

Data Path : Z:\VOASRV\HPCHEM1\MSVOA R\DATA\VR092618\  
 Data File : VR025862.D  
 Acq On : 26 Sep 2018 14:24  
 Operator : SY/MD  
 Sample : J5011-11DL 40X  
 Misc : 25mL/MSVOA R/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_R  
 ClientSampleId :

Quant Time: Sep 27 07:51:07 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  | 391919   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.29 | 117  | 313647   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 0.00  | 152  | 0        | 0.00 | ug/L  | -13.22   |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.15   | 65    | 102164   | 3.64     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 72.80%  |
| 7) Chloroethane-d5             | 2.63   | 69    | 97060    | 4.40     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 88.00%  |
| 11) 1,1-Dichloroethene-d2      | 3.64   | 63    | 218856   | 3.22     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 64.40%  |
| 20) 2-Butanone-d5              | 6.59   | 46    | 191718   | 51.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 102.50% |
| 24) Chloroform-d               | 7.20   | 84    | 224931   | 3.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 76.40%  |
| 26) 1,2-Dichloroethane-d4      | 7.89   | 65    | 105183   | 4.14     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 82.80%  |
| 32) Benzene-d6                 | 7.85   | 84    | 465848   | 4.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 80.00%  |
| 36) 1,2-Dichloropropane-d6     | 8.90   | 67    | 136817   | 4.31     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 86.20%  |
| 41) Toluene-d8                 | 9.97   | 98    | 397898   | 3.80     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 76.00%  |
| 43) trans-1,3-Dichloropropene- | 10.24  | 79    | 26372    | 3.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 60.00%  |
| 46) 2-Hexanone-d5              | 10.59  | 63    | 140541   | 47.89    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 95.78%  |
| 57) 1,1,2,2-Tetrachloroethane- | 12.36  | 84    | 42023    | 3.48     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 69.60%  |
| 64) 1,2-Dichlorobenzene-d4     | 0.00   | 152   | 0        | 0.00     | ug/L |         |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 0.00%#  |

## Target Compounds

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 5) Vinyl chloride              | 2.17  | 62   | 43156    | 1.025  | ug/L   | 97     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 3.69  | 101  | 8834     | 0.278  | ug/L # | 67     |
| 12) 1,1-Dichloroethene         | 3.66  | 96   | 38951    | 1.152  | ug/L # | 45     |
| 15) Methyl Acetate             | 4.21  | 43   | 918      | 0.116  | ug/L # | 84     |
| 16) Methylene chloride         | 4.40  | 84   | 3235     | 0.106  | ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 5.69  | 63   | 106079   | 1.356  | ug/L   | 93     |
| 22) cis-1,2-Dichloroethene     | 6.67  | 96   | 343551   | 8.917  | ug/L # | 89     |
| 29) 1,1,1-Trichloroethane      | 7.43  | 97   | 363973   | 5.746  | ug/L   | 96     |
| 31) Carbon tetrachloride       | 7.43  | 117  | 40643    | 0.780  | ug/L   | 95     |
| 34) Trichloroethene            | 8.71  | 95   | 1957280  | 44.788 | ug/L   | 93     |
| 35) Methylcyclohexane          | 8.90  | 83   | 31898    | 0.445  | ug/L # | 14     |
| 37) 1,2-Dichloropropane        | 8.90  | 63   | 17032    | 0.464  | ug/L # | 93     |
| 45) 1,1,2-Trichloroethane      | 10.44 | 97   | 1960     | 0.127  | ug/L # | 71     |
| 47) Tetrachloroethene          | 10.51 | 164  | 32935    | 1.318  | ug/L   | 89     |
| 48) 2-Hexanone                 | 10.59 | 43   | 22210    | 2.642  | ug/L # | 69     |
| 49) Dibromochloromethane       | 10.51 | 129  | 32288    | 2.014  | ug/L # | 12     |

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MSVOA\_R  
ClientSampleId :

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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) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

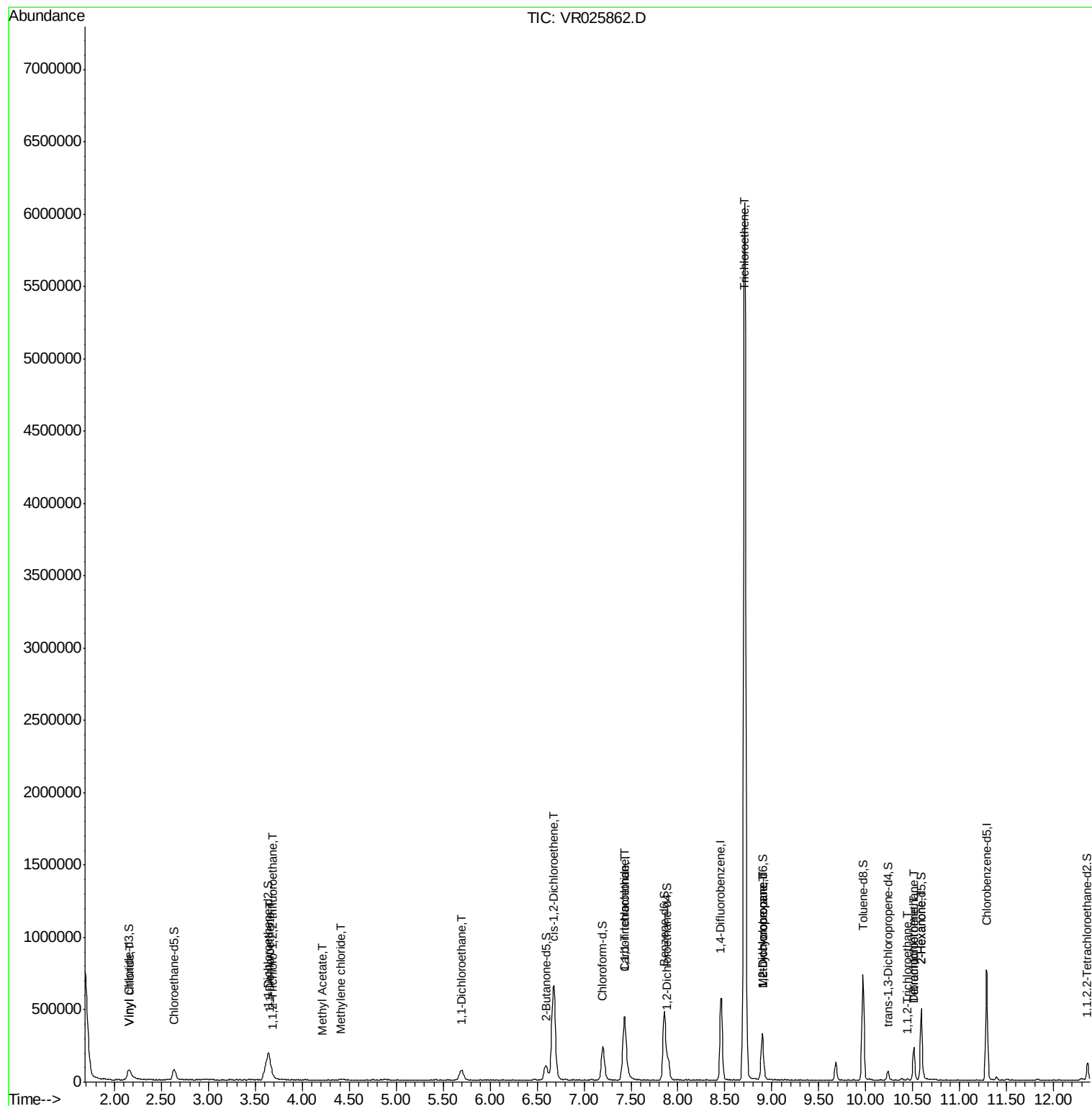
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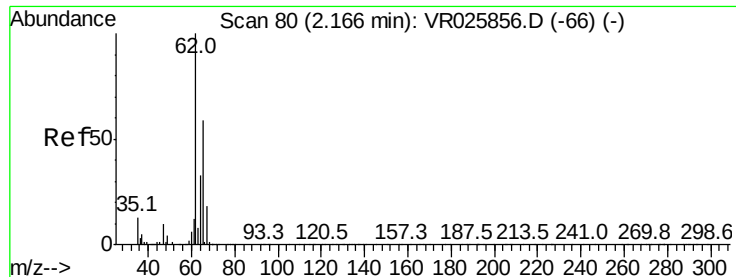
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Sep 27 07:50:08 2018  
Response via : Initial Calibration





