

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV051920\  
 Data File : VV016119.D  
 Acq On : 19 May 2020 13:55  
 Operator : SY/MD  
 Sample : L2661-12MSD  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: May 20 01:23:22 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed May 20 01:20:41 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 145765   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 146485   | 5.00 | ug/L  | 0.00     |
| 61) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 66233    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 36199    | 4.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 91.60%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 37874    | 5.05     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 101.00% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 80970    | 4.76     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 95.20%  |
| 20) 2-Butanone-d5              | 3.96   | 46    | 130220   | 57.73    | ug/L | -0.02   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 115.46% |
| 24) Chloroform-d               | 4.38   | 84    | 84371    | 4.88     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 97.60%  |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 50822    | 5.13     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 102.60% |
| 32) Benzene-d6                 | 5.08   | 84    | 164965   | 4.73     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 94.60%  |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 53266    | 5.01     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 100.20% |
| 41) Toluene-d8                 | 7.34   | 98    | 144423   | 4.38     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 87.60%  |
| 45) trans-1,3-Dichloropropene- | 7.65   | 79    | 18306    | 4.38     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 87.60%  |
| 48) 2-Hexanone-d5              | 8.12   | 63    | 93896    | 51.19    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 102.38% |
| 59) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 39868    | 5.33     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 106.60% |
| 65) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 55656    | 5.18     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 103.60% |

## Target Compounds

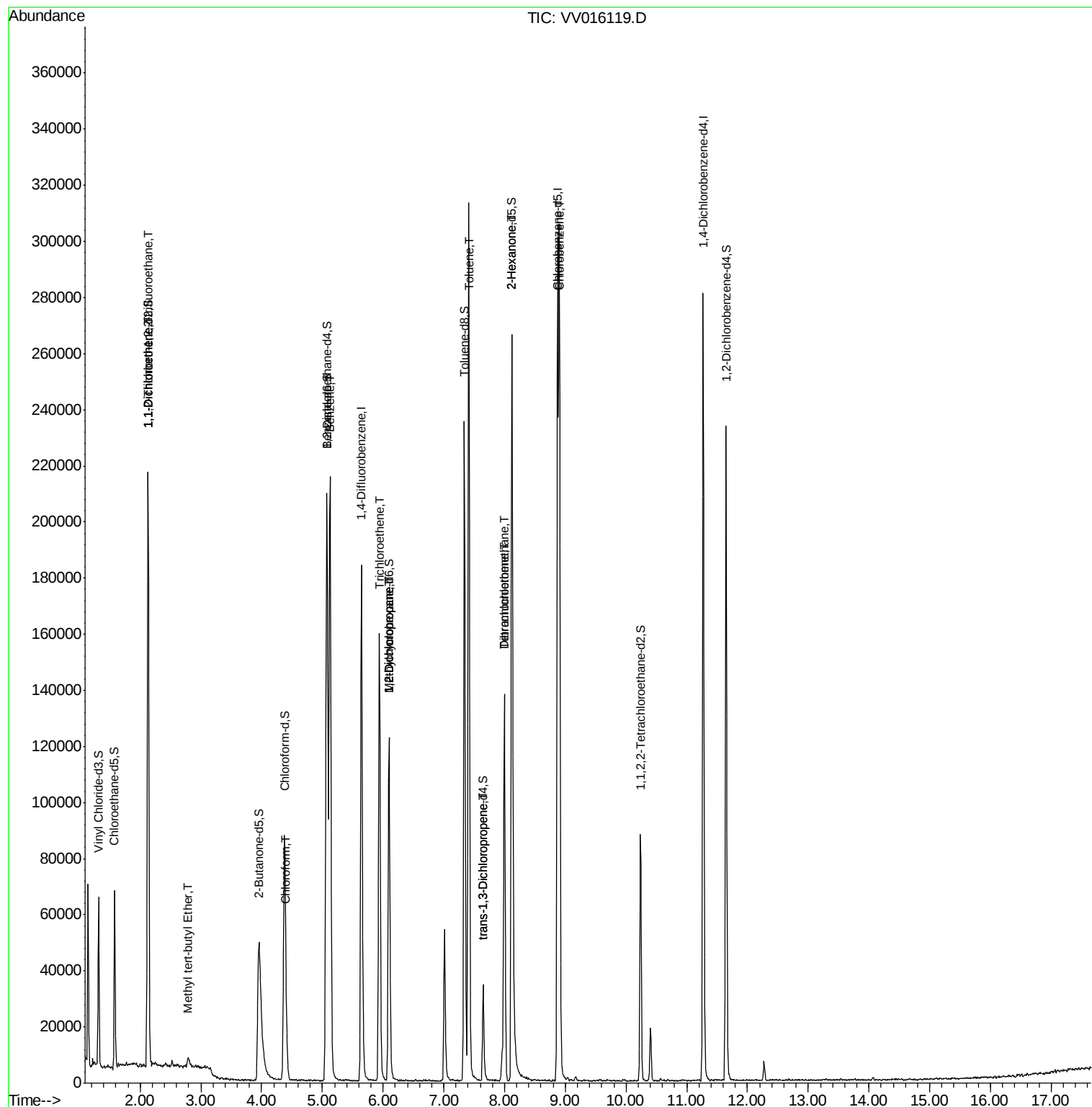
| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101  | 695      | 0.083 | ug/L # | 20     |
| 12) 1,1-Dichloroethene         | 2.14 | 96   | 41975    | 5.233 | ug/L   | 85     |
| 17) Methyl tert-butyl Ether    | 2.79 | 73   | 3013     | 0.145 | ug/L # | 88     |
| 25) Chloroform                 | 4.41 | 83   | 9679     | 0.515 | ug/L   | 96     |
| 33) Benzene                    | 5.13 | 78   | 203731   | 5.528 | ug/L   | 100    |
| 34) Trichloroethene            | 5.94 | 95   | 55491    | 5.275 | ug/L   | 96     |
| 35) Methylcyclohexane          | 6.10 | 83   | 13499    | 0.848 | ug/L # | 16     |
| 37) 1,2-Dichloropropane        | 6.10 | 63   | 6769     | 0.723 | ug/L # | 87     |
| 42) Toluene                    | 7.41 | 91   | 215931   | 5.527 | ug/L   | 99     |
| 46) trans-1,3-Dichloropropene  | 7.65 | 75   | 1112     | 0.099 | ug/L   | 95     |
| 49) Tetrachloroethene          | 8.00 | 164  | 28649    | 3.903 | ug/L   | 98     |
| 50) 2-Hexanone                 | 8.12 | 43   | 15636    | 3.789 | ug/L # | 75     |
| 51) Dibromochloromethane       | 8.00 | 129  | 27363    | 3.895 | ug/L # | 9      |
| 53) Chlorobenzene              | 8.90 | 112  | 146700   | 5.839 | ug/L   | 100    |

