

Data File : VW009174.D  
Acq On : 14 Mar 2019 17:11  
Operator : SY/VA  
Sample : VSTDCCC025  
Misc : 5.00G/10ML/MSVOA\_W/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTD02507

Quant Time: Mar 15 06:50:49 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM031419S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 14 16:36:23 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.84  | 114  | 514607   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 480017   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 245137   | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 168507   | 27.40    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 109.60% |
| 7) Chloroethane-d5             | 2.89   | 69    | 171141   | 23.78    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 95.12%  |
| 10) 1,1-Dichloroethene-d2      | 4.02   | 63    | 340237   | 25.60    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 102.40% |
| 20) 2-Butanone-d5              | 7.07   | 46    | 122769   | 48.27    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 96.54%  |
| 24) Chloroform-d               | 7.65   | 84    | 345572   | 24.61    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 98.44%  |
| 26) 1,2-Dichloroethane-d4      | 8.30   | 65    | 204344   | 24.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 96.60%  |
| 29) Benzene-d6                 | 8.27   | 84    | 668911   | 25.27    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 101.08% |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 200329   | 25.20    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 100.80% |
| 37) Toluene-d8                 | 10.32  | 98    | 626842   | 25.61    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 102.44% |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 100197   | 25.09    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 100.36% |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 97301    | 50.53    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 101.06% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 192673   | 24.61    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 98.44%  |
| 61) 1,2-Dichlorobenzene-d4     | 13.85  | 152   | 234916   | 24.99    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 99.96%  |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 2.01 | 85  | 162584 | 23.983 ug/L | 91     |
| 3) Chloromethane               | 2.22 | 50  | 187029 | 26.004 ug/L | 98     |
| 5) Vinyl chloride              | 2.37 | 62  | 206056 | 27.834 ug/L | 98     |
| 6) Bromomethane                | 2.78 | 94  | 159324 | 25.688 ug/L | 98     |
| 8) Chloroethane                | 2.93 | 64  | 152579 | 24.911 ug/L | 94     |
| 9) Trichlorofluoromethane      | 3.26 | 101 | 164209 | 28.081 ug/L | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101 | 160656 | 23.790 ug/L | 95     |
| 12) 1,1-Dichloroethene         | 4.03 | 96  | 166157 | 26.220 ug/L | 94     |
| 13) Acetone                    | 4.12 | 43  | 115562 | 55.410 ug/L | 99     |
| 14) Carbon disulfide           | 4.38 | 76  | 482866 | 28.313 ug/L | 100    |
| 15) Methyl Acetate             | 4.67 | 43  | 101163 | 24.691 ug/L | 98     |
| 16) Methylene chloride         | 4.91 | 84  | 166130 | 22.138 ug/L | 97     |
| 17) Methyl tert-butyl Ether    | 5.42 | 73  | 222529 | 24.818 ug/L | 98     |
| 18) trans-1,2-Dichloroethene   | 5.41 | 96  | 173296 | 26.011 ug/L | 97     |
| 19) 1,1-Dichloroethane         | 6.21 | 63  | 313662 | 25.820 ug/L | 98     |
| 21) 2-Butanone                 | 7.16 | 43  | 152793 | 53.059 ug/L | 97     |
| 22) cis-1,2-Dichloroethene     | 7.16 | 96  | 187455 | 25.973 ug/L | 98     |

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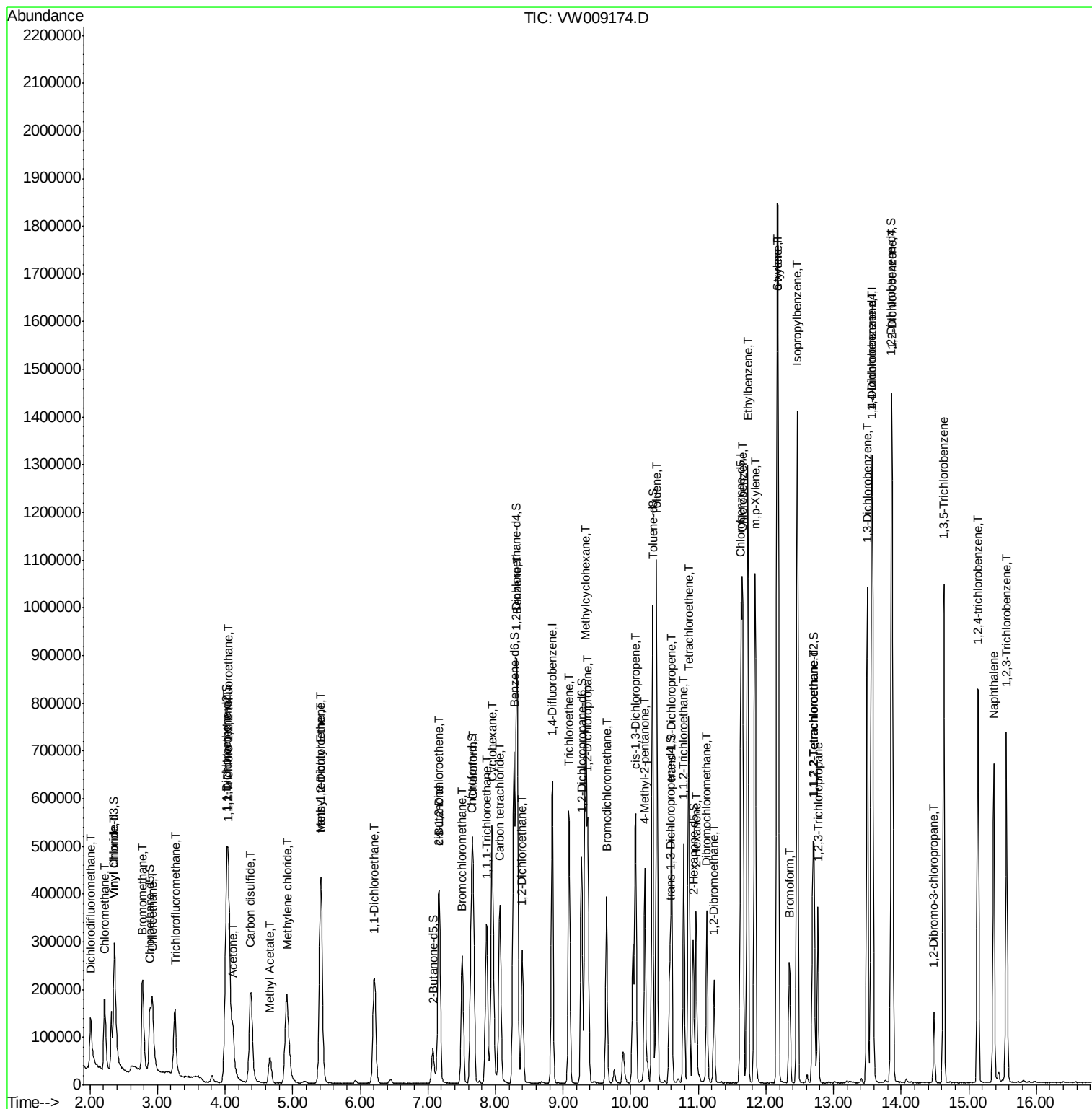
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 7.51  | 128  | 86892    | 25.101 | ug/L   | 99       |
| 25) Chloroform                 | 7.67  | 83   | 324417   | 25.501 | ug/L   | 99       |
| 27) 1,2-Dichloroethane         | 8.40  | 62   | 239812   | 25.283 | ug/L   | 100      |
| 30) Cyclohexane                | 7.95  | 56   | 300366   | 27.552 | ug/L   | 100      |
| 31) 1,1,1-Trichloroethane      | 7.87  | 97   | 256046   | 26.707 | ug/L   | 99       |
| 32) Carbon tetrachloride       | 8.06  | 117  | 262076   | 27.094 | ug/L   | 97       |
| 34) Benzene                    | 8.32  | 78   | 700014   | 26.643 | ug/L   | 100      |
| 35) Trichloroethene            | 9.09  | 95   | 182182   | 26.023 | ug/L   | 99       |
| 36) Methylcyclohexane          | 9.34  | 83   | 329418   | 27.197 | ug/L   | 100      |
| 40) 1,2-Dichloropropane        | 9.37  | 63   | 175001   | 25.957 | ug/L   | 98       |
| 41) Bromodichloromethane       | 9.64  | 83   | 242708   | 25.982 | ug/L   | 99       |
| 42) cis-1,3-Dichloropropene    | 10.07 | 75   | 290077   | 26.417 | ug/L   | 100      |
| 43) 4-Methyl-2-pentanone       | 10.21 | 43   | 302365   | 49.493 | ug/L   | 100      |
| 44) Toluene                    | 10.38 | 91   | 761098   | 26.495 | ug/L   | 96       |
| 45) trans-1,3-Dichloropropene  | 10.60 | 75   | 249014   | 26.069 | ug/L   | 100      |
| 46) 1,1,2-Trichloroethane      | 10.79 | 97   | 137251   | 25.518 | ug/L   | 98       |
| 47) Tetrachloroethene          | 10.86 | 164  | 154142   | 26.058 | ug/L   | 99       |
| 49) 2-Hexanone                 | 10.97 | 43   | 224665   | 52.214 | ug/L   | 99       |
| 50) Dibromochloromethane       | 11.13 | 129  | 171304   | 25.800 | ug/L   | 96       |
| 51) 1,2-Dibromoethane          | 11.24 | 107  | 138730   | 25.442 | ug/L   | 95       |
| 52) Chlorobenzene              | 11.66 | 112  | 481642   | 26.141 | ug/L   | 98       |
| 53) Ethylbenzene               | 11.73 | 91   | 868268   | 26.884 | ug/L   | 98       |
| 54) m,p-Xylene                 | 11.84 | 106  | 329761   | 26.876 | ug/L   | 95       |
| 55) o-xylene                   | 12.16 | 106  | 319429   | 26.685 | ug/L   | 97       |
| 56) Styrene                    | 12.18 | 104  | 546660   | 26.766 | ug/L   | 97       |
| 57) Isopropylbenzene           | 12.46 | 105  | 873396   | 27.238 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 183895   | 25.343 | ug/L # | 98       |
| 59) 1,2,3-Trichloropropane     | 12.77 | 75   | 137021   | 25.445 | ug/L   | 98       |
| 62) Bromoform                  | 12.35 | 173  | 107713   | 26.006 | ug/L   | 99       |
| 63) 1,3-Dichlorobenzene        | 13.50 | 146  | 384678   | 26.330 | ug/L   | 99       |
| 64) 1,4-Dichlorobenzene        | 13.58 | 146  | 394632   | 26.126 | ug/L   | 96       |
| 65) 1,2-Dichlorobenzene        | 13.87 | 146  | 365863   | 26.259 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 14.49 | 75   | 33278    | 24.371 | ug/L   | 97       |
| 67) 1,3,5-Trichlorobenzene     | 14.63 | 180  | 301724   | 26.478 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 15.14 | 180  | 253148   | 26.447 | ug/L   | 99       |
| 69) Naphthalene                | 15.37 | 128  | 529338   | 26.674 | ug/L   | 100      |
| 70) 1,2,3-Trichlorobenzene     | 15.56 | 180  | 235410   | 26.258 | ug/L   | 99       |

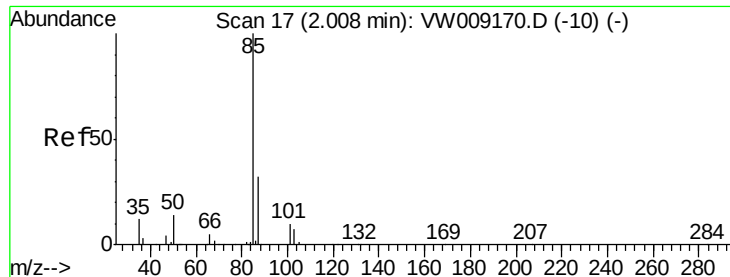
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 23.983 ug/L

RT: 2.01 min Scan# 17

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

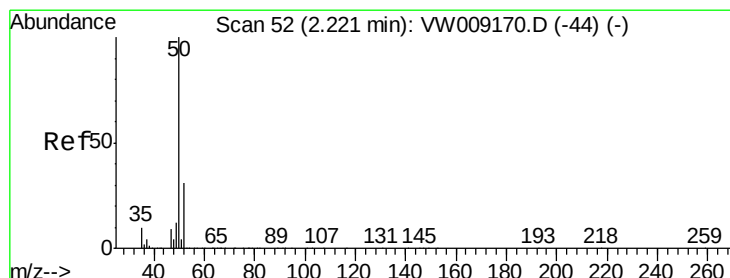
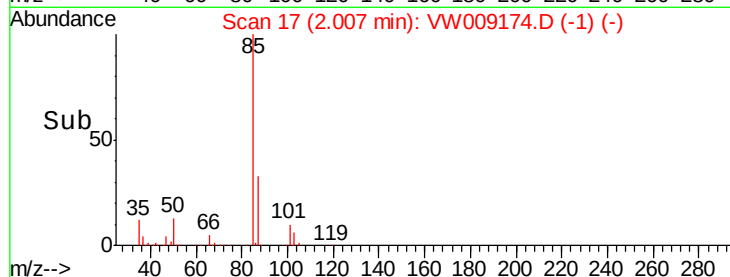
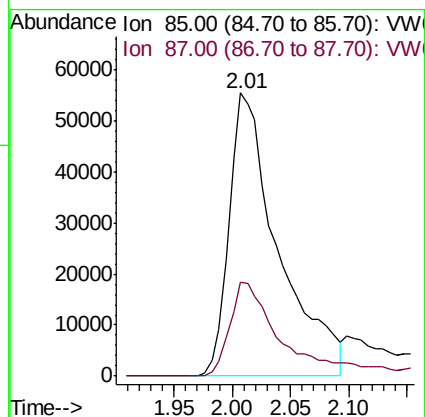
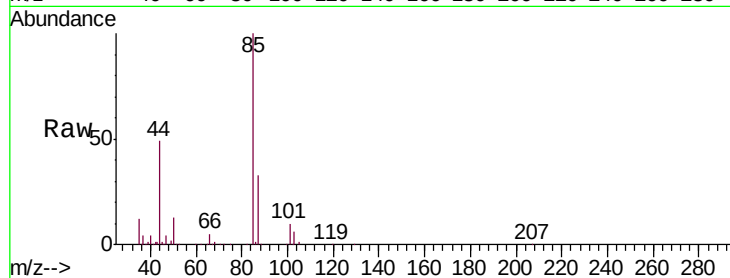
VSTD02507

Tgt Ion: 85 Resp: 162584

Ion Ratio Lower Upper

85 100

87 32.5 19.5 36.3



#3

Chloromethane

Concen: 26.004 ug/L

RT: 2.22 min Scan# 52

Delta R.T. -0.00 min

Lab File: VW009174.D

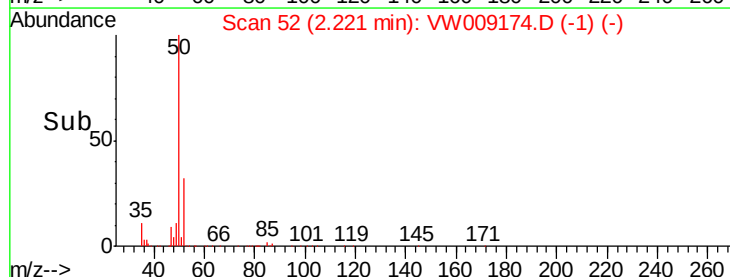
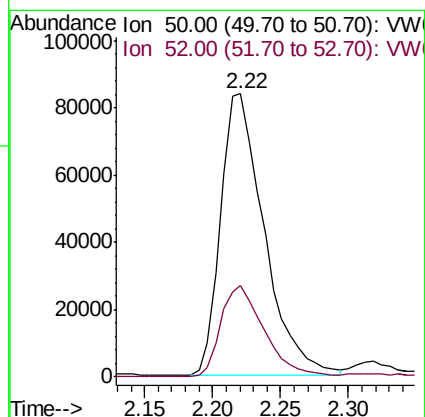
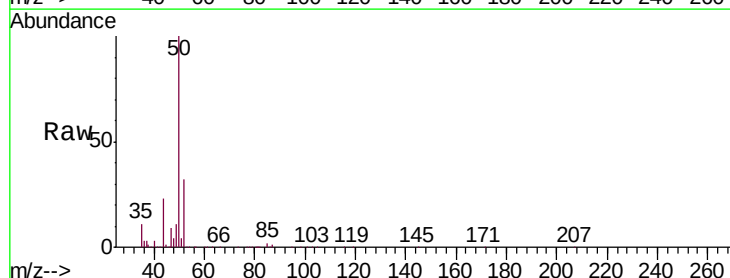
Acq: 14 Mar 2019 17:11

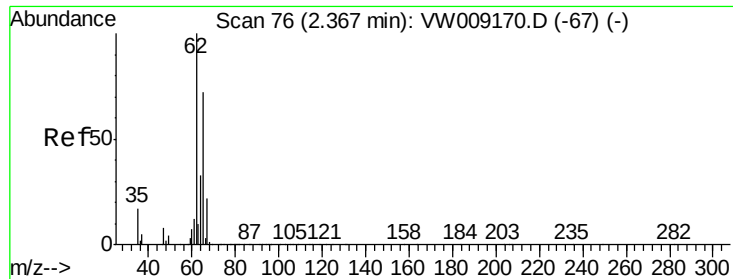
Tgt Ion: 50 Resp: 187029

Ion Ratio Lower Upper

50 100

52 32.1 21.6 40.2





#5

Vinyl chloride

Concen: 27.834 ug/L

RT: 2.37 min Scan# 76

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

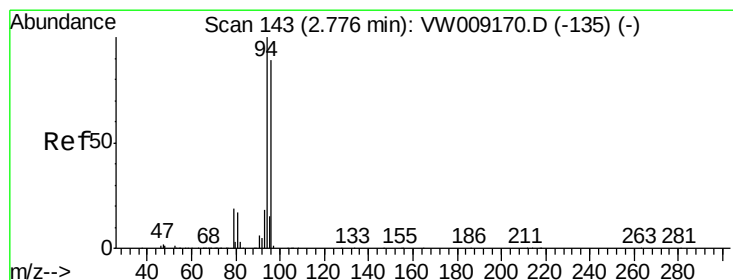
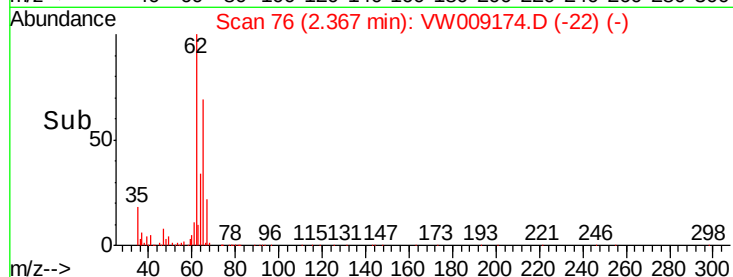
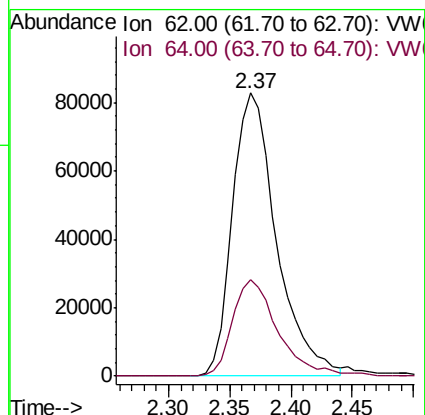
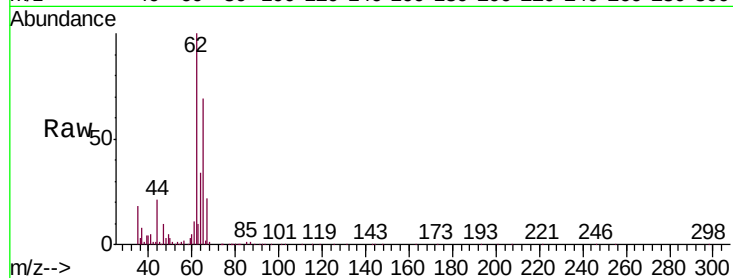
VSTD02507

