

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV062019\  
 Data File : VV011626.D  
 Acq On : 19 Jun 2019 18:58  
 Operator : SY/MD  
 Sample : K3381-09DL 20X  
 Misc : 25ML/MSVOA\_V/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 BFCQ6DL

Quant Time: Jun 20 02:11:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR061419WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu Jun 20 02:04:09 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 152898   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 138262   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 55554    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 59674    | 5.17     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 103.40% |
| 7) Chloroethane-d5             | 1.57   | 69    | 38145    | 5.21     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 104.20% |
| 11) 1,1-Dichloroethene-d2      | 2.12   | 63    | 106705   | 4.85     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 97.00%  |
| 20) 2-Butanone-d5              | 3.95   | 46    | 159959   | 49.24    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 98.48%  |
| 24) Chloroform-d               | 4.40   | 84    | 111986   | 5.04     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 100.80% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 66323    | 5.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 108.20% |
| 32) Benzene-d6                 | 5.09   | 84    | 231864   | 5.62     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 112.40% |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 73104    | 5.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 111.60% |
| 41) Toluene-d8                 | 7.36   | 98    | 199264   | 5.42     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 108.40% |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 21776    | 5.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 100.00% |
| 46) 2-Hexanone-d5              | 8.14   | 63    | 113186   | 45.02    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 90.04%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 47076    | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 95.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 63355    | 5.72     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 114.40% |

## Target Compounds

|                                |      |     |        |              | Qvalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 3) Chloromethane               | 1.25 | 50  | 2180   | 0.148 ug/L # | 82     |
| 5) Vinyl chloride              | 1.32 | 62  | 20907  | 1.433 ug/L   | 85     |
| 6) Bromomethane                | 1.53 | 94  | 1660   | 0.272 ug/L   | 94     |
| 8) Chloroethane                | 1.59 | 64  | 11703  | 1.656 ug/L   | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 9349   | 1.018 ug/L   | 95     |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 22655  | 2.382 ug/L # | 57     |
| 13) Acetone                    | 2.21 | 43  | 4401   | 2.010 ug/L   | 99     |
| 16) Methylene chloride         | 2.53 | 84  | 1250   | 0.116 ug/L   | 79     |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 210582 | 9.467 ug/L   | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 116179 | 9.538 ug/L   | 96     |
| 25) Chloroform                 | 4.43 | 83  | 6316   | 0.283 ug/L   | 96     |
| 29) 1,1,1-Trichloroethane      | 4.65 | 97  | 209730 | 12.192 ug/L  | 98     |
| 31) Carbon tetrachloride       | 4.65 | 117 | 25102  | 1.803 ug/L   | 99     |
| 34) Trichloroethene            | 5.96 | 95  | 94955  | 8.245 ug/L   | 98     |
| 35) Methylcyclohexane          | 6.12 | 83  | 17863  | 1.088 ug/L # | 16     |
| 37) 1,2-Dichloropropane        | 6.12 | 63  | 8982   | 0.747 ug/L # | 86     |
| 39) cis-1,3-Dichloropropene    | 7.03 | 75  | 1936   | 0.128 ug/L # | 65     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV062019\  
Data File : VV011626.D  
Acq On : 19 Jun 2019 18:58  
Operator : SY/MD  
Sample : K3381-09DL 20X  
Misc : 25ML/MSVOA\_V/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
BFCQ6DL

Quant Time: Jun 20 02:11:45 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR061419WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Jun 20 02:04:09 2019  
Response via : Initial Calibration

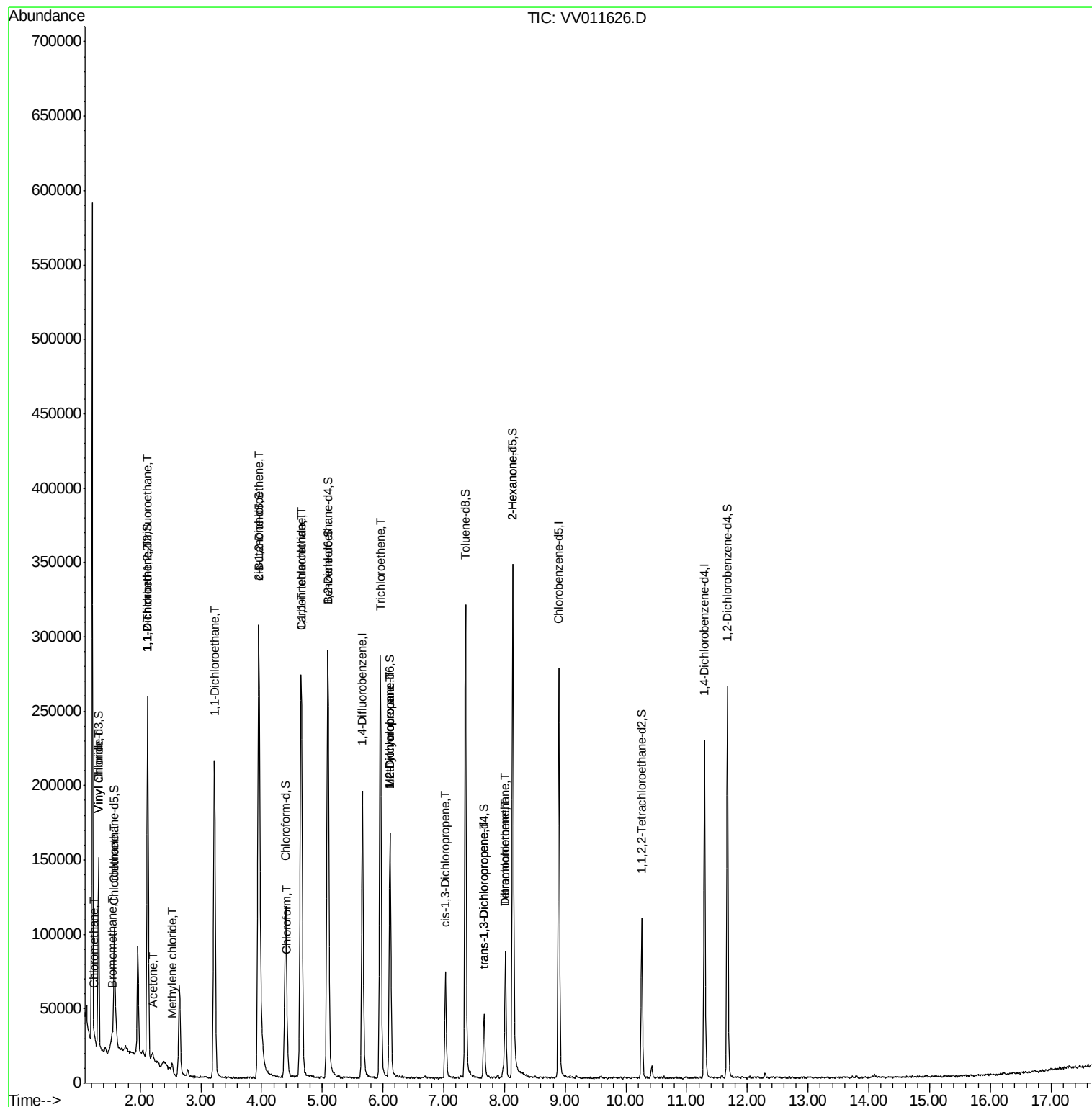
| Internal Standards            | R.T. | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|------|------|----------|-------|--------|----------|
| 44) trans-1,3-Dichloropropene | 7.67 | 75   | 1159     | 0.100 | ug/L   | 99       |
| 47) Tetrachloroethene         | 8.02 | 164  | 17929    | 2.183 | ug/L   | 96       |
| 48) 2-Hexanone                | 8.14 | 43   | 15404    | 2.557 | ug/L # | 70       |
| 49) Dibromochloromethane      | 8.02 | 129  | 15887    | 1.970 | ug/L # | 12       |

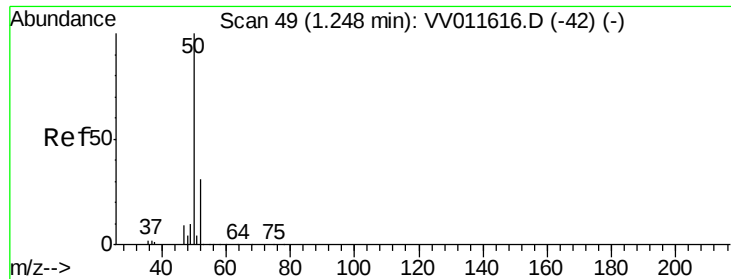
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV062019\  
Data File : VV011626.D  
Acq On : 19 Jun 2019 18:58  
Operator : SY/MD  
Sample : K3381-09DL 20X  
Misc : 25ML/MSVOA\_V/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
BFCQ6DL

