

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV041620\  
 Data File : VV015536.D  
 Acq On : 16 Apr 2020 15:01  
 Operator : SY/MD  
 Sample : L2320-03  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BFRR0

Quant Time: Apr 17 01:52:48 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR040920WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Apr 17 00:46:36 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 109416   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 103180   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 49962    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.31   | 65    | 26057    | 4.59     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 91.80% |
| 7) Chloroethane-d5             | 1.57   | 69    | 24923    | 4.77     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 95.40% |
| 11) 1,1-Dichloroethene-d2      | 2.12   | 63    | 39110    | 3.27     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 65.40% |
| 20) 2-Butanone-d5              | 3.96   | 46    | 72272    | 45.34    | ug/L | 0.03   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 90.68% |
| 24) Chloroform-d               | 4.38   | 84    | 54770    | 4.36     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 87.20% |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 31977    | 4.72     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 94.40% |
| 32) Benzene-d6                 | 5.07   | 84    | 109203   | 4.77     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 95.40% |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 34064    | 4.78     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 95.60% |
| 41) Toluene-d8                 | 7.34   | 98    | 98408    | 4.50     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 90.00% |
| 43) trans-1,3-Dichloropropene- | 7.65   | 79    | 13582    | 4.38     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 87.60% |
| 46) 2-Hexanone-d5              | 8.12   | 63    | 63606    | 42.54    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 85.08% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 23218    | 4.10     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 82.00% |
| 64) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 37264    | 4.65     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 93.00% |

## Target Compounds

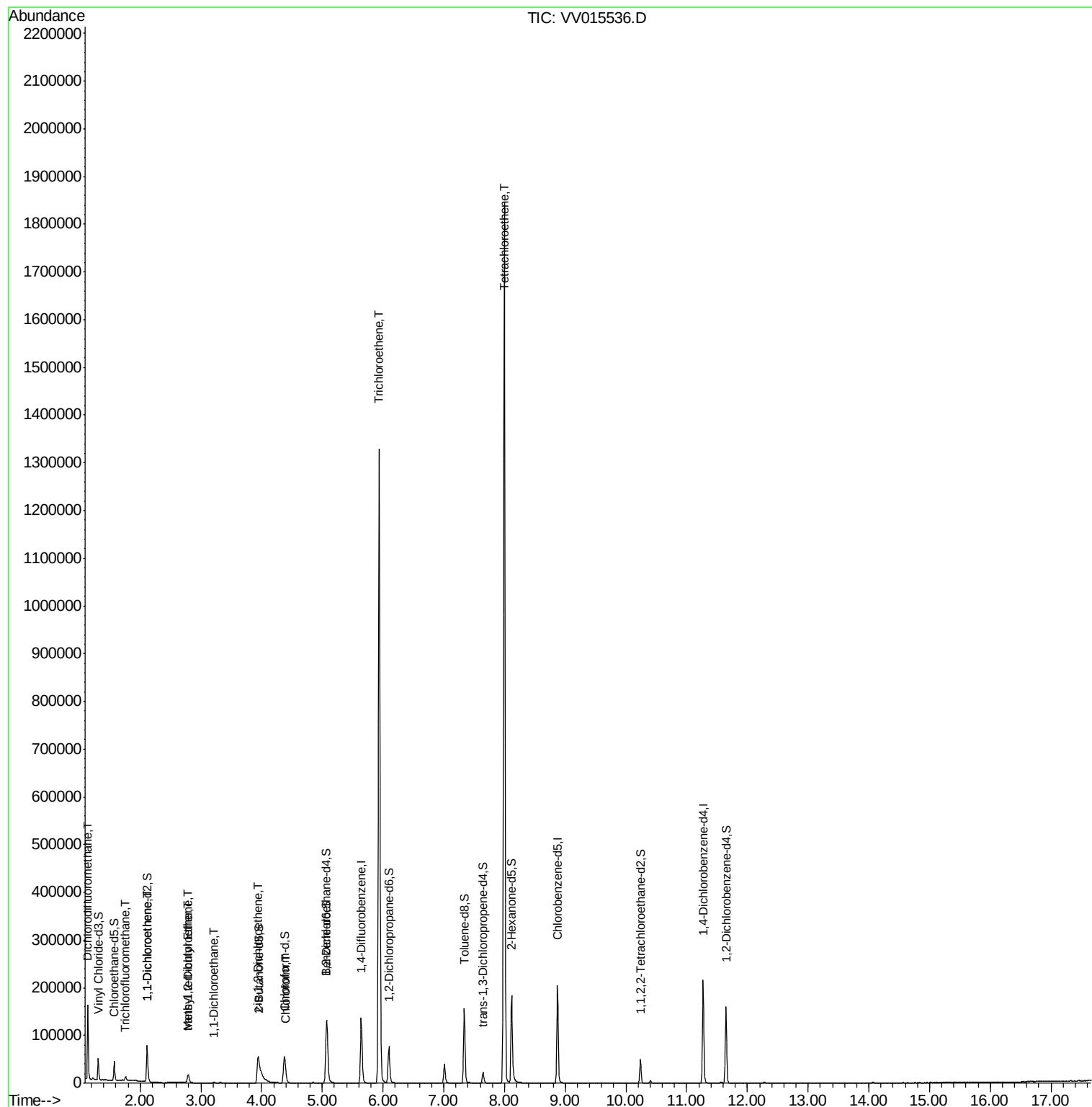
|                              |      |     |        |              | Ovalue |
|------------------------------|------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane   | 1.14 | 85  | 48058  | 4.438 ug/L   | 98     |
| 9) Trichlorofluoromethane    | 1.76 | 101 | 4010   | 0.316 ug/L   | 99     |
| 12) 1,1-Dichloroethene       | 2.13 | 96  | 2446   | 0.356 ug/L # | 1      |
| 17) Methyl tert-butyl Ether  | 2.79 | 73  | 15728  | 0.857 ug/L   | 98     |
| 18) trans-1,2-Dichloroethene | 2.78 | 96  | 1003   | 0.130 ug/L   | 99     |
| 19) 1,1-Dichloroethane       | 3.21 | 63  | 2054   | 0.141 ug/L # | 91     |
| 22) cis-1,2-Dichloroethene   | 3.94 | 96  | 18287  | 2.276 ug/L   | 94     |
| 25) Chloroform               | 4.41 | 83  | 5065   | 0.339 ug/L   | 95     |
| 34) Trichloroethene          | 5.94 | 95  | 453300 | 54.535 ug/L  | 100    |
| 47) Tetrachloroethene        | 8.00 | 164 | 376067 | 61.067 ug/L  | 99     |

