

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV051120\  
 Data File : VV015987.D  
 Acq On : 11 May 2020 14:15  
 Operator : SY/MD  
 Sample : L2520-12  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: May 12 01:11:09 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Tue May 12 01:07:44 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 140701   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 138549   | 5.00 | ug/L  | 0.00     |
| 61) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 63321    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 28733    | 3.76     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 75.20%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 30722    | 4.25     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 85.00%  |
| 11) 1,1-Dichloroethene-d2      | 2.12   | 63    | 49785    | 3.03     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 60.60%  |
| 20) 2-Butanone-d5              | 3.93   | 46    | 109204   | 50.15    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 100.30% |
| 24) Chloroform-d               | 4.38   | 84    | 80450    | 4.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 96.40%  |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 45820    | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 95.80%  |
| 32) Benzene-d6                 | 5.08   | 84    | 148351   | 4.50     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 90.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 47090    | 4.68     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 93.60%  |
| 41) Toluene-d8                 | 7.34   | 98    | 132578   | 4.25     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 85.00%  |
| 45) trans-1,3-Dichloropropene- | 7.65   | 79    | 16357    | 4.14     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 82.80%  |
| 48) 2-Hexanone-d5              | 8.12   | 63    | 78889    | 45.47    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 90.94%  |
| 59) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 35334    | 4.99     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 99.80%  |
| 65) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 51101    | 4.97     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 99.40%  |

## Target Compounds

|                                |      |     |        |               | Ovalue |
|--------------------------------|------|-----|--------|---------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 1620   | 0.150 ug/L    | 99     |
| 8) Chloroethane                | 1.44 | 64  | 262950 | 35.358 ug/L # | 49     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 815    | 0.101 ug/L #  | 46     |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 2003   | 0.259 ug/L #  | 1      |
| 13) Acetone                    | 2.21 | 43  | 5178   | 3.605 ug/L    | 98     |
| 14) Carbon disulfide           | 2.31 | 76  | 13432  | 0.525 ug/L    | 100    |
| 17) Methyl tert-butyl Ether    | 2.79 | 73  | 3551   | 0.176 ug/L #  | 68     |
| 22) cis-1,2-Dichloroethene     | 3.95 | 96  | 2059   | 0.230 ug/L    | 74     |
| 25) Chloroform                 | 4.40 | 83  | 6260   | 0.345 ug/L    | 95     |
| 34) Trichloroethene            | 5.94 | 95  | 13165  | 1.323 ug/L    | 96     |
| 35) Methylcyclohexane          | 6.10 | 83  | 12124  | 0.806 ug/L #  | 16     |
| 37) 1,2-Dichloropropane        | 6.10 | 63  | 6333   | 0.715 ug/L #  | 87     |
| 38) Bromodichloromethane       | 6.53 | 83  | 556    | 0.049 ug/L #  | 24     |
| 39) cis-1,3-Dichloropropene    | 7.01 | 75  | 1367   | 0.109 ug/L #  | 63     |
| 46) trans-1,3-Dichloropropene  | 7.65 | 75  | 966    | 0.091 ug/L #  | 79     |
| 49) Tetrachloroethene          | 8.00 | 164 | 65097  | 9.377 ug/L    | 98     |
| 50) 2-Hexanone                 | 8.17 | 43  | 3435   | 0.880 ug/L #  | 89     |

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ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :

Quant Time: May 12 01:11:09 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue May 12 01:07:44 2020  
Response via : Initial Calibration

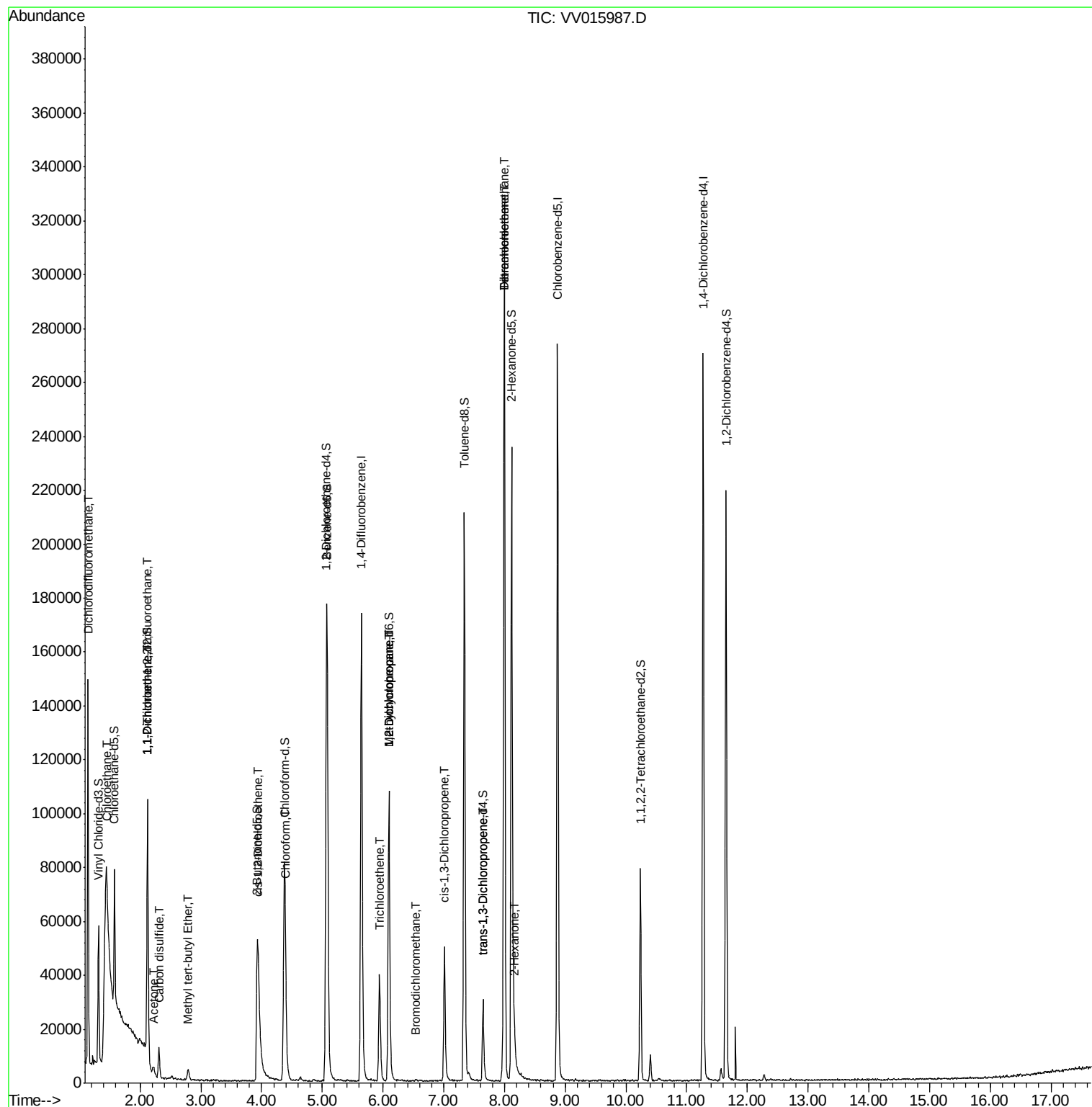
| Internal Standards       | R.T. | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------|------|------|----------|-------|--------|----------|
| 51) Dibromochloromethane | 8.00 | 129  | 63343    | 9.532 | ug/L # | 9        |