#5

Vinyl chloride

Concen: 1.025 ug/L

RT: 2.17 min Scan# 80

Delta R.T. 0.00 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

Instrument :

MSVOA\_R

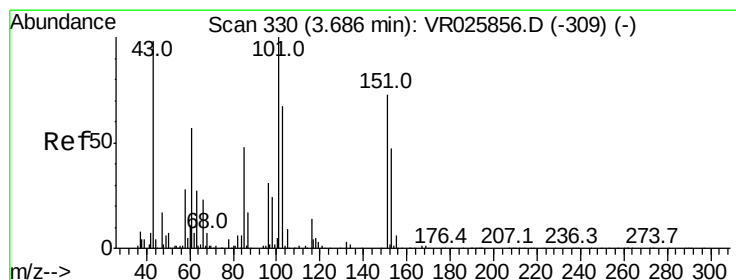
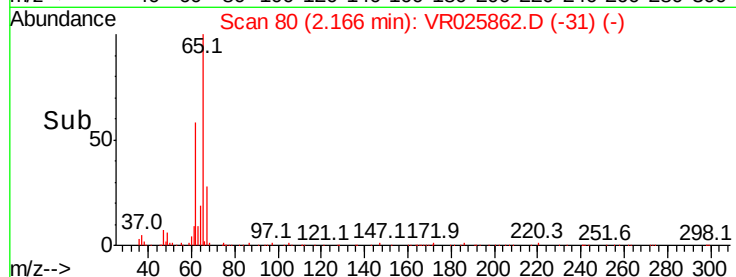
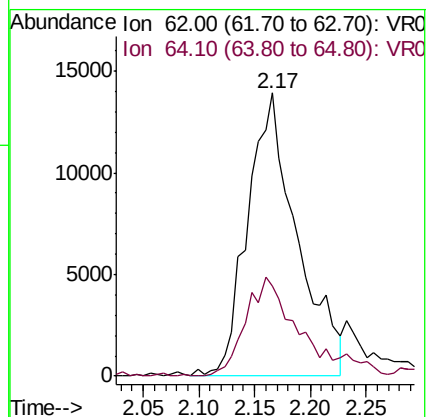
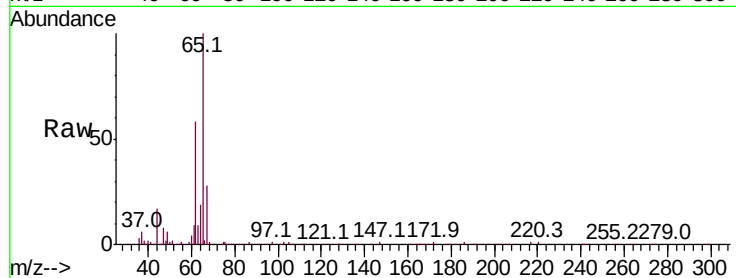
ClientSampleId :

Tot Ion: 62 Resp: 43156

Ion Ratio Lower Upper

62 100

64 31.7 23.5 43.7



#10

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

Concen: 0.278 ug/L

RT: 3.69 min Scan# 331

Delta R.T. 0.01 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

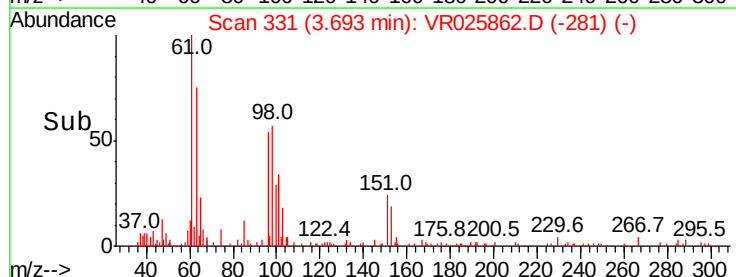
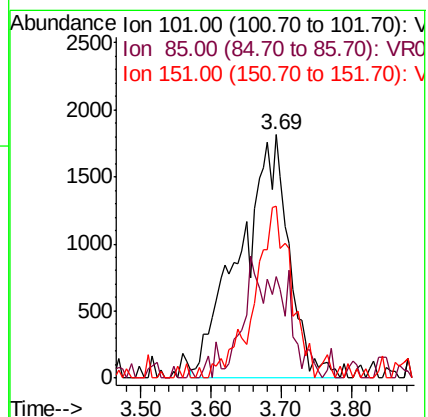
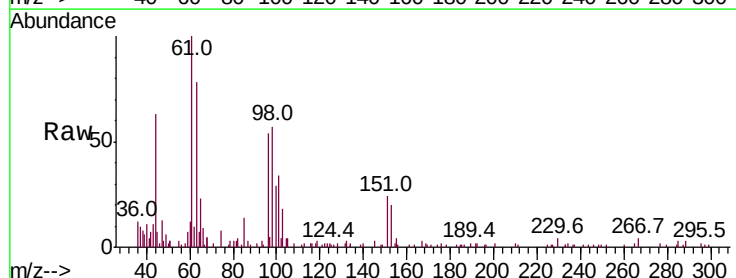
Tgt Ion: 101 Resp: 8834