Tgt Ion: 62 Resp: 206056

Ion Ratio Lower Upper

62 100

64 34.1 23.0 42.6



#6

Bromomethane

Concen: 25.688 ug/L

RT: 2.78 min Scan# 144

Delta R.T. 0.01 min

Lab File: VW009174.D

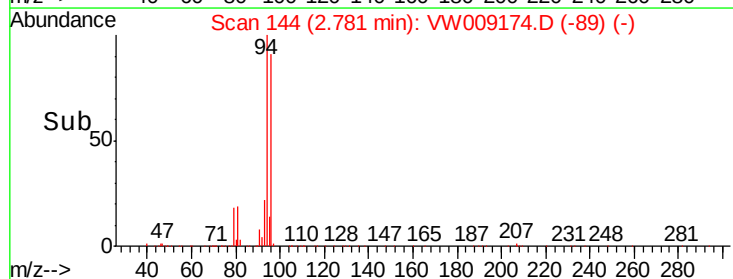
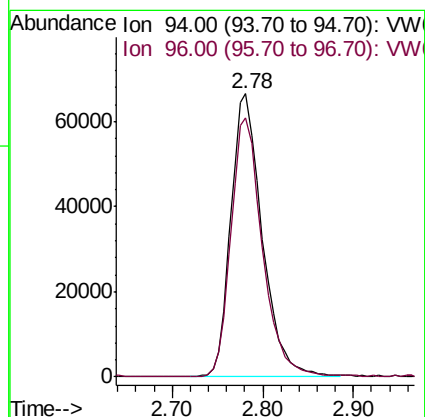
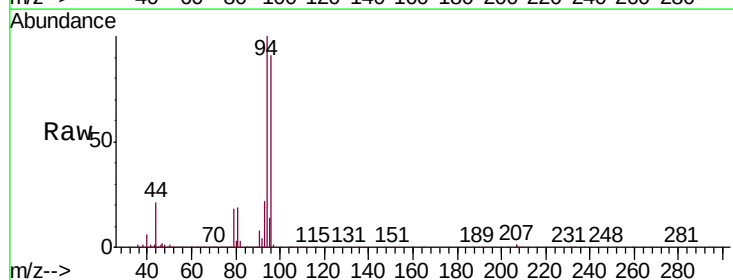
Acq: 14 Mar 2019 17:11

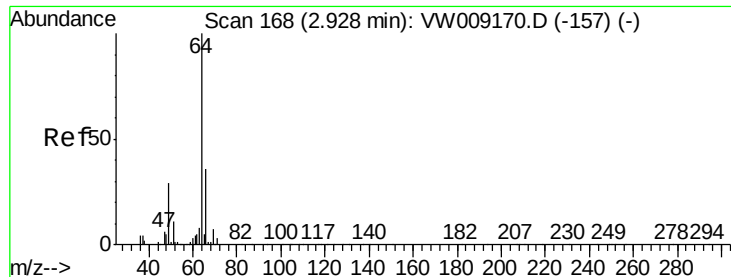
Tgt Ion: 94 Resp: 159324

Ion Ratio Lower Upper

94 100

96 92.2 9.4 178.4





#8

Chloroethane

Concen: 24.911 ug/L

RT: 2.93 min Scan# 168

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

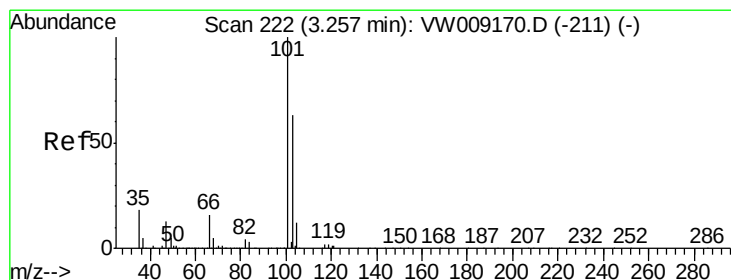
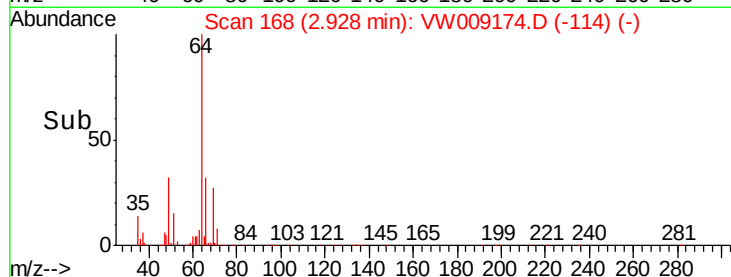
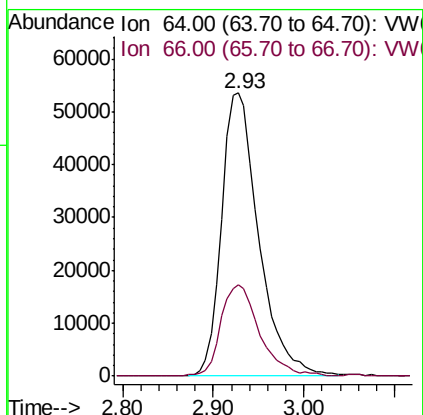
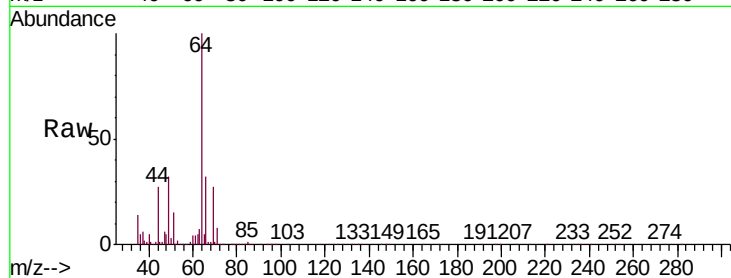
VSTD02507

Tgt Ion: 64 Resp: 152579

Ion Ratio Lower Upper

64 100

66 32.3 25.1 46.7



#9

Trichlorofluoromethane

Concen: 28.081 ug/L

RT: 3.26 min Scan# 222

Delta R.T. -0.00 min

Lab File: VW009174.D

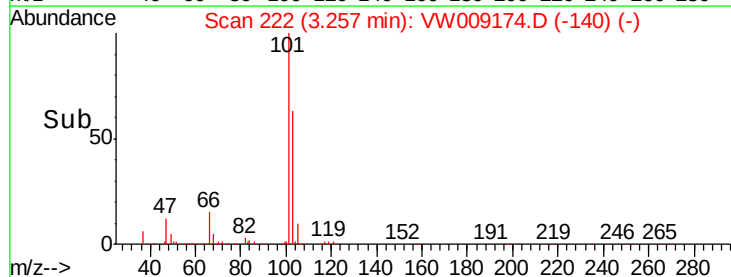
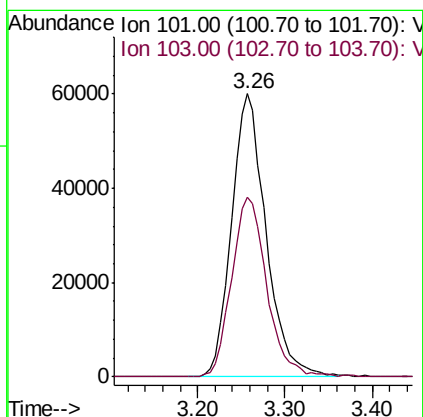
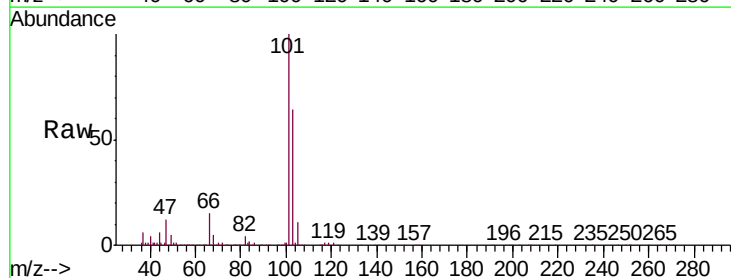
Acq: 14 Mar 2019 17:11

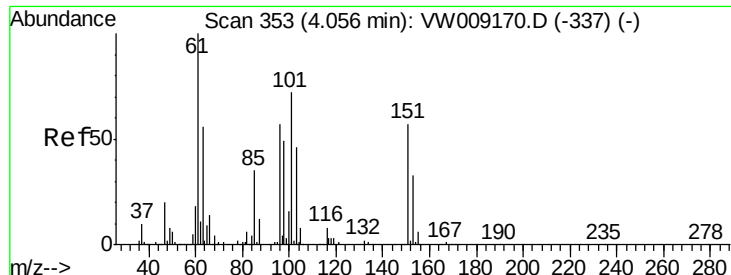
Tgt Ion: 101 Resp: 164209

Ion Ratio Lower Upper

101 100

103 64.1 45.0 83.6





#11

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

Concen: 23.790 ug/L

RT: 4.06 min Scan# 353

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampled :

VSTD02507

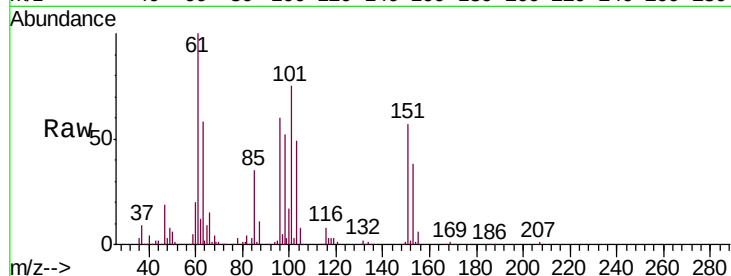
Tgt Ion:101 Resp: 160656

Ion Ratio Lower Upper

101 100

85 47.6 32.6 48.8

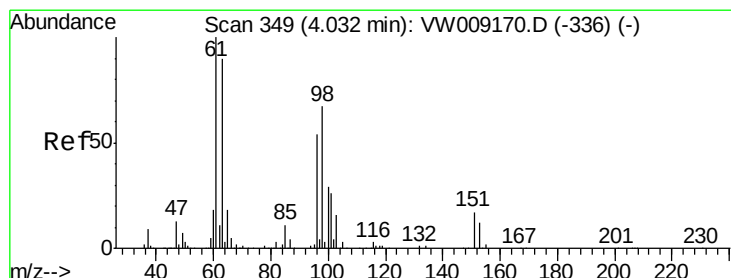
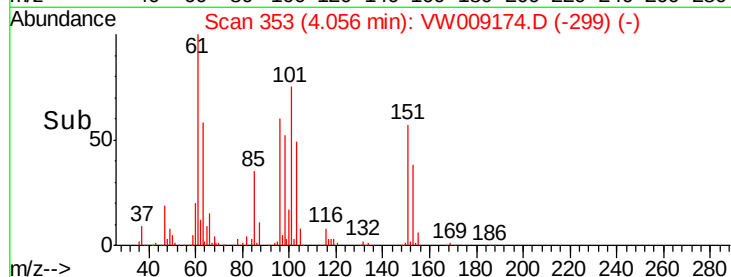
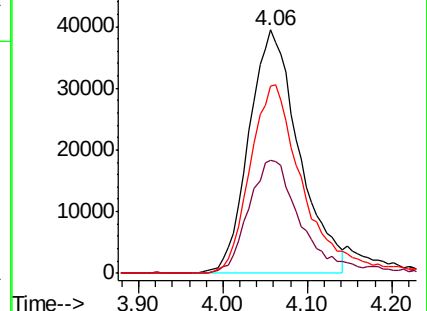
151 80.4 63.3 94.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VW

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 26.220 ug/L

RT: 4.03 min Scan# 349

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

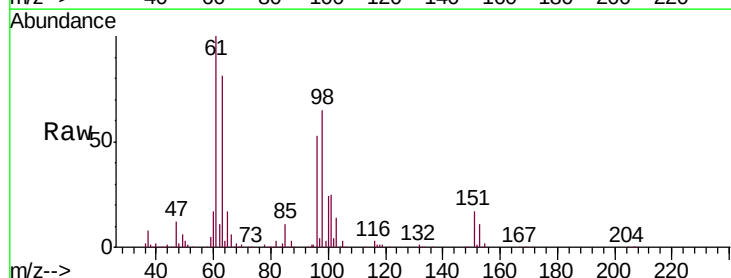
Tgt Ion: 96 Resp: 166157

Ion Ratio Lower Upper

96 100

61 187.1 129.4 240.2

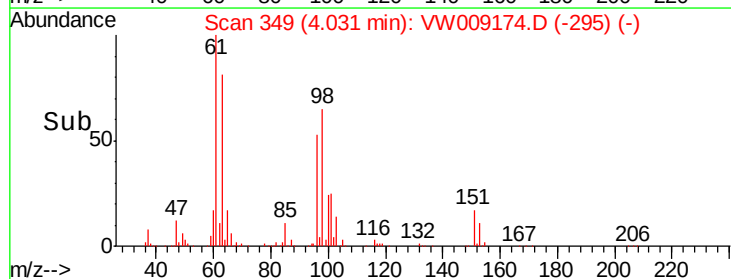
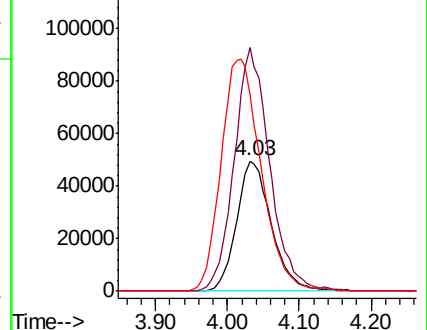
63 151.1 116.8 217.0



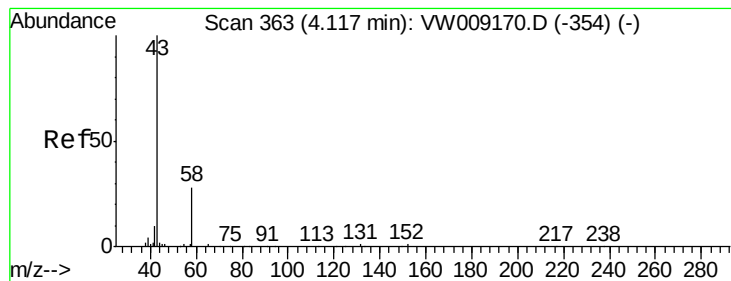
Abundance Ion 96.00 (95.70 to 96.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 63.00 (62.70 to 63.70): VW







#13

Acetone

Concen: 55.410 ug/L

RT: 4.12 min Scan# 363

Delta R.T. -0.00 min

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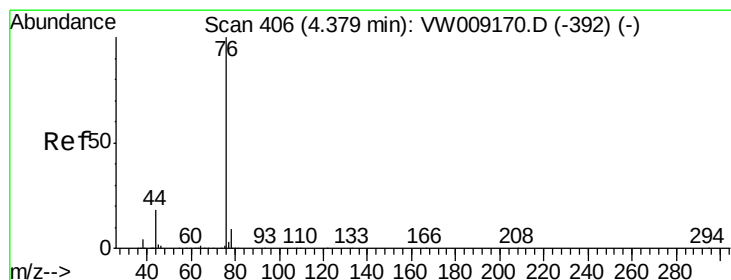
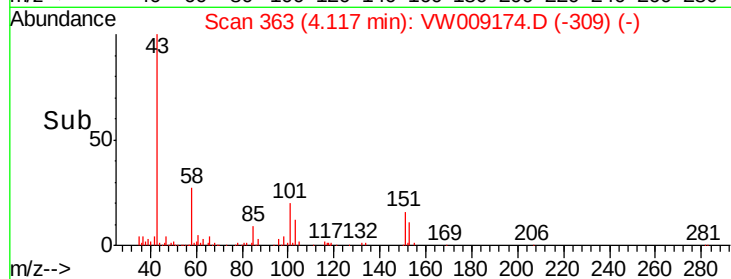
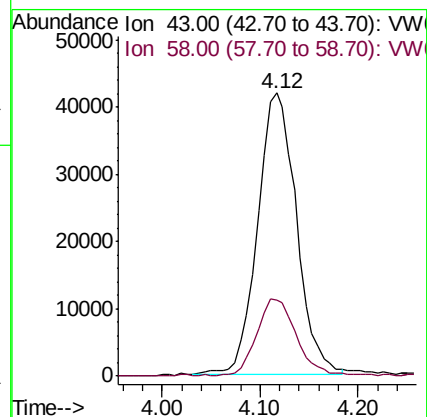
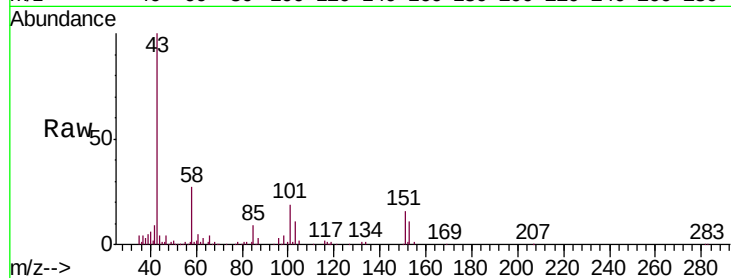
VSTD02507

Tgt Ion: 43 Resp: 115562

Ion Ratio Lower Upper

43 100

58 27.6 0.0 56.2



#14

Carbon disulfide

Concen: 28.313 ug/L

RT: 4.38 min Scan# 406

Delta R.T. -0.00 min

Lab File: VW009174.D

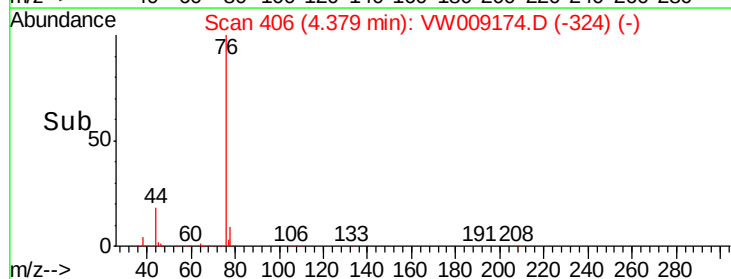
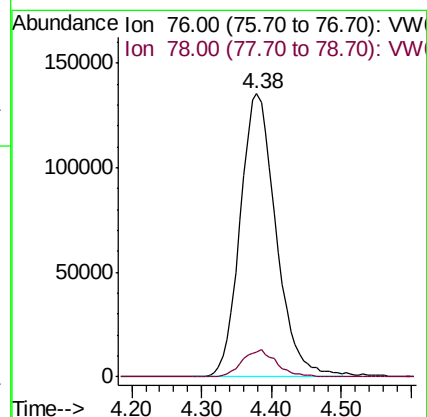
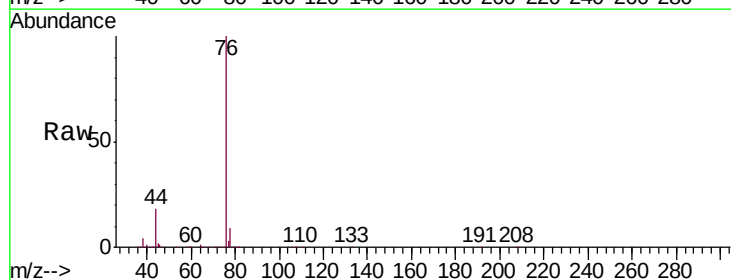
Acq: 14 Mar 2019 17:11

