

Data Path : Z:\VOASRV\HPCHEM1\MSVOA R\DATA\VR100218\  
 Data File : VR025929.D  
 Acq On : 2 Oct 2018 15:51  
 Operator : SY/MD  
 Sample : J5160-11  
 Misc : 25mL/MSVOA R/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_R  
 ClientSampleId :

Quant Time: Oct 03 02:55:25 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR092718WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Oct 03 02:53:45 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.46  | 114  | 422095   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.29 | 117  | 357509   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.23 | 152  | 119878   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.15   | 65    | 138669   | 4.17     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 83.40%  |
| 7) Chloroethane-d5             | 2.63   | 69    | 138836   | 5.10     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 102.00% |
| 11) 1,1-Dichloroethene-d2      | 3.63   | 63    | 259511   | 3.32     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 66.40%  |
| 20) 2-Butanone-d5              | 6.59   | 46    | 232270   | 62.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 125.18% |
| 24) Chloroform-d               | 7.20   | 84    | 272801   | 4.71     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 94.20%  |
| 26) 1,2-Dichloroethane-d4      | 7.90   | 65    | 129275   | 5.19     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 103.80% |
| 32) Benzene-d6                 | 7.85   | 84    | 525008   | 4.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 88.20%  |
| 36) 1,2-Dichloropropane-d6     | 8.90   | 67    | 156320   | 4.88     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 97.60%  |
| 41) Toluene-d8                 | 9.97   | 98    | 460733   | 4.12     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 82.40%  |
| 43) trans-1,3-Dichloropropene- | 10.24  | 79    | 32902    | 4.52     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 90.40%  |
| 46) 2-Hexanone-d5              | 10.59  | 63    | 168025   | 60.54    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 121.08% |
| 57) 1,1,2,2-Tetrachloroethane- | 12.36  | 84    | 66077    | 5.08     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 101.60% |
| 64) 1,2-Dichlorobenzene-d4     | 13.51  | 152   | 93618    | 4.88     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 97.60%  |

## Target Compounds

|                            |       |     |        |              | Ovalue |
|----------------------------|-------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane | 1.84  | 85  | 16351  | 0.637 ug/L # | 52     |
| 5) Vinyl chloride          | 2.14  | 62  | 5241   | 0.144 ug/L # | 80     |
| 9) Trichlorofluoromethane  | 2.93  | 101 | 7395   | 0.147 ug/L # | 37     |
| 12) 1,1-Dichloroethene     | 3.64  | 96  | 3837   | 0.120 ug/L # | 1      |
| 15) Methyl Acetate         | 4.20  | 43  | 752    | 0.101 ug/L # | 82     |
| 19) 1,1-Dichloroethane     | 5.69  | 63  | 174406 | 3.343 ug/L   | 99     |
| 22) cis-1,2-Dichloroethene | 6.67  | 96  | 28639  | 1.080 ug/L # | 98     |
| 29) 1,1,1-Trichloroethane  | 7.43  | 97  | 9176   | 0.228 ug/L # | 92     |
| 34) Trichloroethene        | 8.71  | 95  | 46244  | 1.464 ug/L   | 98     |
| 35) Methylcyclohexane      | 8.89  | 83  | 36426  | 0.767 ug/L # | 16     |
| 37) 1,2-Dichloropropane    | 9.00  | 63  | 2743   | 0.107 ug/L # | 85     |
| 47) Tetrachloroethene      | 10.51 | 164 | 57113  | 2.934 ug/L   | 93     |
| 48) 2-Hexanone             | 10.59 | 43  | 25766  | 4.351 ug/L # | 72     |
| 49) Dibromochloromethane   | 10.51 | 129 | 47594  | 4.030 ug/L # | 12     |
| 63) 1,4-Dichlorobenzene    | 13.24 | 146 | 2625   | 0.073 ug/L # | 73     |

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ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_R  
ClientSampleId :

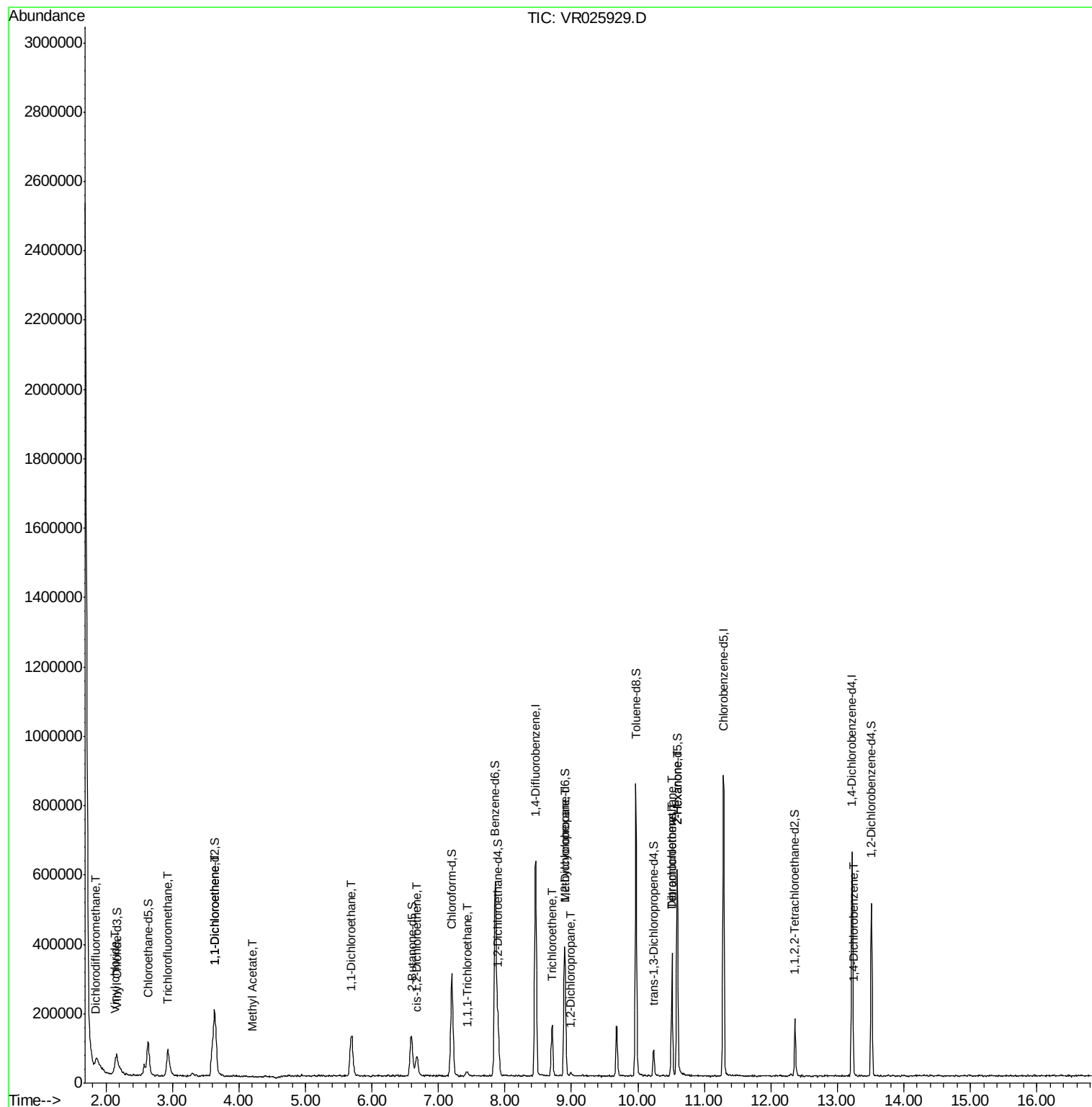
Quant Time: Oct 03 02:55:25 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR092718WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Oct 03 02:53:45 2018  
Response via : Initial Calibration

