

Data Path : Z:\VOASRV\HPCHEM1\MSVOA R\DATA\VR100918\  
 Data File : VR026017.D  
 Acq On : 9 Oct 2018 17:01  
 Operator : SY/MD  
 Sample : J5276-16DL 4X  
 Misc : 25mL/MSVOA R/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_R  
 ClientSampleId :

Quant Time: Oct 10 05:42:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR092718WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Oct 10 05:39:19 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.46  | 114  | 461147   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.29 | 117  | 377822   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.22 | 152  | 126676   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.14   | 65    | 165191   | 4.54     | ug/L | -0.02   |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 90.80%  |
| 7) Chloroethane-d5             | 2.63   | 69    | 135778   | 4.57     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 91.40%  |
| 11) 1,1-Dichloroethene-d2      | 3.63   | 63    | 293783   | 3.44     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 68.80%  |
| 20) 2-Butanone-d5              | 6.59   | 46    | 225800   | 55.70    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 111.40% |
| 24) Chloroform-d               | 7.20   | 84    | 294802   | 4.66     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 93.20%  |
| 26) 1,2-Dichloroethane-d4      | 7.90   | 65    | 140538   | 5.16     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 103.20% |
| 32) Benzene-d6                 | 7.85   | 84    | 594106   | 4.73     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 94.60%  |
| 36) 1,2-Dichloropropane-d6     | 8.90   | 67    | 164956   | 4.87     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 97.40%  |
| 41) Toluene-d8                 | 9.97   | 98    | 533063   | 4.51     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 90.20%  |
| 43) trans-1,3-Dichloropropene- | 10.23  | 79    | 36067    | 4.69     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 93.80%  |
| 46) 2-Hexanone-d5              | 10.59  | 63    | 168786   | 57.54    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 115.08% |
| 57) 1,1,2,2-Tetrachloroethane- | 12.36  | 84    | 64550    | 4.69     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 93.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 13.51  | 152   | 97854    | 4.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 96.40%  |

## Target Compounds

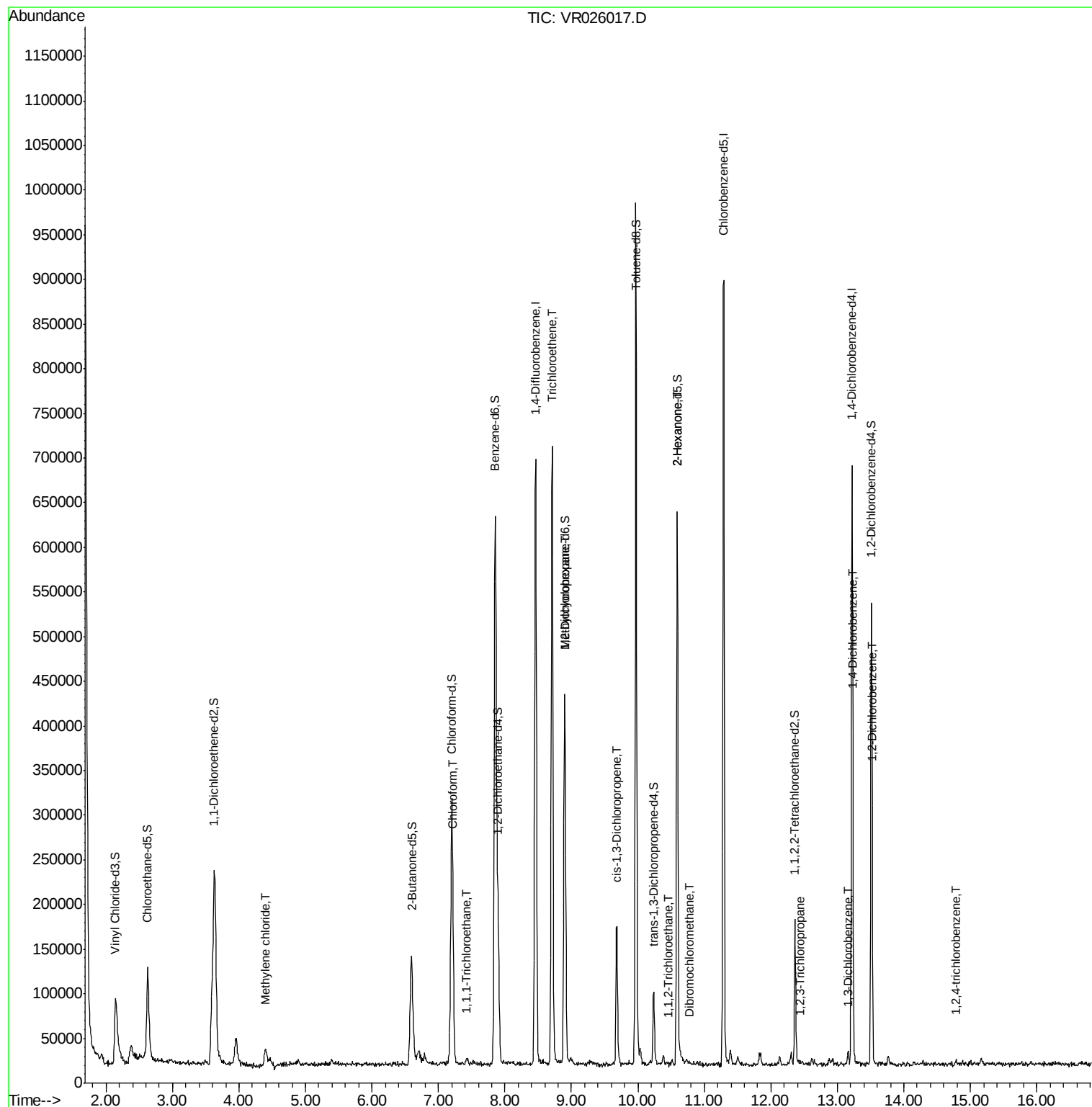
| Target Compounds            | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|-----------------------------|-------|------|----------|-------|--------|--------|
| 16) Methylene chloride      | 4.40  | 84   | 17711    | 0.553 | ug/L   | 95     |
| 25) Chloroform              | 7.22  | 83   | 4221     | 0.076 | ug/L   | 85     |
| 29) 1,1,1-Trichloroethane   | 7.42  | 97   | 4915     | 0.116 | ug/L # | 87     |
| 34) Trichloroethene         | 8.71  | 95   | 219496   | 6.574 | ug/L   | 88     |
| 35) Methylcyclohexane       | 8.90  | 83   | 36715    | 0.731 | ug/L # | 16     |
| 39) cis-1,3-Dichloropropene | 9.68  | 75   | 4957     | 0.163 | ug/L   | 87     |
| 45) 1,1,2-Trichloroethane   | 10.45 | 97   | 1276     | 0.104 | ug/L # | 53     |
| 48) 2-Hexanone              | 10.59 | 43   | 27917    | 4.460 | ug/L # | 69     |
| 49) Dibromochloromethane    | 10.78 | 129  | 1289     | 0.103 | ug/L   | 93     |
| 59) 1,2,3-Trichloropropane  | 12.44 | 75   | 1212     | 0.137 | ug/L # | 62     |
| 62) 1,3-Dichlorobenzene     | 13.16 | 146  | 3262     | 0.088 | ug/L   | 89     |
| 63) 1,4-Dichlorobenzene     | 13.24 | 146  | 2708     | 0.072 | ug/L # | 66     |
| 65) 1,2-Dichlorobenzene     | 13.53 | 146  | 2883     | 0.097 | ug/L # | 80     |
| 68) 1,2,4-trichlorobenzene  | 14.79 | 180  | 1461     | 0.104 | ug/L # | 74     |

