

Data File : VV011981.D  
Acq On : 23 Jul 2019 22:59  
Operator : SY/MD  
Sample : K3823-20DL 5X  
Misc : 25ML/MSVOA\_V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
A52K0DL

Quant Time: Jul 24 07:51:00 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR072219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Jul 24 07:47:25 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 103121   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 98801    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 53520    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |          |
|--------------------------------|--------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 32774    | 6.12     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 122.40%  |
| 7) Chloroethane-d5             | 1.55   | 69    | 23640    | 5.61     | ug/L | -0.03    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 112.20%  |
| 11) 1,1-Dichloroethene-d2      | 2.12   | 63    | 46198    | 4.33     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 86.60%   |
| 20) 2-Butanone-d5              | 3.94   | 46    | 106981   | 68.29    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 136.58%# |
| 24) Chloroform-d               | 4.40   | 84    | 65607    | 4.67     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 93.40%   |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 43204    | 6.02     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 120.40%  |
| 32) Benzene-d6                 | 5.10   | 84    | 143908   | 5.22     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 104.40%  |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 42264    | 5.36     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 107.20%  |
| 41) Toluene-d8                 | 7.36   | 98    | 127371   | 4.98     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 99.60%   |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 16576    | 5.18     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 103.60%  |
| 46) 2-Hexanone-d5              | 8.13   | 63    | 93006    | 72.37    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 144.74%# |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 36786    | 6.56     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 131.20%# |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 58843    | 5.71     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 114.20%  |

#### Target Compounds

|                                |      |     |        |              | Qvalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 8) Chloroethane                | 1.53 | 64  | 341    | 0.091 ug/L   | 90     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 451    | 0.086 ug/L # | 15     |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 2067   | 0.440 ug/L # | 1      |
| 13) Acetone                    | 2.19 | 43  | 1893   | 2.242 ug/L   | 88     |
| 16) Methylene chloride         | 2.53 | 84  | 1355   | 0.257 ug/L   | 97     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 6194   | 0.480 ug/L # | 96     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 5442   | 0.693 ug/L   | 94     |
| 25) Chloroform                 | 4.42 | 83  | 9114   | 0.585 ug/L   | 93     |
| 27) 1,2-Dichloroethane         | 5.09 | 62  | 1024   | 0.118 ug/L # | 76     |
| 29) 1,1,1-Trichloroethane      | 4.65 | 97  | 112780 | 8.919 ug/L   | 99     |
| 31) Carbon tetrachloride       | 4.65 | 117 | 14561  | 1.279 ug/L # | 57     |
| 34) Trichloroethene            | 5.96 | 95  | 3003   | 0.372 ug/L   | 92     |
| 35) Methylcyclohexane          | 6.12 | 83  | 11385  | 0.906 ug/L # | 17     |
| 37) 1,2-Dichloropropane        | 6.12 | 63  | 5409   | 0.774 ug/L # | 84     |
| 39) cis-1,3-Dichloropropene    | 7.03 | 75  | 1293   | 0.125 ug/L # | 69     |
| 44) trans-1,3-Dichloropropene  | 7.67 | 75  | 828    | 0.101 ug/L   | 91     |
| 47) Tetrachloroethene          | 8.02 | 164 | 3757   | 0.539 ug/L   | 86     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV072319\  
Quantitation Report (Not Reviewed)

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Jul 24 07:47:25 2019  
Response via : Initial Calibration

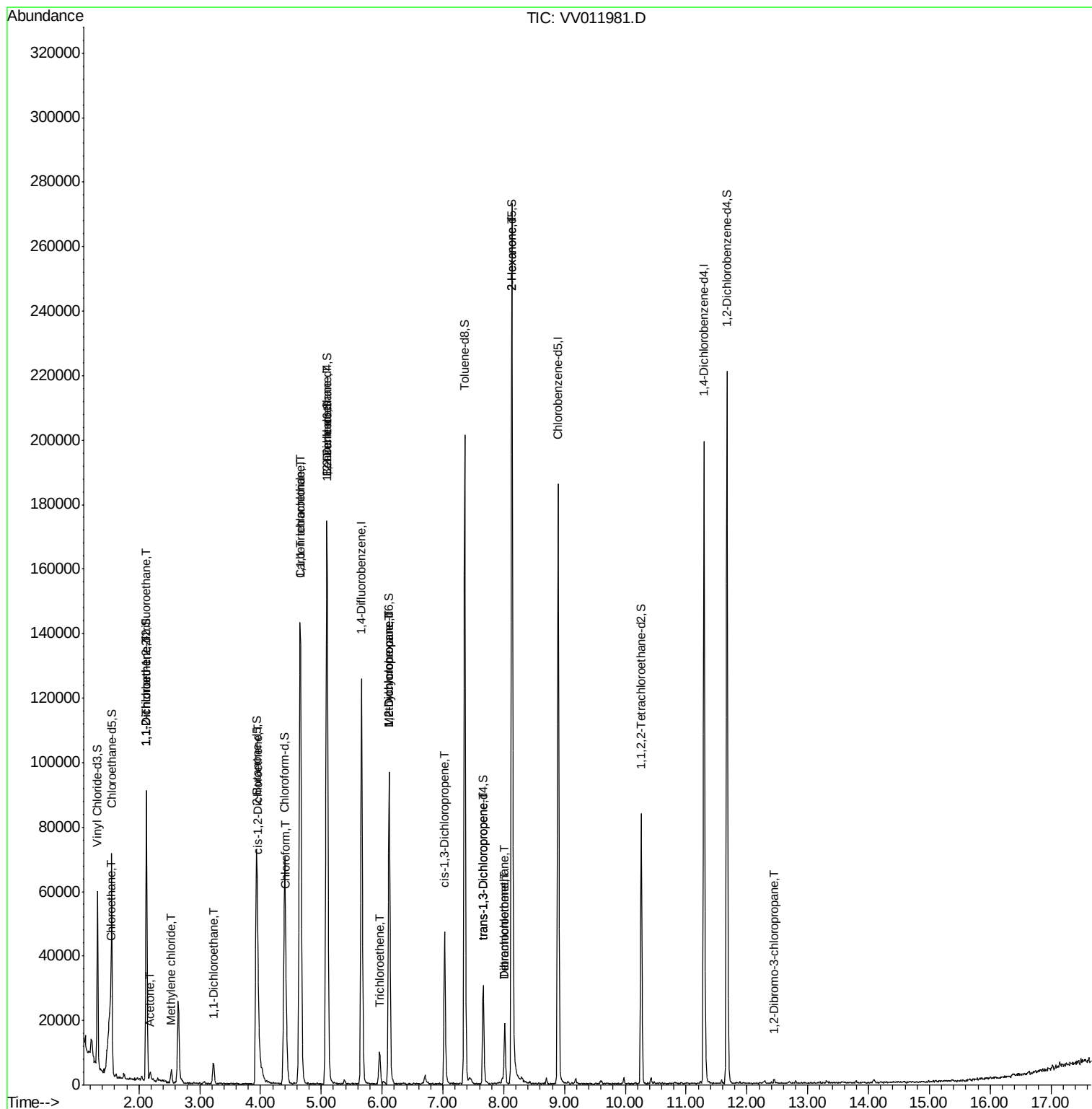
| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 48) 2-Hexanone                 | 8.13  | 43   | 11819    | 4.316 | ug/L # | 69       |
| 49) Dibromochloromethane       | 8.02  | 129  | 3575     | 0.605 | ug/L # | 10       |
| 66) 1,2-Dibromo-3-chloropropan | 12.45 | 75   | 298      | 0.318 | ug/L # | 1        |

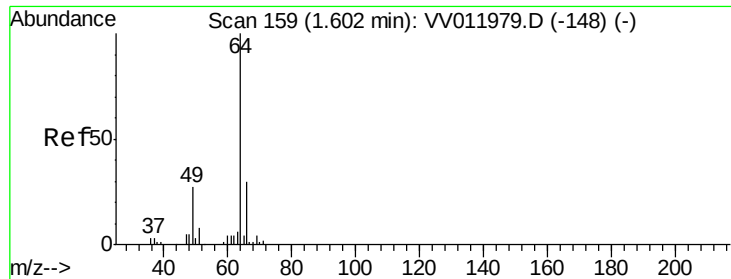
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#8