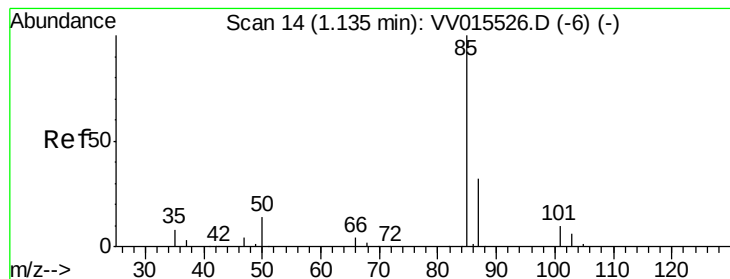
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Apr 17 01:52:48 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR040920WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Apr 17 00:46:36 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 4.438 ug/L

RT: 1.14 min Scan# 14

Delta R.T. 0.00 min

Lab File: VV015536.D

Acq: 16 Apr 2020 15:01

Instrument :

MSVOA\_V

ClientSampled :

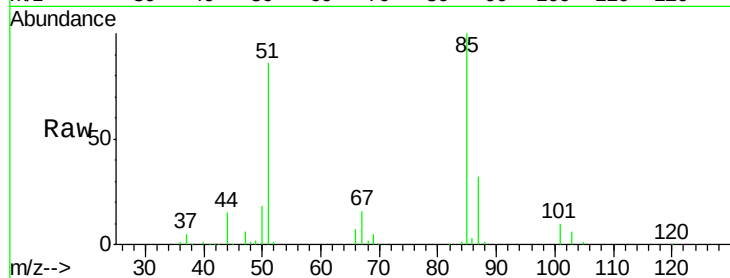
BFRR0

Tot Ion: 85 Resp: 48058

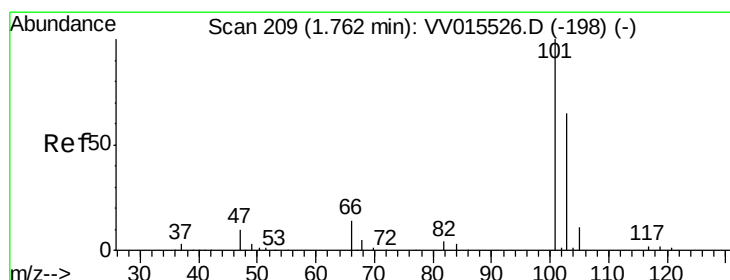
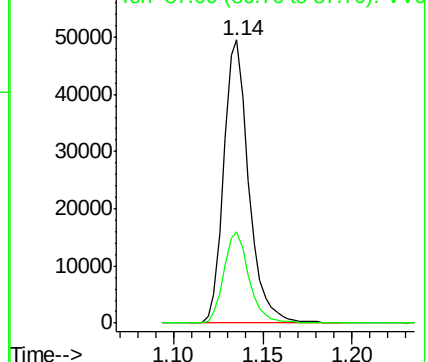
