

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV122319\  
 Data File : VV014160.D  
 Acq On : 23 Dec 2019 15:19  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Dec 24 01:33:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR122319WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Tue Dec 24 01:28:12 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 452504   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 406573   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 220309   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 148681   | 4.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 91.60%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 124350   | 4.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 91.60%  |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 262421   | 4.77     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 95.40%  |
| 20) 2-Butanone-d5              | 3.94   | 46    | 281998   | 46.04    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 92.08%  |
| 24) Chloroform-d               | 4.39   | 84    | 285525   | 4.62     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.40%  |
| 26) 1,2-Dichloroethane-d4      | 5.07   | 65    | 137228   | 4.59     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 91.80%  |
| 32) Benzene-d6                 | 5.09   | 84    | 582196   | 5.22     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 104.40% |
| 36) 1,2-Dichloropropane-d6     | 6.11   | 67    | 168132   | 5.02     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 100.40% |
| 41) Toluene-d8                 | 7.35   | 98    | 513559   | 5.11     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 102.20% |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 62377    | 4.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 96.40%  |
| 46) 2-Hexanone-d5              | 8.13   | 63    | 230903   | 50.46    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 100.92% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.25  | 84    | 113254   | 4.64     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 92.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 189862   | 4.81     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 96.20%  |

## Target Compounds

|                                |      |     |        |        | Ovalue    |
|--------------------------------|------|-----|--------|--------|-----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 194462 | 5.322  | ug/L 100  |
| 3) Chloromethane               | 1.25 | 50  | 192482 | 5.114  | ug/L 99   |
| 5) Vinyl chloride              | 1.32 | 62  | 180324 | 5.126  | ug/L 97   |
| 6) Bromomethane                | 1.53 | 94  | 101322 | 5.224  | ug/L 97   |
| 8) Chloroethane                | 1.60 | 64  | 104048 | 4.976  | ug/L 99   |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 250138 | 5.274  | ug/L 100  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 141666 | 5.300  | ug/L 98   |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 135580 | 5.196  | ug/L 97   |
| 13) Acetone                    | 2.21 | 43  | 189470 | 37.977 | ug/L 96   |
| 14) Carbon disulfide           | 2.31 | 76  | 459032 | 5.294  | ug/L 98   |
| 15) Methyl Acetate             | 2.47 | 43  | 59836  | 5.080  | ug/L 98   |
| 16) Methylene chloride         | 2.53 | 84  | 166425 | 4.744  | ug/L 96   |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 339740 | 5.292  | ug/L 99   |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96  | 164993 | 5.347  | ug/L 98   |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 300834 | 5.253  | ug/L 100  |
| 21) 2-Butanone                 | 4.03 | 43  | 334821 | 48.993 | ug/L 95   |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 168387 | 5.299  | ug/L # 97 |

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 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 6 Sample Multiplier: 1

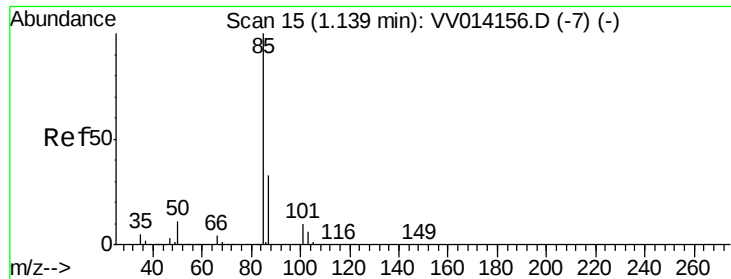
Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Dec 24 01:33:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR122319WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Tue Dec 24 01:28:12 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.29  | 128  | 73234    | 4.988  | ug/L  | 92       |
| 25) Chloroform                  | 4.42  | 83   | 302158   | 5.147  | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.17  | 62   | 174306   | 5.217  | ug/L  | 98       |
| 29) 1,1,1-Trichloroethane       | 4.65  | 97   | 261343   | 5.526  | ug/L  | 99       |
| 30) Cyclohexane                 | 4.72  | 56   | 275767   | 6.095  | ug/L  | 98       |
| 31) Carbon tetrachloride        | 4.87  | 117  | 235499   | 5.595  | ug/L  | 98       |
| 33) Benzene                     | 5.14  | 78   | 666062   | 5.807  | ug/L  | 100      |
| 34) Trichloroethene             | 5.95  | 95   | 170787   | 5.652  | ug/L  | 96       |
| 35) Methylcyclohexane           | 6.17  | 83   | 278365   | 6.207  | ug/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.21  | 63   | 161749   | 5.714  | ug/L  | 99       |
| 38) Bromodichloromethane        | 6.55  | 83   | 198981   | 5.404  | ug/L  | 100      |
| 39) cis-1,3-Dichloropropene     | 7.06  | 75   | 229397   | 5.753  | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone        | 7.27  | 43   | 837817   | 54.329 | ug/L  | 100      |
| 42) Toluene                     | 7.42  | 91   | 680821   | 5.674  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.69  | 75   | 172579   | 5.505  | ug/L  | 97       |
| 45) 1,1,2-Trichloroethane       | 7.88  | 97   | 100488   | 5.111  | ug/L  | 97       |
| 47) Tetrachloroethene           | 8.01  | 164  | 149863   | 5.502  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.18  | 43   | 634298   | 56.302 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.28  | 129  | 133684   | 5.368  | ug/L  | 97       |
| 50) 1,2-Dibromoethane           | 8.39  | 107  | 96279    | 5.327  | ug/L  | 95       |
| 51) Chlorobenzene               | 8.92  | 112  | 427605   | 5.454  | ug/L  | 98       |
| 52) Ethylbenzene                | 9.05  | 91   | 721320   | 5.771  | ug/L  | 99       |
| 53) m,p-xylene                  | 9.18  | 106  | 277888   | 5.753  | ug/L  | 99       |
| 54) o-xylene                    | 9.58  | 106  | 268716   | 5.916  | ug/L  | 97       |
| 55) Styrene                     | 9.60  | 104  | 455861   | 5.814  | ug/L  | 99       |
| 56) Isopropylbenzene            | 9.97  | 105  | 711438   | 5.926  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.28 | 83   | 120233   | 5.220  | ug/L  | 95       |
| 59) 1,2,3-Trichloropropane      | 10.31 | 75   | 88617    | 5.189  | ug/L  | 100      |
| 61) Bromoform                   | 9.77  | 173  | 76785    | 5.056  | ug/L  | 98       |
| 62) 1,3-Dichlorobenzene         | 11.22 | 146  | 361681   | 5.625  | ug/L  | 98       |
| 63) 1,4-Dichlorobenzene         | 11.31 | 146  | 362618   | 5.569  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.68 | 146  | 327369   | 5.468  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.47 | 75   | 17831    | 4.857  | ug/L  | 93       |
| 67) 1,3,5-Trichlorobenzene      | 12.69 | 180  | 302158   | 5.714  | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene      | 13.30 | 180  | 248207   | 5.755  | ug/L  | 100      |
| 69) Naphthalene                 | 13.55 | 128  | 316104   | 5.585  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.79 | 180  | 227577   | 5.720  | ug/L  | 100      |

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





#2

Dichlorodifluoromethane

Concen: 5.322 ug/L

RT: 1.14 min Scan# 15

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

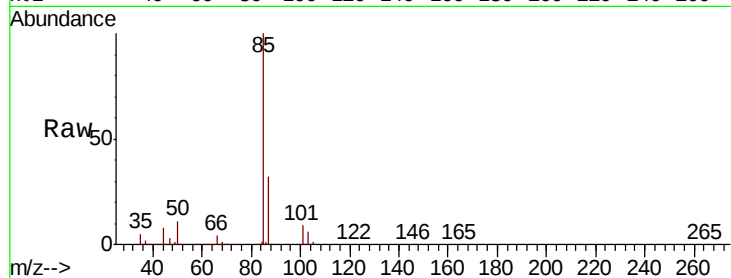
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 85 Resp: 194462

Ion Ratio Lower Upper

85 100

87 32.5 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0

1.14

200000

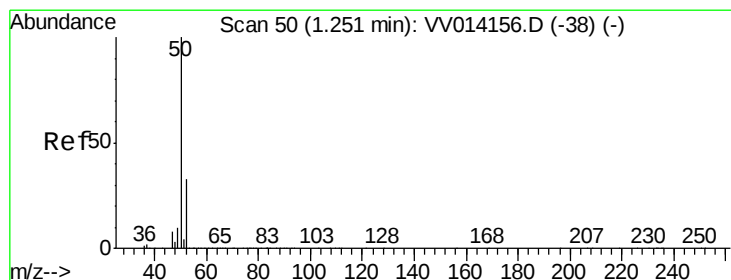
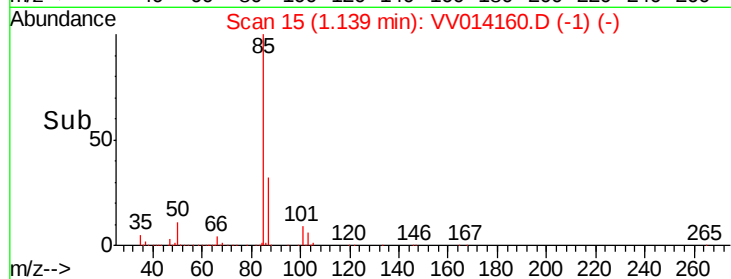
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: 5.114 ug/L

RT: 1.25 min Scan# 50

Delta R.T. -0.00 min

Lab File: VV014160.D

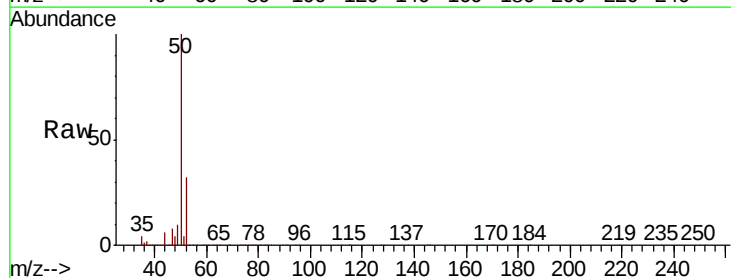
Acq: 23 Dec 2019 15:19

Tgt Ion: 50 Resp: 192482

Ion Ratio Lower Upper

50 100

52 32.3 22.9 42.5



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0

1.25

200000

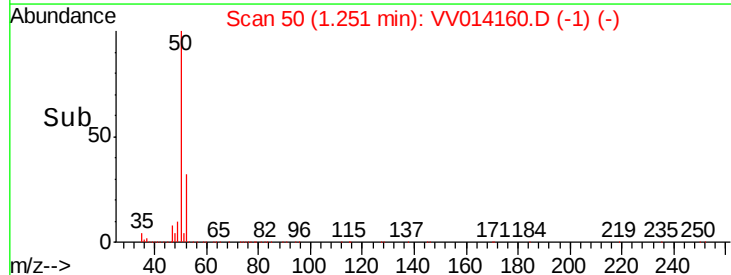
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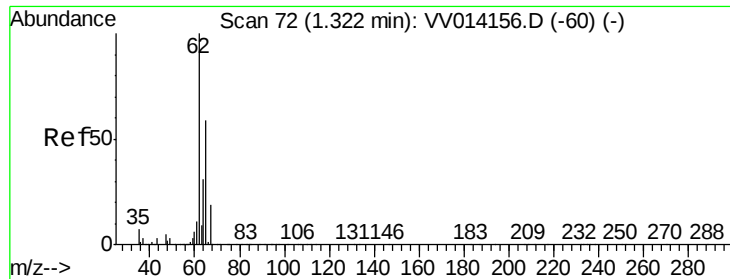
100000

50000

0

Time-->





#5

Vinyl chloride

Concen: 5.126 ug/L

RT: 1.32 min Scan# 71

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

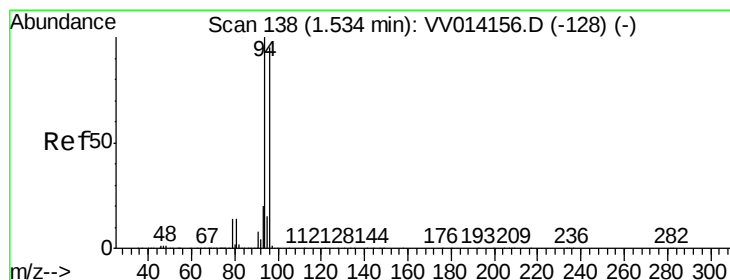
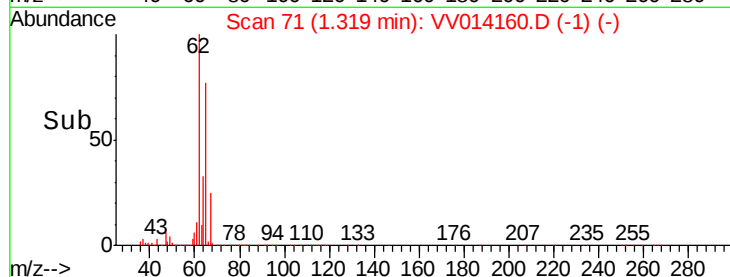
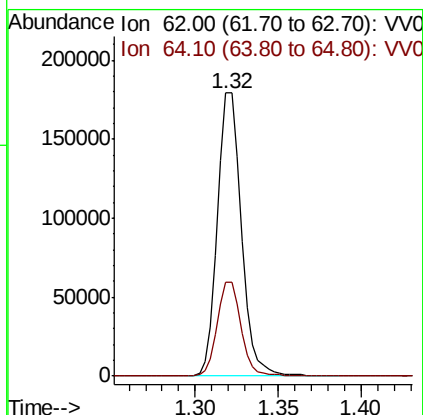
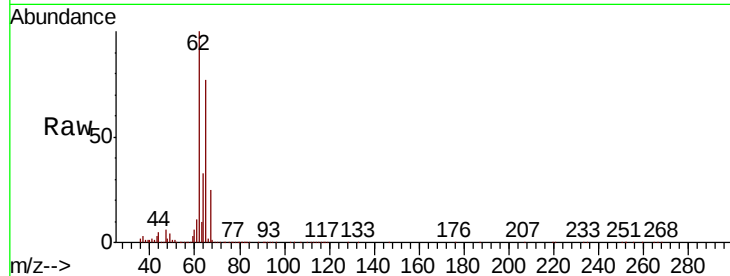
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 62 Resp: 180324

Ion Ratio Lower Upper

62 100

64 33.2 22.0 40.8



#6

Bromomethane

Concen: 5.224 ug/L

RT: 1.53 min Scan# 138

Delta R.T. -0.00 min

Lab File: VV014160.D

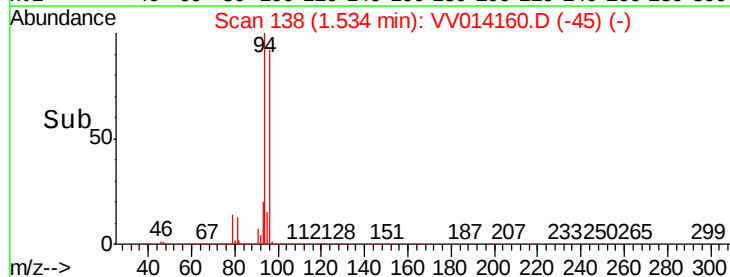
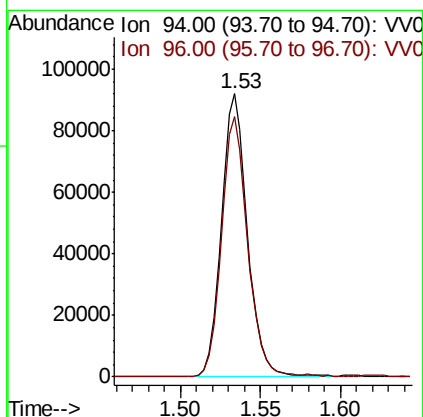
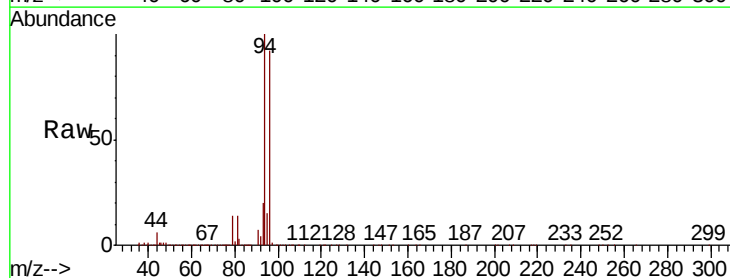
Acq: 23 Dec 2019 15:19

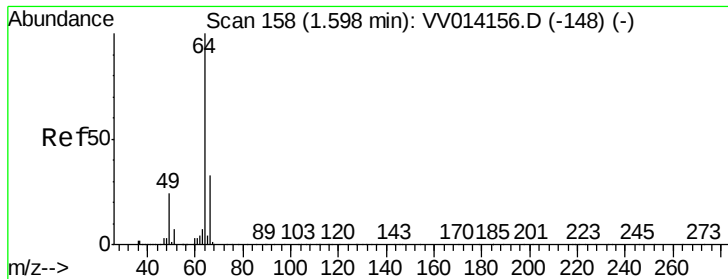
Tgt Ion: 94 Resp: 101322

Ion Ratio Lower Upper

94 100

96 91.9 66.4 123.4





#8

Chloroethane

Concen: 4.976 ug/L

RT: 1.60 min Scan# 158

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

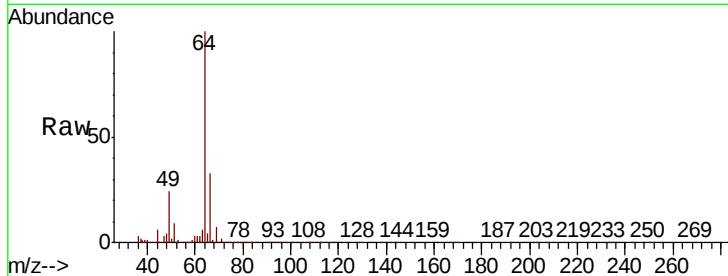
ClientSampleId :

Tot Ion: 64 Resp: 104048

Ion Ratio Lower Upper

64 100

66 32.6 23.1 42.9



Abundance Ion 64.10 (63.80 to 64.80): VV0

Ion 66.05 (65.75 to 66.75): VV0

1.60

100000

80000

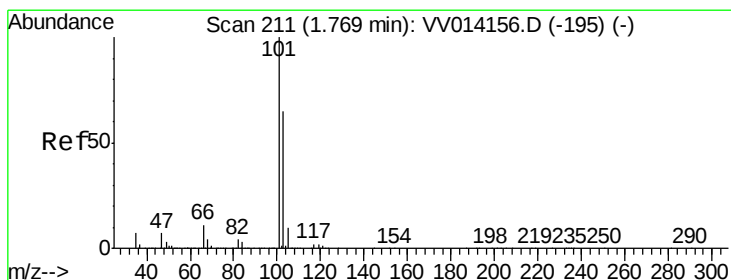
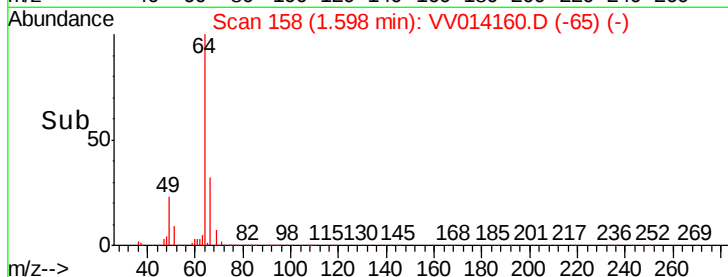
60000

