

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW081818\  
 Data File : VW004726.D  
 Acq On : 16 Aug 2018 10:29  
 Operator : SY/AP  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Aug 16 18:26:23 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM081418S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Aug 16 02:39:24 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.85  | 114  | 805321   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 779451   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 400247   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 293833   | 22.95    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 91.80%  |
| 7) Chloroethane-d5             | 2.90   | 69    | 236088   | 23.86    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 95.44%  |
| 10) 1,1-Dichloroethene-d2      | 4.01   | 63    | 552989   | 23.62    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 94.48%  |
| 20) 2-Butanone-d5              | 7.09   | 46    | 216878   | 62.62    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 125.24% |
| 24) Chloroform-d               | 7.65   | 84    | 525294   | 24.34    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 97.36%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 282991   | 24.75    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 99.00%  |
| 29) Benzene-d6                 | 8.27   | 84    | 1061493  | 24.28    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 97.12%  |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 323605   | 23.83    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 95.32%  |
| 37) Toluene-d8                 | 10.33  | 98    | 971855   | 24.78    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 99.12%  |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 138670   | 25.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 100.60% |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 177446   | 65.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 130.78% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.70  | 84    | 353509   | 27.75    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 111.00% |
| 61) 1,2-Dichlorobenzene-d4     | 13.86  | 152   | 371433   | 24.46    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 97.84%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 2.01 | 85   | 226438   | 23.501 | ug/L  | 95     |
| 3) Chloromethane               | 2.21 | 50   | 251322   | 21.991 | ug/L  | 98     |
| 5) Vinyl chloride              | 2.37 | 62   | 417015   | 25.142 | ug/L  | 97     |
| 6) Bromomethane                | 2.79 | 94   | 230028   | 24.197 | ug/L  | 100    |
| 8) Chloroethane                | 2.93 | 64   | 229467   | 24.663 | ug/L  | 96     |
| 9) Trichlorofluoromethane      | 3.26 | 101  | 200909   | 24.040 | ug/L  | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101  | 316910   | 25.802 | ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 4.03 | 96   | 305445   | 25.330 | ug/L  | 95     |
| 13) Acetone                    | 4.14 | 43   | 197671   | 62.199 | ug/L  | 97     |
| 14) Carbon disulfide           | 4.37 | 76   | 1026378  | 24.413 | ug/L  | 98     |
| 15) Methyl Acetate             | 4.67 | 43   | 196135   | 28.558 | ug/L  | 99     |
| 16) Methylene chloride         | 4.92 | 84   | 328777   | 20.436 | ug/L  | 96     |
| 17) Methyl tert-butyl Ether    | 5.43 | 73   | 401432   | 25.491 | ug/L  | 100    |
| 18) trans-1,2-Dichloroethene   | 5.42 | 96   | 304415   | 24.585 | ug/L  | 96     |
| 19) 1,1-Dichloroethane         | 6.21 | 63   | 542555   | 24.766 | ug/L  | 98     |
| 21) 2-Butanone                 | 7.18 | 43   | 269051   | 60.531 | ug/L  | 98     |
| 22) cis-1,2-Dichloroethene     | 7.17 | 96   | 327299   | 25.055 | ug/L  | 98     |

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 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Aug 16 18:26:23 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM081418S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Aug 16 02:39:24 2018  
 Response via : Initial Calibration