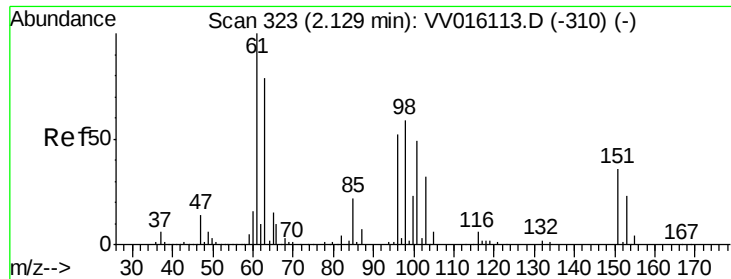
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA V\DATA\VV051920\  
Data File : VV016119.D  
Acq On : 19 May 2020 13:55  
Operator : SY/MD  
Sample : L2661-12MSD  
Misc : 25.0mL/MSVOA V/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :

Quant Time: May 20 01:23:22 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR050720WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed May 20 01:20:41 2020  
Response via : Initial Calibration





#10

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

Concen: 0.083 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.00 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

Instrument :

MSVOA\_V

ClientSampleId :

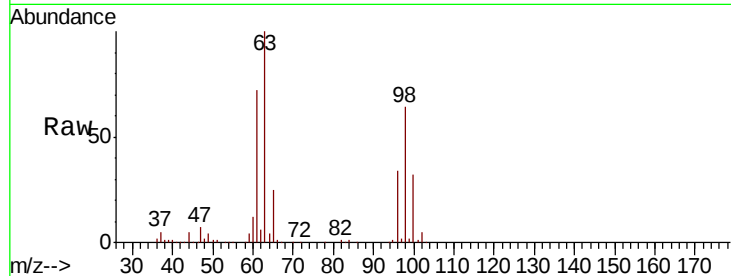
Tot Ion:101 Resp: 695

Ion Ratio Lower Upper

101 100

85 0.0 35.7 53.5#

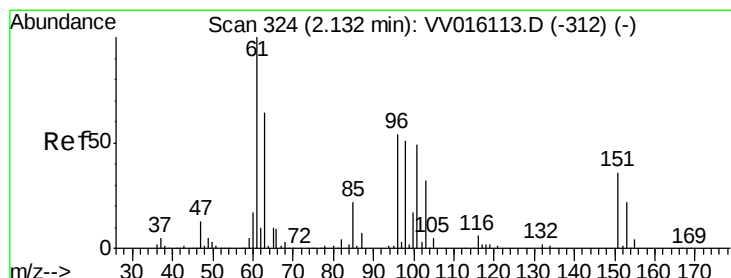
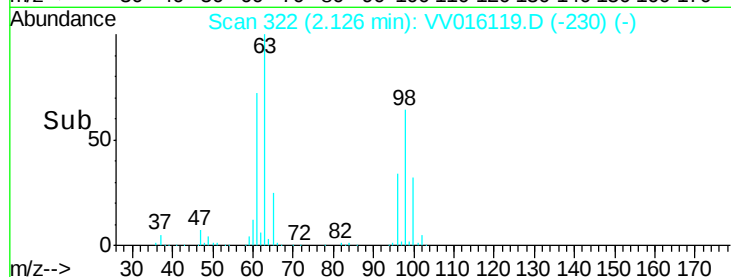
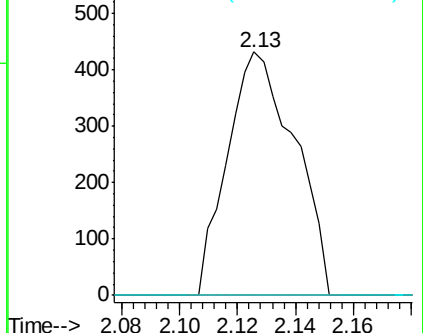
151 0.0 58.0 87.0#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 5.233 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

