

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV121420\  
 Data File : VV019618.D  
 Acq On : 14 Dec 2020 20:41  
 Operator : SY/MD  
 Sample : L4928-19 5X  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BG4N2

Quant Time: Dec 15 07:24:49 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM121020WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Dec 15 07:21:43 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.62  | 114  | 665213   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.86  | 117  | 616028   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.25 | 152  | 282445   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.31    | 65    | 204356   | 42.84    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 85.68%  |
| 7) Chloroethane-d5             | 1.57    | 69    | 178563   | 47.46    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 94.92%  |
| 11) 1,1-Dichloroethene-d2      | 2.11    | 63    | 326022   | 36.83    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 73.66%  |
| 21) 2-Butanone-d5              | 3.89    | 46    | 278646   | 107.47   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 107.47% |
| 24) Chloroform-d               | 4.35    | 84    | 392725   | 45.68    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.36%  |
| 26) 1,2-Dichloroethane-d4      | 5.04    | 65    | 275546   | 49.04    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.08%  |
| 32) Benzene-d6                 | 5.05    | 84    | 787033   | 47.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 95.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.07    | 67    | 252729   | 49.10    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 98.20%  |
| 41) Toluene-d8                 | 7.32    | 98    | 687541   | 46.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 92.96%  |
| 43) trans-1,3-Dichloropropene- | 7.62    | 79    | 123519   | 42.19    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 84.38%  |
| 47) 2-Hexanone-d5              | 8.09    | 63    | 203367   | 100.68   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 100.68% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.22   | 84    | 338481   | 48.62    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 97.24%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.63   | 152   | 257260   | 48.73    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 97.46%  |

## Target Compounds

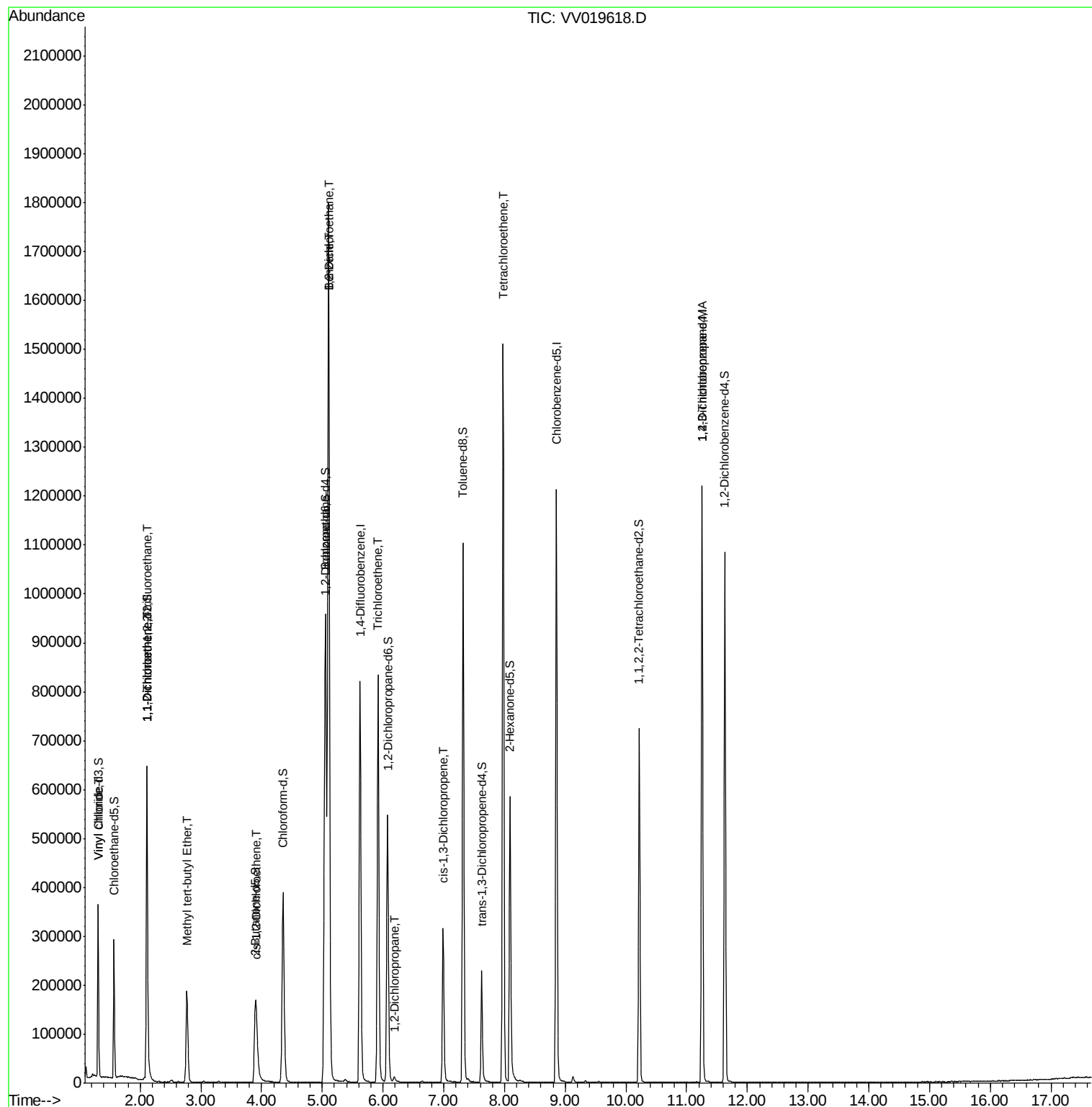
|                                |       |     |         |        | Ovalue    |
|--------------------------------|-------|-----|---------|--------|-----------|
| 5) Vinyl chloride              | 1.31  | 62  | 14837   | 2.592  | ug/L # 73 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.11  | 101 | 2765    | 0.716  | ug/L # 22 |
| 12) 1,1-Dichloroethene         | 2.12  | 96  | 45208   | 11.408 | ug/L # 1  |
| 18) Methyl tert-butyl Ether    | 2.77  | 73  | 187880  | 12.378 | ug/L 99   |
| 20) cis-1,2-Dichloroethene     | 3.92  | 96  | 25749   | 5.392  | ug/L # 94 |
| 27) 1,2-Dichloroethane         | 5.10  | 62  | 15899   | 2.282  | ug/L # 75 |
| 33) Benzene                    | 5.10  | 78  | 1747282 | 97.050 | ug/L 100  |
| 34) Trichloroethene            | 5.92  | 95  | 293800  | 61.775 | ug/L 99   |
| 37) 1,2-Dichloropropane        | 6.18  | 63  | 3905    | 0.831  | ug/L # 94 |
| 39) cis-1,3-Dichloropropene    | 6.99  | 75  | 7869    | 1.008  | ug/L # 64 |
| 46) Tetrachloroethene          | 7.98  | 164 | 302978  | 92.066 | ug/L 97   |
| 59) 1,2,3-Trichloropropane     | 11.25 | 75  | 38444   | 6.574  | ug/L 90   |