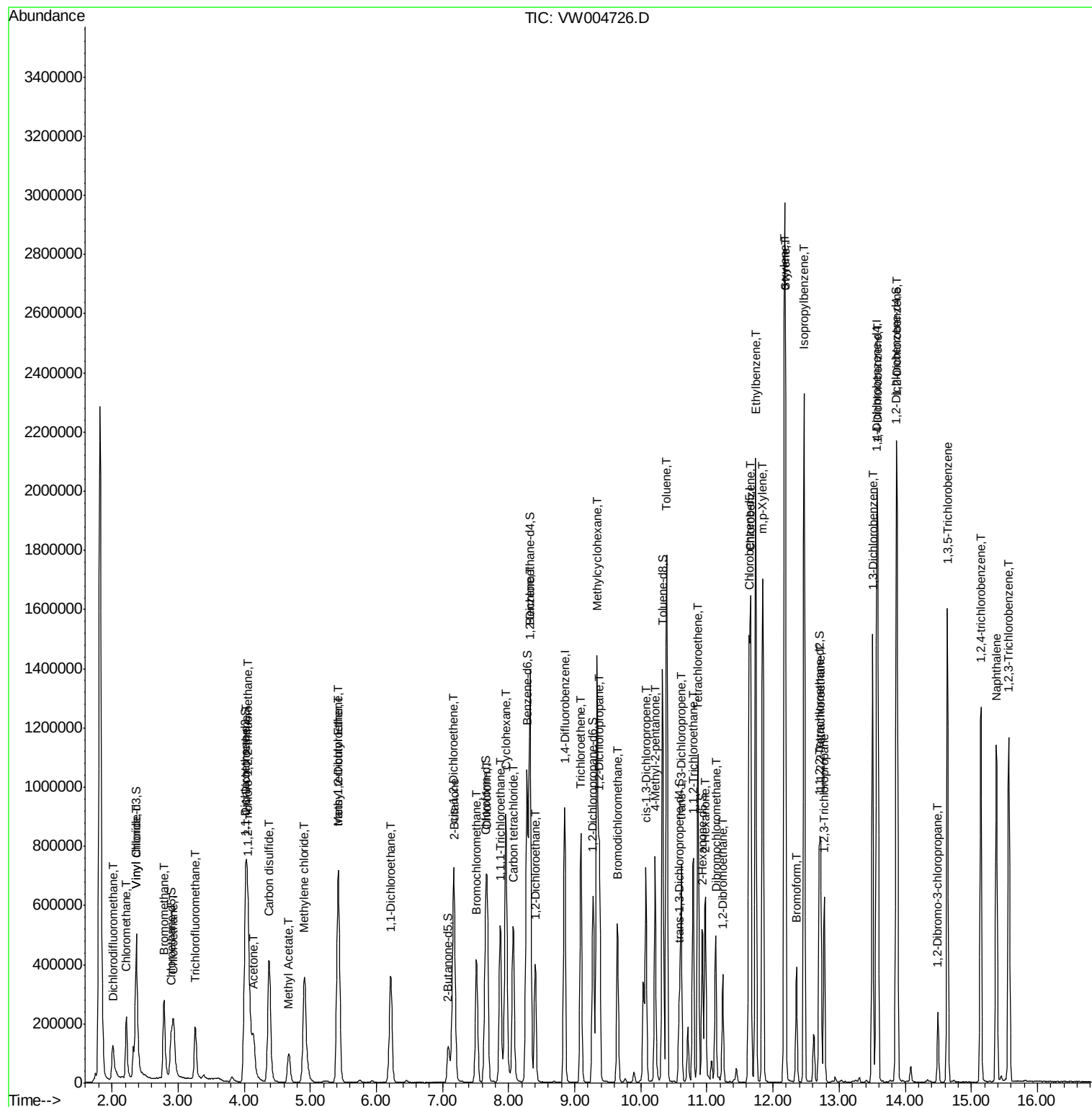
| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 7.51  | 128  | 151805   | 24.913 | ug/L  | 98       |
| 25) Chloroform                  | 7.68  | 83   | 540169   | 24.778 | ug/L  | 100      |
| 27) 1,2-Dichloroethane          | 8.40  | 62   | 353259   | 25.064 | ug/L  | 99       |
| 30) Cyclohexane                 | 7.96  | 56   | 533231   | 26.177 | ug/L  | 99       |
| 31) 1,1,1-Trichloroethane       | 7.87  | 97   | 440161   | 25.242 | ug/L  | 100      |
| 32) Carbon tetrachloride        | 8.07  | 117  | 416064   | 25.078 | ug/L  | 99       |
| 34) Benzene                     | 8.33  | 78   | 1256300  | 25.321 | ug/L  | 100      |
| 35) Trichloroethene             | 9.09  | 95   | 307960   | 24.665 | ug/L  | 99       |
| 36) Methylcyclohexane           | 9.34  | 83   | 598059   | 25.671 | ug/L  | 98       |
| 40) 1,2-Dichloropropane         | 9.37  | 63   | 318845   | 25.326 | ug/L  | 100      |
| 41) Bromodichloromethane        | 9.65  | 83   | 365872   | 24.873 | ug/L  | 99       |
| 42) cis-1,3-Dichloropropene     | 10.08 | 75   | 449477   | 25.652 | ug/L  | 100      |
| 43) 4-Methyl-2-pentanone        | 10.21 | 43   | 500626   | 60.055 | ug/L  | 100      |
| 44) Toluene                     | 10.39 | 91   | 1322004  | 26.313 | ug/L  | 99       |
| 45) trans-1,3-Dichloropropene   | 10.61 | 75   | 403289   | 26.103 | ug/L  | 99       |
| 46) 1,1,2-Trichloroethane       | 10.79 | 97   | 250288   | 26.303 | ug/L  | 99       |
| 47) Tetrachloroethene           | 10.87 | 164  | 261383   | 25.233 | ug/L  | 100      |
| 49) 2-Hexanone                  | 10.98 | 43   | 394916   | 65.047 | ug/L  | 99       |