Chloroethane

Concen: 0.091 ug/L

RT: 1.53 min Scan# 137

Delta R.T. -0.07 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

Instrument :

MSVOA\_V

ClientSampleId :

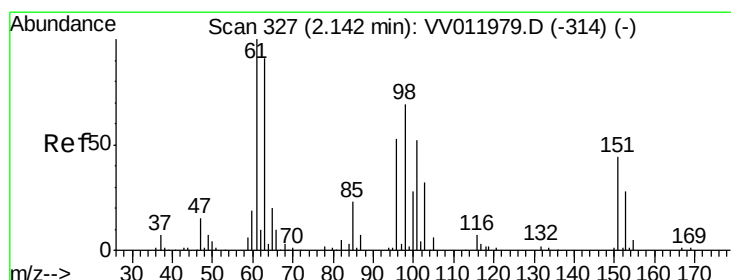
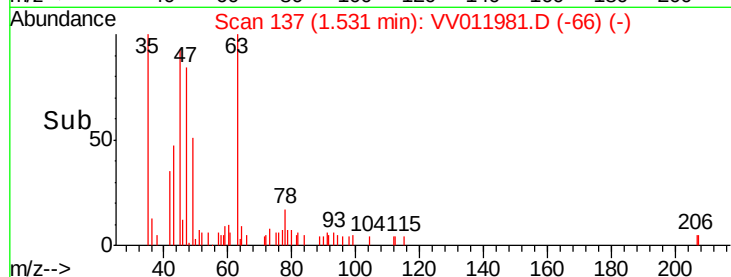
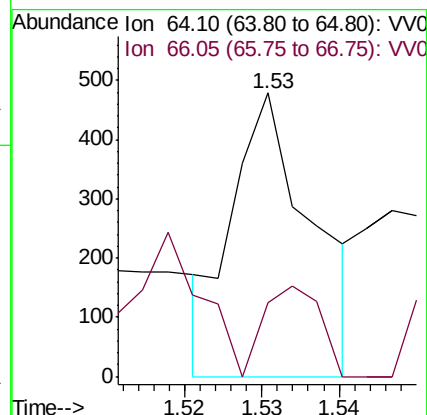
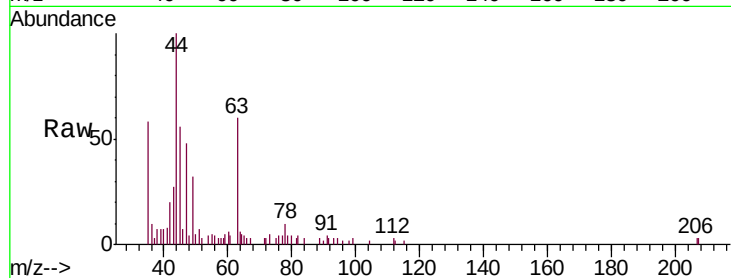
A52K0DL

Tgt Ion: 64 Resp: 341

Ion Ratio Lower Upper

64 100

66 25.9 21.8 40.6



#10

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

Concen: 0.086 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.02 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

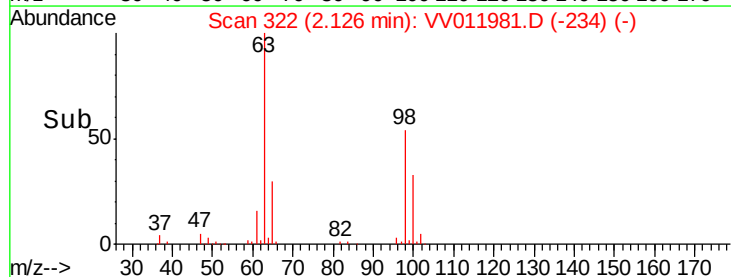
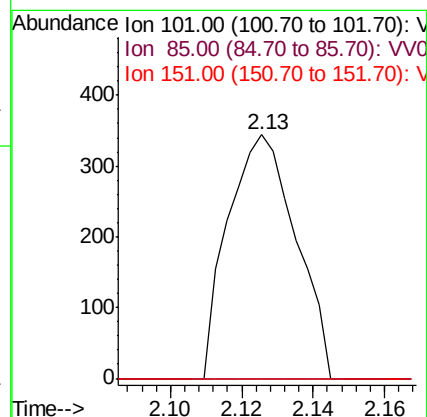
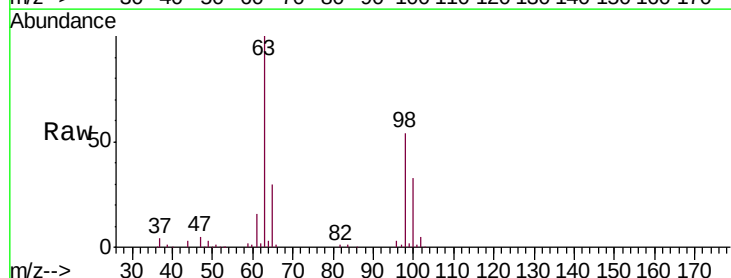
Tgt Ion: 101 Resp: 451

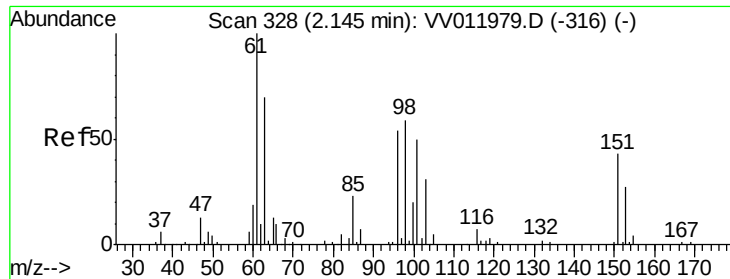
Ion Ratio Lower Upper

101 100

85 0.0 37.0 55.6#

151 0.0 68.3 102.5#

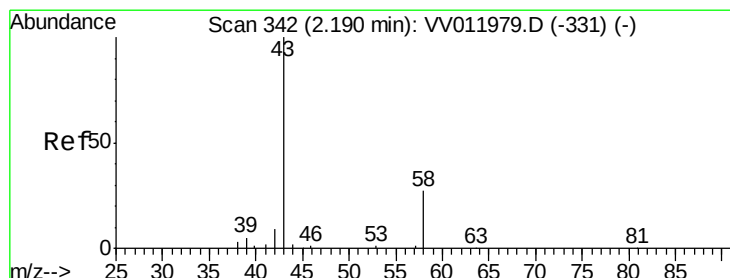
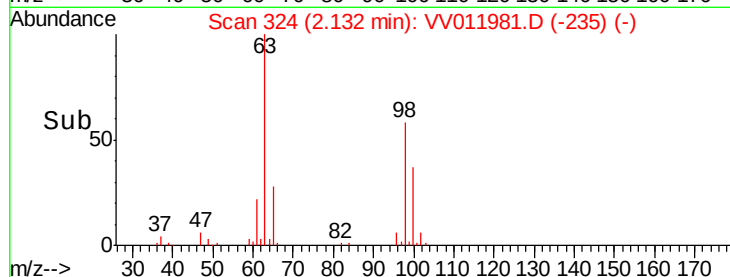
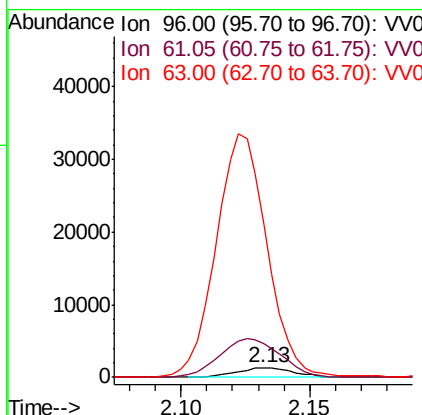
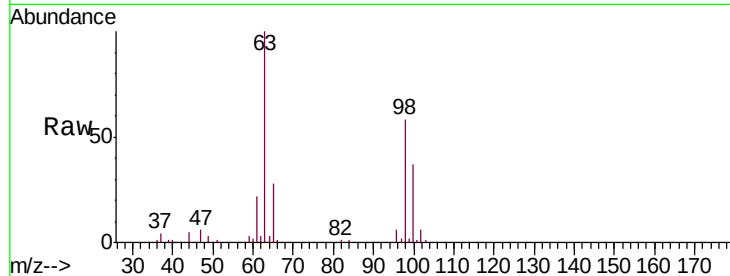




