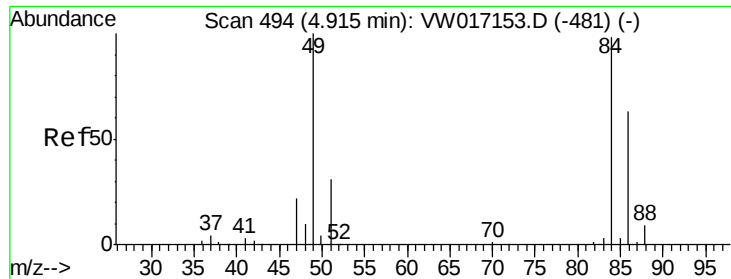
Tgt Ion: 76 Resp: 24013

Ion Ratio Lower Upper

76 100

78 9.0 7.6 11.4





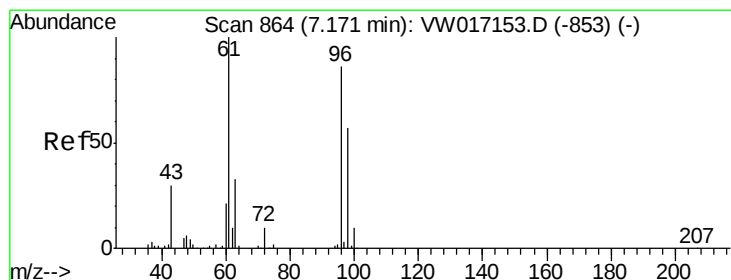
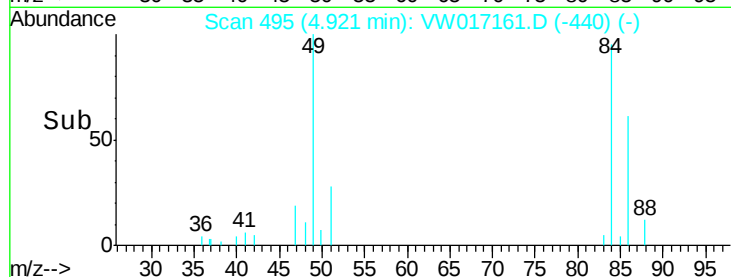
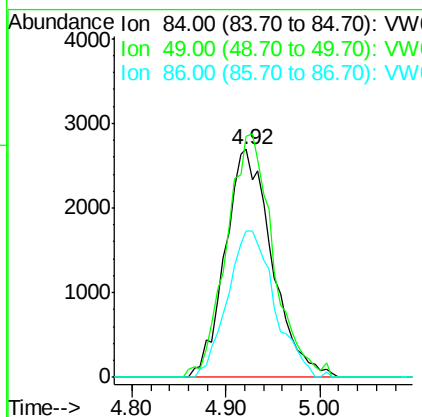
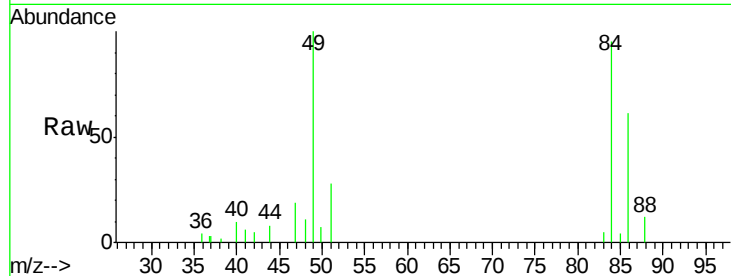
#16  
Methylene chloride  
Concen: 1.461 ug/L  
RT: 4.92 min Scan# 495  
Delta R.T. 0.01 min  
Lab File: VW017161.D  
Acq: 11 Nov 2020 13:39

Instrument :  
MSVOA\_W  
ClientSampled :  
BG4D9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 49      | 105.6 | 72.3  | 134.3 |
| 86      | 64.4  | 45.1  | 83.7  |