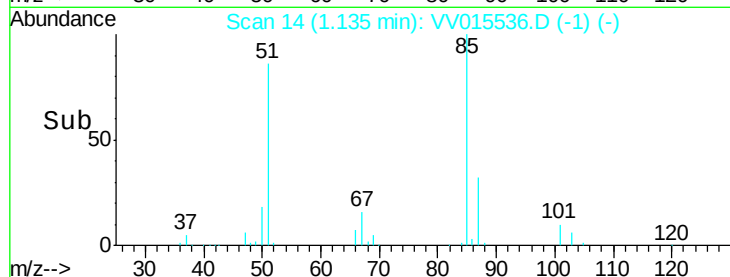
Ion Ratio Lower Upper

85 100

87 32.5 25.3 37.9



Abundance Ion 85.00 (84.70 to 85.70): VV015536.D (-1) (-)



#9

Trichlorofluoromethane

Concen: 0.316 ug/L

RT: 1.76 min Scan# 208

Delta R.T. -0.00 min

Lab File: VV015536.D

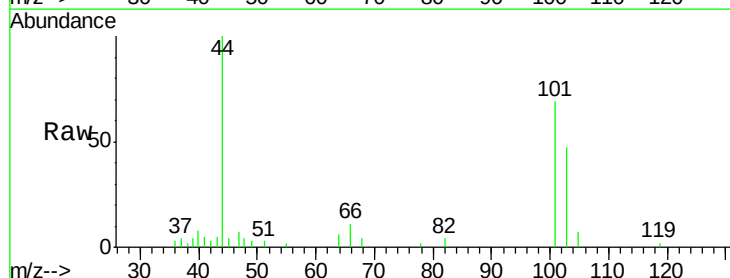
Acq: 16 Apr 2020 15:01

Tgt Ion: 101 Resp: 4010

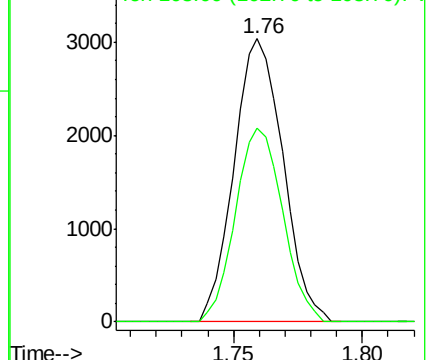
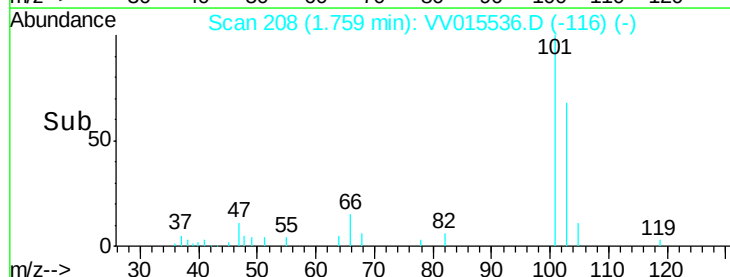
Ion Ratio Lower Upper

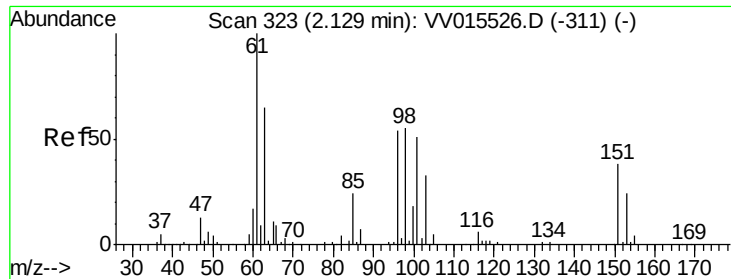
101 100

103 66.1 51.9 77.9



Abundance Ion 101.00 (100.70 to 101.70): VV015536.D (-116) (-)