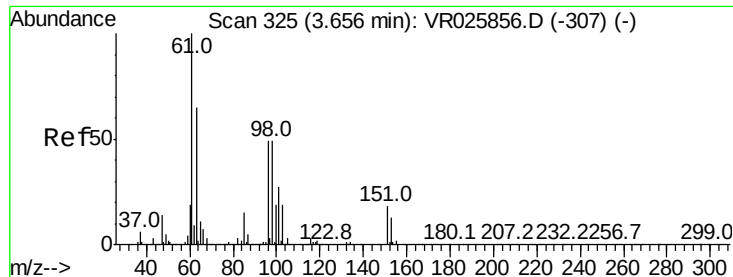
Ion Ratio Lower Upper

101 100

85 16.0 38.2 57.4#

151 53.2 58.4 87.6#





#12

1,1-Dichloroethene

Concen: 1.152 ug/L

RT: 3.66 min Scan# 325

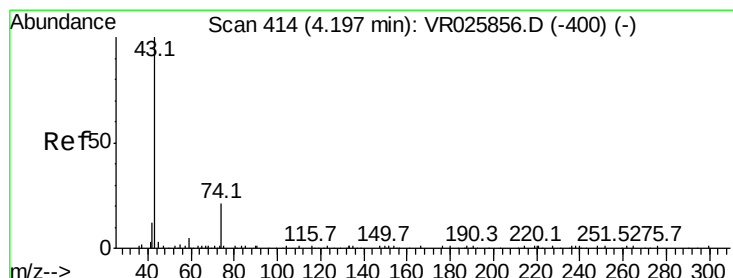
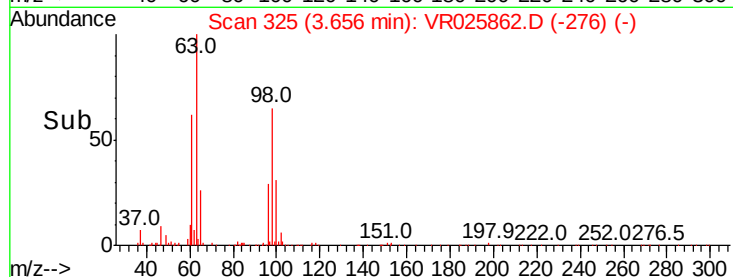
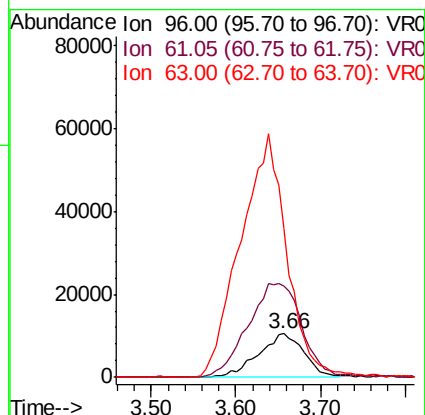
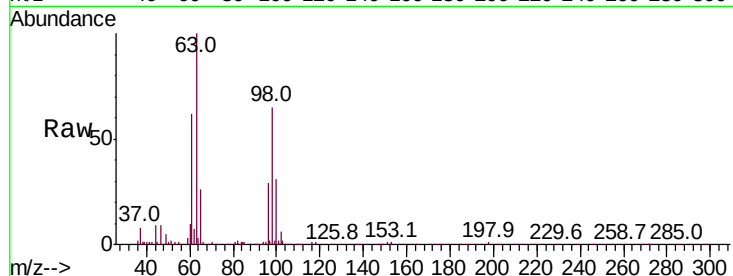
Delta R.T. 0.00 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

Instrument :  
MSVOA\_R  
ClientSampled :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 96    | Resp: | 38951  |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 210.5 | 145.0 | 269.4  |
| 63       | 341.4 | 123.8 | 230.0# |



#15

Methyl Acetate

Concen: 0.116 ug/L

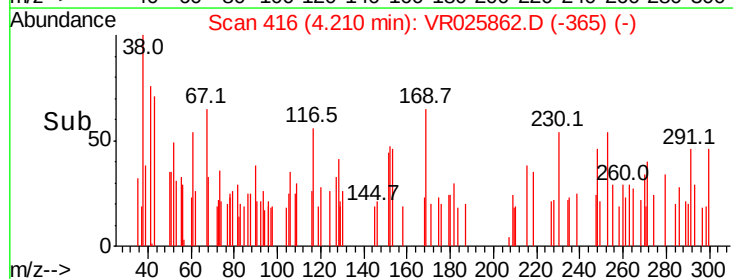
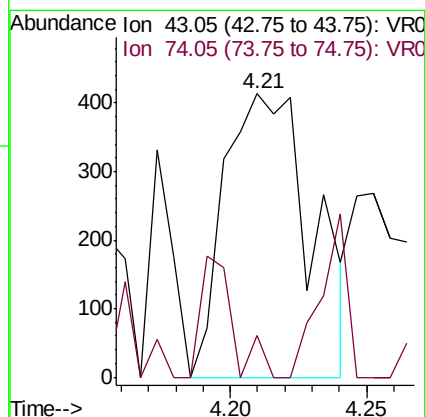
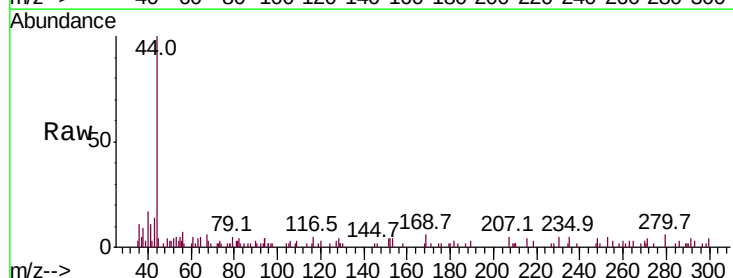
RT: 4.21 min Scan# 416

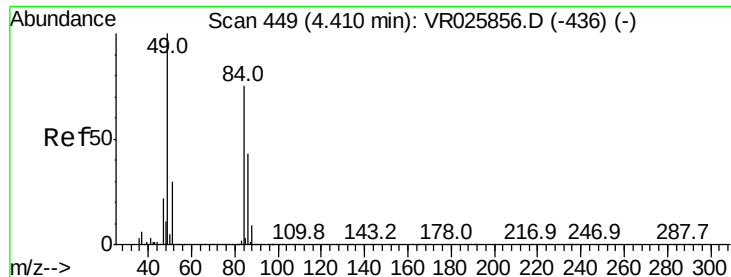
Delta R.T. 0.01 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 918   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 74       | 15.8  | 19.0  | 28.4# |