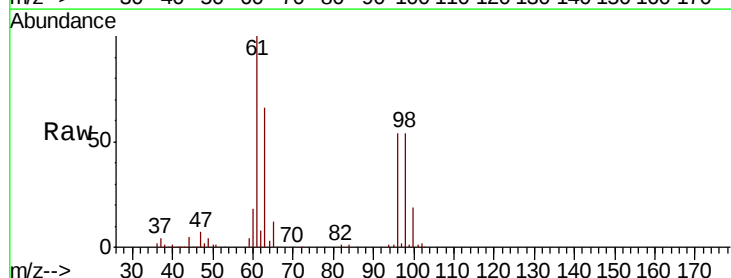
Tgt Ion: 96 Resp: 41975

Ion Ratio Lower Upper

96 100

61 185.8 139.9 259.7

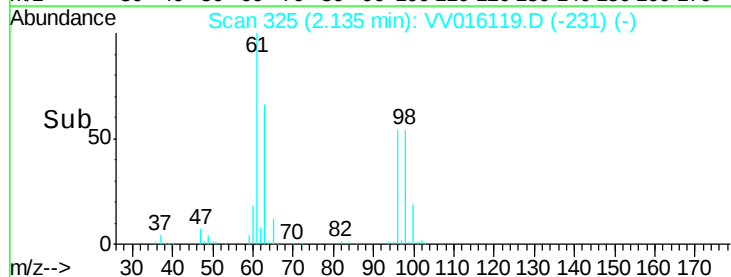
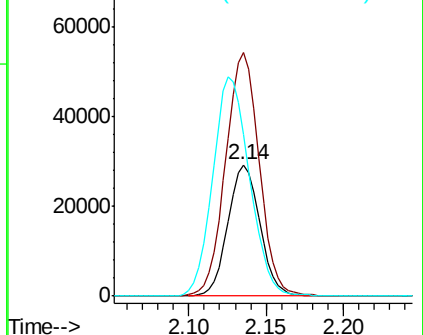
63 123.2 106.4 197.6

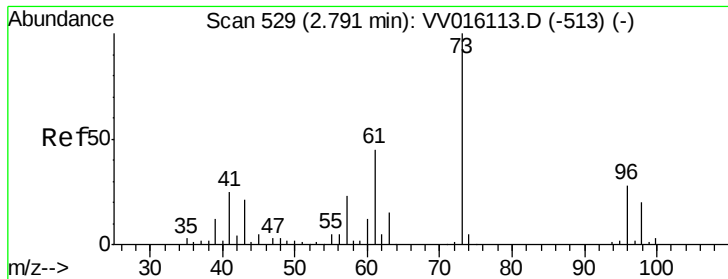


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0

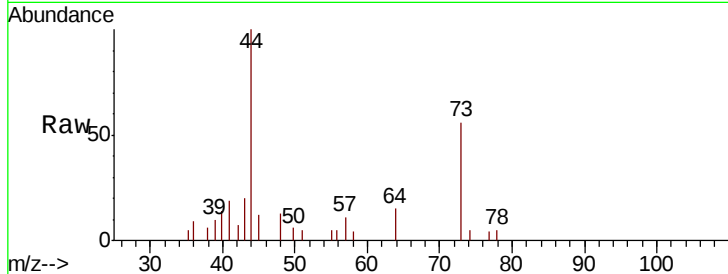




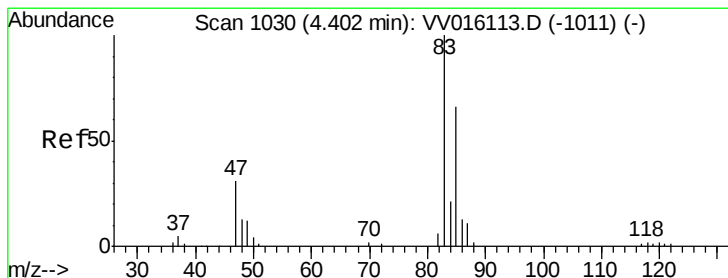
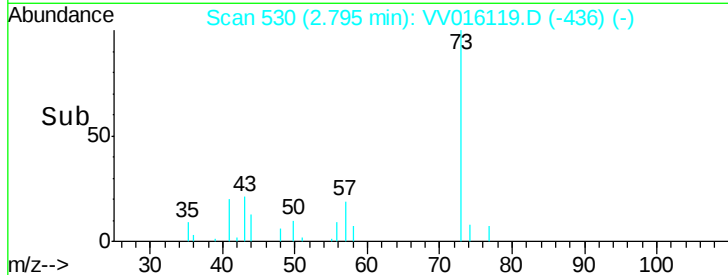
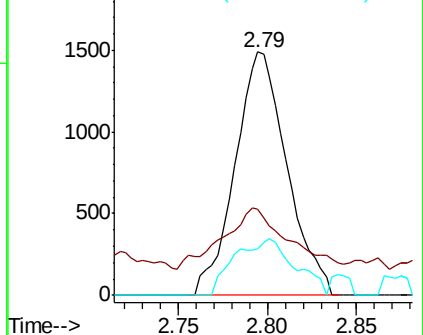
#17  
Methvl tert-butvl Ether  
Concen: 0.145 ug/L  
RT: 2.79 min Scan# 530  
Delta R.T. 0.00 min  
Lab File: VV016119.D  
Acq: 19 May 2020 13:55

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 73 Resp: 3013  
Ion Ratio Lower Upper  
73 100  
43 30.8 18.8 28.2#  
57 26.7 17.8 26.6#

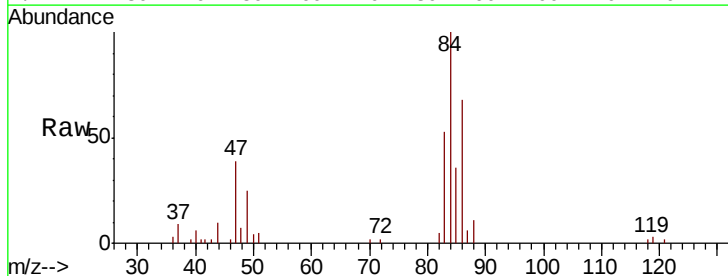


Abundance Ion 73.10 (72.80 to 73.80): VV0  
Ion 43.05 (42.75 to 43.75): VV0  
Ion 57.10 (56.80 to 57.80): VV0

