

Data Path : Z:\VOASRV\HPCHEM1\MSVOA R\DATA\VR092618\  
 Data File : VR025858.D  
 Acq On : 26 Sep 2018 11:57  
 Operator : SY/MD  
 Sample : J5011-02  
 Misc : 25mL/MSVOA R/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_R  
 ClientSampleId :

Quant Time: Sep 27 07:50:31 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR092118WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu Sep 27 07:50:08 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.46  | 114  | 378671   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.29 | 117  | 300327   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.23 | 152  | 99575    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.15   | 65    | 120672   | 4.45     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 89.00%  |
| 7) Chloroethane-d5             | 2.63   | 69    | 108241   | 5.08     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 101.60% |
| 11) 1,1-Dichloroethene-d2      | 3.63   | 63    | 226351   | 3.45     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 69.00%  |
| 20) 2-Butanone-d5              | 6.59   | 46    | 190168   | 52.61    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 105.22% |
| 24) Chloroform-d               | 7.20   | 84    | 241808   | 4.25     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 85.00%  |
| 26) 1,2-Dichloroethane-d4      | 7.90   | 65    | 107508   | 4.38     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 87.60%  |
| 32) Benzene-d6                 | 7.85   | 84    | 493110   | 4.42     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 88.40%  |
| 36) 1,2-Dichloropropane-d6     | 8.90   | 67    | 141865   | 4.66     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 93.20%  |
| 41) Toluene-d8                 | 9.97   | 98    | 425926   | 4.25     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 85.00%  |
| 43) trans-1,3-Dichloropropene- | 10.24  | 79    | 23526    | 2.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 55.80%  |
| 46) 2-Hexanone-d5              | 10.59  | 63    | 136816   | 48.69    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 97.38%  |
| 57) 1,1,2,2-Tetrachloroethane- | 12.36  | 84    | 53118    | 4.59     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 91.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 13.51  | 152   | 73542    | 4.32     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 86.40%  |

## Target Compounds

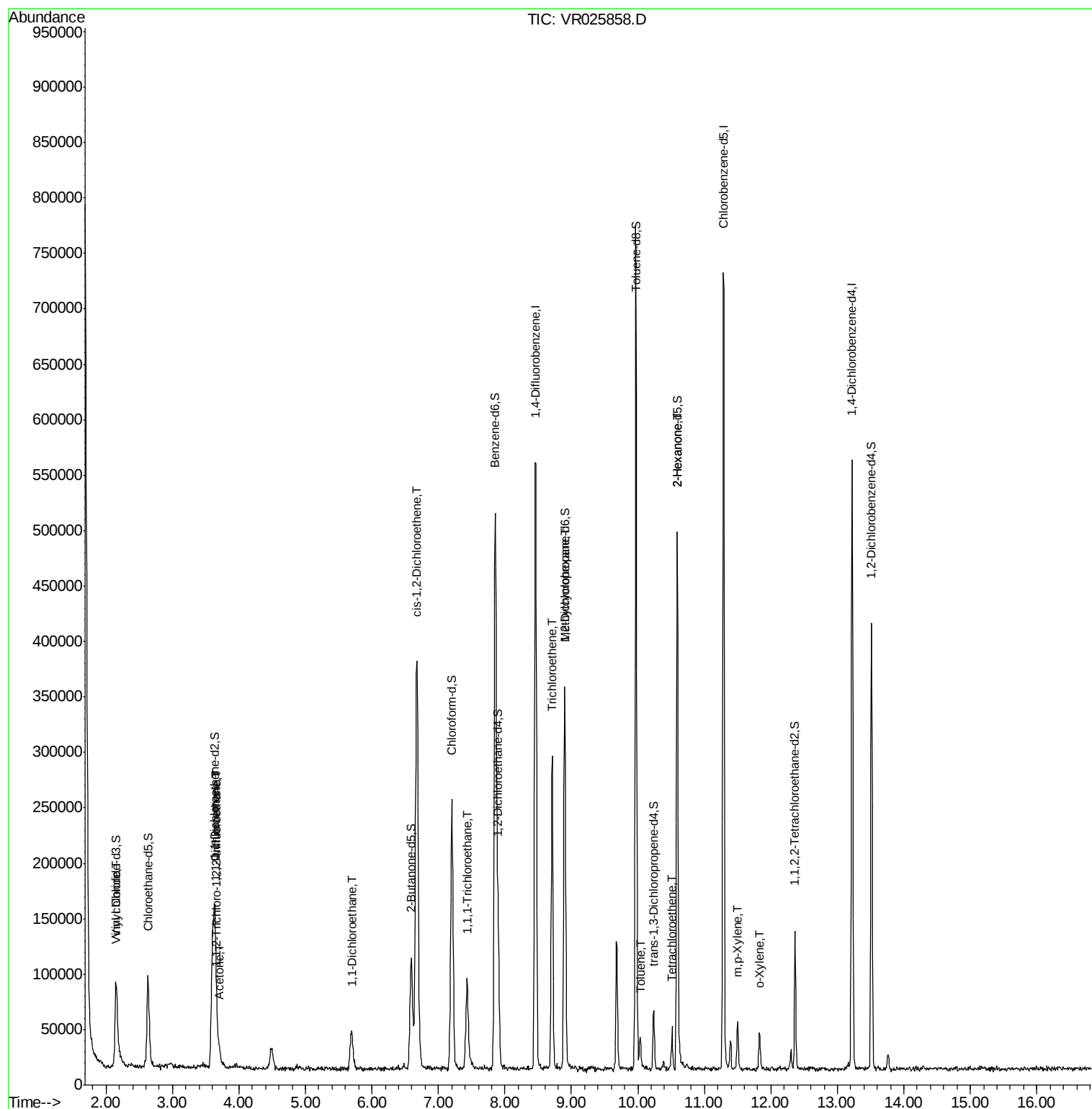
|                                |       |     |        |              | Ovalue |
|--------------------------------|-------|-----|--------|--------------|--------|
| 5) Vinyl chloride              | 2.16  | 62  | 26838  | 0.660 ug/L # | 73     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 3.67  | 101 | 12386  | 0.403 ug/L   | 89     |
| 12) 1,1-Dichloroethene         | 3.65  | 96  | 4782   | 0.146 ug/L # | 1      |
| 13) Acetone                    | 3.70  | 43  | 9264   | 3.884 ug/L   | 94     |
| 19) 1,1-Dichloroethane         | 5.69  | 63  | 52278  | 0.692 ug/L   | 97     |
| 22) cis-1,2-Dichloroethene     | 6.67  | 96  | 201177 | 5.405 ug/L # | 98     |
| 29) 1,1,1-Trichloroethane      | 7.43  | 97  | 66343  | 1.094 ug/L   | 95     |
| 34) Trichloroethene            | 8.71  | 95  | 94147  | 2.250 ug/L   | 96     |
| 35) Methylcyclohexane          | 8.90  | 83  | 33997  | 0.495 ug/L # | 16     |
| 42) Toluene                    | 10.04 | 91  | 14922  | 0.093 ug/L   | 96     |
| 47) Tetrachloroethene          | 10.51 | 164 | 6351   | 0.265 ug/L   | 84     |
| 48) 2-Hexanone                 | 10.59 | 43  | 21657  | 2.691 ug/L # | 76     |
| 53) m,p-Xylene                 | 11.50 | 106 | 10774  | 0.162 ug/L   | 79     |
| 54) o-Xylene                   | 11.83 | 106 | 7093   | 0.116 ug/L   | 90     |