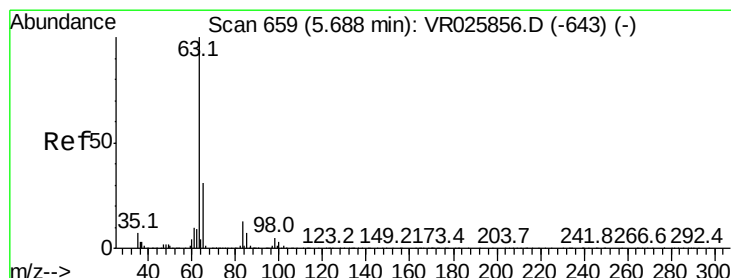
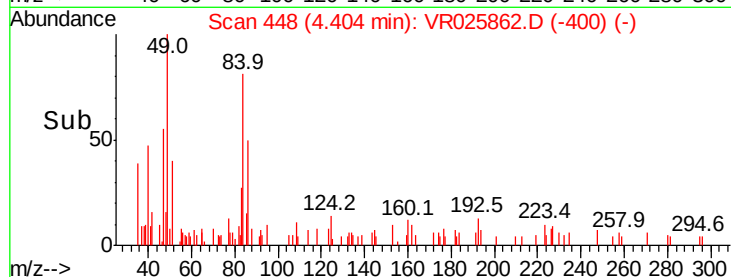
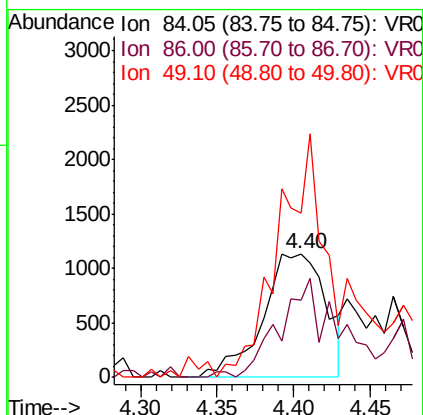
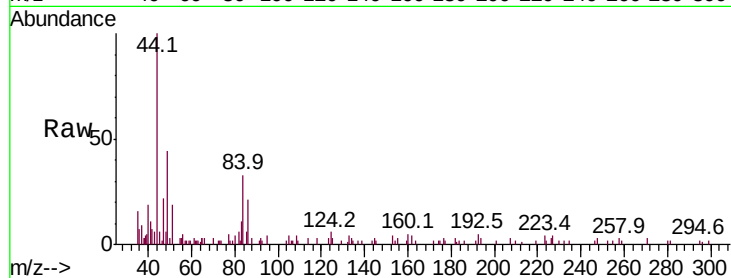




#16  
Methylene chloride  
Concen: 0.106 ug/L  
RT: 4.40 min Scan# 448  
Delta R.T. -0.01 min  
Lab File: VR025862.D  
Acq: 26 Sep 2018 14:24

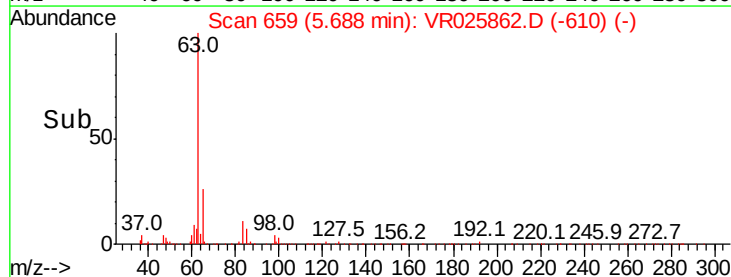
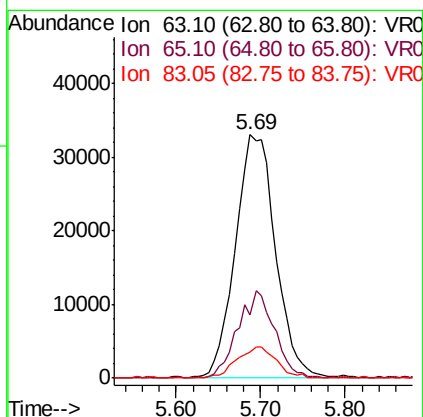
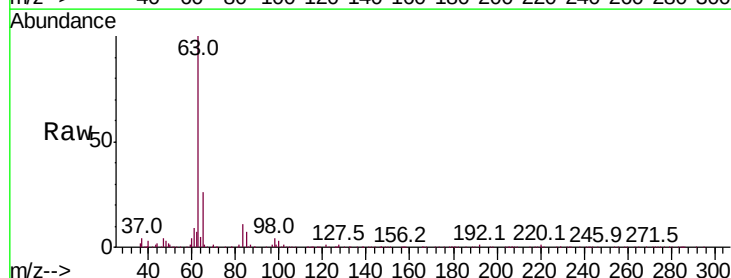
Instrument :  
MSVOA\_R  
ClientSampled :

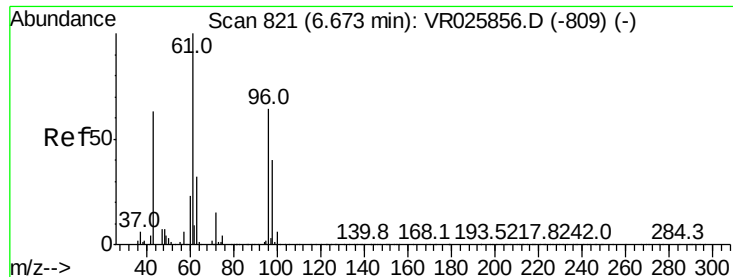
Tot Ion: 84 Resp: 3235  
Ion Ratio Lower Upper  
84 100  
86 62.4 43.1 80.1  
49 132.9 95.5 177.3



#19  
1,1-Dichloroethane  
Concen: 1.356 ug/L  
RT: 5.69 min Scan# 659  
Delta R.T. 0.00 min  
Lab File: VR025862.D  
Acq: 26 Sep 2018 14:24

Tgt Ion: 63 Resp: 106079  
Ion Ratio Lower Upper  
63 100  
65 25.7 21.1 39.1  
83 10.8 8.9 16.5