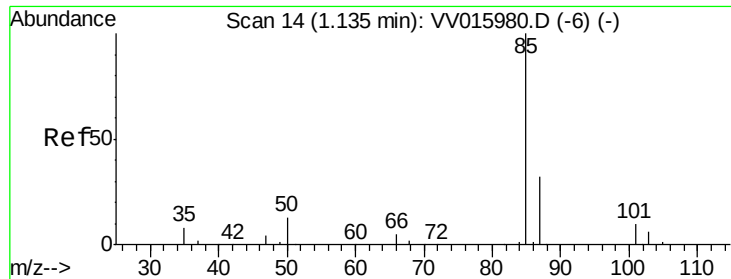
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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MSVOA\_V  
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Quant Time: May 12 01:11:09 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue May 12 01:07:44 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 0.150 ug/L

RT: 1.14 min Scan# 16

Delta R.T. 0.01 min

Lab File: VV015987.D

Acq: 11 May 2020 14:15

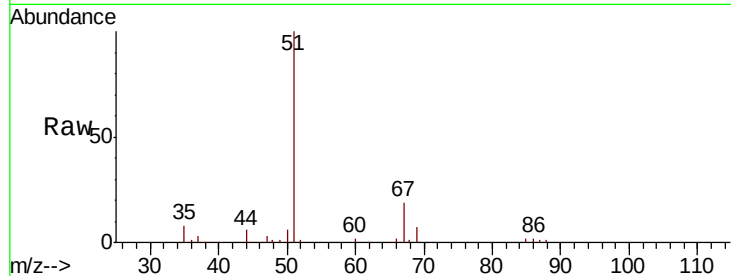
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 85 Resp: 1620

Ion Ratio Lower Upper

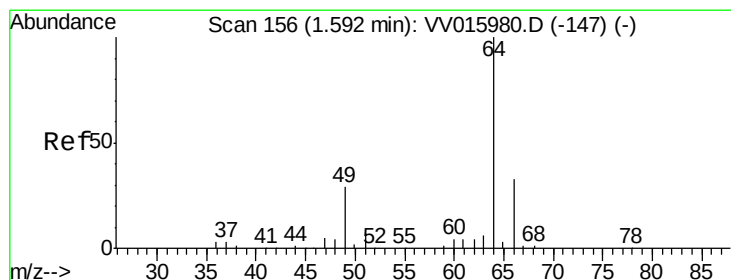
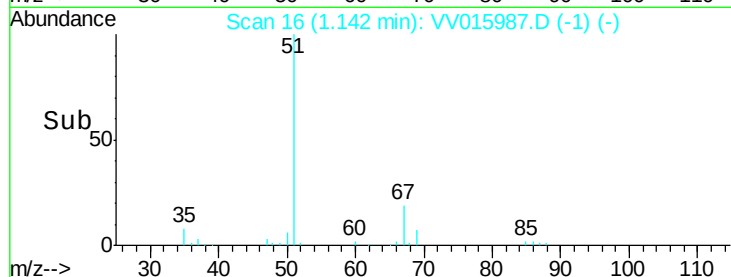
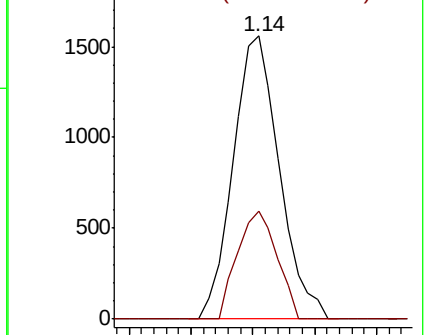
85 100

87 32.5 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#8

Chloroethane

Concen: 35.358 ug/L

RT: 1.44 min Scan# 110

Delta R.T. -0.15 min

Lab File: VV015987.D

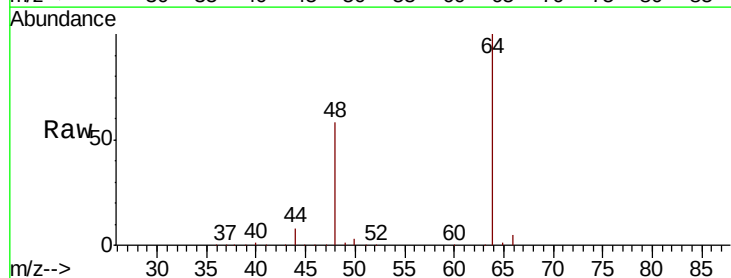
Acq: 11 May 2020 14:15

Tgt Ion: 64 Resp: 262950

Ion Ratio Lower Upper

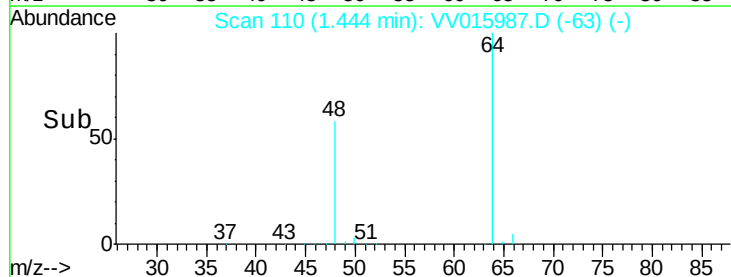
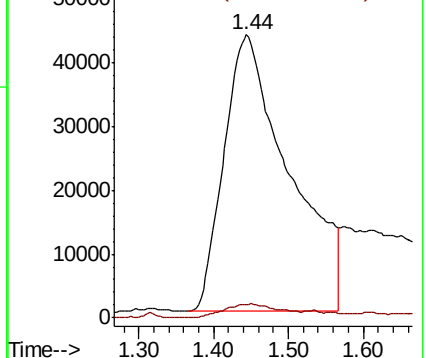
64 100

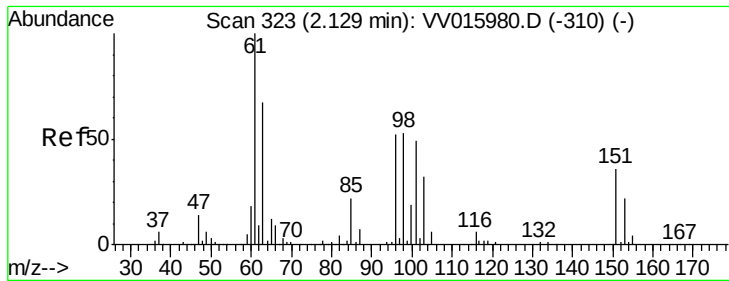
66 4.8 23.6 43.8#



Abundance Ion 64.10 (63.80 to 64.80): VV0

Ion 66.05 (65.75 to 66.75): VV0





#10

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

Concen: 0.101 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.00 min

Lab File: VV015987.D

Acq: 11 May 2020 14:15

Instrument :

MSVOA\_V

ClientSampleId :