40000

20000

0

Time-->



#9

Trichlorofluoromethane

Concen: 5.274 ug/L

RT: 1.77 min Scan# 210

Delta R.T. -0.00 min

Lab File: VV014160.D

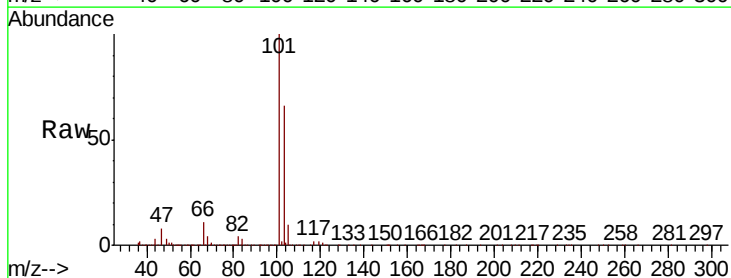
Acq: 23 Dec 2019 15:19

Tgt Ion: 101 Resp: 250138

Ion Ratio Lower Upper

101 100

103 64.4 51.8 77.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

1.77

200000

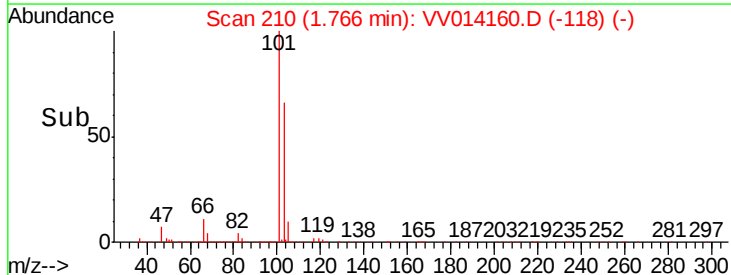
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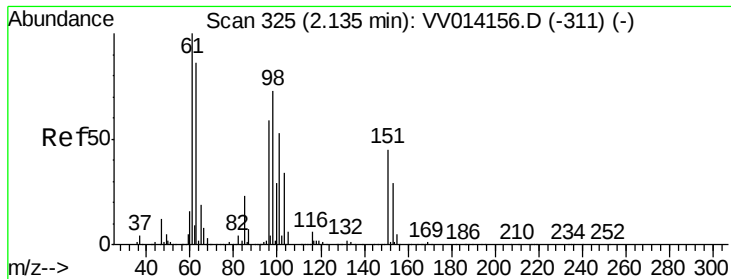
100000

50000

0

Time-->





#10

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

Concen: 5.300 ug/L

RT: 2.14 min Scan# 325

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampled :

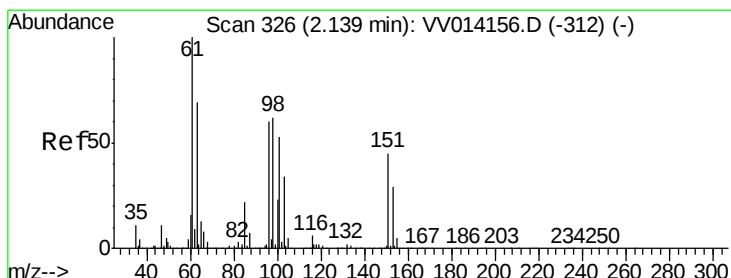
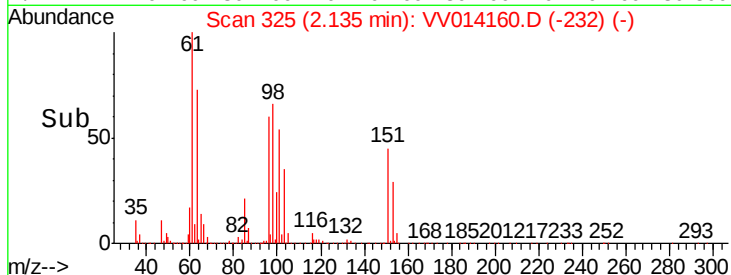
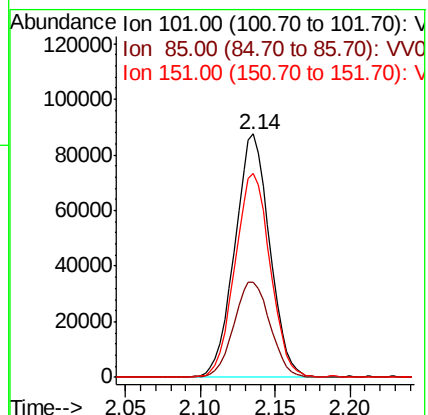
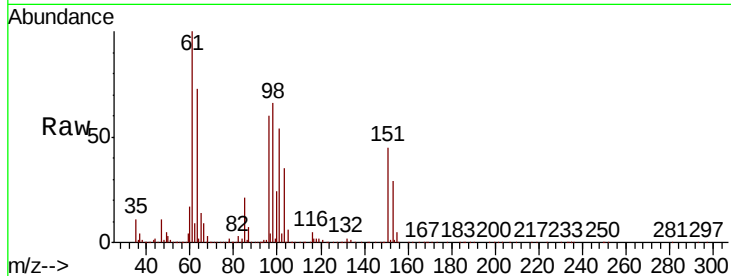
Tot Ion:101 Resp: 141666

Ion Ratio Lower Upper

101 100

85 40.6 34.7 52.1

151 85.0 69.1 103.7



#12

1,1-Dichloroethene

Concen: 5.196 ug/L

RT: 2.14 min Scan# 325

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

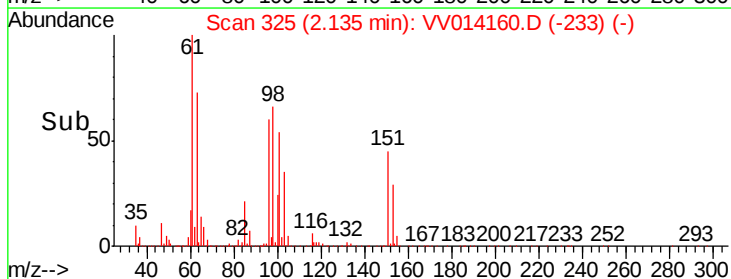
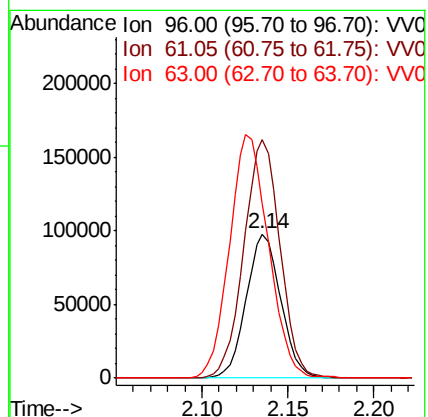
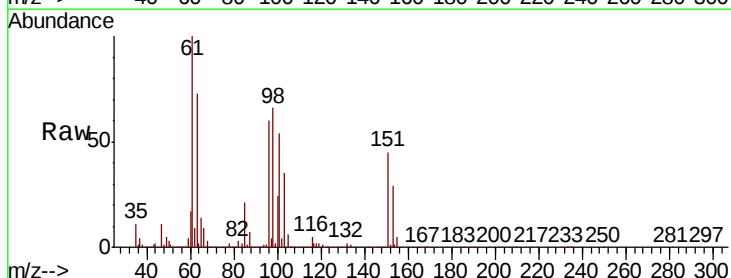
Tgt Ion: 96 Resp: 135580

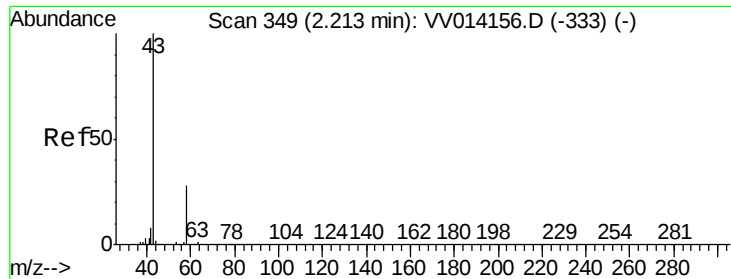
Ion Ratio Lower Upper

96 100

61 165.4 115.8 215.2

63 121.2 79.9 148.3

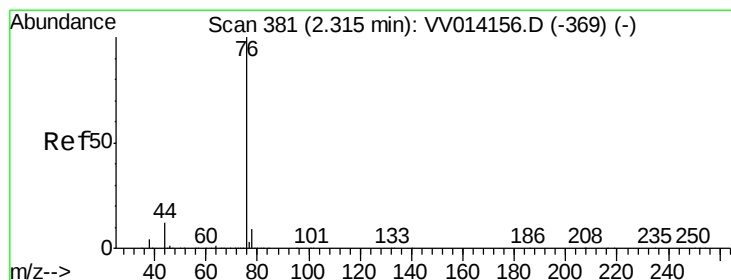
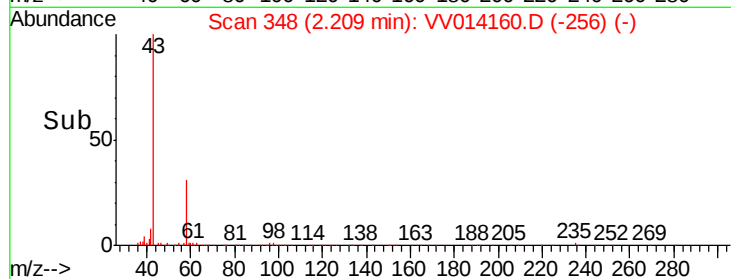
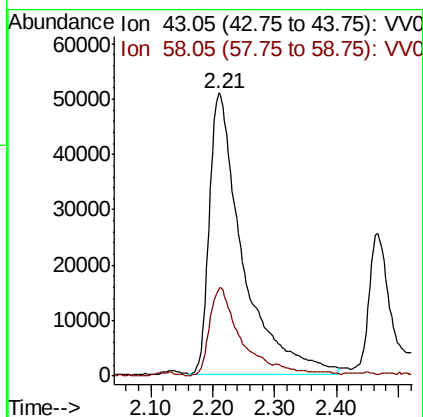
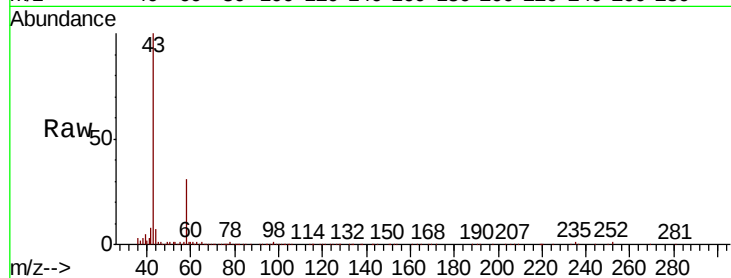




#13  
Acetone  
Concen: 37.977 ug/L  
RT: 2.21 min Scan# 348  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

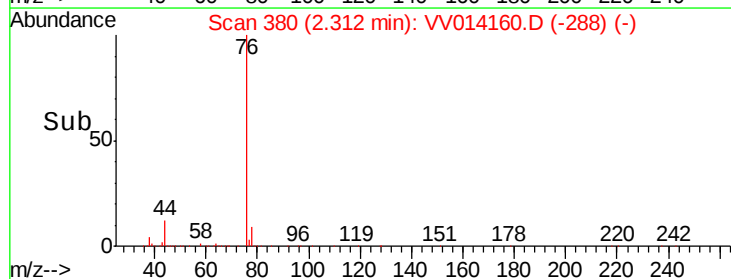
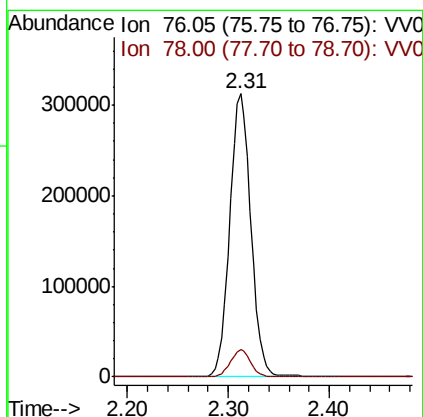
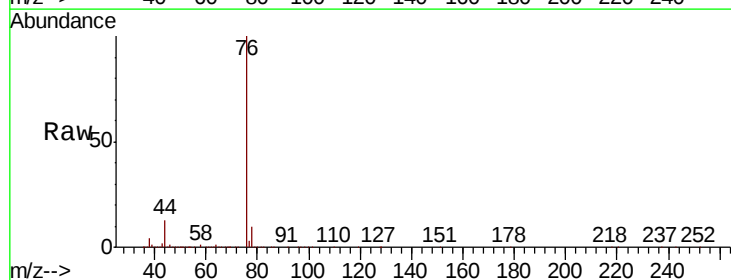
Instrument :  
MSVOA\_V  
ClientSampled :

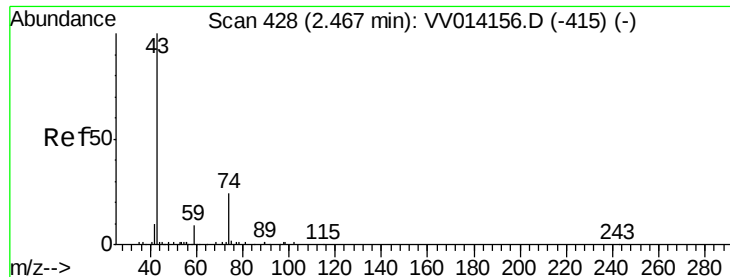
Tot Ion: 43 Resp: 189470  
Ion Ratio Lower Upper  
43 100  
58 27.4 0.0 58.8



#14  
Carbon disulfide  
Concen: 5.294 ug/L  
RT: 2.31 min Scan# 380  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

Tgt Ion: 76 Resp: 459032  
Ion Ratio Lower Upper  
76 100  
78 9.5 7.0 10.6

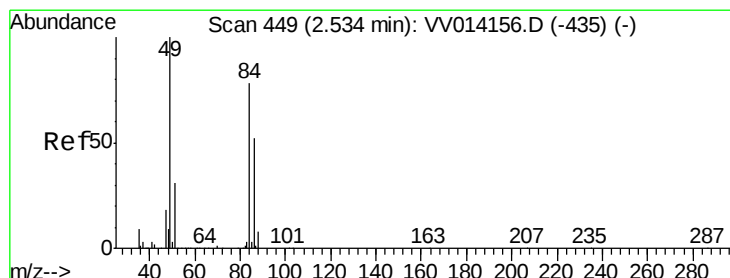
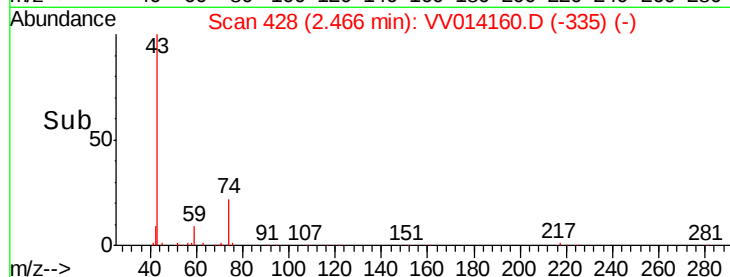
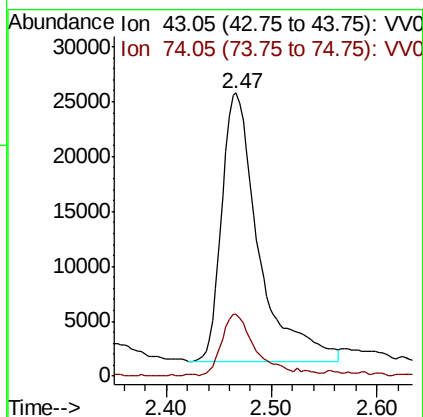
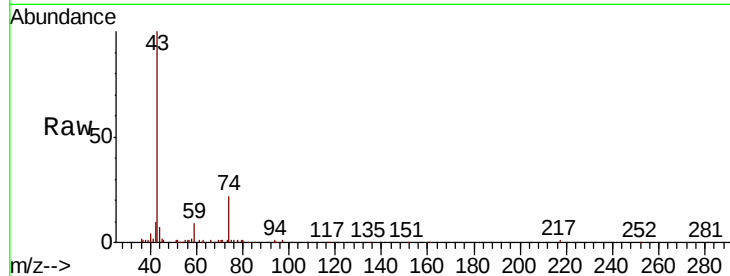




#15  
Methvl Acetate  
Concen: 5.080 ug/L  
RT: 2.47 min Scan# 428  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

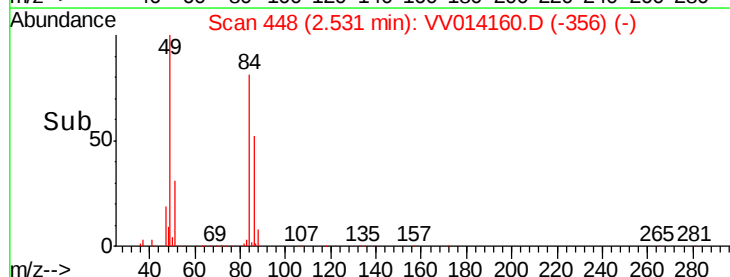
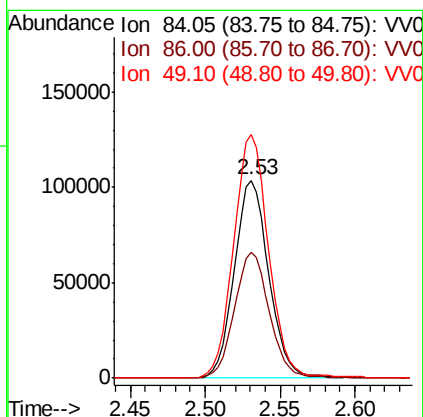
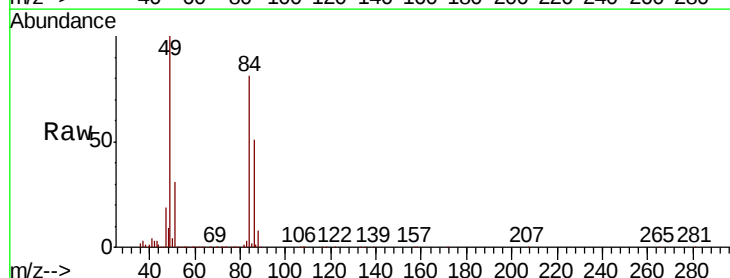
Instrument :  
MSVOA\_V  
ClientSampled :

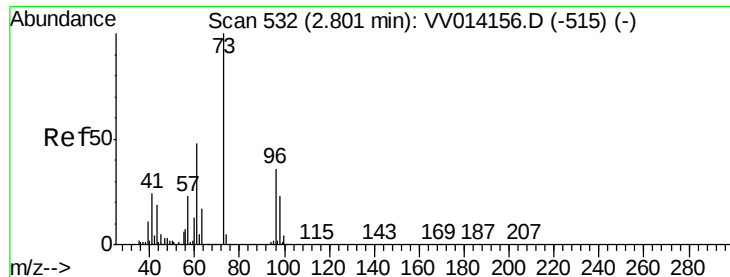
Tot Ion: 43 Resp: 59836  
Ion Ratio Lower Upper  
43 100  
74 20.8 17.3 25.9



#16  
Methylene chloride  
Concen: 4.744 ug/L  
RT: 2.53 min Scan# 448  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