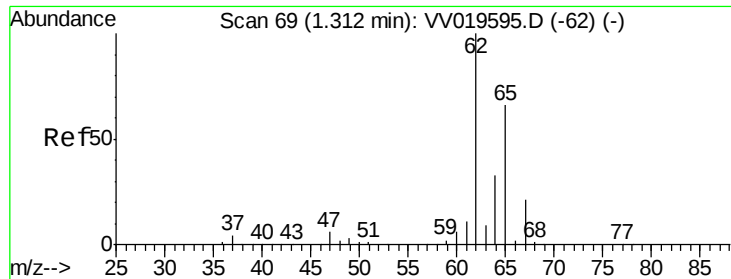
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA V\DATA\VV121420\  
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Acq On : 14 Dec 2020 20:41  
Operator : SY/MD  
Sample : L4928-19 5X  
Misc : 5.0mL/MSVOA V/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
BG4N2

Quant Time: Dec 15 07:24:49 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM121020WMA.M  
Quant Title : VOC Analysis  
QLast Update : Tue Dec 15 07:21:43 2020  
Response via : Initial Calibration





#5

Vinyl chloride

Concen: 2.592 ug/L

RT: 1.31 min Scan# 69

Delta R.T. 0.00 min

Lab File: VV019618.D

Acq: 14 Dec 2020 20:41

Instrument :

MSVOA\_V

ClientSampleId :

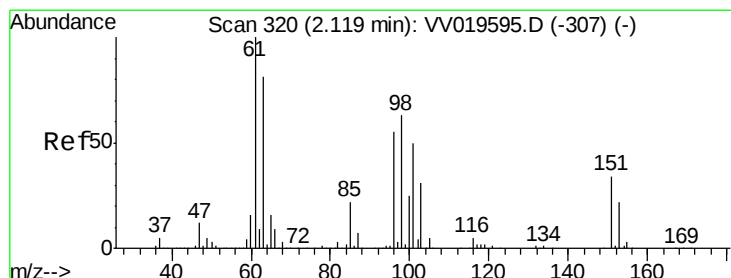
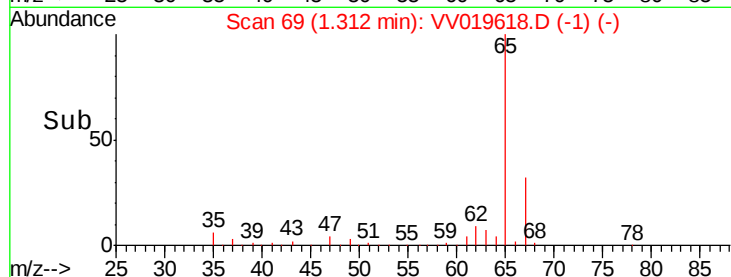
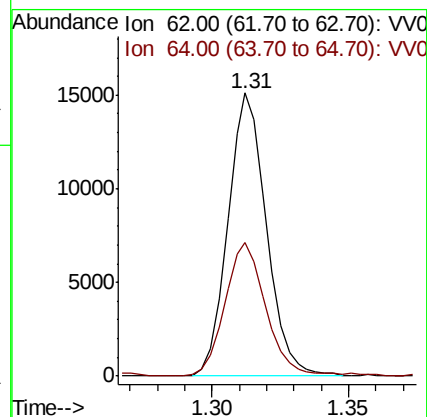
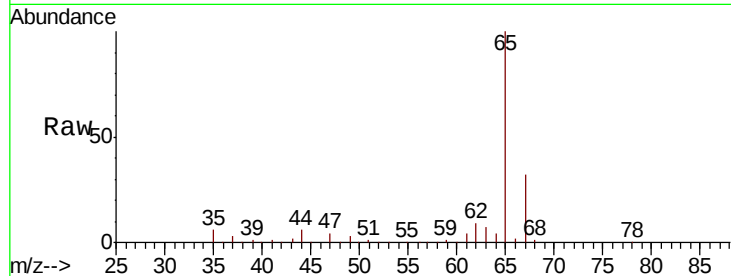
BG4N2