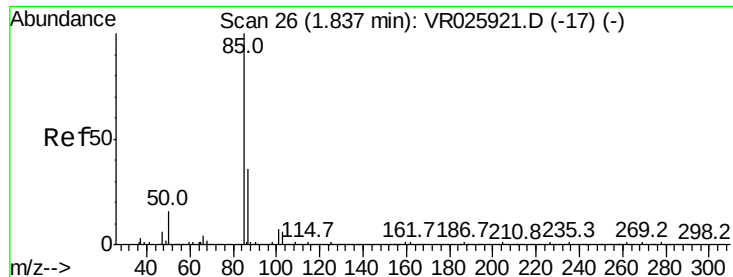
| Internal Standards                                                         | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                      |      |      |          |      |       |          |
| (#) = qualifier out of range (m) = manual integration (+) = signals summed |      |      |          |      |       |          |

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Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 0.637 ug/L

RT: 1.84 min Scan# 27

Delta R.T. 0.01 min

Lab File: VR025929.D

Acq: 2 Oct 2018 15:51

Instrument :

MSVOA\_R

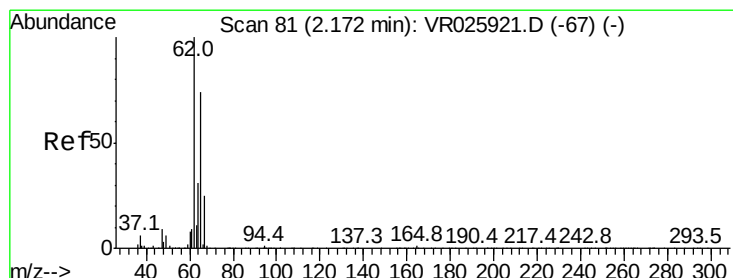
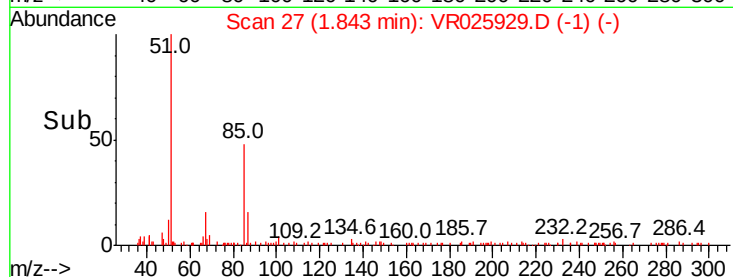
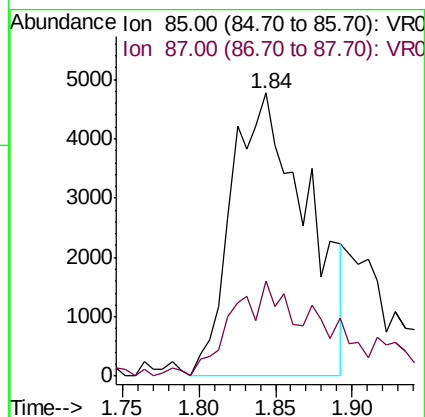
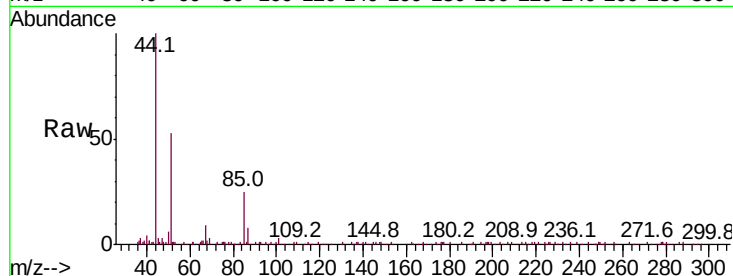
ClientSampled :

Tot Ion: 85 Resp: 16351

Ion Ratio Lower Upper

85 100

87 4.8 25.1 37.7#



#5

Vinyl chloride

Concen: 0.144 ug/L

RT: 2.14 min Scan# 75

Delta R.T. -0.04 min

Lab File: VR025929.D

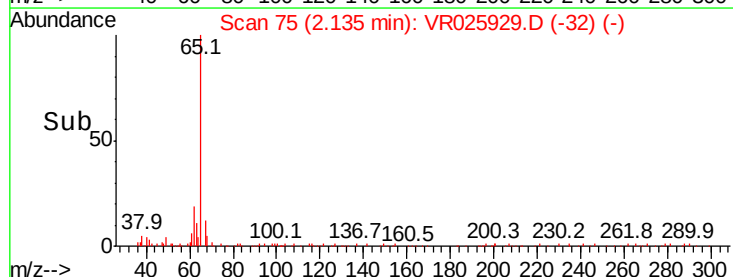
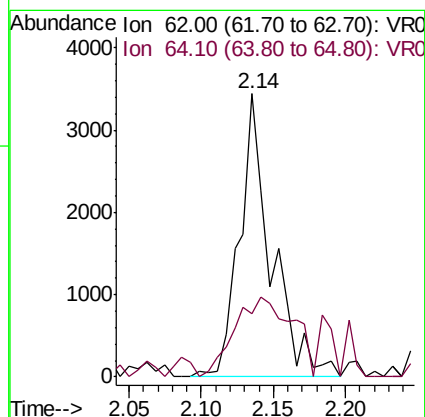
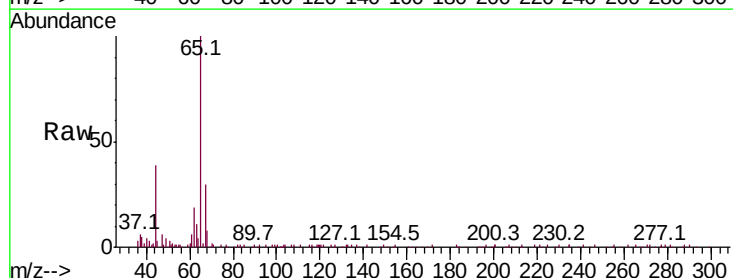
Acq: 2 Oct 2018 15:51