Tgt Ion: 84 Resp: 166425  
Ion Ratio Lower Upper  
84 100  
86 63.3 46.3 85.9  
49 122.9 89.8 166.8

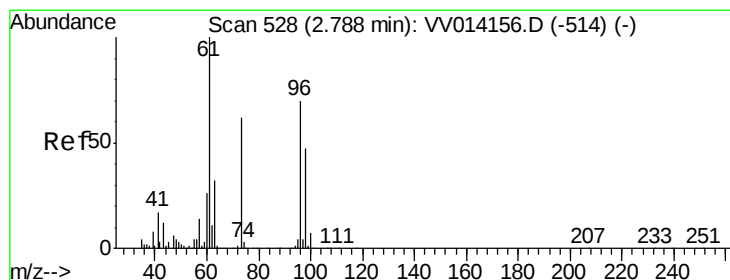
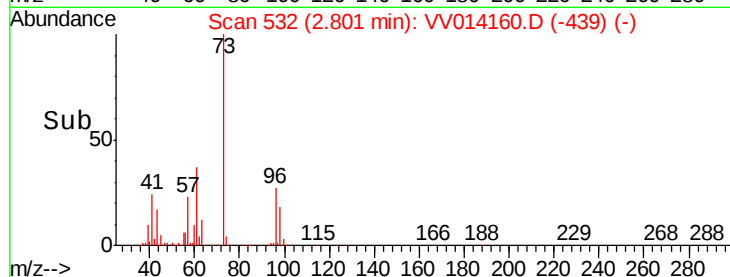
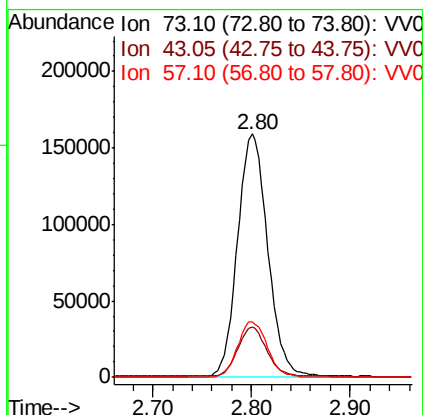
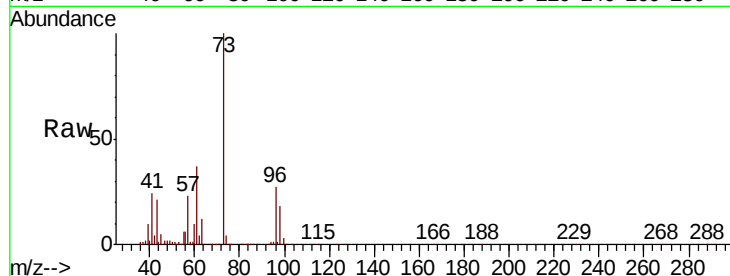




#17  
Methvl tert-butvl Ether  
Concen: 5.292 ug/L  
RT: 2.80 min Scan# 532  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

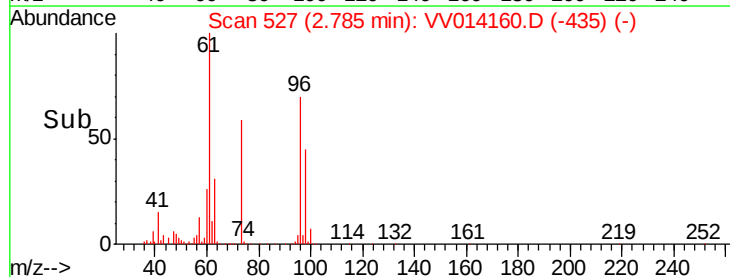
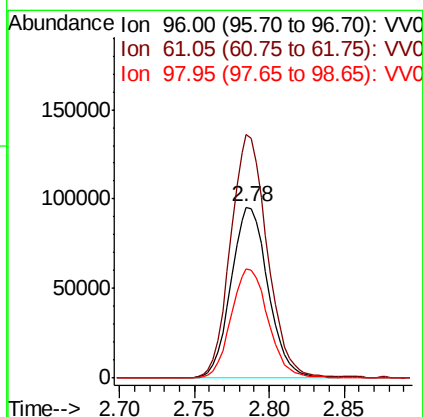
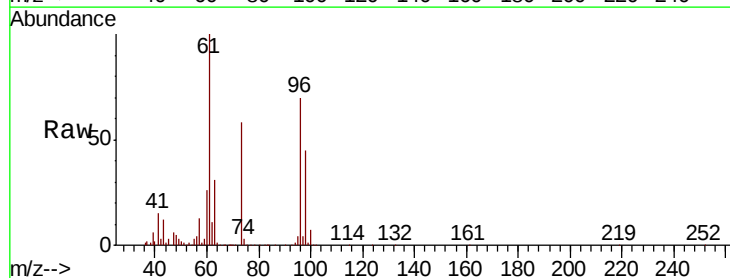
Instrument :  
MSVOA\_V  
ClientSampleId :

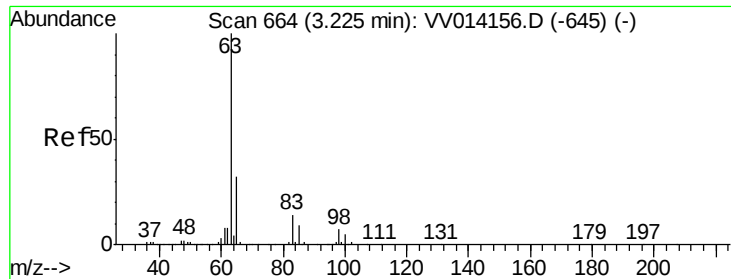
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 43      | 19.6  | 15.8  | 23.8  |
| 57      | 22.3  | 18.6  | 28.0  |



#18  
trans-1,2-Dichloroethene  
Concen: 5.347 ug/L  
RT: 2.78 min Scan# 527  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 142.5 | 100.7 | 187.1 |
| 98      | 63.7  | 46.9  | 87.1  |

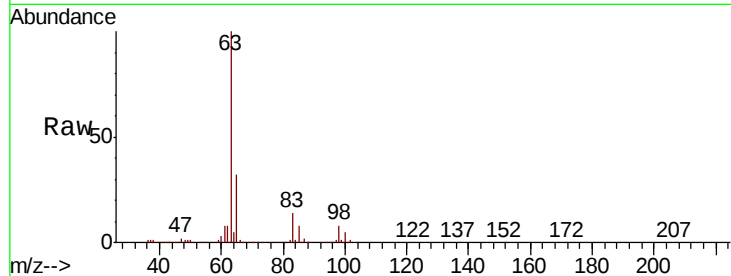




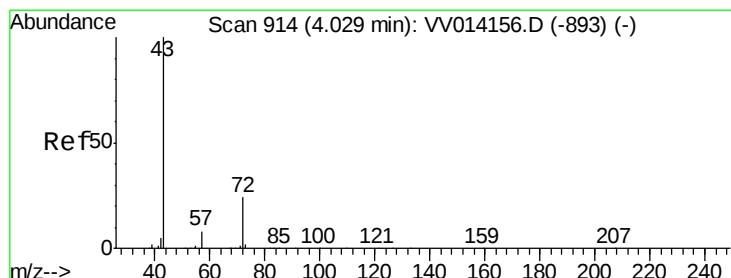
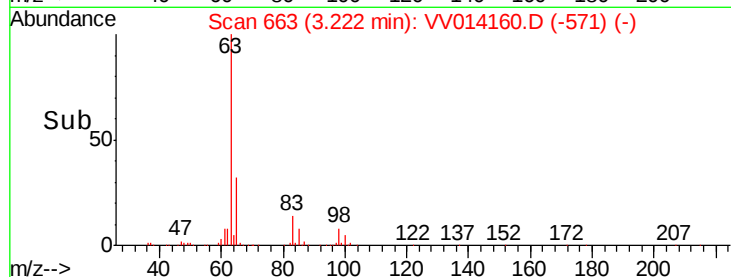
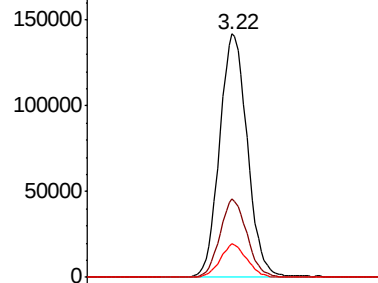
#19  
 1,1-Dichloroethane  
 Concen: 5.253 ug/L  
 RT: 3.22 min Scan# 663  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Tot Ion: 63 Resp: 300834  
 Ion Ratio Lower Upper  
 63 100  
 65 32.1 22.3 41.5  
 83 13.6 9.7 17.9

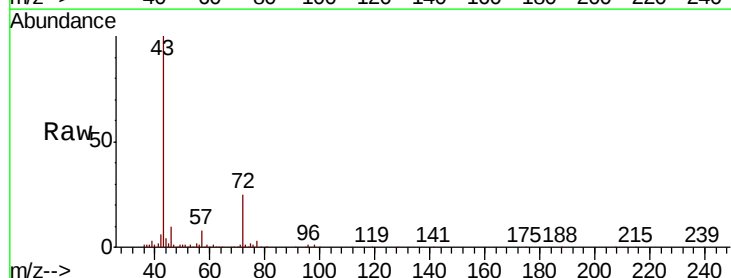


Abundance Ion 63.10 (62.80 to 63.80): VV0  
 Ion 65.10 (64.80 to 65.80): VV0  
 Ion 83.05 (82.75 to 83.75): VV0

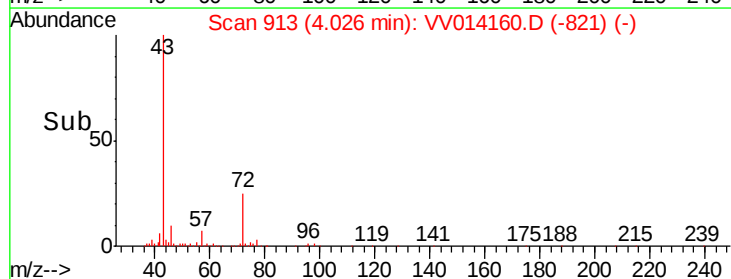
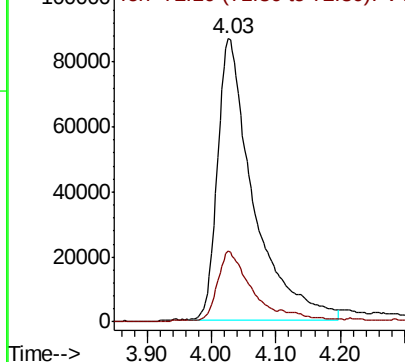


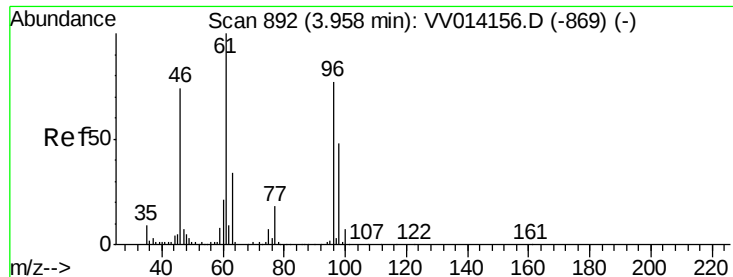
#21  
 2-Butanone  
 Concen: 48.993 ug/L  
 RT: 4.03 min Scan# 913  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

Tgt Ion: 43 Resp: 334821  
 Ion Ratio Lower Upper  
 43 100  
 72 22.4 12.4 37.0



Abundance Ion 43.05 (42.75 to 43.75): VV0  
 Ion 72.10 (71.80 to 72.80): VV0



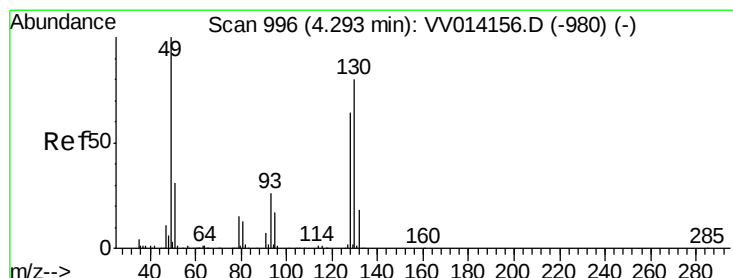
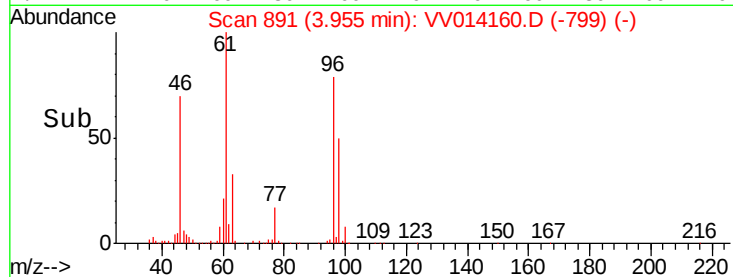
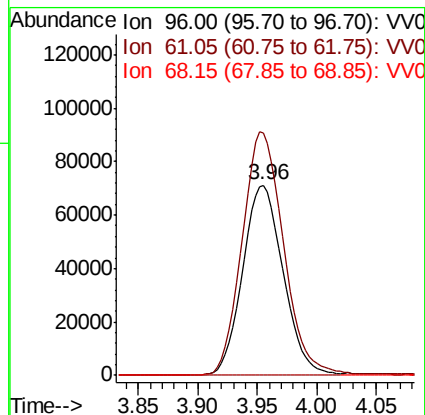
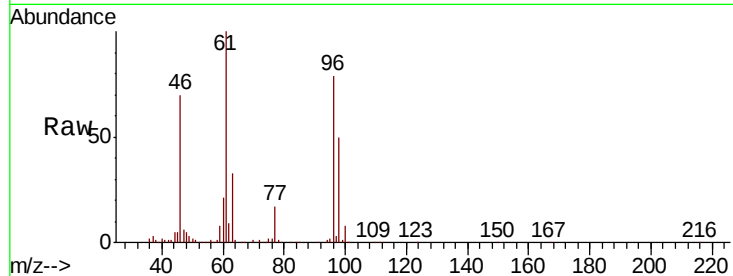


#22

cis-1,2-Dichloroethene  
Concen: 5.299 ug/L  
RT: 3.96 min Scan# 891  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

Instrument :  
MSVOA\_V  
ClientSampleId :

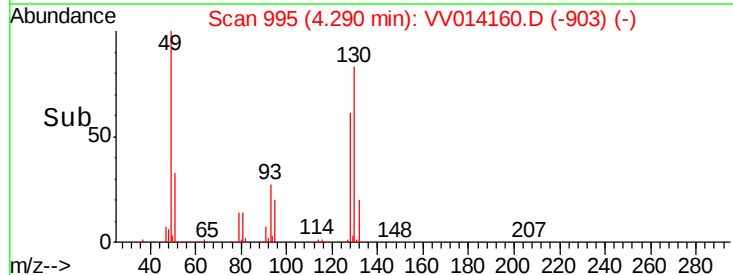
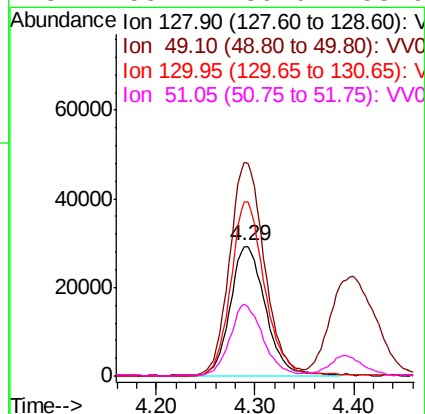
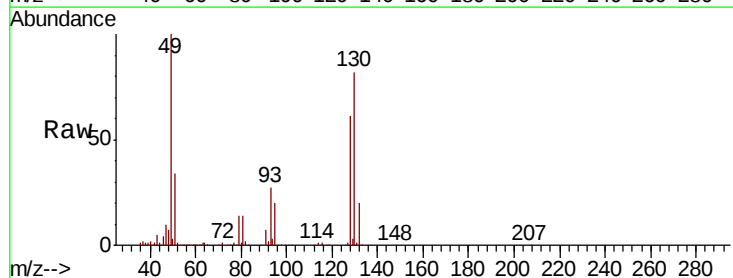
Tot Ion: 96 Resp: 168387  
Ion Ratio Lower Upper  
96 100  
61 127.2 91.2 169.4  
68 0.0 0.1 0.3#

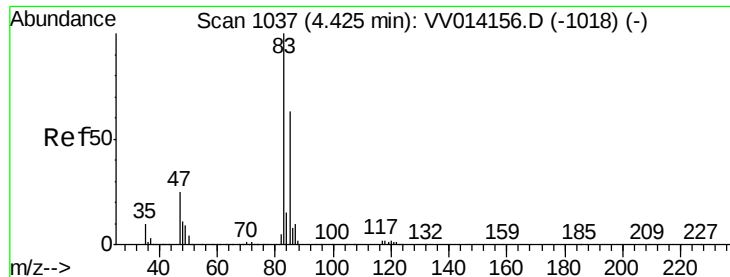


#23

Bromochloromethane  
Concen: 4.988 ug/L  
RT: 4.29 min Scan# 995  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

Tgt Ion: 128 Resp: 73234  
Ion Ratio Lower Upper  
128 100  
49 164.5 109.3 202.9  
130 134.6 87.2 161.9  
51 55.4 39.0 58.6

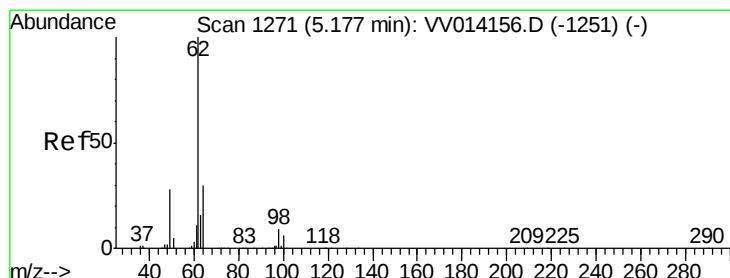
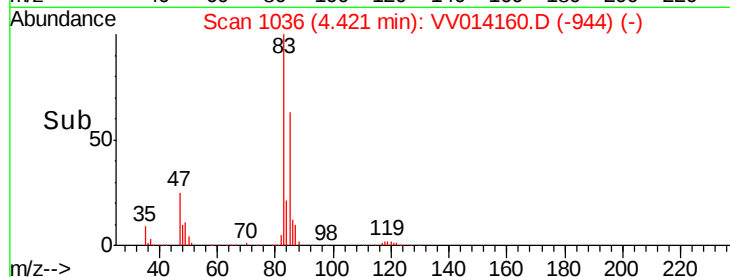
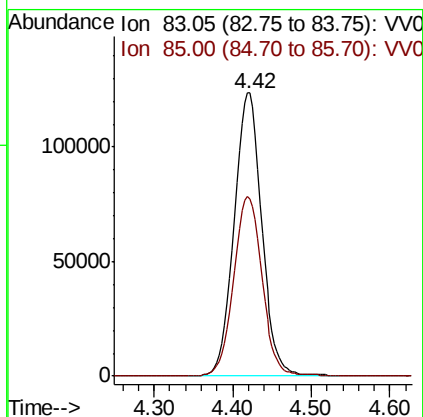
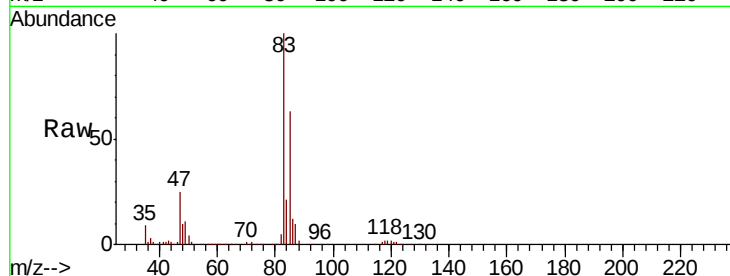