Tot Ion: 62 Resp: 14837

Ion Ratio Lower Upper

62 100

64 47.1 22.5 41.7#



#10

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

Concen: 0.716 ug/L

RT: 2.11 min Scan# 317

Delta R.T. -0.01 min

Lab File: VV019618.D

Acq: 14 Dec 2020 20:41

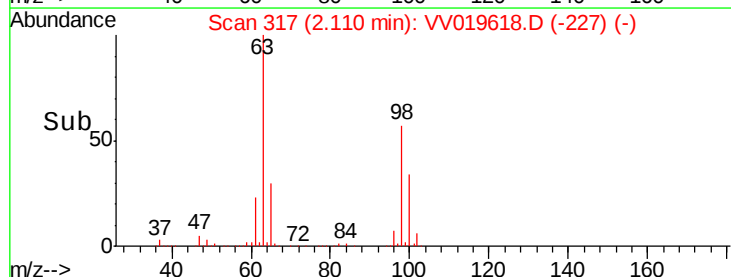
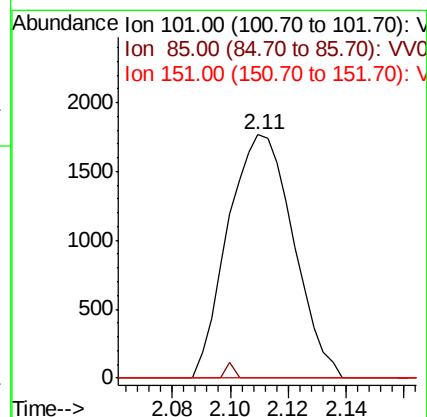
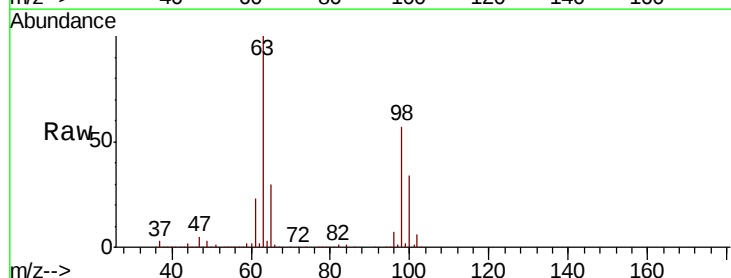
Tgt Ion: 101 Resp: 2765

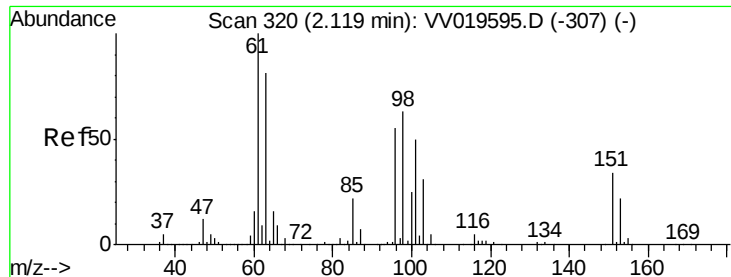
Ion Ratio Lower Upper

101 100

85 0.0 35.0 52.4#

151 0.0 55.8 83.8#

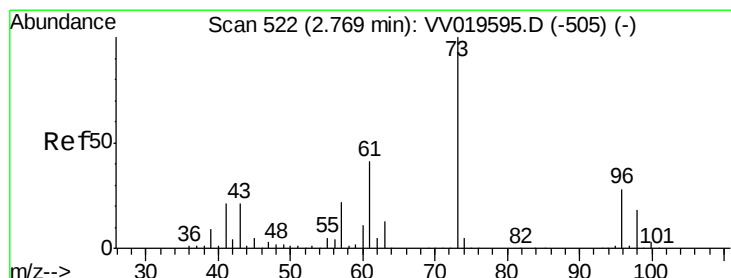
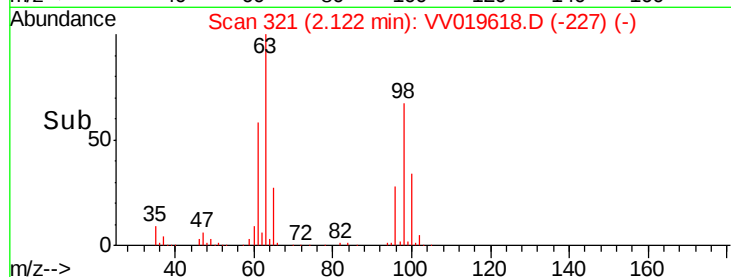
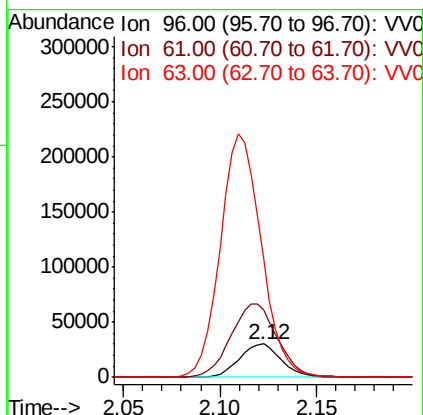
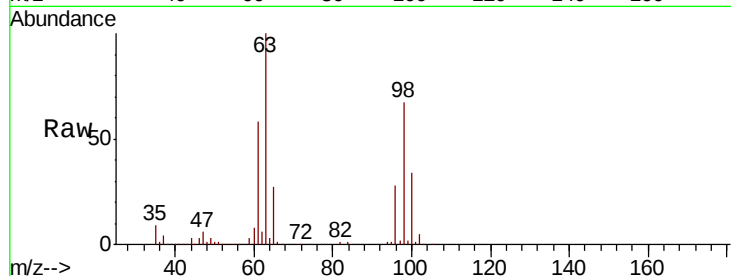