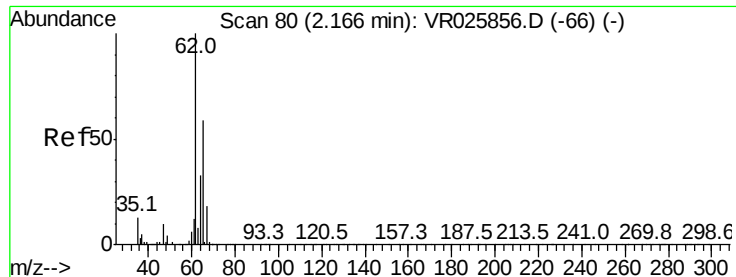
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA R\DATA\VR092618\  
Data File : VR025858.D  
Acq On : 26 Sep 2018 11:57  
Operator : SY/MD  
Sample : J5011-02  
Misc : 25mL/MSVOA R/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_R  
ClientSampleId :

Quant Time: Sep 27 07:50:31 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR092118WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Sep 27 07:50:08 2018  
Response via : Initial Calibration





#5

Vinyl chloride

Concen: 0.660 ug/L

RT: 2.16 min Scan# 79

Delta R.T. -0.01 min

Lab File: VR025858.D

Acq: 26 Sep 2018 11:57

Instrument :

MSVOA\_R

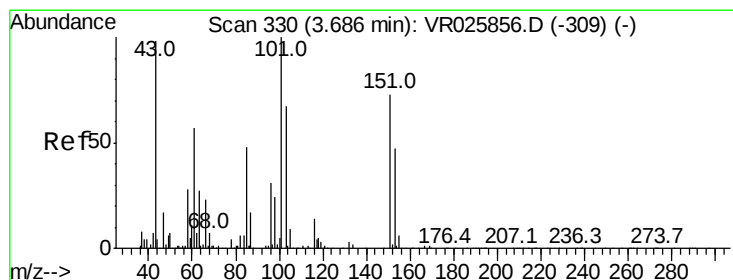
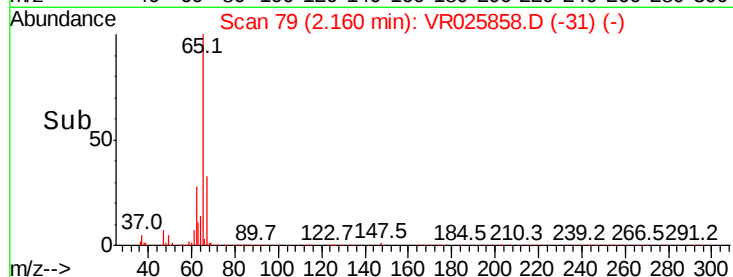
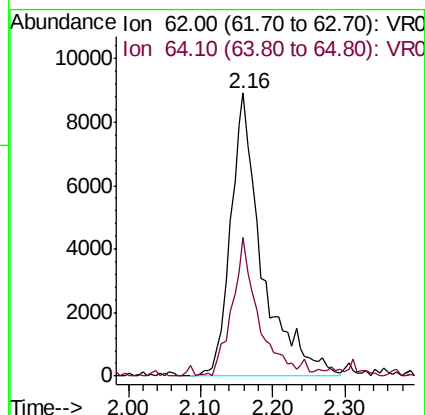
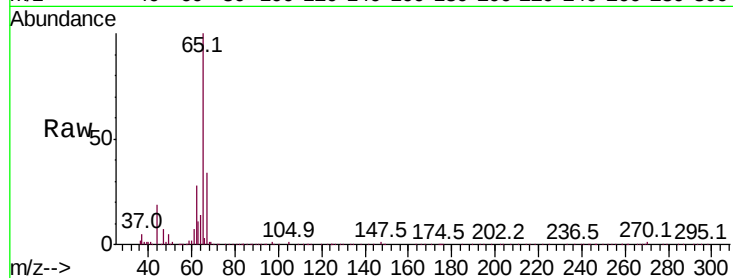
ClientSampleId :