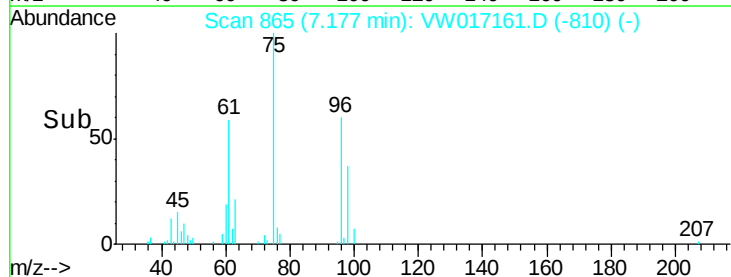
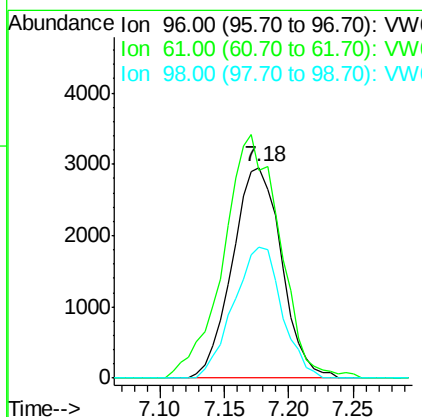
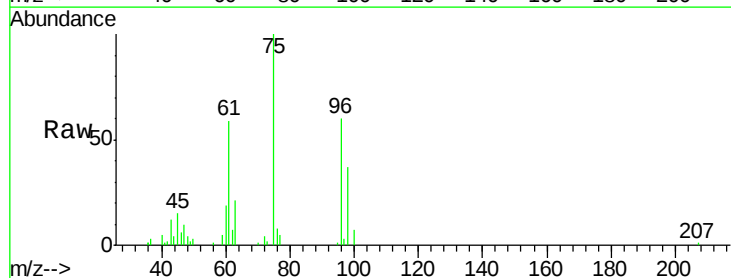
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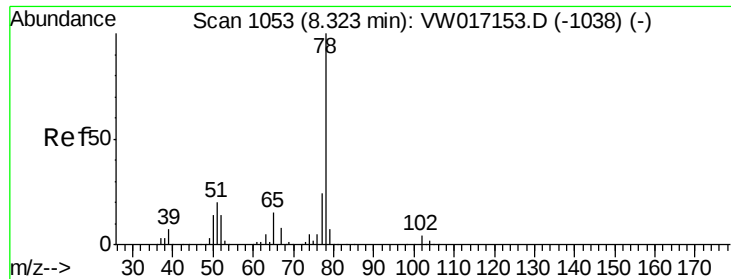
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#22  
cis-1,2-Dichloroethene  
Concen: 1.221 ug/L  
RT: 7.18 min Scan# 865  
Delta R.T. 0.01 min  
Lab File: VW017161.D  
Acq: 11 Nov 2020 13:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 98.5  | 77.4  | 143.8 |
| 98      | 62.0  | 45.1  | 83.7  |





#34

Benzene

Concen: 4.131 ug/L

RT: 8.32 min Scan# 1053

Delta R.T. -0.00 min

Lab File: VW017161.D

Acq: 11 Nov 2020 13:39

Instrument :

MSVOA\_W

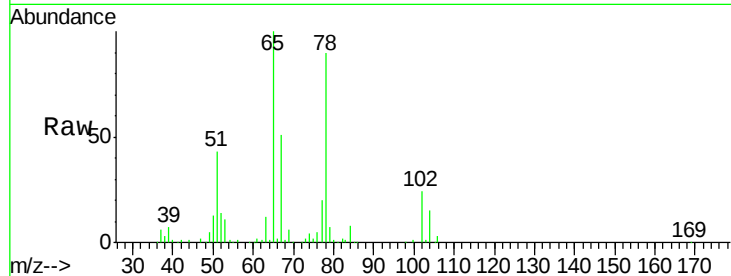
ClientSampleId :