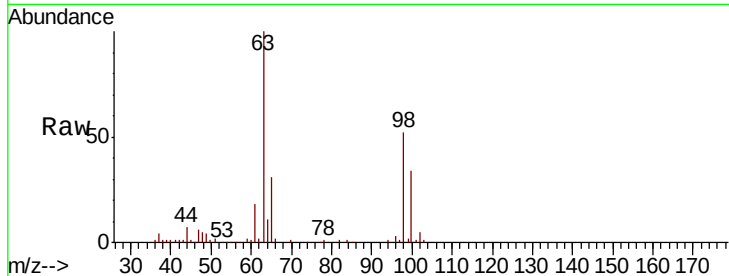
Tot Ion:101 Resp: 815

Ion Ratio Lower Upper

101 100

85 29.0 35.7 53.5#

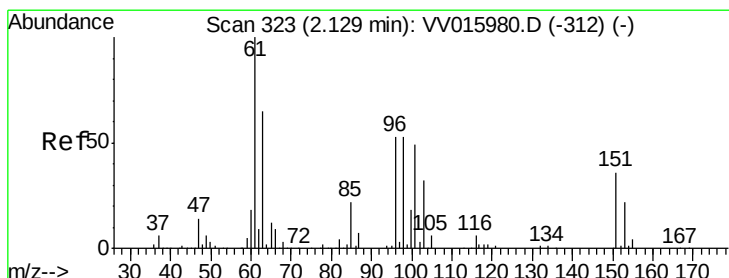
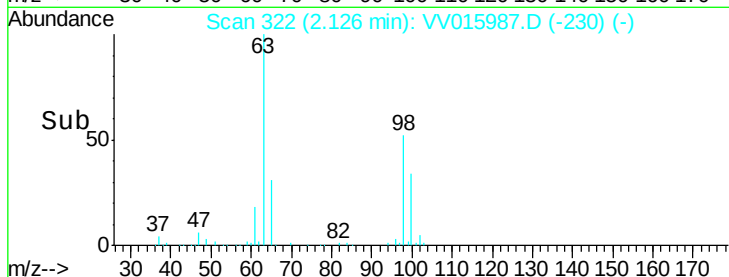
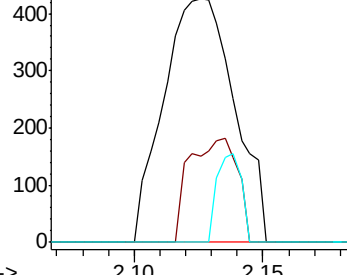
151 12.4 58.0 87.0#



Abundance Ion 101.00 (100.70 to 101.70): VV015980.D (-310) (-)

Ion 85.00 (84.70 to 85.70): VV015980.D (-310) (-)

Ion 151.00 (150.70 to 151.70): VV015980.D (-310) (-)



#12

1,1-Dichloroethene

Concen: 0.259 ug/L

RT: 2.13 min Scan# 324

Delta R.T. 0.00 min

Lab File: VV015987.D

Acq: 11 May 2020 14:15

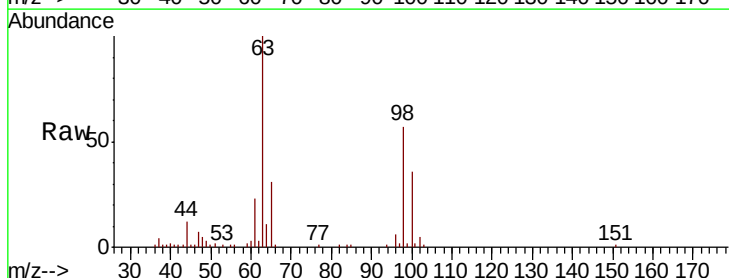
Tgt Ion: 96 Resp: 2003

Ion Ratio Lower Upper

96 100

61 372.3 139.9 259.7#

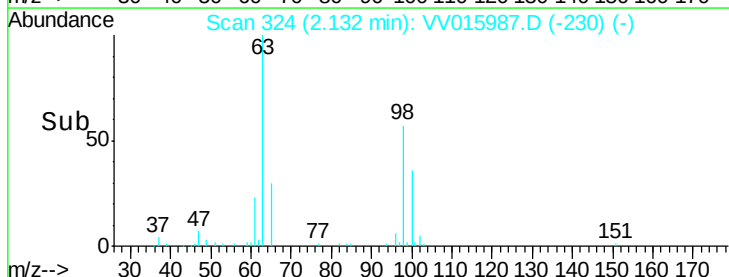
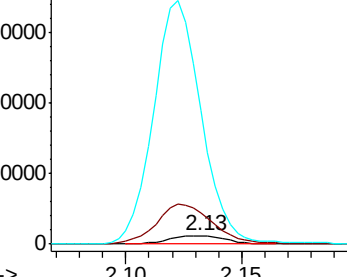
63 1589.9 106.4 197.6#

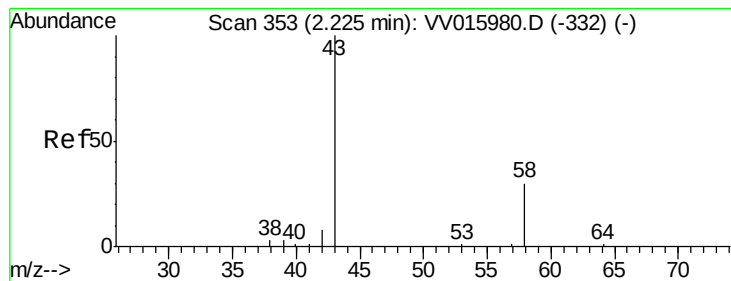


Abundance Ion 96.00 (95.70 to 96.70): VV015987.D (-230) (-)

Ion 61.05 (60.75 to 61.75): VV015987.D (-230) (-)

Ion 63.00 (62.70 to 63.70): VV015987.D (-230) (-)





#13

Acetone

Concen: 3.605 ug/L

RT: 2.21 min Scan# 349

Delta R.T. -0.01 min

Lab File: VV015987.D

Acq: 11 May 2020 14:15

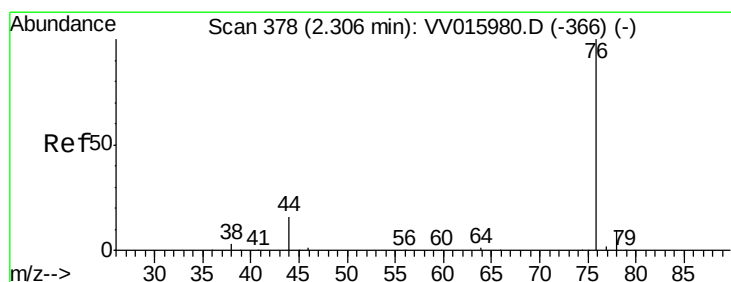
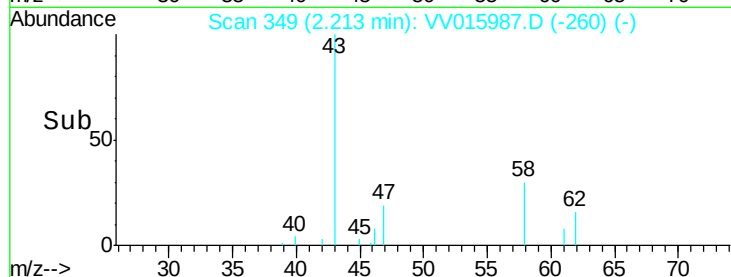
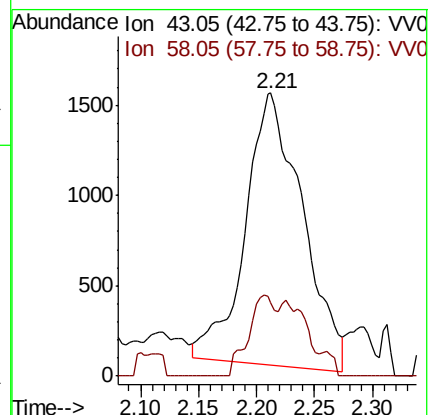
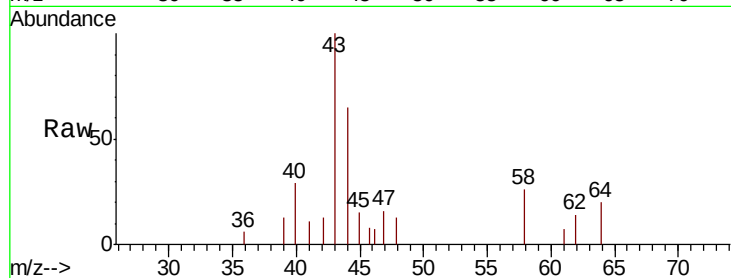
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 43 Resp: 5178