Tgt Ion: 76 Resp: 482866

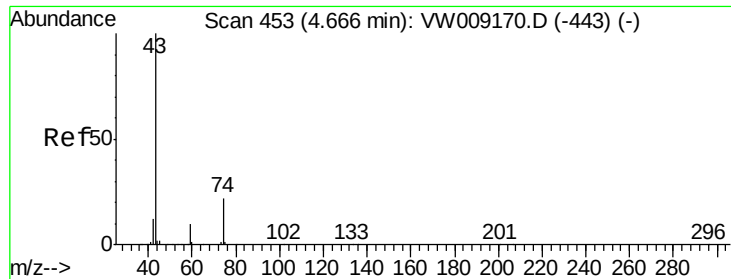
Ion Ratio Lower Upper

76 100

78 8.9 7.3 10.9



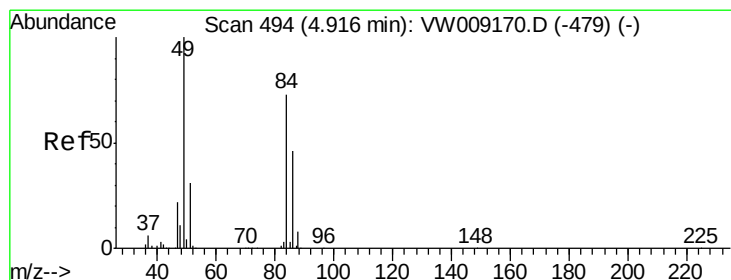
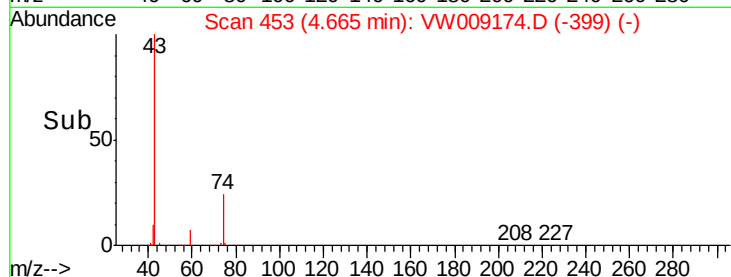
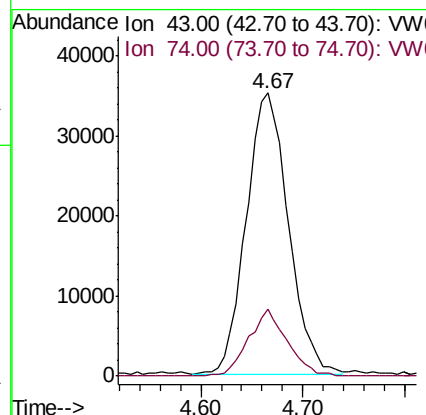
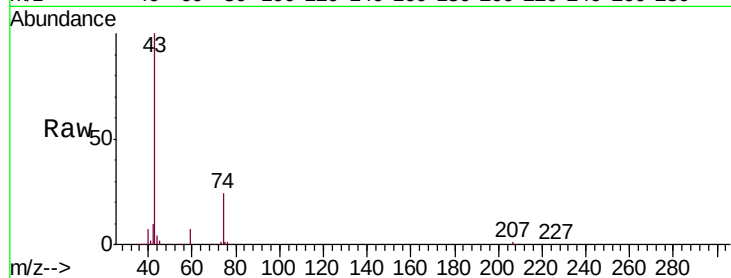




#15  
Methyl Acetate  
Concen: 24.691 ug/L  
RT: 4.67 min Scan# 453  
Delta R.T. -0.00 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

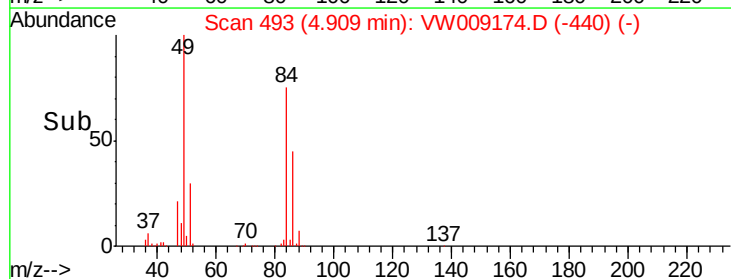
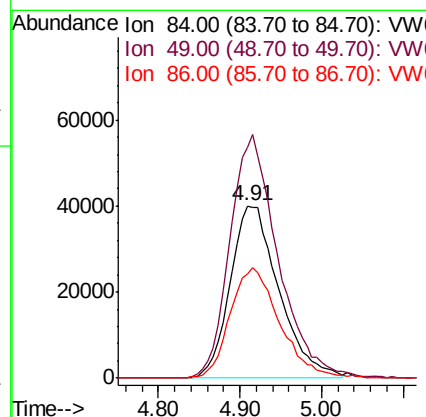
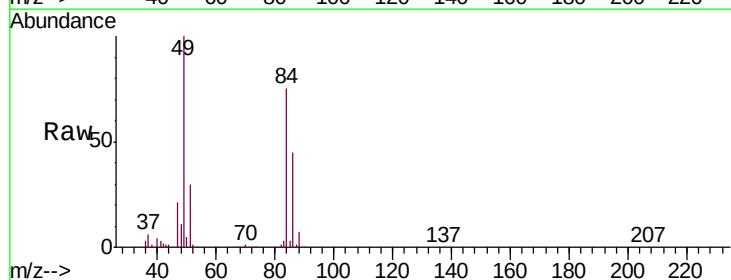
Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTD02507

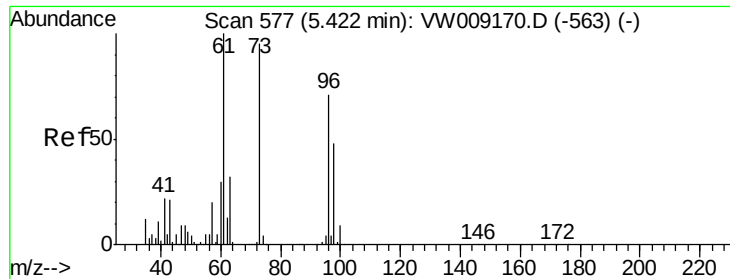
Tgt Ion: 43 Resp: 101163  
Ion Ratio Lower Upper  
43 100  
74 21.7 16.7 25.1



#16  
Methylene chloride  
Concen: 22.138 ug/L  
RT: 4.91 min Scan# 493  
Delta R.T. -0.01 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

Tgt Ion: 84 Resp: 166130  
Ion Ratio Lower Upper  
84 100  
49 133.8 96.0 178.2  
86 60.7 44.4 82.5

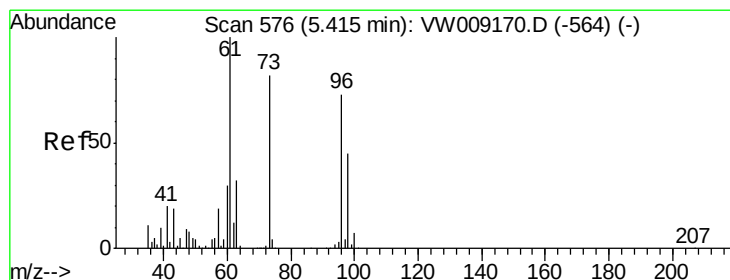
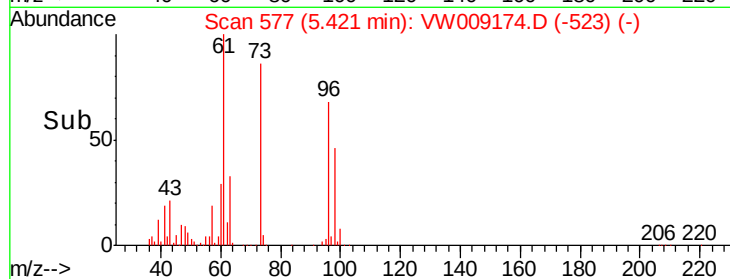
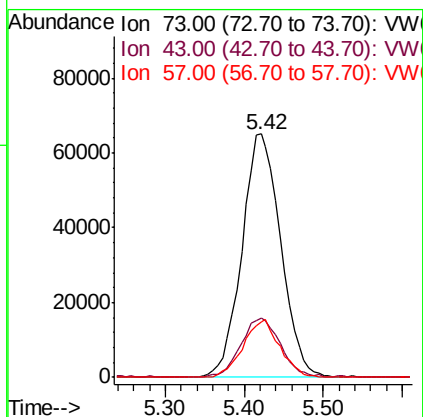
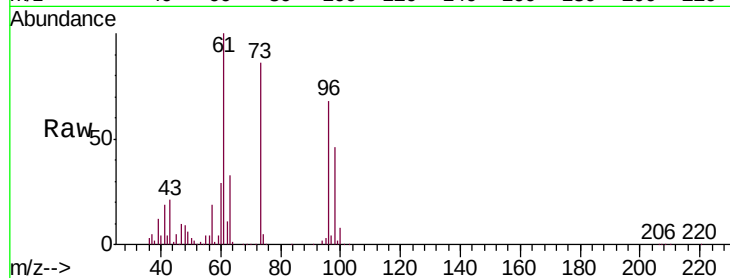




#17  
Methyl tert-butyl Ether  
Concen: 24.818 ug/L  
RT: 5.42 min Scan# 577  
Delta R.T. -0.00 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

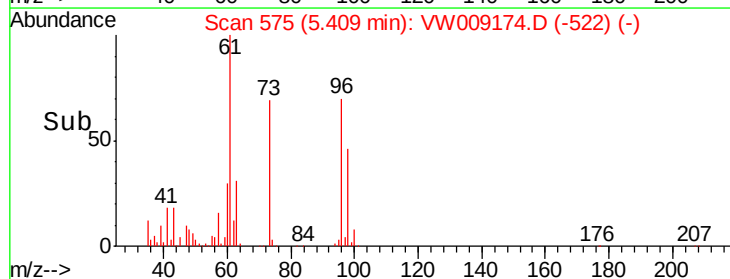
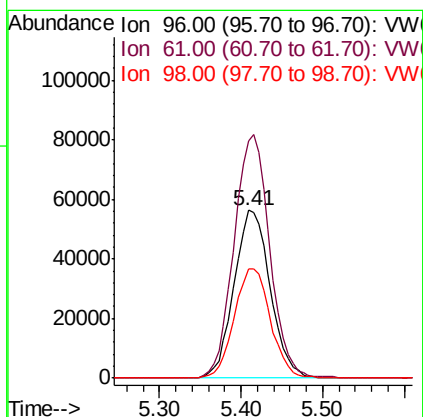
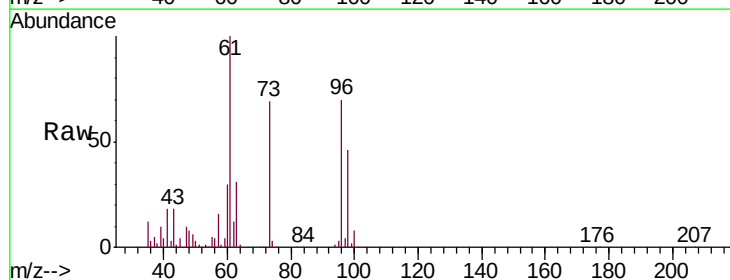
Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTD02507

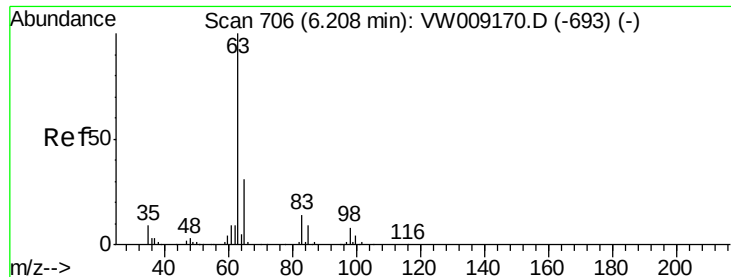
Tgt Ion: 73 Resp: 222529  
Ion Ratio Lower Upper  
73 100  
43 24.4 18.2 27.4  
57 22.3 17.8 26.8



#18  
trans-1,2-Dichloroethene  
Concen: 26.011 ug/L  
RT: 5.41 min Scan# 575  
Delta R.T. -0.01 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

Tgt Ion: 96 Resp: 173296  
Ion Ratio Lower Upper  
96 100  
61 142.0 96.7 179.5  
98 65.6 43.8 81.4

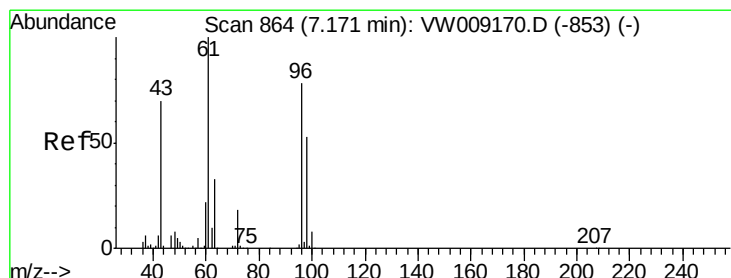
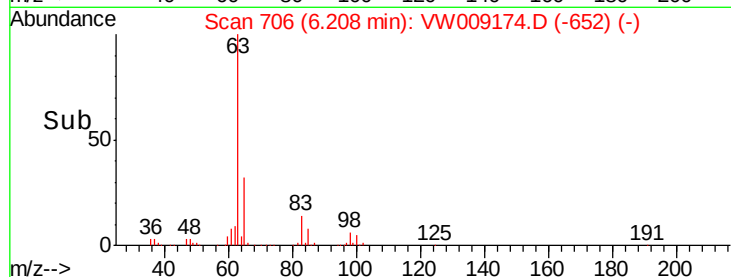
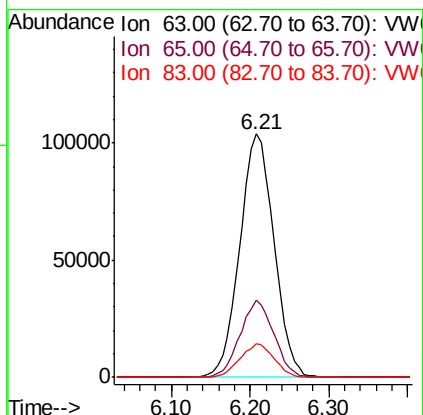
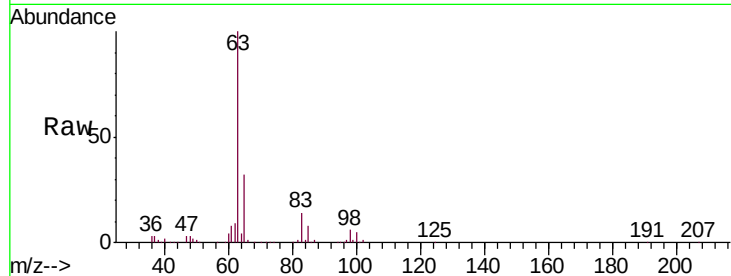




#19  
 1,1-Dichloroethane  
 Concen: 25.820 ug/L  
 RT: 6.21 min Scan# 706  
 Delta R.T. -0.00 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

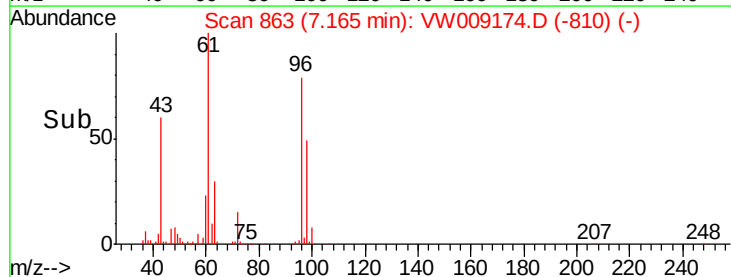
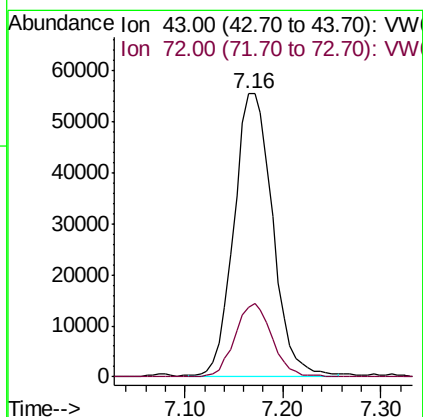
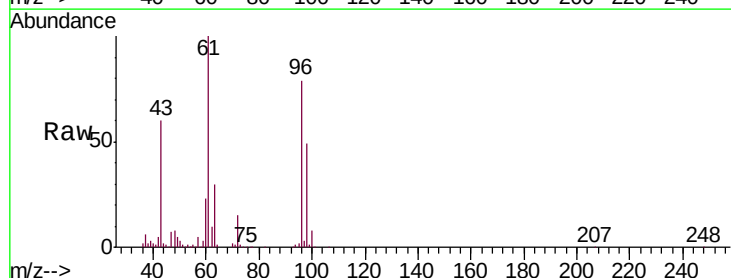
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02507

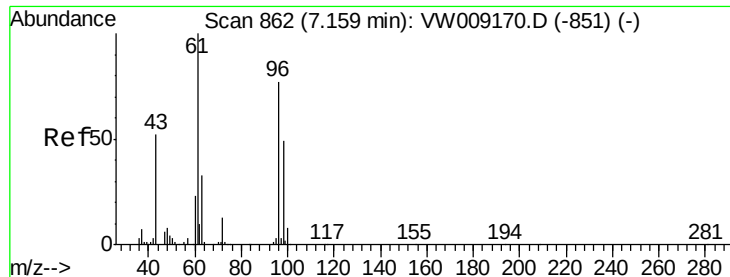
Tgt Ion: 63 Resp: 313662  
 Ion Ratio Lower Upper  
 63 100  
 65 31.8 21.6 40.0  
 83 13.9 10.1 18.7



#21  
 2-Butanone  
 Concen: 53.059 ug/L  
 RT: 7.16 min Scan# 863  
 Delta R.T. -0.01 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

Tgt Ion: 43 Resp: 152793  
 Ion Ratio Lower Upper  
 43 100  
 72 24.5 13.1 39.1



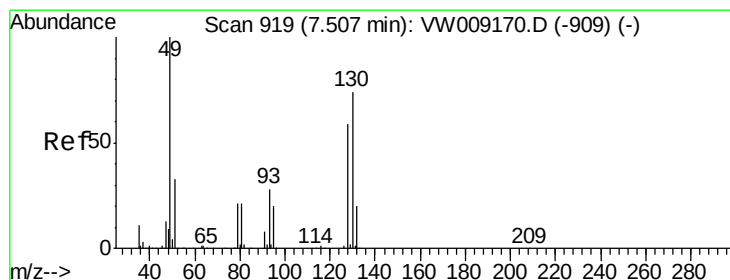
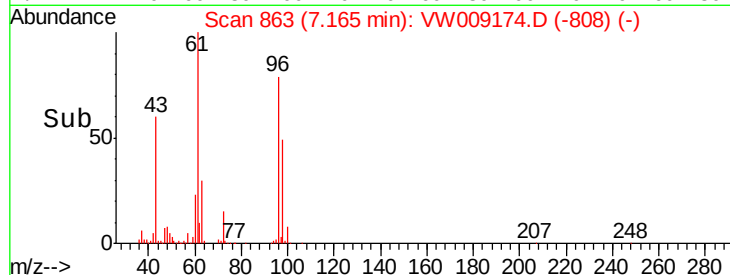
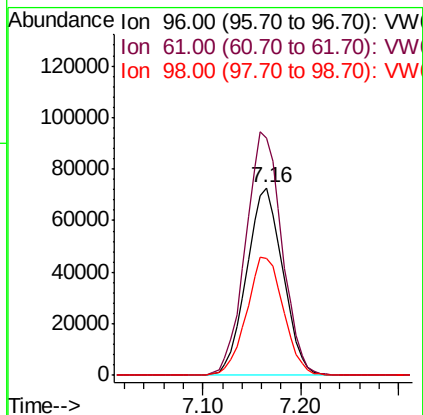
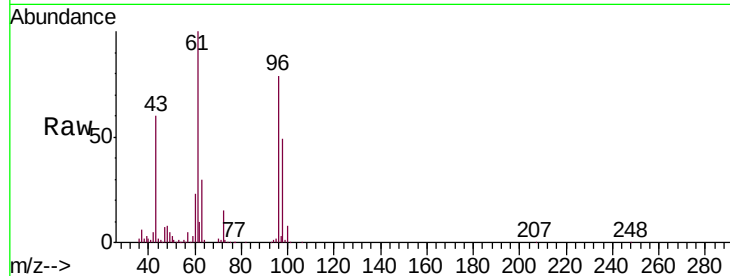


#22

cis-1,2-Dichloroethene  
 Concen: 25.973 ug/L  
 RT: 7.16 min Scan# 863  
 Delta R.T. 0.01 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02507