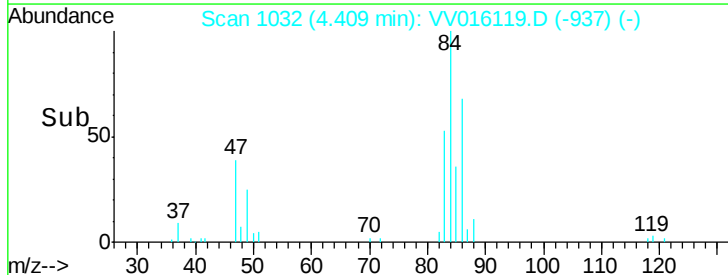
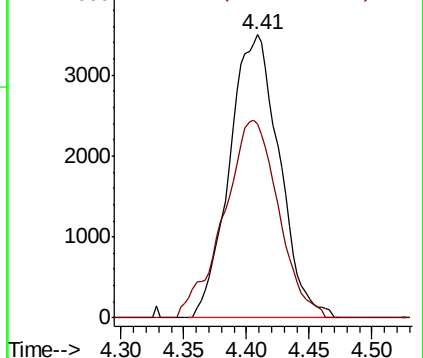


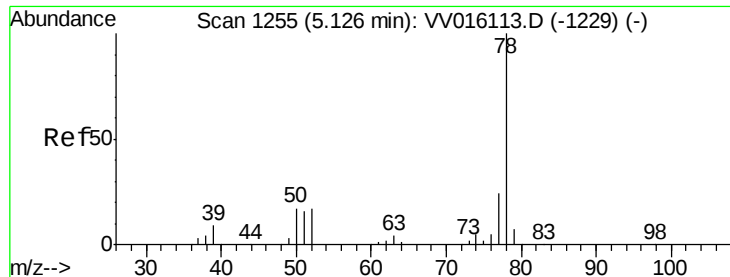
#25  
Chloroform  
Concen: 0.515 ug/L  
RT: 4.41 min Scan# 1032  
Delta R.T. 0.01 min  
Lab File: VV016119.D  
Acq: 19 May 2020 13:55

Tgt Ion: 83 Resp: 9679  
Ion Ratio Lower Upper  
83 100  
85 68.4 45.7 84.9



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





#33

Benzene

Concen: 5.528 ug/L

RT: 5.13 min Scan# 1255

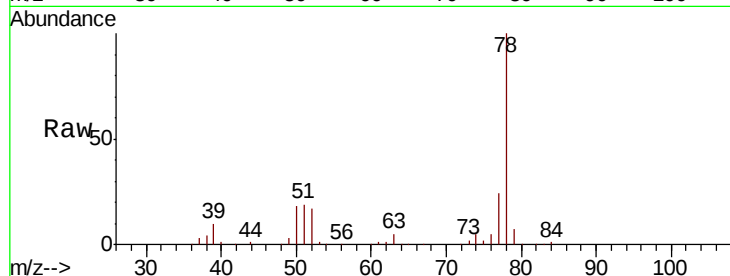
Delta R.T. -0.00 min

Lab File: VV016119.D

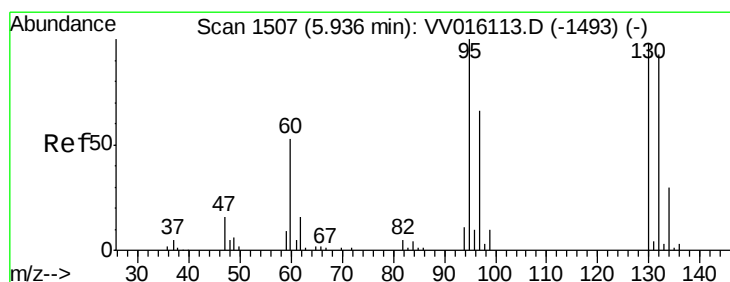
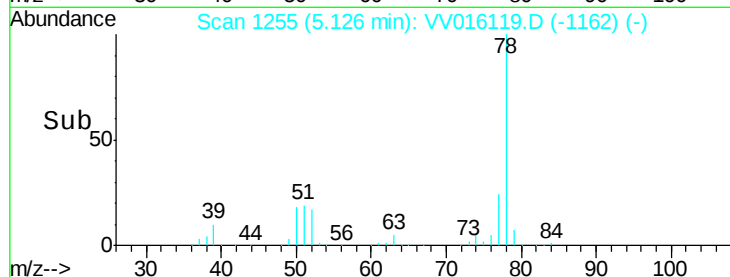
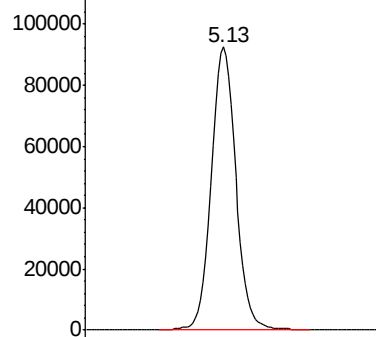
Acq: 19 May 2020 13:55

Instrument :  
MSVOA\_V  
ClientSampleId :

Tgt Ion: 78 Resp: 203731



Abundance Ion 78.10 (77.80 to 78.80): VV0



#34

Trichloroethene

Concen: 5.275 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. 0.00 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

Tgt Ion: 95 Resp: 55491

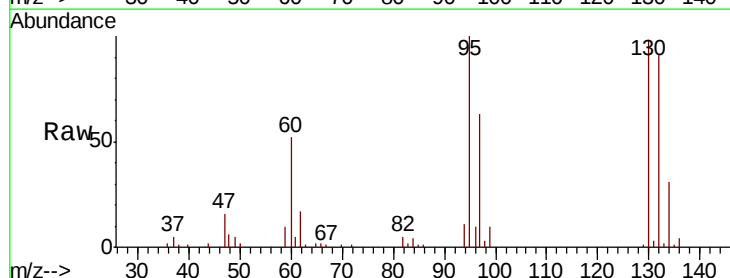
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 63.5  | 43.3  | 80.5  |
| 132 | 90.8  | 60.3  | 112.1 |
| 130 | 98.3  | 66.0  | 122.6 |