#12

1,1-Dichloroethene

Concen: 0.356 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.00 min

Lab File: VV015536.D

Acq: 16 Apr 2020 15:01

Instrument :

MSVOA\_V

ClientSampleId :

BFRRO

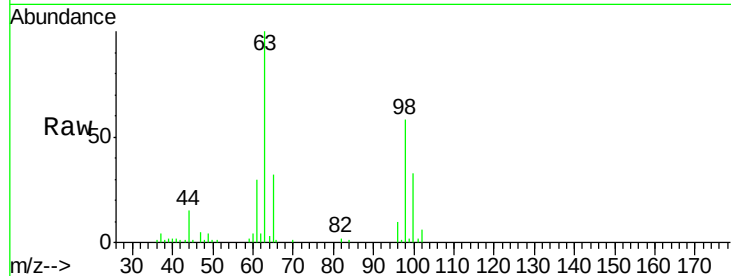
Tot Ion: 96 Resp: 2446

Ion Ratio Lower Upper

96 100

61 284.0 127.7 237.1#

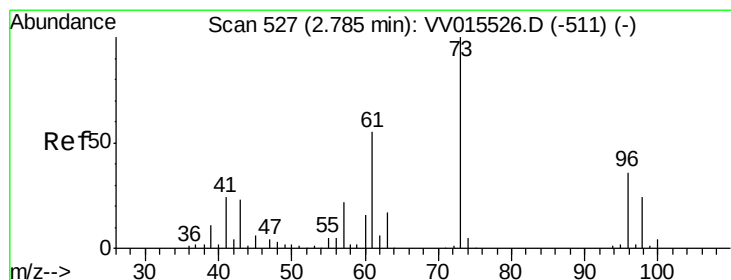
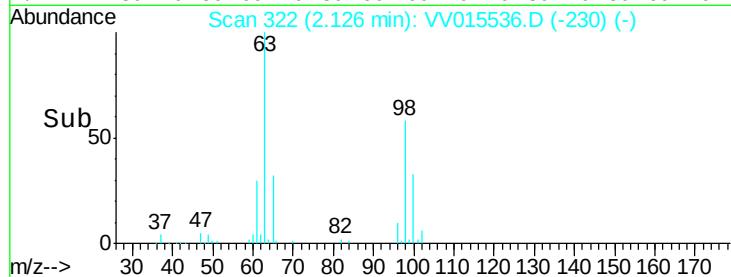
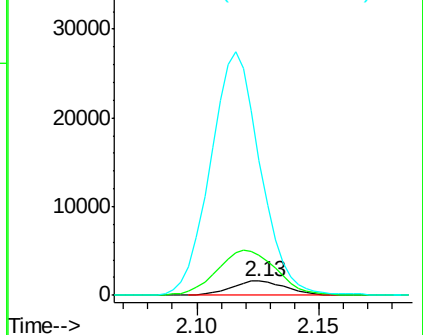
63 960.4 75.1 139.5#