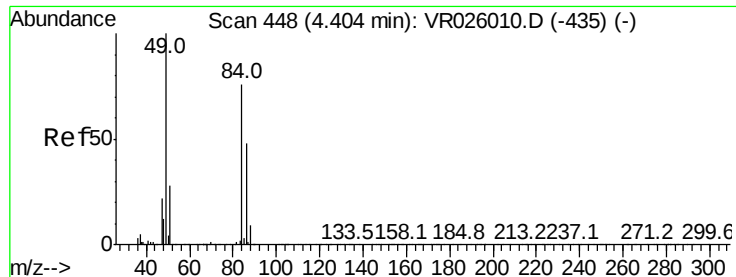
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA R\DATA\VR100918\  
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ALS Vial : 7 Sample Multiplier: 1

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MSVOA\_R  
ClientSampleId :

Quant Time: Oct 10 05:42:49 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_R\METHODS\SOMRTR092718WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Oct 10 05:39:19 2018  
Response via : Initial Calibration

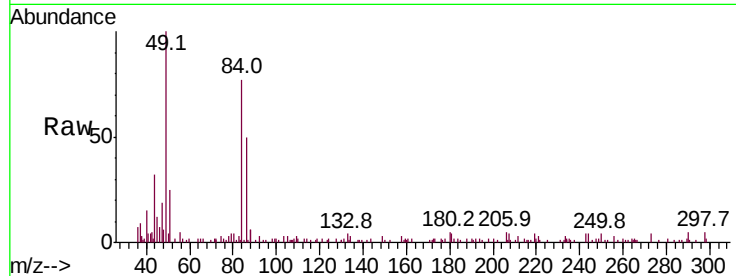




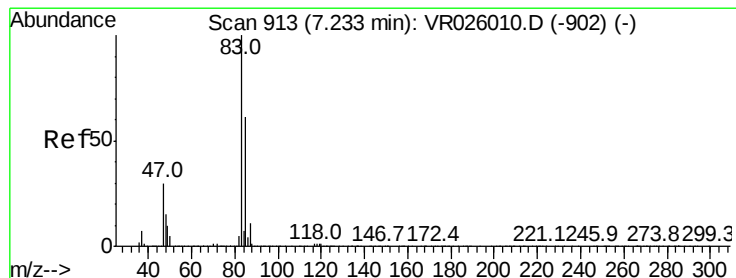
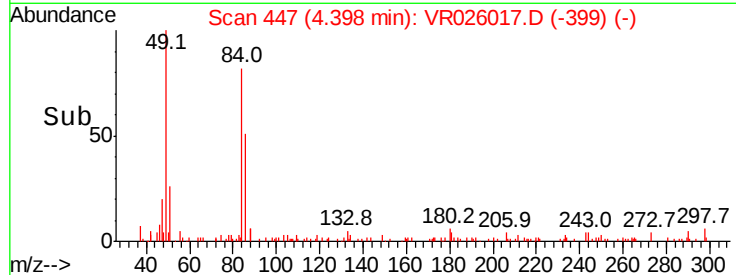
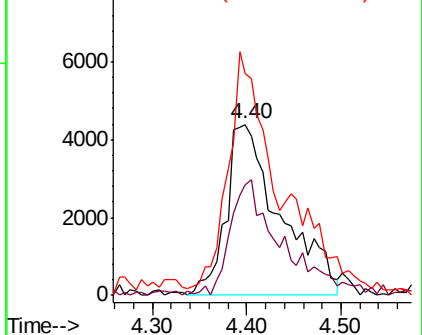
#16  
Methvlene chloride  
Concen: 0.553 ug/L  
RT: 4.40 min Scan# 447  
Delta R.T. -0.01 min  
Lab File: VR026017.D  
Acq: 9 Oct 2018 17:01

Instrument :  
MSVOA\_R  
ClientSampleId :

Tot Ion: 84 Resp: 17711  
Ion Ratio Lower Upper  
84 100  
86 64.4 43.1 80.1  
49 129.7 95.5 177.3

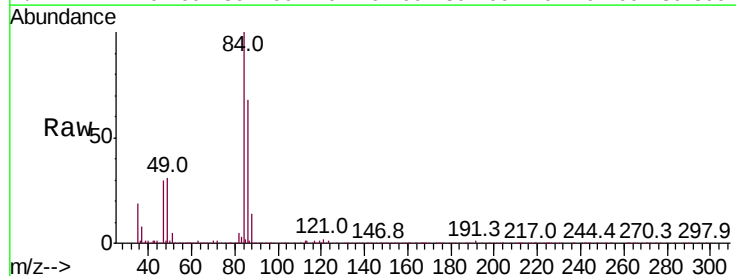


Abundance Ion 84.05 (83.75 to 84.75): VR0  
Ion 86.00 (85.70 to 86.70): VR0  
Ion 49.10 (48.80 to 49.80): VR0