Ion Ratio Lower Upper

43 100

58 14.7 0.0 30.8



#14

Carbon disulfide

Concen: 0.525 ug/L

RT: 2.31 min Scan# 379

Delta R.T. 0.00 min

Lab File: VV015987.D

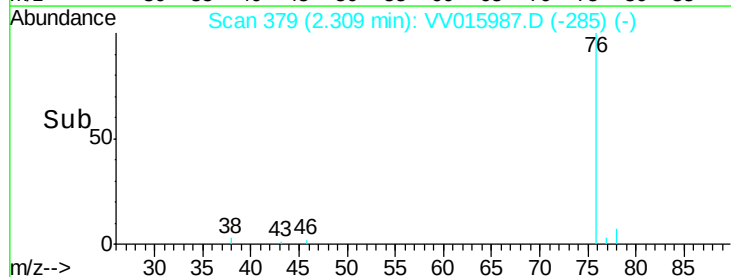
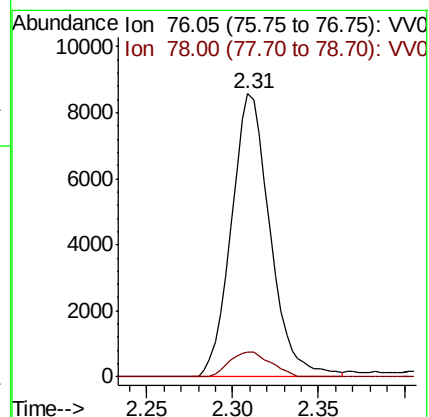
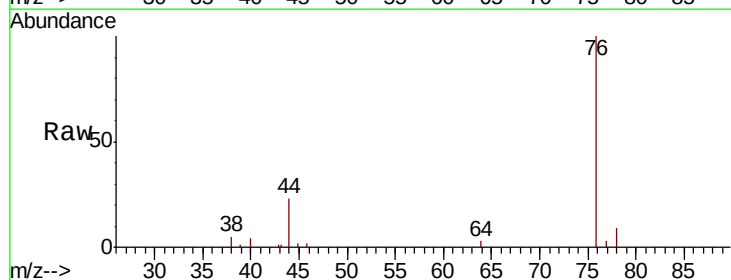
Acq: 11 May 2020 14:15

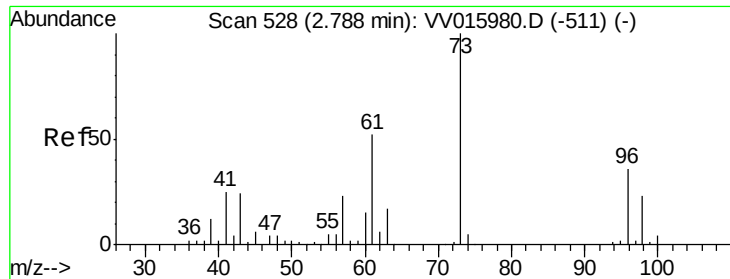
Tgt Ion: 76 Resp: 13432

Ion Ratio Lower Upper

76 100

78 8.8 7.0 10.6

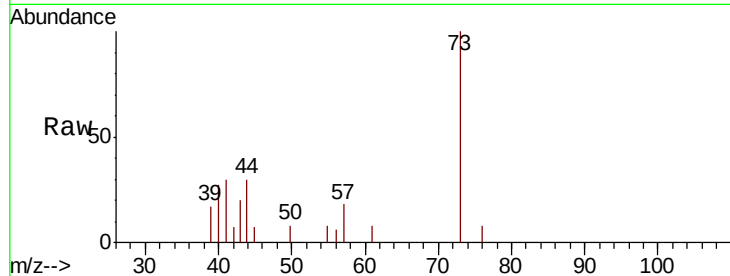




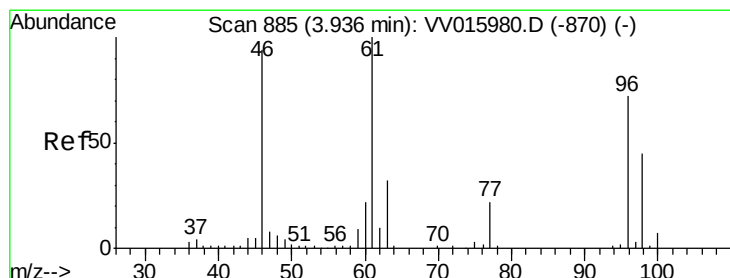
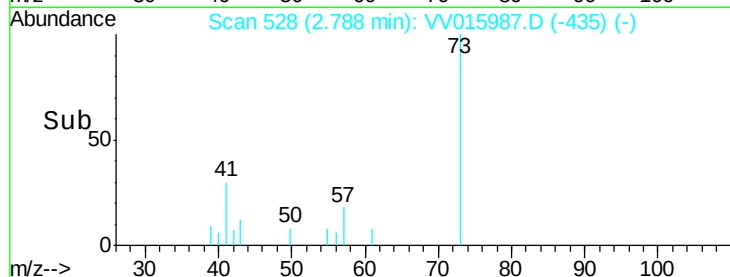
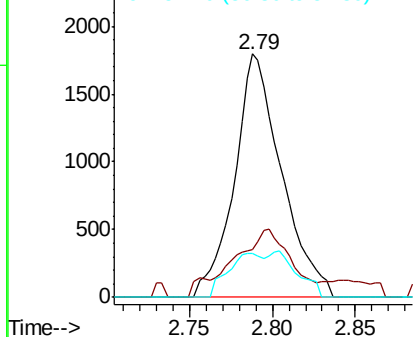
#17  
Methyl tert-butyl Ether  
Concen: 0.176 ug/L  
RT: 2.79 min Scan# 528  
Delta R.T. -0.00 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 73 Resp: 3551  
Ion Ratio Lower Upper  
73 100  
43 1.1 18.8 28.2#  
57 13.5 17.8 26.6#