95 100

97 63.5 43.3 80.5

132 90.8 60.3 112.1

130 98.3 66.0 122.6

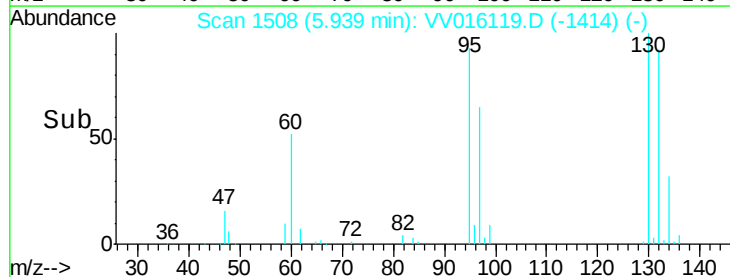
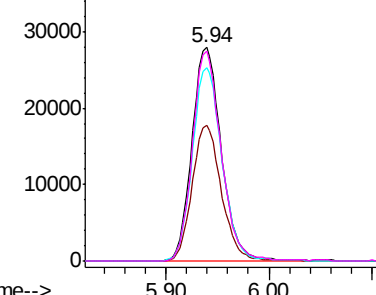


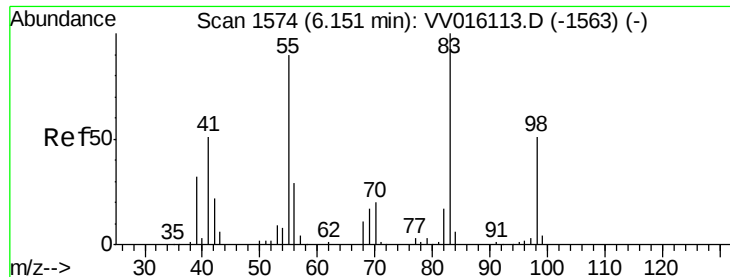
Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0

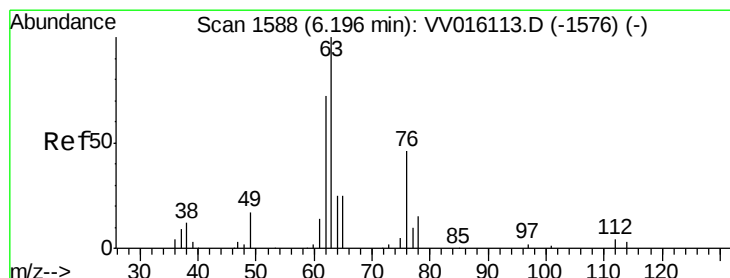
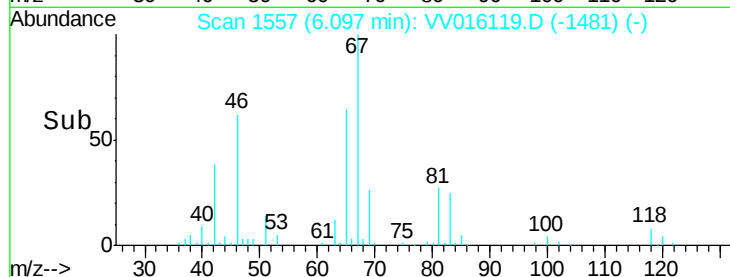
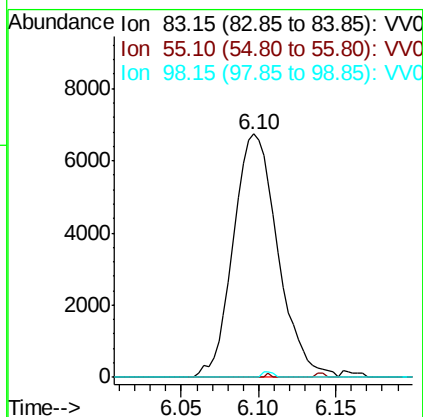
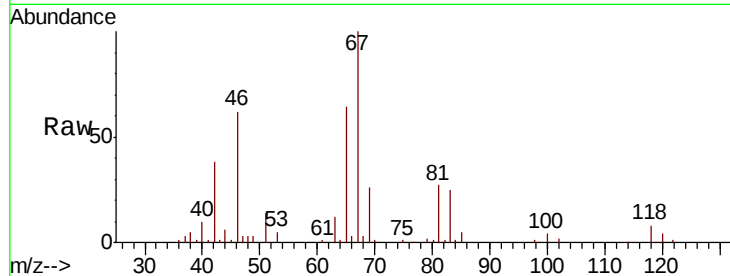




#35  
Methvlcvclohexane  
Concen: 0.848 ug/L  
RT: 6.10 min Scan# 1557  
Delta R.T. -0.05 min  
Lab File: VV016119.D  
Acq: 19 May 2020 13:55