#22

cis-1,2-Dichloroethene

Concen: 8.917 ug/L

RT: 6.67 min Scan# 821

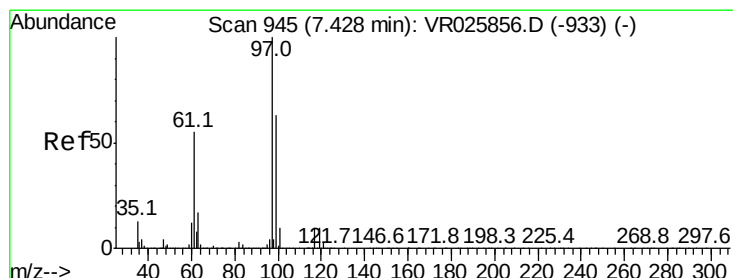
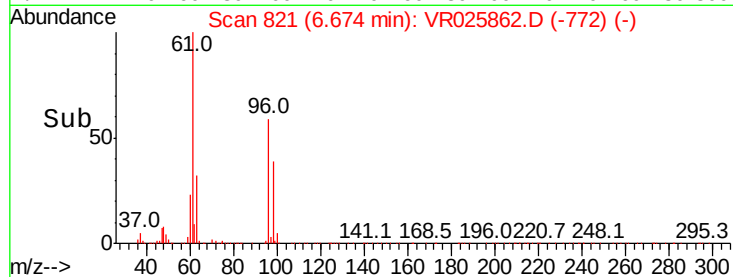
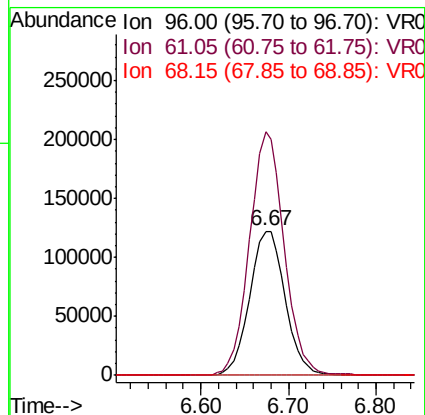
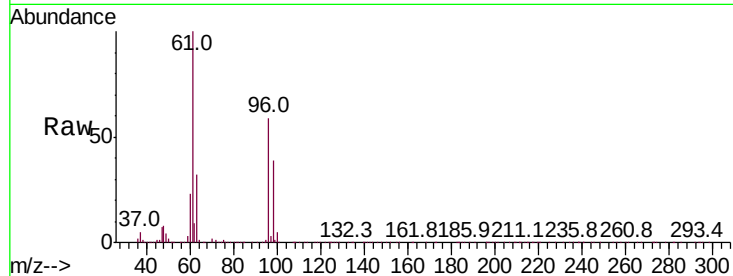
Delta R.T. 0.00 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

Instrument :  
MSVOA\_R  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 96    | Resp: | 343551 |
| Ion      | Ratio | Lower | Upper  |
| 96       | 100   |       |        |
| 61       | 169.3 | 108.7 | 201.9  |
| 68       | 0.0   | 0.1   | 0.1#   |



#29

1,1,1-Trichloroethane

Concen: 5.746 ug/L

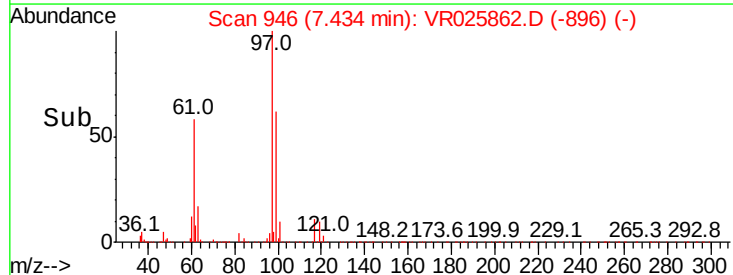
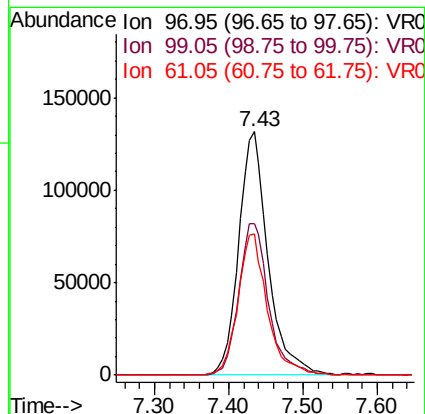
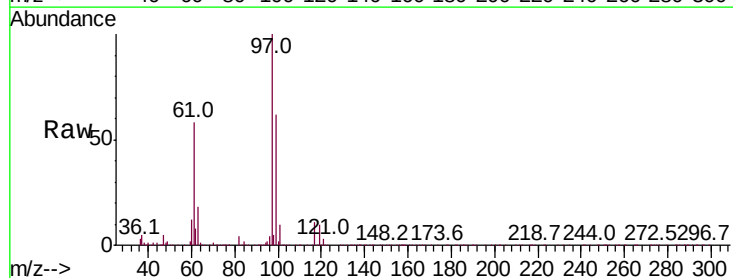
RT: 7.43 min Scan# 946

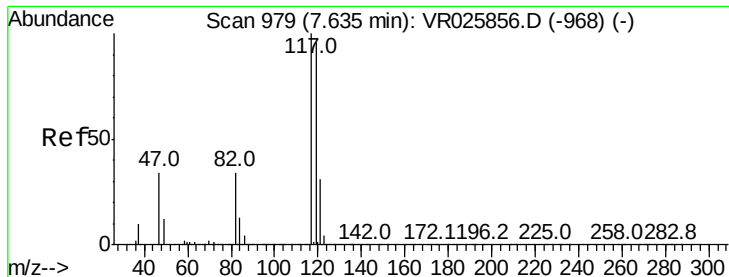
Delta R.T. 0.01 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 363973 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 63.5  | 51.0  | 76.6   |
| 61       | 57.8  | 41.6  | 62.4   |