#12  
 1,1-Dichloroethene  
 Concen: 11.408 ug/L  
 RT: 2.12 min Scan# 321  
 Delta R.T. 0.00 min  
 Lab File: VV019618.D  
 Acq: 14 Dec 2020 20:41

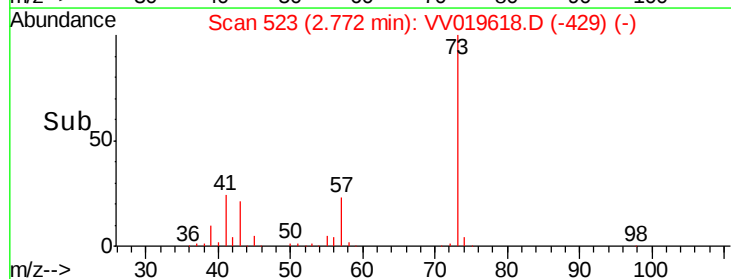
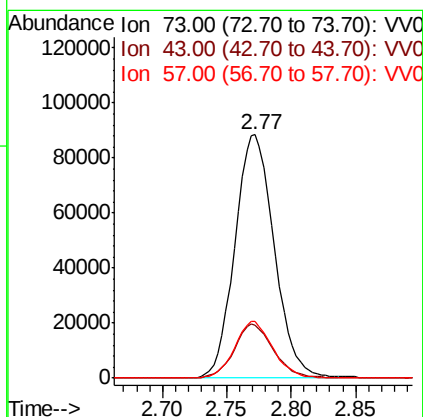
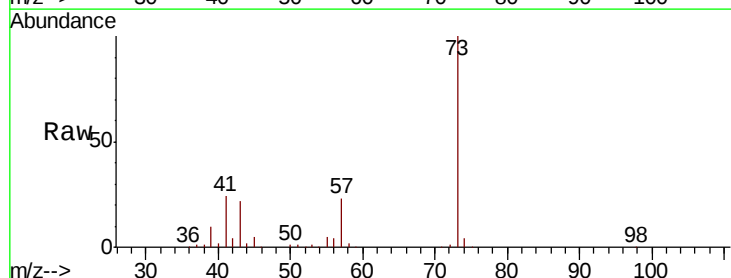
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BG4N2

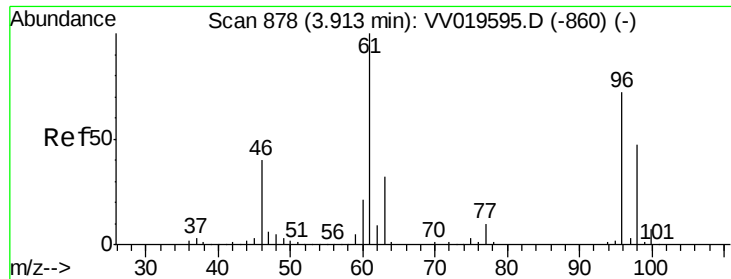
Tot Ion: 96 Resp: 45208  
 Ion Ratio Lower Upper  
 96 100  
 61 202.4 120.7 224.1  
 63 351.4 64.3 119.5#



#18  
 Methyl tert-butyl Ether  
 Concen: 12.378 ug/L  
 RT: 2.77 min Scan# 523  
 Delta R.T. 0.00 min  
 Lab File: VV019618.D  
 Acq: 14 Dec 2020 20:41

Tgt Ion: 73 Resp: 187880  
 Ion Ratio Lower Upper  
 73 100  
 43 21.7 17.3 25.9  
 57 22.5 17.5 26.3