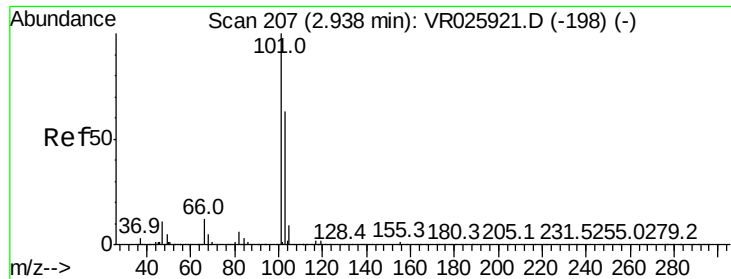
Tgt Ion: 62 Resp: 5241

Ion Ratio Lower Upper

62 100

64 22.3 23.5 43.7#



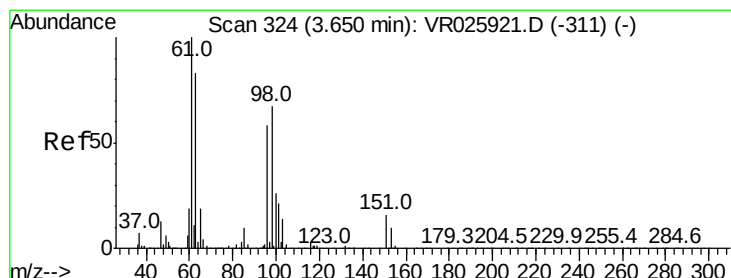
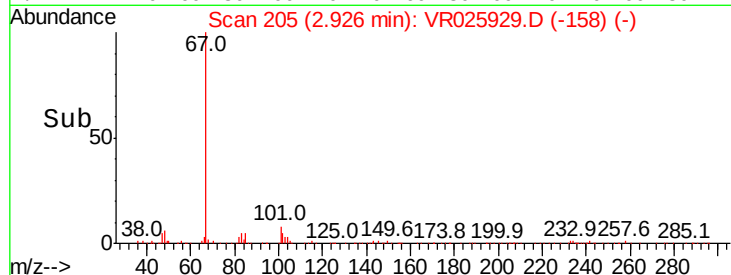
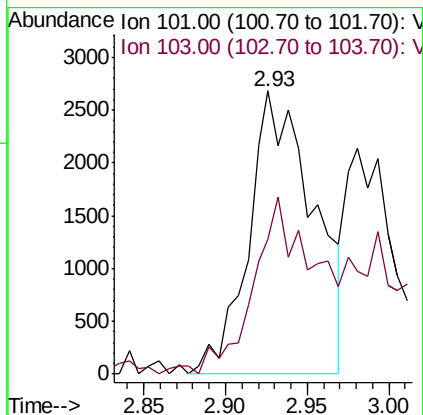
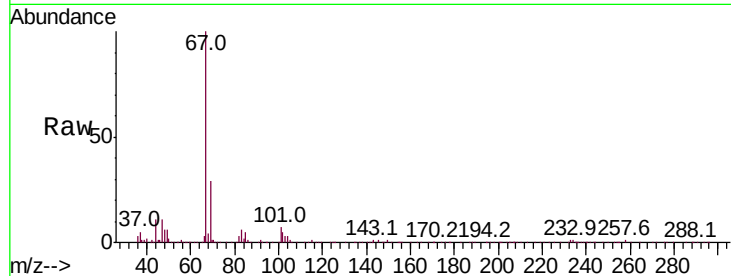


#9

Trichlorofluoromethane  
Concen: 0.147 ug/L  
RT: 2.93 min Scan# 205  
Delta R.T. -0.01 min  
Lab File: VR025929.D  
Acq: 2 Oct 2018 15:51

Instrument :  
MSVOA\_R  
ClientSampleId :

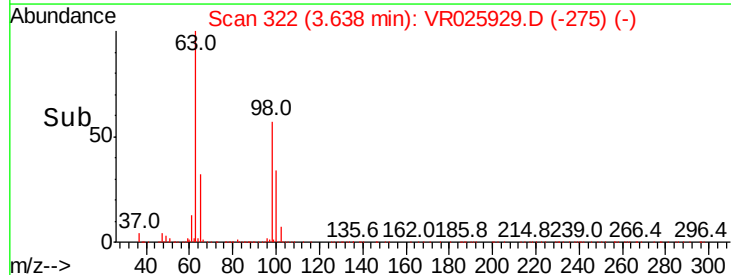
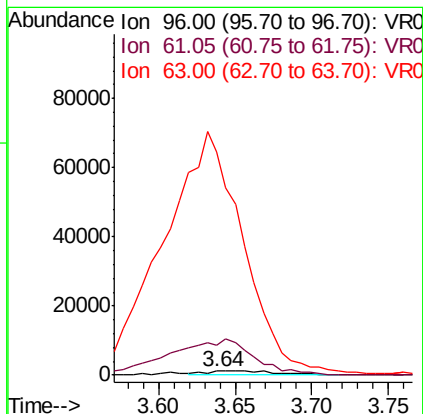
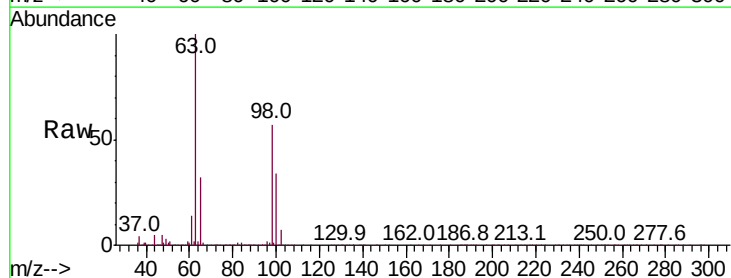
Tot Ion:101 Resp: 7395  
Ion Ratio Lower Upper  
101 100  
103 60.6 22.1 33.1#