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0



#17

Methyl tert-butyl Ether

Concen: 0.857 ug/L

RT: 2.79 min Scan# 529

Delta R.T. 0.01 min

Lab File: VV015536.D

Acq: 16 Apr 2020 15:01

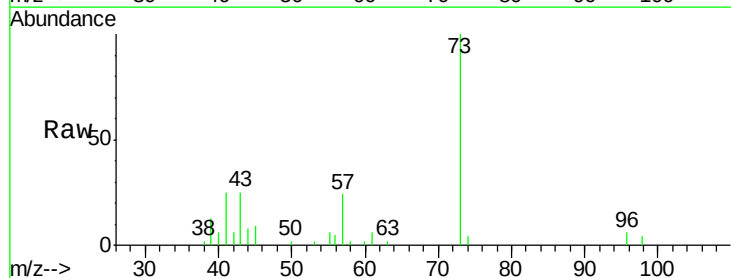
Tgt Ion: 73 Resp: 15728

Ion Ratio Lower Upper

73 100

43 21.6 18.3 27.5

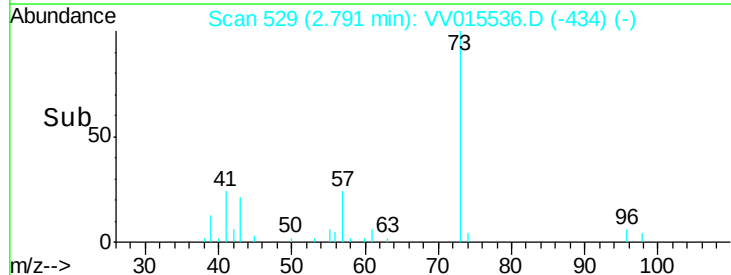
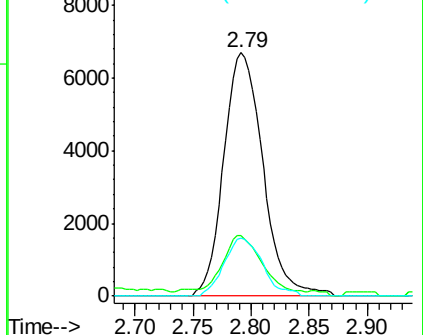
57 23.3 18.4 27.6

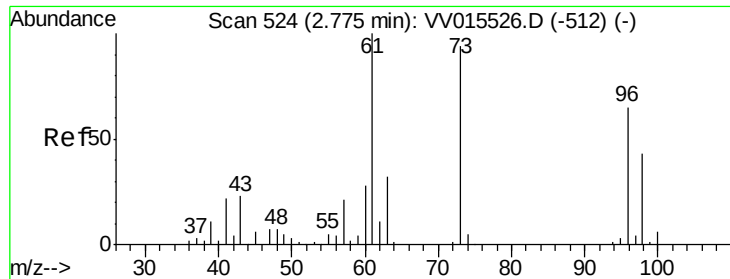


Abundance Ion 73.10 (72.80 to 73.80): VV0

Ion 43.05 (42.75 to 43.75): VV0

Ion 57.10 (56.80 to 57.80): VV0

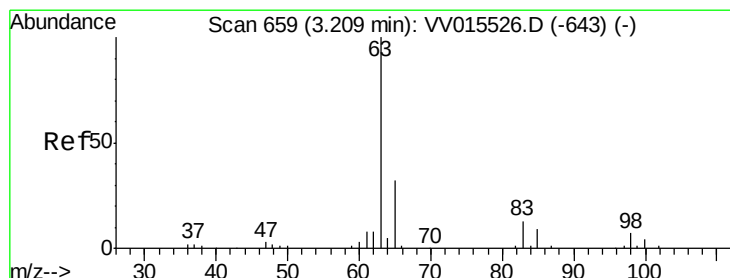
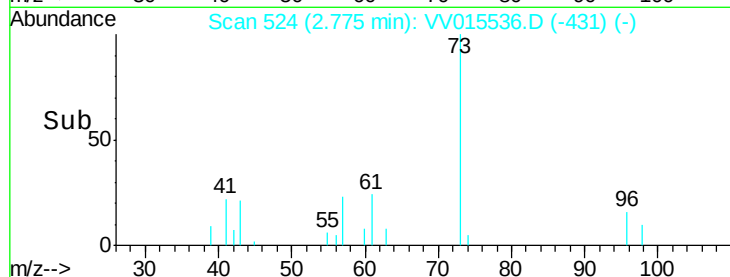
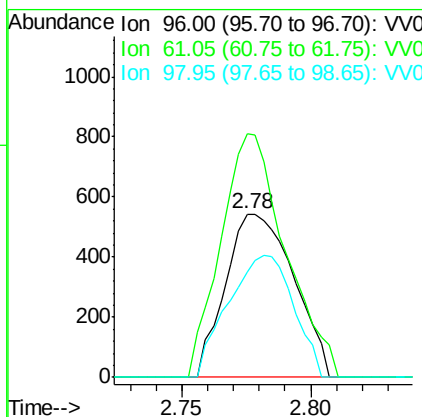
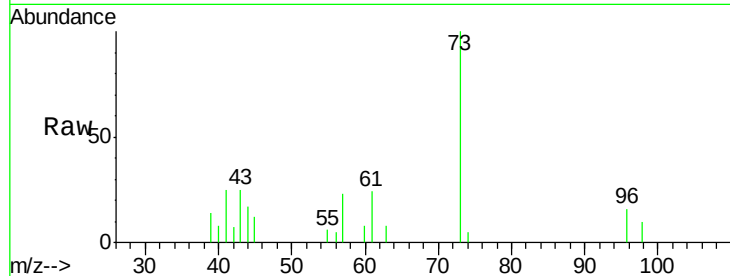




#18  
trans-1,2-Dichloroethene  
Concen: 0.130 ug/L  
RT: 2.78 min Scan# 524  
Delta R.T. 0.00 min  
Lab File: VV015536.D  
Acq: 16 Apr 2020 15:01