Quant Time: Jun 20 02:11:45 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR061419WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Jun 20 02:04:09 2019  
Response via : Initial Calibration





#3

Chloromethane

Concen: 0.148 ug/L

RT: 1.25 min Scan# 49

Delta R.T. 0.00 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

Instrument :

MSVOA\_V

ClientSampleId :

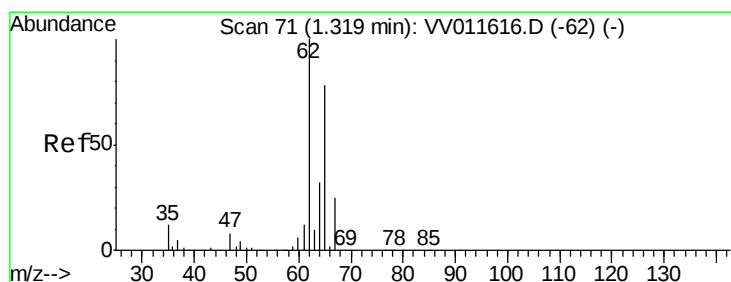
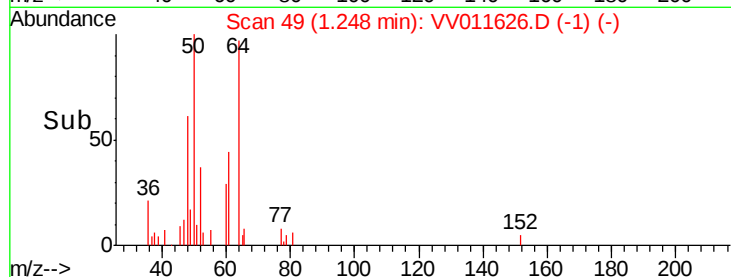
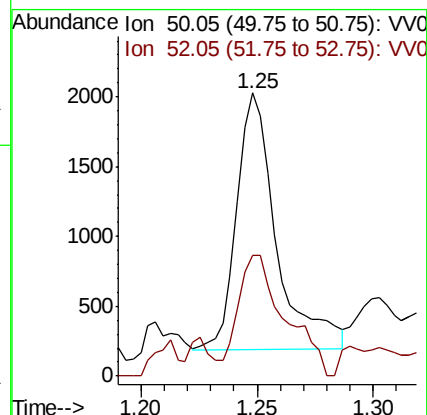
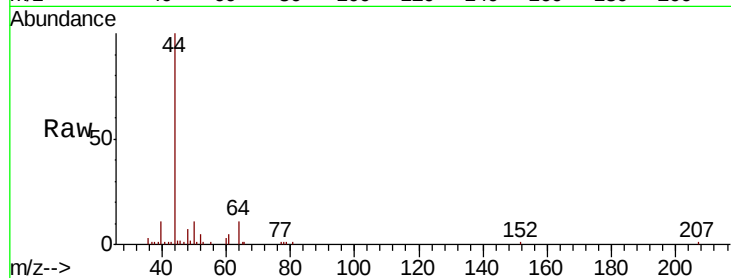
BFCQ6DL

Tgt Ion: 50 Resp: 2180

Ion Ratio Lower Upper

50 100

52 42.5 22.7 42.1#



#5

Vinyl chloride

Concen: 1.433 ug/L

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VV011626.D

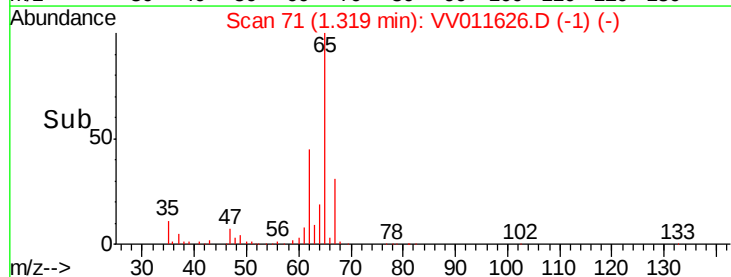
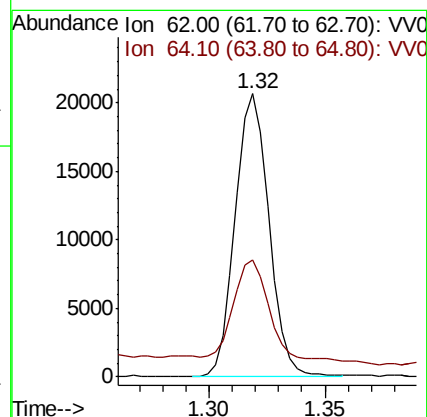
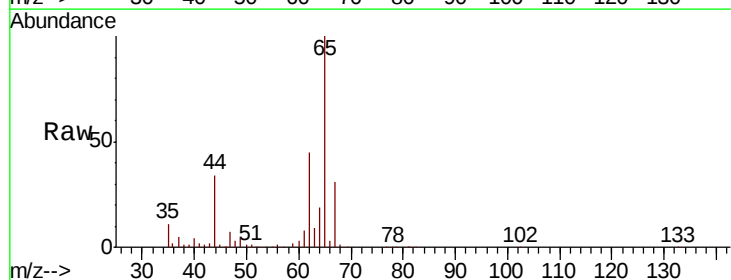
Acq: 19 Jun 2019 18:58

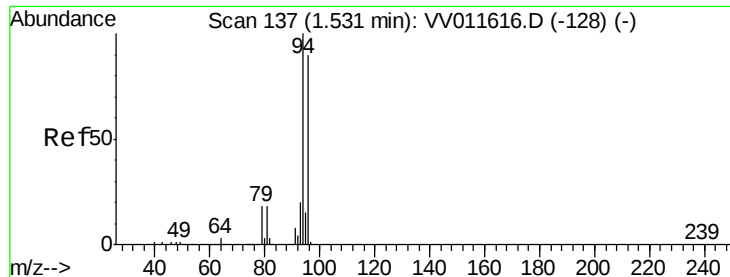
Tgt Ion: 62 Resp: 20907

Ion Ratio Lower Upper

62 100

64 41.4 23.0 42.6

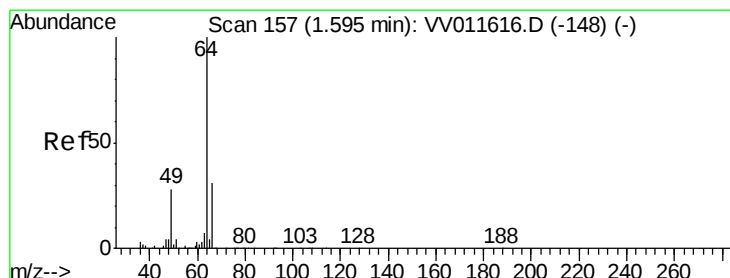
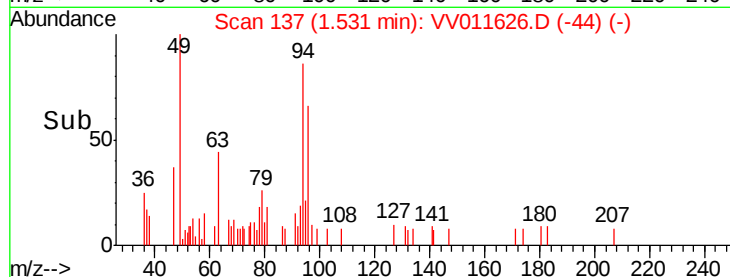
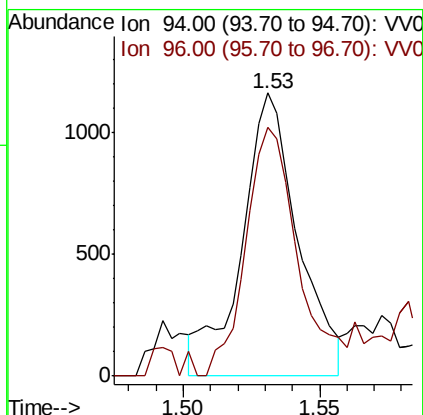
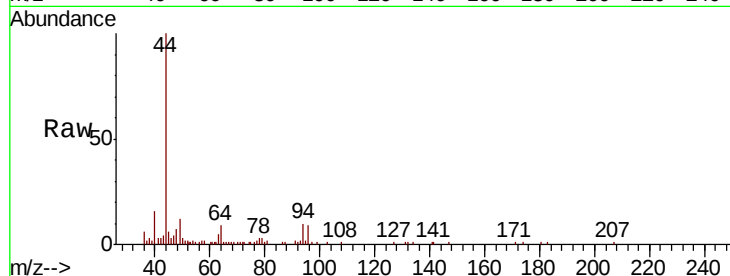