Tot Ion: 62 Resp: 26838

Ion Ratio Lower Upper

62 100

64 49.2 23.5 43.7#



#10

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

Concen: 0.403 ug/L

RT: 3.67 min Scan# 328

Delta R.T. -0.01 min

Lab File: VR025858.D

Acq: 26 Sep 2018 11:57

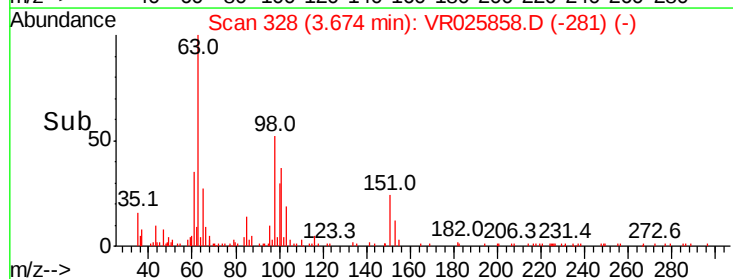
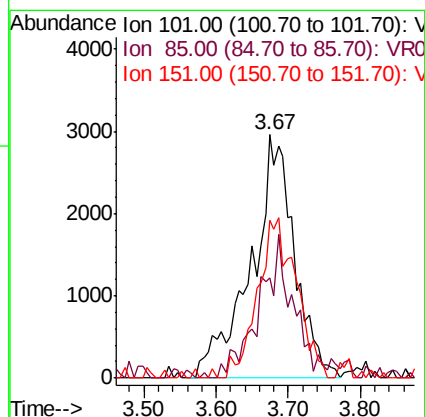
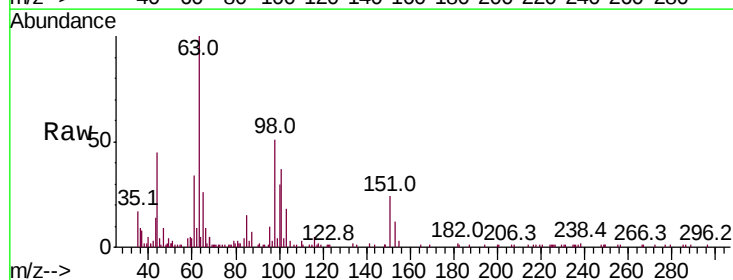
Tgt Ion: 101 Resp: 12386

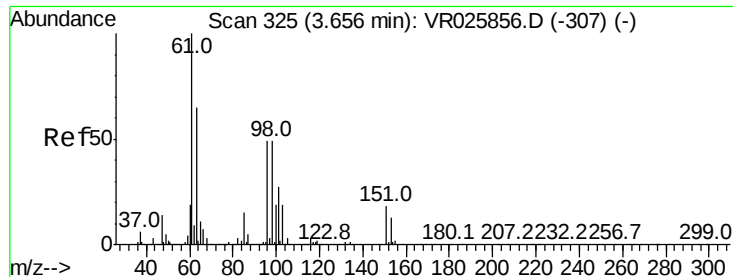
Ion Ratio Lower Upper

101 100

85 46.1 38.2 57.4

151 58.5 58.4 87.6





#12

1,1-Dichloroethene

Concen: 0.146 ug/L

RT: 3.65 min Scan# 324

Delta R.T. -0.01 min

Lab File: VR025858.D

Acq: 26 Sep 2018 11:57

Instrument :  
MSVOA\_R  
ClientSampled :

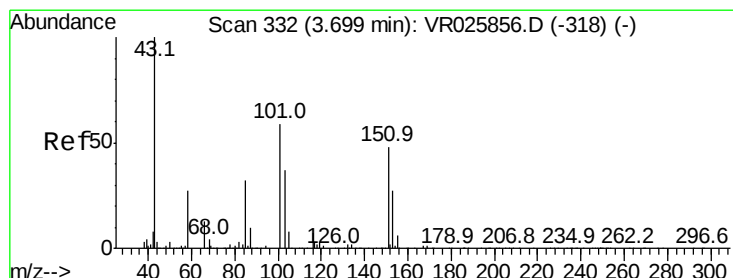
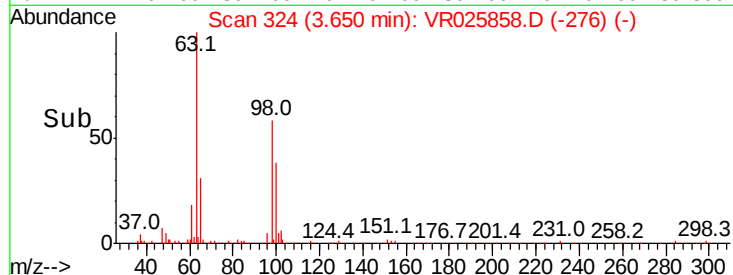
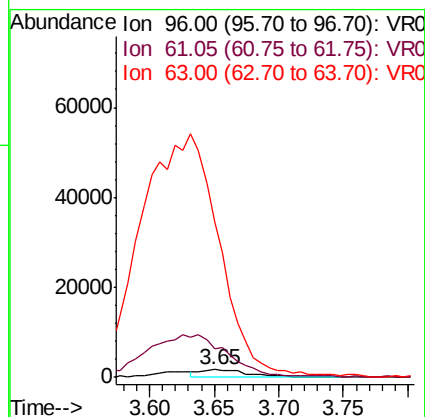
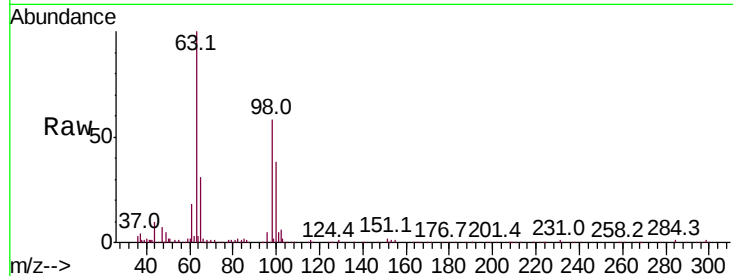
Tot Ion: 96 Resp: 4782