#12  
 1,1-Dichloroethene  
 Concen: 0.440 ug/L  
 RT: 2.13 min Scan# 324  
 Delta R.T. -0.01 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

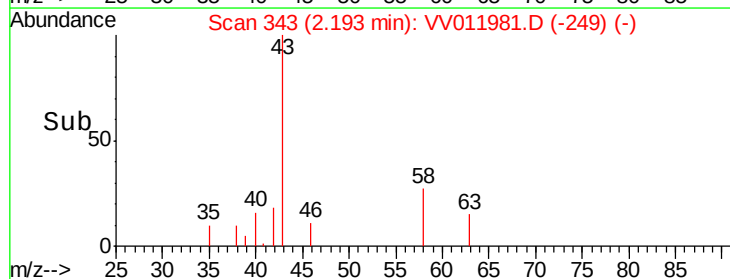
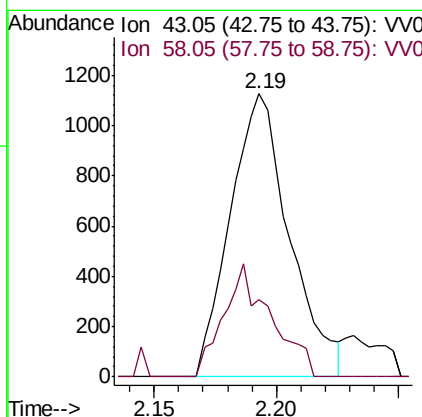
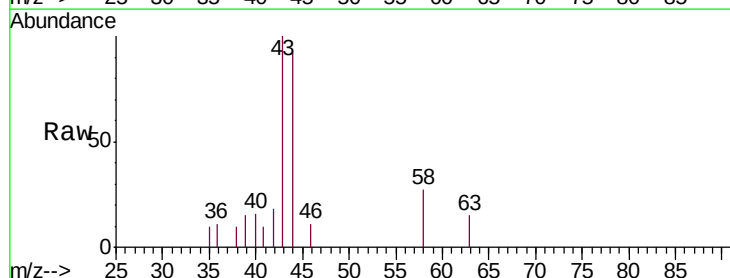
Instrument :  
 MSVOA\_V  
 ClientSampleID :  
 A52K0DL

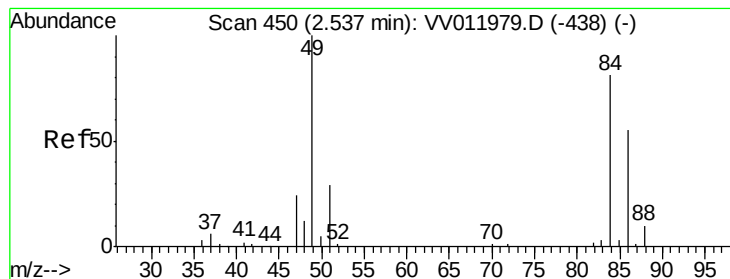
Tgt Ion: 96 Resp: 2067  
 Ion Ratio Lower Upper  
 96 100  
 61 345.9 132.7 246.5#  
 63 1566.0 104.0 193.1#



#13  
 Acetone  
 Concen: 2.242 ug/L  
 RT: 2.19 min Scan# 343  
 Delta R.T. 0.00 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

Tgt Ion: 43 Resp: 1893  
 Ion Ratio Lower Upper  
 43 100  
 58 32.2 0.0 51.8





#16

Methylene chloride

Concen: 0.257 ug/L

RT: 2.53 min Scan# 448

Delta R.T. -0.01 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

Instrument :

MSVOA\_V

ClientSampleId :

A52K0DL

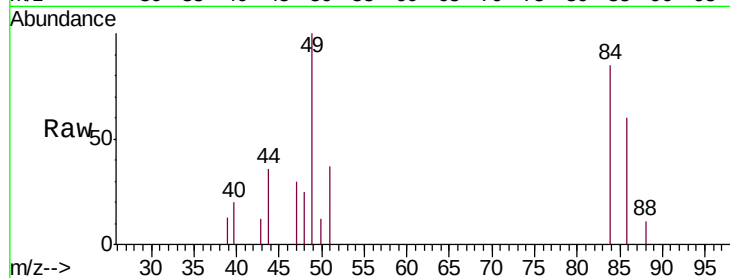
Tgt Ion: 84 Resp: 1355

Ion Ratio Lower Upper

84 100

86 70.8 47.6 88.4

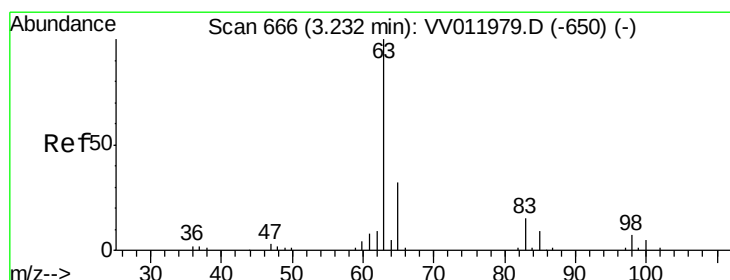
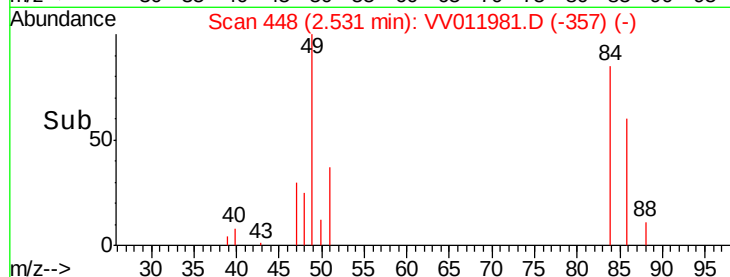
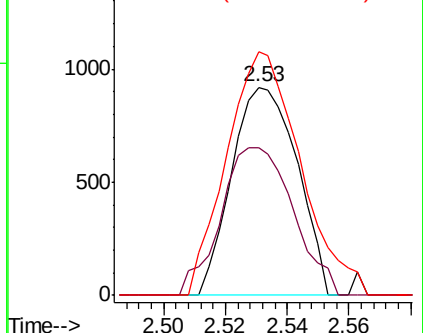
49 117.2 84.3 156.5



Abundance Ion 84.05 (83.75 to 84.75): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.10 (48.80 to 49.80): VV0



#19

1,1-Dichloroethane

Concen: 0.480 ug/L

RT: 3.23 min Scan# 665

Delta R.T. -0.00 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

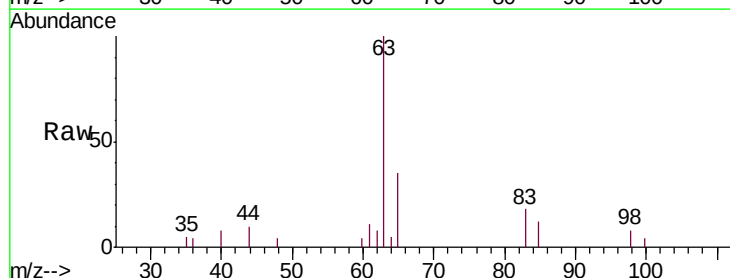
Tgt Ion: 63 Resp: 6194

Ion Ratio Lower Upper

63 100

65 34.6 23.5 43.7

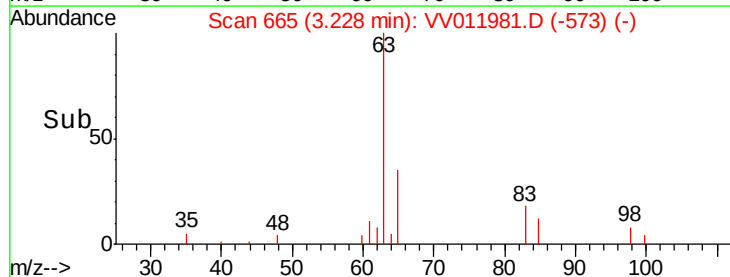
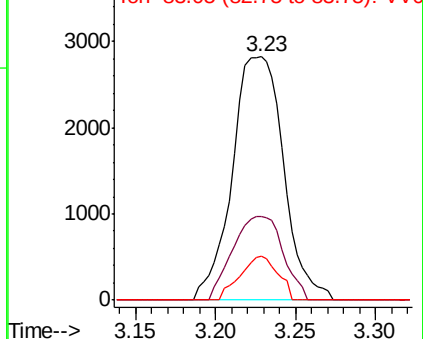
83 18.3 9.7 18.1#