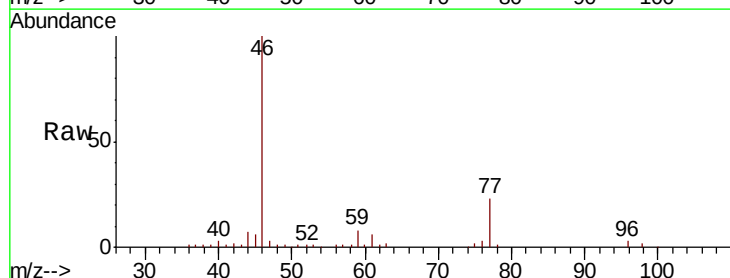


Abundance Ion 73.10 (72.80 to 73.80): VV0  
Ion 43.05 (42.75 to 43.75): VV0  
Ion 57.10 (56.80 to 57.80): VV0

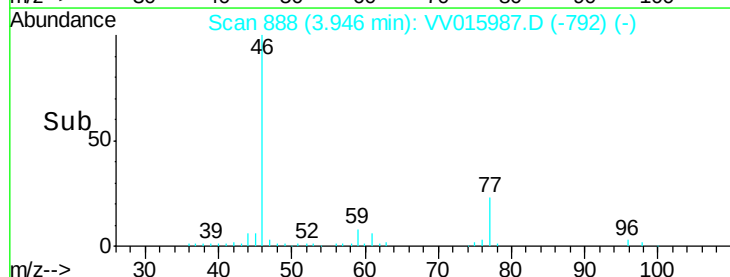
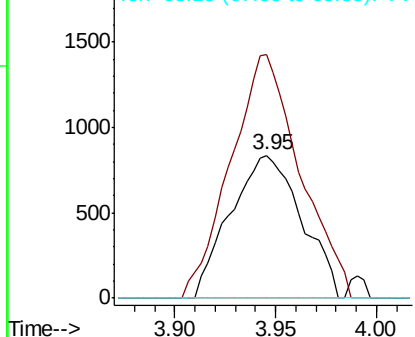


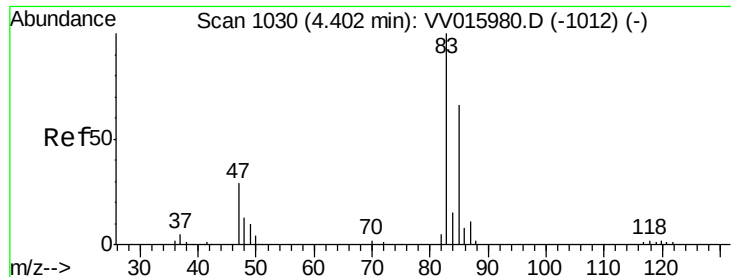
#22  
cis-1,2-Dichloroethene  
Concen: 0.230 ug/L  
RT: 3.95 min Scan# 888  
Delta R.T. 0.01 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Tgt Ion: 96 Resp: 2059  
Ion Ratio Lower Upper  
96 100  
61 170.4 97.2 180.6  
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

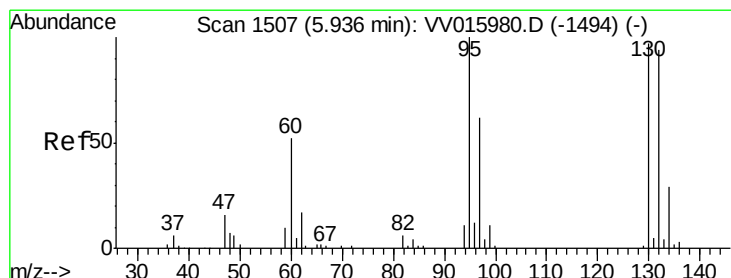
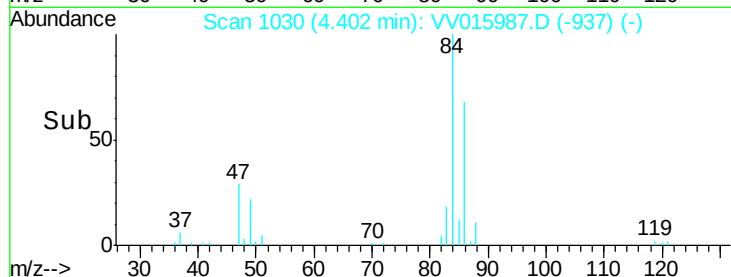
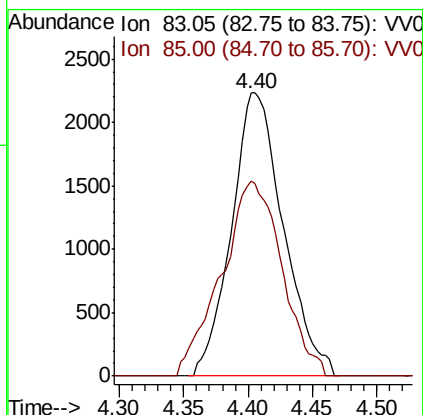
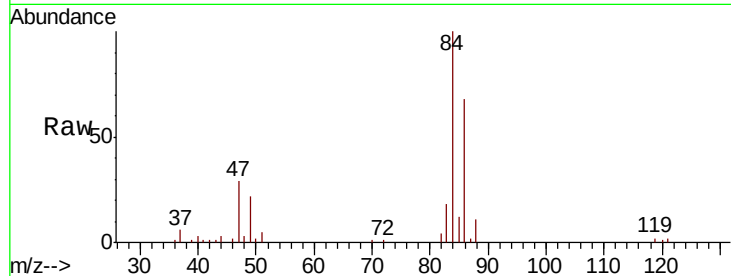




#25  
Chloroform  
Concen: 0.345 ug/L  
RT: 4.40 min Scan# 1030  
Delta R.T. -0.00 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

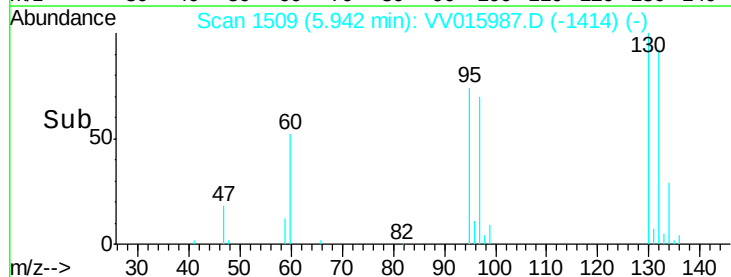
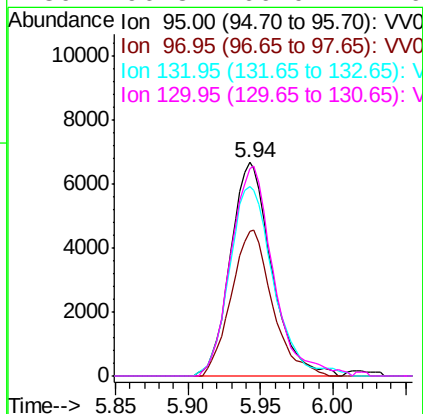
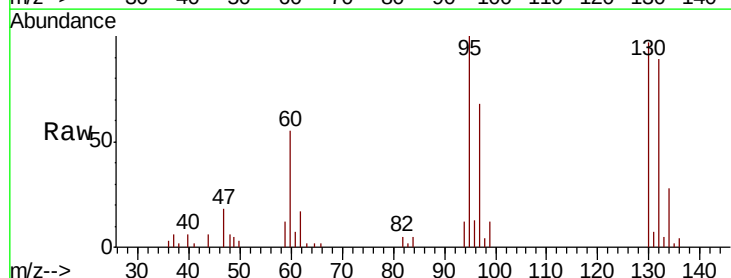
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 83 Resp: 6260  
Ion Ratio Lower Upper  
83 100  
85 69.0 45.7 84.9