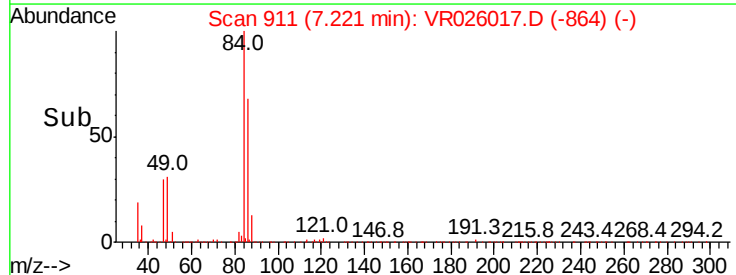
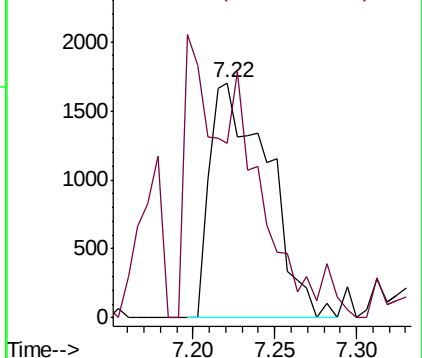


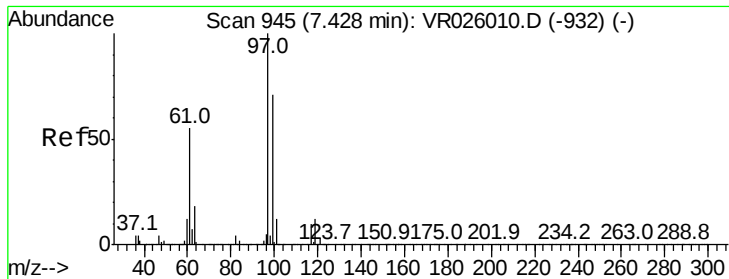
#25  
Chloroform  
Concen: 0.076 ug/L  
RT: 7.22 min Scan# 911  
Delta R.T. -0.01 min  
Lab File: VR026017.D  
Acq: 9 Oct 2018 17:01

Tgt Ion: 83 Resp: 4221  
Ion Ratio Lower Upper  
83 100  
85 74.2 43.8 81.4



Abundance Ion 83.05 (82.75 to 83.75): VR0  
Ion 85.00 (84.70 to 85.70): VR0





#29

1,1,1-Trichloroethane

Concen: 0.116 ug/L

RT: 7.42 min Scan# 944

Delta R.T. -0.01 min

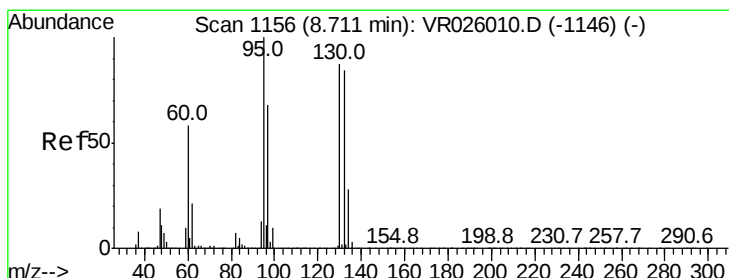
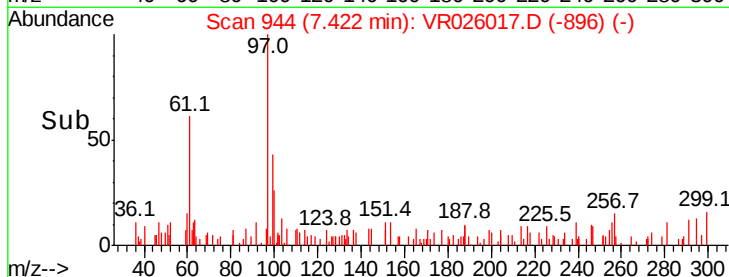
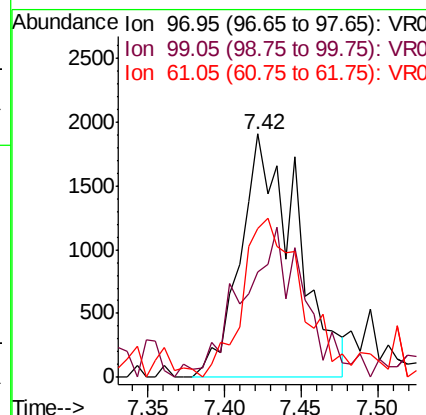
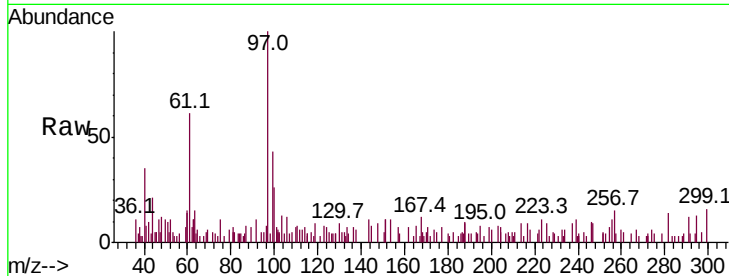
Lab File: VR026017.D

Acq: 9 Oct 2018 17:01

Instrument :  
MSVOA\_R  
ClientSampled :

Tot Ion: 97 Resp: 4915

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 99  | 68.2  | 51.0  | 76.6  |
| 61  | 68.2  | 41.6  | 62.4  |