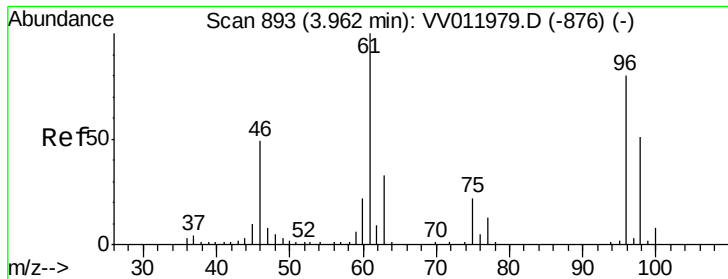


Abundance Ion 63.10 (62.80 to 63.80): VV0

Ion 65.10 (64.80 to 65.80): VV0

Ion 83.05 (82.75 to 83.75): VV0

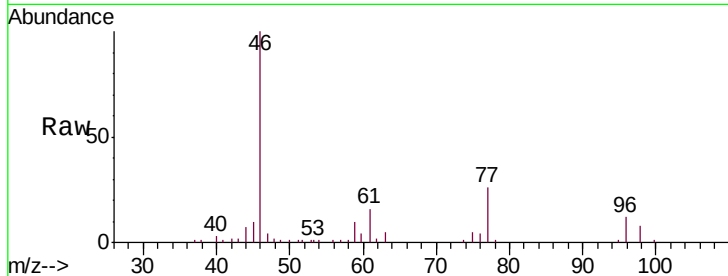




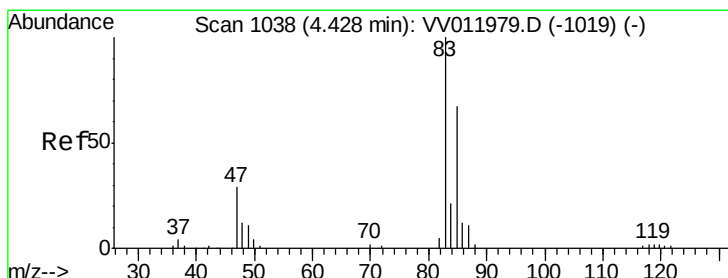
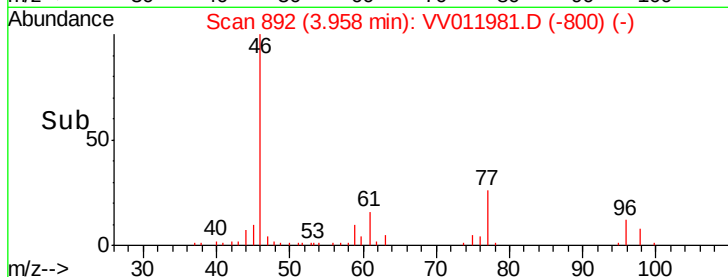
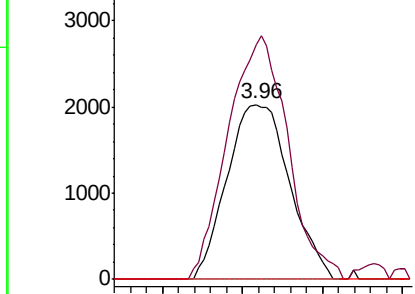
#22  
 cis-1,2-Dichloroethene  
 Concen: 0.693 ug/L  
 RT: 3.96 min Scan# 892  
 Delta R.T. -0.00 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

Instrument :  
 MSVOA\_V  
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 A52K0DL

Tgt Ion: 96 Resp: 5442  
 Ion Ratio Lower Upper  
 96 100  
 61 133.8 89.0 165.2  
 68 0.0 0.0 0.0

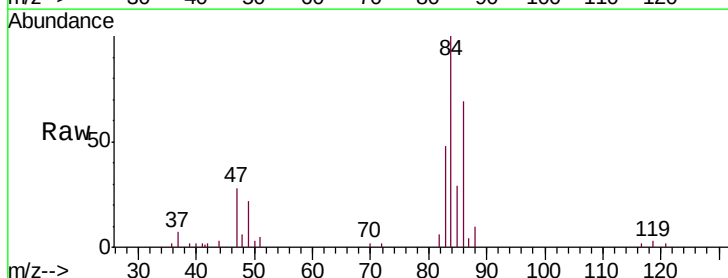


Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0  
 Ion 68.15 (67.85 to 68.85): VV0

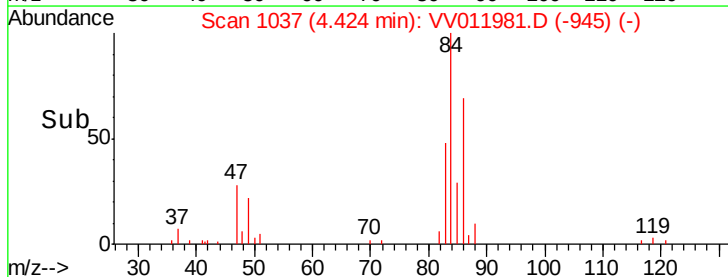
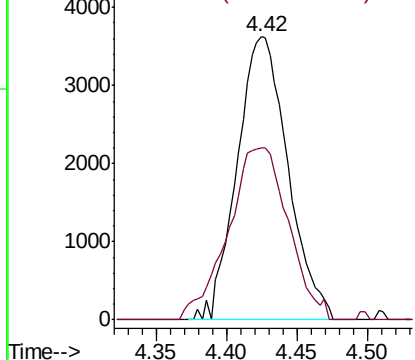


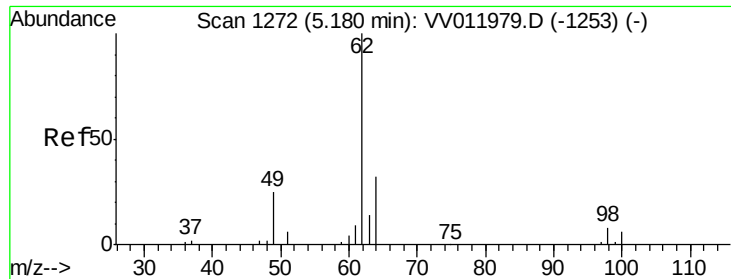
#25  
 Chloroform  
 Concen: 0.585 ug/L  
 RT: 4.42 min Scan# 1037  
 Delta R.T. -0.00 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