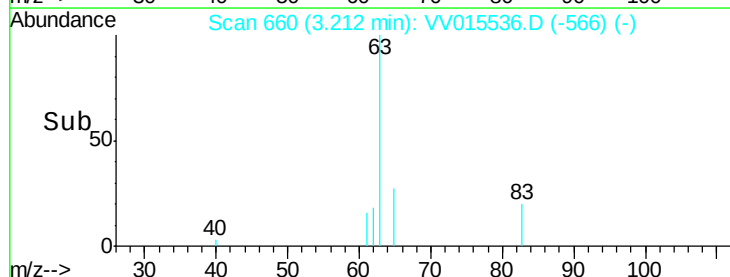
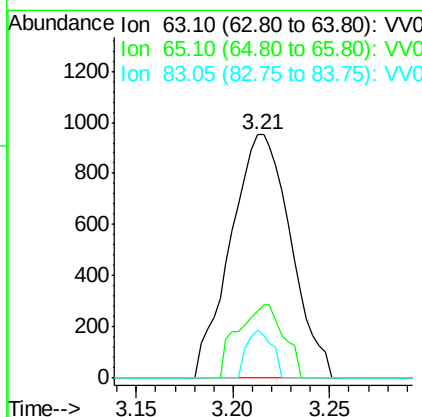
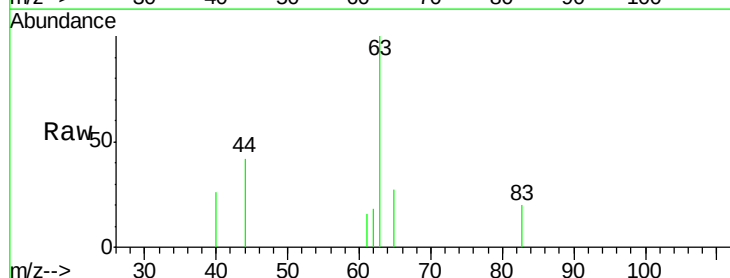
Instrument :  
MSVOA\_V  
ClientSampled :  
BFRR0

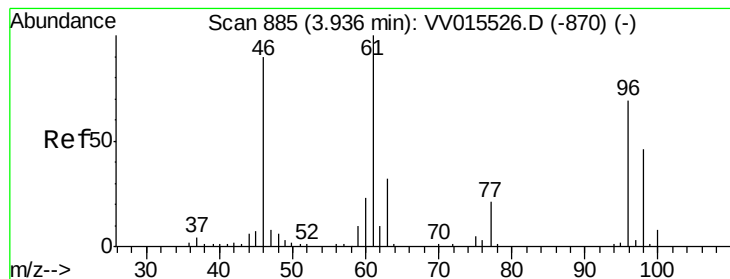
Tot Ion: 96 Resp: 1003  
Ion Ratio Lower Upper  
96 100  
61 149.2 104.4 194.0  
98 64.8 42.8 79.4



#19  
1,1-Dichloroethane  
Concen: 0.141 ug/L  
RT: 3.21 min Scan# 660  
Delta R.T. 0.00 min  
Lab File: VV015536.D  
Acq: 16 Apr 2020 15:01

Tgt Ion: 63 Resp: 2054  
Ion Ratio Lower Upper  
63 100  
65 27.4 21.3 39.6  
83 19.5 9.4 17.6#