| 50) Dibromochloromethane        | 11.13 | 129  | 276416   | 25.826 | ug/L  | 98       |
| 51) 1,2-Dibromoethane           | 11.24 | 107  | 246037   | 26.822 | ug/L  | 98       |
| 52) Chlorobenzene               | 11.66 | 112  | 849082   | 25.312 | ug/L  | 100      |
| 53) Ethylbenzene                | 11.74 | 91   | 1463587  | 26.152 | ug/L  | 100      |
| 54) m,p-Xylene                  | 11.85 | 106  | 560877   | 26.372 | ug/L  | 100      |
| 55) o-xylene                    | 12.17 | 106  | 528294   | 26.282 | ug/L  | 99       |
| 56) Styrene                     | 12.19 | 104  | 935931   | 27.145 | ug/L  | 100      |
| 57) Isopropylbenzene            | 12.47 | 105  | 1471696  | 27.034 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 12.72 | 83   | 363389   | 27.694 | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 12.77 | 75   | 267598   | 27.700 | ug/L  | 99       |
| 62) Bromoform                   | 12.35 | 173  | 183921   | 26.735 | ug/L  | 99       |
| 63) 1,3-Dichlorobenzene         | 13.51 | 146  | 644182   | 25.093 | ug/L  | 100      |
| 64) 1,4-Dichlorobenzene         | 13.58 | 146  | 687225   | 25.061 | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene         | 13.88 | 146  | 638343   | 25.211 | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan  | 14.49 | 75   | 61219    | 28.691 | ug/L  | 97       |
| 67) 1,3,5-Trichlorobenzene      | 14.64 | 180  | 521783   | 25.266 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 15.15 | 180  | 428063   | 25.587 | ug/L  | 99       |
| 69) Naphthalene                 | 15.38 | 128  | 984155   | 28.581 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 15.57 | 180  | 420965   | 26.362 | ug/L  | 99       |