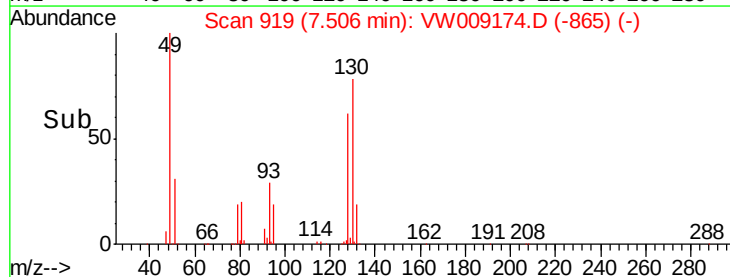
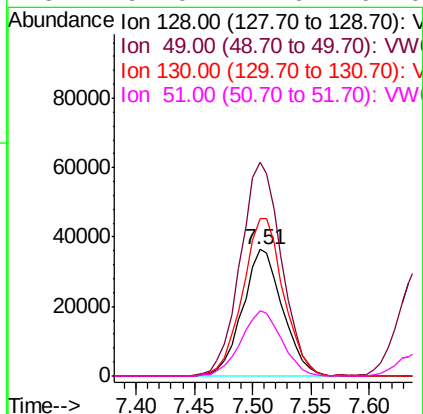
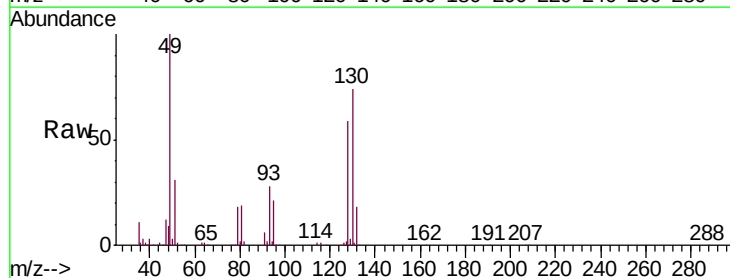
Tgt Ion: 96 Resp: 187455  
 Ion Ratio Lower Upper  
 96 100  
 61 126.5 90.6 168.3  
 98 62.2 44.0 81.8

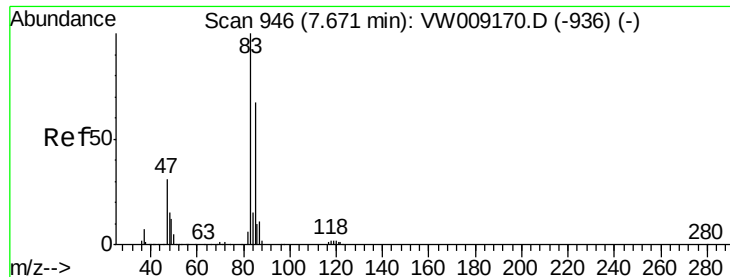


#23

Bromochloromethane  
 Concen: 25.101 ug/L  
 RT: 7.51 min Scan# 919  
 Delta R.T. -0.00 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

Tgt Ion: 128 Resp: 86892  
 Ion Ratio Lower Upper  
 128 100  
 49 169.3 118.4 219.8  
 130 125.3 87.8 163.2  
 51 52.0 44.6 67.0





#25

Chloroform

Concen: 25.501 ug/L

RT: 7.67 min Scan# 946

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

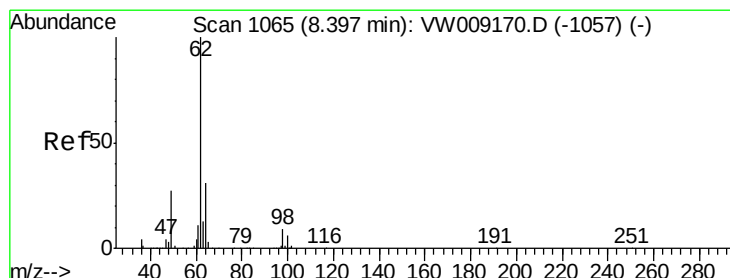
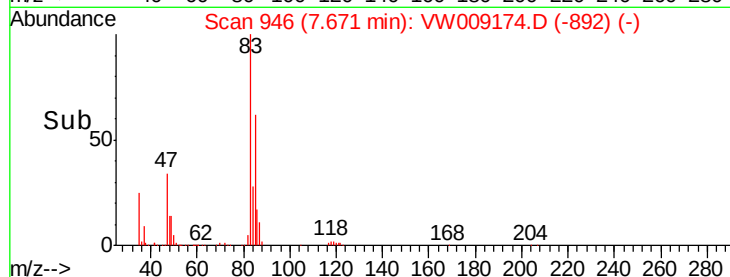
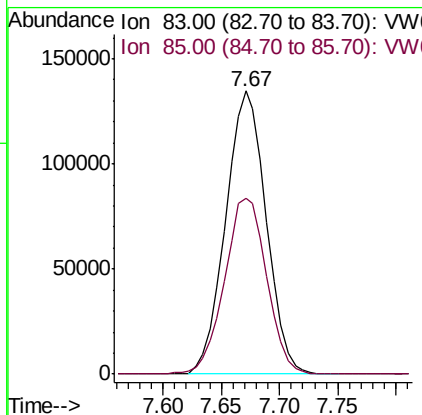
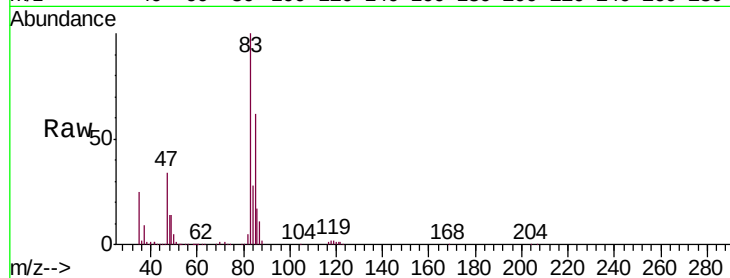
VSTD02507

Tgt Ion: 83 Resp: 324417

Ion Ratio Lower Upper

83 100

85 65.1 46.0 85.4



#27

1,2-Dichloroethane

Concen: 25.283 ug/L

RT: 8.40 min Scan# 1065

Delta R.T. -0.00 min

Lab File: VW009174.D

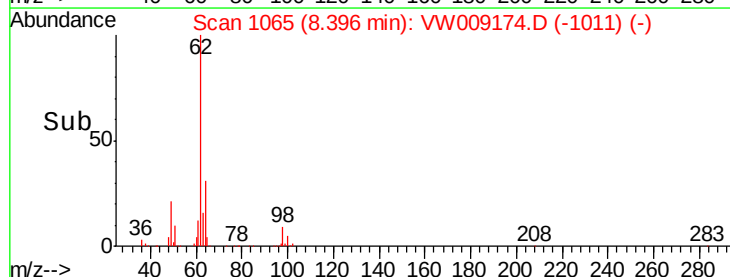
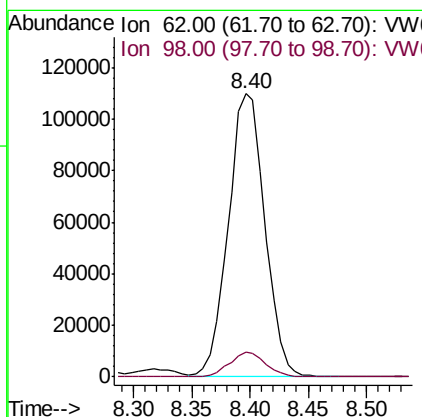
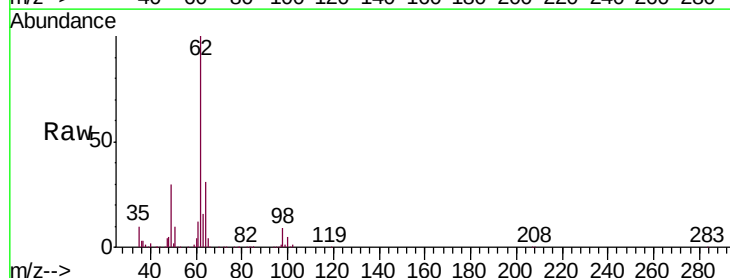
Acq: 14 Mar 2019 17:11

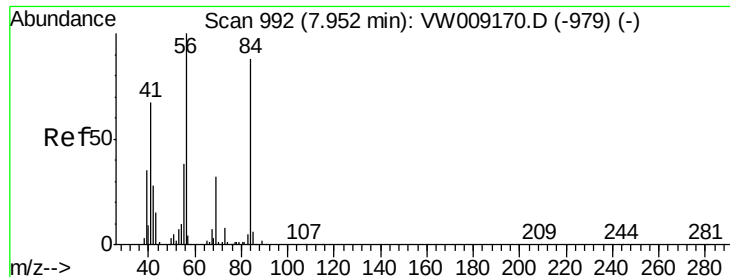
Tgt Ion: 62 Resp: 239812

Ion Ratio Lower Upper

62 100

98 8.9 7.3 10.9

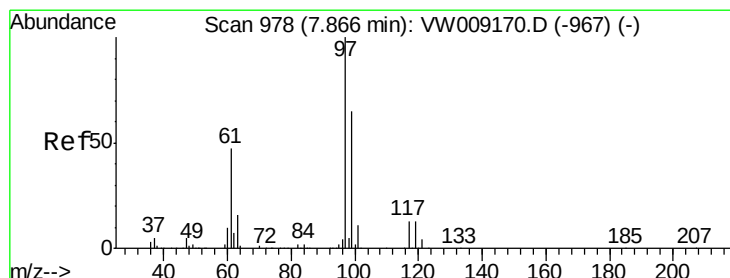
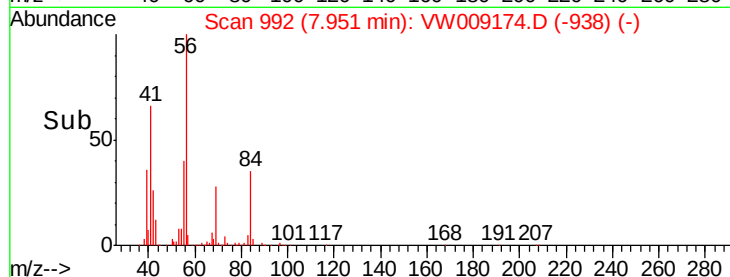
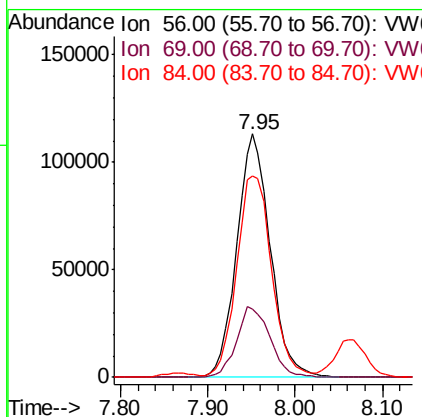
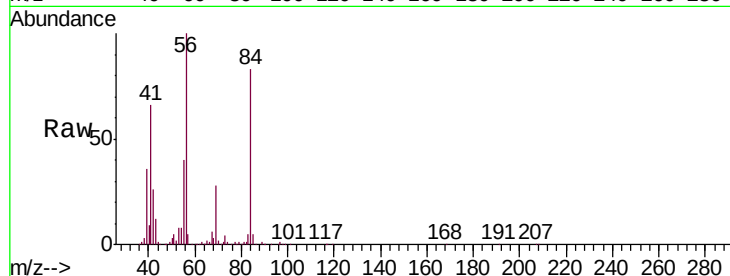




#30  
Cyclohexane  
Concen: 27.552 ug/L  
RT: 7.95 min Scan# 992  
Delta R.T. -0.00 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

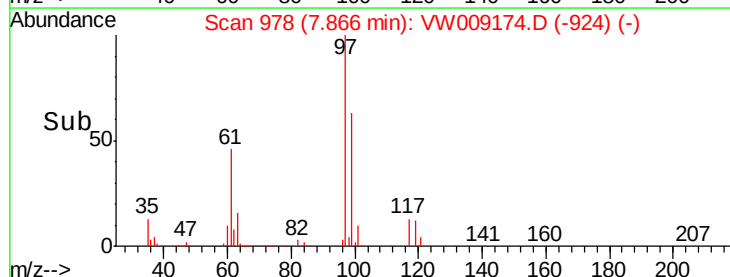
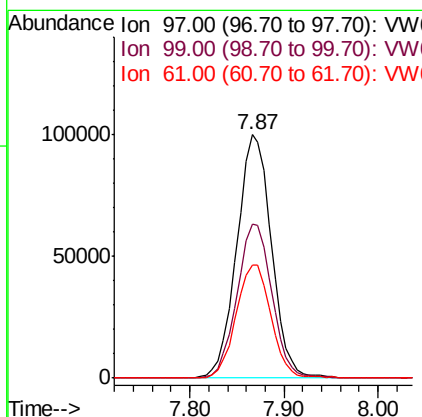
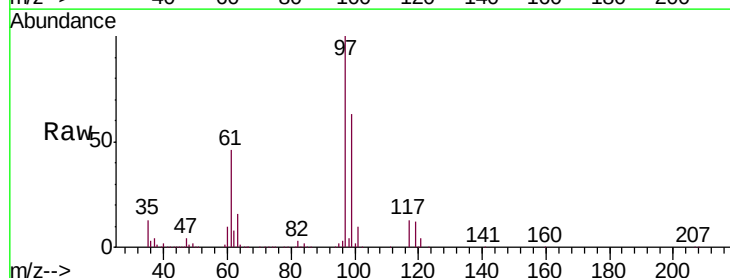
Instrument :  
MSVOA\_W  
ClientSampled :  
VSTD02507

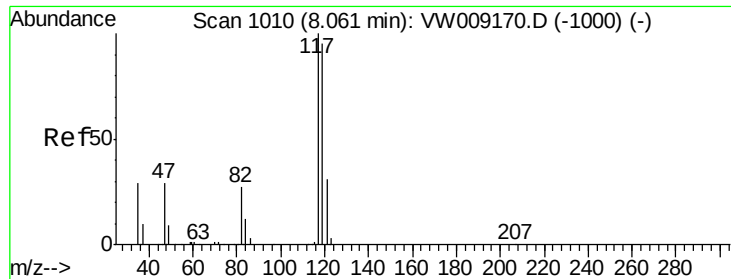
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 29.2  | 24.0  | 36.0  |
| 84      | 86.5  | 69.2  | 103.8 |



#31  
1,1,1-Trichloroethane  
Concen: 26.707 ug/L  
RT: 7.87 min Scan# 978  
Delta R.T. -0.00 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 63.8  | 51.2  | 76.8  |
| 61      | 46.7  | 38.4  | 57.6  |





#32

Carbon tetrachloride

Concen: 27.094 ug/L

RT: 8.06 min Scan# 1010

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

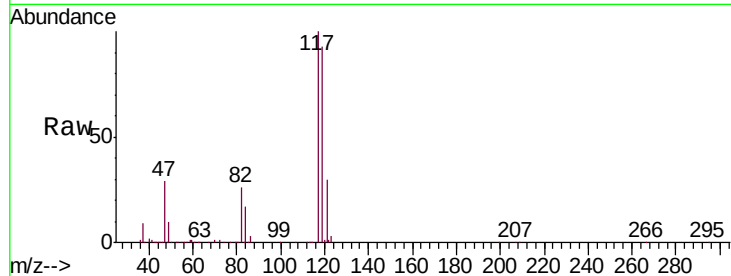
VSTD02507

Tgt Ion:117 Resp: 262076

Ion Ratio Lower Upper

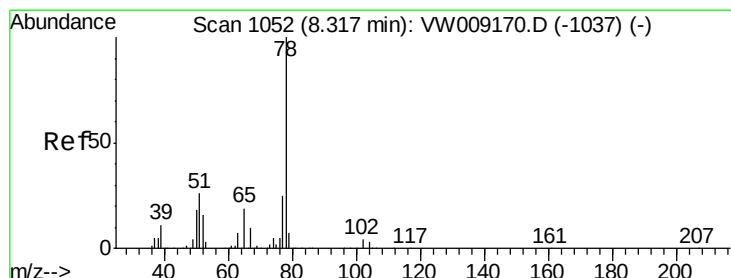
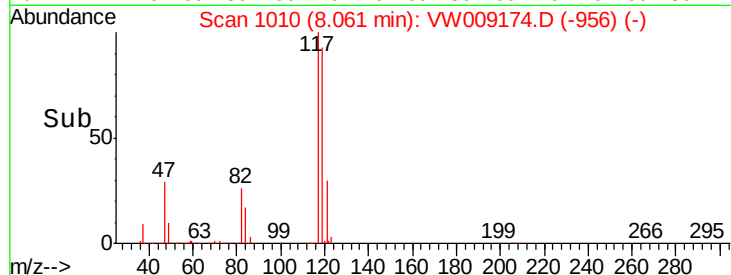
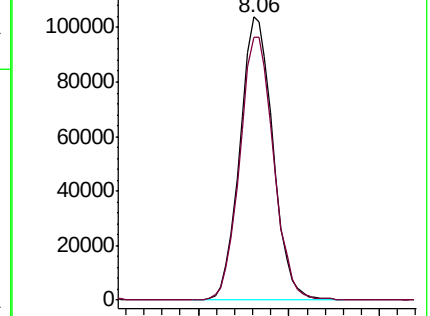
117 100

119 94.9 78.0 117.0



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 26.643 ug/L

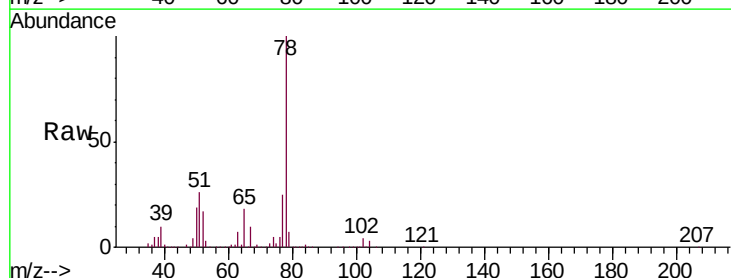
RT: 8.32 min Scan# 1052

Delta R.T. -0.00 min

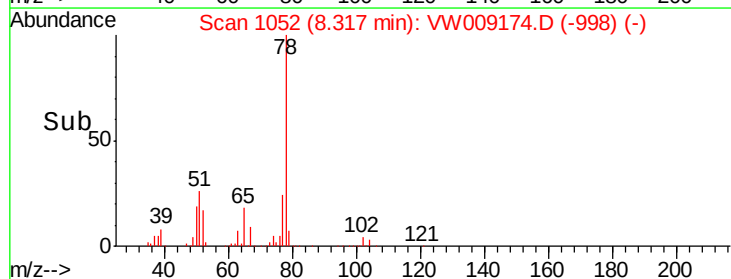
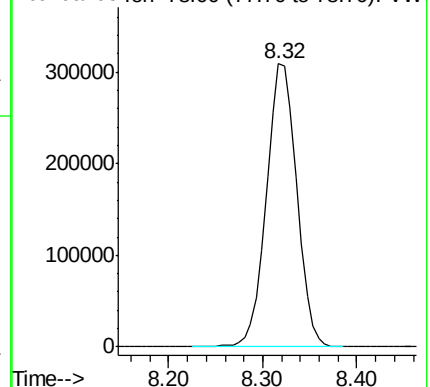
Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