#6  
Bromomethane  
Concen: 0.272 ug/L  
RT: 1.53 min Scan# 137  
Delta R.T. 0.00 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

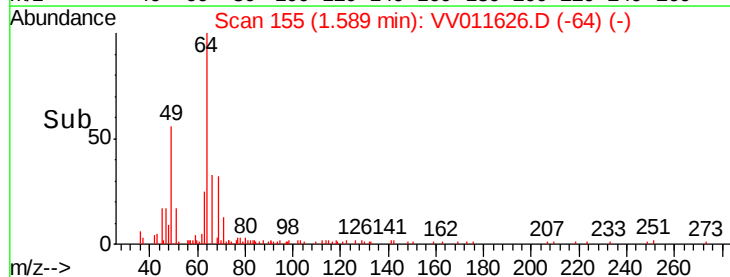
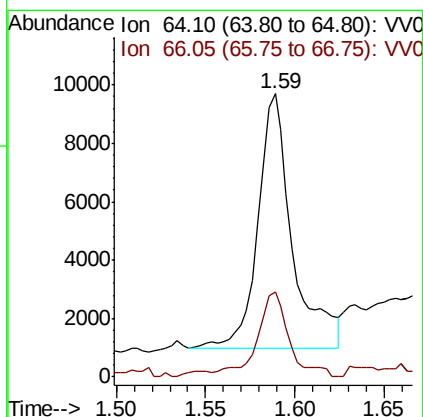
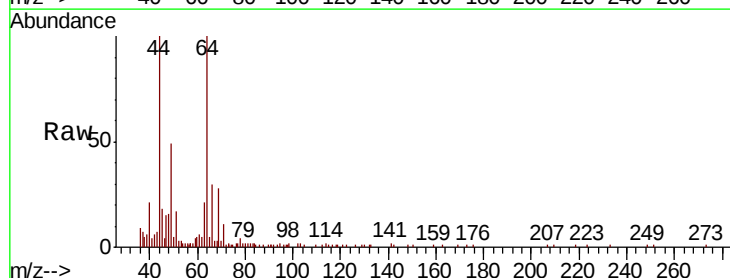
Instrument :  
MSVOA\_V  
ClientSampleId :  
BFCQ6DL

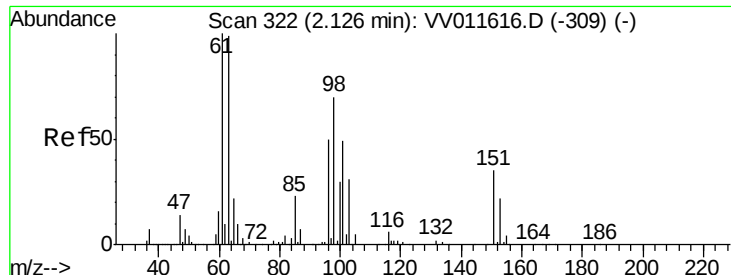
Tgt Ion: 94 Resp: 1660  
Ion Ratio Lower Upper  
94 100  
96 87.7 65.5 121.7



#8  
Chloroethane  
Concen: 1.656 ug/L  
RT: 1.59 min Scan# 155  
Delta R.T. -0.01 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Tgt Ion: 64 Resp: 11703  
Ion Ratio Lower Upper  
64 100  
66 30.0 21.6 40.2





#10

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

Concen: 1.018 ug/L

RT: 2.13 min Scan# 323

Delta R.T. 0.00 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

Instrument :

MSVOA\_V

ClientSampled :

BFCQ6DL

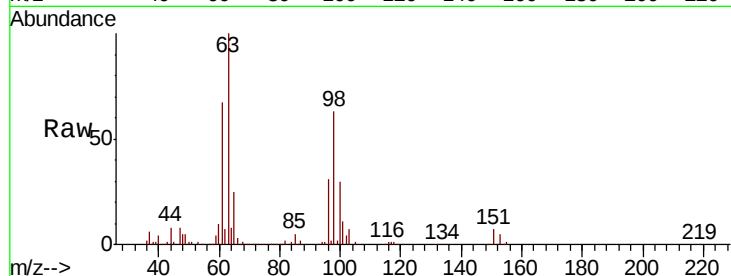
Tgt Ion: 101 Resp: 9349

Ion Ratio Lower Upper

101 100

85 43.4 37.3 55.9

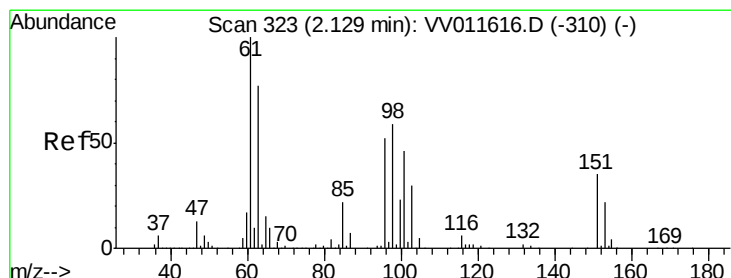
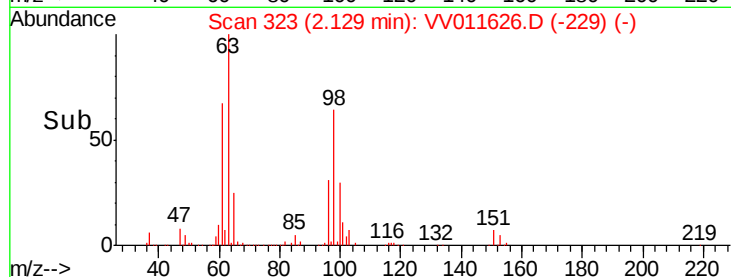
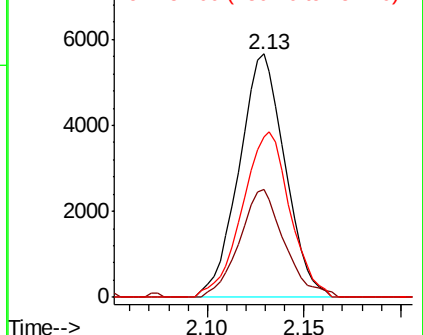
151 70.5 59.4 89.2



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: 2.382 ug/L

RT: 2.13 min Scan# 324

Delta R.T. 0.00 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

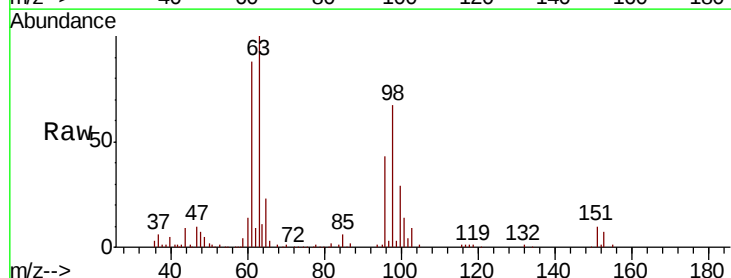
Tgt Ion: 96 Resp: 22655

Ion Ratio Lower Upper

96 100

61 206.3 135.9 252.5

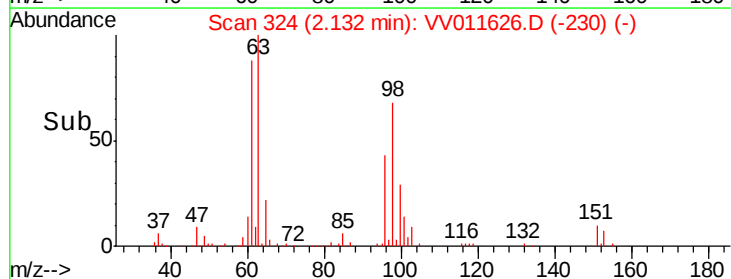
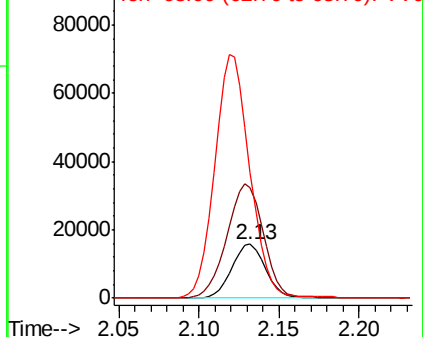
63 234.5 86.2 160.2#