BG4D9

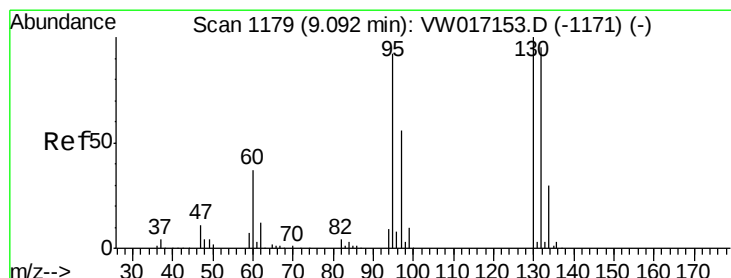
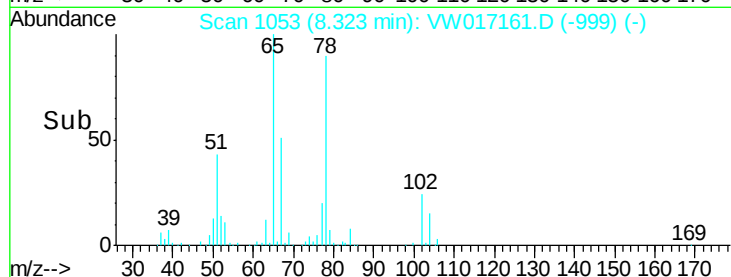
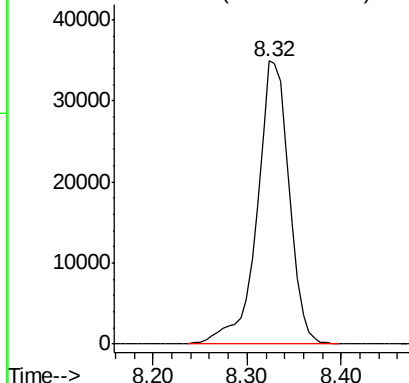
Tgt Ion: 78 Resp: 83512

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Abundance Ion 78.00 (77.70 to 78.70): VW



#35

Trichloroethene

Concen: 189.074 ug/L

RT: 9.10 min Scan# 1180

Delta R.T. 0.01 min

Lab File: VW017161.D

Acq: 11 Nov 2020 13:39

Tgt Ion: 95 Resp: 1070823

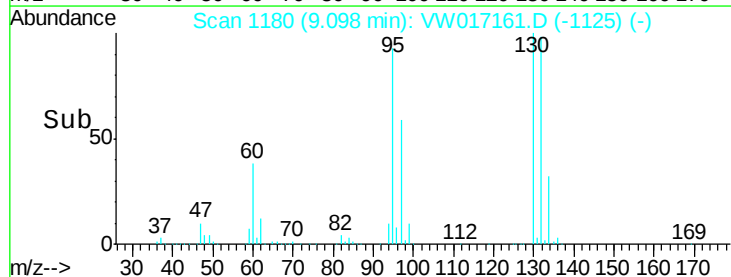
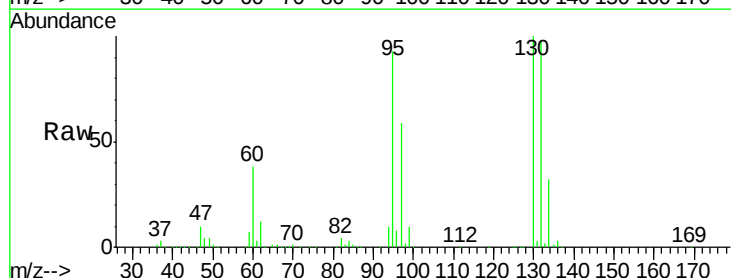
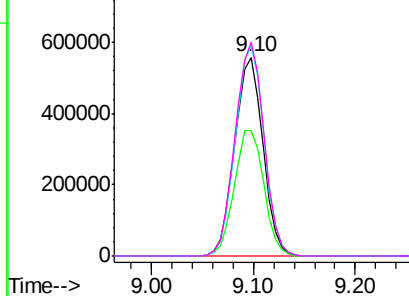
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 65.9  | 45.0  | 83.6  |
| 132 | 106.6 | 73.7  | 136.9 |
| 130 | 109.5 | 77.1  | 143.1 |