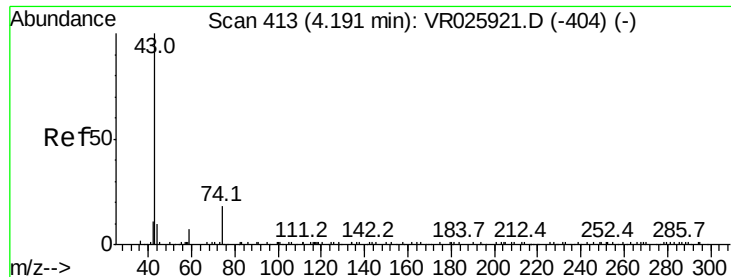


#12

1,1-Dichloroethene  
Concen: 0.120 ug/L  
RT: 3.64 min Scan# 322  
Delta R.T. -0.01 min  
Lab File: VR025929.D  
Acq: 2 Oct 2018 15:51

Tgt Ion: 96 Resp: 3837  
Ion Ratio Lower Upper  
96 100  
61 724.9 145.0 269.4#  
63 5335.5 123.8 230.0#

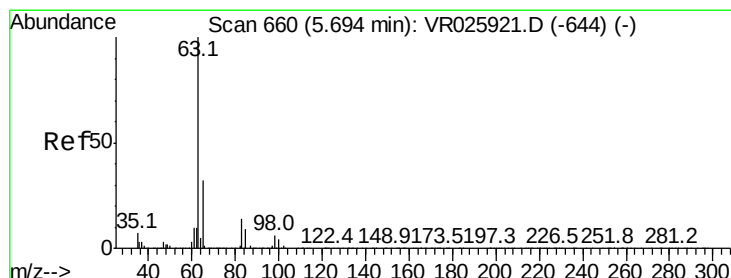
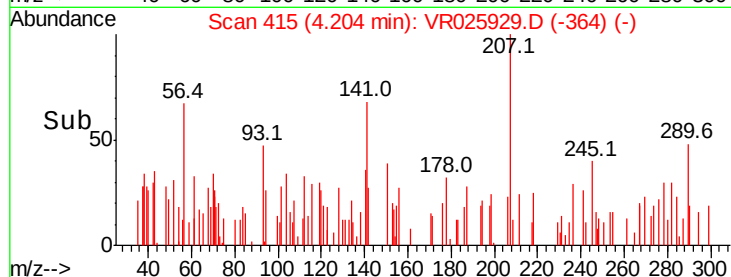
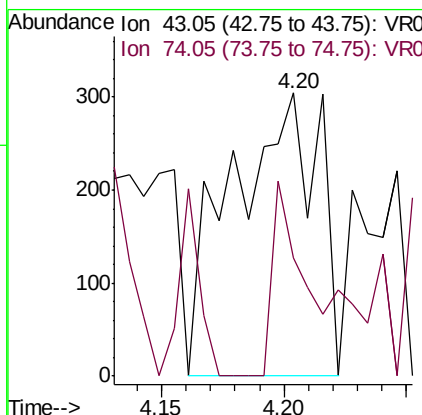
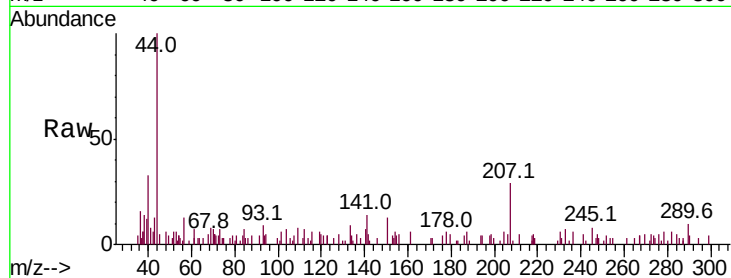




#15  
Methvl Acetate  
Concen: 0.101 ug/L  
RT: 4.20 min Scan# 415  
Delta R.T. 0.01 min  
Lab File: VR025929.D  
Acq: 2 Oct 2018 15:51

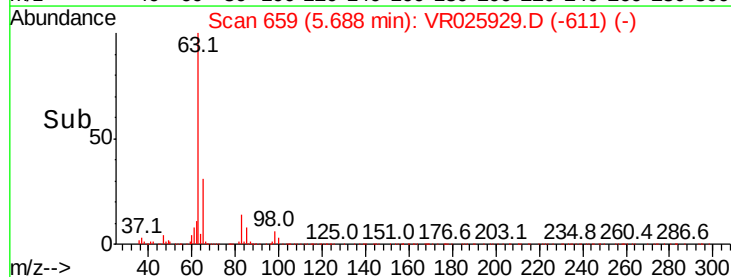
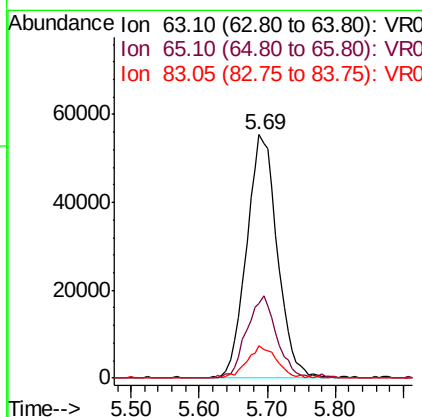
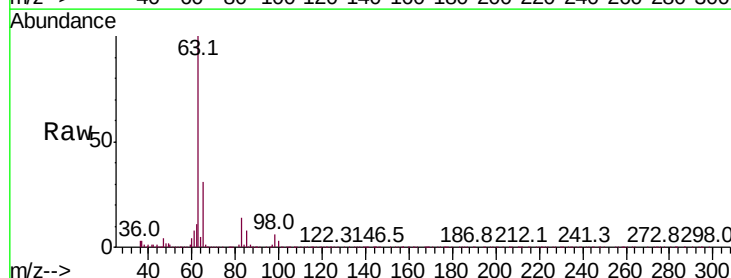
Instrument :  
MSVOA\_R  
ClientSampleId :

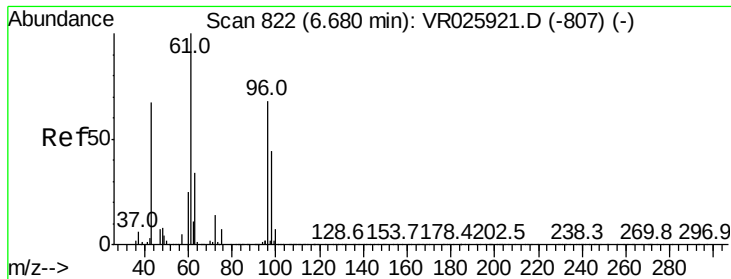
Tot Ion: 43 Resp: 752  
Ion Ratio Lower Upper  
43 100  
74 32.4 19.0 28.4#