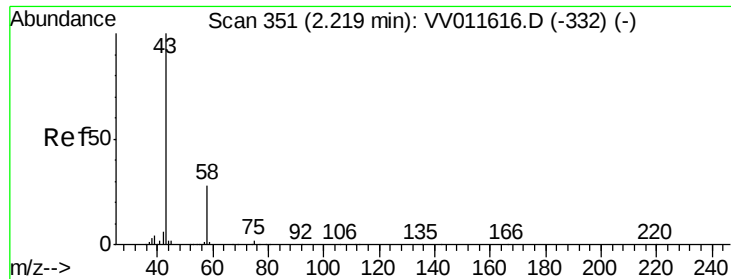


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0

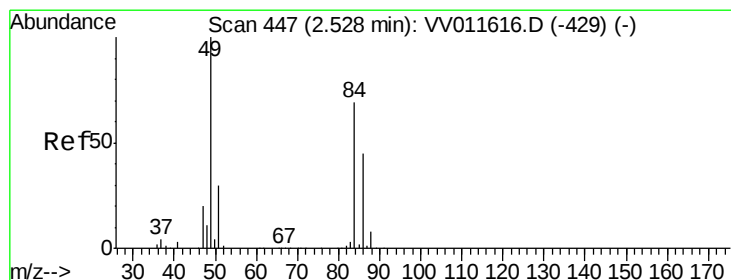
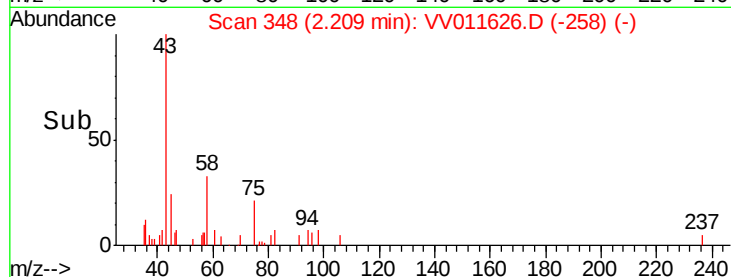
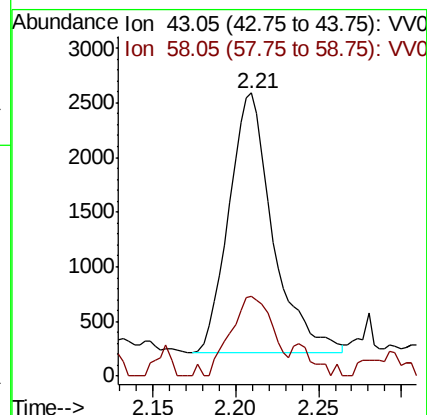
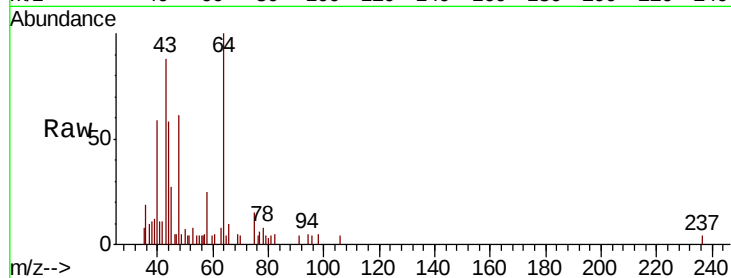




#13  
Acetone  
Concen: 2.010 ug/L  
RT: 2.21 min Scan# 348  
Delta R.T. -0.01 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

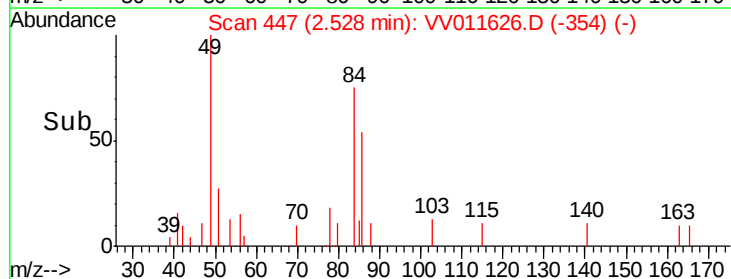
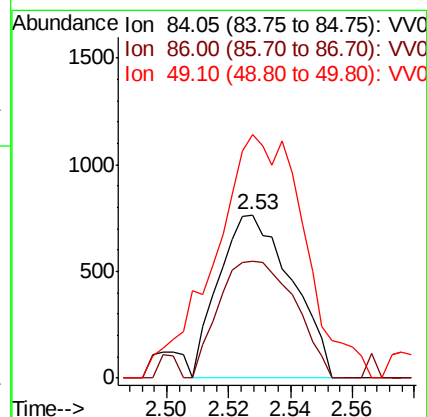
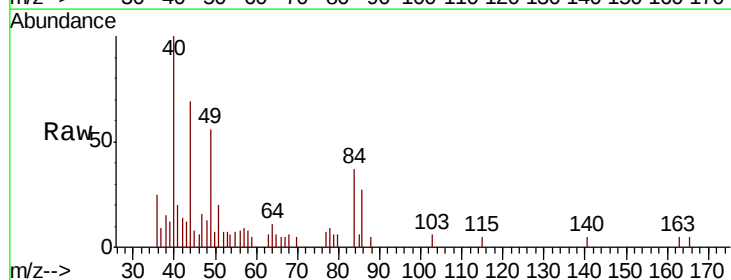
Instrument :  
MSVOA\_V  
ClientSampleId :  
BFCQ6DL

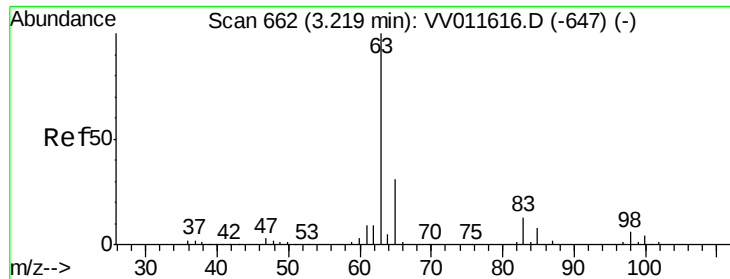
Tgt Ion: 43 Resp: 4401  
Ion Ratio Lower Upper  
43 100  
58 29.4 0.0 57.8



#16  
Methylene chloride  
Concen: 0.116 ug/L  
RT: 2.53 min Scan# 447  
Delta R.T. 0.00 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Tgt Ion: 84 Resp: 1250  
Ion Ratio Lower Upper  
84 100  
86 72.0 42.5 78.9  
49 168.6 97.7 181.5





#19

1,1-Dichloroethane

Concen: 9.467 ug/L

RT: 3.22 min Scan# 663

Delta R.T. 0.00 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

Instrument :

MSVOA\_V

ClientSampleId :

BFCQ6DL

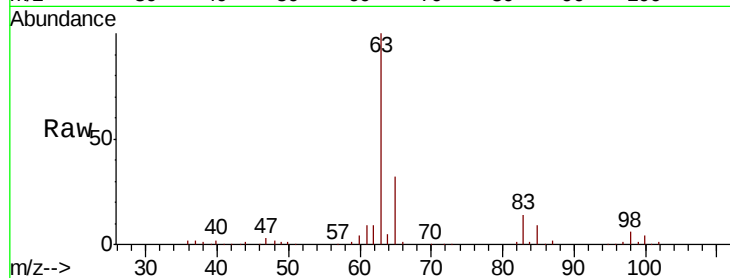
Tgt Ion: 63 Resp: 210582

Ion Ratio Lower Upper

63 100

65 31.5 22.5 41.9

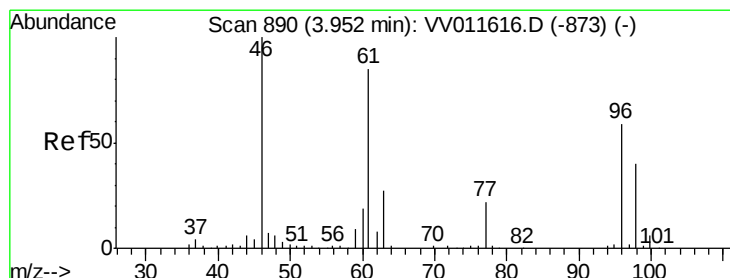
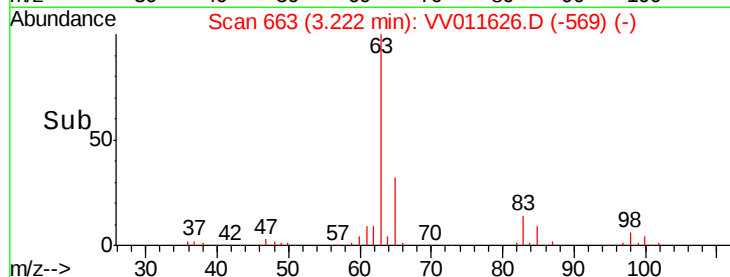
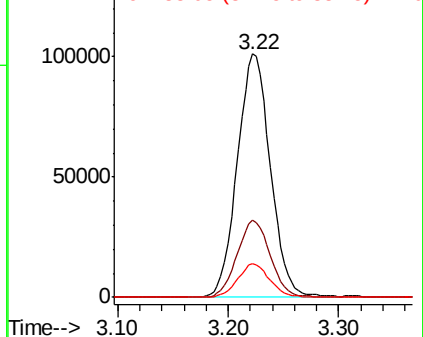
83 13.8 10.1 18.9