#31

Carbon tetrachloride

Concen: 0.780 ug/L

RT: 7.43 min Scan# 946

Delta R.T. -0.20 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

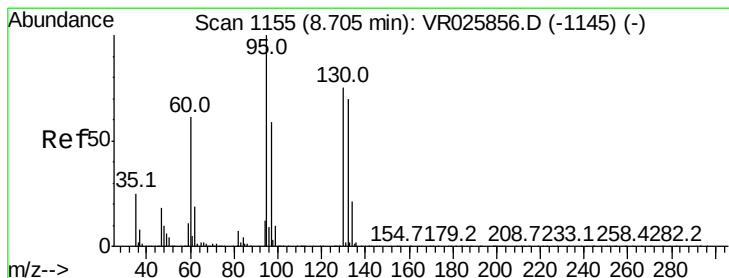
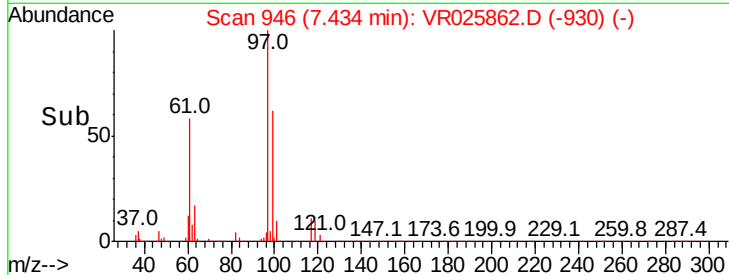
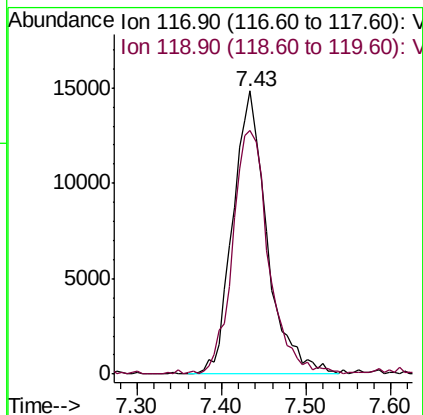
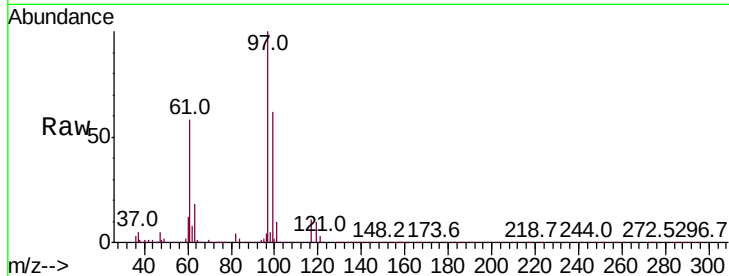
Instrument :  
MSVOA\_R  
ClientSampleId :

Tot Ion:117 Resp: 40643

Ion Ratio Lower Upper

117 100

119 89.3 75.6 113.4



#34

Trichloroethene

Concen: 44.788 ug/L

RT: 8.71 min Scan# 1156

Delta R.T. 0.01 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

Tgt Ion: 95 Resp: 1957280

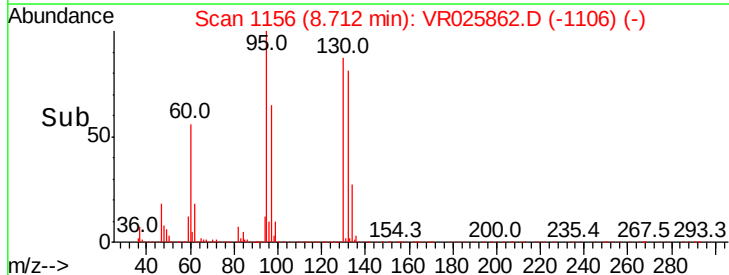
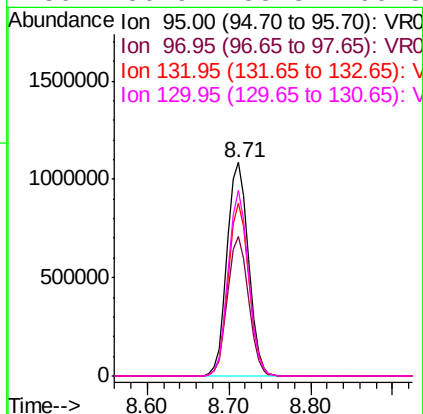
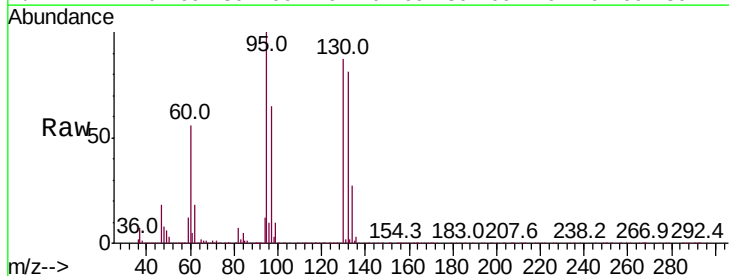
Ion Ratio Lower Upper

95 100

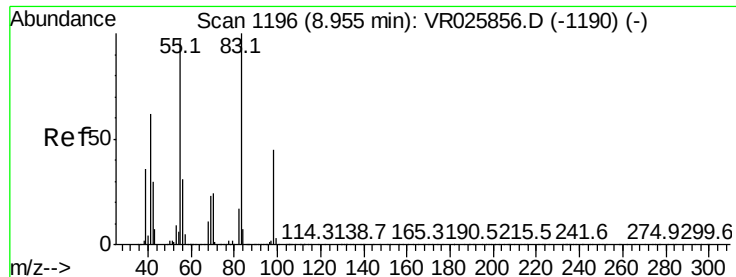
97 65.2 43.9 81.5

132 81.0 53.3 98.9

130 86.9 53.8 99.8



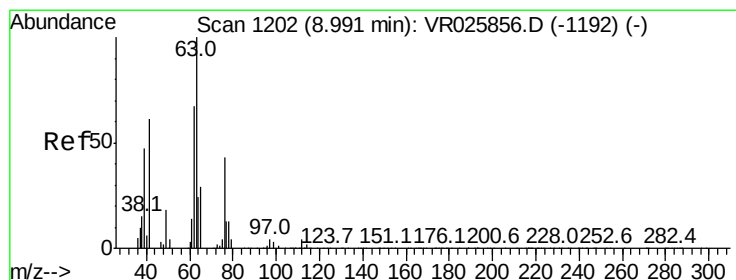
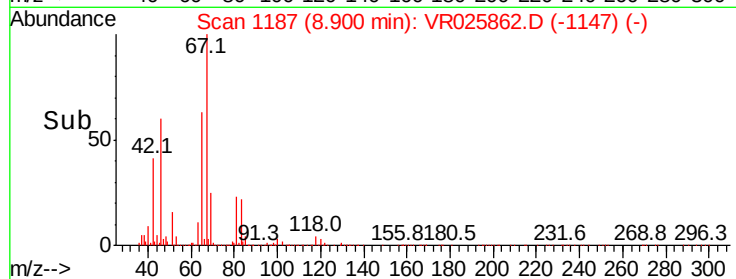
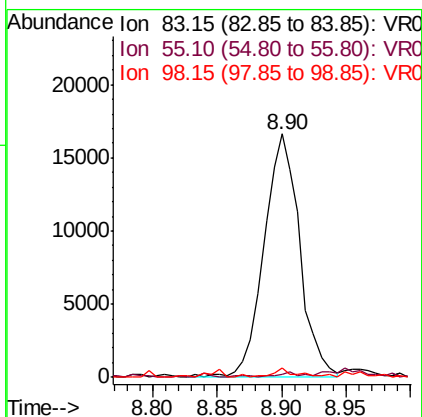
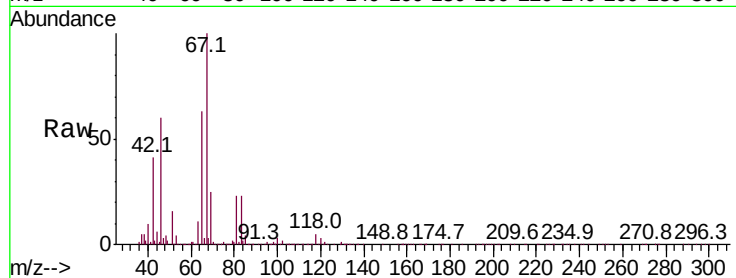