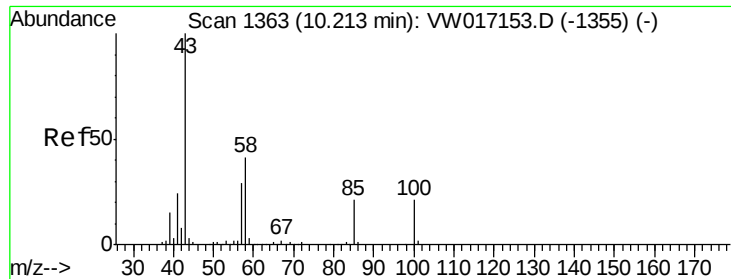
Abundance Ion 95.00 (94.70 to 95.70): VW

Ion 97.00 (96.70 to 97.70): VW

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V





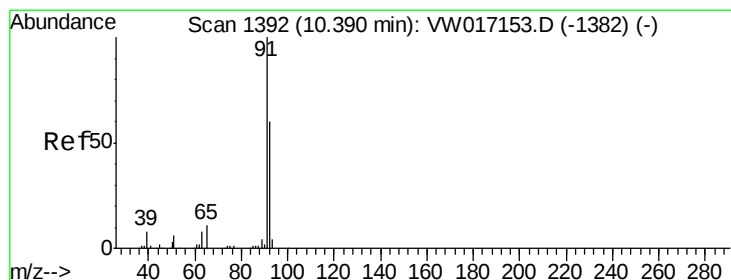
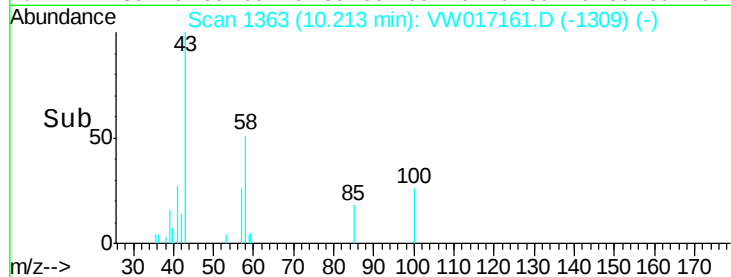
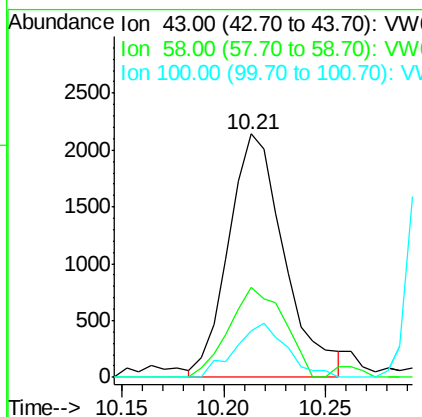
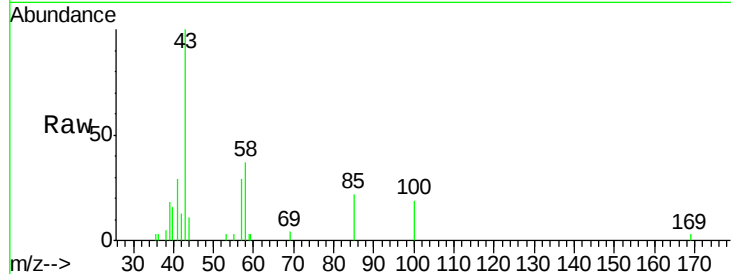
#43  
4-Methyl-2-pentanone  
Concen: 1.399 ug/L  
RT: 10.21 min Scan# 1363  
Delta R.T. -0.00 min  
Lab File: VW017161.D  
Acq: 11 Nov 2020 13:39

Instrument :  
MSVOA\_W  
ClientSampleId :  
BG4D9

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 36.5  | 35.0  | 52.6  |
| 100     | 20.5  | 16.6  | 24.8  |