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: 9.538 ug/L

RT: 3.96 min Scan# 891

Delta R.T. 0.00 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

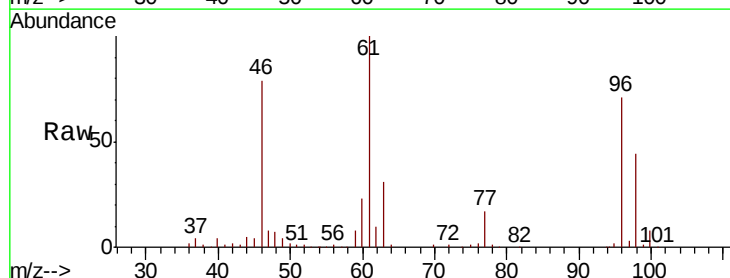
Tgt Ion: 96 Resp: 116179

Ion Ratio Lower Upper

96 100

61 141.4 102.2 189.8

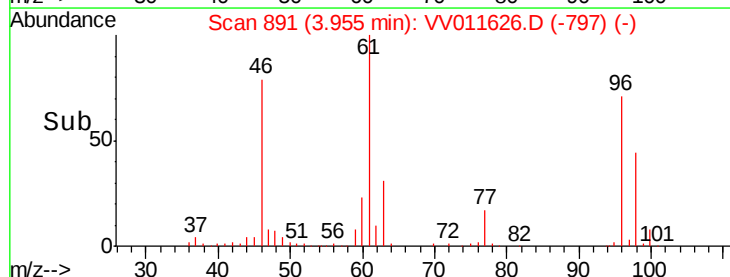
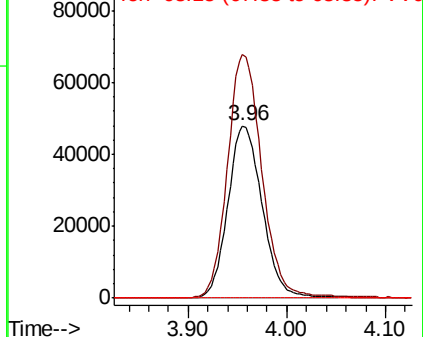
68 0.0 0.0 0.0

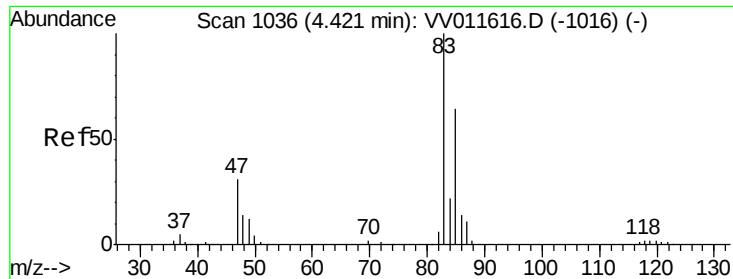


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 68.15 (67.85 to 68.85): VV0

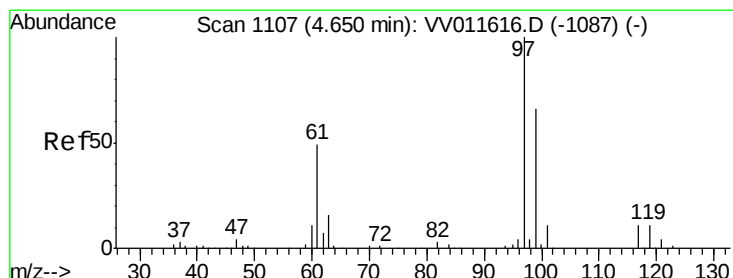
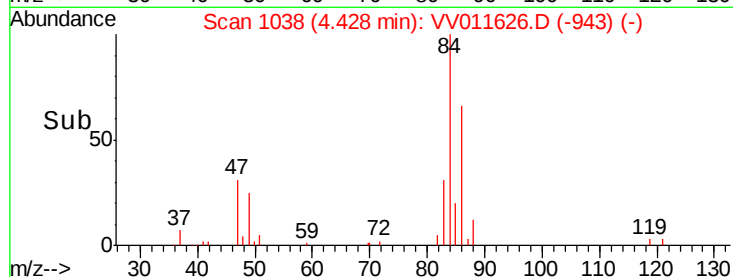
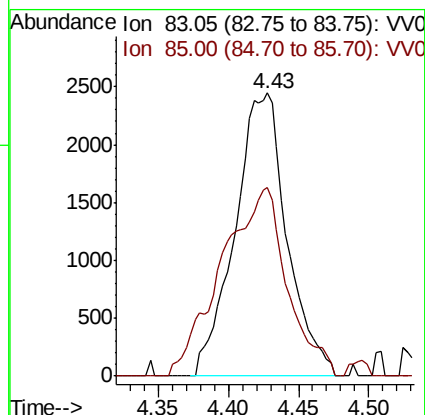
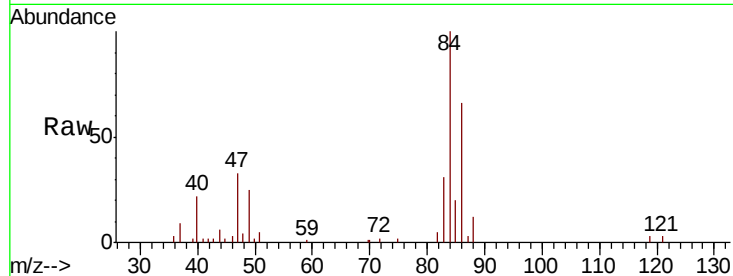




#25  
Chloroform  
Concen: 0.283 ug/L  
RT: 4.43 min Scan# 1038  
Delta R.T. 0.01 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

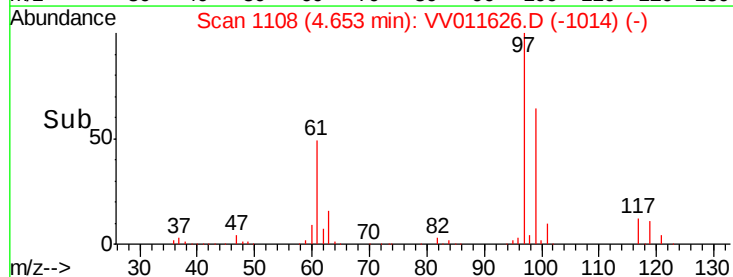
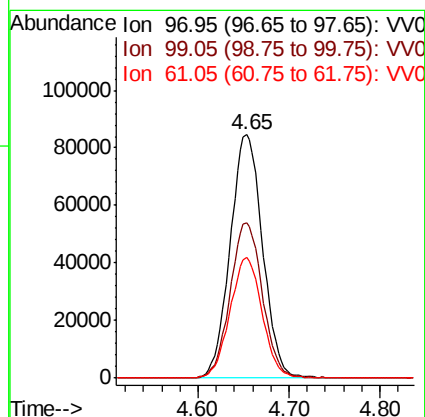
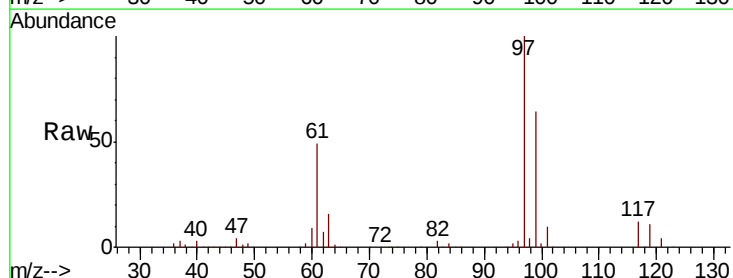
Instrument :  
MSVOA\_V  
ClientSampled :  
BFCQ6DL