#19  
1,1-Dichloroethane  
Concen: 3.343 ug/L  
RT: 5.69 min Scan# 659  
Delta R.T. -0.01 min  
Lab File: VR025929.D  
Acq: 2 Oct 2018 15:51

Tgt Ion: 63 Resp: 174406  
Ion Ratio Lower Upper  
63 100  
65 30.6 21.1 39.1  
83 13.5 8.9 16.5



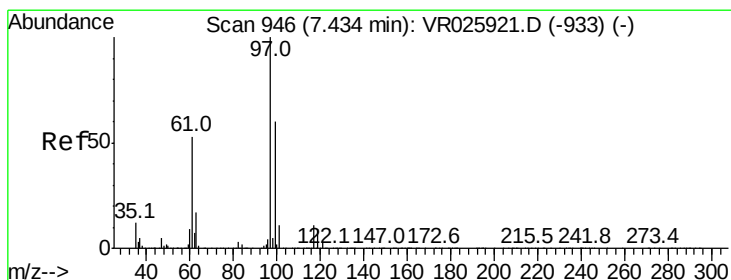
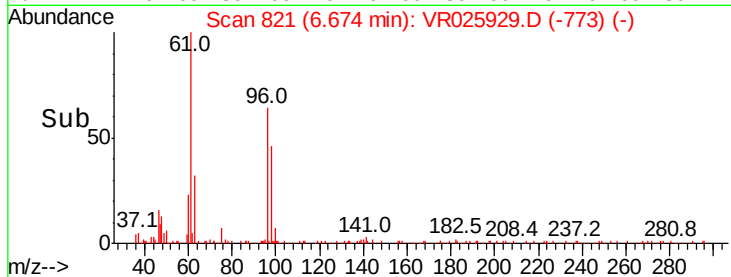
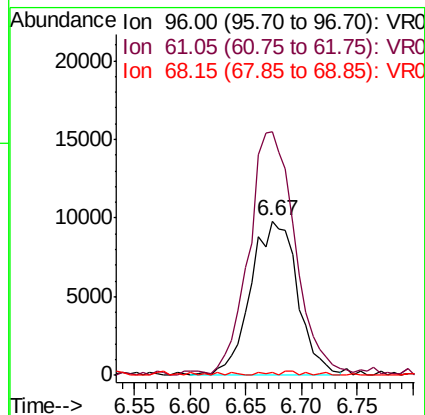
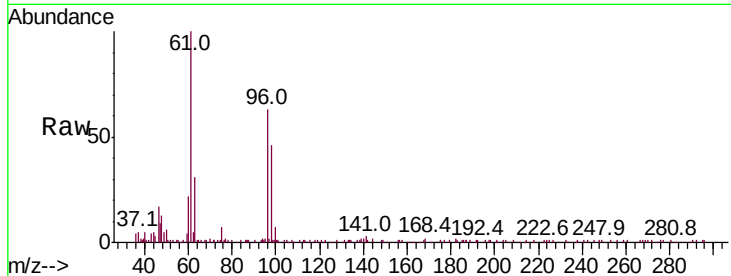


#22

cis-1,2-Dichloroethene  
 Concen: 1.080 ug/L  
 RT: 6.67 min Scan# 821  
 Delta R.T. -0.01 min  
 Lab File: VR025929.D  
 Acq: 2 Oct 2018 15:51

Instrument :  
 MSVOA\_R  
 ClientSampleId :

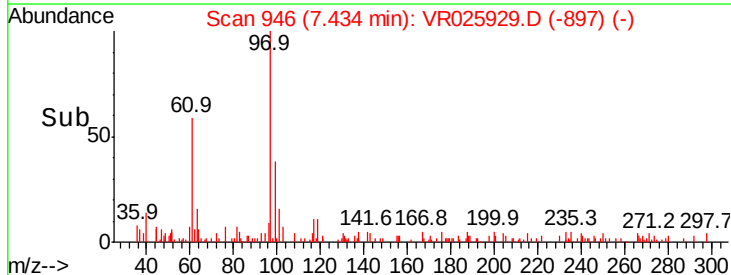
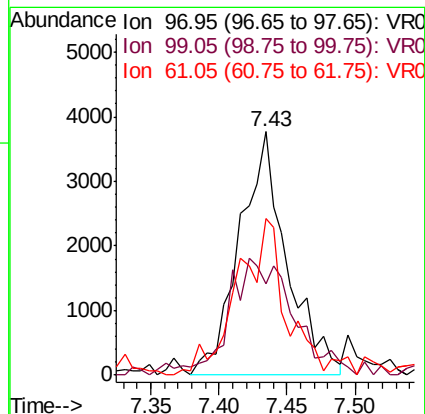
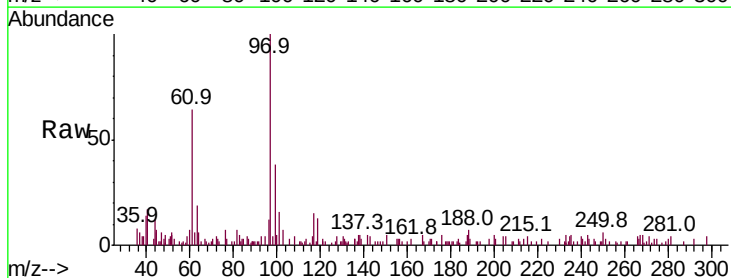
| Tot Ion | 96    | Resp  | 28639 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 96      | 100   |       |       |
| 61      | 157.8 | 108.7 | 201.9 |
| 68      | 1.8   | 0.1   | 0.1#  |

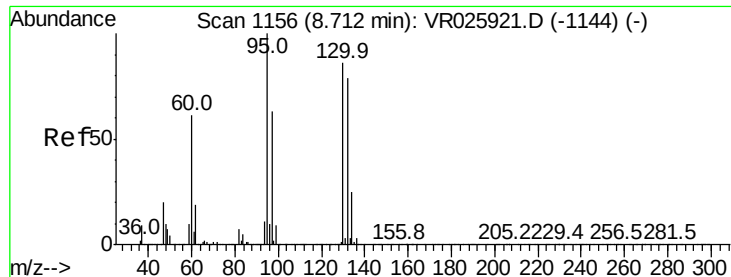


#29

1,1,1-Trichloroethane  
 Concen: 0.228 ug/L  
 RT: 7.43 min Scan# 946  
 Delta R.T. 0.00 min  
 Lab File: VR025929.D  
 Acq: 2 Oct 2018 15:51

| Tgt Ion | 97    | Resp  | 9176  |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 97      | 100   |       |       |
| 99      | 63.3  | 51.0  | 76.6  |
| 61      | 64.6  | 41.6  | 62.4# |