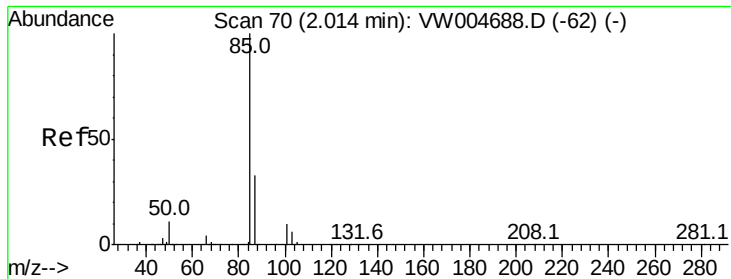
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW081818\  
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 MSVOA\_W  
 ClientSampled :

Quant Time: Aug 16 18:26:23 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM081418S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Aug 16 02:39:24 2018  
 Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 23.501 ug/L

RT: 2.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

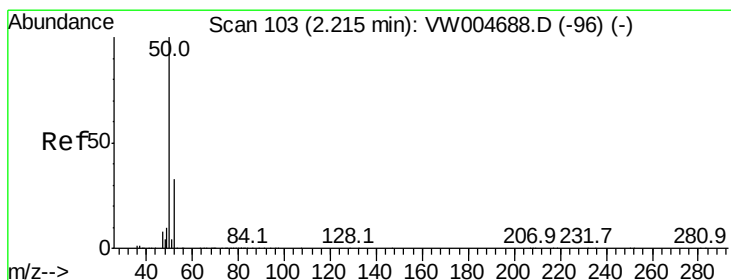
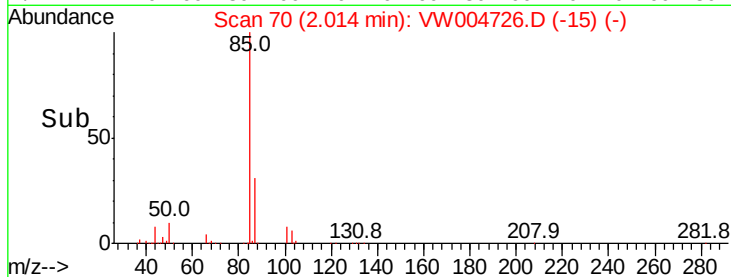
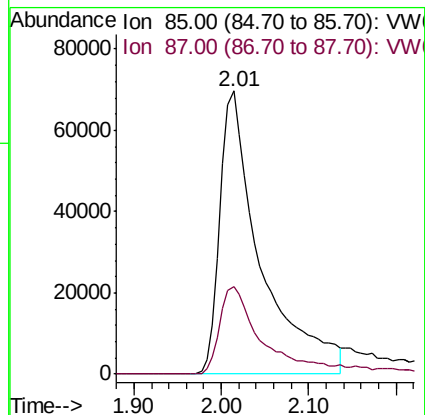
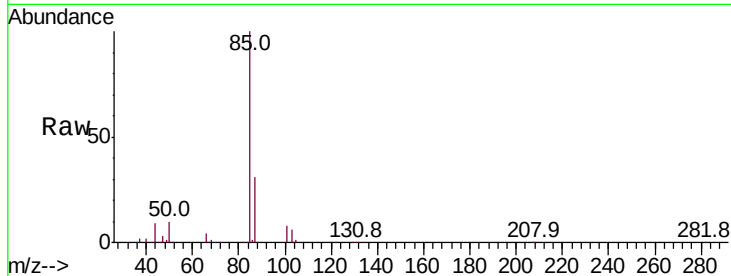
ClientSampleId :