#34

Trichloroethene

Concen: 6.574 ug/L

RT: 8.71 min Scan# 1156

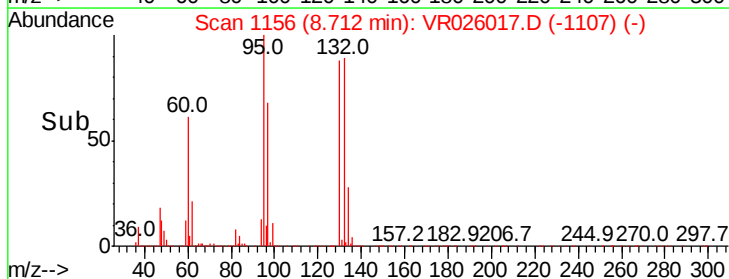
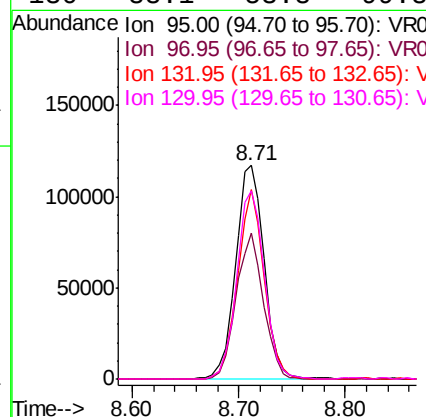
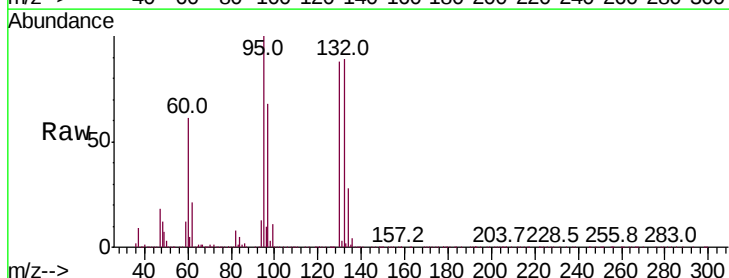
Delta R.T. 0.00 min

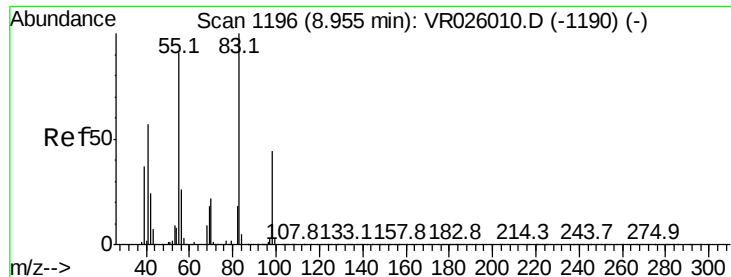
Lab File: VR026017.D

Acq: 9 Oct 2018 17:01

Tgt Ion: 95 Resp: 219496

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 68.0  | 43.9  | 81.5  |
| 132 | 88.9  | 53.3  | 98.9  |
| 130 | 88.1  | 53.8  | 99.8  |

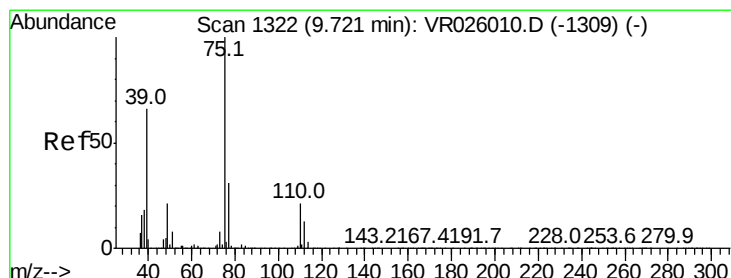
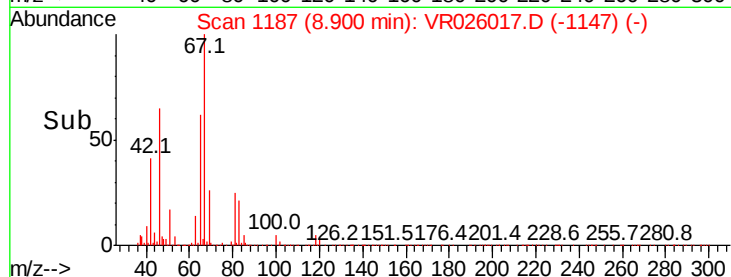
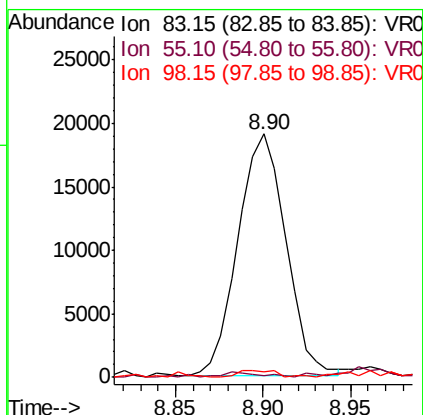
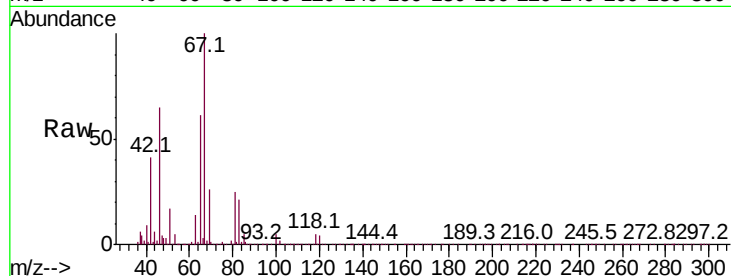




#35  
Methylcyclohexane  
Concen: 0.731 ug/L  
RT: 8.90 min Scan# 1187  
Delta R.T. -0.05 min  
Lab File: VR026017.D  
Acq: 9 Oct 2018 17:01