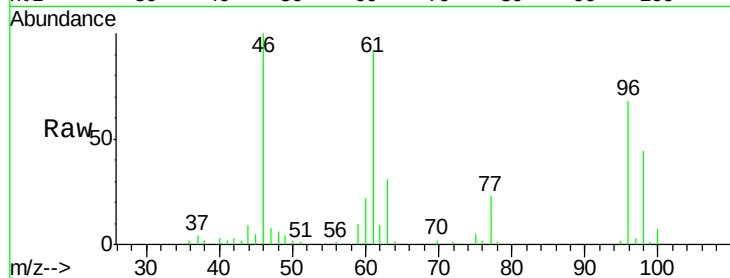


#22

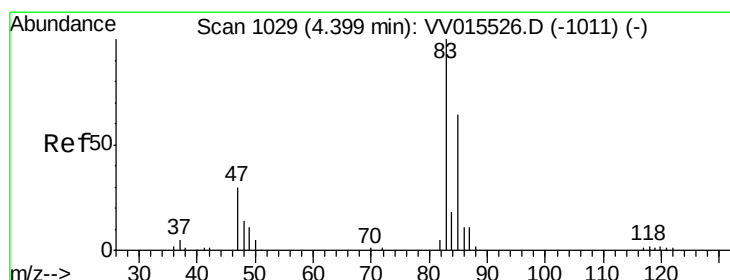
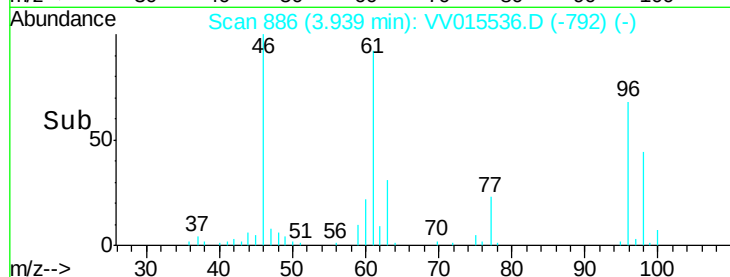
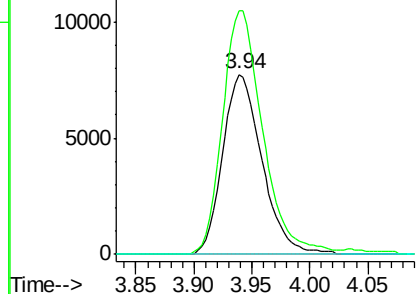
cis-1,2-Dichloroethene  
 Concen: 2.276 ug/L  
 RT: 3.94 min Scan# 886  
 Delta R.T. 0.00 min  
 Lab File: VV015536.D  
 Acq: 16 Apr 2020 15:01

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BFRR0

Tot Ion: 96 Resp: 18287  
 Ion Ratio Lower Upper  
 96 100  
 61 135.6 100.0 185.8  
 68 0.0 0.0 0.0



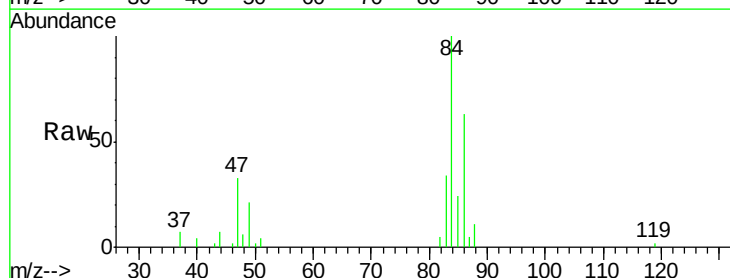
Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0  
 Ion 68.15 (67.85 to 68.85): VV0



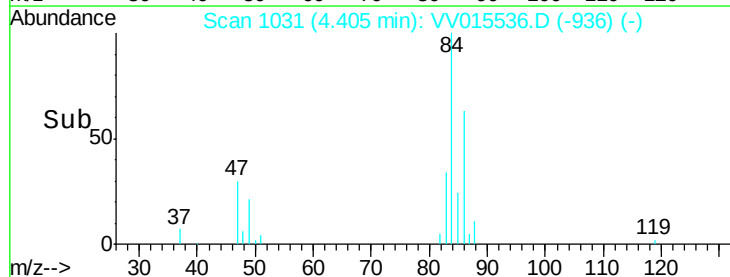
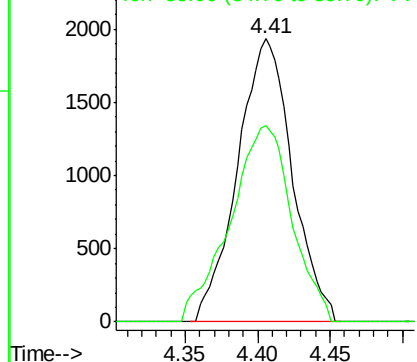
#25

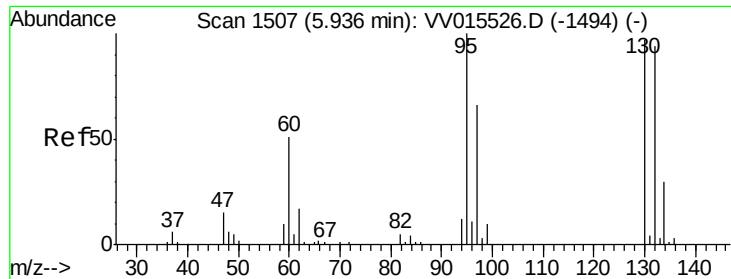
Chloroform  
 Concen: 0.339 ug/L  
 RT: 4.41 min Scan# 1031  
 Delta R.T. 0.01 min  
 Lab File: VV015536.D  
 Acq: 16 Apr 2020 15:01