Ion Ratio Lower Upper

96 100

61 334.7 145.0 269.4#

63 1828.5 123.8 230.0#



#13

Acetone

Concen: 3.884 ug/L

RT: 3.70 min Scan# 333

Delta R.T. 0.01 min

Lab File: VR025858.D

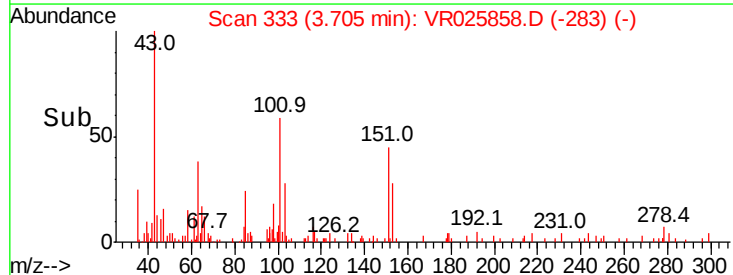
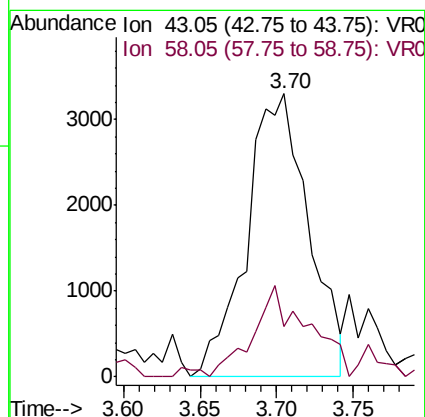
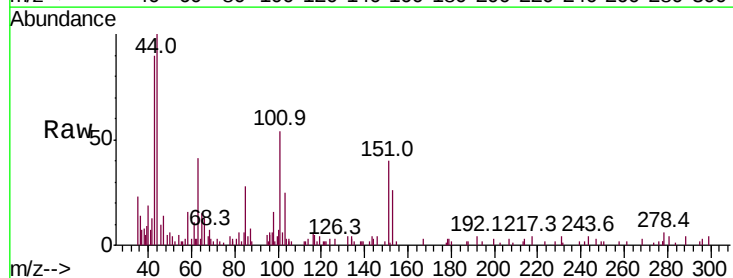
Acq: 26 Sep 2018 11:57

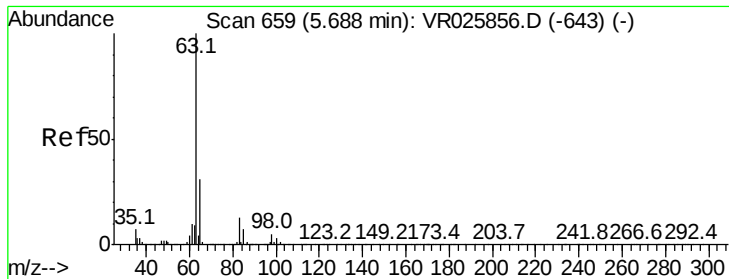
Tgt Ion: 43 Resp: 9264

Ion Ratio Lower Upper

43 100

58 28.6 0.0 51.4

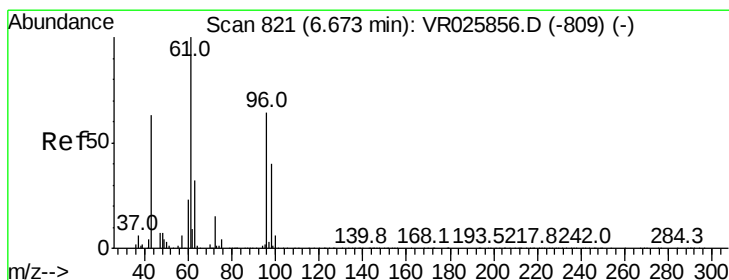
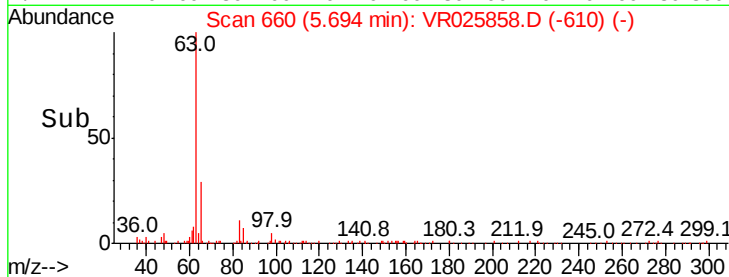
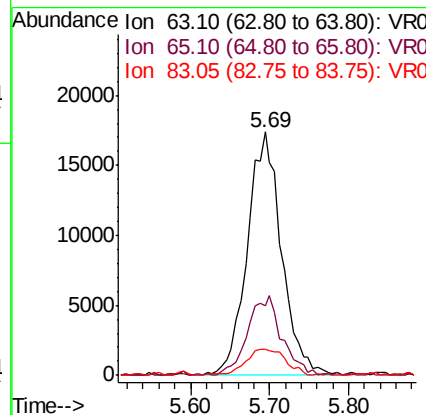
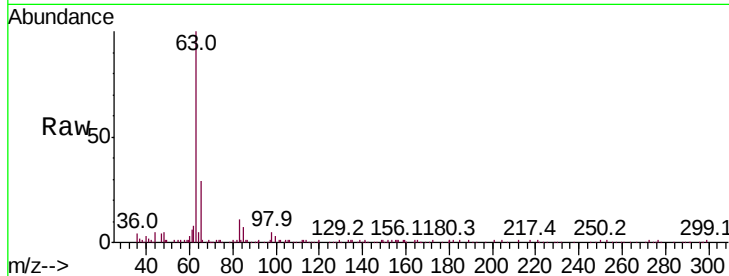




#19  
 1,1-Dichloroethane  
 Concen: 0.692 ug/L  
 RT: 5.69 min Scan# 660  
 Delta R.T. 0.01 min  
 Lab File: VR025858.D  
 Acq: 26 Sep 2018 11:57

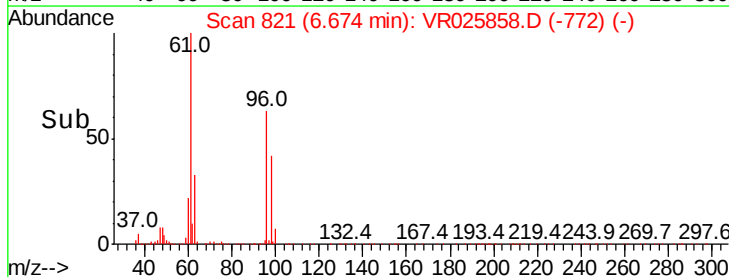
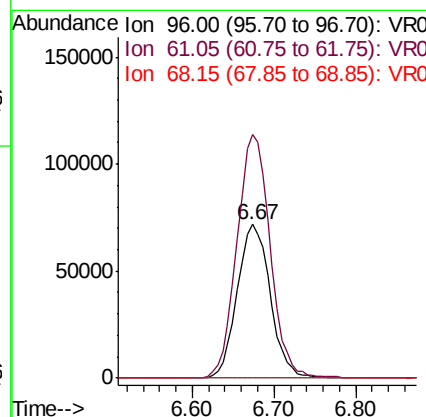
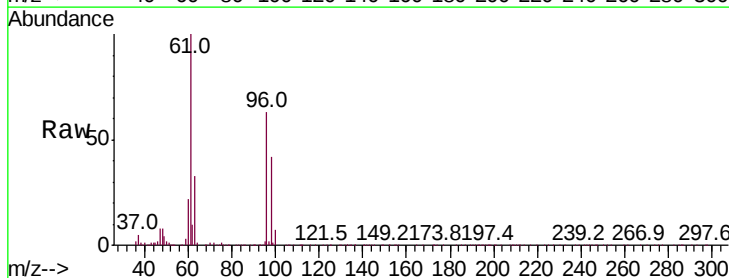
Instrument :  
 MSVOA\_R  
 ClientSampled :