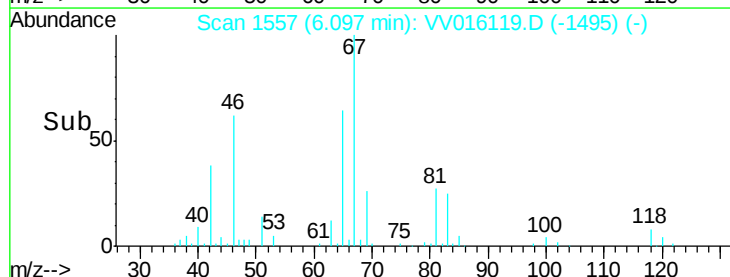
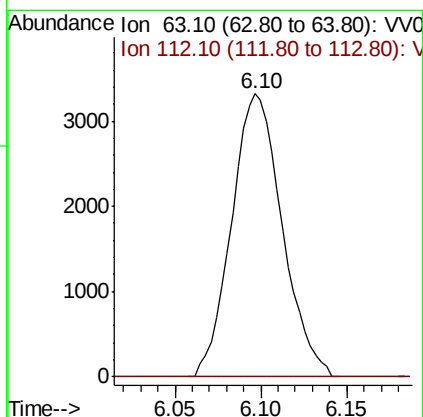
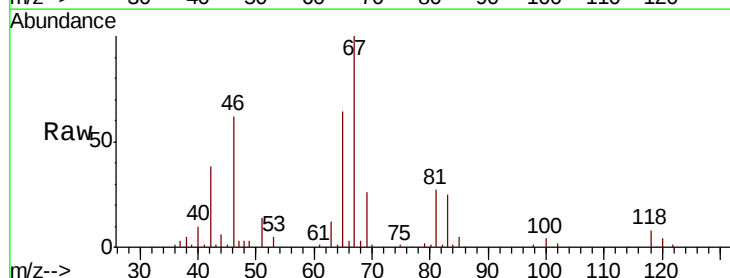
Instrument :  
MSVOA\_V  
ClientSampleId :

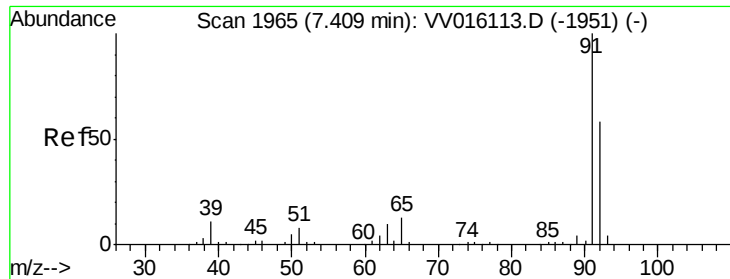
Tot Ion: 83 Resp: 13499  
Ion Ratio Lower Upper  
83 100  
55 0.1 66.2 99.2#  
98 0.6 37.9 56.9#



#37  
1,2-Dichloropropane  
Concen: 0.723 ug/L  
RT: 6.10 min Scan# 1557  
Delta R.T. -0.10 min  
Lab File: VV016119.D  
Acq: 19 May 2020 13:55

Tgt Ion: 63 Resp: 6769  
Ion Ratio Lower Upper  
63 100  
112 0.0 3.4 5.0#





#42

Toluene

Concen: 5.527 ug/L

RT: 7.41 min Scan# 1966

Delta R.T. 0.00 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

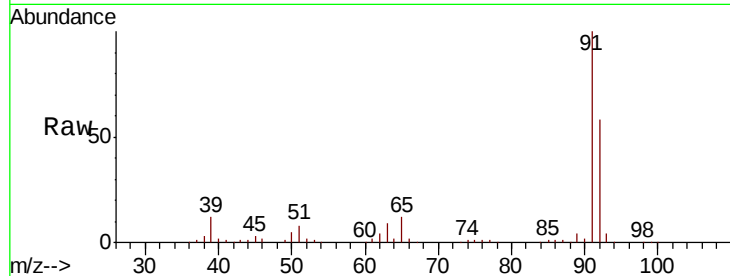
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 91 Resp: 215931

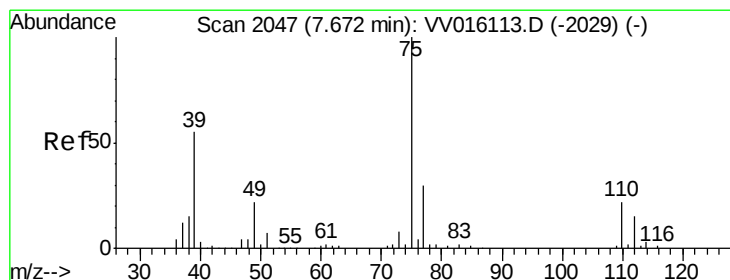
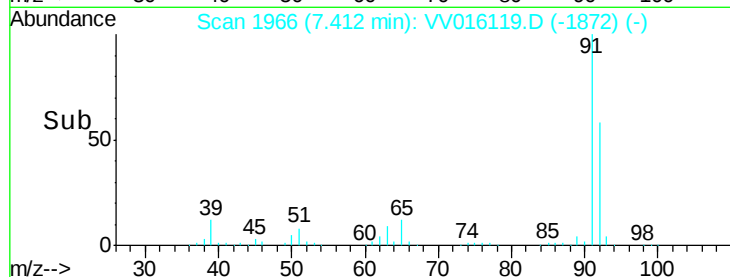
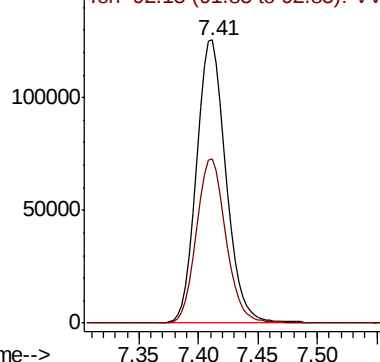
Ion Ratio Lower Upper