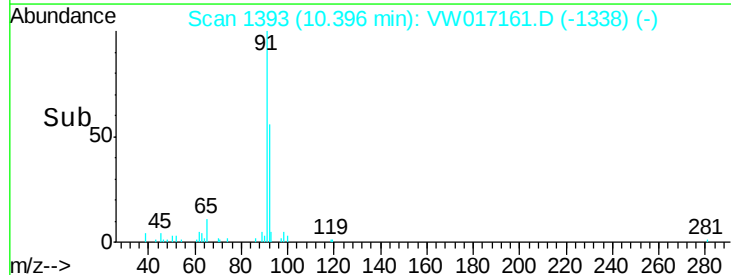
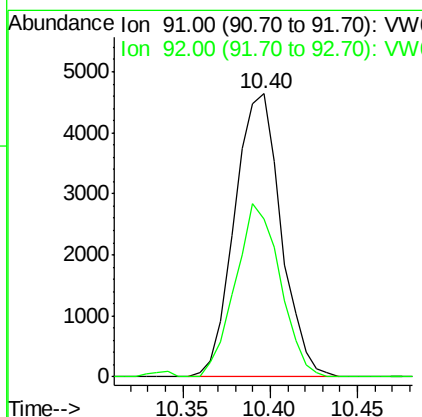
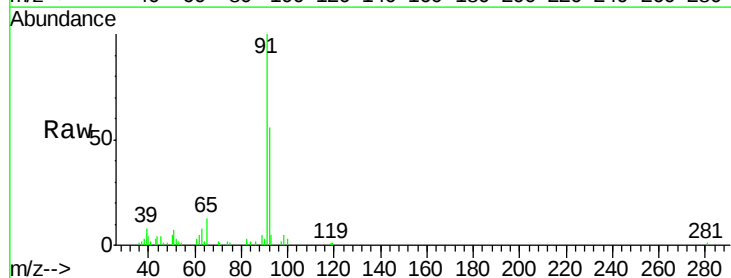
Manual Integrations  
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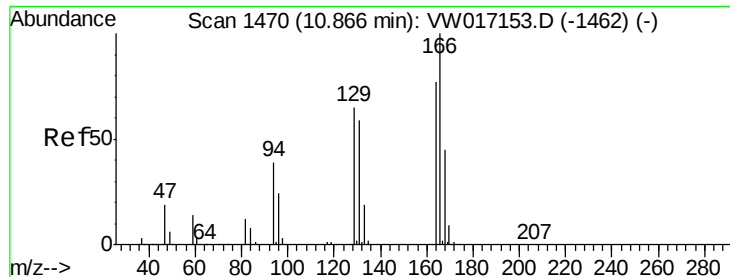
MMDadoda  
11/13/2020 11:41:02 AM



#44  
Toluene  
Concen: 0.385 ug/L  
RT: 10.40 min Scan# 1393  
Delta R.T. 0.01 min  
Lab File: VW017161.D  
Acq: 11 Nov 2020 13:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 55.7  | 41.4  | 76.8  |





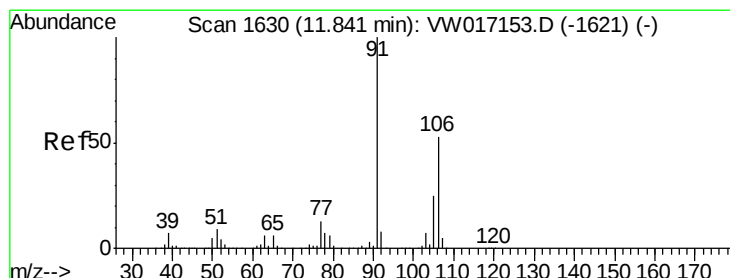
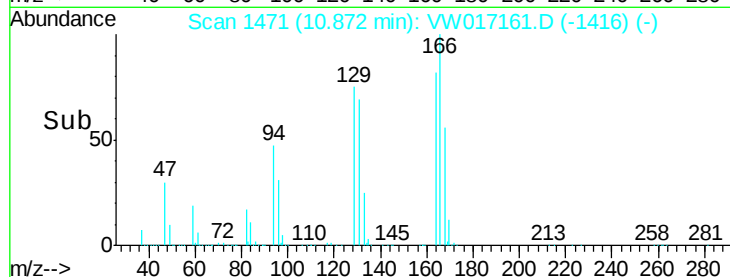
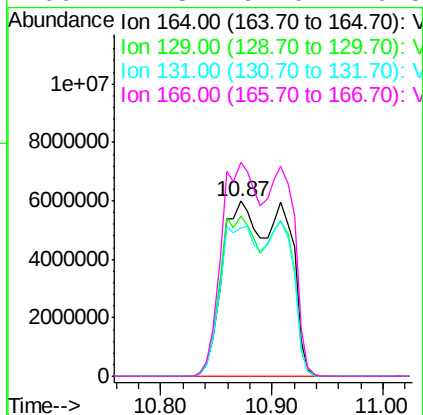
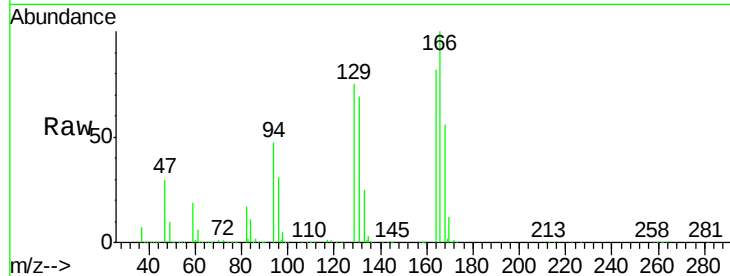
#47  
Tetrachloroethene  
Concen: 4589.861 ug/L m  
RT: 10.87 min Scan# 1471  
Delta R.T. 0.01 min  
Lab File: VW017161.D  
Acq: 11 Nov 2020 13:39