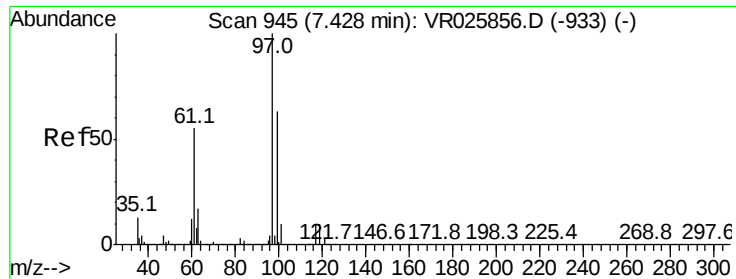
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 28.7  | 21.1  | 39.1  |
| 83      | 10.8  | 8.9   | 16.5  |



#22  
 cis-1,2-Dichloroethene  
 Concen: 5.405 ug/L  
 RT: 6.67 min Scan# 821  
 Delta R.T. 0.00 min  
 Lab File: VR025858.D  
 Acq: 26 Sep 2018 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 158.4 | 108.7 | 201.9 |
| 68      | 0.2   | 0.1   | 0.1#  |

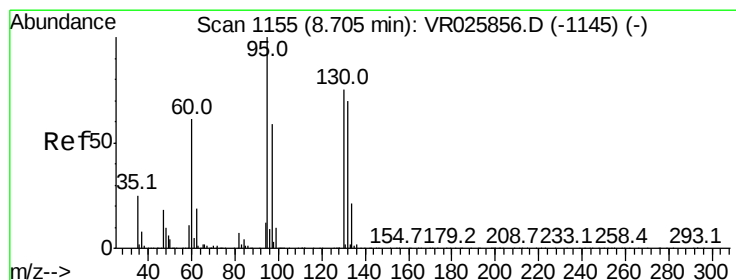
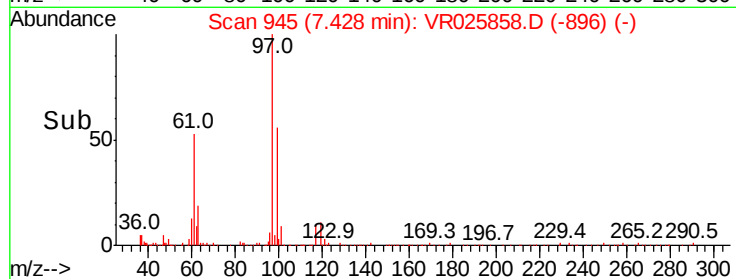
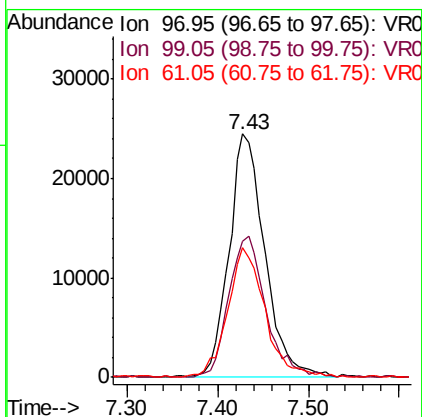
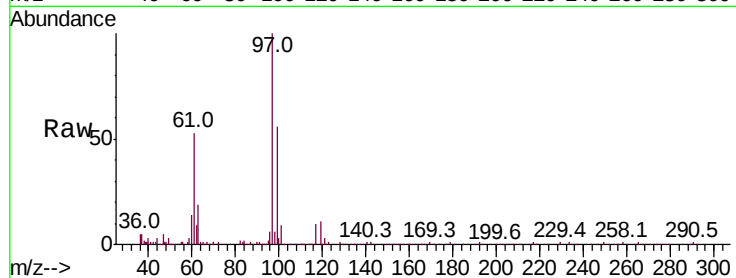




#29  
1,1,1-Trichloroethane  
Concen: 1.094 ug/L  
RT: 7.43 min Scan# 945  
Delta R.T. 0.00 min  
Lab File: VR025858.D  
Acq: 26 Sep 2018 11:57

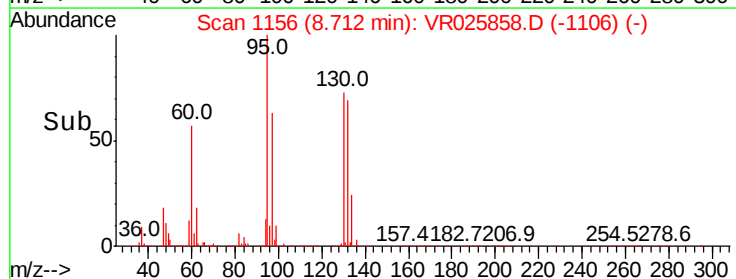
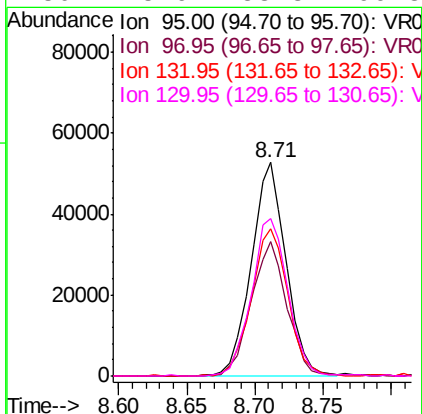
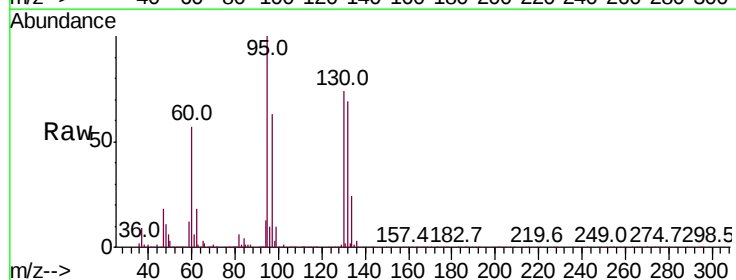
Instrument :  
MSVOA\_R  
ClientSampleId :