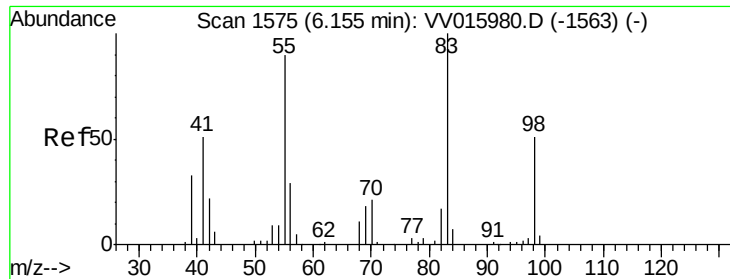


#34  
Trichloroethene  
Concen: 1.323 ug/L  
RT: 5.94 min Scan# 1509  
Delta R.T. 0.01 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Tgt Ion: 95 Resp: 13165  
Ion Ratio Lower Upper  
95 100  
97 67.9 43.3 80.5  
132 89.0 60.3 112.1  
130 96.8 66.0 122.6



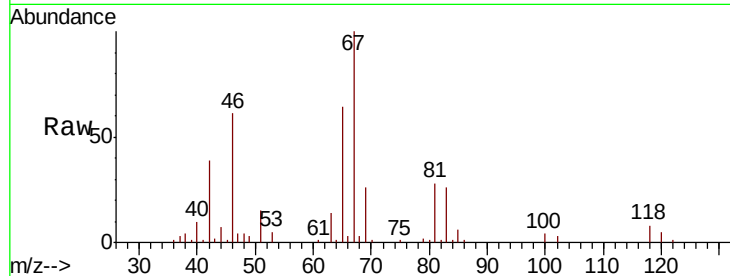




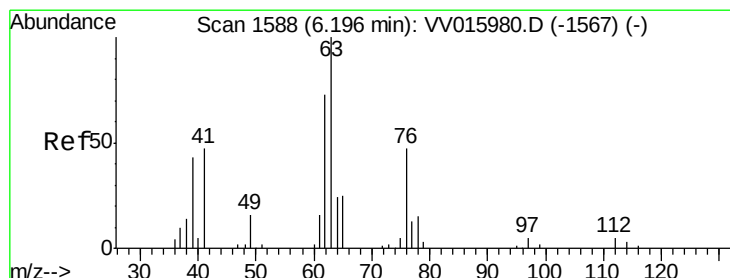
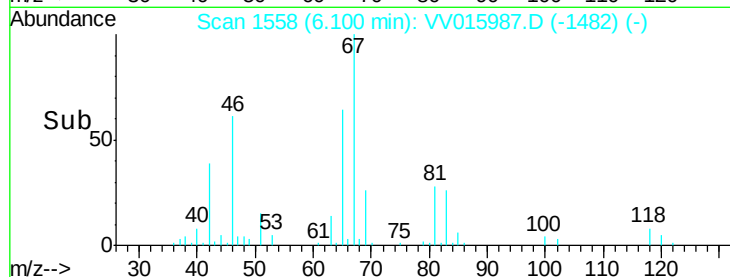
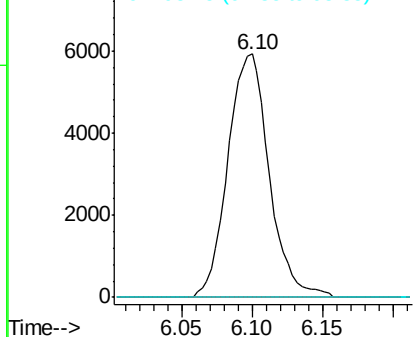
#35  
Methylvlcyclohexane  
Concen: 0.806 ug/L  
RT: 6.10 min Scan# 1558  
Delta R.T. -0.05 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 83 Resp: 12124  
Ion Ratio Lower Upper  
83 100  
55 0.0 66.2 99.2#  
98 0.4 37.9 56.9#

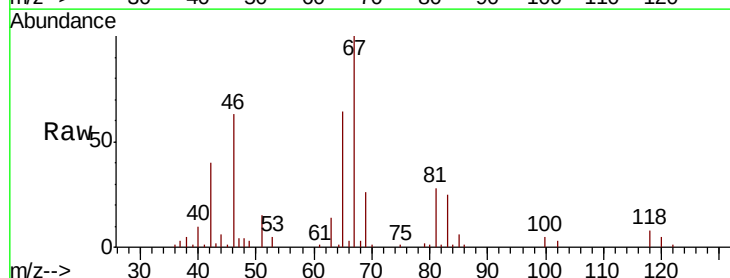


Abundance Ion 83.15 (82.85 to 83.85): VV0  
Ion 55.10 (54.80 to 55.80): VV0  
Ion 98.15 (97.85 to 98.85): VV0

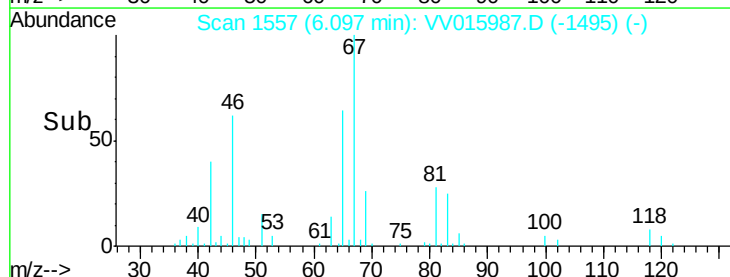
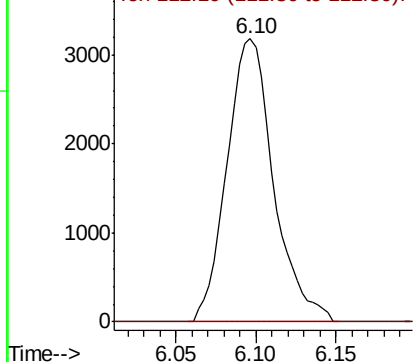


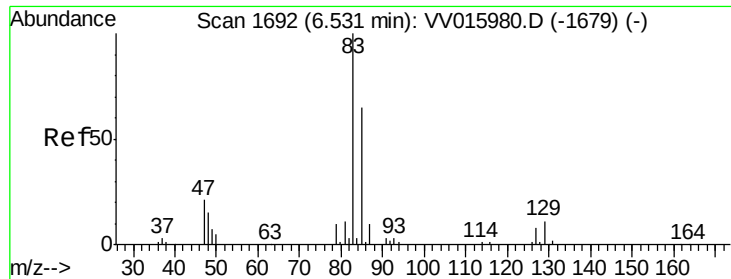
#37  
1,2-Dichloropropane  
Concen: 0.715 ug/L  
RT: 6.10 min Scan# 1557  
Delta R.T. -0.10 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Tgt Ion: 63 Resp: 6333  
Ion Ratio Lower Upper  
63 100  
112 0.0 3.4 5.0#