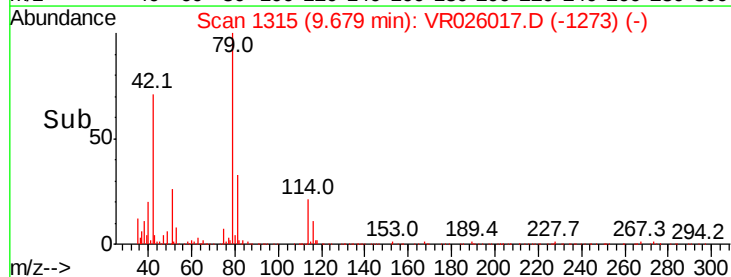
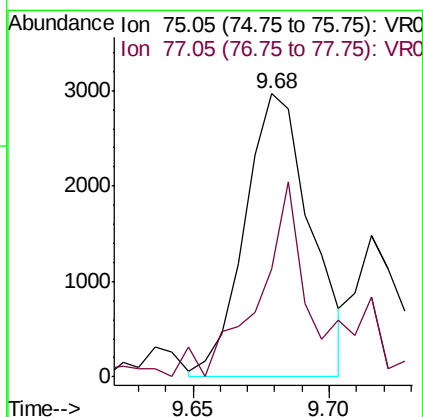
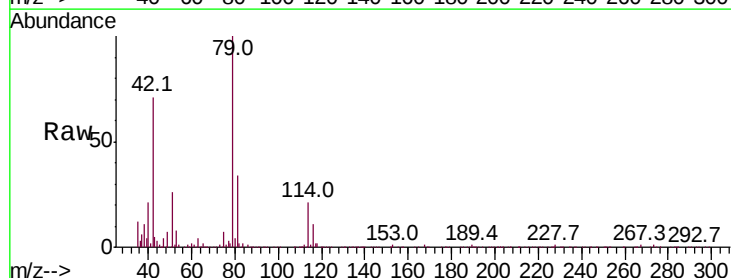
Instrument :  
MSVOA\_R  
ClientSampled :

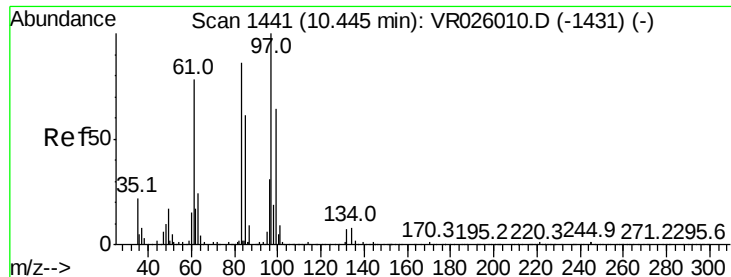
Tot Ion: 83 Resp: 36715  
Ion Ratio Lower Upper  
83 100  
55 1.7 71.8 107.6#  
98 1.7 34.2 51.4#



#39  
cis-1,3-Dichloropropene  
Concen: 0.163 ug/L  
RT: 9.68 min Scan# 1315  
Delta R.T. -0.04 min  
Lab File: VR026017.D  
Acq: 9 Oct 2018 17:01

Tgt Ion: 75 Resp: 4957  
Ion Ratio Lower Upper  
75 100  
77 38.0 21.5 39.9

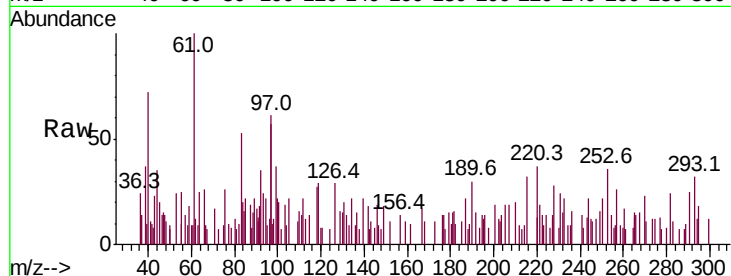




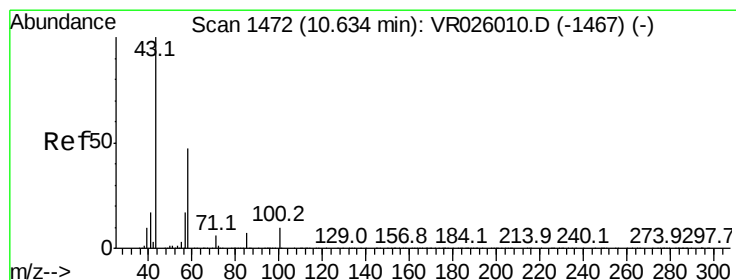
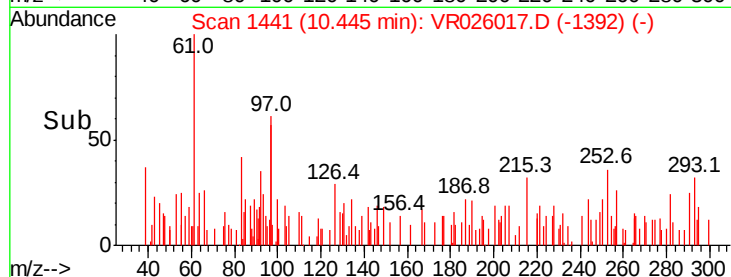
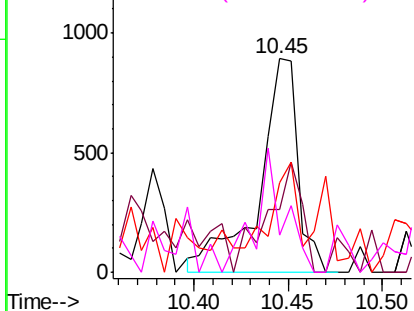
#45  
 1,1,2-Trichloroethane  
 Concen: 0.104 ug/L  
 RT: 10.45 min Scan# 1441  
 Delta R.T. 0.00 min  
 Lab File: VR026017.D  
 Acq: 9 Oct 2018 17:01

Instrument :  
 MSVOA\_R  
 ClientSampleID :

Tot Ion: 97 Resp: 1276  
 Ion Ratio Lower Upper  
 97 100  
 99 29.2 39.6 73.6#  
 83 41.7 62.2 115.6#  
 85 17.5 39.1 72.7#