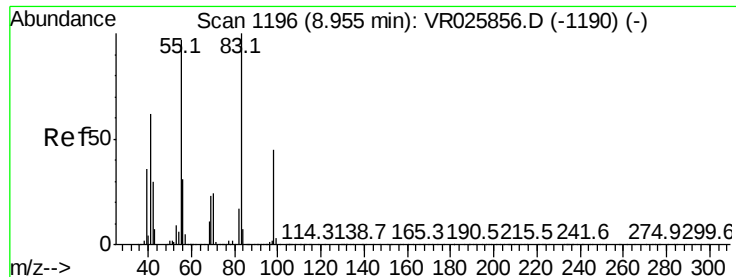
Tot Ion: 97 Resp: 66343  
Ion Ratio Lower Upper  
97 100  
99 60.7 51.0 76.6  
61 56.2 41.6 62.4



#34  
Trichloroethene  
Concen: 2.250 ug/L  
RT: 8.71 min Scan# 1156  
Delta R.T. 0.01 min  
Lab File: VR025858.D  
Acq: 26 Sep 2018 11:57

Tgt Ion: 95 Resp: 94147  
Ion Ratio Lower Upper  
95 100  
97 62.8 43.9 81.5  
132 68.7 53.3 98.9  
130 73.6 53.8 99.8

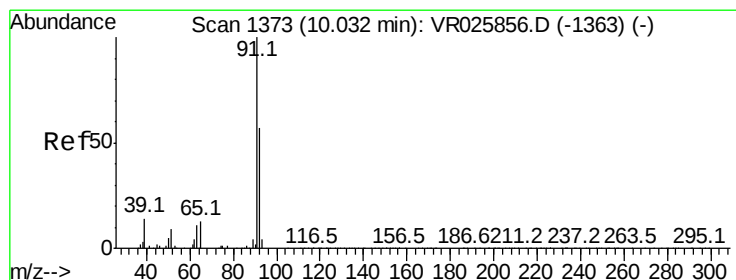
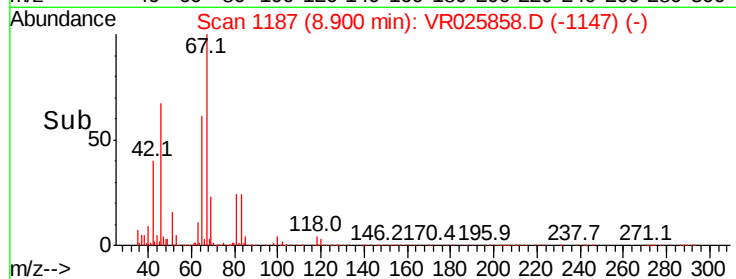
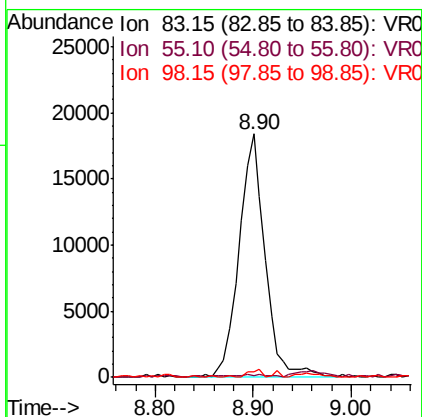
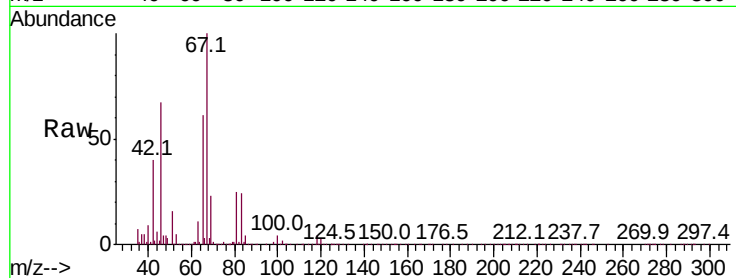




#35  
Methvlcvclohexane  
Concen: 0.495 ug/L  
RT: 8.90 min Scan# 1187  
Delta R.T. -0.05 min  
Lab File: VR025858.D  
Acq: 26 Sep 2018 11:57

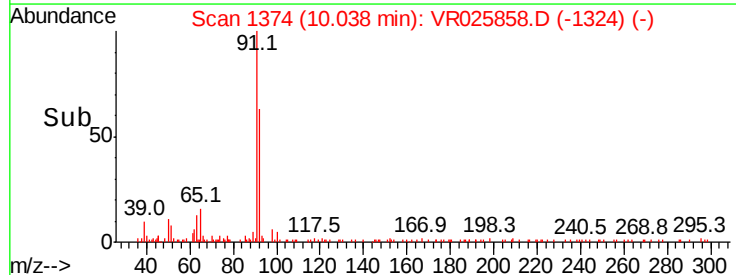
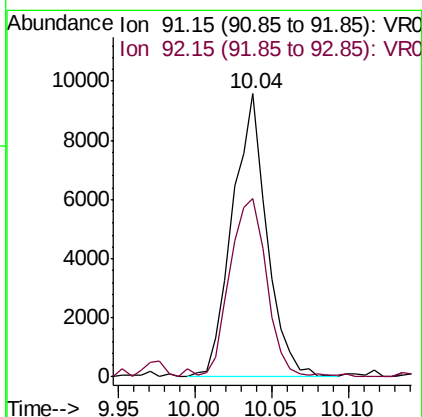
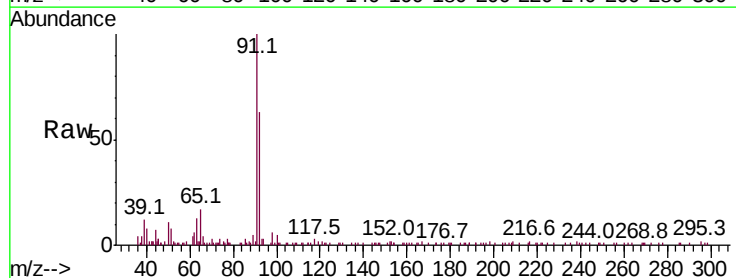
Instrument :  
MSVOA\_R  
ClientSampleId :