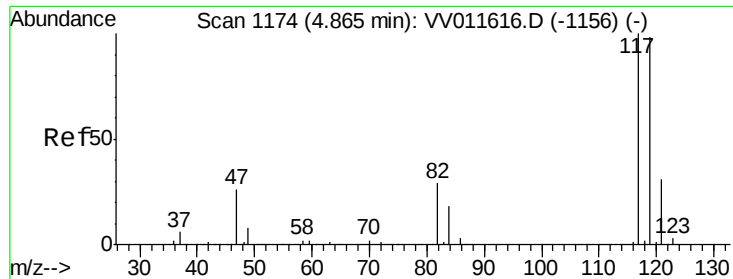
Tgt Ion: 83 Resp: 6316  
Ion Ratio Lower Upper  
83 100  
85 66.4 44.6 82.8



#29  
1,1,1-Trichloroethane  
Concen: 12.192 ug/L  
RT: 4.65 min Scan# 1108  
Delta R.T. 0.00 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Tgt Ion: 97 Resp: 209730  
Ion Ratio Lower Upper  
97 100  
99 63.3 51.6 77.4  
61 49.0 40.4 60.6





#31

Carbon tetrachloride

Concen: 1.803 ug/L

RT: 4.65 min Scan# 1108

Delta R.T. -0.21 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

Instrument :

MSVOA\_V

ClientSampleId :

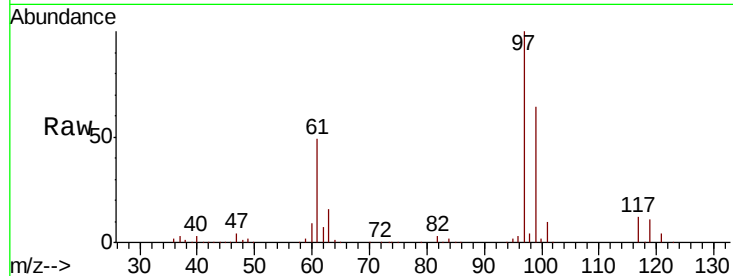
BFCQ6DL

Tgt Ion:117 Resp: 25102

Ion Ratio Lower Upper

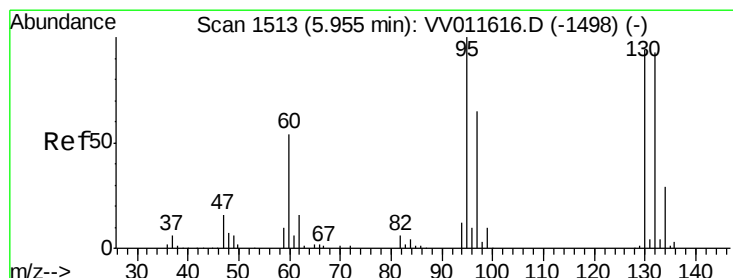
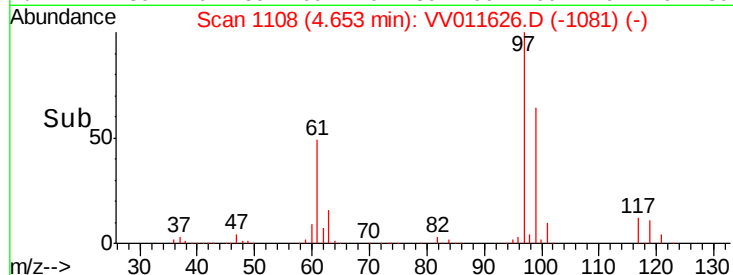
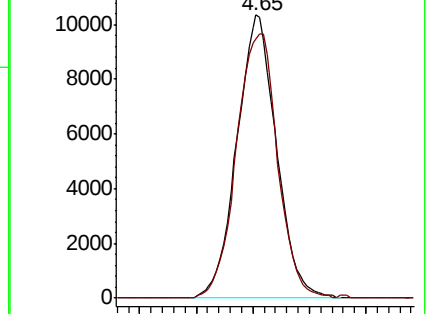
117 100

119 97.4 77.4 116.2



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#34

Trichloroethene

Concen: 8.245 ug/L

RT: 5.96 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

Tgt Ion: 95 Resp: 94955

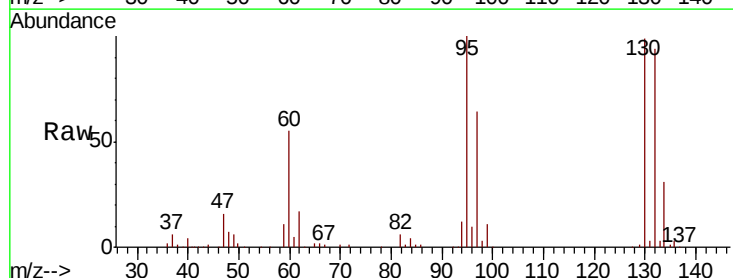
Ion Ratio Lower Upper

95 100

97 64.1 44.4 82.4

132 93.8 63.5 117.9

130 99.3 68.5 127.3

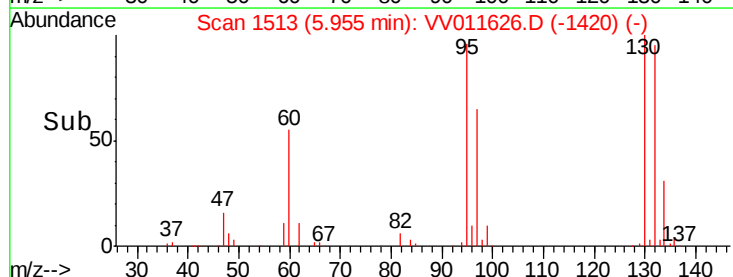
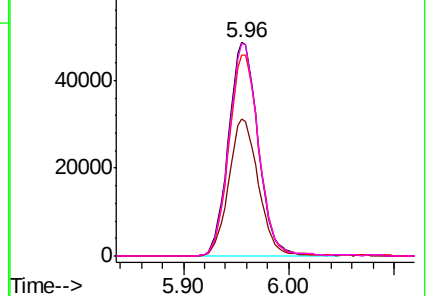


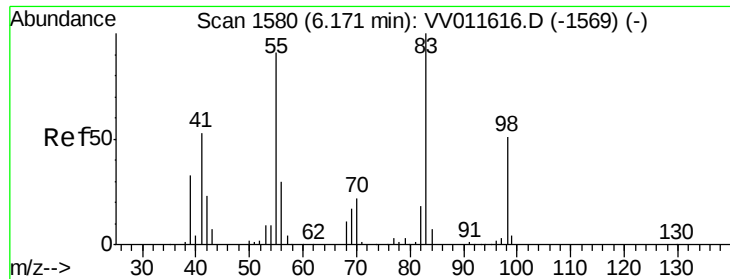
Abundance Ion 95.00 (94.70 to 95.70): VV0