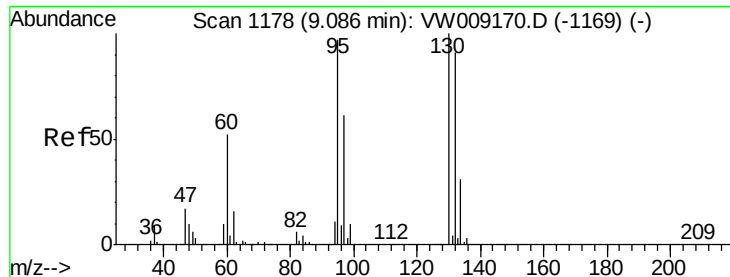
Tgt Ion: 78 Resp: 700014



Abundance Ion 78.00 (77.70 to 78.70): VW







#35

Trichloroethene

Concen: 26.023 ug/L

RT: 9.09 min Scan# 1178

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02507

Tgt Ion: 95 Resp: 182182

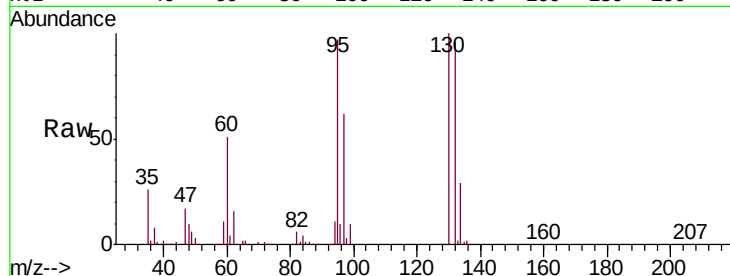
Ion Ratio Lower Upper

95 100

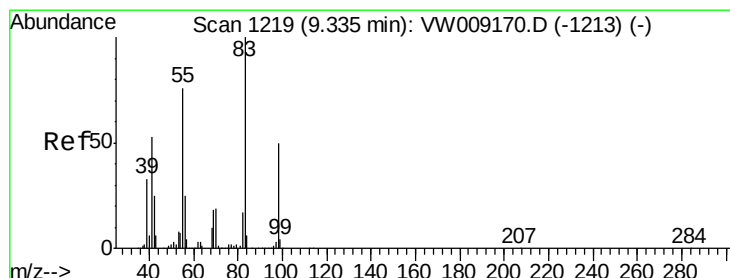
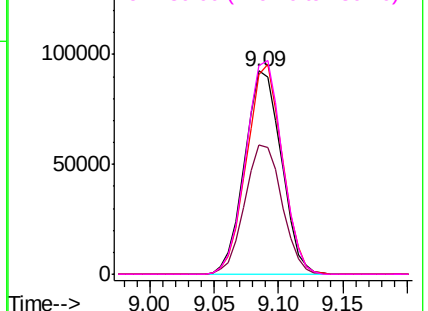
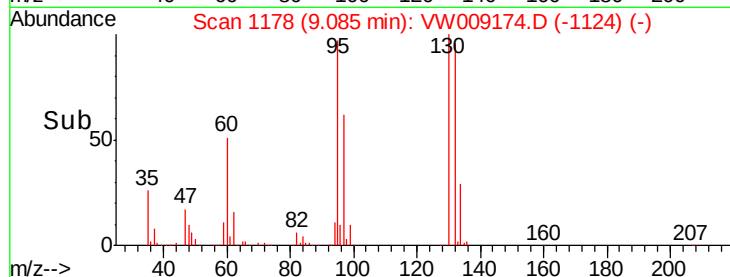
97 64.7 44.7 82.9

132 100.6 69.0 128.2

130 104.2 72.7 134.9



Abundance Ion 95.00 (94.70 to 95.70): VW  
 150000 Ion 97.00 (96.70 to 97.70): VW  
 Ion 132.00 (131.70 to 132.70): V  
 Ion 130.00 (129.70 to 130.70): V



#36

Methylcyclohexane

Concen: 27.197 ug/L

RT: 9.34 min Scan# 1219

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

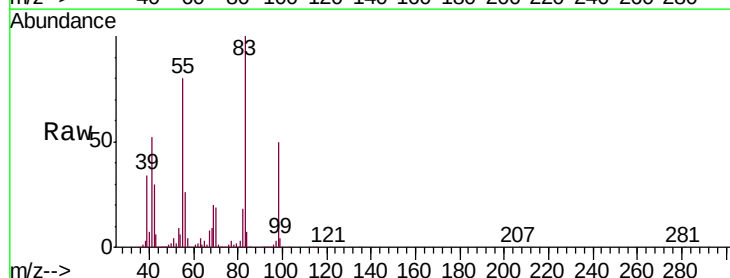
Tgt Ion: 83 Resp: 329418

Ion Ratio Lower Upper

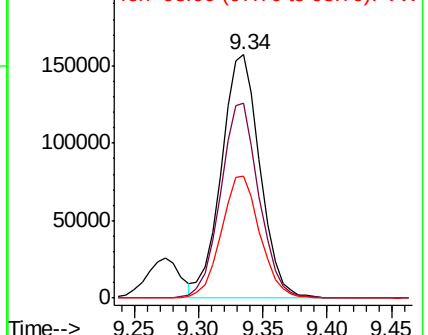
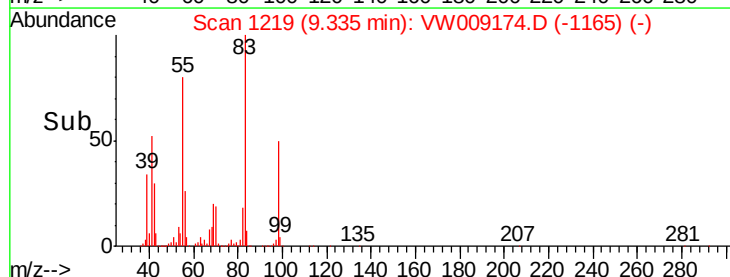
83 100

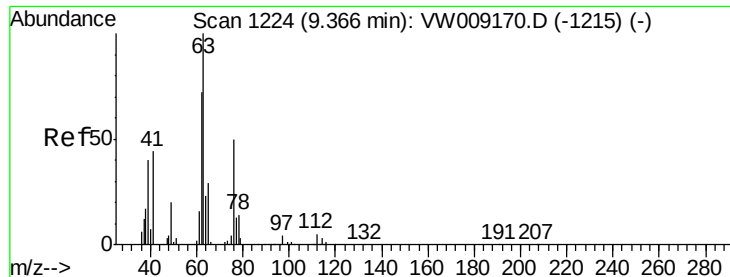
55 79.2 63.5 95.3

98 50.2 39.8 59.8



Abundance Ion 83.00 (82.70 to 83.70): VW  
 200000 Ion 55.00 (54.70 to 55.70): VW  
 Ion 98.00 (97.70 to 98.70): VW





#40

1,2-Dichloropropane

Concen: 25.957 ug/L

RT: 9.37 min Scan# 1224

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

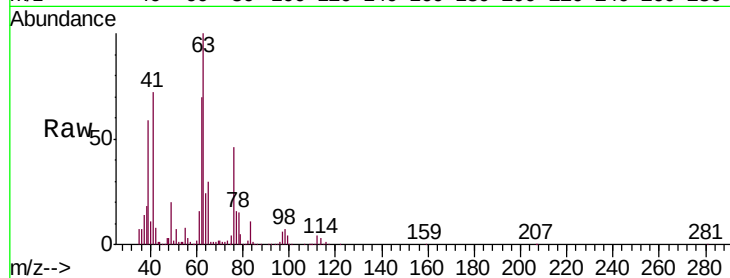
VSTD02507

Tgt Ion: 63 Resp: 175001

Ion Ratio Lower Upper

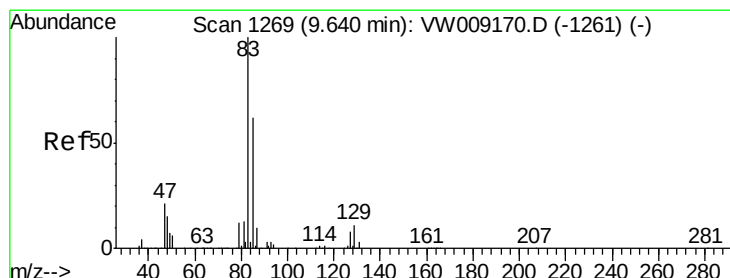
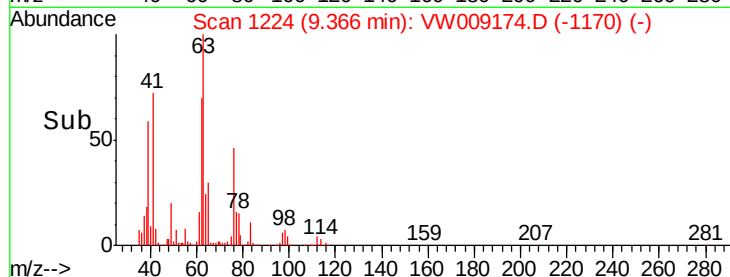
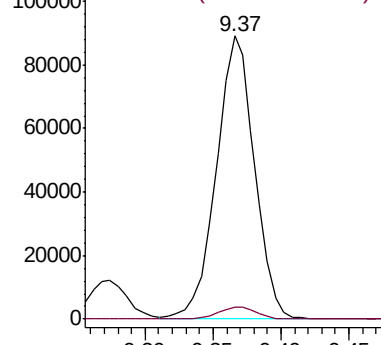
63 100

112 4.4 4.0 6.0



Abundance Ion 63.00 (62.70 to 63.70): VW

Ion 112.00 (111.70 to 112.70): V



#41

Bromodichloromethane

Concen: 25.982 ug/L

RT: 9.64 min Scan# 1269

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

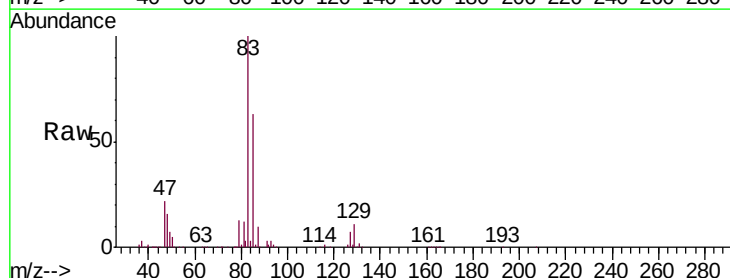
Tgt Ion: 83 Resp: 242708

Ion Ratio Lower Upper

83 100

85 63.0 43.5 80.7

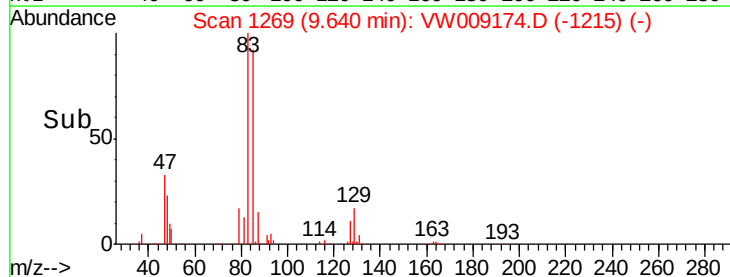
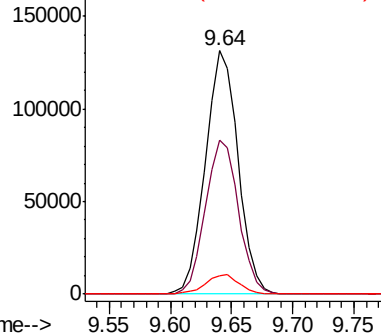
127 7.4 6.2 9.4

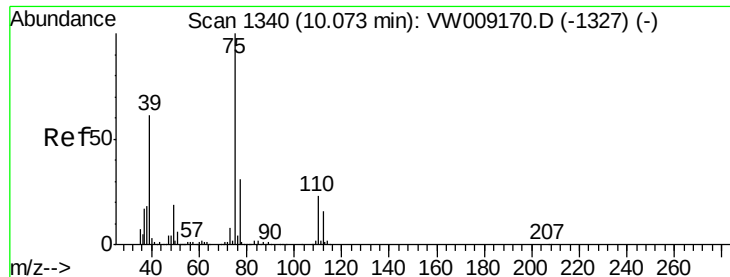


Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 127.00 (126.70 to 127.70): V





#42

cis-1,3-Dichloropropene

Concen: 26.417 ug/L

RT: 10.07 min Scan# 1340

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

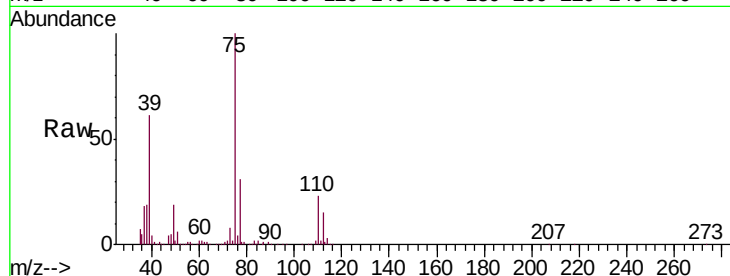
VSTD02507

Tgt Ion: 75 Resp: 290077

Ion Ratio Lower Upper

75 100

77 30.7 21.6 40.2



Abundance Ion 75.00 (74.70 to 75.70): VW

Ion 77.00 (76.70 to 77.70): VW

10.07

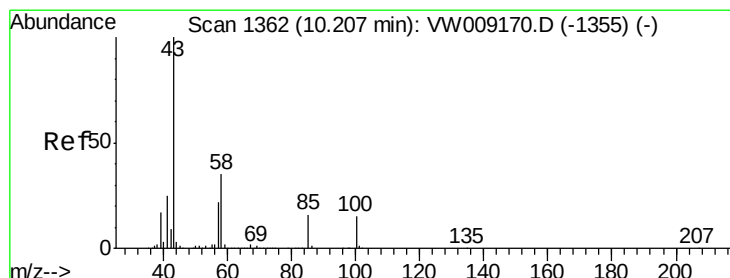
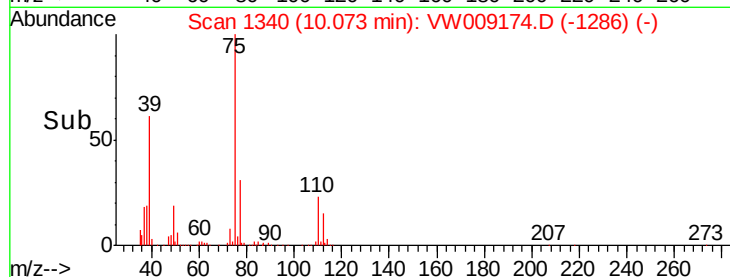
150000

100000

50000

0

Time-->



#43

4-Methyl-2-pentanone

Concen: 49.493 ug/L

RT: 10.21 min Scan# 1362

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

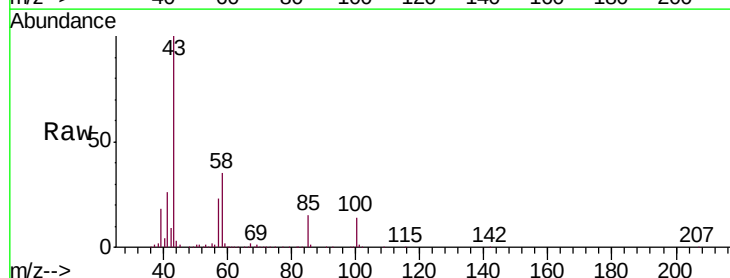
Tgt Ion: 43 Resp: 302365

Ion Ratio Lower Upper

43 100

58 35.3 28.2 42.2

100 14.0 11.4 17.2



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

Ion 100.00 (99.70 to 100.70): VW

300000

250000

200000

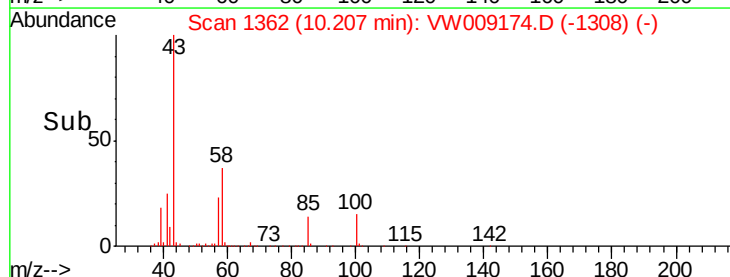
150000

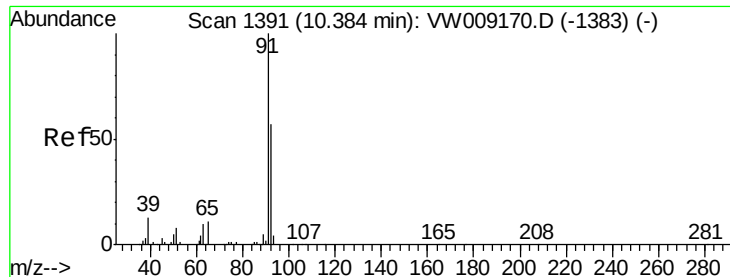
100000

50000

0

Time-->





#44

Toluene

Concen: 26.495 ug/L

RT: 10.38 min Scan# 1391

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

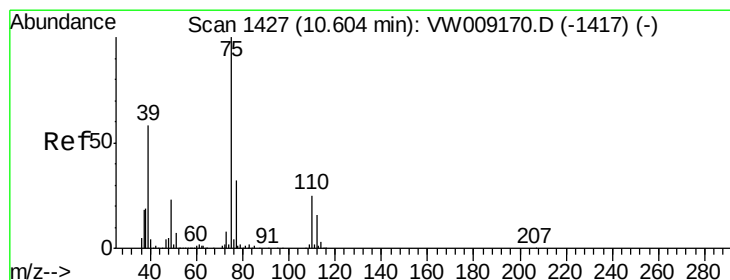
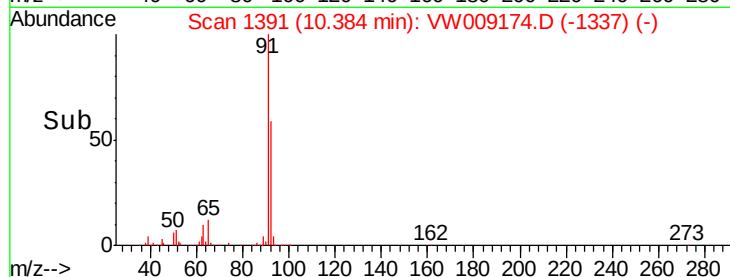
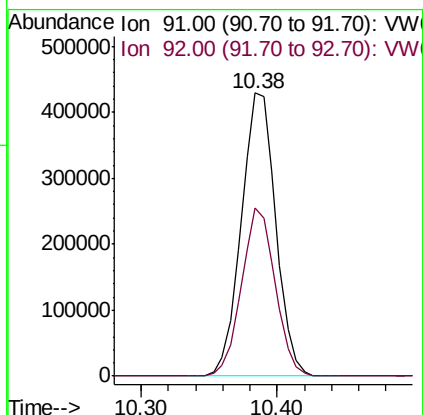
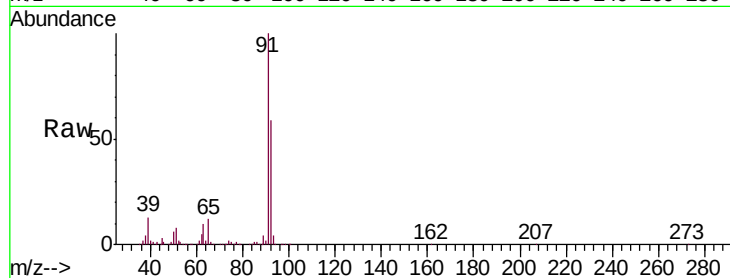
VSTD02507

Tgt Ion: 91 Resp: 761098

Ion Ratio Lower Upper

91 100

92 59.5 39.8 73.8



#45

trans-1,3-Dichloropropene

Concen: 26.069 ug/L

RT: 10.60 min Scan# 1427

Delta R.T. -0.00 min

Lab File: VW009174.D

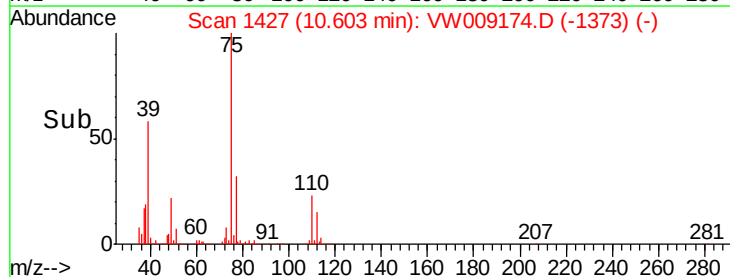
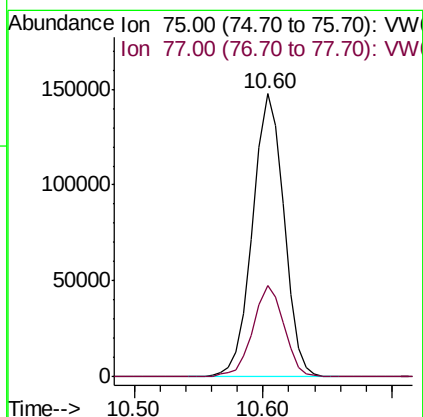
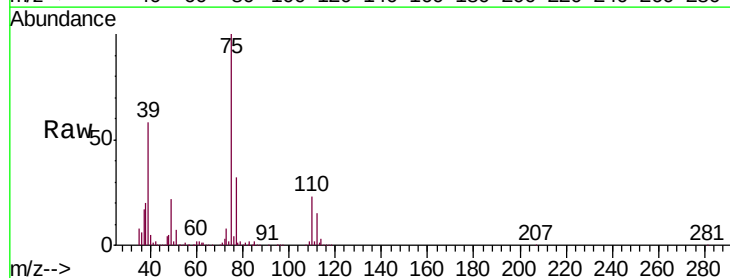
Acq: 14 Mar 2019 17:11