Tgt Ion: 83 Resp: 5065  
 Ion Ratio Lower Upper  
 83 100  
 85 69.5 45.9 85.3



Abundance Ion 83.05 (82.75 to 83.75): VV0  
 Ion 85.00 (84.70 to 85.70): VV0





#34

Trichloroethene

Concen: 54.535 ug/L

RT: 5.94 min Scan# 1507

Delta R.T. 0.00 min

Lab File: VV015536.D

Acq: 16 Apr 2020 15:01

Instrument :

MSVOA\_V

ClientSampleId :

BFR00

Tot Ion: 95 Resp: 453300

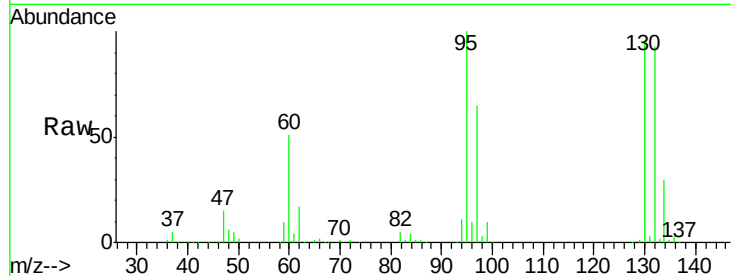
Ion Ratio Lower Upper

95 100

97 64.8 45.4 84.4

132 93.1 64.8 120.4

130 96.0 67.4 125.2

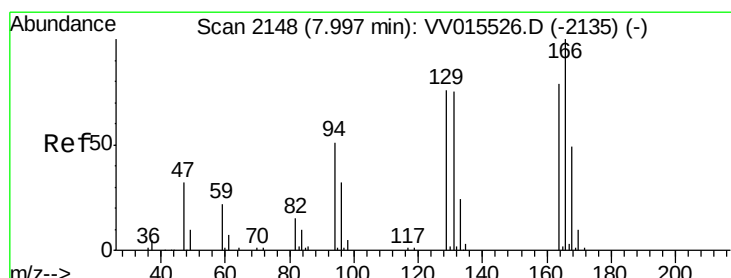
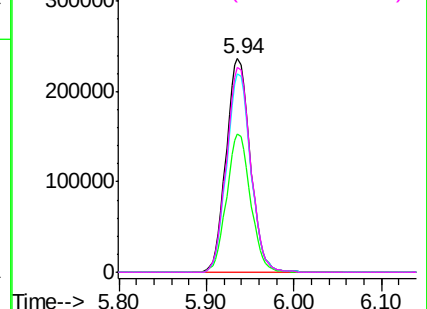
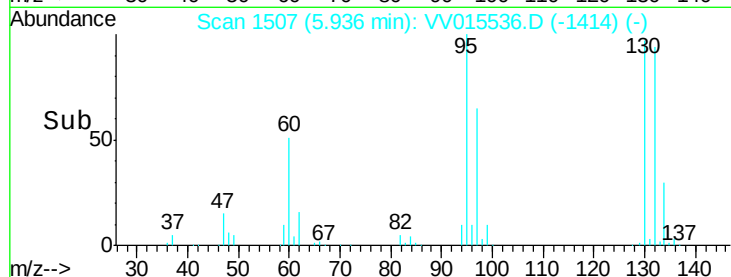


Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#47

Tetrachloroethene

Concen: 61.067 ug/L

RT: 8.00 min Scan# 2148

Delta R.T. 0.00 min

Lab File: VV015536.D

Acq: 16 Apr 2020 15:01

Tgt Ion: 164 Resp: 376067

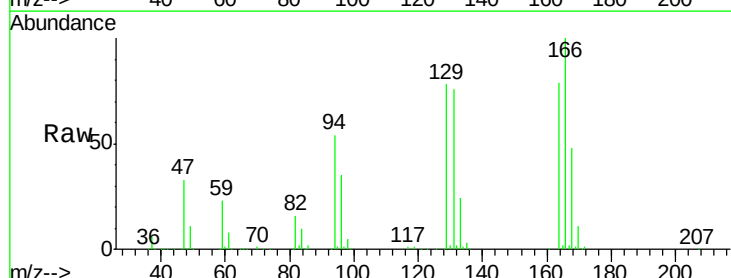
Ion Ratio Lower Upper

164 100

129 98.5 70.6 131.0

131 95.7 68.3 126.8

166 126.4 88.3 163.9



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