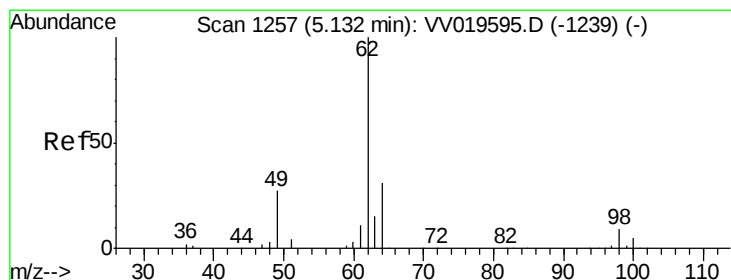
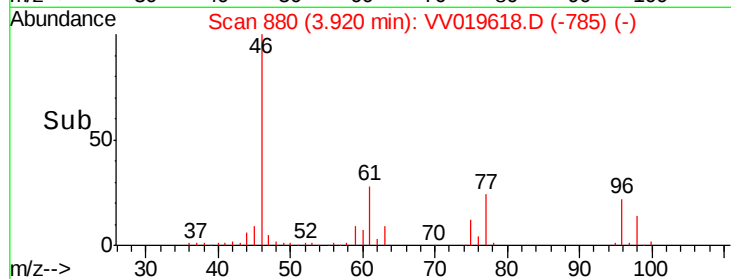
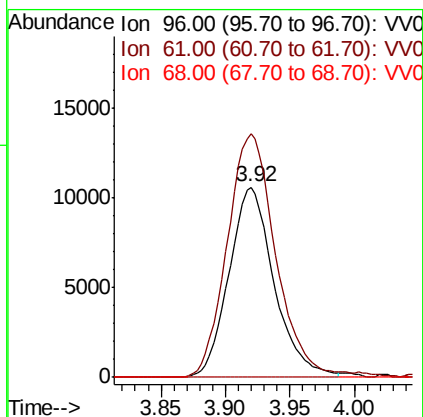
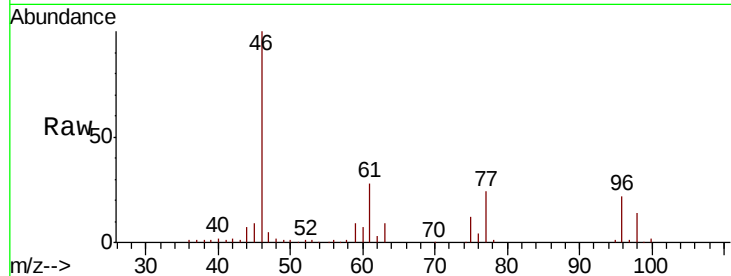




#20  
 cis-1,2-Dichloroethene  
 Concen: 5.392 ug/L  
 RT: 3.92 min Scan# 880  
 Delta R.T. 0.01 min  
 Lab File: VV019618.D  
 Acq: 14 Dec 2020 20:41

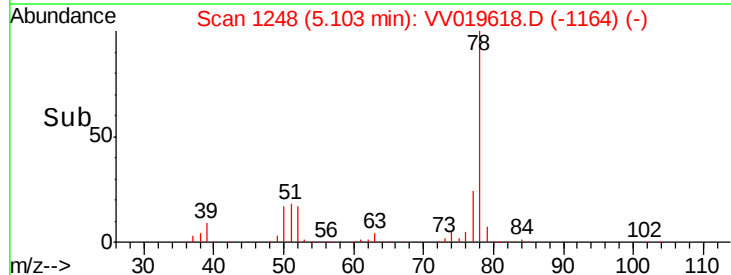
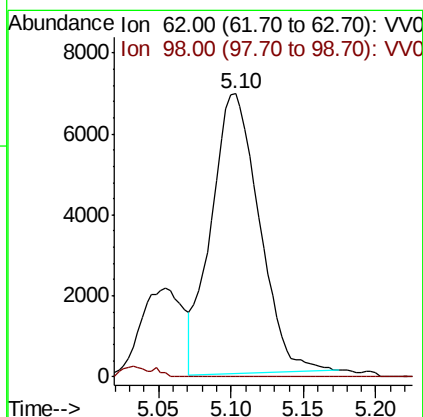
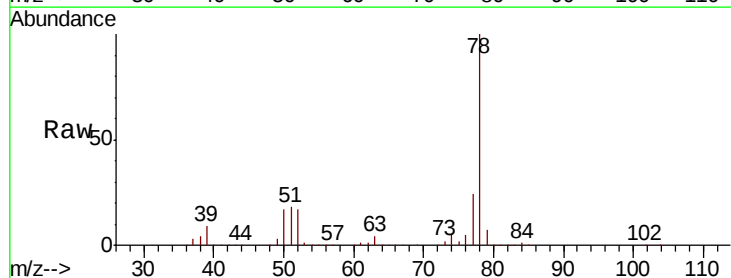
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BG4N2

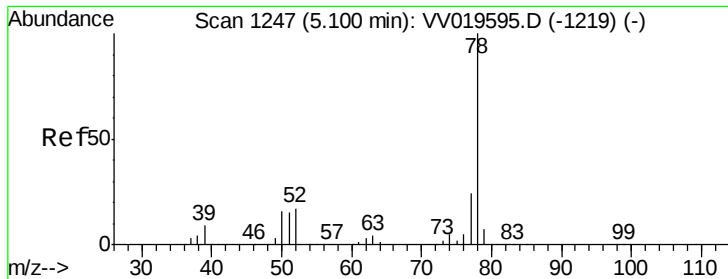
Tot Ion: 96 Resp: 25749  
 Ion Ratio Lower Upper  
 96 100  
 61 127.9 94.1 174.8  
 68 0.0 0.1 0.1#



#27  
 1,2-Dichloroethane  
 Concen: 2.282 ug/L  
 RT: 5.10 min Scan# 1248  
 Delta R.T. -0.03 min  
 Lab File: VV019618.D  
 Acq: 14 Dec 2020 20:41