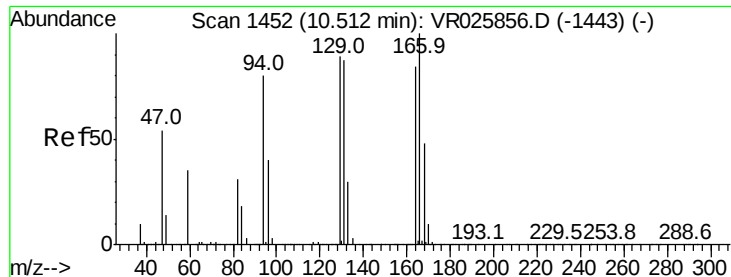
| Tot Ion   | 83    | Resp  | 33997  |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 83        | 100   |       |        |
| 55        | 1.6   | 71.8  | 107.6# |
| 98        | 1.7   | 34.2  | 51.4#  |



#42  
Toluene  
Concen: 0.093 ug/L  
RT: 10.04 min Scan# 1374  
Delta R.T. 0.01 min  
Lab File: VR025858.D  
Acq: 26 Sep 2018 11:57

| Tgt Ion   | 91    | Resp  | 14922 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 91        | 100   |       |       |
| 92        | 63.1  | 41.8  | 77.6  |





#47

Tetrachloroethene

Concen: 0.265 ug/L

RT: 10.51 min Scan# 1452

Delta R.T. 0.00 min

Lab File: VR025858.D

Acq: 26 Sep 2018 11:57

Instrument :

MSVOA\_R

ClientSampleId :

Tot Ion:164 Resp: 6351

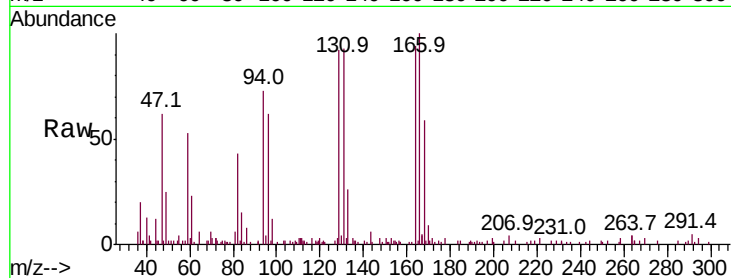
Ion Ratio Lower Upper

164 100

129 97.3 80.8 150.2

131 98.2 74.5 138.3

166 106.2 92.5 171.7

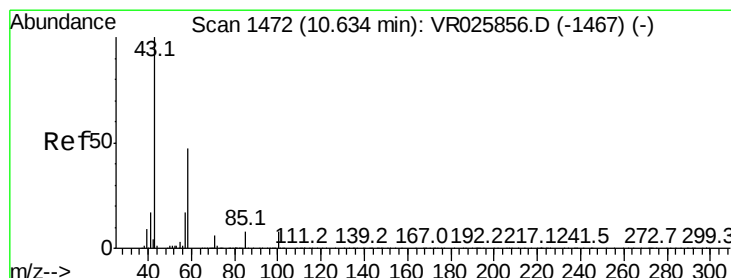
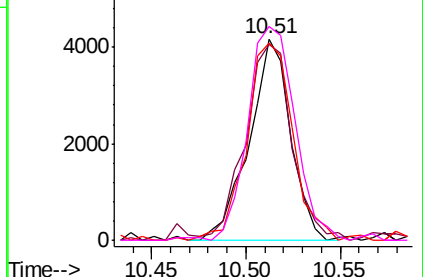
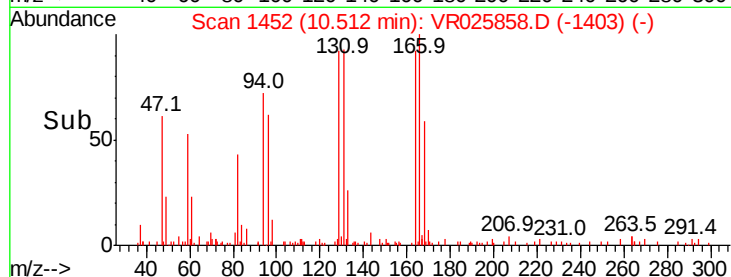