Tgt Ion: 83 Resp: 9114  
 Ion Ratio Lower Upper  
 83 100  
 85 60.6 46.5 86.3



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

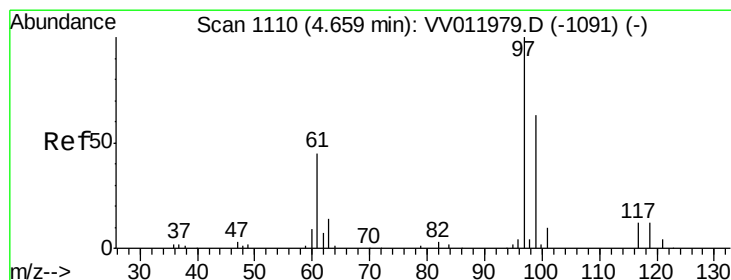
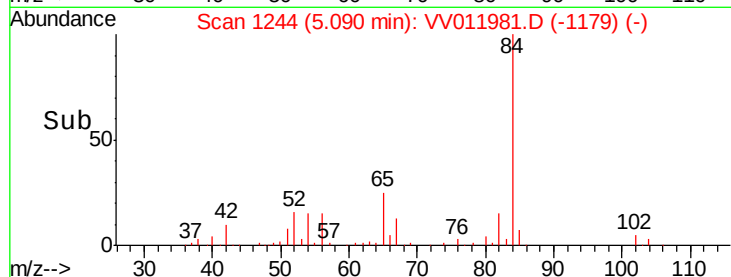
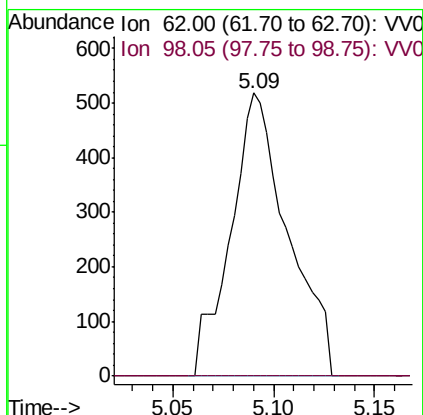
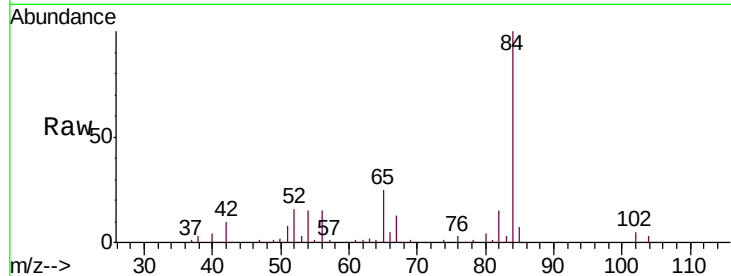




#27  
 1,2-Dichloroethane  
 Concen: 0.118 ug/L  
 RT: 5.09 min Scan# 1244  
 Delta R.T. -0.09 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

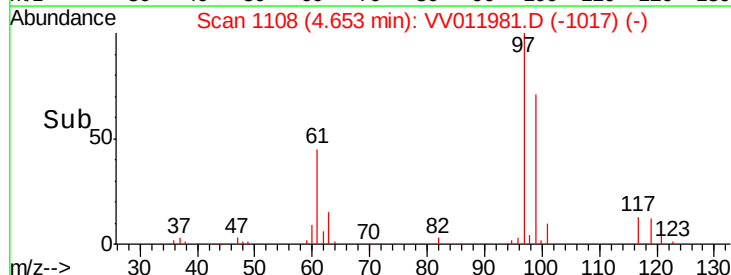
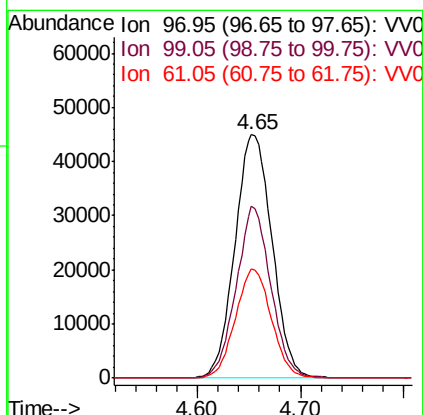
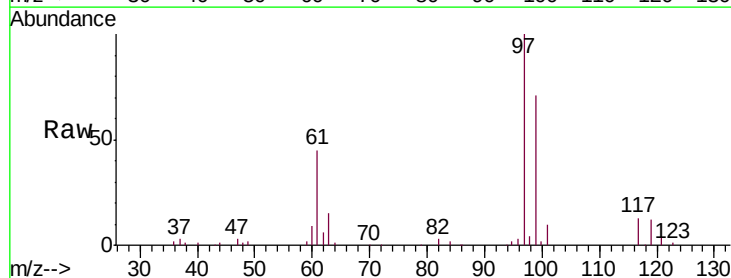
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 A52K0DL

Tgt Ion: 62 Resp: 1024  
 Ion Ratio Lower Upper  
 62 100  
 98 0.0 7.0 10.6#

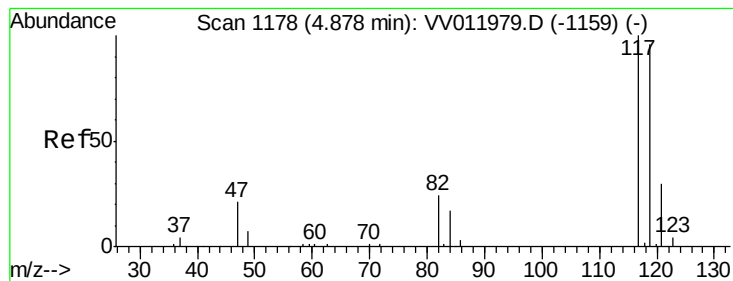


#29  
 1,1,1-Trichloroethane  
 Concen: 8.919 ug/L  
 RT: 4.65 min Scan# 1108  
 Delta R.T. -0.01 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

Tgt Ion: 97 Resp: 112780  
 Ion Ratio Lower Upper  
 97 100  
 99 65.6 51.7 77.5  
 61 43.5 35.1 52.7







#31

Carbon tetrachloride

Concen: 1.279 ug/L

RT: 4.65 min Scan# 1108

Delta R.T. -0.23 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

Instrument :

MSVOA\_V

ClientSampleId :

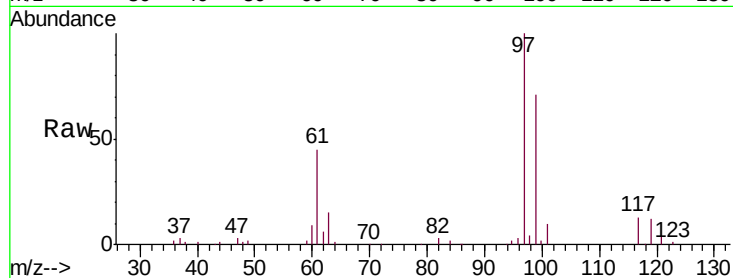
A52K0DL

Tgt Ion:117 Resp: 14561

Ion Ratio Lower Upper

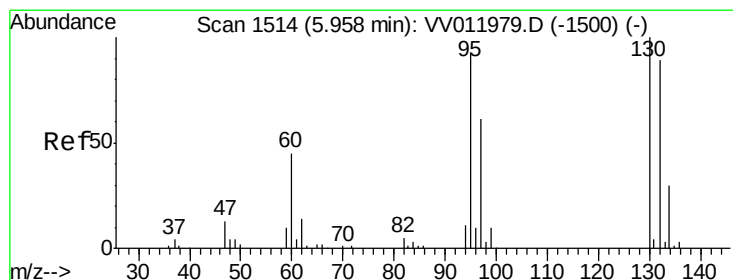
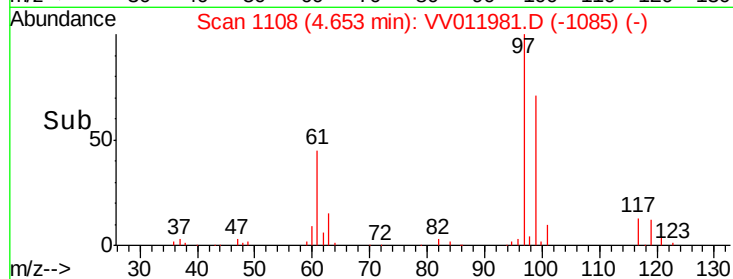
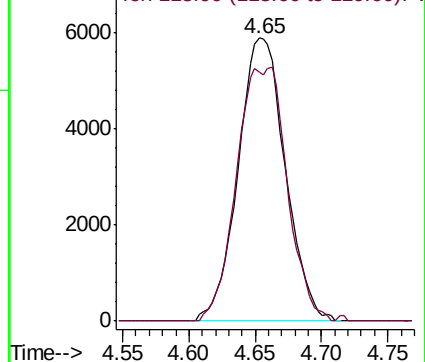
117 100