#25  
Chloroform  
Concen: 5.147 ug/L  
RT: 4.42 min Scan# 1036  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

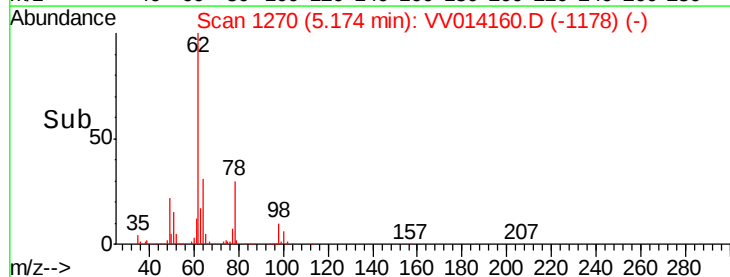
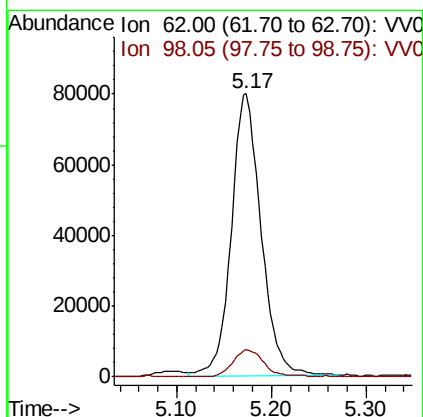
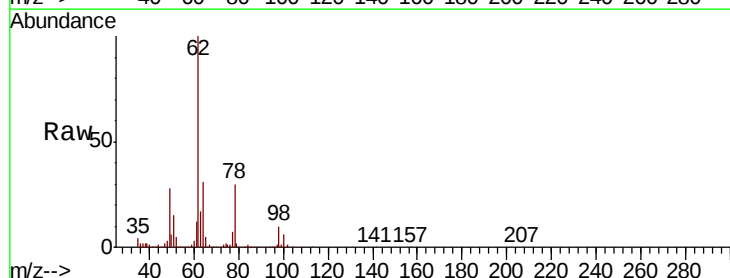
Instrument :  
MSVOA\_V  
ClientSampled :

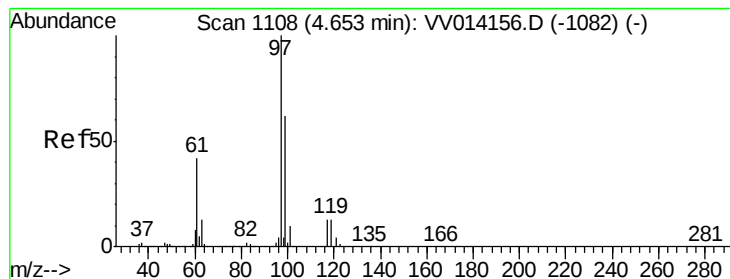
Tot Ion: 83 Resp: 302158  
Ion Ratio Lower Upper  
83 100  
85 62.7 44.6 82.8



#27  
1,2-Dichloroethane  
Concen: 5.217 ug/L  
RT: 5.17 min Scan# 1270  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

Tgt Ion: 62 Resp: 174306  
Ion Ratio Lower Upper  
62 100  
98 9.7 7.0 10.6





#29

1,1,1-Trichloroethane

Concen: 5.526 ug/L

RT: 4.65 min Scan# 1107

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampleId :

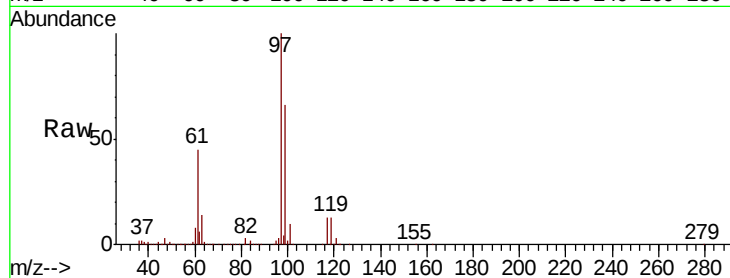
Tot Ion: 97 Resp: 261343

Ion Ratio Lower Upper

97 100

99 64.4 51.6 77.4

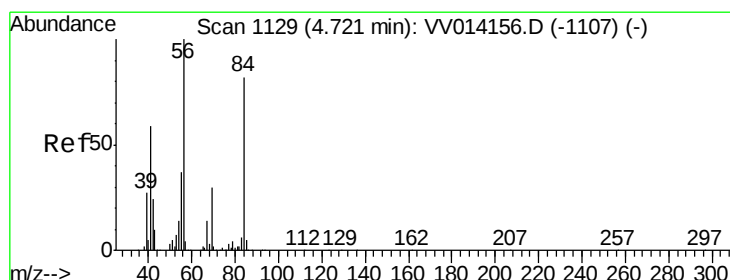
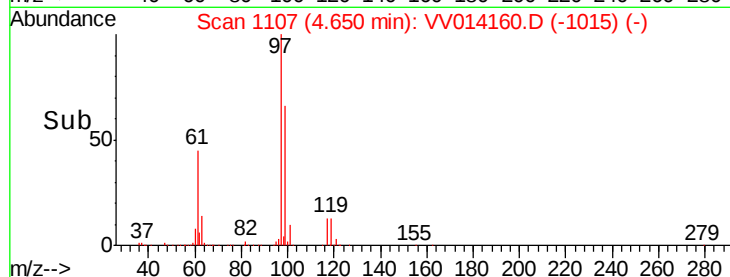
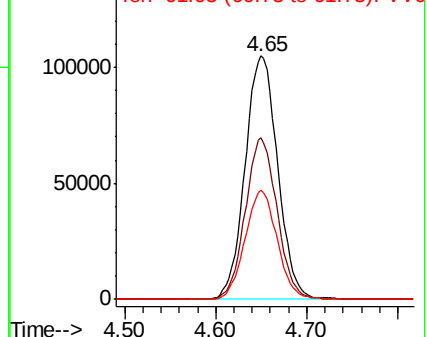
61 44.2 34.5 51.7



Abundance Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

Ion 61.05 (60.75 to 61.75): VV0



#30

Cyclohexane

Concen: 6.095 ug/L

RT: 4.72 min Scan# 1128

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

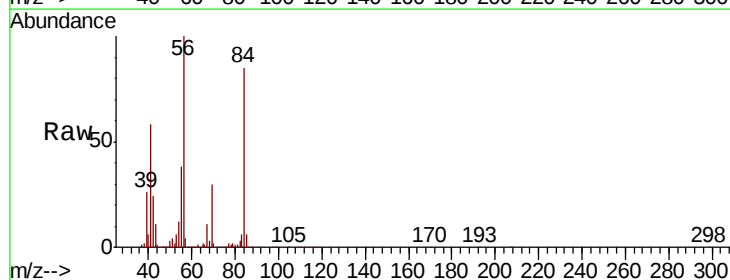
Tgt Ion: 56 Resp: 275767

Ion Ratio Lower Upper

56 100

69 29.8 24.4 36.6

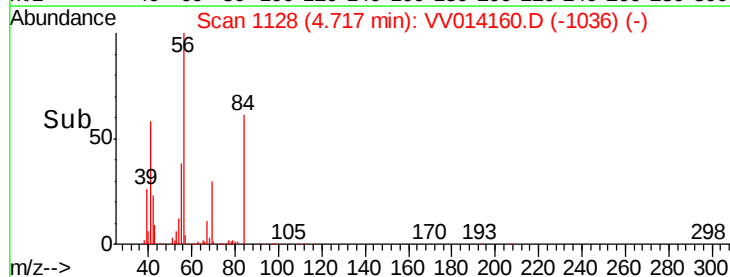
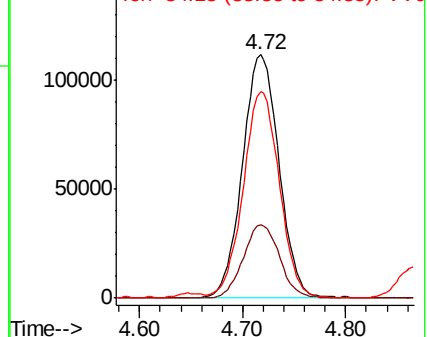
84 83.7 68.3 102.5

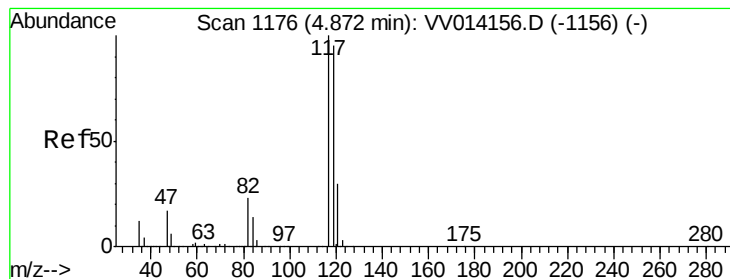


Abundance Ion 56.10 (55.80 to 56.80): VV0

Ion 69.15 (68.85 to 69.85): VV0

Ion 84.15 (83.85 to 84.85): VV0





#31

Carbon tetrachloride

Concen: 5.595 ug/L

RT: 4.87 min Scan# 1175

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

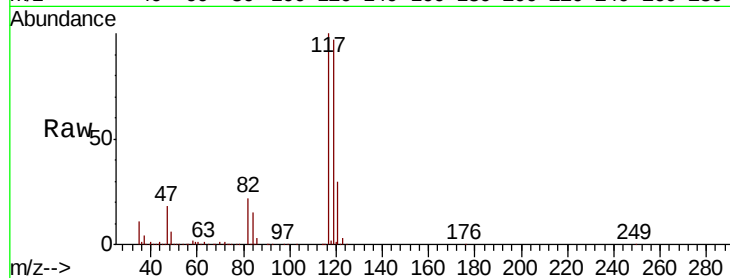
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion:117 Resp: 235499

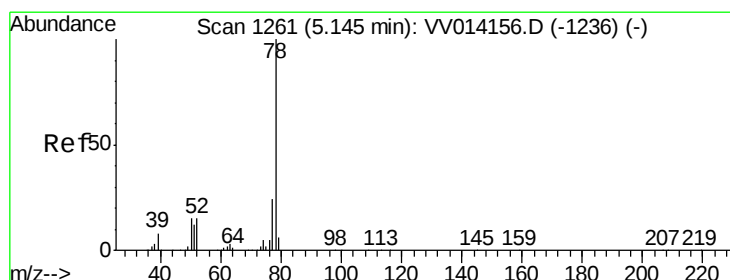
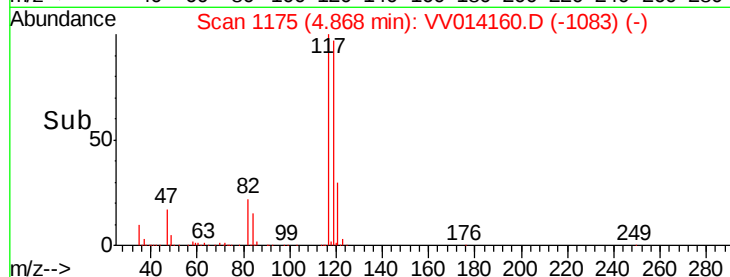
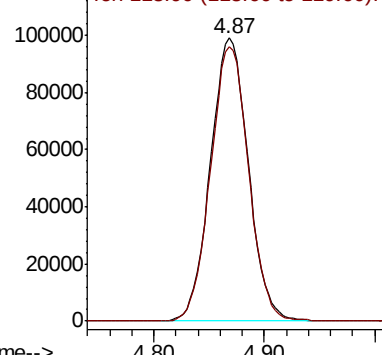
Ion Ratio Lower Upper

117 100

119 97.6 76.2 114.4



Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.807 ug/L

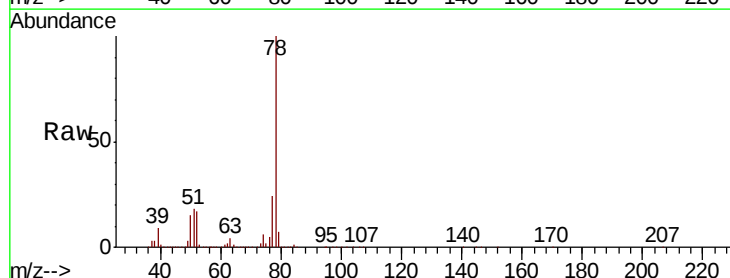
RT: 5.14 min Scan# 1259

Delta R.T. -0.01 min

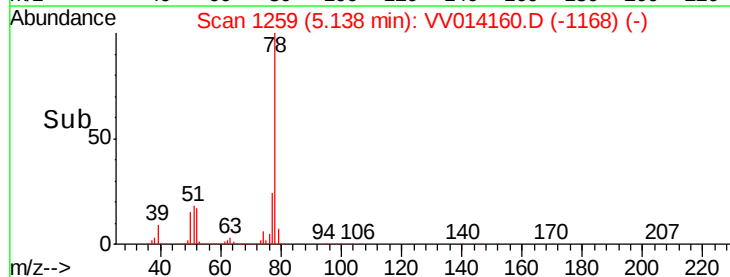
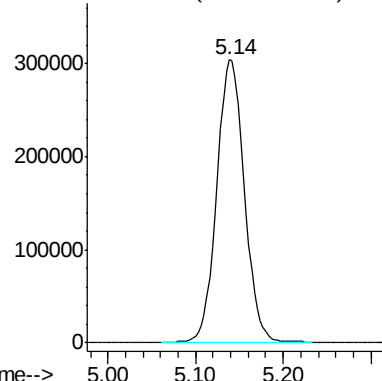
Lab File: VV014160.D

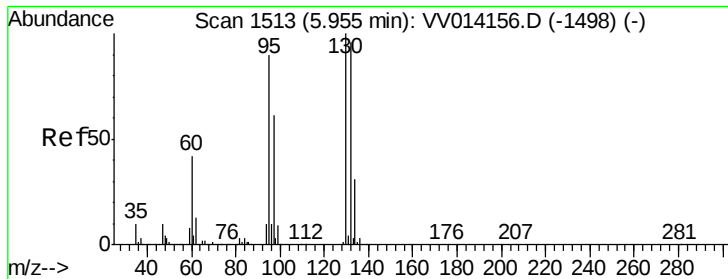
Acq: 23 Dec 2019 15:19

Tgt Ion: 78 Resp: 666062



Abundance Ion 78.10 (77.80 to 78.80): VV0





#34

Trichloroethene

Concen: 5.652 ug/L

RT: 5.95 min Scan# 1512

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 95 Resp: 170787

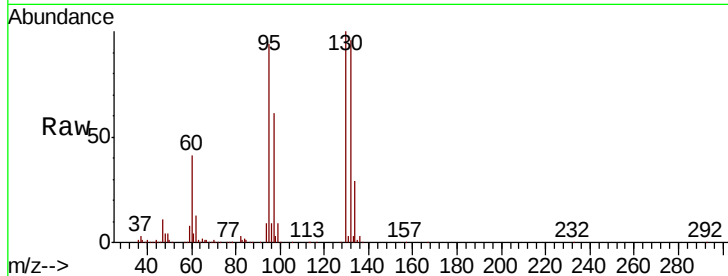
Ion Ratio Lower Upper

95 100

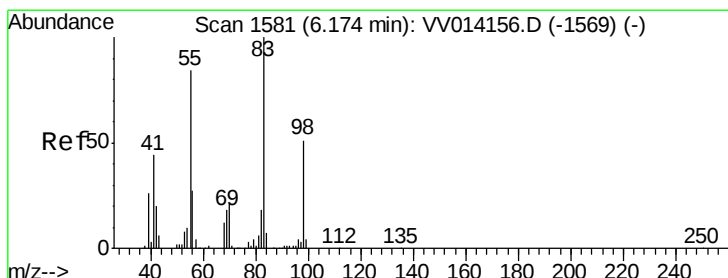
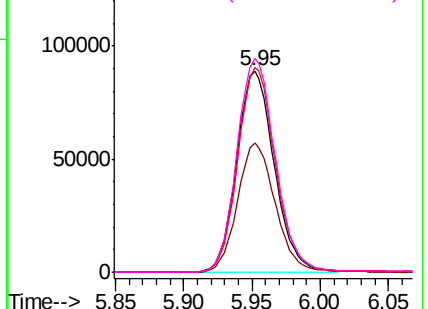
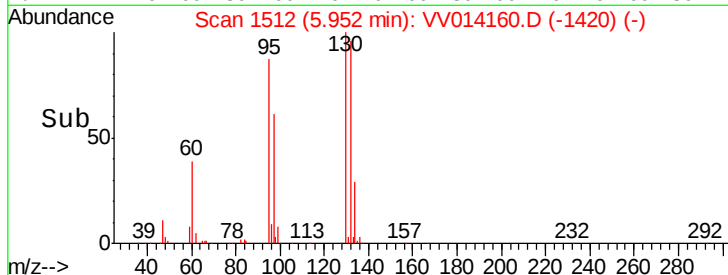
97 64.1 47.2 87.6

132 101.4 74.1 137.7

130 105.9 77.5 143.9



Abundance Ion 95.00 (94.70 to 95.70): VV014160.D (-1420) (-)



#35

Methylcyclohexane

Concen: 6.207 ug/L

RT: 6.17 min Scan# 1580

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

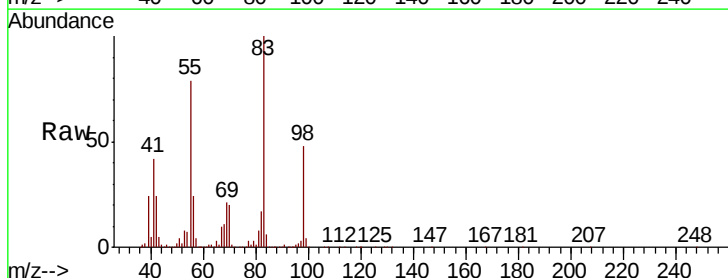
Tgt Ion: 83 Resp: 278365

Ion Ratio Lower Upper

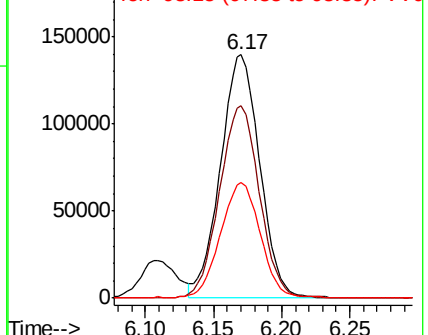
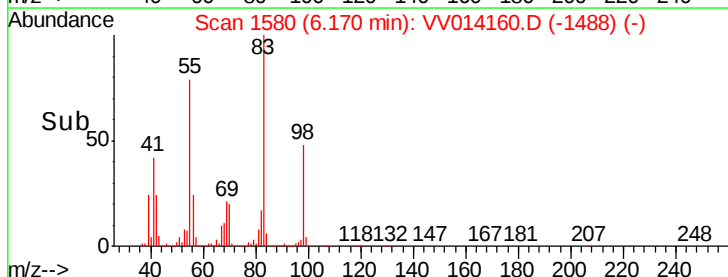
83 100