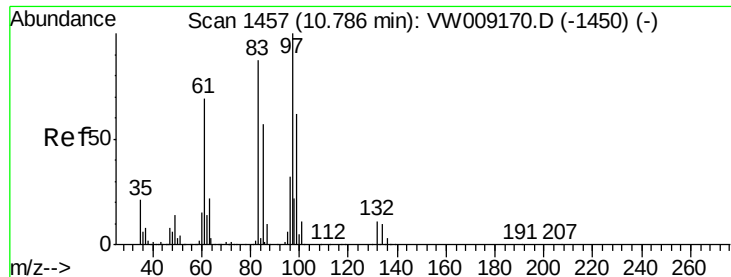
Tgt Ion: 75 Resp: 249014

Ion Ratio Lower Upper

75 100

77 32.4 22.5 41.7





#46

1,1,2-Trichloroethane

Concen: 25.518 ug/L

RT: 10.79 min Scan# 1457

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02507

Tgt Ion: 97 Resp: 137251

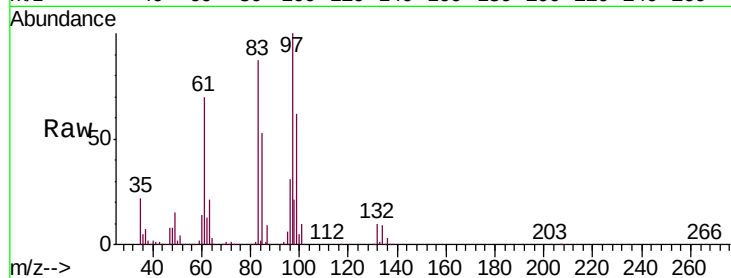
Ion Ratio Lower Upper

97 100

83 86.8 60.7 112.7

85 53.3 40.1 74.5

99 62.4 43.8 81.3



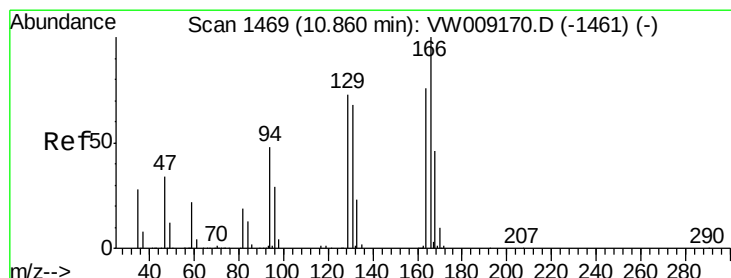
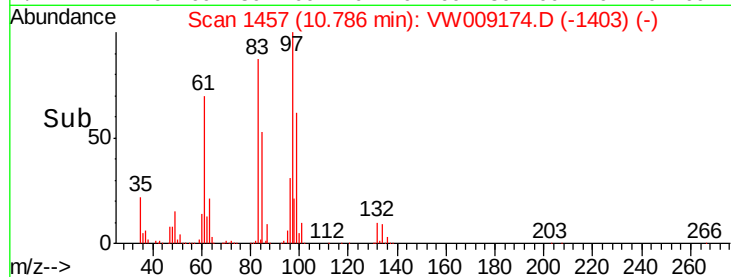
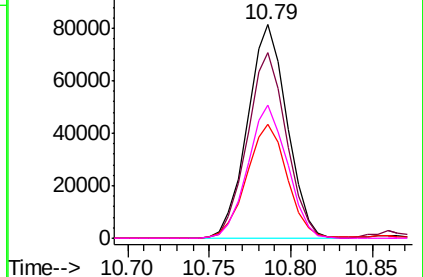
Abundance

Ion 97.00 (96.70 to 97.70): VW

Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 99.00 (98.70 to 99.70): VW



#47

Tetrachloroethene

Concen: 26.058 ug/L

RT: 10.86 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Tgt Ion: 164 Resp: 154142

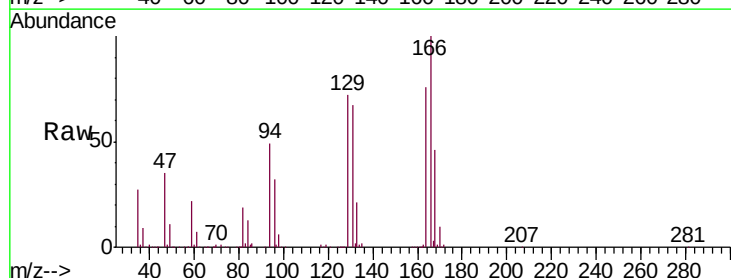
Ion Ratio Lower Upper

164 100

129 95.1 66.5 123.5

131 88.5 62.6 116.3

166 131.7 91.6 170.0



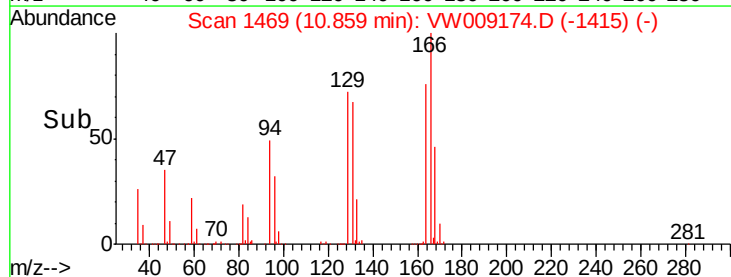
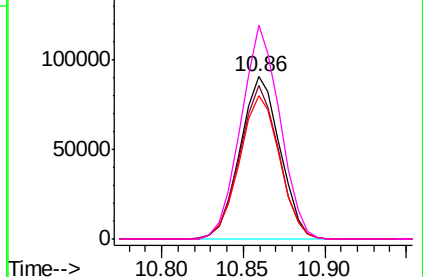
Abundance

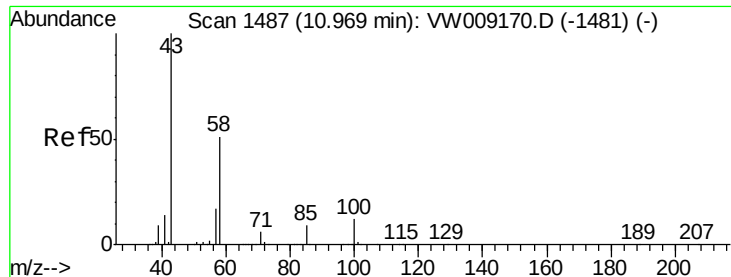
Ion 164.00 (163.70 to 164.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V





#49

2-Hexanone

Concen: 52.214 ug/L

RT: 10.97 min Scan# 1487

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02507

Tgt Ion: 43 Resp: 224665

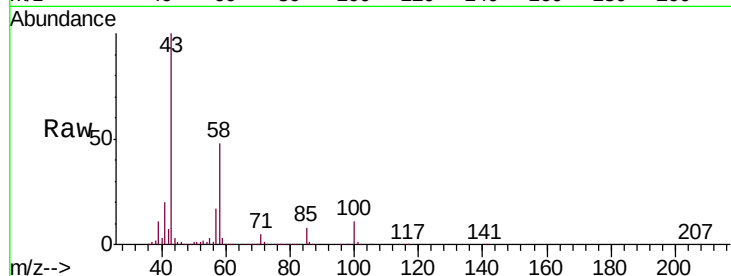
Ion Ratio Lower Upper

43 100

58 49.8 39.2 58.8

57 17.9 14.2 21.2

100 11.2 8.9 13.3



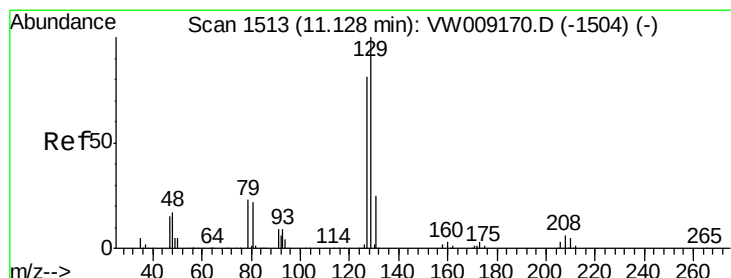
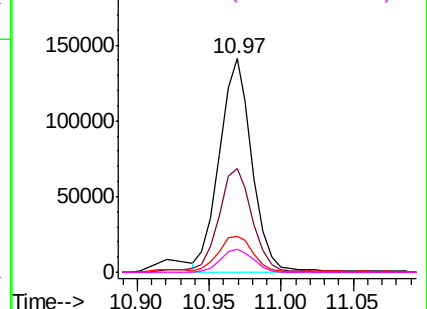
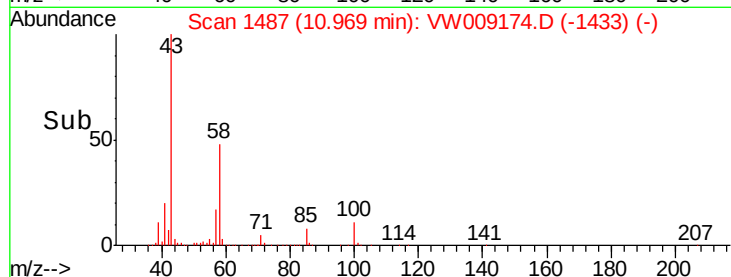
Abundance

Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

Ion 57.00 (56.70 to 57.70): VW

Ion 100.00 (99.70 to 100.70): VW



#50

Dibromochloromethane

Concen: 25.800 ug/L

RT: 11.13 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VW009174.D

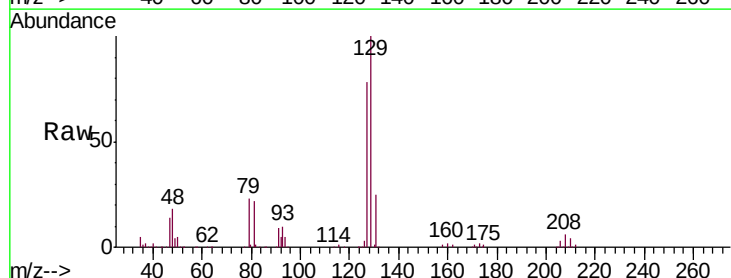
Acq: 14 Mar 2019 17:11

Tgt Ion: 129 Resp: 171304

Ion Ratio Lower Upper

129 100

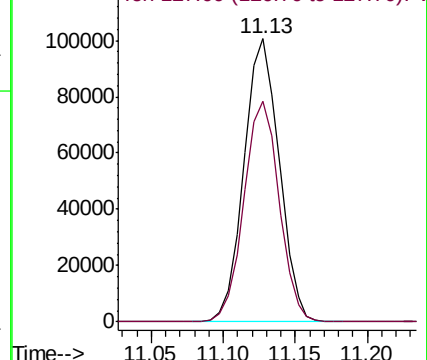
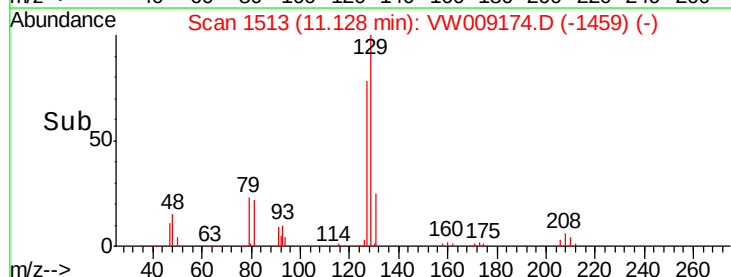
127 77.8 56.8 105.6

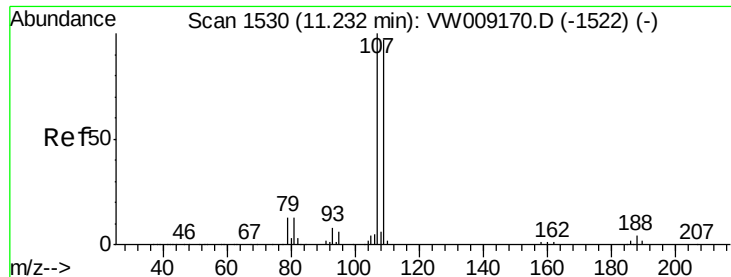


Abundance

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

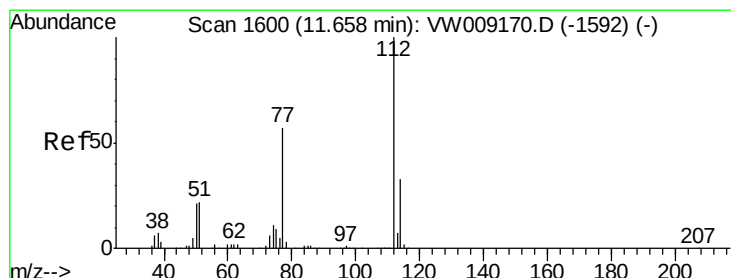
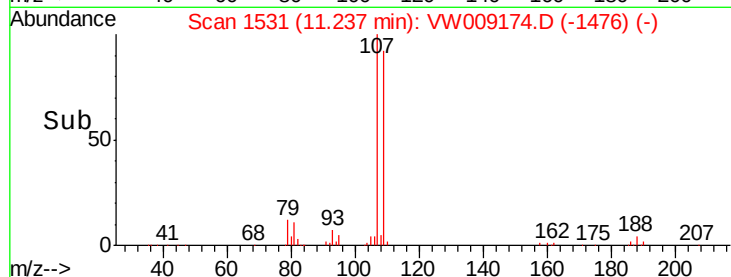
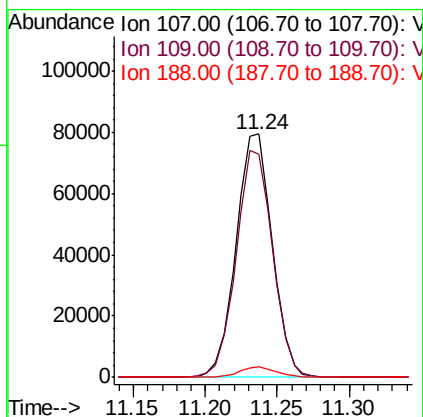
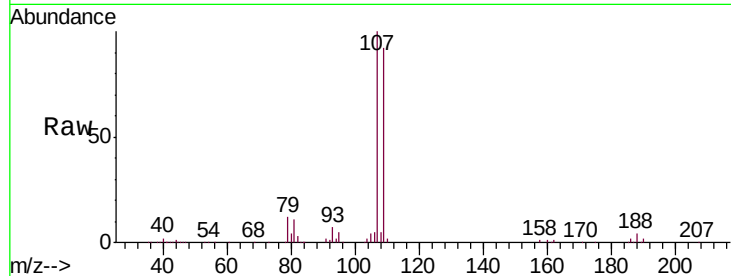




#51  
1,2-Dibromoethane  
Concen: 25.442 ug/L  
RT: 11.24 min Scan# 1531  
Delta R.T. 0.01 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

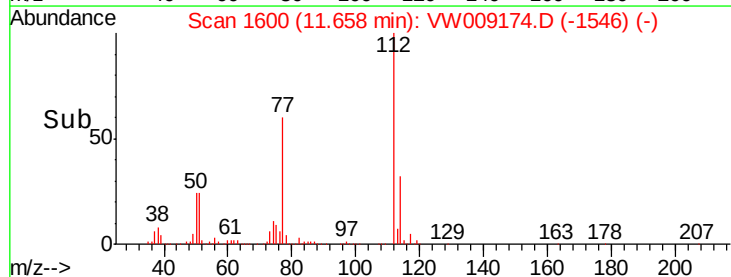
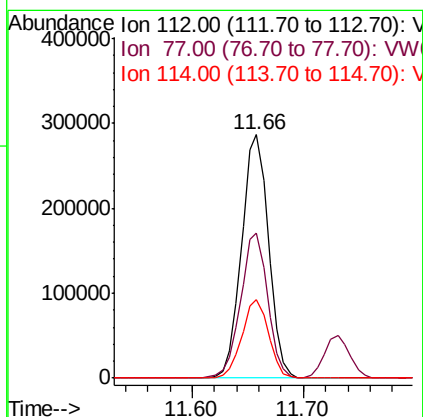
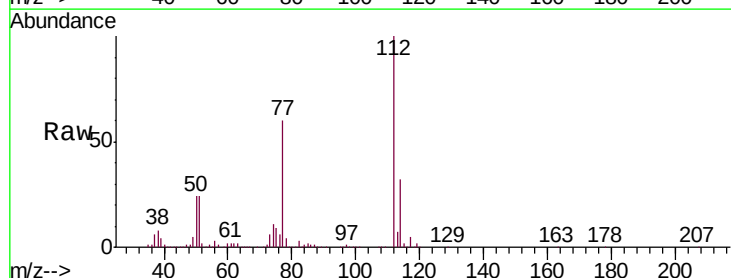
Instrument :  
MSVOA\_W  
ClientSampled :  
VSTD02507

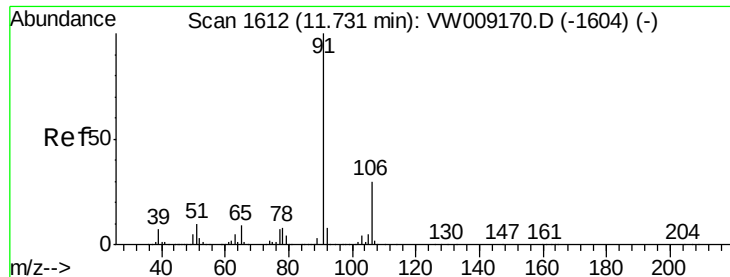
Tgt Ion:107 Resp: 138730  
Ion Ratio Lower Upper  
107 100  
109 91.7 68.0 126.4  
188 4.3 3.5 5.3



#52  
Chlorobenzene  
Concen: 26.141 ug/L  
RT: 11.66 min Scan# 1600  
Delta R.T. -0.00 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

Tgt Ion:112 Resp: 481642  
Ion Ratio Lower Upper  
112 100  
77 59.5 45.7 68.5  
114 32.2 22.8 42.4

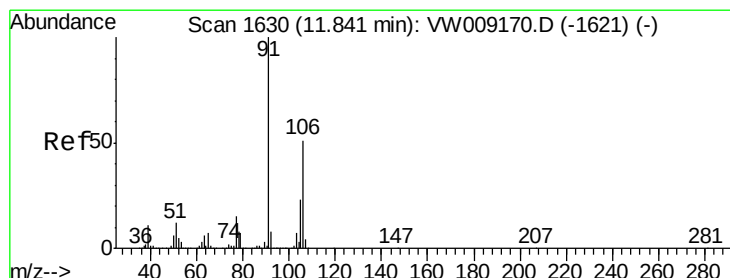
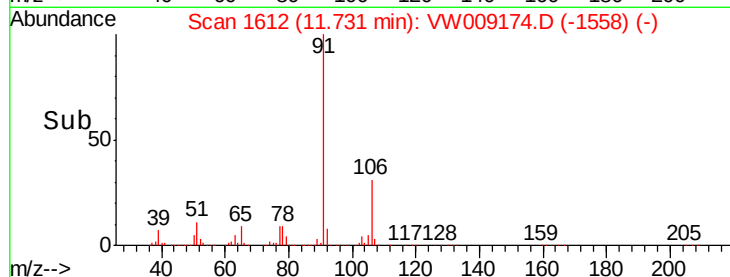
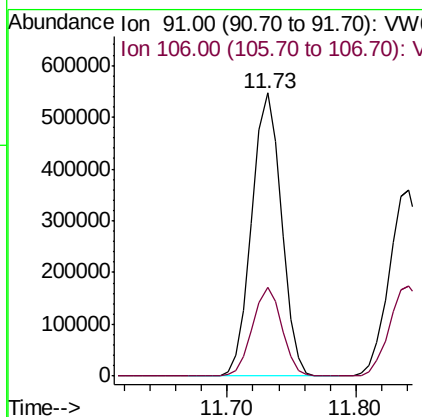
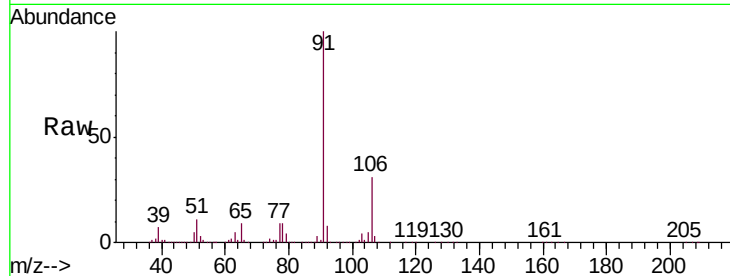