119 53.7 76.4 114.6#



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#34

Trichloroethene

Concen: 0.372 ug/L

RT: 5.96 min Scan# 1515

Delta R.T. 0.00 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

Tgt Ion: 95 Resp: 3003

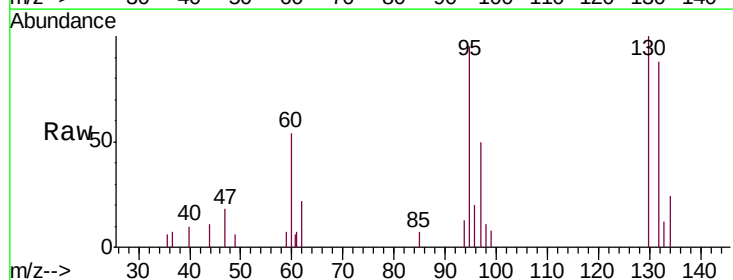
Ion Ratio Lower Upper

95 100

97 52.9 45.6 84.6

132 92.6 71.3 132.3

130 105.8 72.8 135.2

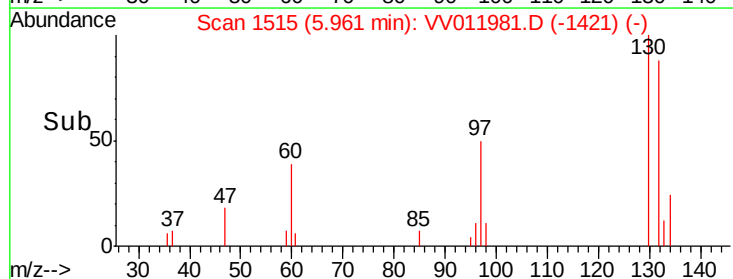
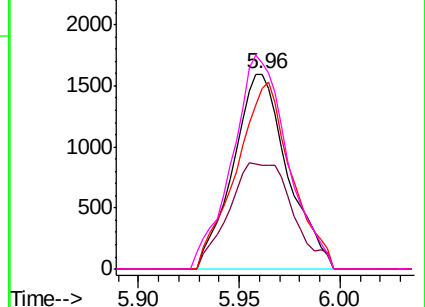


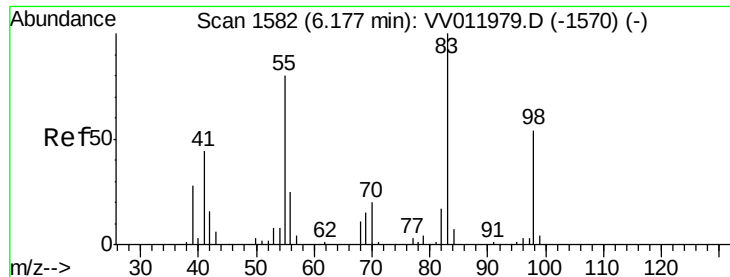
Abundance Ion 95.00 (94.70 to 95.70): VV0

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

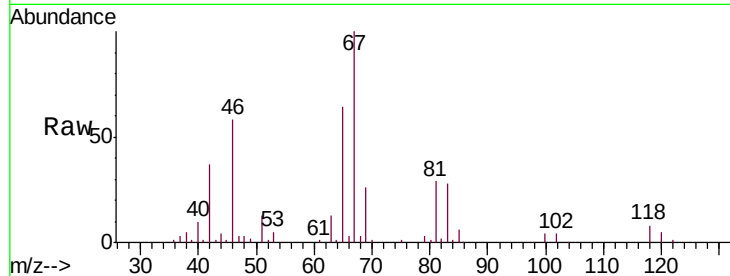




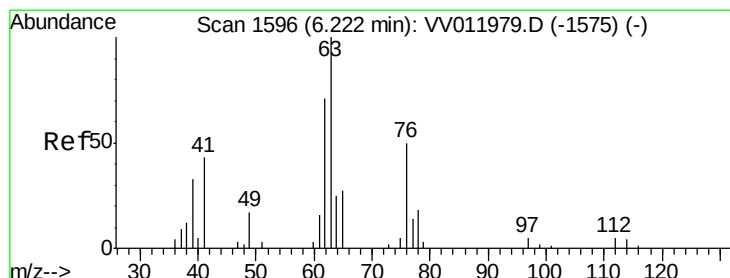
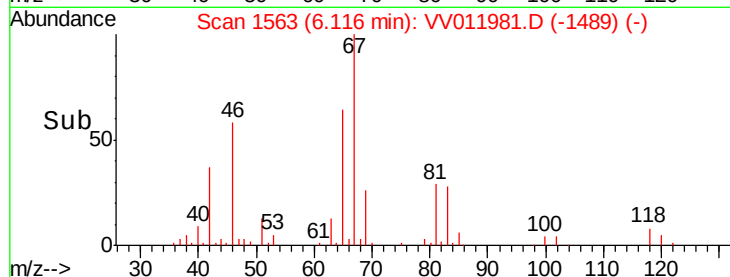
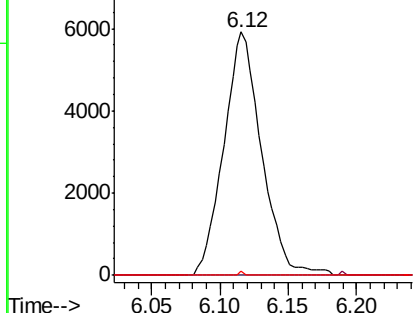
#35  
Methylcyclohexane  
Concen: 0.906 ug/L  
RT: 6.12 min Scan# 1563  
Delta R.T. -0.06 min  
Lab File: VV011981.D  
Acq: 23 Jul 2019 22:59

Instrument :  
MSVOA\_V  
ClientSampleId :  
A52K0DL

Tgt Ion: 83 Resp: 11385  
Ion Ratio Lower Upper  
83 100  
55 0.2 63.0 94.4#  
98 0.2 41.4 62.0#

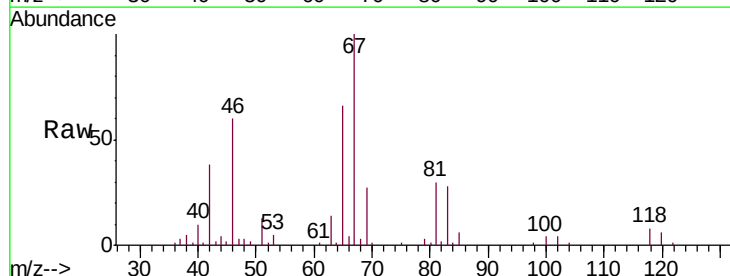


Abundance Ion 83.15 (82.85 to 83.85): VV0  
Ion 55.10 (54.80 to 55.80): VV0  
Ion 98.15 (97.85 to 98.85): VV0

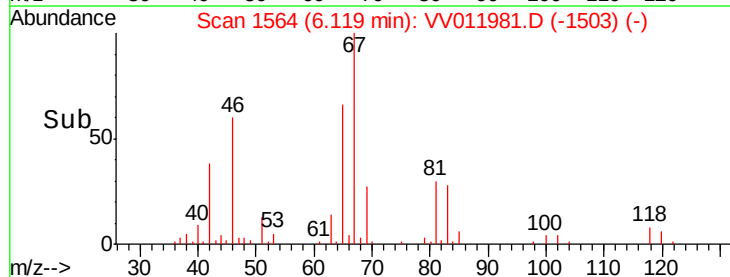
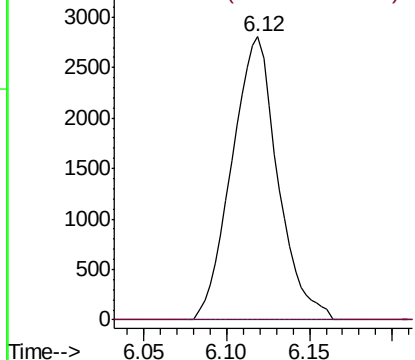