Tgt Ion: 62 Resp: 15899  
 Ion Ratio Lower Upper  
 62 100  
 98 0.0 7.4 11.0#





#33

Benzene

Concen: 97.050 ug/L

RT: 5.10 min Scan# 1248

Delta R.T. 0.00 min

Lab File: VV019618.D

Acq: 14 Dec 2020 20:41

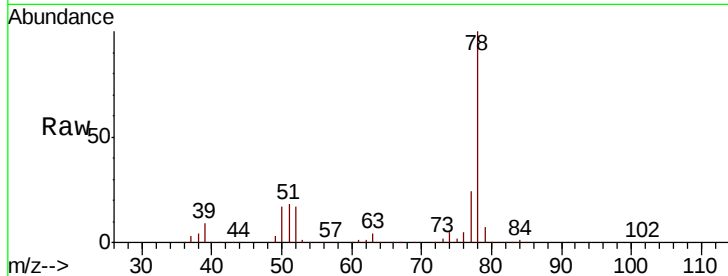
Instrument :

MSVOA\_V

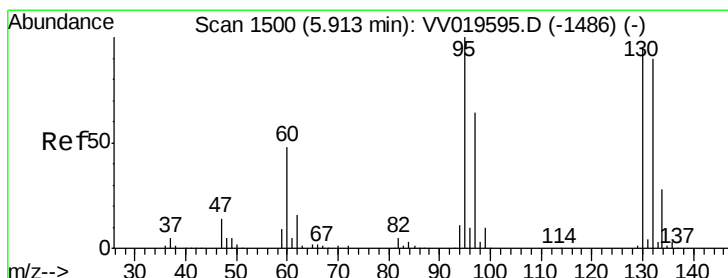
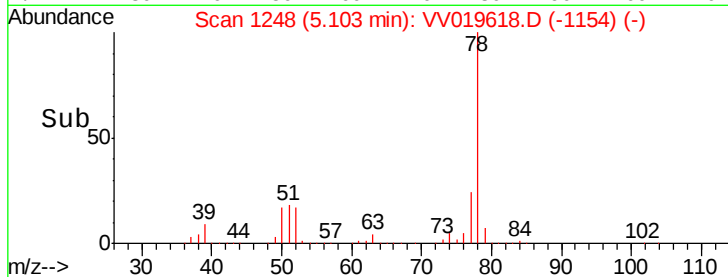
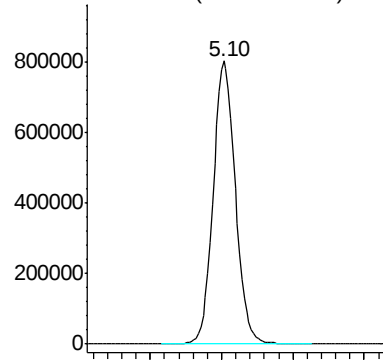
ClientSampleId :

BG4N2

Tgt Ion: 78 Resp: 1747282



Abundance Ion 78.00 (77.70 to 78.70): VV0



#34

Trichloroethene

Concen: 61.775 ug/L

RT: 5.92 min Scan# 1501

Delta R.T. 0.00 min

Lab File: VV019618.D

Acq: 14 Dec 2020 20:41

Tgt Ion: 95 Resp: 293800

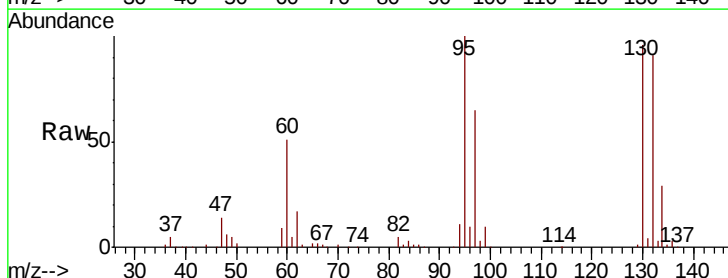
Ion Ratio Lower Upper

95 100

97 65.2 44.4 82.4

132 91.4 64.3 119.3

130 96.0 67.8 125.8

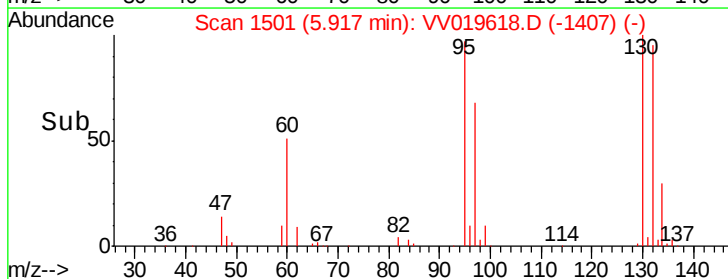
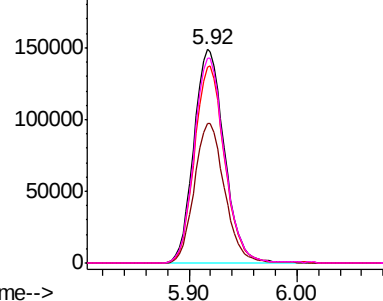


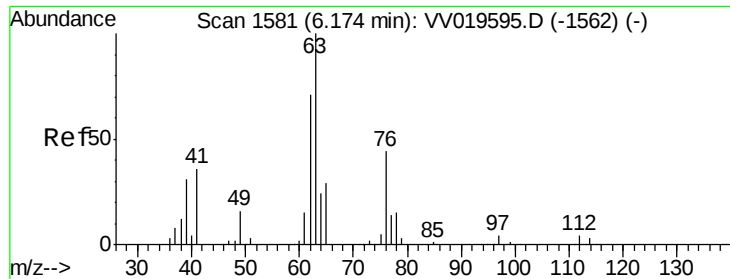
Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 97.00 (96.70 to 97.70): VV0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V