#53  
Ethylbenzene  
Concen: 26.884 ug/L  
RT: 11.73 min Scan# 1612  
Delta R.T. -0.00 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

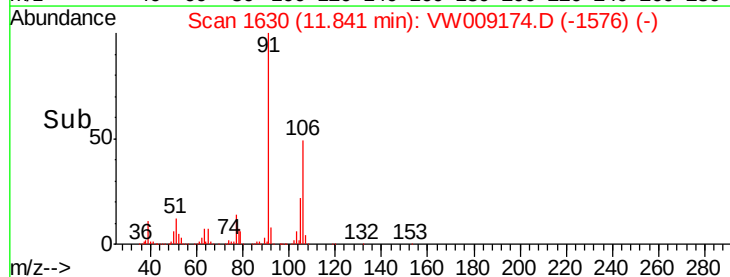
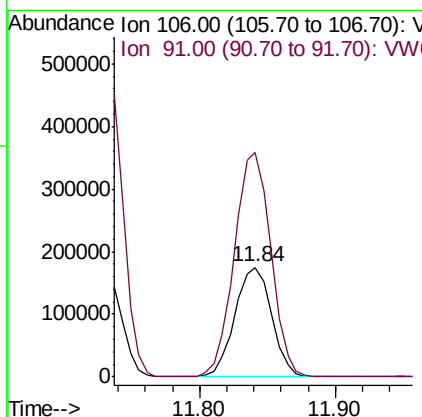
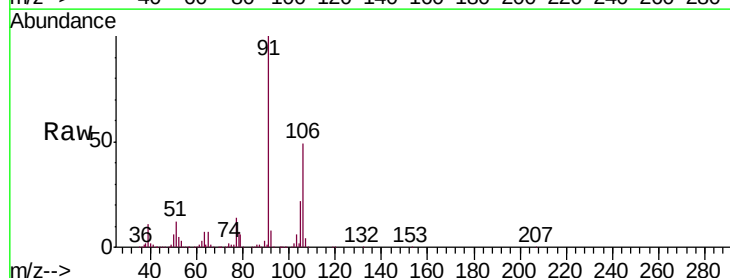
Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTD02507

Tgt Ion: 91 Resp: 868268  
Ion Ratio Lower Upper  
91 100  
106 31.2 21.0 39.0

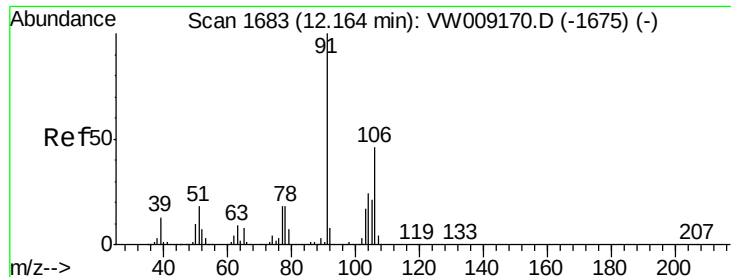


#54  
m,p-Xylene  
Concen: 26.876 ug/L  
RT: 11.84 min Scan# 1630  
Delta R.T. -0.00 min  
Lab File: VW009174.D  
Acq: 14 Mar 2019 17:11

Tgt Ion: 106 Resp: 329761  
Ion Ratio Lower Upper  
106 100  
91 205.8 138.4 257.0







#55

o-xylene

Concen: 26.685 ug/L

RT: 12.16 min Scan# 1683

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

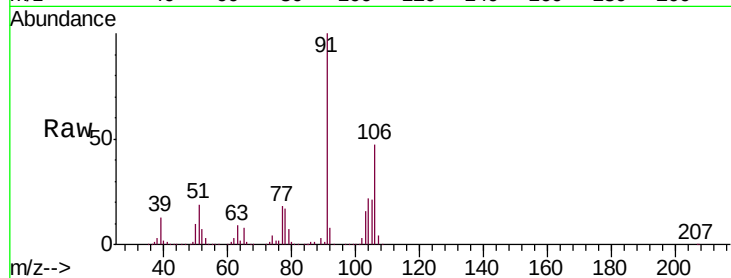
VSTD02507

Tgt Ion:106 Resp: 319429

Ion Ratio Lower Upper

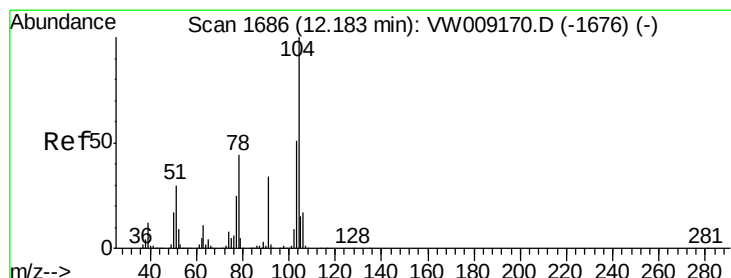
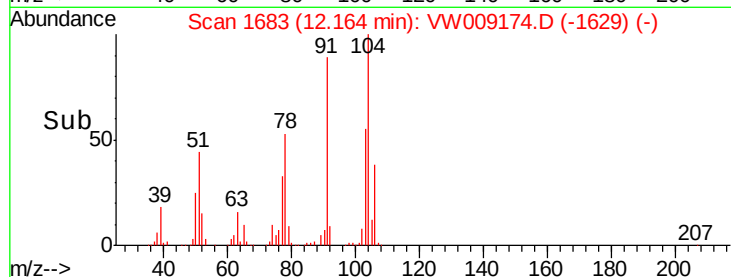
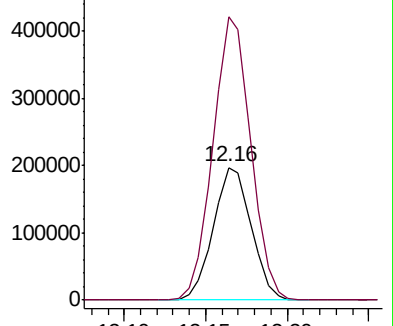
106 100

91 213.6 153.2 284.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#56

Styrene

Concen: 26.766 ug/L

RT: 12.18 min Scan# 1686

Delta R.T. -0.00 min

Lab File: VW009174.D

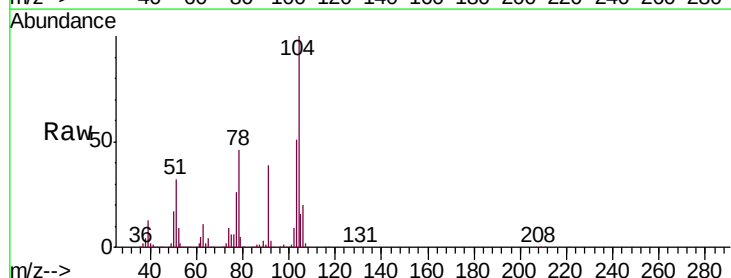
Acq: 14 Mar 2019 17:11

Tgt Ion:104 Resp: 546660

Ion Ratio Lower Upper

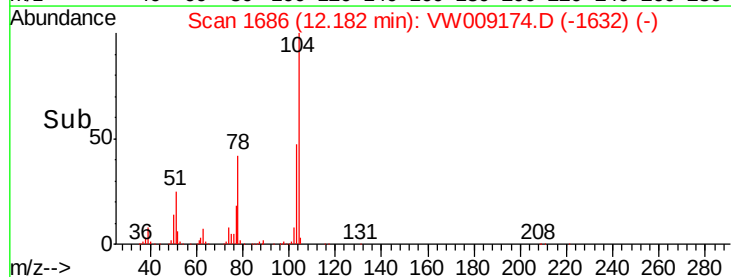
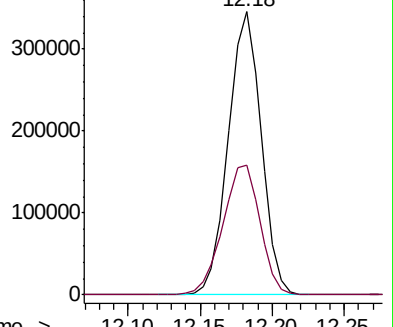
104 100

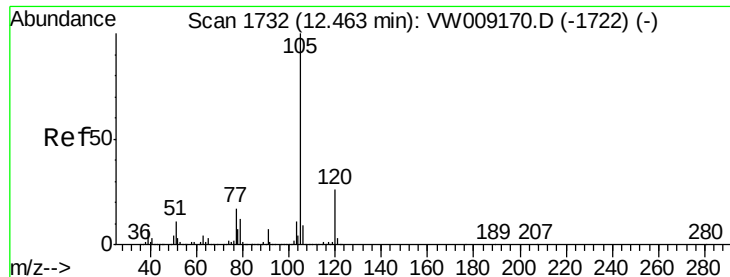
78 45.8 30.9 57.3



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VW





#57

Isopropylbenzene

Concen: 27.238 ug/L

RT: 12.46 min Scan# 1732

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02507

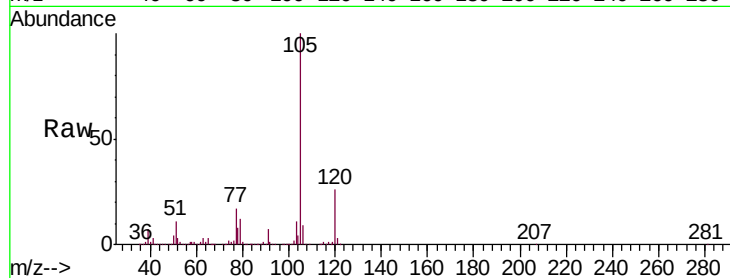
Tgt Ion: 105 Resp: 873396

Ion Ratio Lower Upper

105 100

120 26.2 21.3 31.9

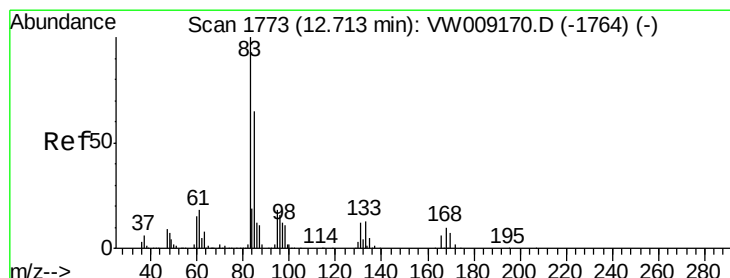
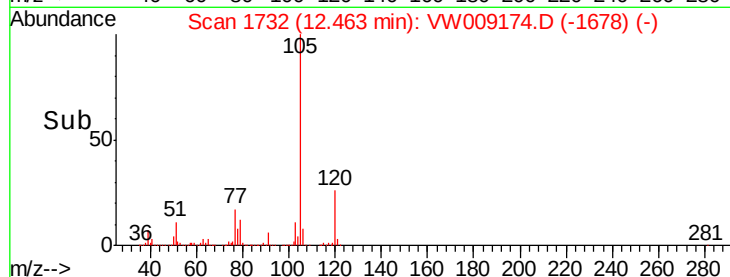
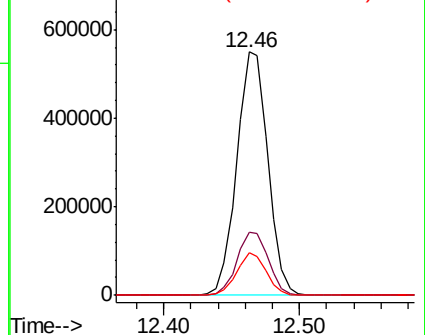
77 16.6 13.1 19.7



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 25.343 ug/L

RT: 12.71 min Scan# 1773

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

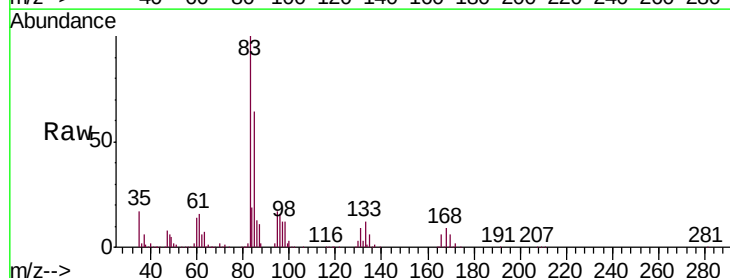
Tgt Ion: 83 Resp: 183895

Ion Ratio Lower Upper

83 100

85 64.0 45.6 84.8

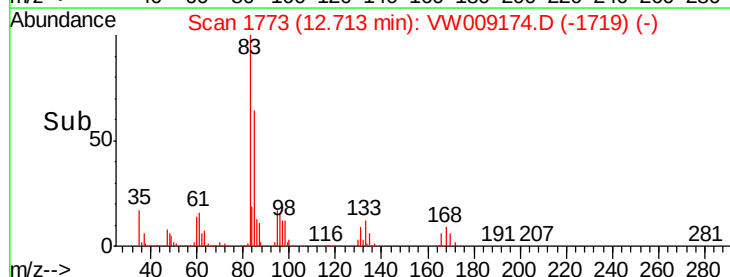
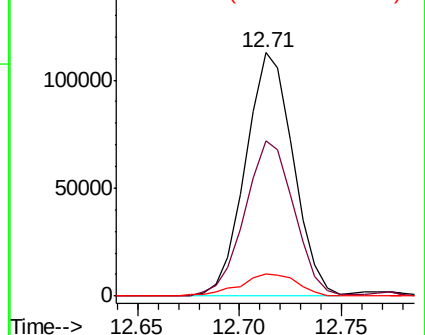
131 9.0 9.2 13.8#

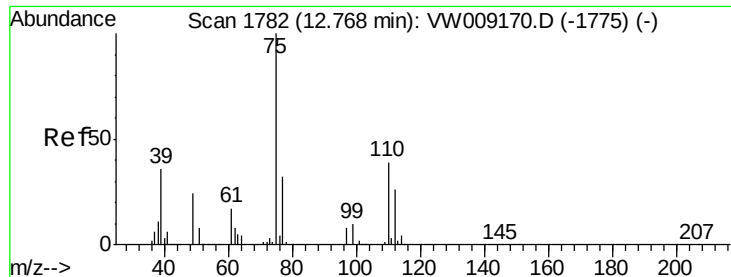


Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 25.445 ug/L

RT: 12.77 min Scan# 1782

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

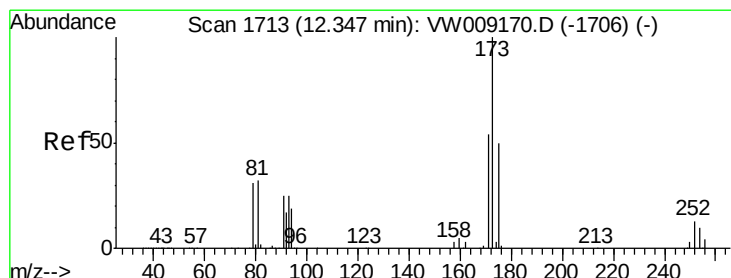
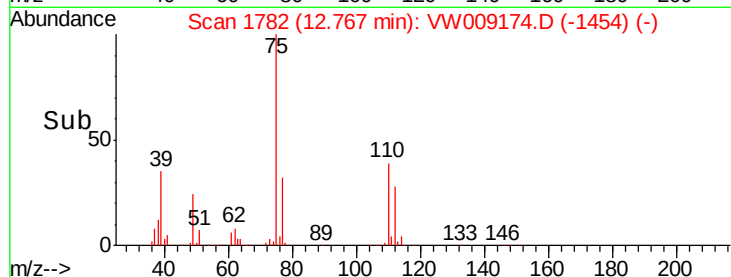
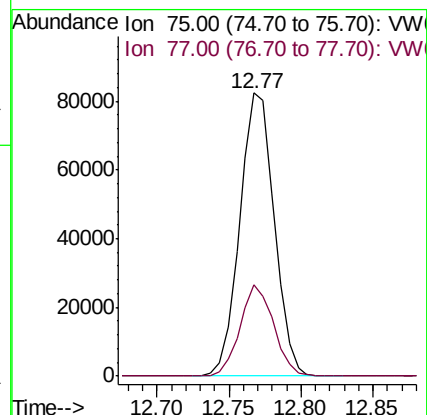
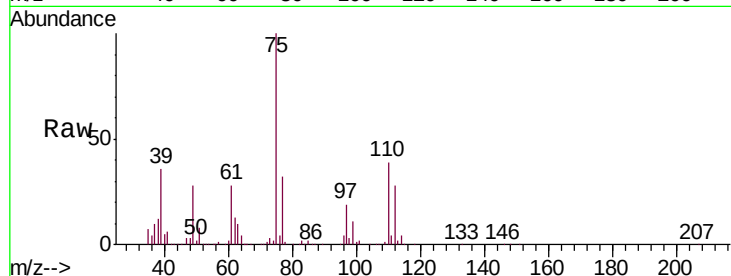
VSTD02507

Tgt Ion: 75 Resp: 137021

Ion Ratio Lower Upper

75 100

77 31.5 26.2 39.2



#62

Bromoform

Concen: 26.006 ug/L

RT: 12.35 min Scan# 1713

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

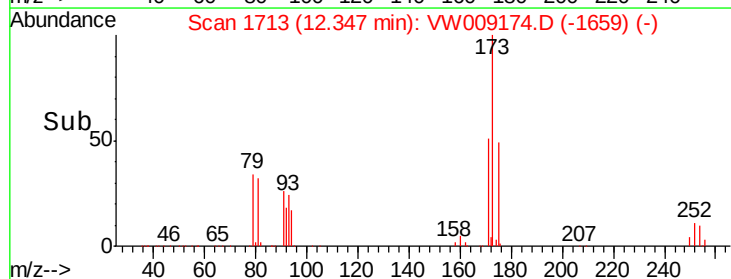
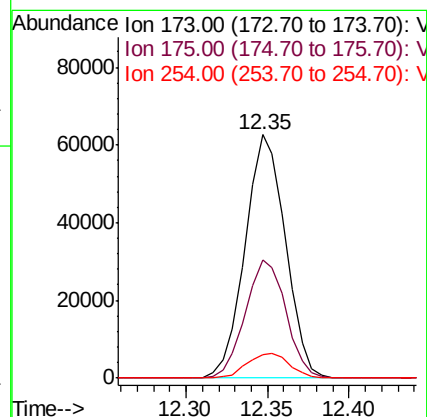
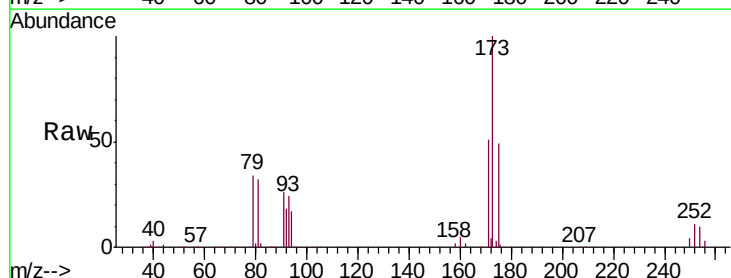
Tgt Ion: 173 Resp: 107713