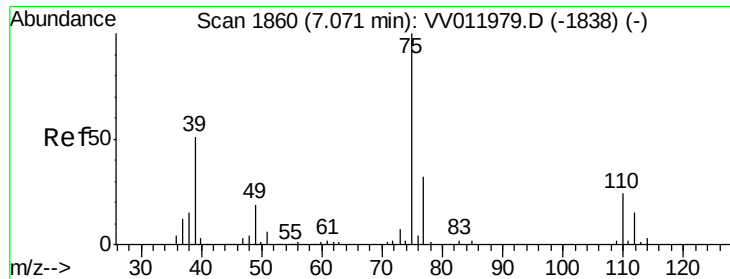
#37  
1,2-Dichloropropane  
Concen: 0.774 ug/L  
RT: 6.12 min Scan# 1564  
Delta R.T. -0.10 min  
Lab File: VV011981.D  
Acq: 23 Jul 2019 22:59

Tgt Ion: 63 Resp: 5409  
Ion Ratio Lower Upper  
63 100  
112 0.0 4.2 6.4#



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

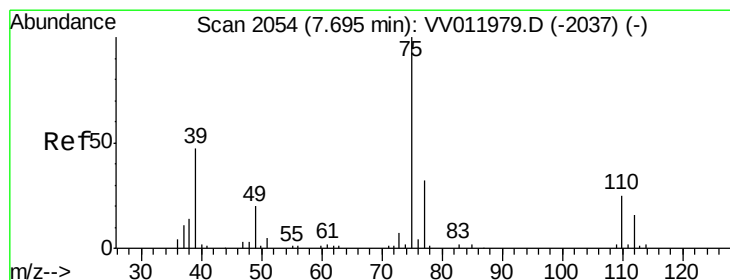
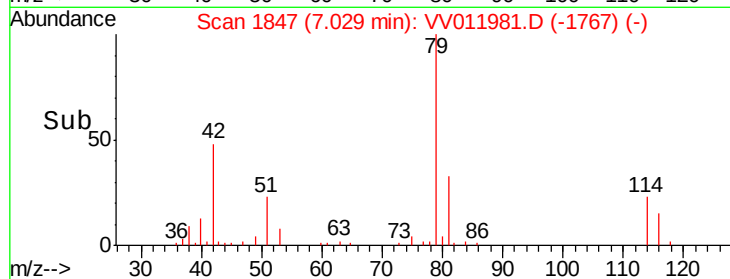
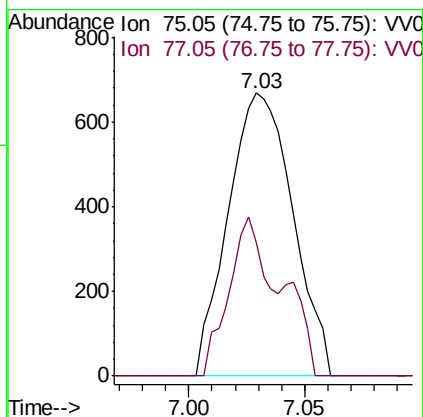
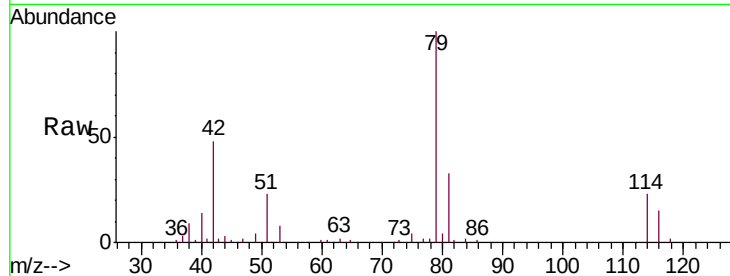




#39  
 cis-1,3-Dichloropropene  
 Concen: 0.125 ug/L  
 RT: 7.03 min Scan# 1847  
 Delta R.T. -0.04 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

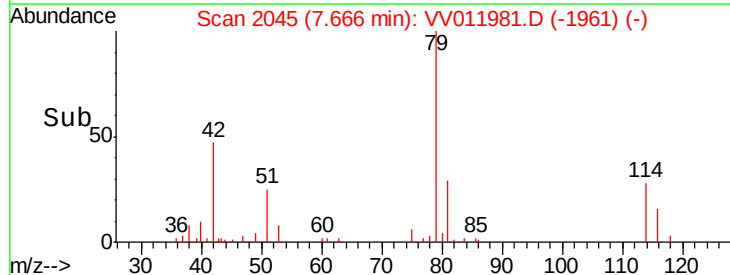
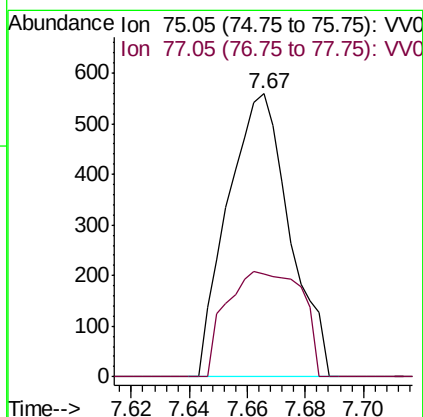
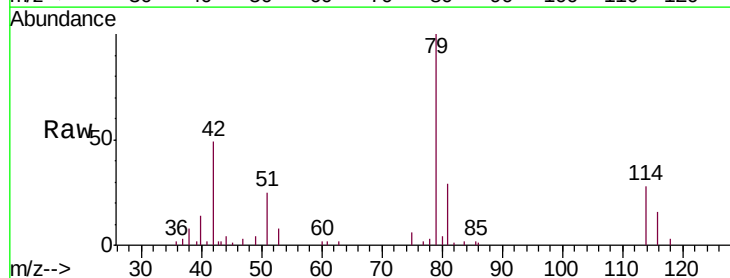
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 A52K0DL

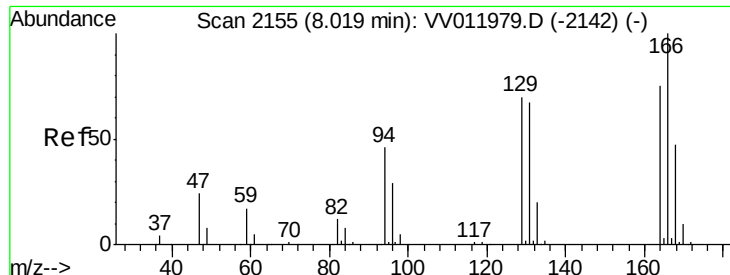
Tgt Ion: 75 Resp: 1293  
 Ion Ratio Lower Upper  
 75 100  
 77 47.5 21.3 39.6#



#44  
 trans-1,3-Dichloropropene  
 Concen: 0.101 ug/L  
 RT: 7.67 min Scan# 2045  
 Delta R.T. -0.03 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

Tgt Ion: 75 Resp: 828  
 Ion Ratio Lower Upper  
 75 100  
 77 36.1 22.0 40.8





#47

Tetrachloroethene

Concen: 0.539 ug/L

RT: 8.02 min Scan# 2154

Delta R.T. -0.00 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

Instrument :

MSVOA\_V

ClientSampleId :