#34

Trichloroethene

Concen: 1.464 ug/L

RT: 8.71 min Scan# 1156

Delta R.T. 0.00 min

Lab File: VR025929.D

Acq: 2 Oct 2018 15:51

Instrument :

MSVOA\_R

ClientSampleId :

Tot Ion: 95 Resp: 46244

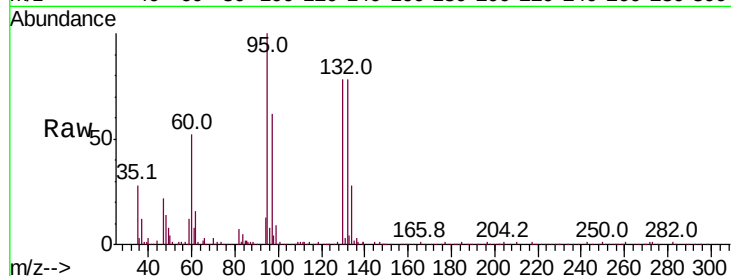
Ion Ratio Lower Upper

95 100

97 61.8 43.9 81.5

132 78.0 53.3 98.9

130 77.8 53.8 99.8

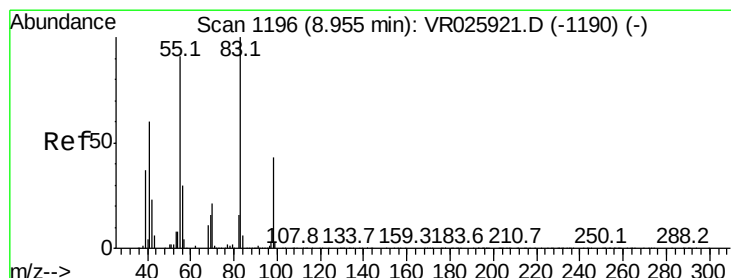
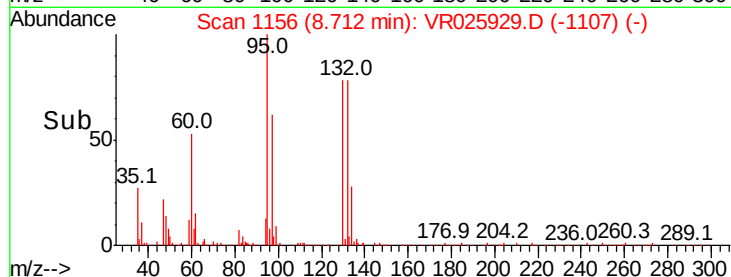
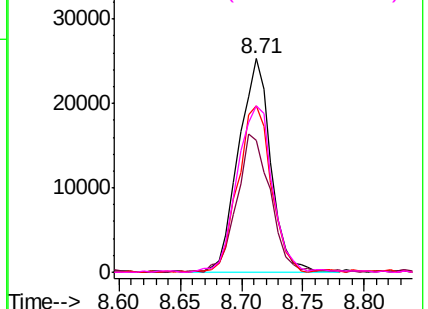


Abundance Ion 95.00 (94.70 to 95.70): VR0

Ion 96.95 (96.65 to 97.65): VR0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35

Methylcyclohexane

Concen: 0.767 ug/L

RT: 8.89 min Scan# 1186

Delta R.T. -0.06 min

Lab File: VR025929.D

Acq: 2 Oct 2018 15:51

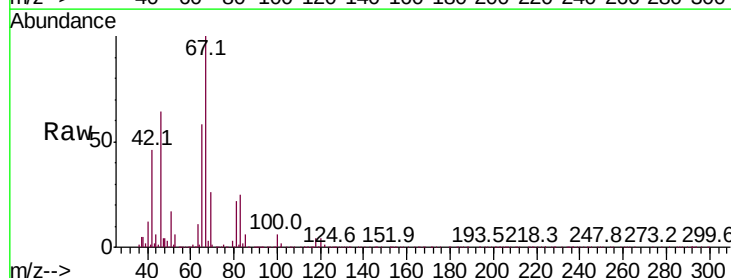
Tgt Ion: 83 Resp: 36426

Ion Ratio Lower Upper

83 100

55 1.8 71.8 107.6#

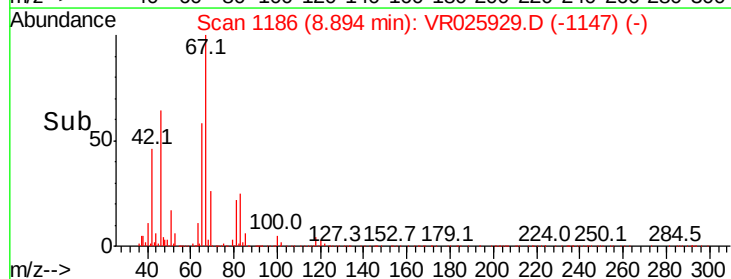
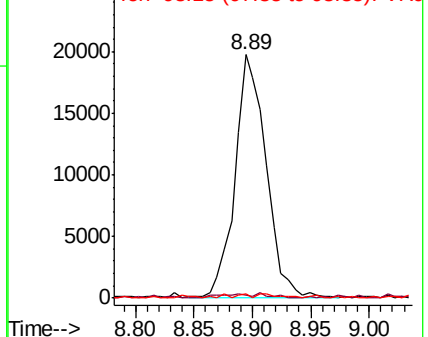
98 1.1 34.2 51.4#



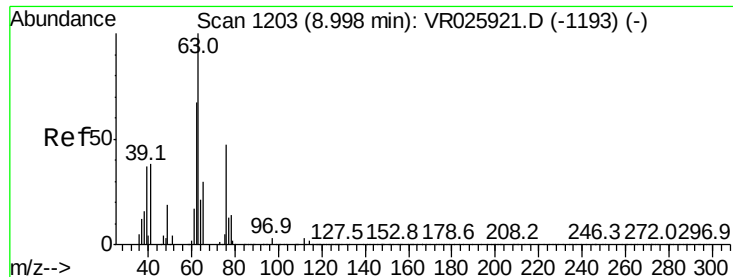
Abundance Ion 83.15 (82.85 to 83.85): VR0