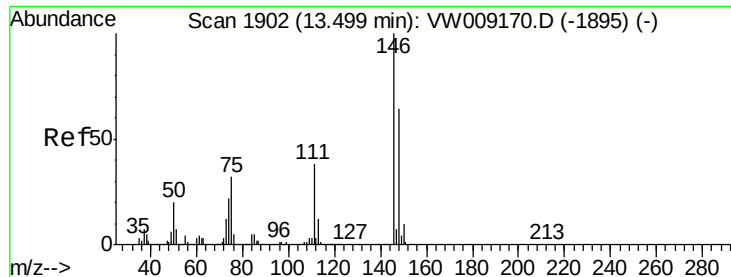
Ion Ratio Lower Upper

173 100

175 48.9 39.7 59.5

254 10.7 8.5 12.7

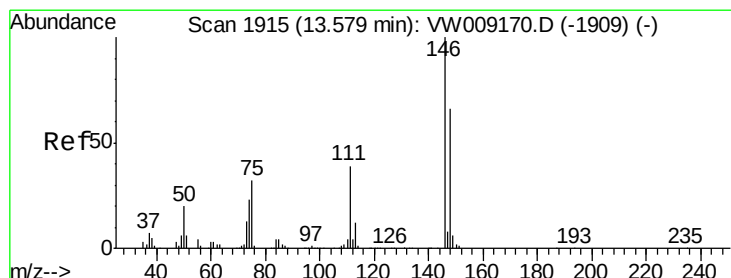
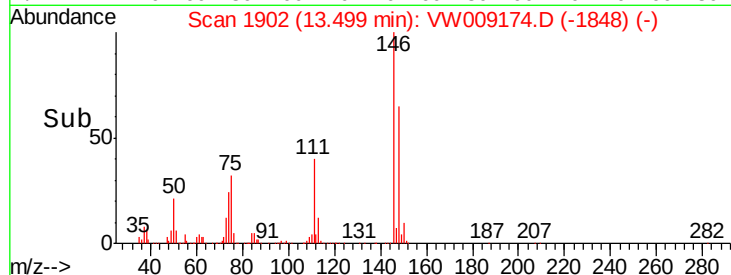
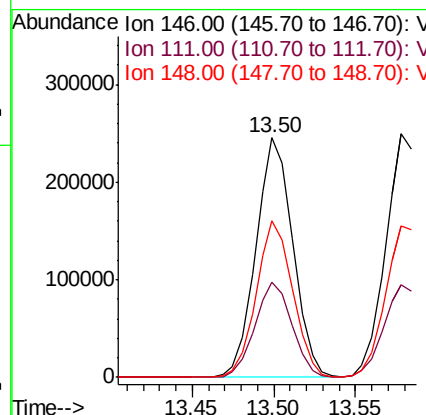
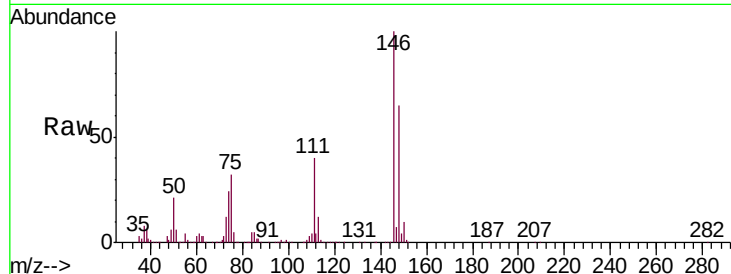




#63  
 1,3-Dichlorobenzene  
 Concen: 26.330 ug/L  
 RT: 13.50 min Scan# 1902  
 Delta R.T. -0.00 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

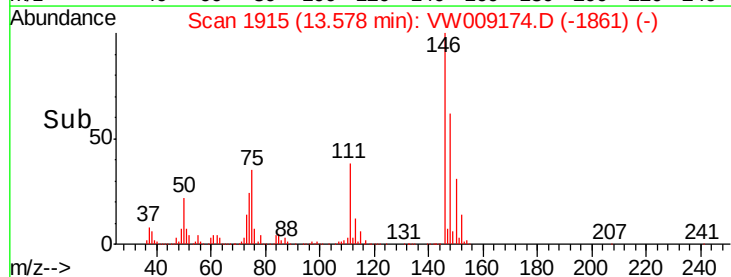
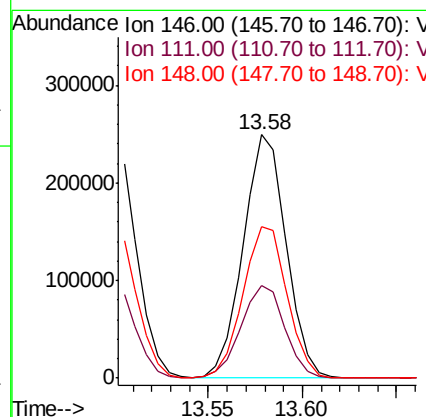
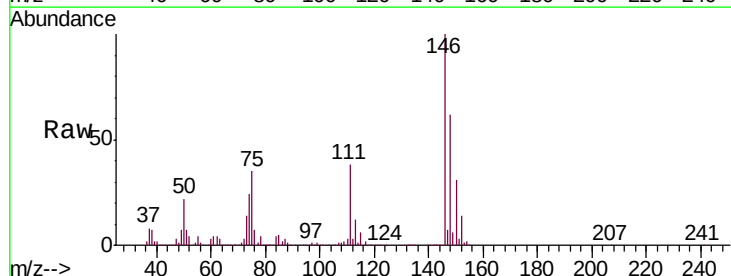
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02507

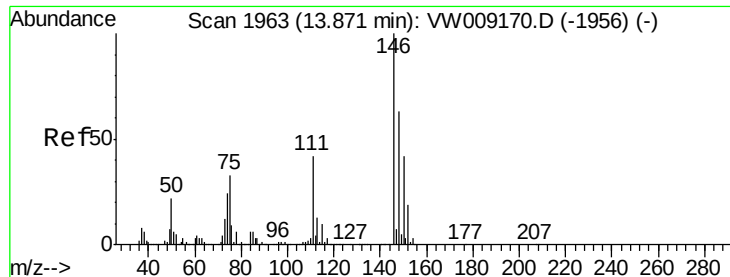
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 39.6  | 26.9  | 49.9  |
| 148     | 65.2  | 45.1  | 83.7  |



#64  
 1,4-Dichlorobenzene  
 Concen: 26.126 ug/L  
 RT: 13.58 min Scan# 1915  
 Delta R.T. -0.00 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 37.8  | 27.8  | 51.6  |
| 148     | 62.4  | 46.3  | 86.1  |

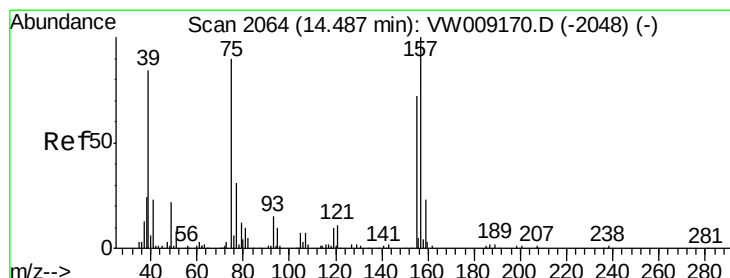
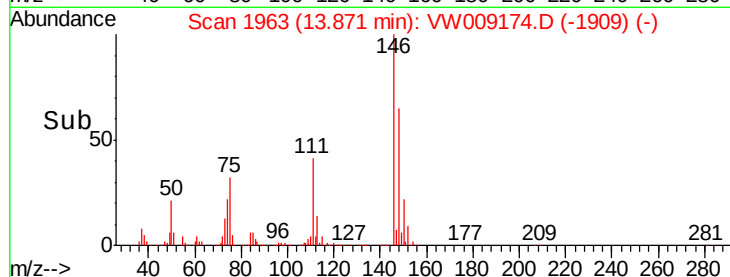
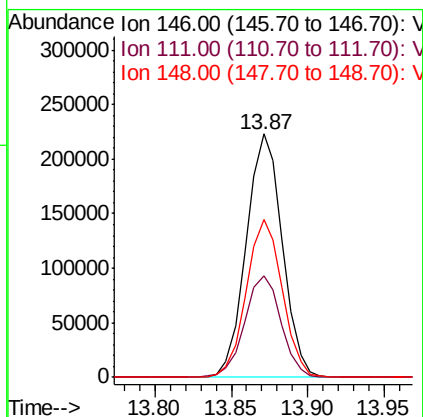
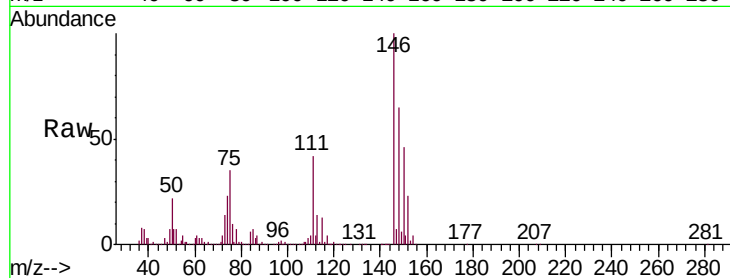




#65  
 1,2-Dichlorobenzene  
 Concen: 26.259 ug/L  
 RT: 13.87 min Scan# 1963  
 Delta R.T. -0.00 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

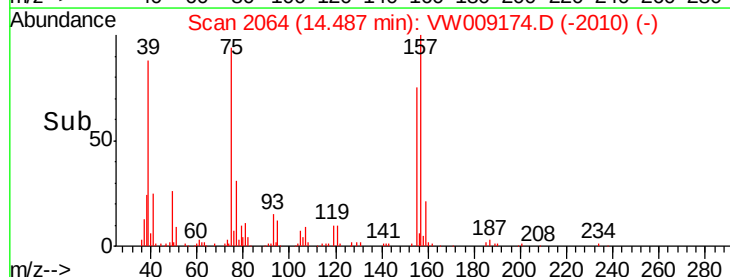
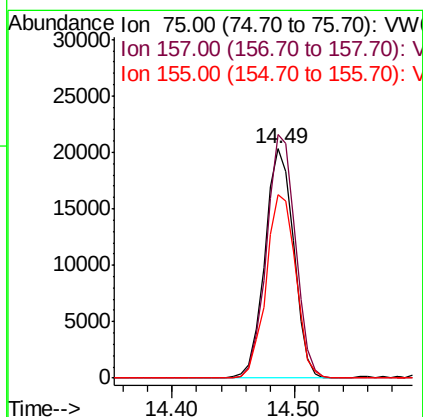
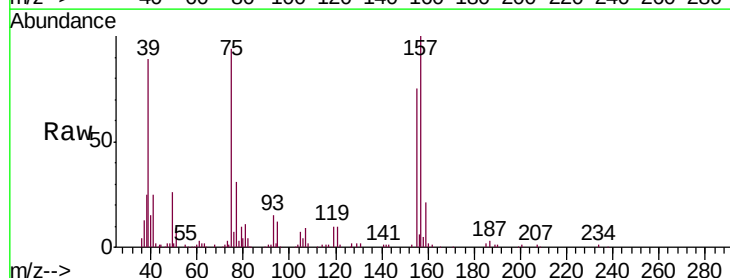
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02507

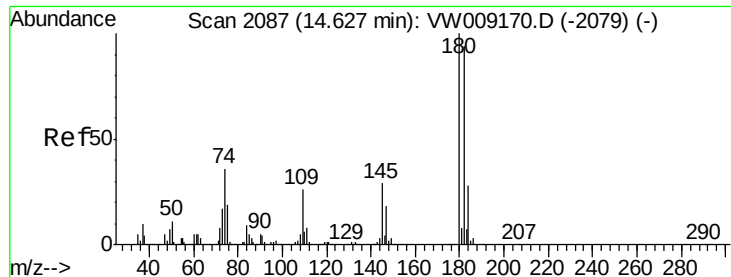
Tgt Ion: 146 Resp: 365863  
 Ion Ratio Lower Upper  
 146 100  
 111 41.7 33.5 50.3  
 148 64.7 50.2 75.2



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 24.371 ug/L  
 RT: 14.49 min Scan# 2064  
 Delta R.T. -0.00 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

Tgt Ion: 75 Resp: 33278  
 Ion Ratio Lower Upper  
 75 100  
 157 106.2 89.0 133.4  
 155 80.0 64.2 96.2

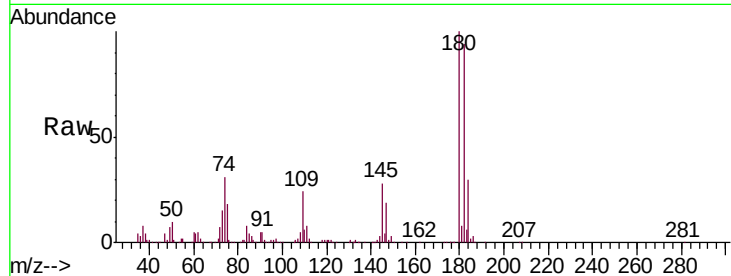




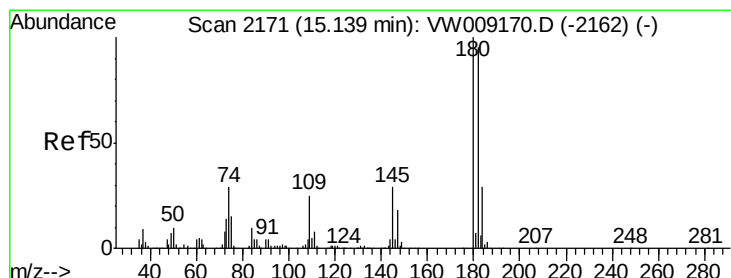
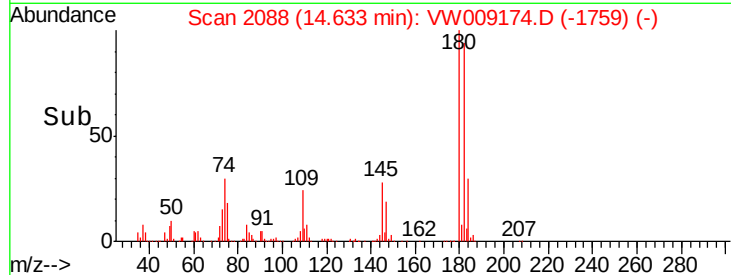
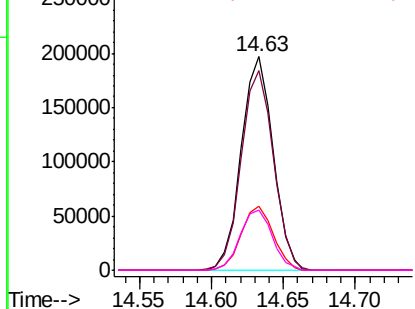
#67  
 1,3,5-Trichlorobenzene  
 Concen: 26.478 ug/L  
 RT: 14.63 min Scan# 2088  
 Delta R.T. 0.01 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02507

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 301724 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 94.7  | 76.1  | 114.1  |
| 184      | 30.0  | 23.8  | 35.6   |
| 145      | 28.8  | 23.4  | 35.2   |

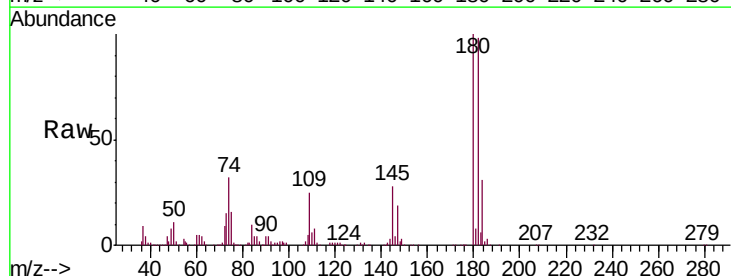


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

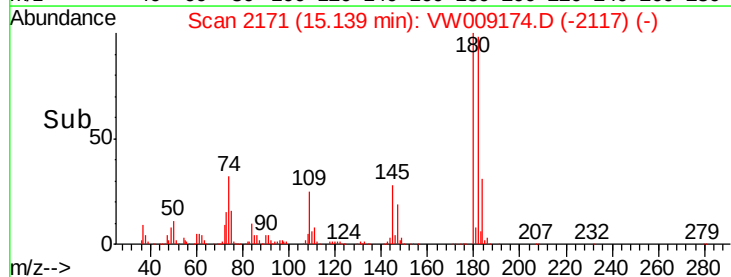
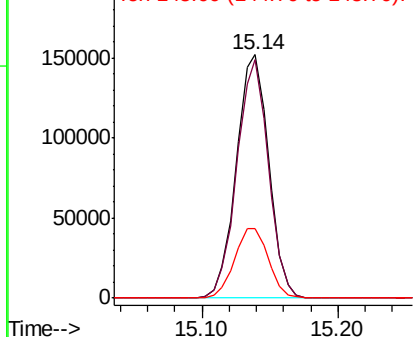


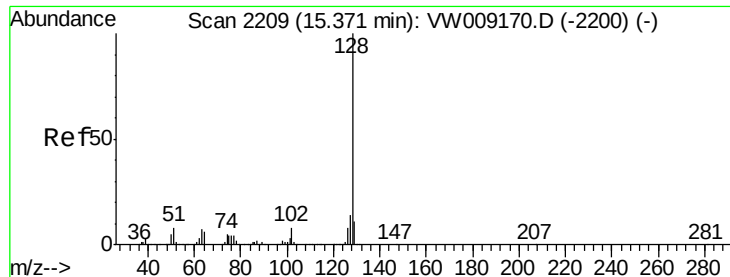
#68  
 1,2,4-trichlorobenzene  
 Concen: 26.447 ug/L  
 RT: 15.14 min Scan# 2171  
 Delta R.T. -0.00 min  
 Lab File: VW009174.D  
 Acq: 14 Mar 2019 17:11

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 253148 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 95.3  | 75.5  | 113.3  |
| 145      | 29.9  | 24.1  | 36.1   |



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





#69

Naphthalene

Concen: 26.674 ug/L

RT: 15.37 min Scan# 2209

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02507

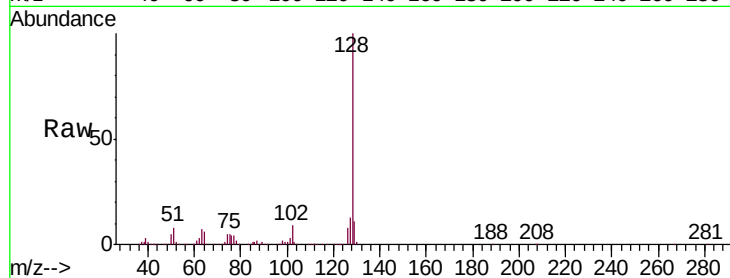
Tgt Ion:128 Resp: 529338

Ion Ratio Lower Upper

128 100

129 10.9 8.7 13.1

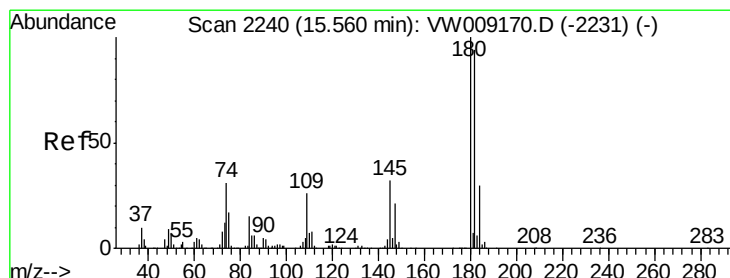
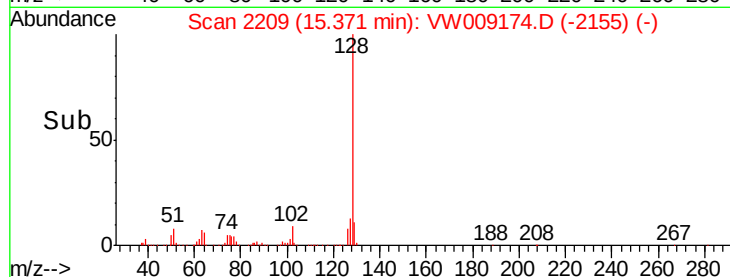
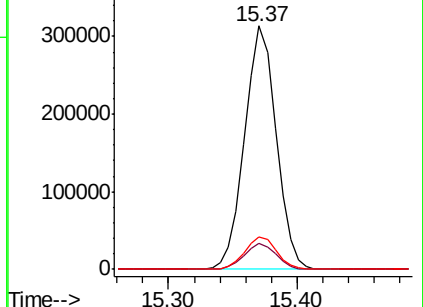
127 13.6 11.1 16.7



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 26.258 ug/L

RT: 15.56 min Scan# 2240

Delta R.T. -0.00 min

Lab File: VW009174.D

Acq: 14 Mar 2019 17:11

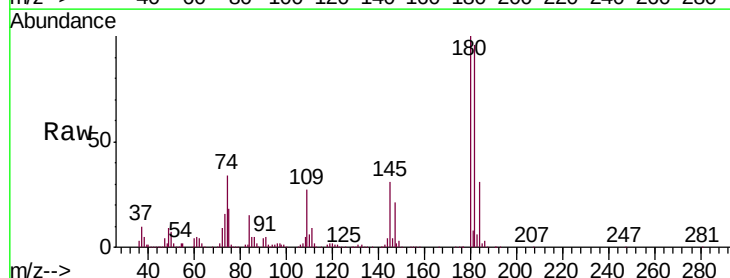
Tgt Ion:180 Resp: 235410

Ion Ratio Lower Upper

180 100

182 94.8 77.2 115.8

145 31.9 25.8 38.6



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