91 100

92 58.2 40.1 74.5



Abundance Ion 91.15 (90.85 to 91.85): VV0  
Ion 92.15 (91.85 to 92.85): VV0



#46

trans-1,3-Dichloropropene

Concen: 0.099 ug/L

RT: 7.65 min Scan# 2039

Delta R.T. -0.03 min

Lab File: VV016119.D

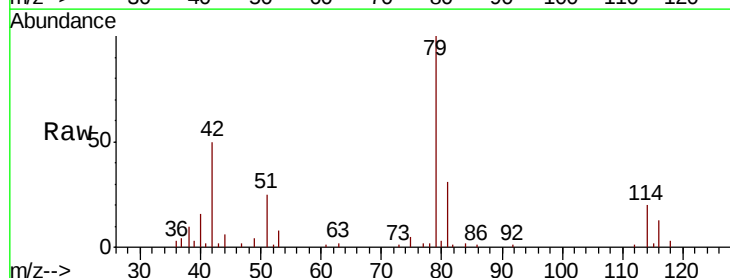
Acq: 19 May 2020 13:55

Tgt Ion: 75 Resp: 1112

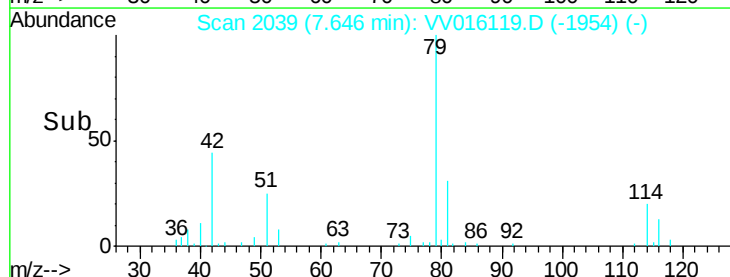
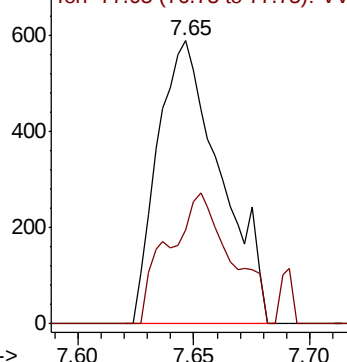
Ion Ratio Lower Upper

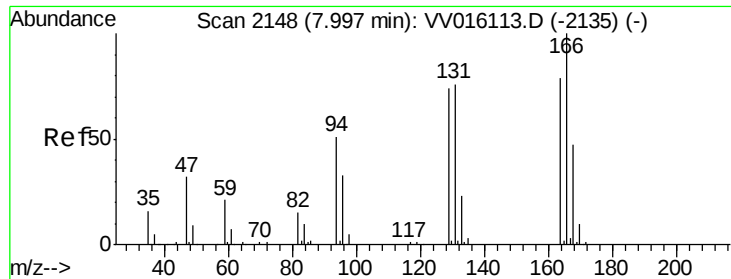
75 100

77 33.3 21.3 39.6



Abundance Ion 75.05 (74.75 to 75.75): VV0  
Ion 77.05 (76.75 to 77.75): VV0





#49

Tetrachloroethene

Concen: 3.903 ug/L

RT: 8.00 min Scan# 2148

Delta R.T. -0.00 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion:164 Resp: 28649

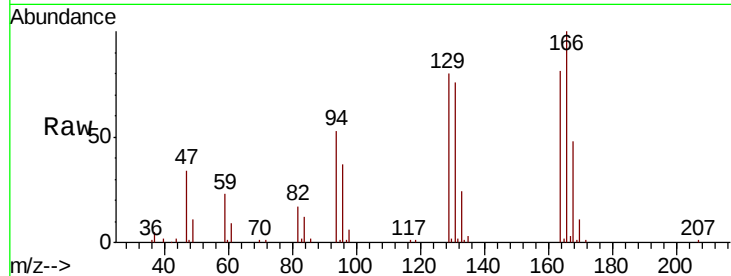
Ion Ratio Lower Upper

164 100

129 98.9 69.7 129.4

131 94.8 66.8 124.2

166 123.9 89.1 165.5

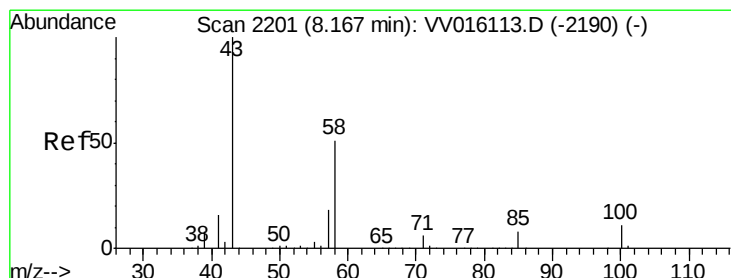
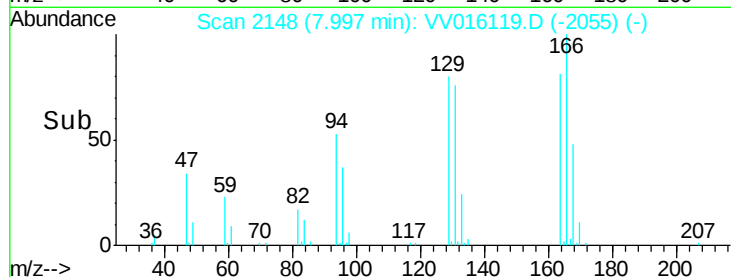
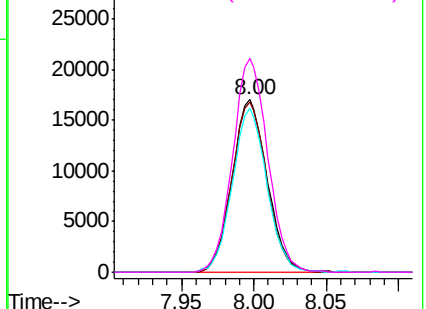