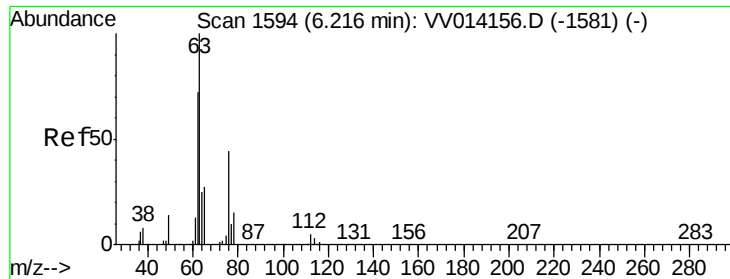
55 80.8 65.3 97.9

98 47.9 39.2 58.8



Abundance Ion 83.15 (82.85 to 83.85): VV014160.D (-1488) (-)

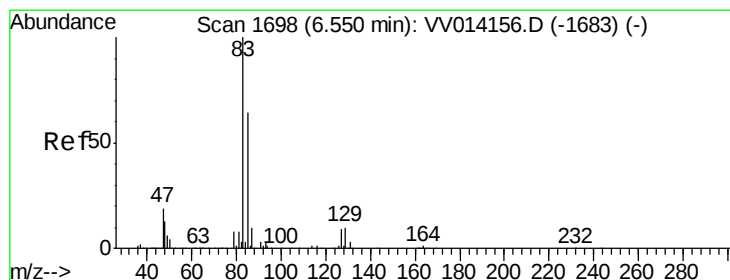
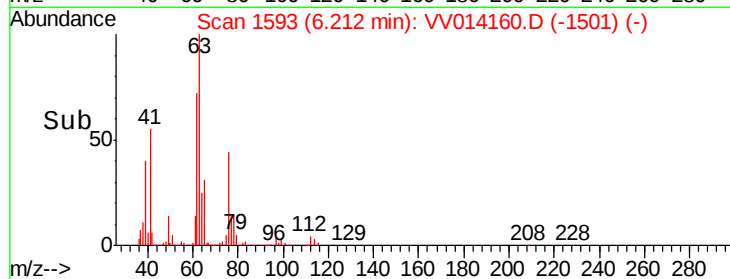
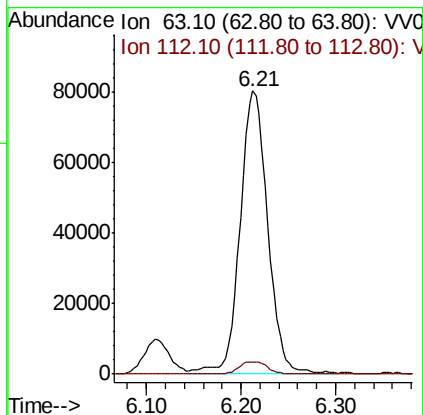
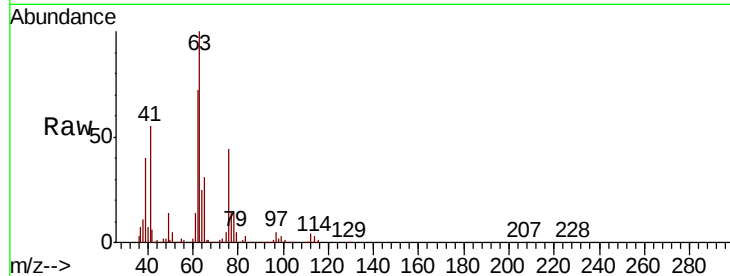




#37  
 1,2-Dichloropropane  
 Concen: 5.714 ug/L  
 RT: 6.21 min Scan# 1593  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

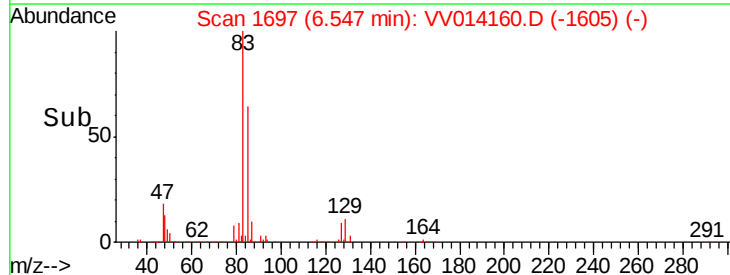
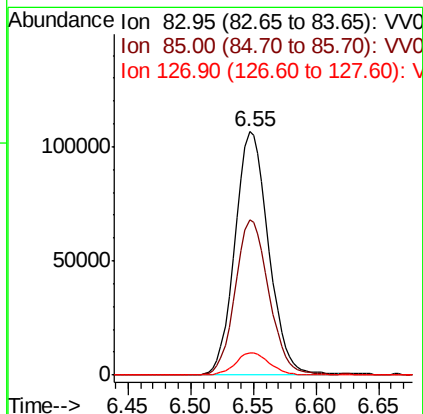
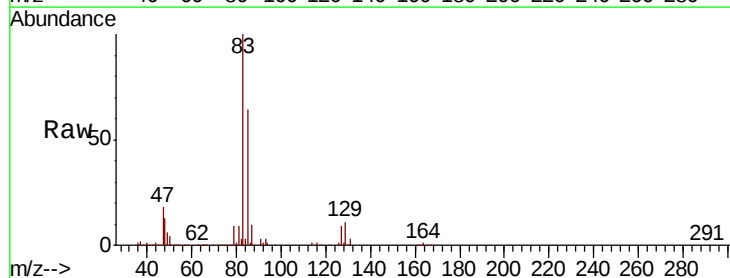
Instrument :  
 MSVOA\_V  
 ClientSampleId :

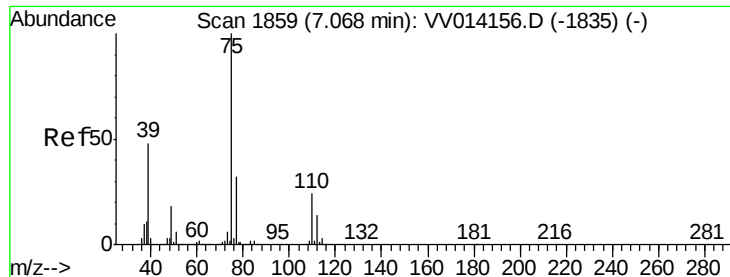
Tot Ion: 63 Resp: 161749  
 Ion Ratio Lower Upper  
 63 100  
 112 4.5 4.0 6.0



#38  
 Bromodichloromethane  
 Concen: 5.404 ug/L  
 RT: 6.55 min Scan# 1697  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

Tgt Ion: 83 Resp: 198981  
 Ion Ratio Lower Upper  
 83 100  
 85 63.6 44.5 82.7  
 127 9.3 7.2 10.8

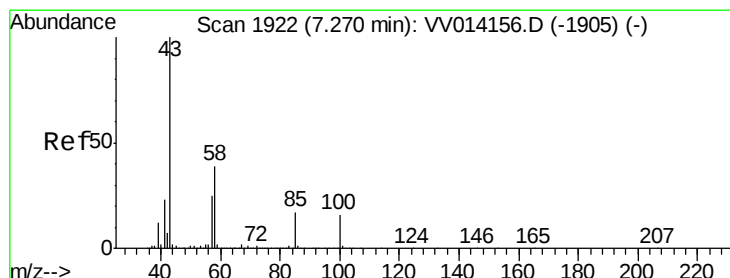
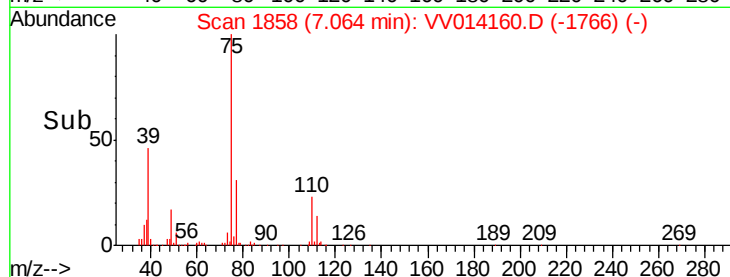
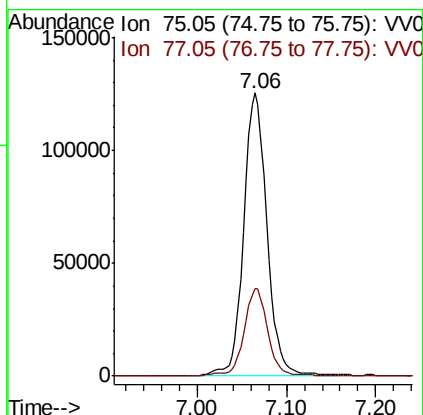
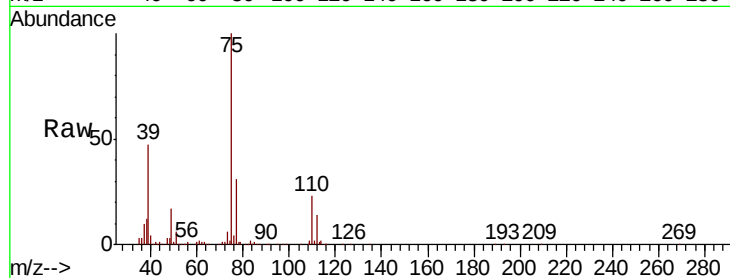




#39  
 cis-1,3-Dichloropropene  
 Concen: 5.753 ug/L  
 RT: 7.06 min Scan# 1858  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

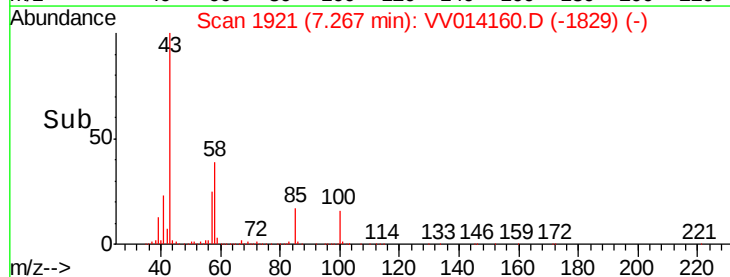
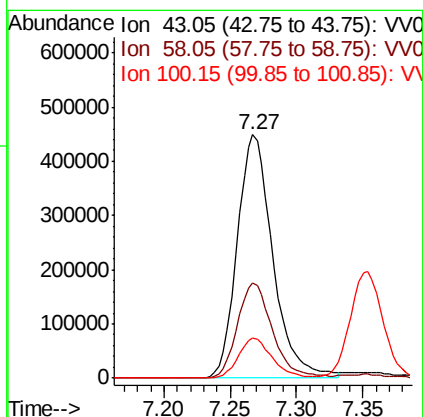
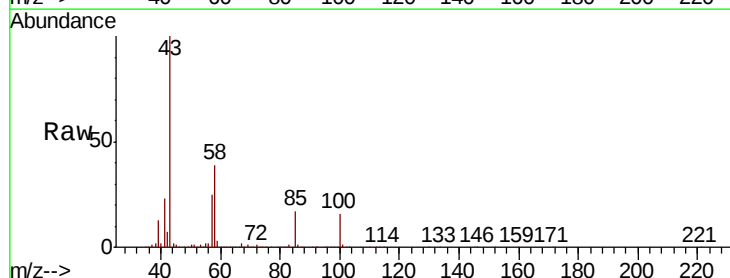
Instrument :  
 MSVOA\_V  
 ClientSampled :

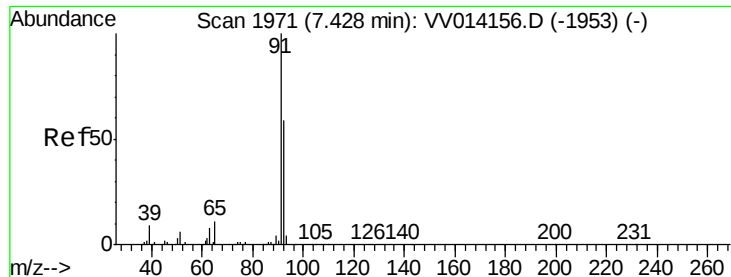
Tot Ion: 75 Resp: 229397  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 22.6 42.0



#40  
 4-Methyl-2-pentanone  
 Concen: 54.329 ug/L  
 RT: 7.27 min Scan# 1921  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

Tgt Ion: 43 Resp: 837817  
 Ion Ratio Lower Upper  
 43 100  
 58 38.7 30.8 46.2  
 100 15.6 12.3 18.5





#42

Toluene

Concen: 5.674 ug/L

RT: 7.42 min Scan# 1970

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

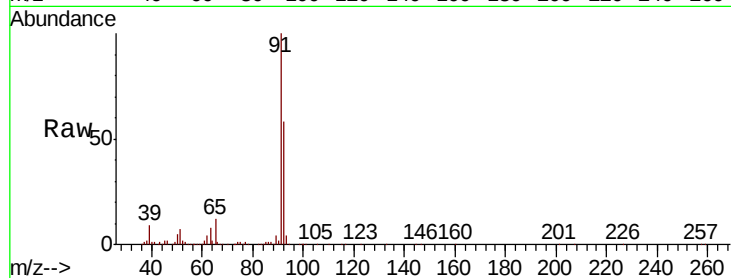
ClientSampleId :

Tot Ion: 91 Resp: 680821

Ion Ratio Lower Upper

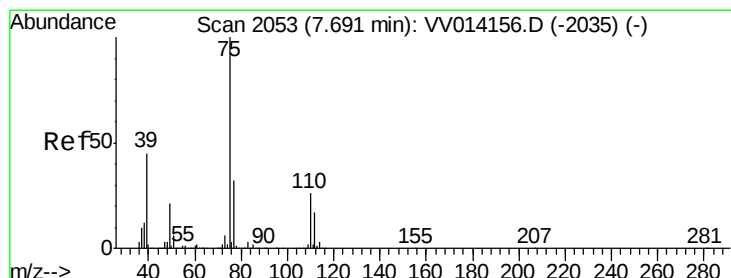
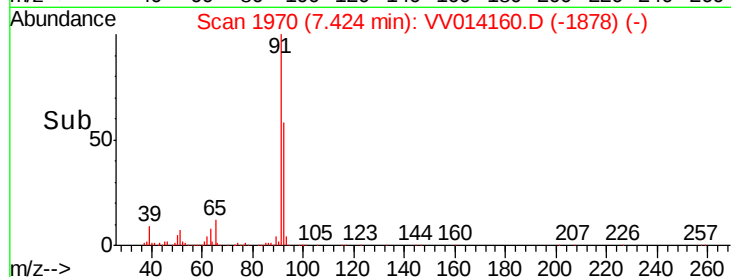
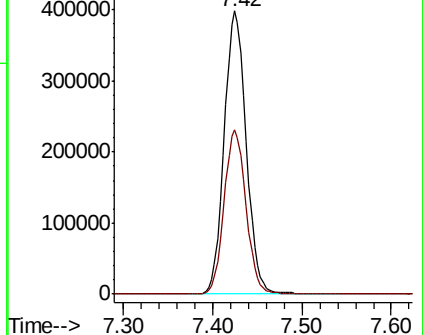
91 100

92 57.9 41.2 76.6



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0



#44

trans-1,3-Dichloropropene

Concen: 5.505 ug/L

RT: 7.69 min Scan# 2052

Delta R.T. -0.00 min

Lab File: VV014160.D

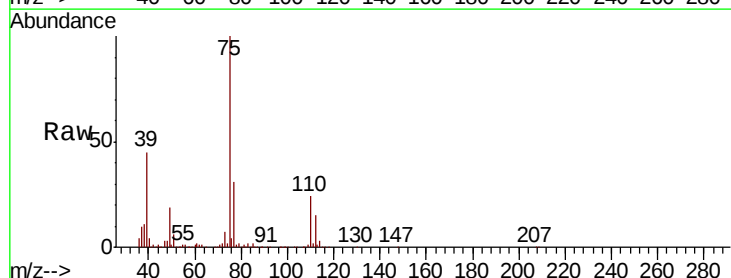
Acq: 23 Dec 2019 15:19

Tgt Ion: 75 Resp: 172579

Ion Ratio Lower Upper

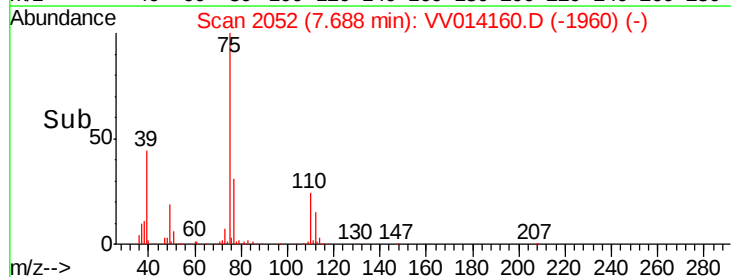
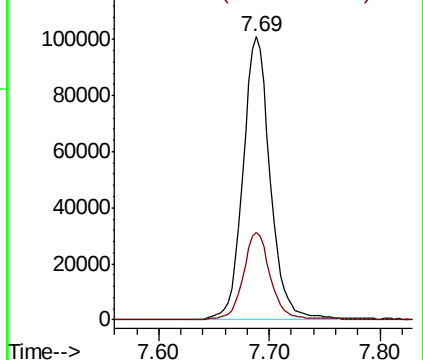
75 100

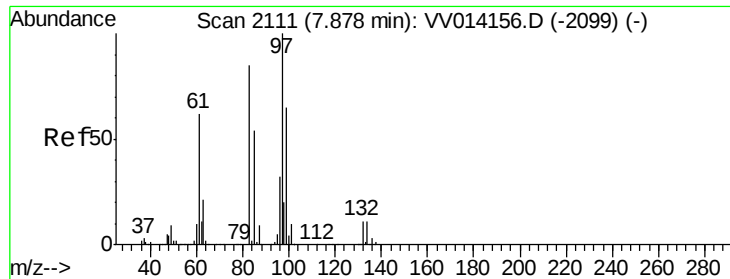
77 31.0 22.8 42.4



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0





#45

1,1,2-Trichloroethane

Concen: 5.111 ug/L

RT: 7.88 min Scan# 2111

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 97 Resp: 100488

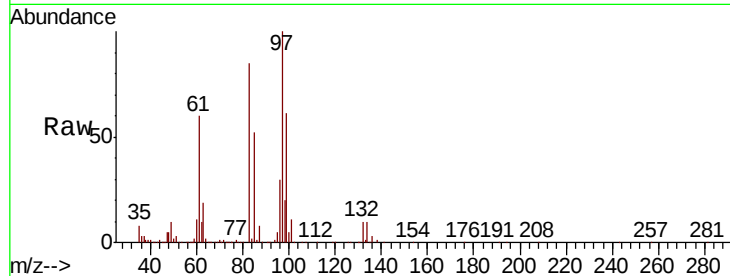
Ion Ratio Lower Upper

97 100

99 60.8 45.8 85.2

83 84.6 59.5 110.5

85 51.9 38.1 70.9

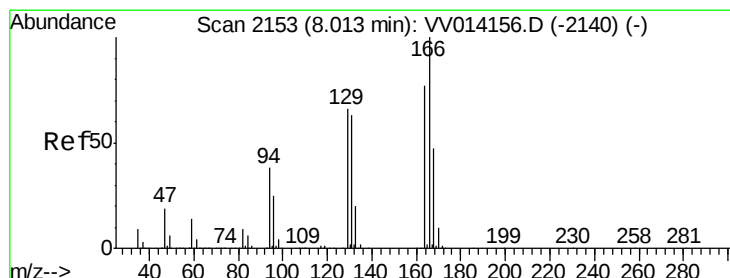
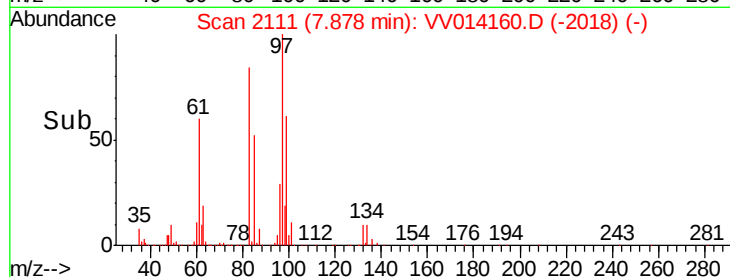
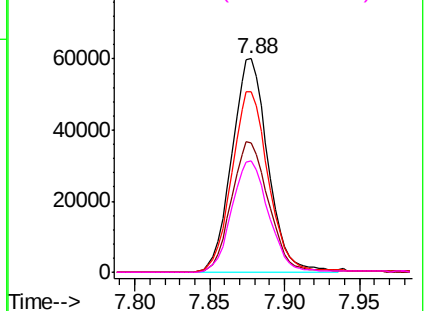