#35  
Methylcyclohexane  
Concen: 0.445 ug/L  
RT: 8.90 min Scan# 1187  
Delta R.T. -0.05 min  
Lab File: VR025862.D  
Acq: 26 Sep 2018 14:24

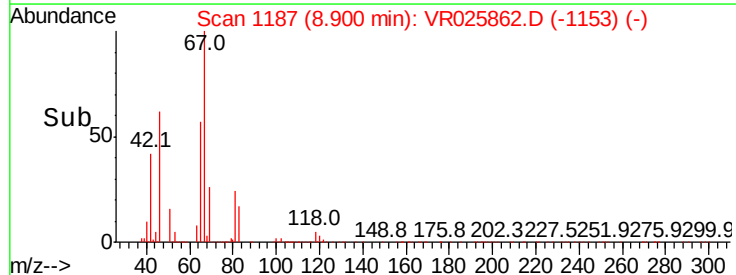
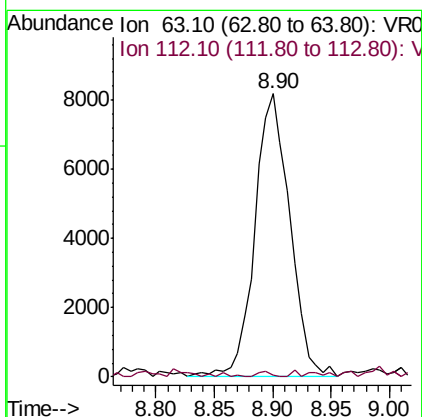
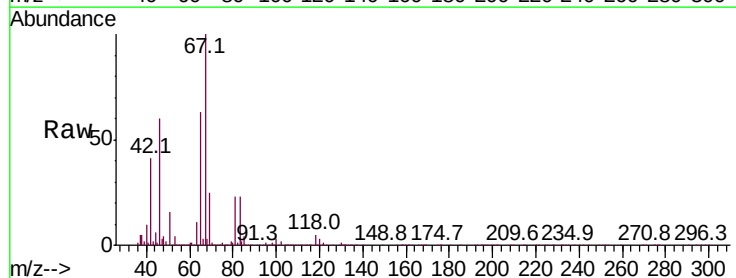
Instrument :  
MSVOA\_R  
ClientSampled :

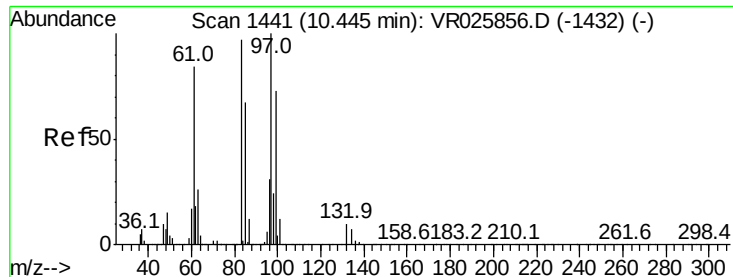
Tot Ion: 83 Resp: 31898  
Ion Ratio Lower Upper  
83 100  
55 1.0 71.8 107.6#  
98 0.0 34.2 51.4#



#37  
1,2-Dichloropropane  
Concen: 0.464 ug/L  
RT: 8.90 min Scan# 1187  
Delta R.T. -0.09 min  
Lab File: VR025862.D  
Acq: 26 Sep 2018 14:24

Tgt Ion: 63 Resp: 17032  
Ion Ratio Lower Upper  
63 100  
112 0.7 2.5 3.7#





#45

1,1,2-Trichloroethane

Concen: 0.127 ug/L

RT: 10.44 min Scan# 1440

Delta R.T. -0.01 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

Instrument :

MSVOA\_R

ClientSampleId :

Tot Ion: 97 Resp: 1960

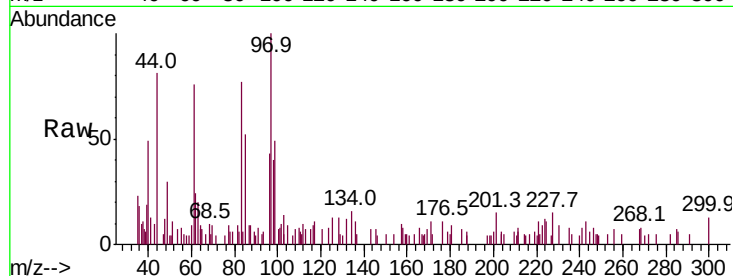
Ion Ratio Lower Upper

97 100

99 0.0 39.6 73.6#

83 77.4 62.2 115.6

85 52.1 39.1 72.7

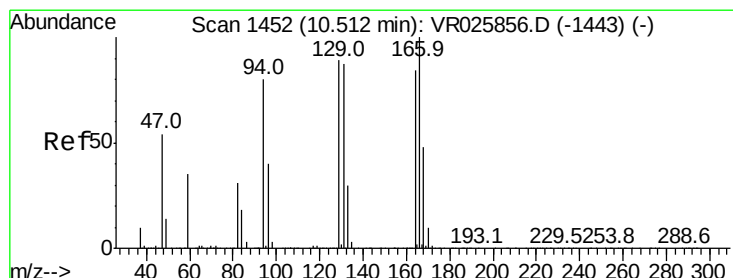
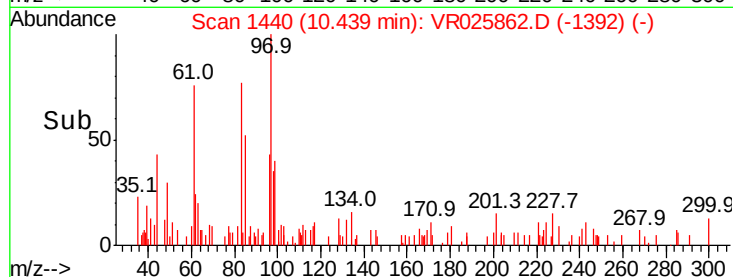
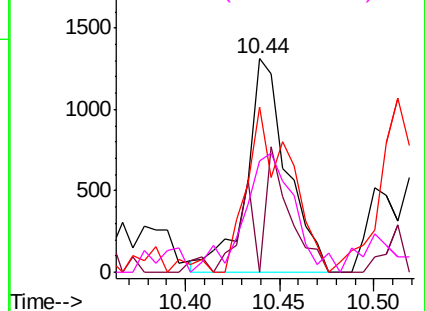