Abundance Ion 63.10 (62.80 to 63.80): VV0  
Ion 112.10 (111.80 to 112.80): V





#38

Bromodichloromethane

Concen: 0.049 ug/L

RT: 6.53 min Scan# 1693

Delta R.T. 0.00 min

Lab File: VV015987.D

Acq: 11 May 2020 14:15

Instrument :

MSVOA\_V

ClientSampleId :

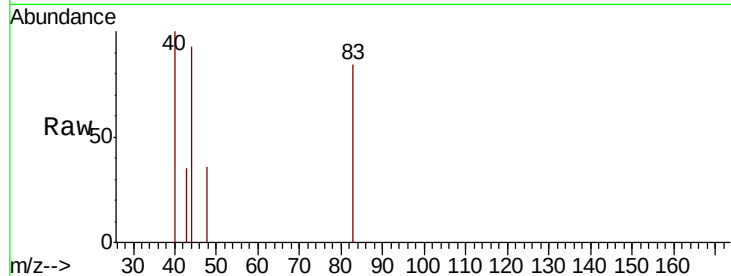
Tot Ion: 83 Resp: 556

Ion Ratio Lower Upper

83 100

85 0.0 45.5 84.5#

127 0.0 6.2 9.4#



Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 126.90 (126.60 to 127.60): VV0

6.53

300

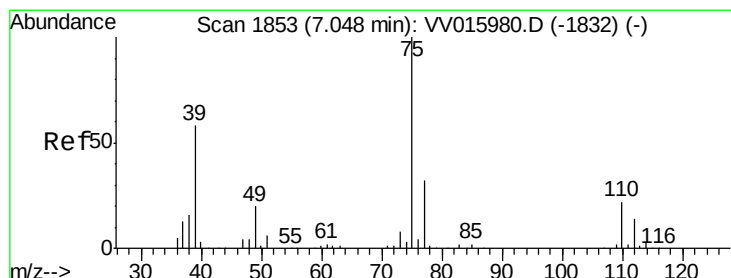
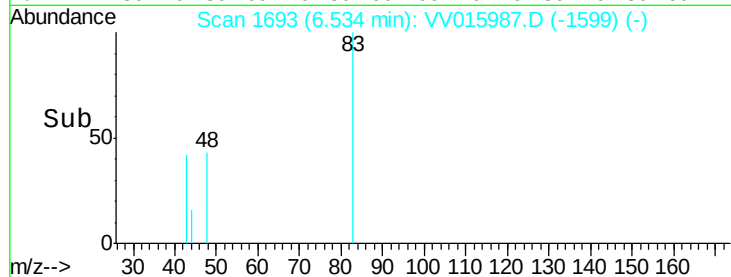
200

100

0

6.50 6.52 6.54 6.56 6.58

Time-->



#39

cis-1,3-Dichloropropene

Concen: 0.109 ug/L

RT: 7.01 min Scan# 1840

Delta R.T. -0.04 min

Lab File: VV015987.D

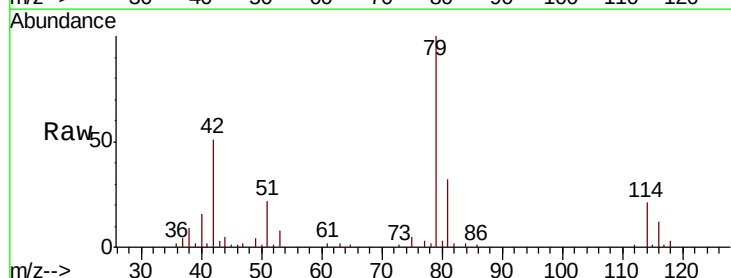
Acq: 11 May 2020 14:15

Tgt Ion: 75 Resp: 1367

Ion Ratio Lower Upper

75 100

77 50.7 21.3 39.5#



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

800

600

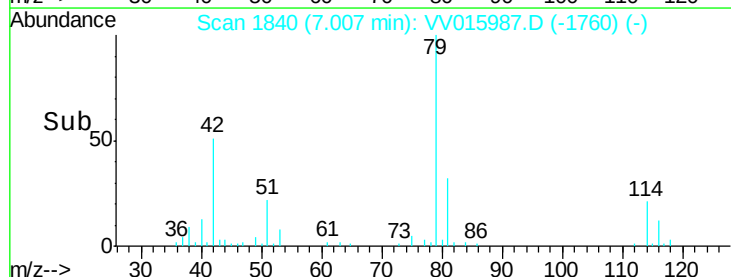
400

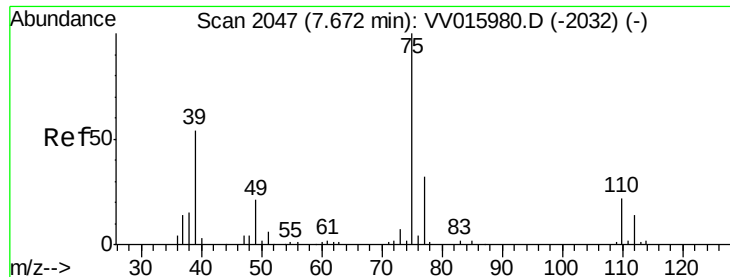
200

0

7.00 7.01 7.02 7.03 7.04 7.05

Time-->

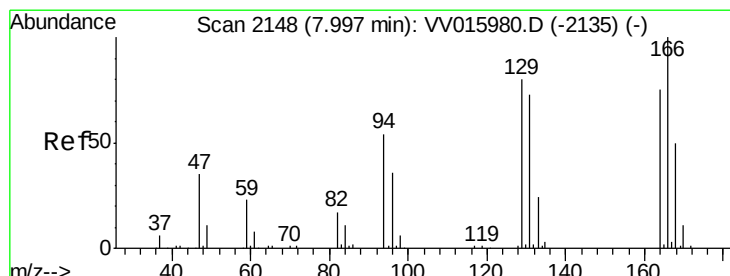
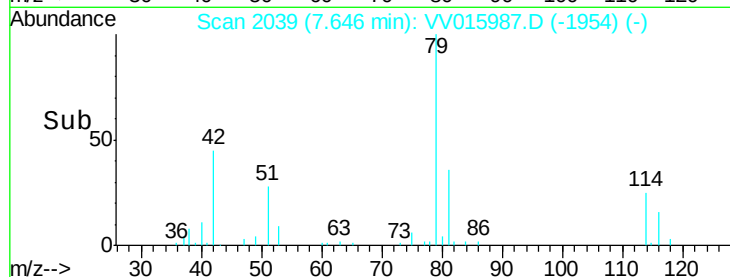
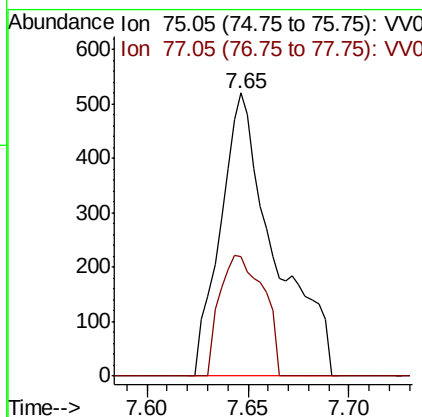
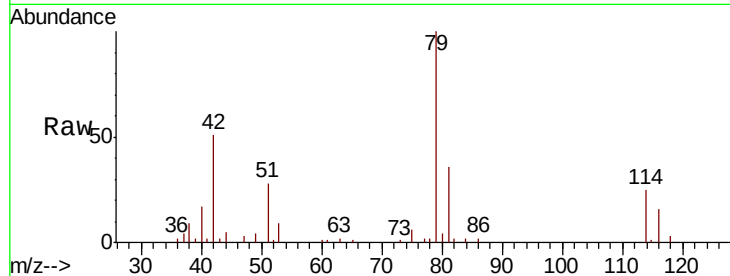