Ion 55.10 (54.80 to 55.80): VR0

Ion 98.15 (97.85 to 98.85): VR0



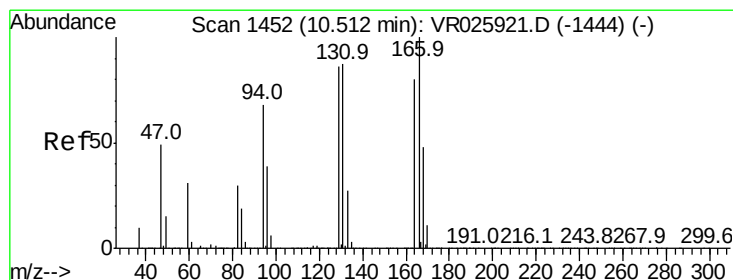
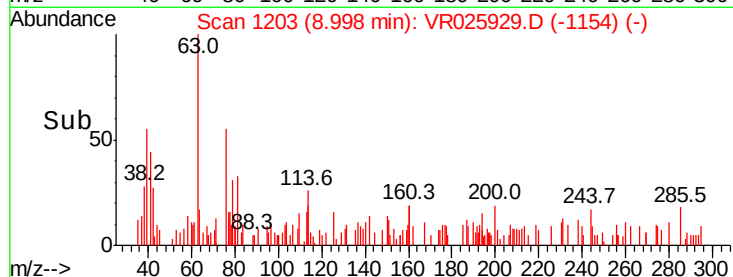
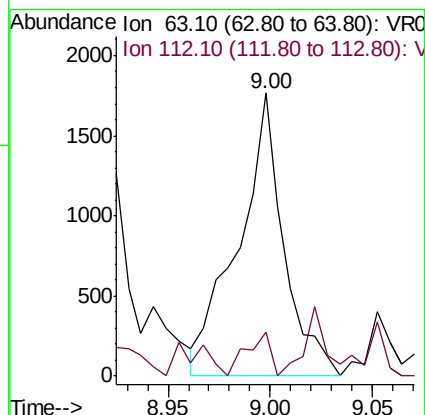
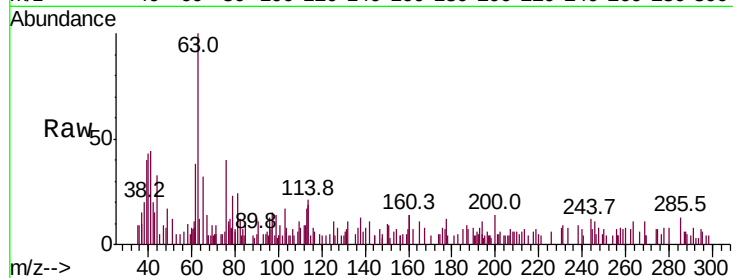




#37  
 1,2-Dichloropropane  
 Concen: 0.107 ug/L  
 RT: 9.00 min Scan# 1203  
 Delta R.T. 0.00 min  
 Lab File: VR025929.D  
 Acq: 2 Oct 2018 15:51

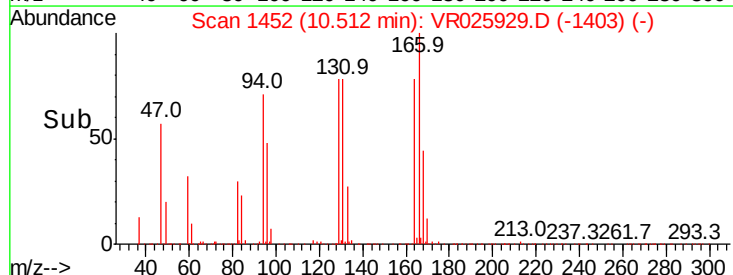
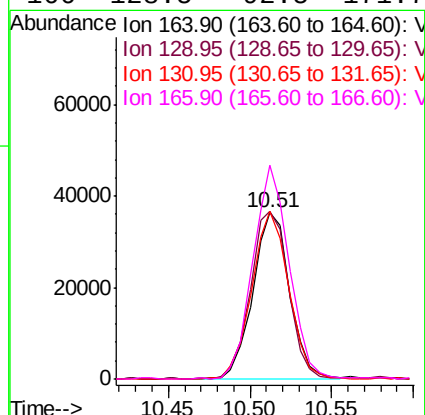
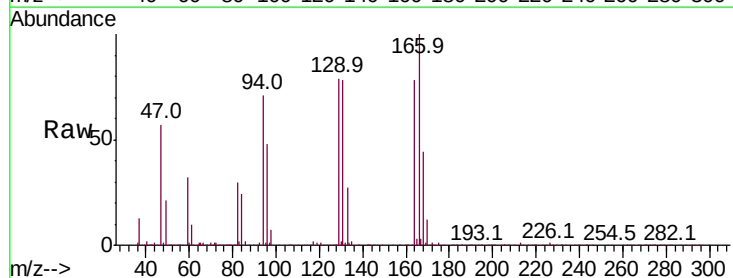
Instrument :  
 MSVOA\_R  
 ClientSampleId :

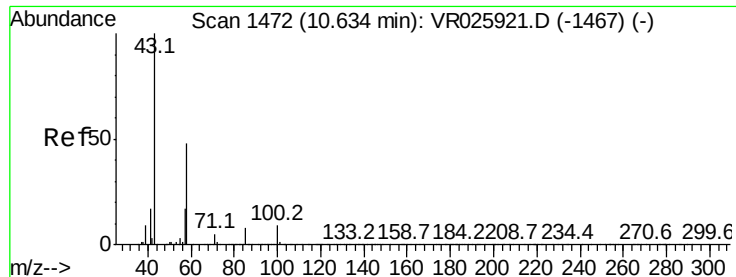
Tot Ion: 63 Resp: 2743  
 Ion Ratio Lower Upper  
 63 100  
 112 8.1 2.5 3.7#



#47  
 Tetrachloroethene  
 Concen: 2.934 ug/L  
 RT: 10.51 min Scan# 1452  
 Delta R.T. 0.00 min  
 Lab File: VR025929.D  
 Acq: 2 Oct 2018 15:51

Tgt Ion: 164 Resp: 57113  
 Ion Ratio Lower Upper  
 164 100  
 129 101.1 80.8 150.2  
 131 100.6 74.5 138.3  
 166 128.5 92.5 171.7