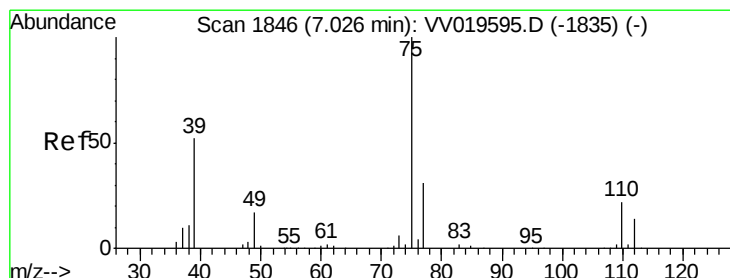
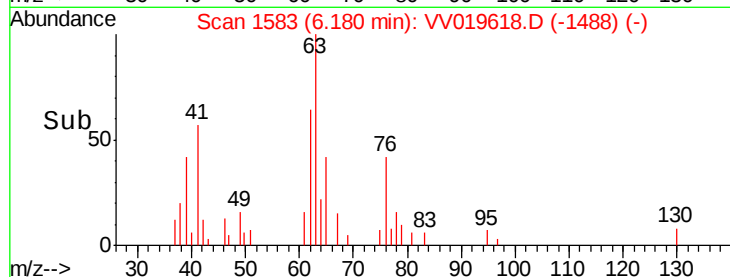
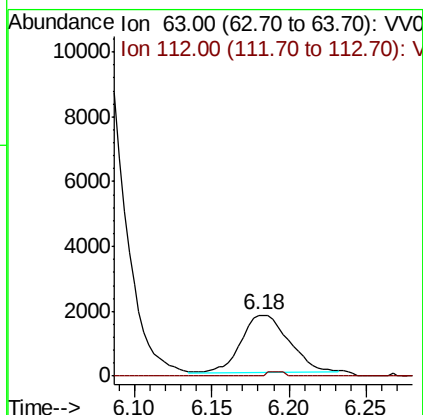
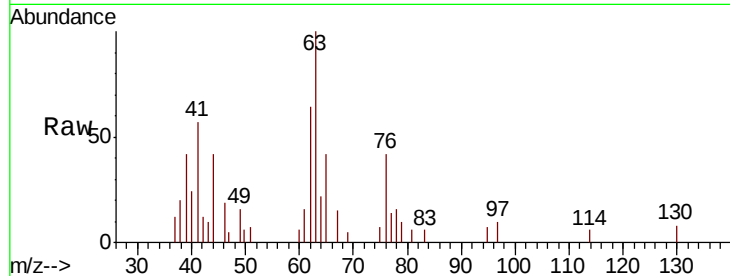




#37  
 1,2-Dichloropropane  
 Concen: 0.831 ug/L  
 RT: 6.18 min Scan# 1583  
 Delta R.T. 0.01 min  
 Lab File: VV019618.D  
 Acq: 14 Dec 2020 20:41

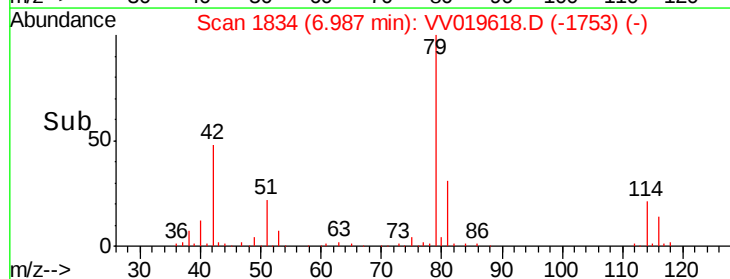
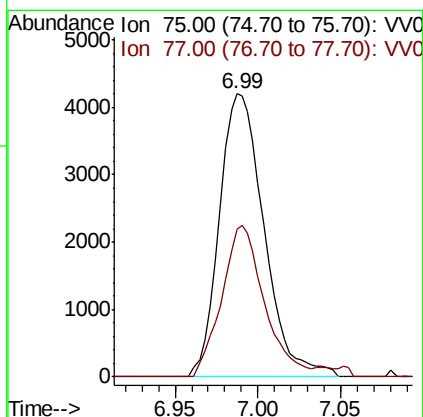
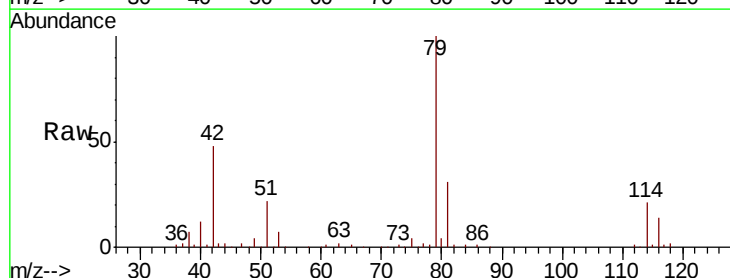
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
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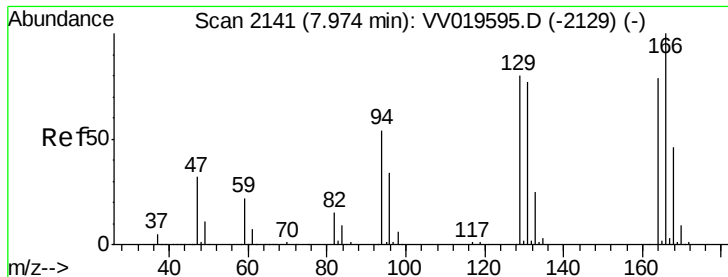
Tot Ion: 63 Resp: 3905  
 Ion Ratio Lower Upper  
 63 100  
 112 2.6 3.5 5.3#