A52K0DL

Tgt Ion: 164 Resp: 3757

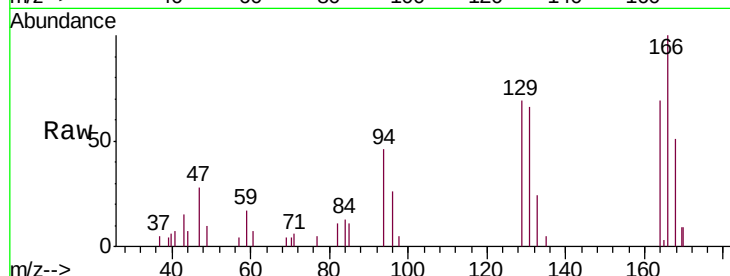
Ion Ratio Lower Upper

164 100

129 100.1 62.5 116.1

131 96.1 58.6 108.8

166 144.8 88.2 163.8

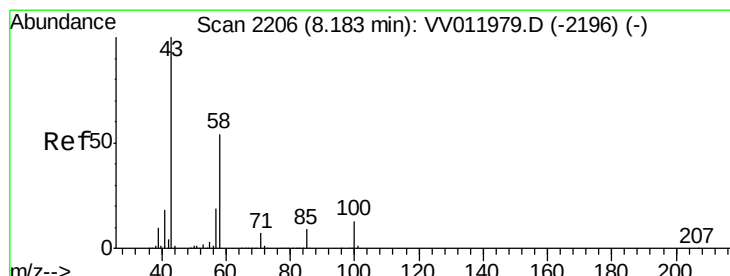
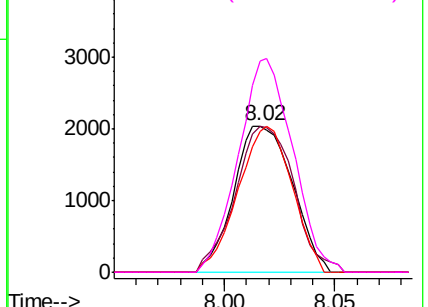
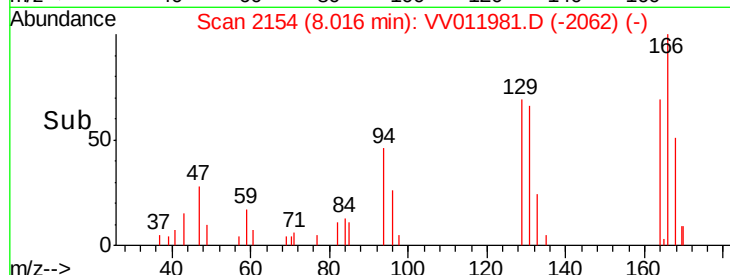


Abundance Ion 163.90 (163.60 to 164.60): V

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



#48

2-Hexanone

Concen: 4.316 ug/L

RT: 8.13 min Scan# 2191

Delta R.T. -0.05 min

Lab File: VV011981.D

Acq: 23 Jul 2019 22:59

Tgt Ion: 43 Resp: 11819

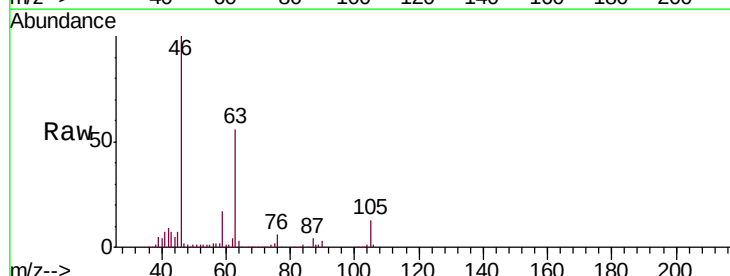
Ion Ratio Lower Upper

43 100

58 29.9 43.7 65.5#

57 29.7 16.0 24.0#

100 1.0 10.5 15.7#

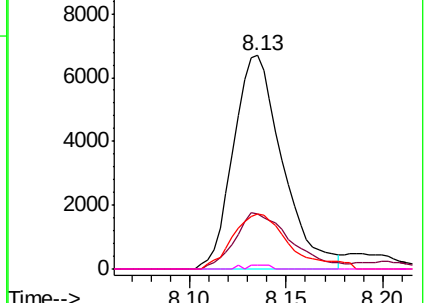
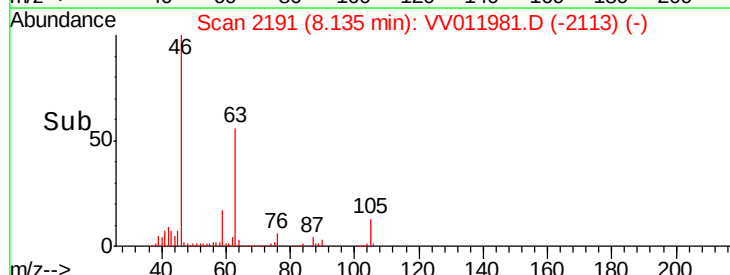


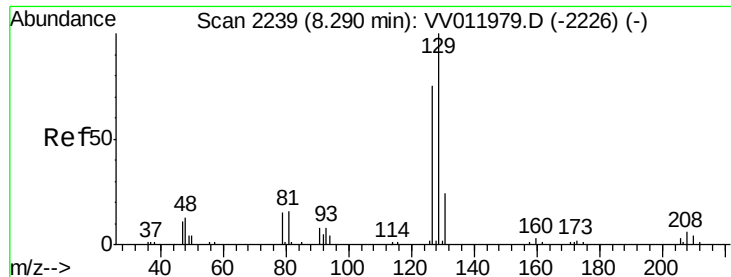
Abundance Ion 43.05 (42.75 to 43.75): VV0

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

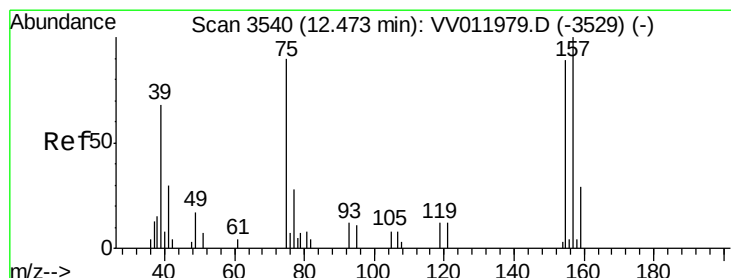
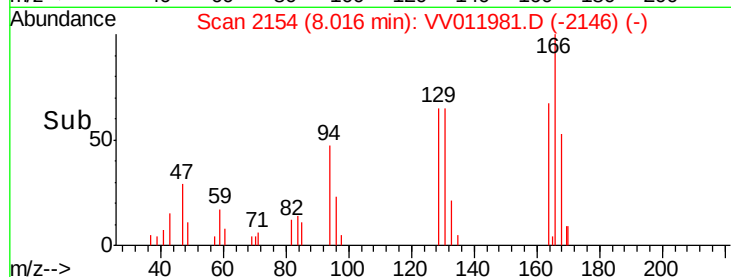
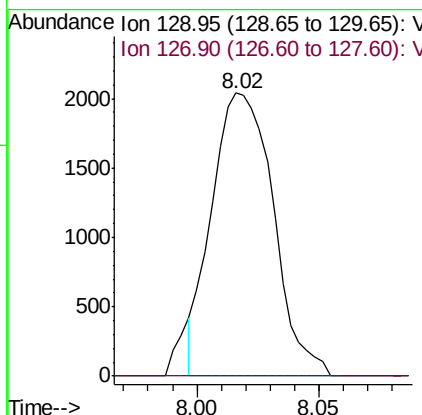
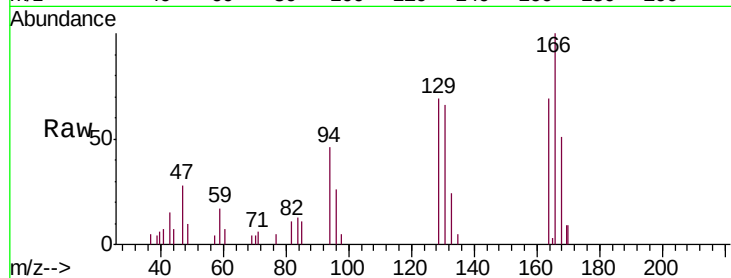




#49  
 Dibromochloromethane  
 Concen: 0.605 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. -0.27 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 A52K0DL

Tgt Ion: 129 Resp: 3575  
 Ion Ratio Lower Upper  
 129 100  
 127 0.0 55.3 102.7#



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 0.318 ug/L  
 RT: 12.45 min Scan# 3532  
 Delta R.T. -0.03 min  
 Lab File: VV011981.D  
 Acq: 23 Jul 2019 22:59

Tgt Ion: 75 Resp: 298  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 69.5 104.3#  
 157 0.0 96.2 144.2#