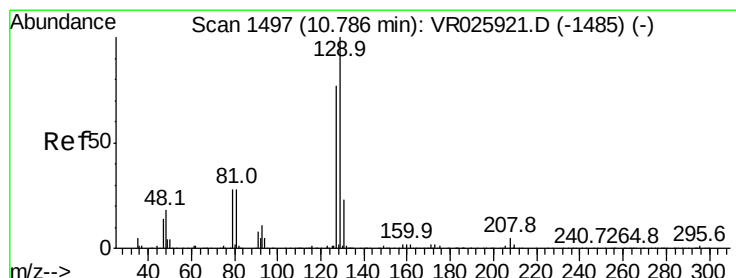
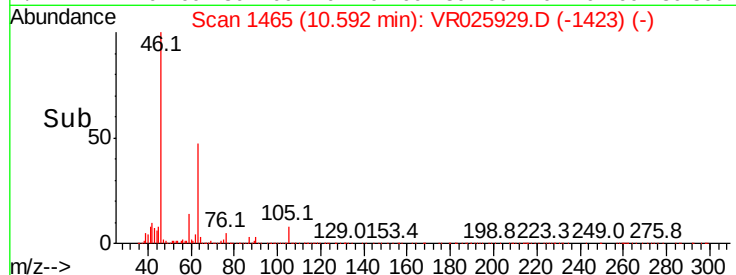
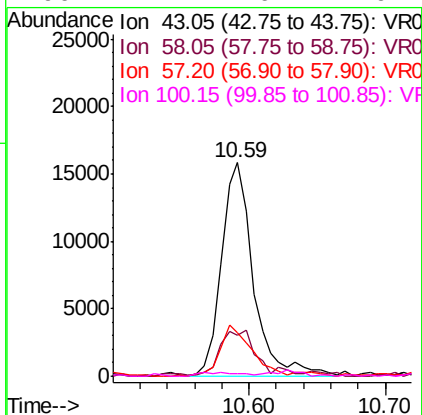
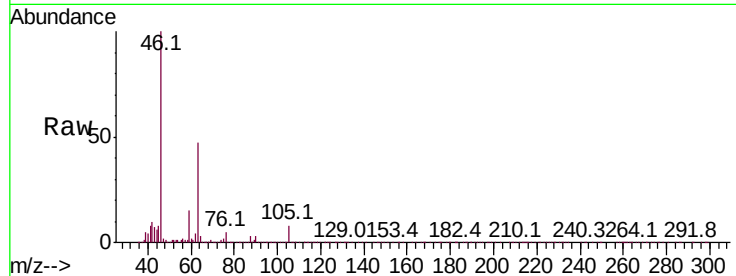




#48  
2-Hexanone  
Concen: 4.351 ug/L  
RT: 10.59 min Scan# 1465  
Delta R.T. -0.04 min  
Lab File: VR025929.D  
Acq: 2 Oct 2018 15:51

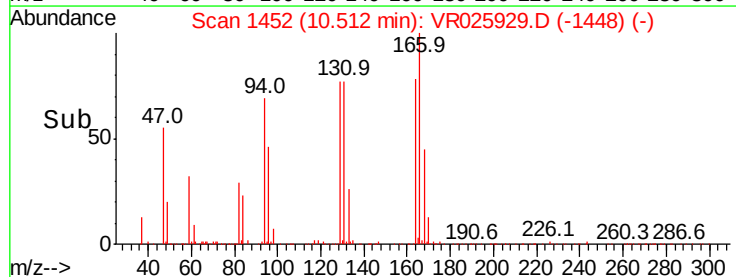
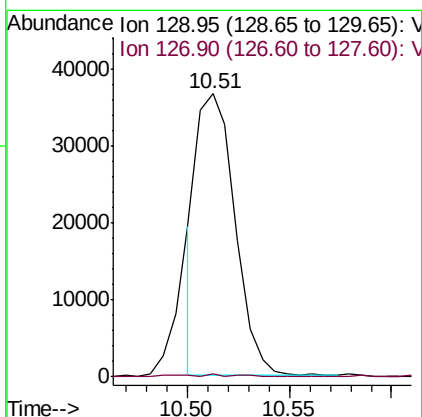
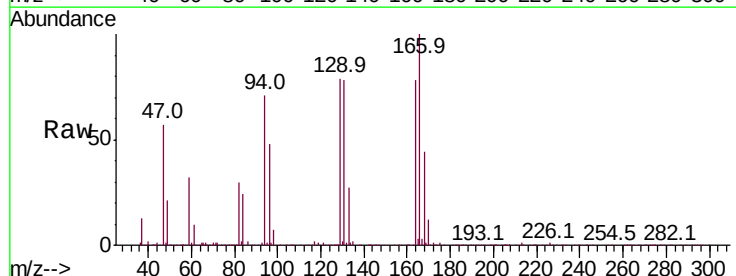
Instrument :  
MSVOA\_R  
ClientSampled :

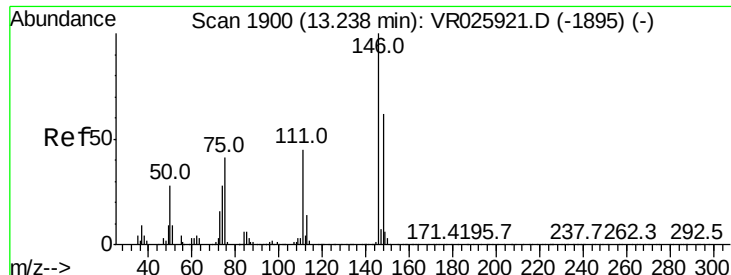
Tot Ion: 43 Resp: 25766  
Ion Ratio Lower Upper  
43 100  
58 24.6 39.5 59.3#  
57 23.6 14.6 21.8#  
100 2.4 6.7 10.1#



#49  
Dibromochloromethane  
Concen: 4.030 ug/L  
RT: 10.51 min Scan# 1452  
Delta R.T. -0.27 min  
Lab File: VR025929.D  
Acq: 2 Oct 2018 15:51

Tgt Ion: 129 Resp: 47594  
Ion Ratio Lower Upper  
129 100  
127 1.2 54.1 100.5#





#63

1,4-Dichlorobenzene

Concen: 0.073 ug/L

RT: 13.24 min Scan# 1901

Delta R.T. 0.01 min

Lab File: VR025929.D

Acq: 2 Oct 2018 15:51

Instrument :

MSVOA\_R

ClientSampleId :

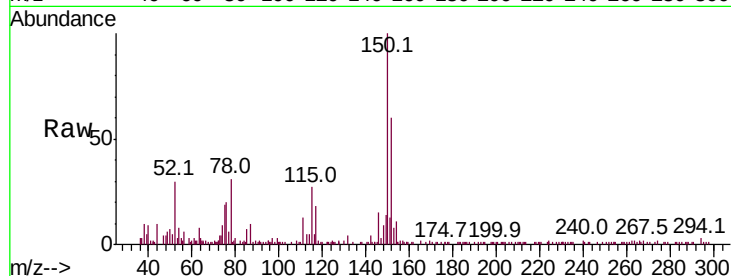
Tot Ion:146 Resp: 2625

Ion Ratio Lower Upper

146 100

111 88.1 32.9 61.1#

148 63.7 45.5 84.5



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