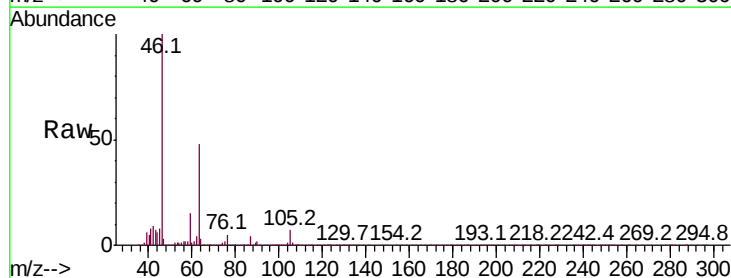


Abundance Ion 96.95 (96.65 to 97.65): VR0  
 Ion 99.05 (98.75 to 99.75): VR0  
 Ion 82.95 (82.65 to 83.65): VR0  
 Ion 85.00 (84.70 to 85.70): VR0

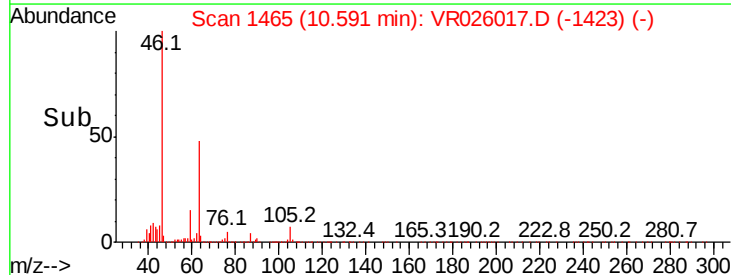
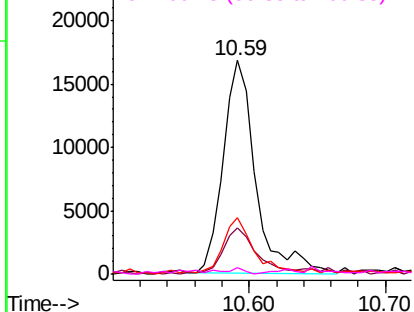


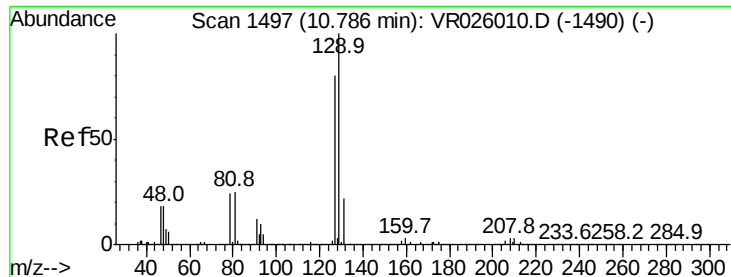
#48  
 2-Hexanone  
 Concen: 4.460 ug/L  
 RT: 10.59 min Scan# 1465  
 Delta R.T. -0.04 min  
 Lab File: VR026017.D  
 Acq: 9 Oct 2018 17:01

Tgt Ion: 43 Resp: 27917  
 Ion Ratio Lower Upper  
 43 100  
 58 22.5 39.5 59.3#  
 57 23.8 14.6 21.8#  
 100 2.0 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





#49

Dibromochloromethane

Concen: 0.103 ug/L

RT: 10.78 min Scan# 1496

Delta R.T. -0.01 min

Lab File: VR026017.D

Acq: 9 Oct 2018 17:01

Instrument :

MSVOA\_R

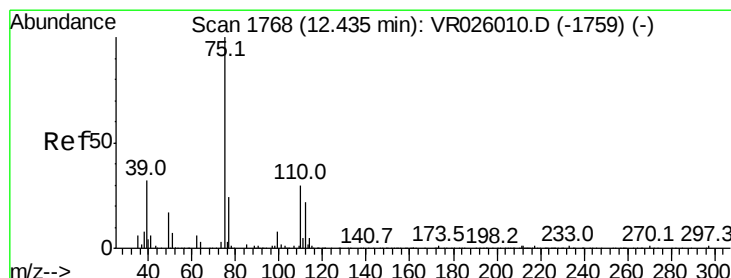
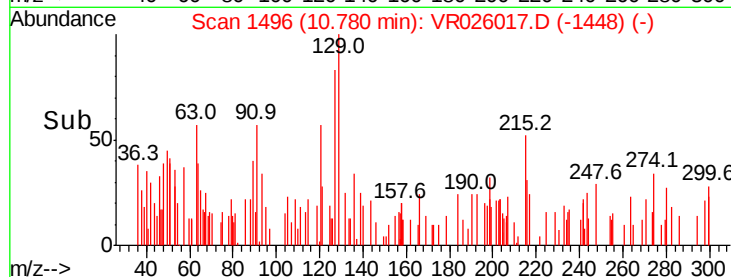
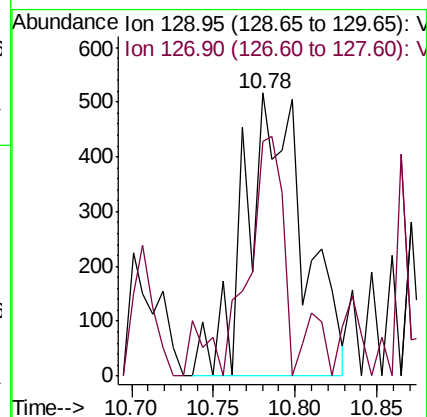
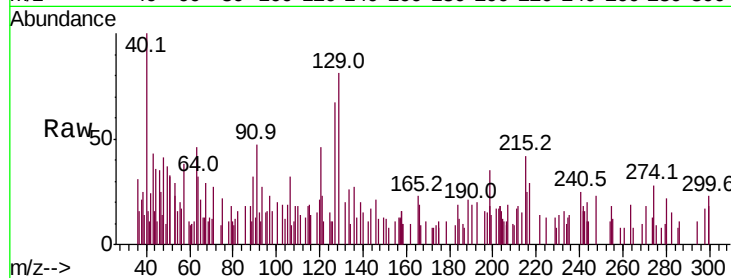
ClientSampled :