#46  
trans-1,3-Dichloropropene  
Concen: 0.091 ug/L  
RT: 7.65 min Scan# 2039  
Delta R.T. -0.03 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

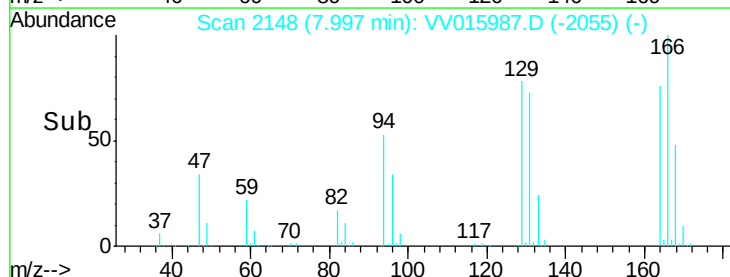
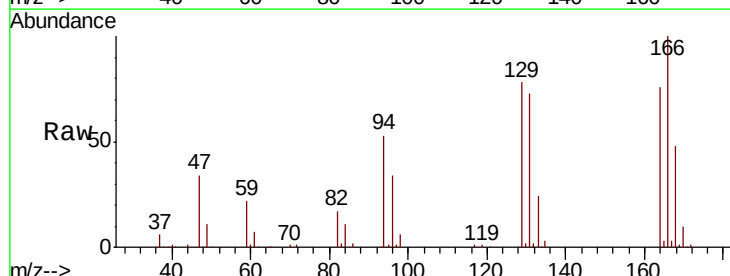
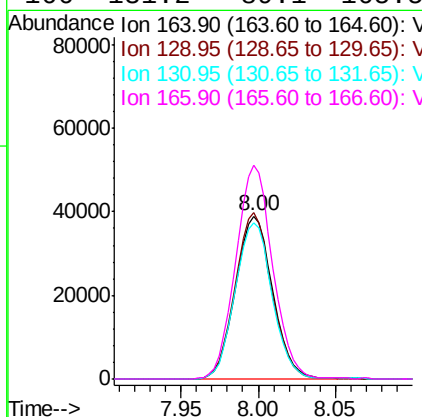
Instrument :  
MSVOA\_V  
ClientSampleId :

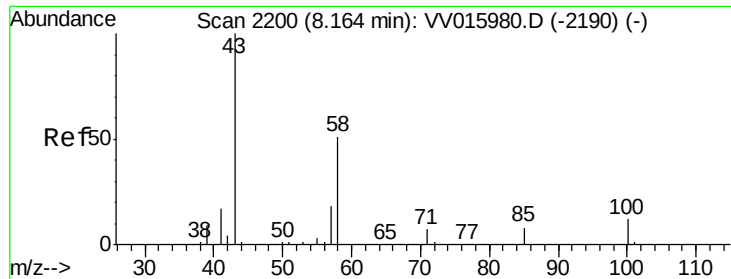
Tot Ion: 75 Resp: 966  
Ion Ratio Lower Upper  
75 100  
77 42.1 21.3 39.6#



#49  
Tetrachloroethene  
Concen: 9.377 ug/L  
RT: 8.00 min Scan# 2148  
Delta R.T. -0.00 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Tgt Ion: 164 Resp: 65097  
Ion Ratio Lower Upper  
164 100  
129 101.8 69.7 129.4  
131 96.2 66.8 124.2  
166 131.2 89.1 165.5

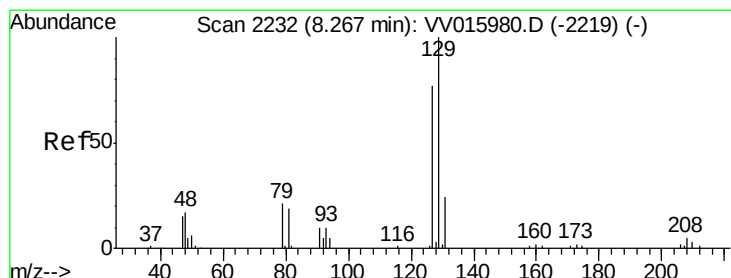
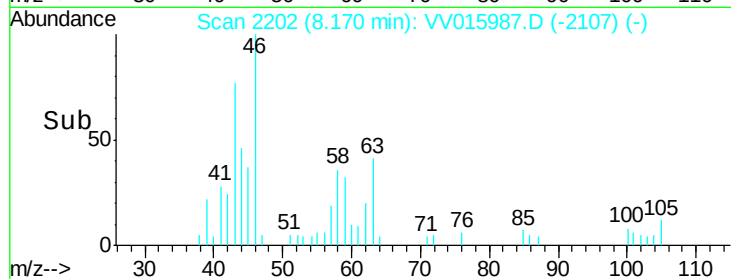
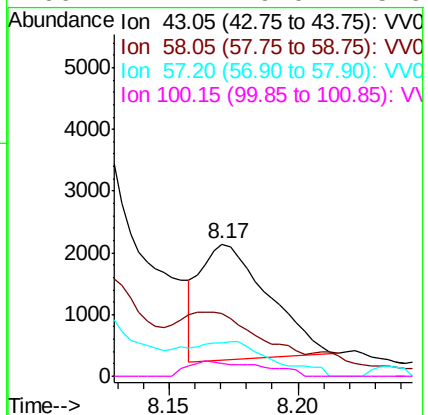
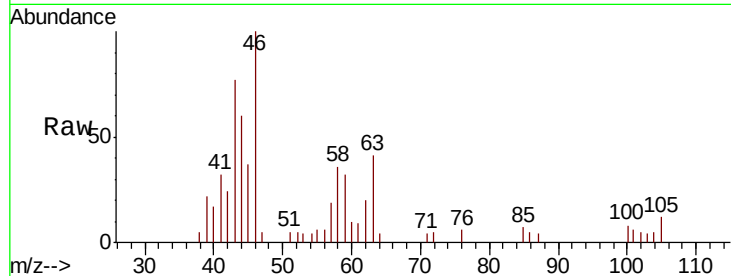




#50  
2-Hexanone  
Concen: 0.880 ug/L  
RT: 8.17 min Scan# 2202  
Delta R.T. 0.01 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 3435  
Ion Ratio Lower Upper  
43 100  
58 46.1 40.8 61.2  
57 29.1 14.7 22.1#  
100 14.4 9.0 13.6#



#51  
Dibromochloromethane  
Concen: 9.532 ug/L  
RT: 8.00 min Scan# 2148  
Delta R.T. -0.27 min  
Lab File: VV015987.D  
Acq: 11 May 2020 14:15

Tgt Ion: 129 Resp: 63343  
Ion Ratio Lower Upper  
129 100  
127 0.0 56.0 104.0#