#39  
 cis-1,3-Dichloropropene  
 Concen: 1.008 ug/L  
 RT: 6.99 min Scan# 1834  
 Delta R.T. -0.04 min  
 Lab File: VV019618.D  
 Acq: 14 Dec 2020 20:41

Tgt Ion: 75 Resp: 7869  
 Ion Ratio Lower Upper  
 75 100  
 77 52.1 22.4 41.6#

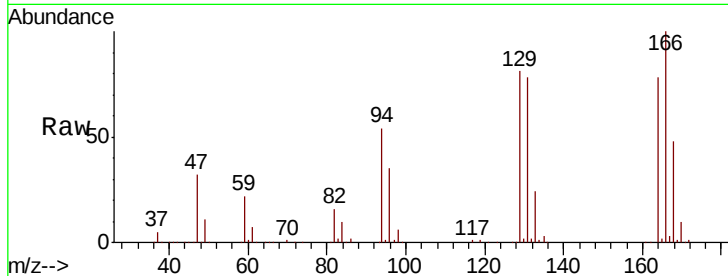




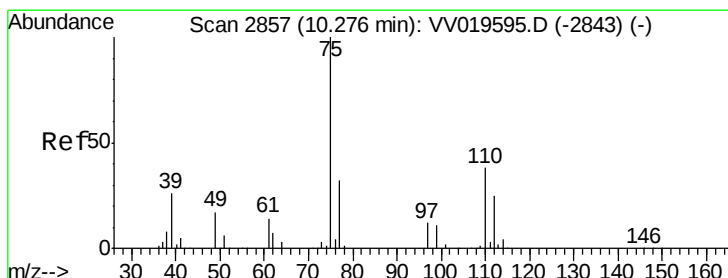
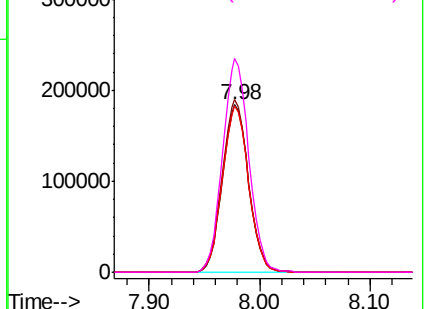
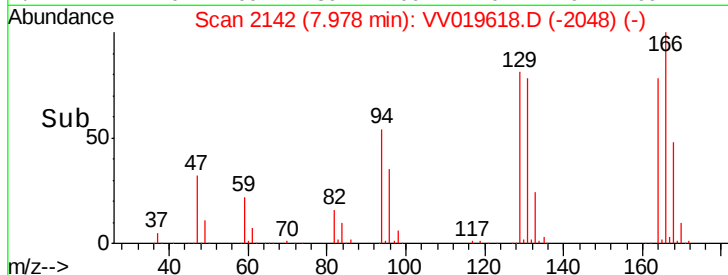
#46  
Tetrachloroethene  
Concen: 92.066 ug/L  
RT: 7.98 min Scan# 2142  
Delta R.T. 0.00 min  
Lab File: VV019618.D  
Acq: 14 Dec 2020 20:41

Instrument :  
MSVOA\_V  
ClientSampleId :  
BG4N2

Tot Ion:164 Resp: 302978  
Ion Ratio Lower Upper  
164 100  
129 103.4 70.6 131.0  
131 99.1 68.0 126.4  
166 127.7 86.9 161.5

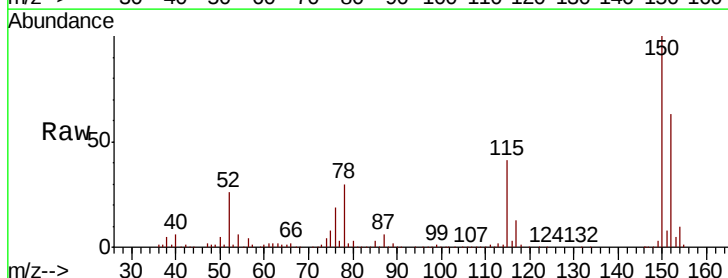


Abundance Ion 164.00 (163.70 to 164.70): V  
Ion 129.00 (128.70 to 129.70): V  
Ion 131.00 (130.70 to 131.70): V  
Ion 166.00 (165.70 to 166.70): V



#59  
1,2,3-Trichloropropane  
Concen: 6.574 ug/L  
RT: 11.25 min Scan# 3161  
Delta R.T. 0.98 min  
Lab File: VV019618.D  
Acq: 14 Dec 2020 20:41

Tgt Ion: 75 Resp: 38444  
Ion Ratio Lower Upper  
75 100  
77 37.7 25.8 38.8



Abundance Ion 75.00 (74.70 to 75.70): VV0  
Ion 77.00 (76.70 to 77.70): VV0