Abundance Ion 96.95 (96.65 to 97.65): VR0

Ion 99.05 (98.75 to 99.75): VR0

Ion 82.95 (82.65 to 83.65): VR0

Ion 85.00 (84.70 to 85.70): VR0



#47

Tetrachloroethene

Concen: 1.318 ug/L

RT: 10.51 min Scan# 1452

Delta R.T. 0.00 min

Lab File: VR025862.D

Acq: 26 Sep 2018 14:24

Tgt Ion: 164 Resp: 32935

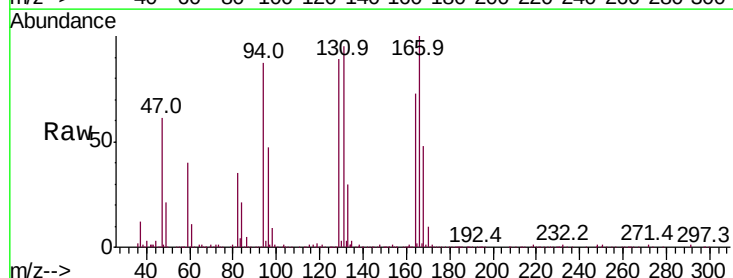
Ion Ratio Lower Upper

164 100

129 122.8 80.8 150.2

131 131.6 74.5 138.3

166 137.8 92.5 171.7

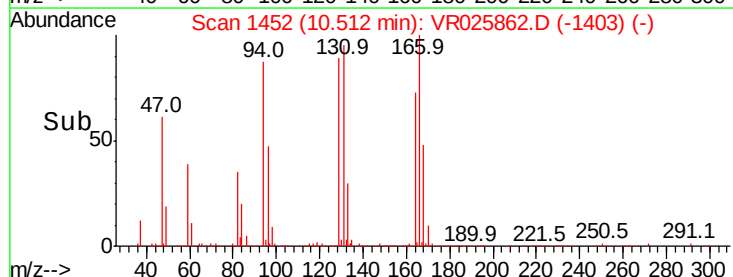
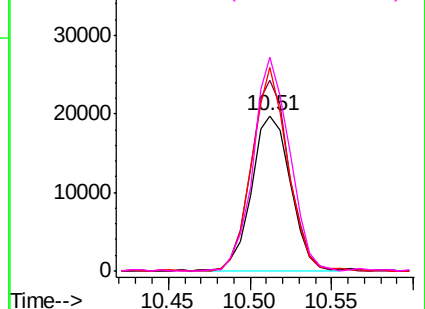


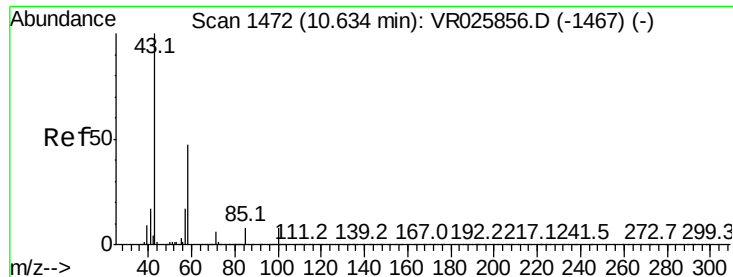
Abundance Ion 163.90 (163.60 to 164.60): V

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

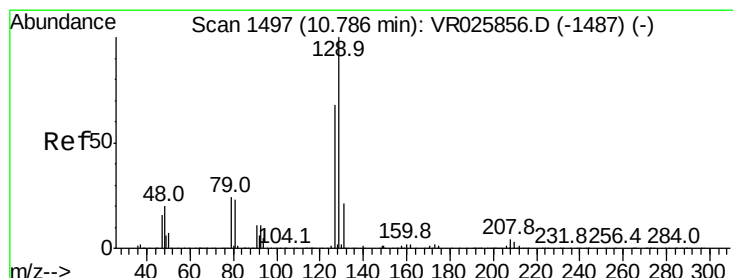
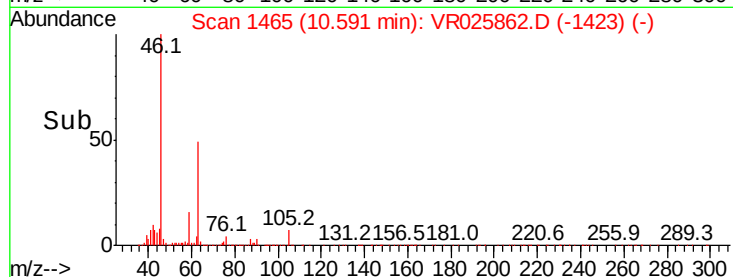
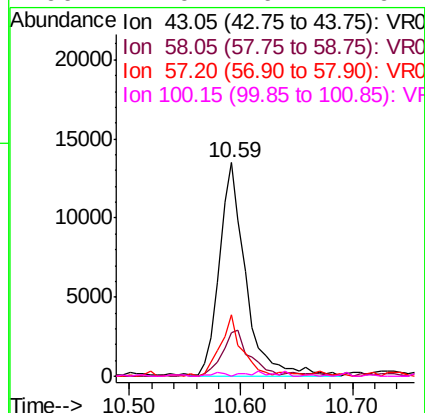
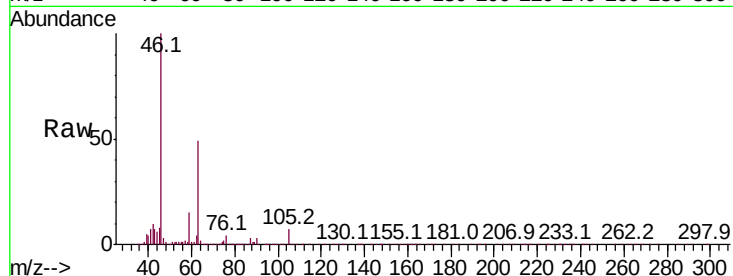




#48  
2-Hexanone  
Concen: 2.642 ug/L  
RT: 10.59 min Scan# 1465  
Delta R.T. -0.04 min  
Lab File: VR025862.D  
Acq: 26 Sep 2018 14:24

Instrument :  
MSVOA\_R  
ClientSampled :

Tot Ion: 43 Resp: 22210  
Ion Ratio Lower Upper  
43 100  
58 21.8 39.5 59.3#  
57 23.4 14.6 21.8#  
100 1.0 6.7 10.1#



#49  
Dibromochloromethane  
Concen: 2.014 ug/L  
RT: 10.51 min Scan# 1452  
Delta R.T. -0.27 min  
Lab File: VR025862.D  
Acq: 26 Sep 2018 14:24

Tgt Ion: 129 Resp: 32288  
Ion Ratio Lower Upper  
129 100  
127 0.8 54.1 100.5#