Abundance Ion 163.90 (163.60 to 164.60): V

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



#50

2-Hexanone

Concen: 3.789 ug/L

RT: 8.12 min Scan# 2186

Delta R.T. -0.05 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

Tgt Ion: 43 Resp: 15636

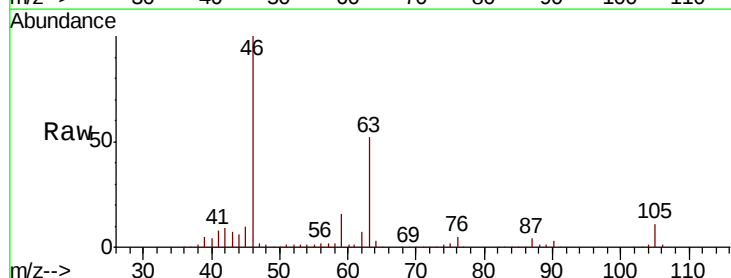
Ion Ratio Lower Upper

43 100

58 32.1 40.8 61.2#

57 24.8 14.7 22.1#

100 0.0 9.0 13.6#

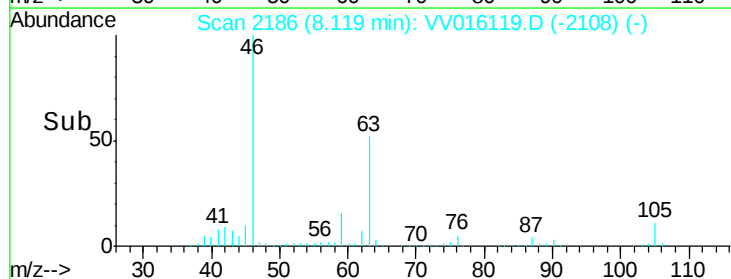
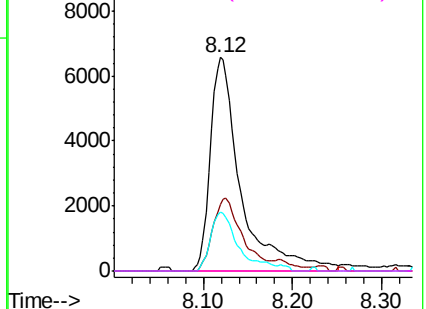


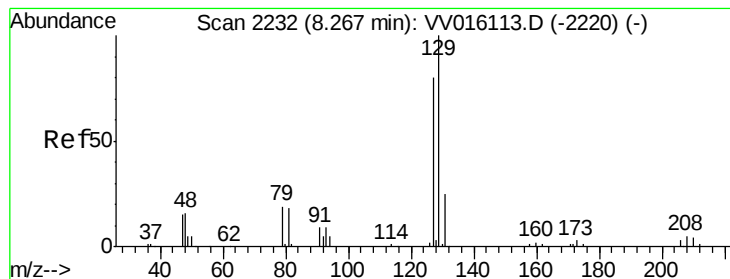
Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 58.05 (57.75 to 58.75): VV0

Ion 57.20 (56.90 to 57.90): VV0

Ion 100.15 (99.85 to 100.85): VV0





#51

Dibromochloromethane

Concen: 3.895 ug/L

RT: 8.00 min Scan# 2148

Delta R.T. -0.27 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

Instrument :

MSVOA\_V

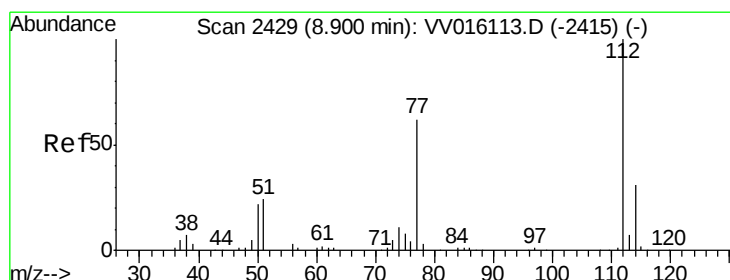
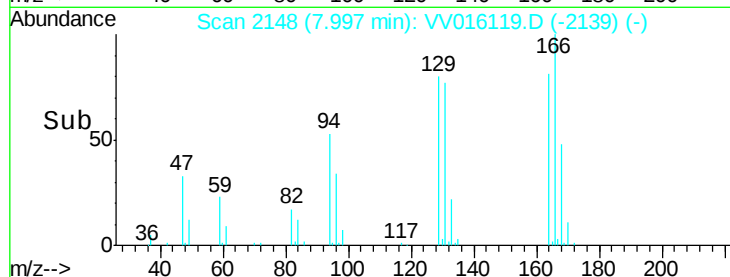
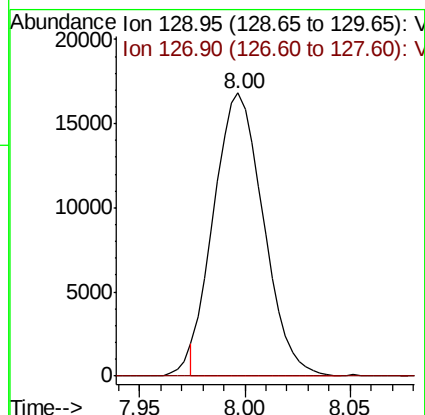
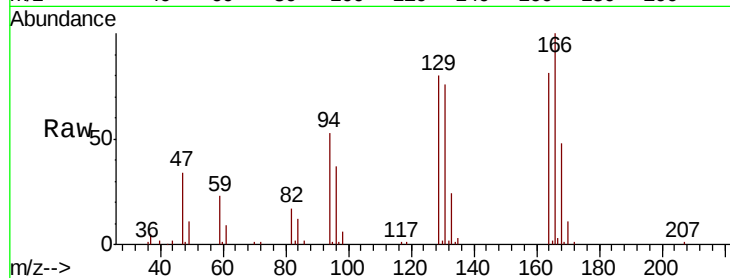
ClientSampled :

Tot Ion:129 Resp: 27363

Ion Ratio Lower Upper

129 100

127 0.0 56.0 104.0#



#53

Chlorobenzene

Concen: 5.839 ug/L

RT: 8.90 min Scan# 2430

Delta R.T. 0.00 min

Lab File: VV016119.D

Acq: 19 May 2020 13:55

Tgt Ion:112 Resp: 146700

Ion Ratio Lower Upper

112 100

114 31.3 21.6 40.0

77 60.8 48.6 73.0