Tot Ion:129 Resp: 1289

Ion Ratio Lower Upper

129 100

127 83.0 54.1 100.5



#59

1,2,3-Trichloropropane

Concen: 0.137 ug/L

RT: 12.44 min Scan# 1769

Delta R.T. 0.01 min

Lab File: VR026017.D

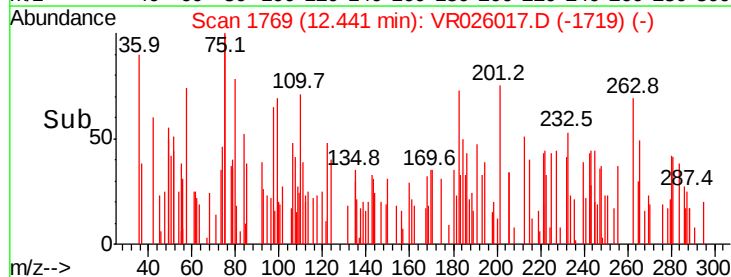
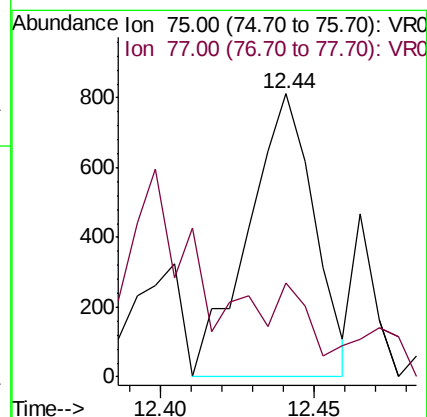
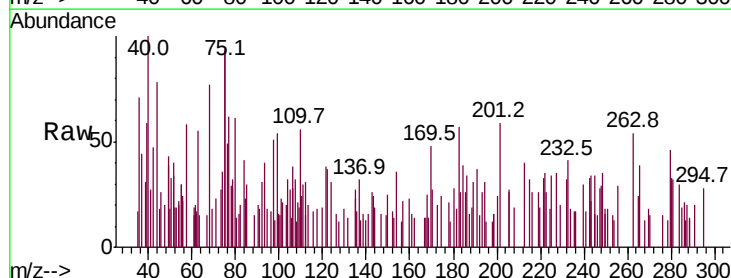
Acq: 9 Oct 2018 17:01

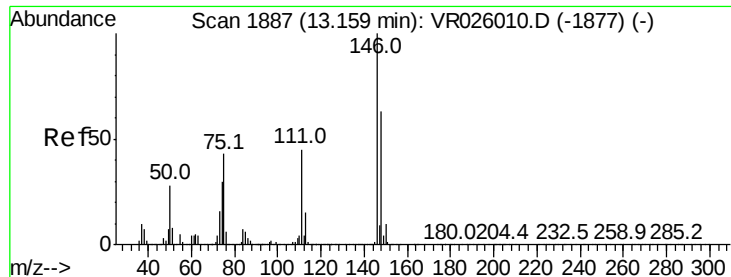
Tgt Ion: 75 Resp: 1212

Ion Ratio Lower Upper

75 100

77 11.1 25.8 38.6#





#62

1,3-Dichlorobenzene

Concen: 0.088 ug/L

RT: 13.16 min Scan# 1887

Delta R.T. 0.00 min

Lab File: VR026017.D

Acq: 9 Oct 2018 17:01

Instrument :

MSVOA\_R

ClientSampleId :

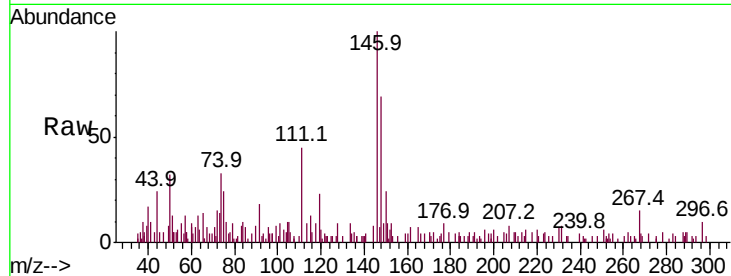
Tot Ion:146 Resp: 3262

Ion Ratio Lower Upper

146 100

111 44.9 36.6 68.0

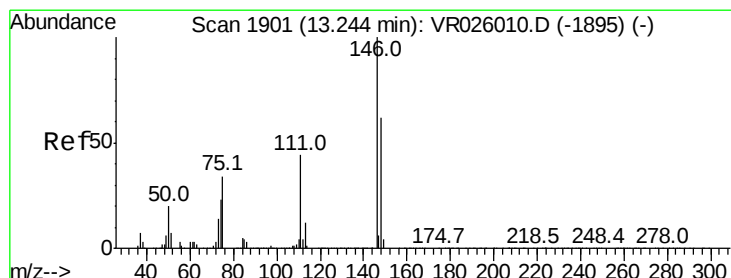
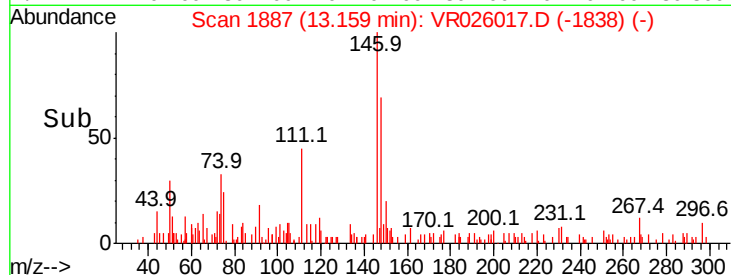
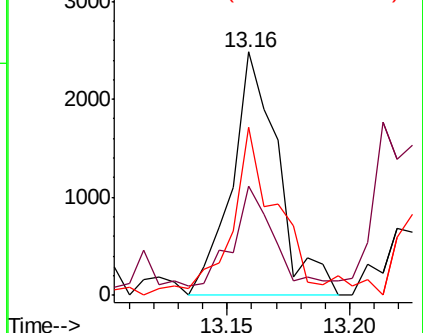
148 69.0 41.9 77.7