Abundance Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0



#47

Tetrachloroethene

Concen: 5.502 ug/L

RT: 8.01 min Scan# 2153

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Tgt Ion:164 Resp: 149863

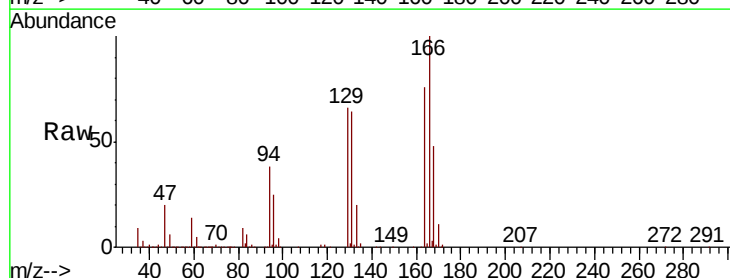
Ion Ratio Lower Upper

164 100

129 86.9 60.1 111.5

131 84.4 57.3 106.5

166 130.9 90.7 168.5

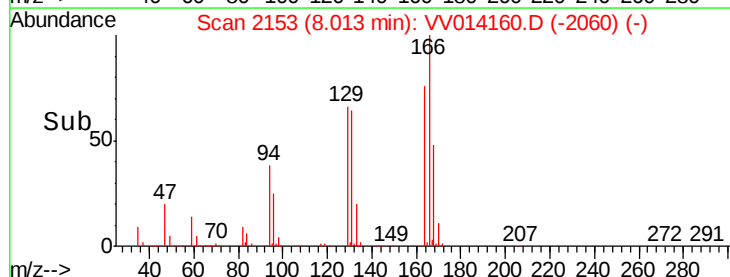
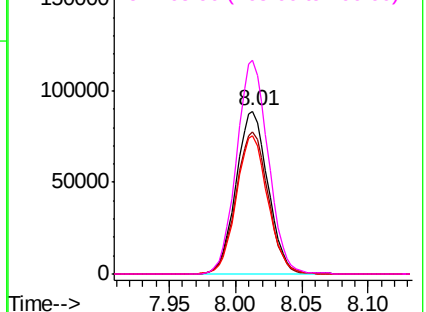


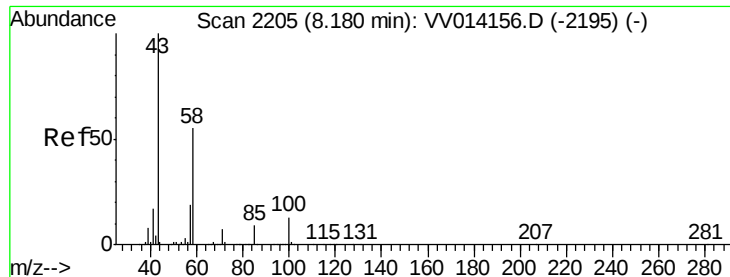
Abundance Ion 163.90 (163.60 to 164.60): V

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

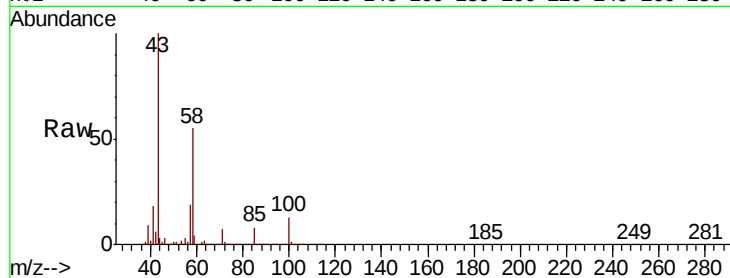




#48  
2-Hexanone  
Concen: 56.302 ug/L  
RT: 8.18 min Scan# 2205  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

Instrument :  
MSVOA\_V  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 53.5  | 43.2  | 64.8  |
| 57      | 19.1  | 14.8  | 22.2  |
| 100     | 12.5  | 9.7   | 14.5  |



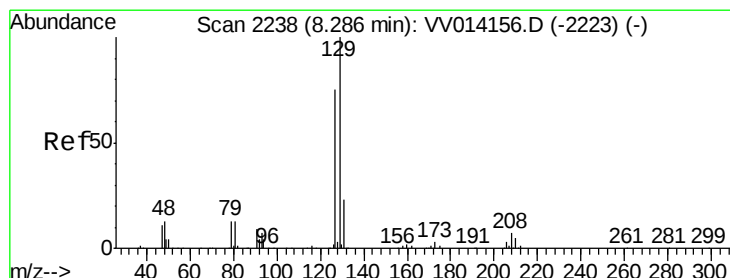
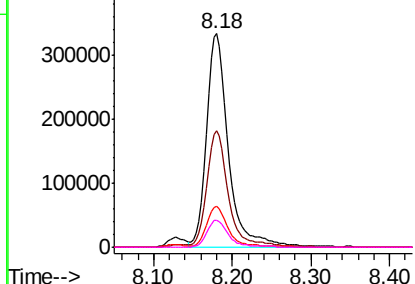
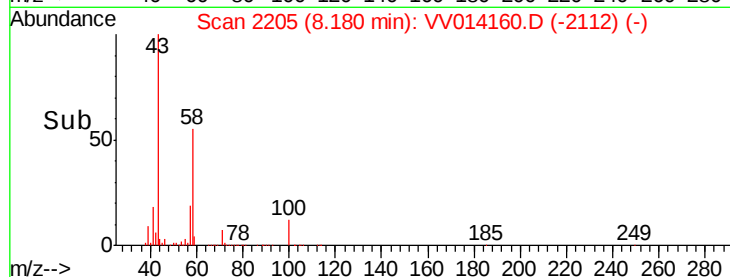
Abundance

Ion 43.05 (42.75 to 43.75): VV014160.D (-2112) (-)

Ion 58.05 (57.75 to 58.75): VV014160.D (-2112) (-)

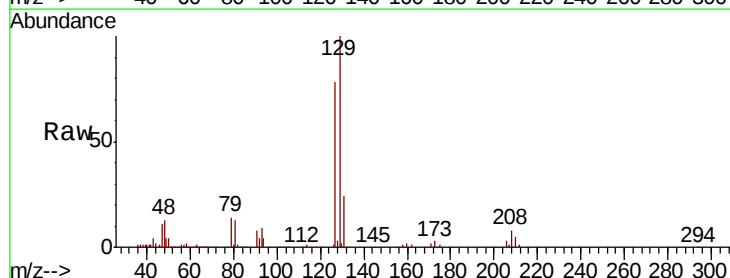
Ion 57.20 (56.90 to 57.90): VV014160.D (-2112) (-)

Ion 100.15 (99.85 to 100.85): VV014160.D (-2112) (-)



#49  
Dibromochloromethane  
Concen: 5.368 ug/L  
RT: 8.28 min Scan# 2237  
Delta R.T. -0.00 min  
Lab File: VV014160.D  
Acq: 23 Dec 2019 15:19

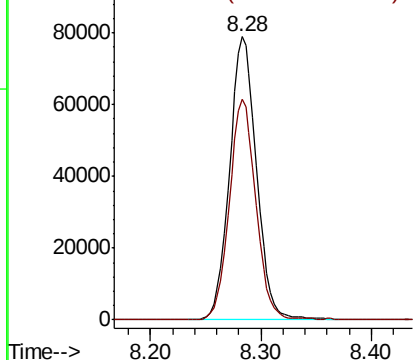
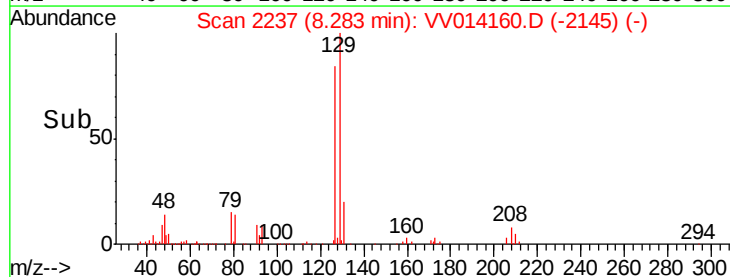
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 77.9  | 52.6  | 97.6  |

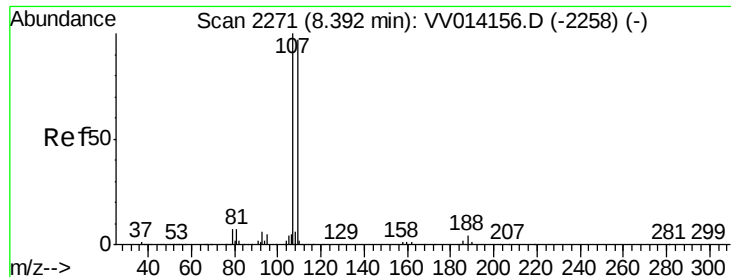


Abundance

Ion 128.95 (128.65 to 129.65): VV014160.D (-2145) (-)

Ion 126.90 (126.60 to 127.60): VV014160.D (-2145) (-)





#50

1,2-Dibromoethane

Concen: 5.327 ug/L

RT: 8.39 min Scan# 2270

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampleId :

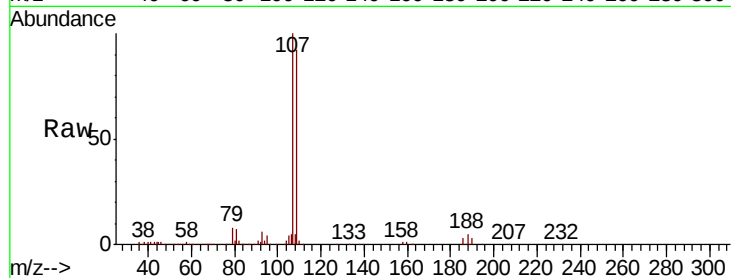
Tot Ion:107 Resp: 96279

Ion Ratio Lower Upper

107 100

109 92.2 68.1 126.5

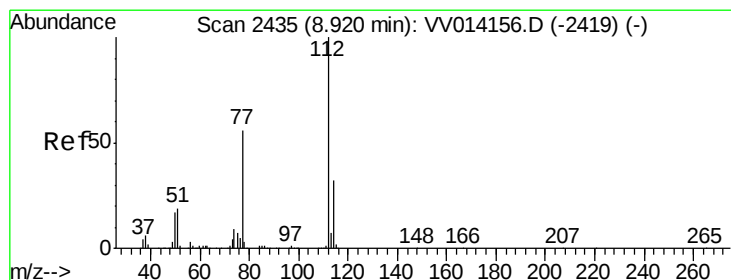
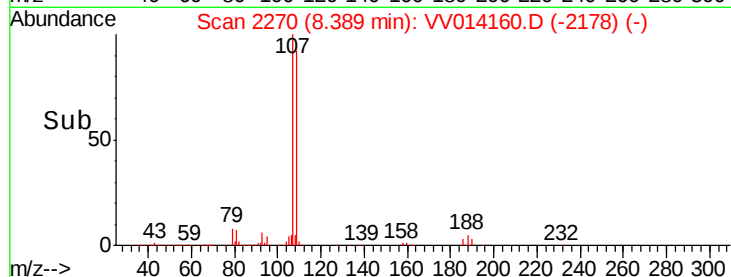
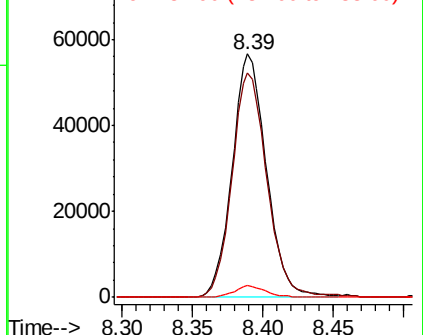
188 4.7 3.2 4.8



Abundance Ion 106.95 (106.65 to 107.65): V

Ion 109.00 (108.70 to 109.70): V

Ion 187.90 (187.60 to 188.60): V



#51

Chlorobenzene

Concen: 5.454 ug/L

RT: 8.92 min Scan# 2435

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

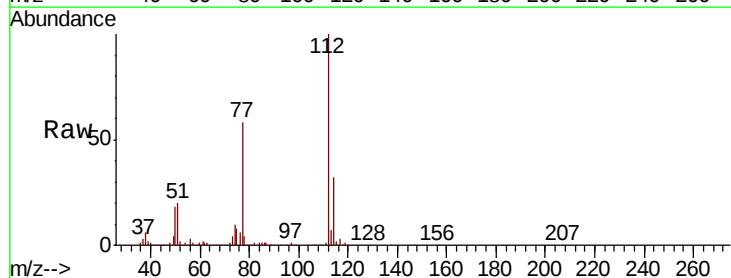
Tgt Ion:112 Resp: 427605

Ion Ratio Lower Upper

112 100

114 32.3 22.3 41.5

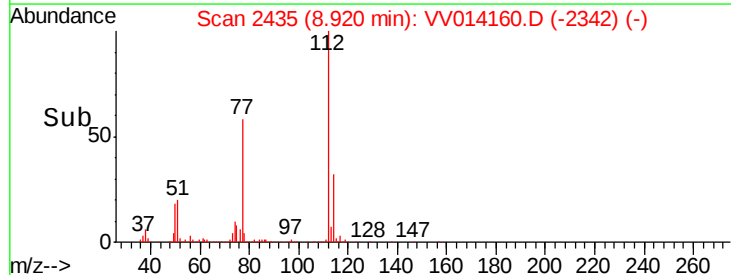
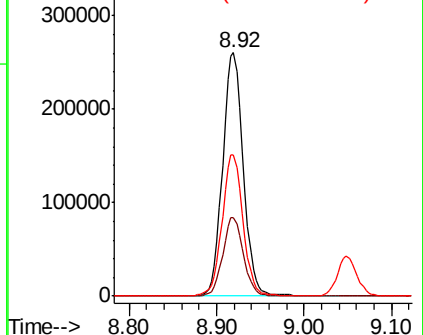
77 58.0 45.1 67.7

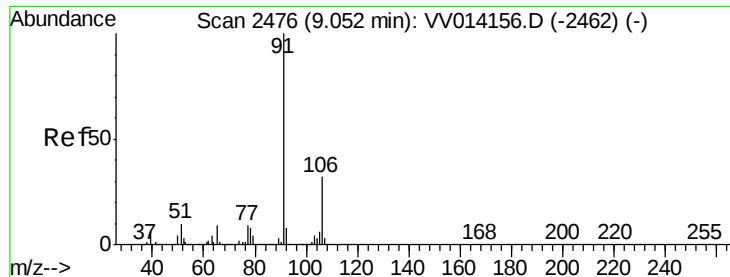


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VV0





#52

Ethylbenzene

Concen: 5.771 ug/L

RT: 9.05 min Scan# 2475

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

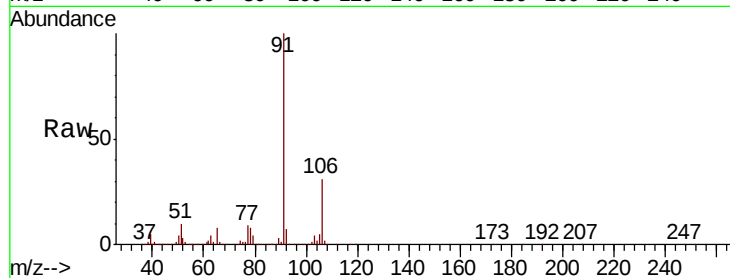
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 91 Resp: 721320

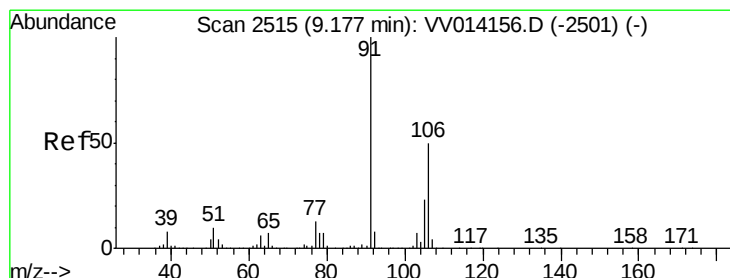
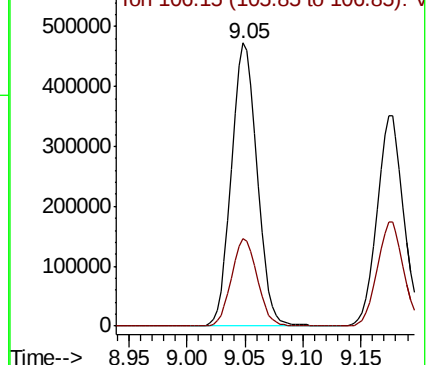
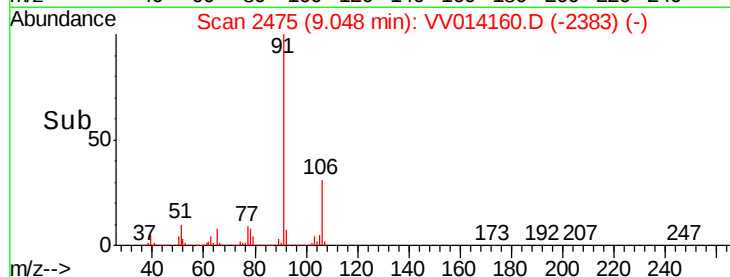
Ion Ratio Lower Upper

91 100

106 30.9 22.0 41.0



Abundance Ion 91.15 (90.85 to 91.85): VV014160.D (-2383) (-)