Instrument :  
MSVOA\_W  
ClientSampleId :  
BG4D9

Tot Ion:164 Resp:23453305  
Ion Ratio Lower Upper  
164 100  
129 91.3 62.9 116.7  
131 84.5 63.3 117.5  
166 121.8 92.0 170.8

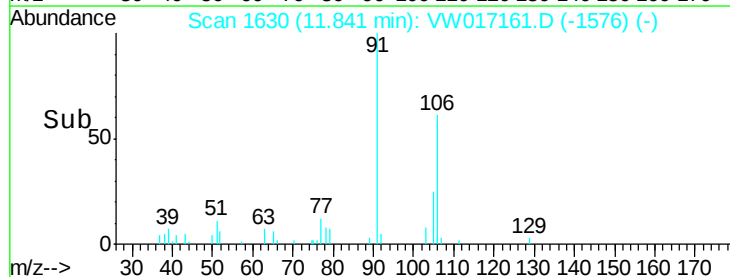
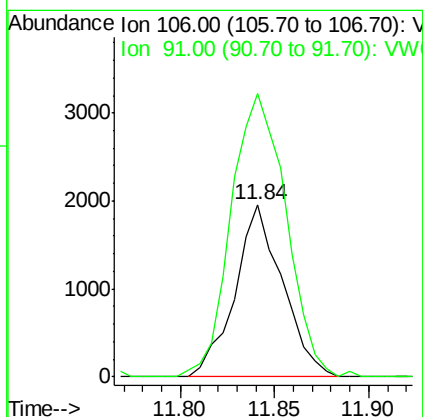
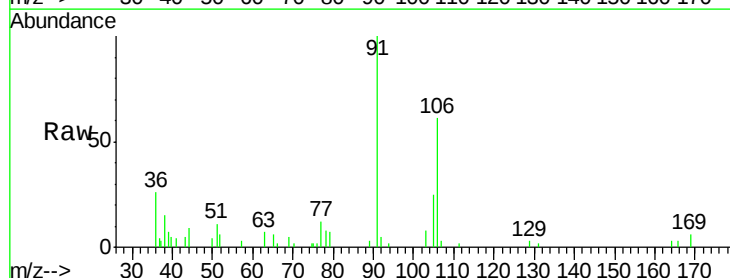
Manual Integrations  
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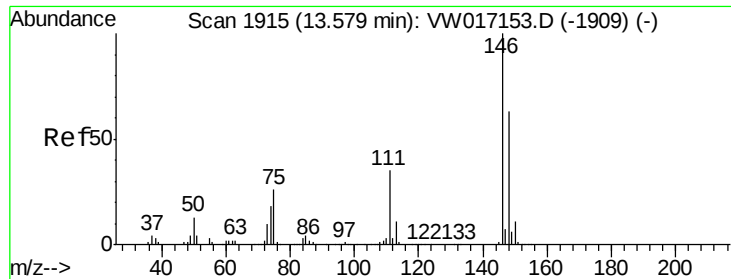
MMDadoda  
11/13/2020 11:41:02 AM