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



#63

1,4-Dichlorobenzene

Concen: 0.072 ug/L

RT: 13.24 min Scan# 1900

Delta R.T. -0.01 min

Lab File: VR026017.D

Acq: 9 Oct 2018 17:01

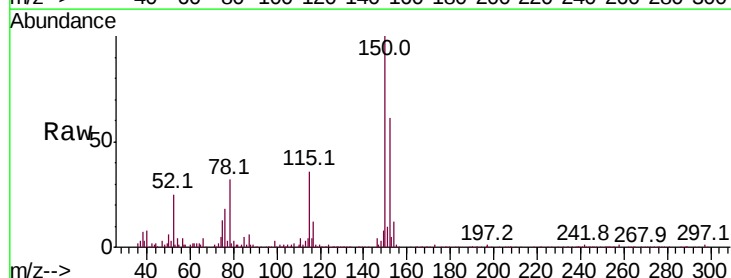
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Ion Ratio Lower Upper

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111 91.8 32.9 61.1#

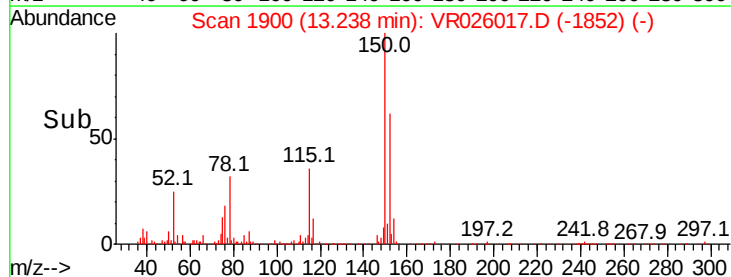
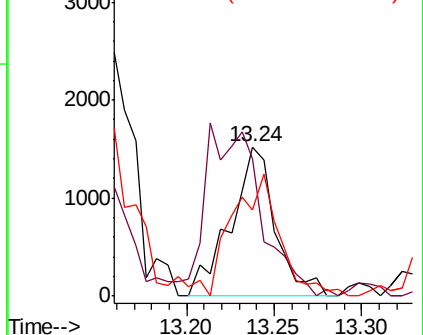
148 57.7 45.5 84.5

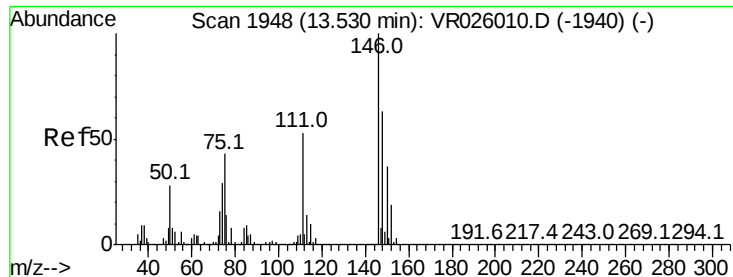


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

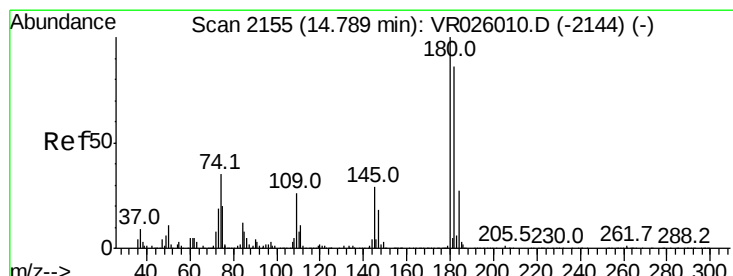
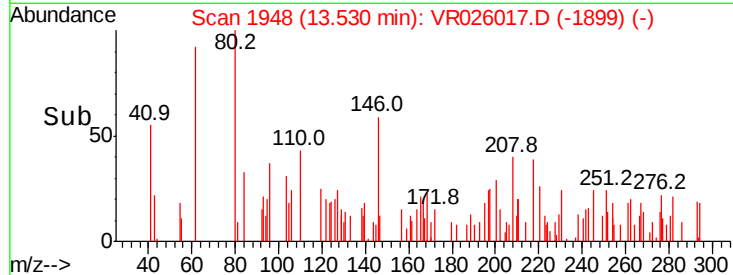
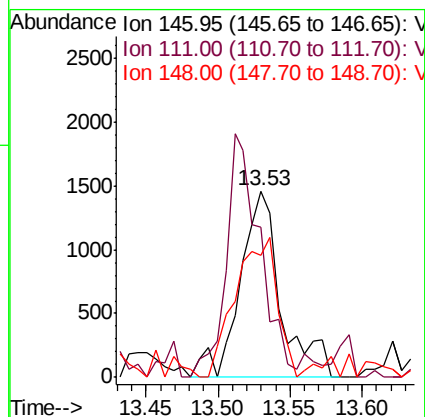
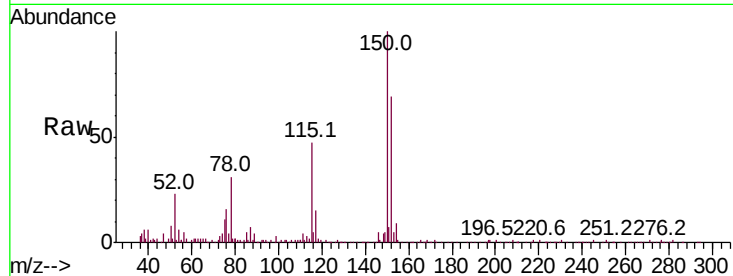




#65  
 1,2-Dichlorobenzene  
 Concen: 0.097 ug/L  
 RT: 13.53 min Scan# 1948  
 Delta R.T. 0.00 min  
 Lab File: VR026017.D  
 Acq: 9 Oct 2018 17:01

Instrument :  
 MSVOA\_R  
 ClientSampleId :

Tot Ion:146 Resp: 2883  
 Ion Ratio Lower Upper  
 146 100  
 111 80.3 39.4 59.0#  
 148 65.3 53.5 80.3



#68  
 1,2,4-trichlorobenzene  
 Concen: 0.104 ug/L  
 RT: 14.79 min Scan# 2155  
 Delta R.T. 0.00 min  
 Lab File: VR026017.D  
 Acq: 9 Oct 2018 17:01

Tgt Ion:180 Resp: 1461  
 Ion Ratio Lower Upper  
 180 100  
 182 64.8 75.2 112.8#  
 145 29.6 30.5 45.7#