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

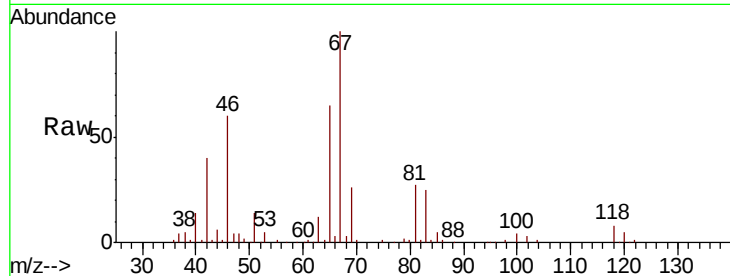




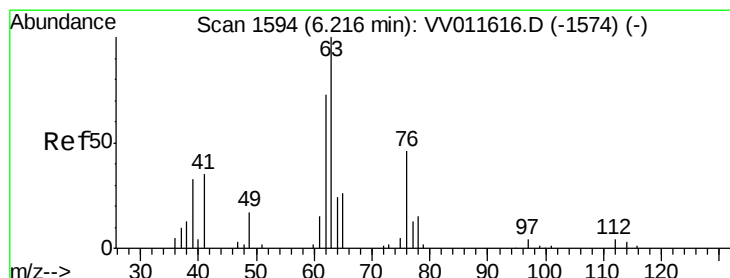
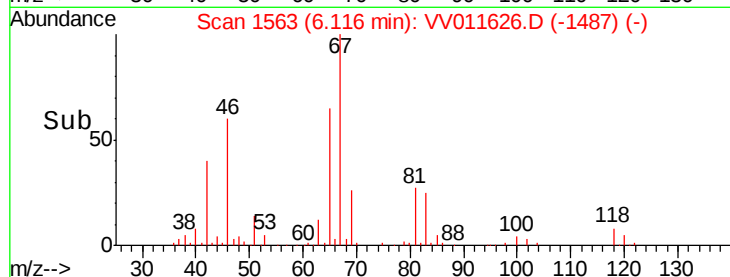
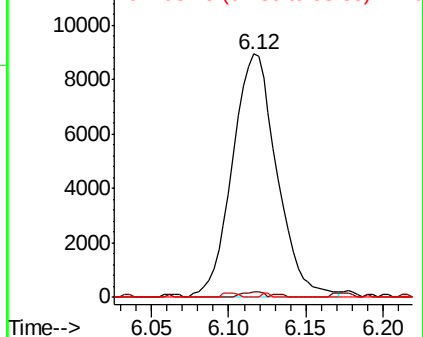
#35  
Methylcyclohexane  
Concen: 1.088 ug/L  
RT: 6.12 min Scan# 1563  
Delta R.T. -0.05 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Instrument :  
MSVOA\_V  
ClientSampleId :  
BFCQ6DL

Tgt Ion: 83 Resp: 17863  
Ion Ratio Lower Upper  
83 100  
55 1.0 67.9 101.9#  
98 0.6 39.6 59.4#

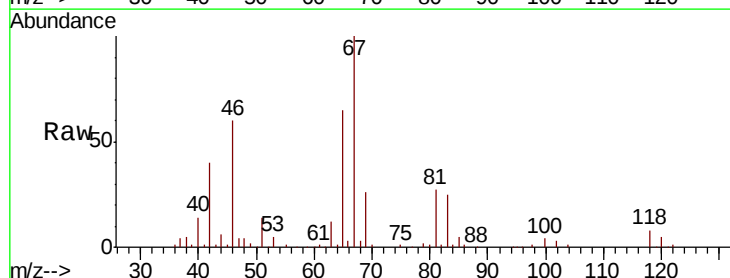


Abundance Ion 83.15 (82.85 to 83.85): VV0  
Ion 55.10 (54.80 to 55.80): VV0  
Ion 98.15 (97.85 to 98.85): VV0

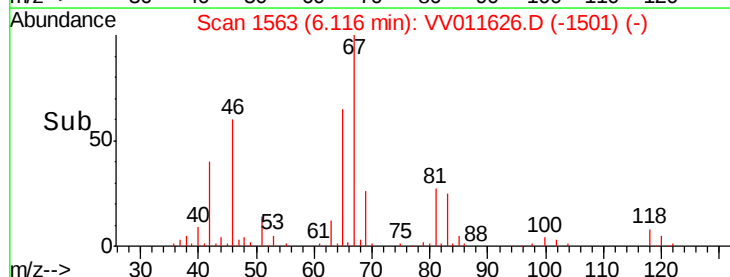
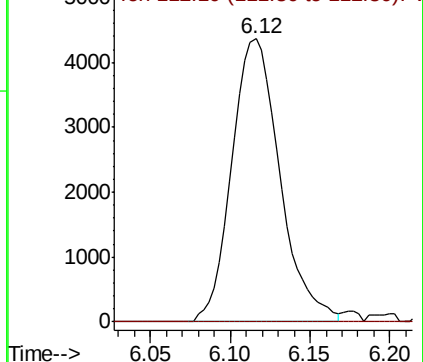


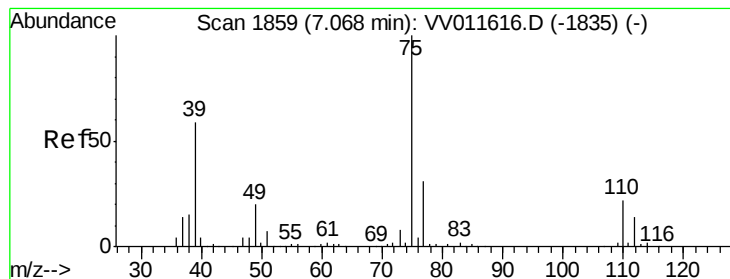
#37  
1,2-Dichloropropane  
Concen: 0.747 ug/L  
RT: 6.12 min Scan# 1563  
Delta R.T. -0.10 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Tgt Ion: 63 Resp: 8982  
Ion Ratio Lower Upper  
63 100  
112 0.0 3.7 5.5#



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



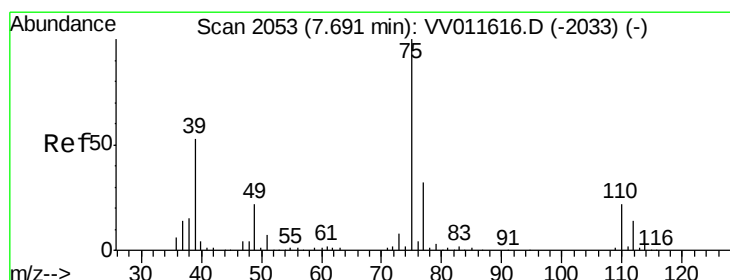
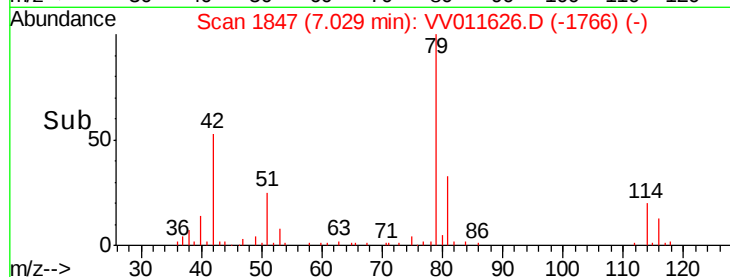
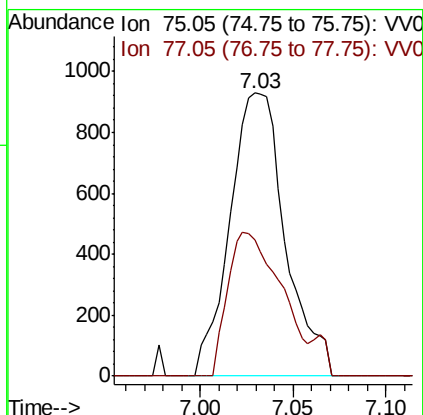
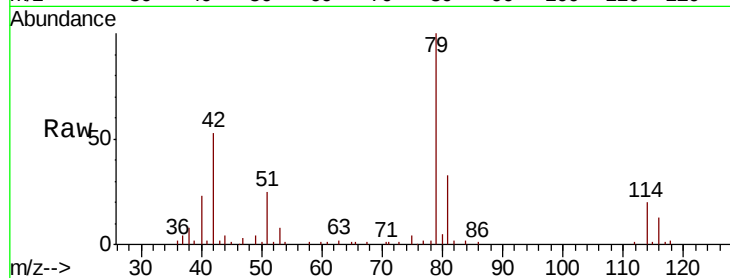


#39

cis-1,3-Dichloropropene  
Concen: 0.128 ug/L  
RT: 7.03 min Scan# 1847  
Delta R.T. -0.04 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Instrument :  
MSVOA\_V  
ClientSampled :  
BFCQ6DL

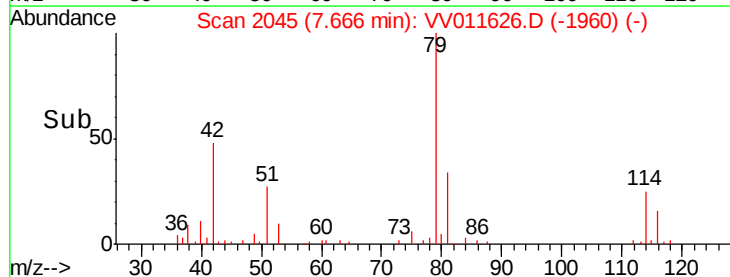
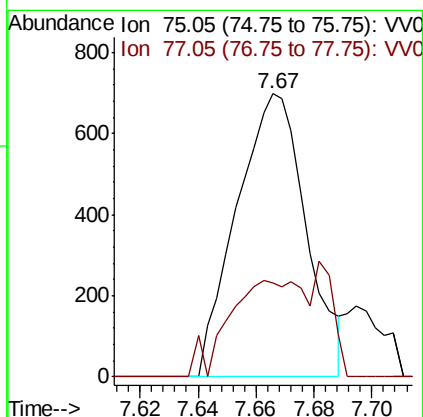
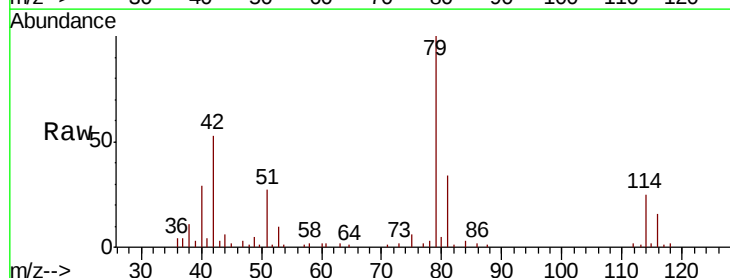
Tgt Ion: 75 Resp: 1936  
Ion Ratio Lower Upper  
75 100  
77 48.2 20.6 38.4#