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V



#48

2-Hexanone

Concen: 2.691 ug/L

RT: 10.59 min Scan# 1465

Delta R.T. -0.04 min

Lab File: VR025858.D

Acq: 26 Sep 2018 11:57

Tgt Ion: 43 Resp: 21657

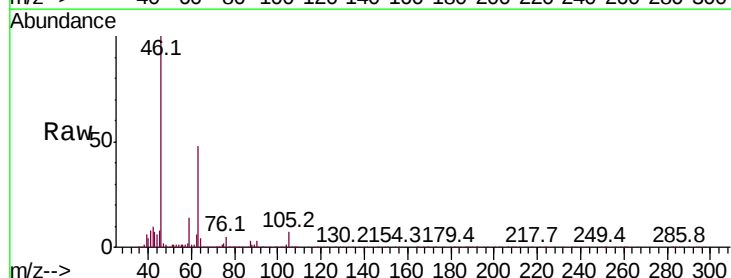
Ion Ratio Lower Upper

43 100

58 28.4 39.5 59.3#

57 22.3 14.6 21.8#

100 1.4 6.7 10.1#

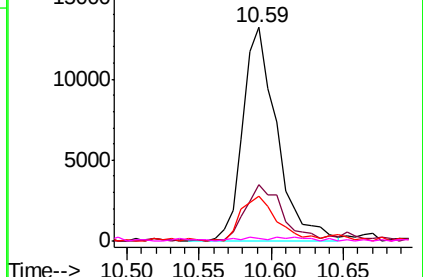
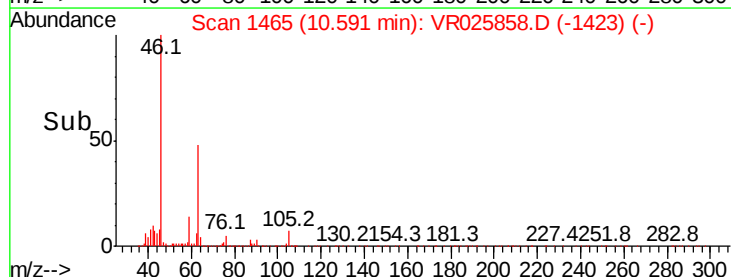


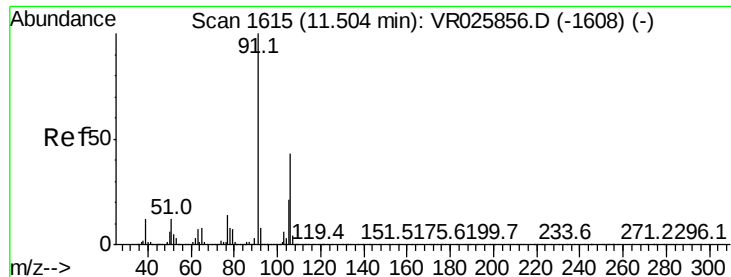
Abundance Ion 43.05 (42.75 to 43.75): VR0

Ion 58.05 (57.75 to 58.75): VR0

Ion 57.20 (56.90 to 57.90): VR0

Ion 100.15 (99.85 to 100.85): VR0





#53

m,p-Xylene

Concen: 0.162 ug/L

RT: 11.50 min Scan# 1614

Delta R.T. -0.01 min

Lab File: VR025858.D

Acq: 26 Sep 2018 11:57

Instrument :

MSVOA\_R

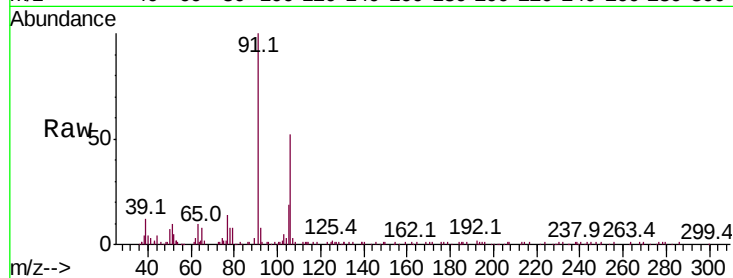
ClientSampleId :

Tot Ion:106 Resp: 10774

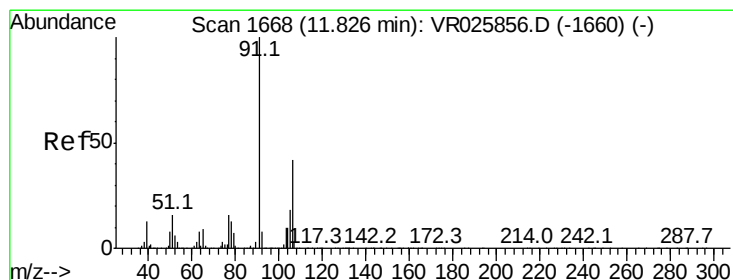
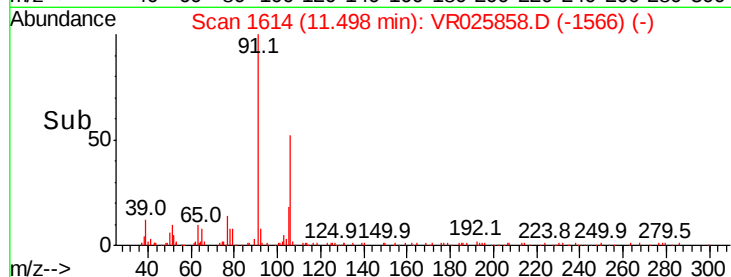
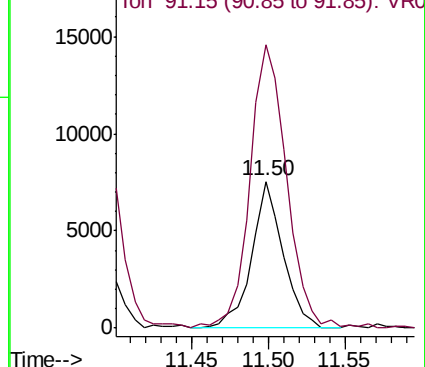
Ion Ratio Lower Upper

106 100

91 192.9 159.7 296.5



Abundance Ion 106.15 (105.85 to 106.85): V



#54

o-Xylene

Concen: 0.116 ug/L

RT: 11.83 min Scan# 1669

Delta R.T. 0.01 min

Lab File: VR025858.D

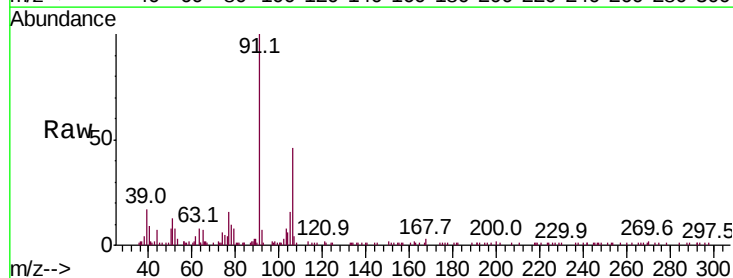
Acq: 26 Sep 2018 11:57

Tgt Ion:106 Resp: 7093

Ion Ratio Lower Upper

106 100

91 217.9 164.5 305.5



Abundance Ion 106.15 (105.85 to 106.85): V