#54  
m,p-Xylene  
Concen: 0.352 ug/L  
RT: 11.84 min Scan# 1630  
Delta R.T. -0.00 min  
Lab File: VW017161.D  
Acq: 11 Nov 2020 13:39

Tgt Ion:106 Resp: 3424  
Ion Ratio Lower Upper  
106 100  
91 164.3 138.7 257.5





#64

1,4-Dichlorobenzene

Concen: 0.459 ug/L

RT: 13.58 min Scan# 1915

Delta R.T. -0.00 min

Lab File: VW017161.D

Acq: 11 Nov 2020 13:39

Instrument :

MSVOA\_W

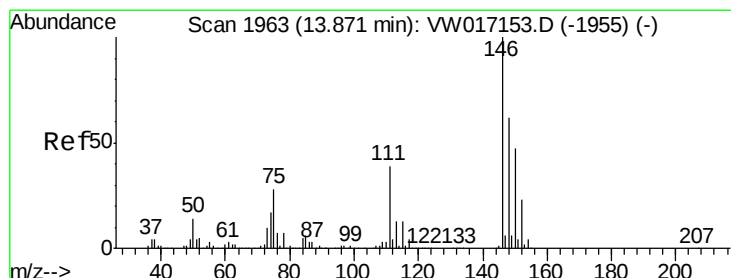
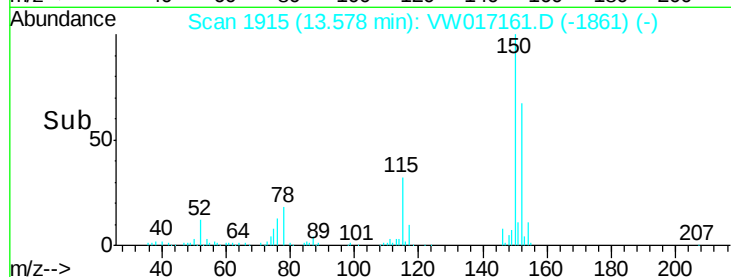
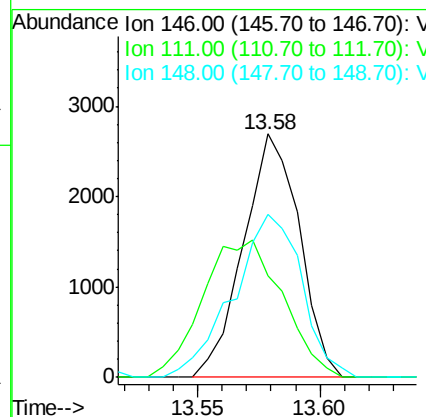
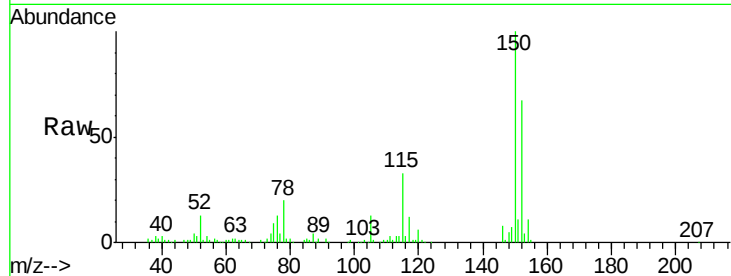
ClientSampled :

BG4D9

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 146   | Resp: | 4291  |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 41.6  | 24.5  | 45.5  |
| 148      | 66.8  | 45.5  | 84.5  |

Manual Integrations  
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11/13/2020 11:41:02 AM



#65

1,2-Dichlorobenzene

Concen: 0.467 ug/L

RT: 13.87 min Scan# 1963

Delta R.T. -0.00 min

Lab File: VW017161.D

Acq: 11 Nov 2020 13:39

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 3916  |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 50.6  | 30.5  | 45.7# |
| 148      | 62.6  | 50.3  | 75.5  |