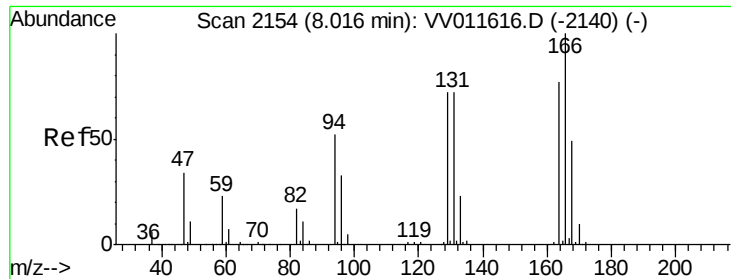


#44

trans-1,3-Dichloropropene  
Concen: 0.100 ug/L  
RT: 7.67 min Scan# 2045  
Delta R.T. -0.03 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Tgt Ion: 75 Resp: 1159  
Ion Ratio Lower Upper  
75 100  
77 33.2 22.8 42.4

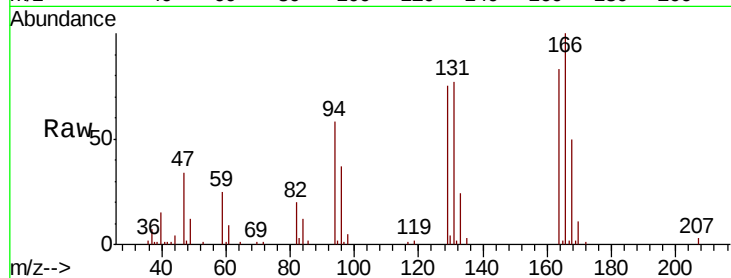




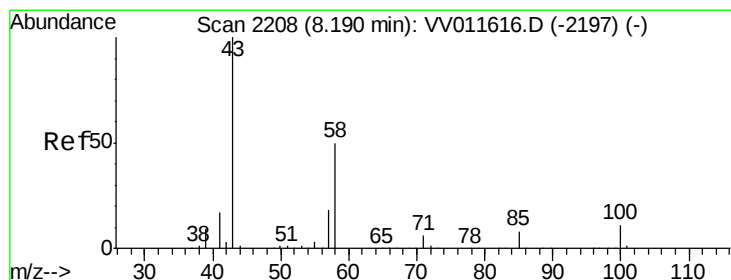
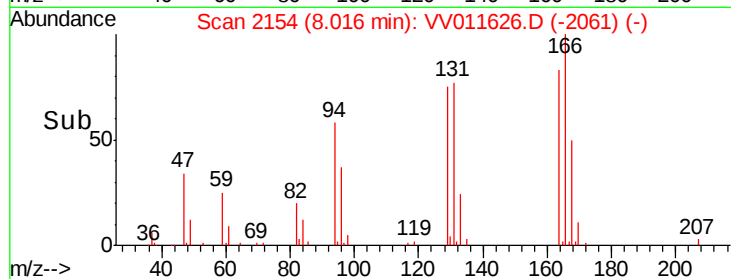
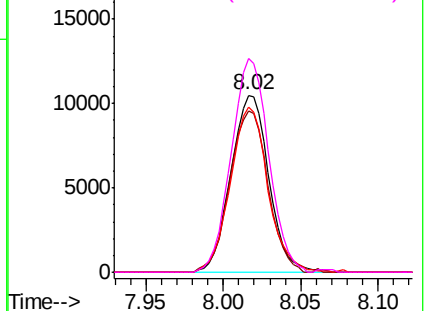
#47  
Tetrachloroethene  
Concen: 2.183 ug/L  
RT: 8.02 min Scan# 2154  
Delta R.T. 0.00 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Instrument :  
MSVOA\_V  
ClientSampleId :  
BFCQ6DL

Tgt Ion:164 Resp: 17929  
Ion Ratio Lower Upper  
164 100  
129 91.0 68.8 127.8  
131 93.2 63.2 117.4  
166 120.9 87.0 161.6

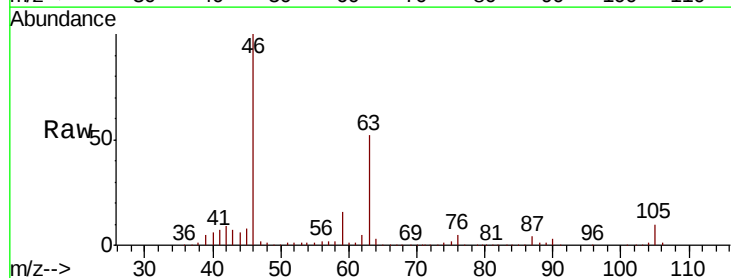


Abundance Ion 163.90 (163.60 to 164.60): V  
Ion 128.95 (128.65 to 129.65): V  
Ion 130.95 (130.65 to 131.65): V  
Ion 165.90 (165.60 to 166.60): V

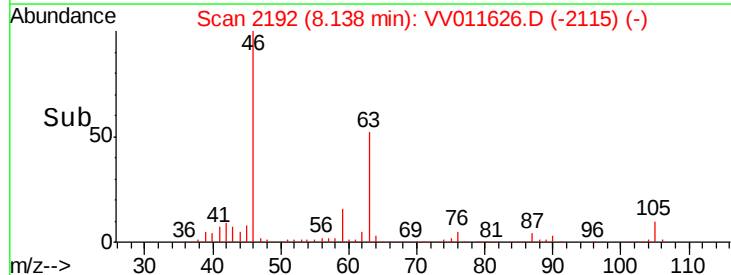
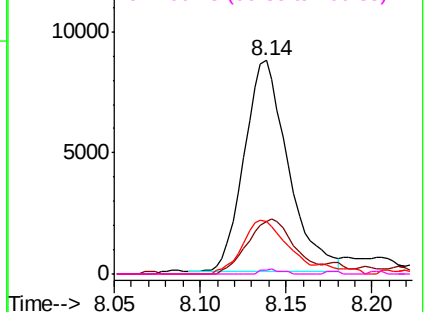


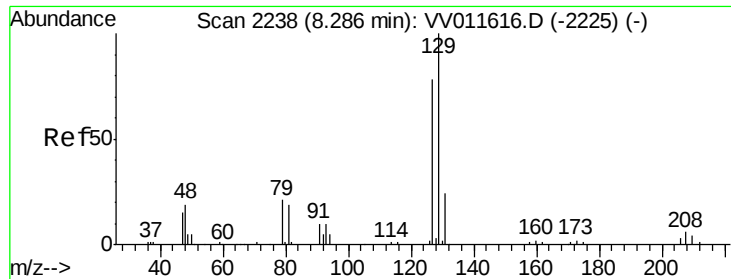
#48  
2-Hexanone  
Concen: 2.557 ug/L  
RT: 8.14 min Scan# 2192  
Delta R.T. -0.05 min  
Lab File: VV011626.D  
Acq: 19 Jun 2019 18:58

Tgt Ion: 43 Resp: 15404  
Ion Ratio Lower Upper  
43 100  
58 27.5 40.6 60.8#  
57 28.7 14.2 21.4#  
100 1.1 8.6 12.8#



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: 1.970 ug/L

RT: 8.02 min Scan# 2154

Delta R.T. -0.27 min

Lab File: VV011626.D

Acq: 19 Jun 2019 18:58

Instrument :

MSVOA\_V

ClientSampleId :

BFCQ6DL

Tgt Ion:129 Resp: 15887

Ion Ratio Lower Upper

129 100

127 0.0 52.6 97.6#