#53

m,p-xylene

Concen: 5.753 ug/L

RT: 9.18 min Scan# 2515

Delta R.T. -0.00 min

Lab File: VV014160.D

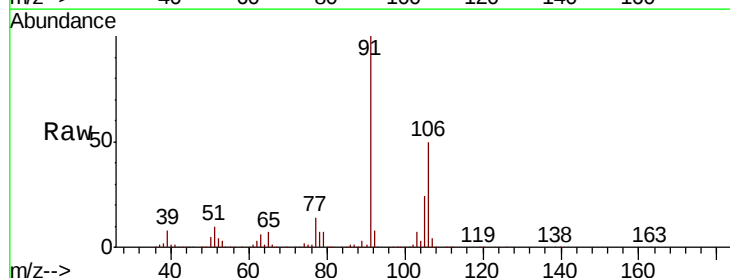
Acq: 23 Dec 2019 15:19

Tgt Ion: 106 Resp: 277888

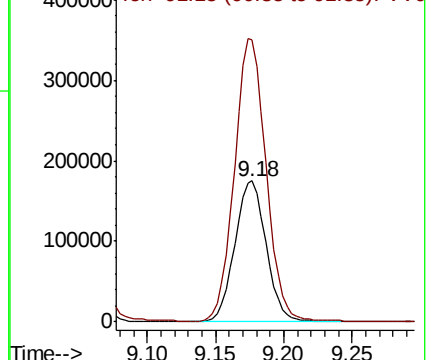
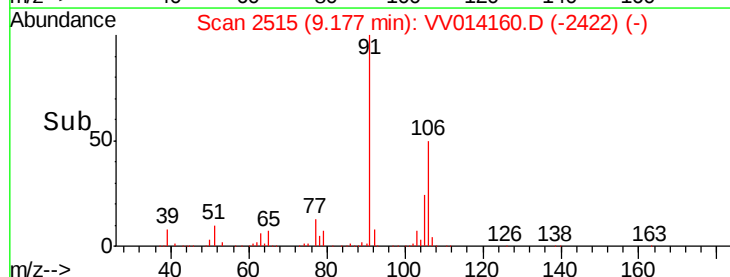
Ion Ratio Lower Upper

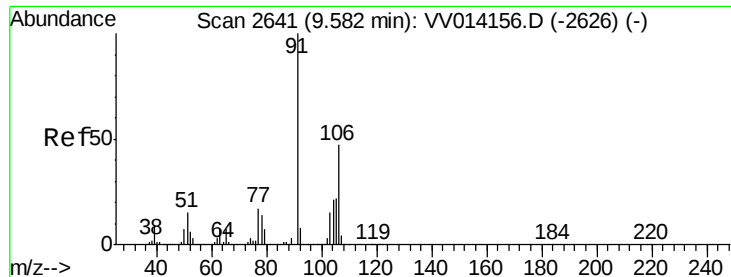
106 100

91 200.6 141.1 262.1



Abundance Ion 106.15 (105.85 to 106.85): VV014160.D (-2422) (-)





#54

o-xylene

Concen: 5.916 ug/L

RT: 9.58 min Scan# 2641

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

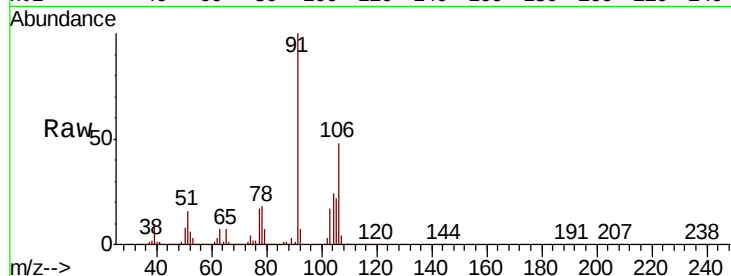
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion:106 Resp: 268716

Ion Ratio Lower Upper

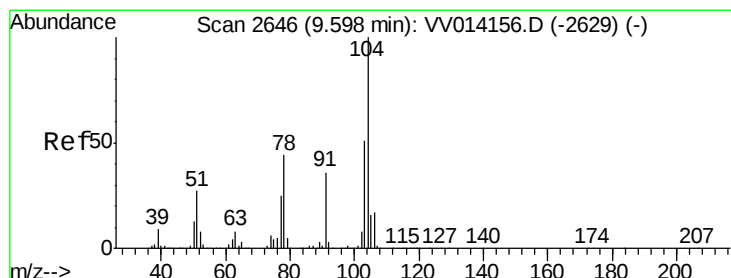
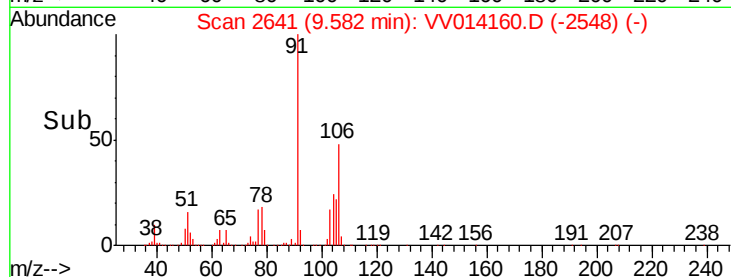
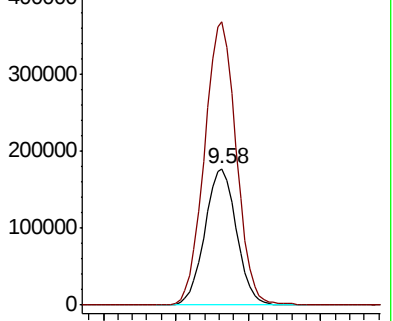
106 100

91 207.6 149.0 276.8



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 5.814 ug/L

RT: 9.60 min Scan# 2646

Delta R.T. -0.00 min

Lab File: VV014160.D

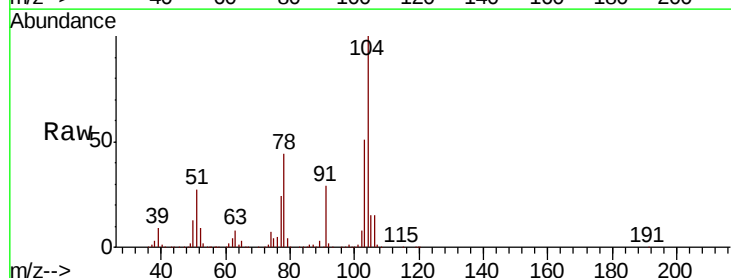
Acq: 23 Dec 2019 15:19

Tgt Ion:104 Resp: 455861

Ion Ratio Lower Upper

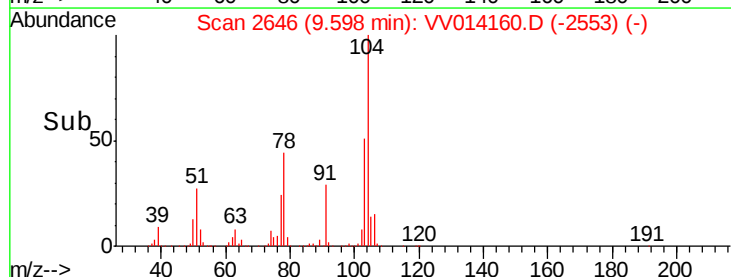
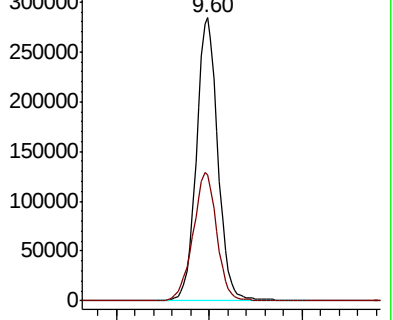
104 100

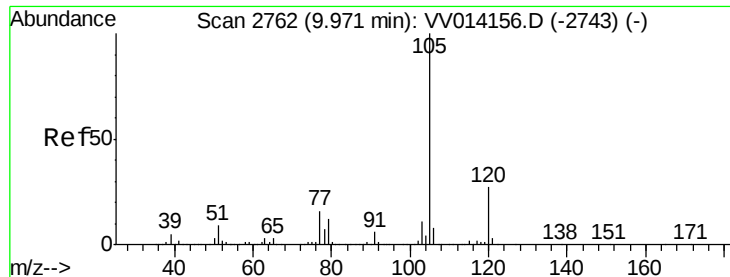
78 44.4 30.5 56.7



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0





#56

Isopropylbenzene

Concen: 5.926 ug/L

RT: 9.97 min Scan# 2761

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :  
MSVOA\_V  
ClientSampleId :

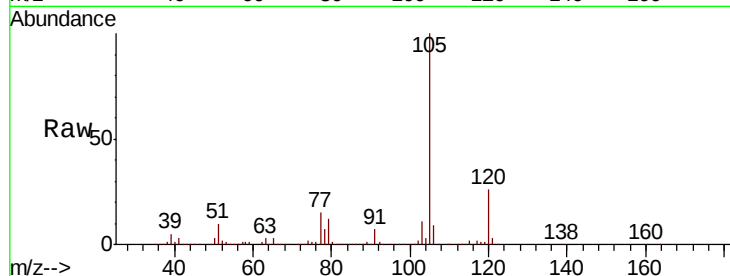
Tot Ion: 105 Resp: 711438

Ion Ratio Lower Upper

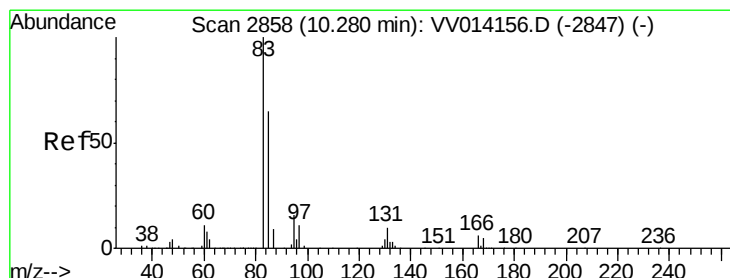
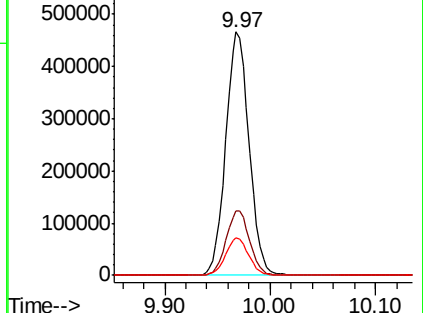
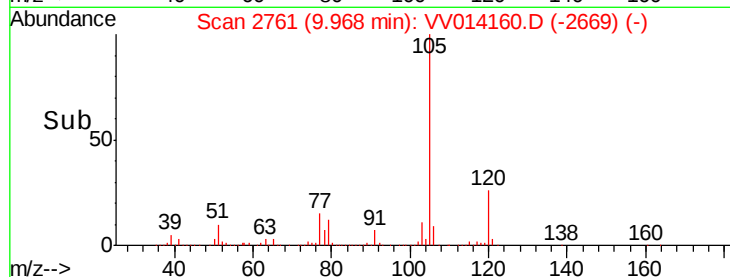
105 100

120 26.7 21.1 31.7

77 15.1 12.4 18.6



Abundance Ion 105.05 (104.75 to 105.75): V  
Ion 120.10 (119.80 to 120.80): V  
Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 5.220 ug/L

RT: 10.28 min Scan# 2858

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

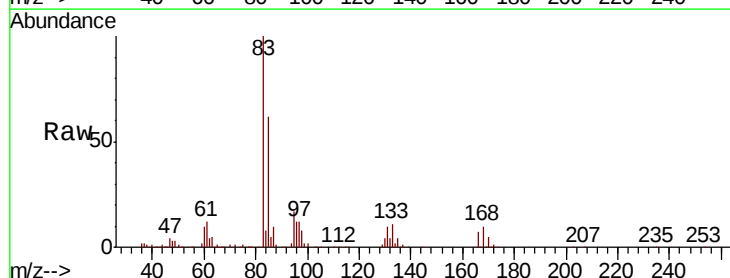
Tgt Ion: 83 Resp: 120233

Ion Ratio Lower Upper

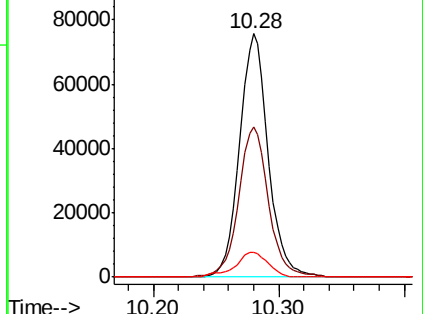
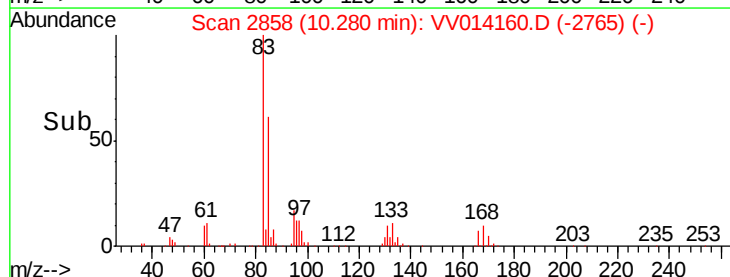
83 100

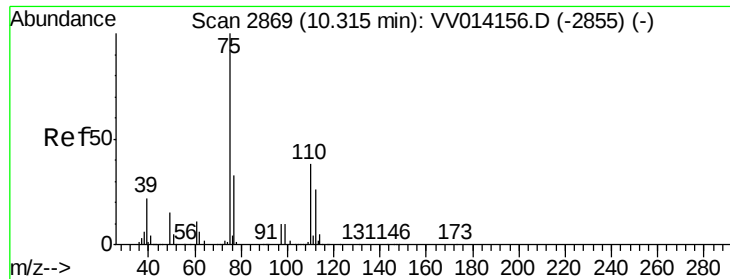
85 61.5 46.3 86.1

131 10.2 8.9 13.3



Abundance Ion 82.95 (82.65 to 83.65): VV0  
Ion 85.00 (84.70 to 85.70): VV0  
Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 5.189 ug/L

RT: 10.31 min Scan# 2868

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

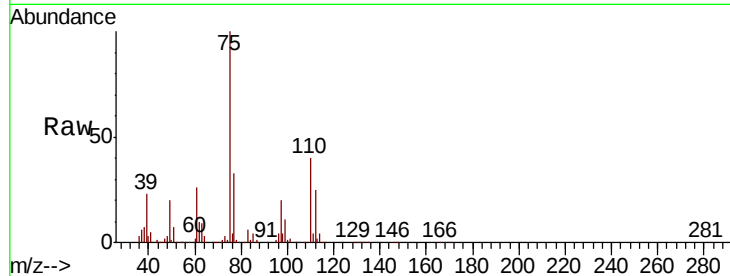
ClientSampleId :

Tot Ion: 75 Resp: 88617

Ion Ratio Lower Upper

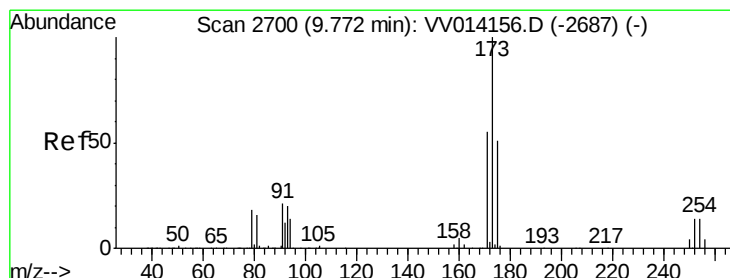
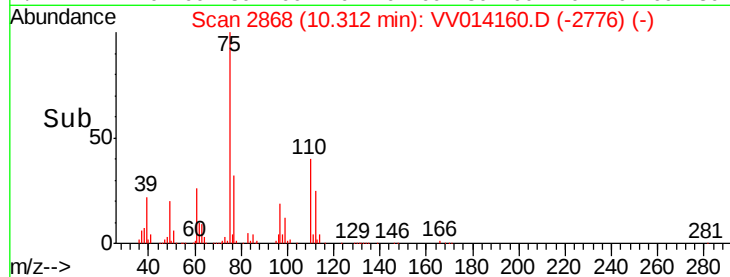
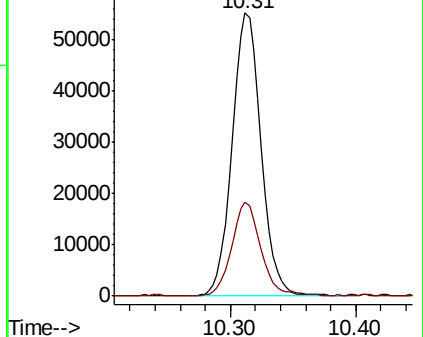
75 100

77 32.2 25.9 38.9



Abundance Ion 75.00 (74.70 to 75.70): VV014160.D (-2776) (-)

Ion 77.00 (76.70 to 77.70): VV014160.D (-2776) (-)



#61

Bromoform

Concen: 5.056 ug/L

RT: 9.77 min Scan# 2700

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

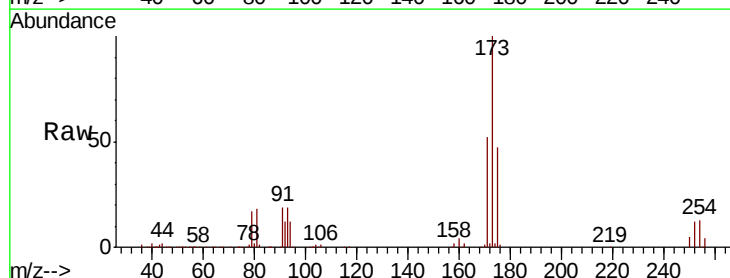
Tgt Ion: 173 Resp: 76785

Ion Ratio Lower Upper

173 100

175 47.5 39.3 58.9

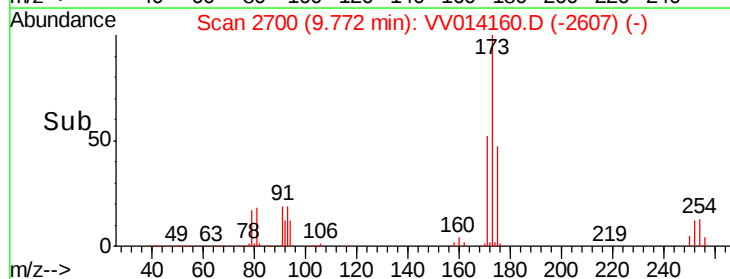
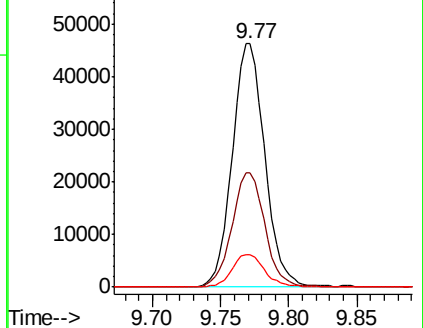
254 13.3 10.3 15.5

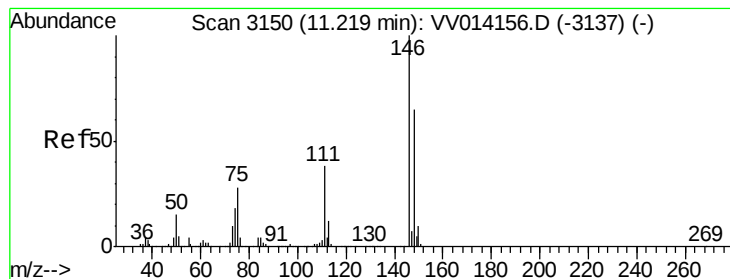


Abundance Ion 172.90 (172.60 to 173.60): VV014160.D (-2607) (-)

Ion 174.90 (174.60 to 175.60): VV014160.D (-2607) (-)

Ion 253.75 (253.45 to 254.45): VV014160.D (-2607) (-)





#62

1,3-Dichlorobenzene

Concen: 5.625 ug/L

RT: 11.22 min Scan# 3151

Delta R.T. 0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampleId :

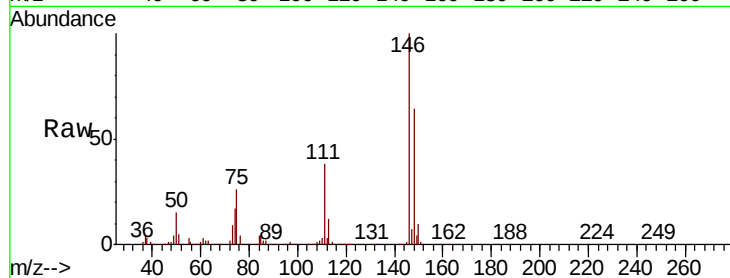
Tot Ion:146 Resp: 361681

Ion Ratio Lower Upper

146 100

111 38.0 26.5 49.1

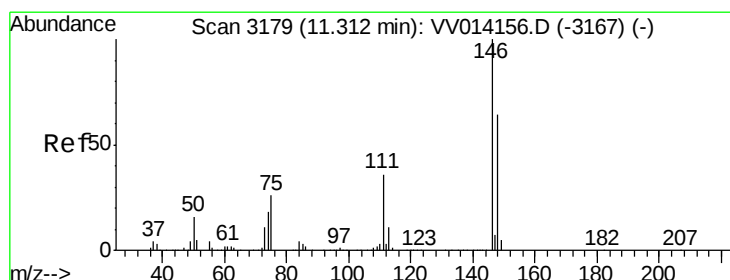
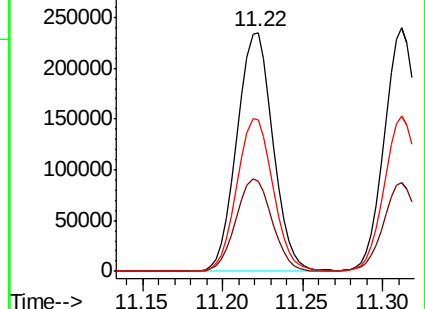
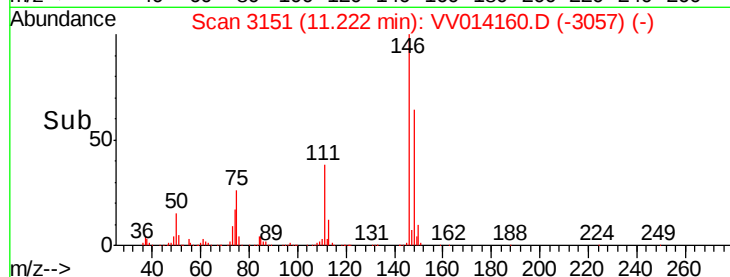
148 63.5 45.7 84.9



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 5.569 ug/L

RT: 11.31 min Scan# 3179

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

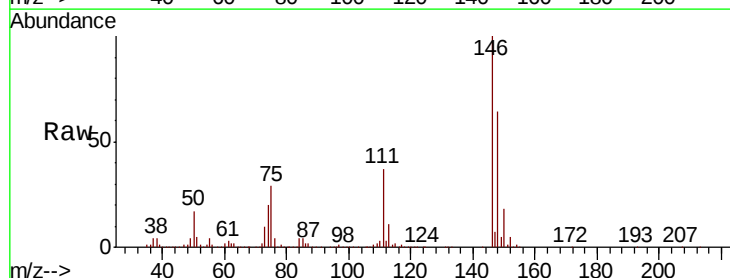
Tgt Ion:146 Resp: 362618

Ion Ratio Lower Upper

146 100

111 36.5 25.7 47.7

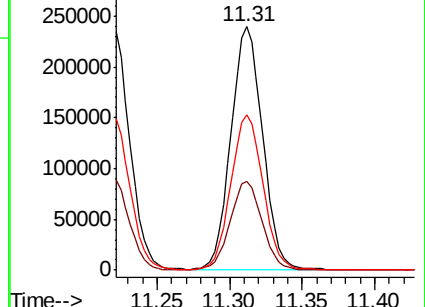
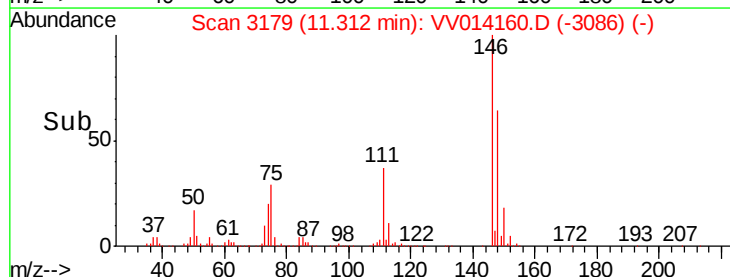
148 63.5 45.1 83.7

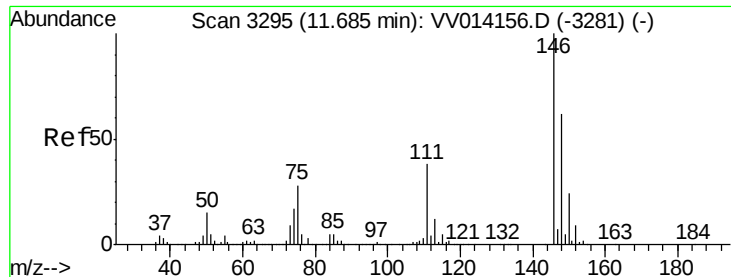


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 5.468 ug/L

RT: 11.68 min Scan# 3294

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampleId :

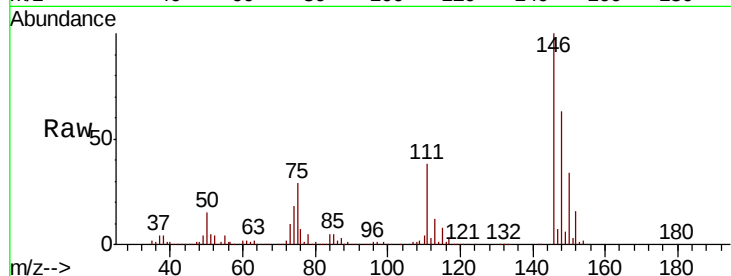
Tot Ion:146 Resp: 327369

Ion Ratio Lower Upper

146 100

111 38.4 30.7 46.1

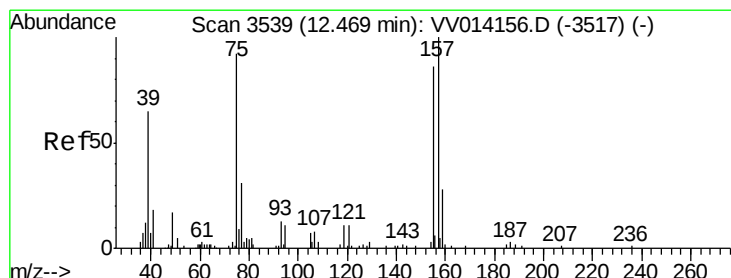
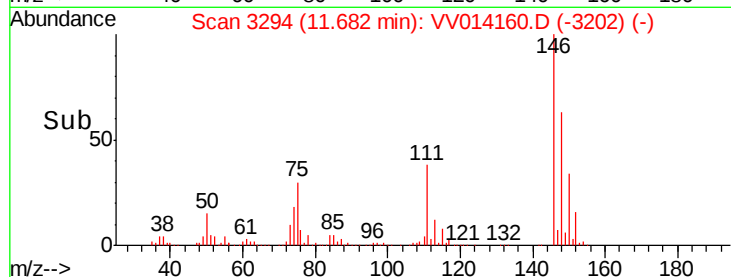
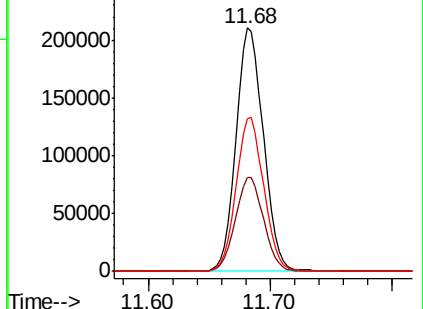
148 62.7 49.4 74.2



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 4.857 ug/L

RT: 12.47 min Scan# 3539

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

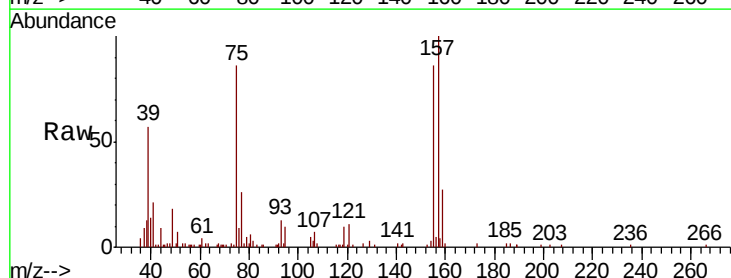
Tgt Ion: 75 Resp: 17831

Ion Ratio Lower Upper

75 100

155 100.5 75.0 112.6

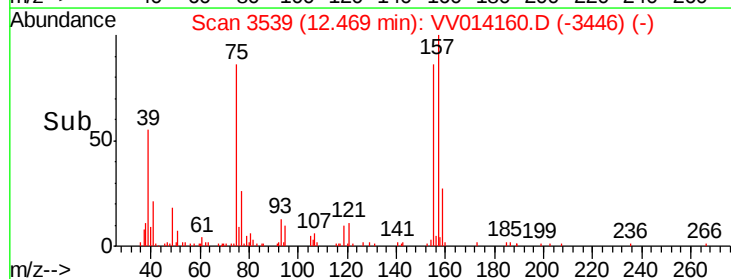
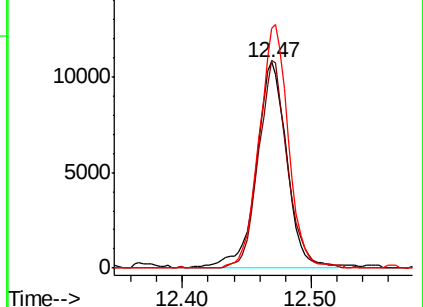
157 116.3 87.4 131.0

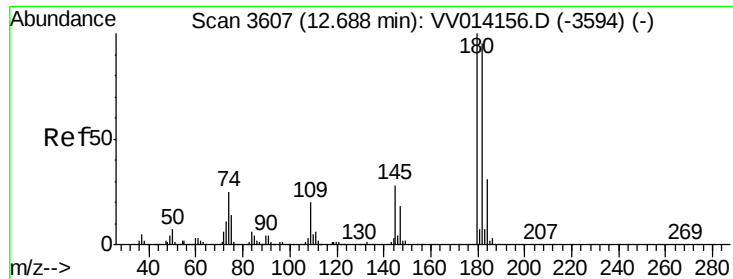


Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

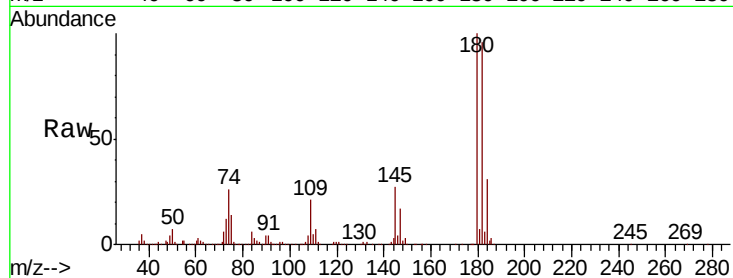




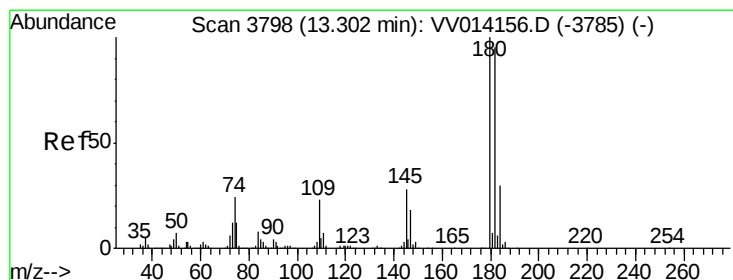
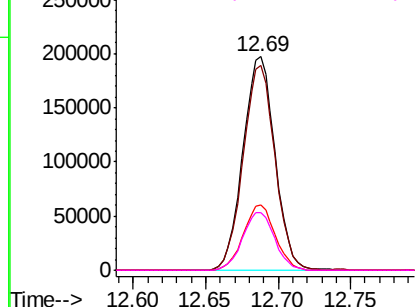
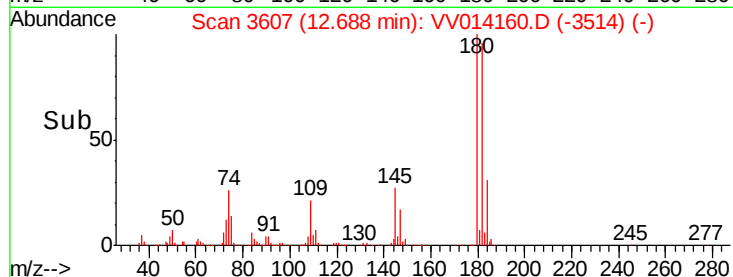
#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.714 ug/L  
 RT: 12.69 min Scan# 3607  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

Instrument :  
 MSVOA\_V  
 ClientSampleId :

|             |       |            |
|-------------|-------|------------|
| Tot Ion:180 | Resp: | 302158     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 95.4  | 75.9 113.9 |
| 184         | 30.6  | 24.4 36.6  |
| 145         | 27.1  | 21.8 32.6  |

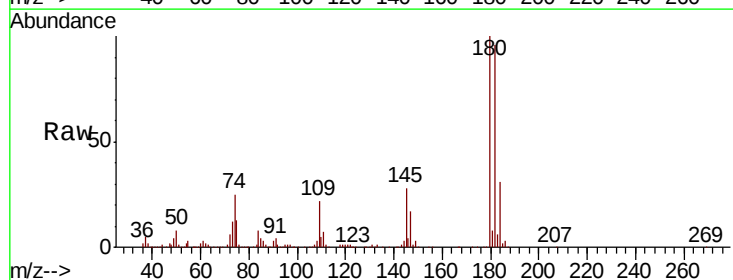


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

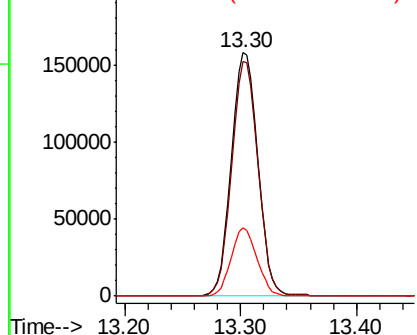
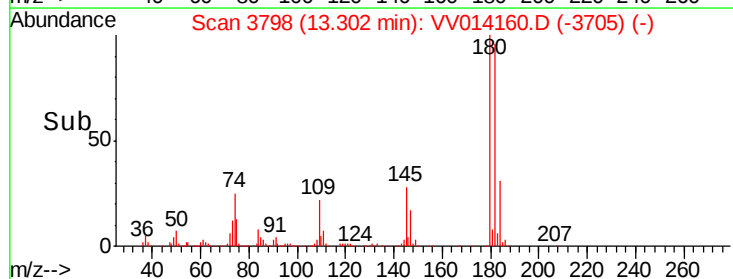


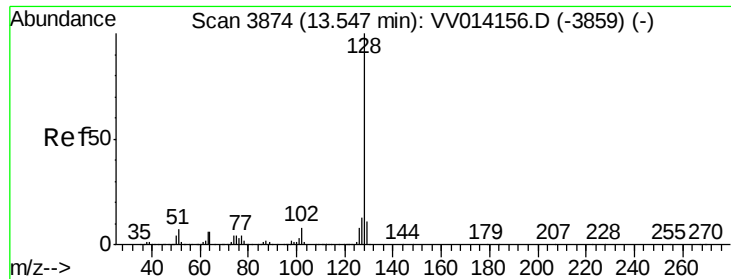
#68  
 1,2,4-trichlorobenzene  
 Concen: 5.755 ug/L  
 RT: 13.30 min Scan# 3798  
 Delta R.T. -0.00 min  
 Lab File: VV014160.D  
 Acq: 23 Dec 2019 15:19

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:180 | Resp: | 248207     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 95.7  | 76.9 115.3 |
| 145         | 27.4  | 22.0 33.0  |



Abundance Ion 179.90 (179.60 to 180.60): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 5.585 ug/L

RT: 13.55 min Scan# 3874

Delta R.T. -0.00 min

Lab File: VV014160.D

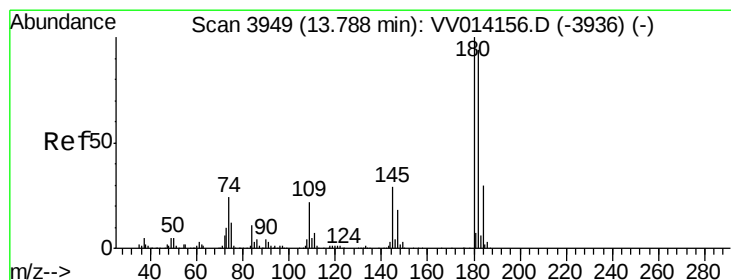
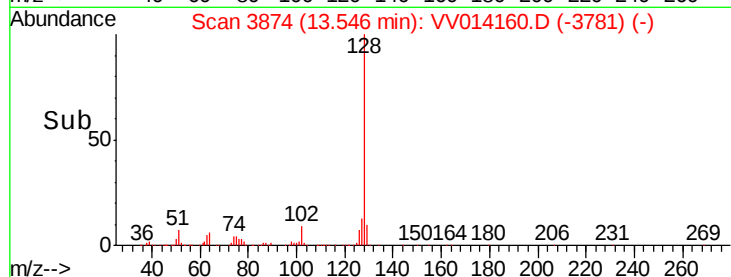
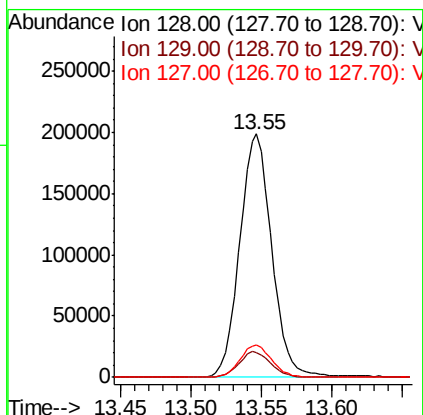
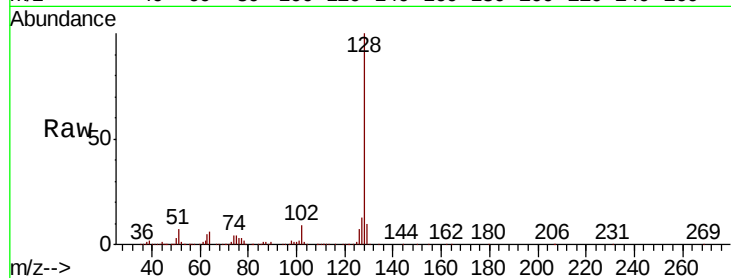
Acq: 23 Dec 2019 15:19

Instrument :

MSVOA\_V

ClientSampled :

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:128 | Resp: | 316104    |
| Ion Ratio   | Lower | Upper     |
| 128         | 100   |           |
| 129         | 10.4  | 8.6 12.8  |
| 127         | 13.3  | 10.8 16.2 |



#70

1,2,3-Trichlorobenzene

Concen: 5.720 ug/L

RT: 13.79 min Scan# 3949

Delta R.T. -0.00 min

Lab File: VV014160.D

Acq: 23 Dec 2019 15:19

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:180 | Resp: | 227577     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 94.7  | 75.4 113.0 |
| 145         | 29.3  | 23.4 35.2  |