Tot Ion: 85 Resp: 226438

Ion Ratio Lower Upper

85 100

87 31.4 19.9 37.0



#3

Chloromethane

Concen: 21.991 ug/L

RT: 2.21 min Scan# 103

Delta R.T. -0.00 min

Lab File: VW004726.D

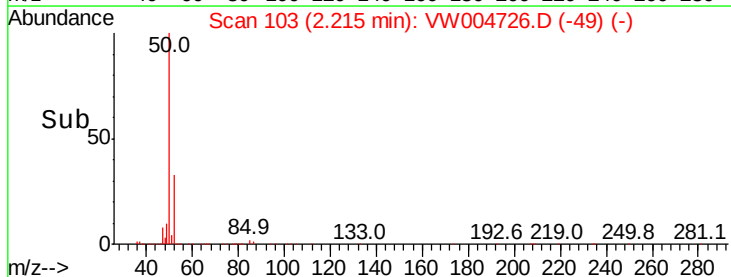
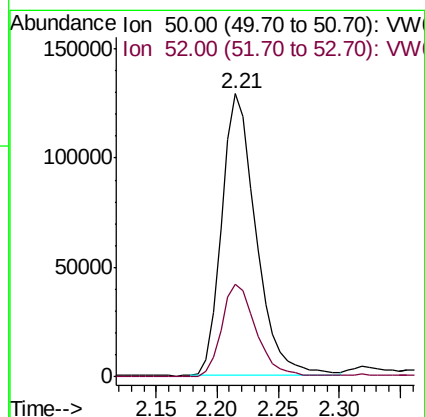
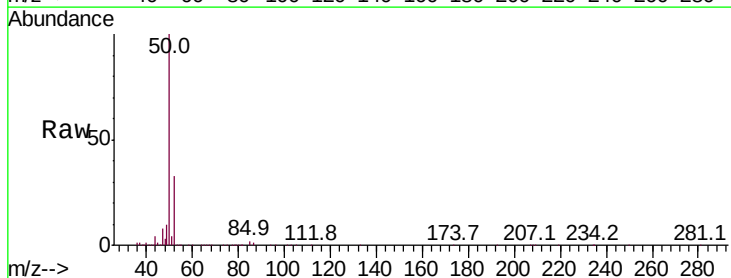
Acq: 16 Aug 2018 10:29

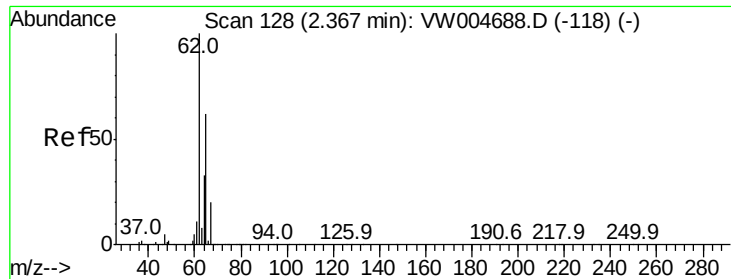
Tgt Ion: 50 Resp: 251322

Ion Ratio Lower Upper

50 100

52 32.9 22.4 41.6





#5

Vinyl chloride

Concen: 25.142 ug/L

RT: 2.37 min Scan# 128

Delta R.T. -0.01 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

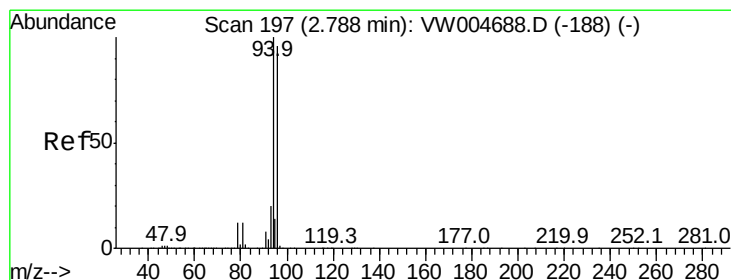
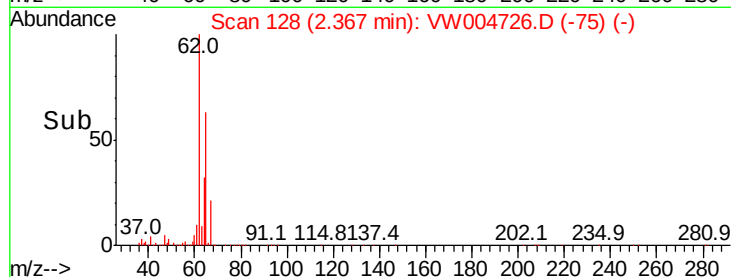
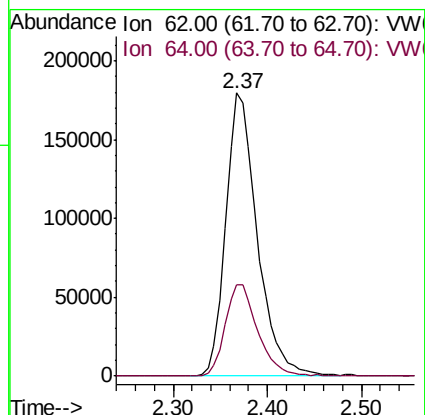
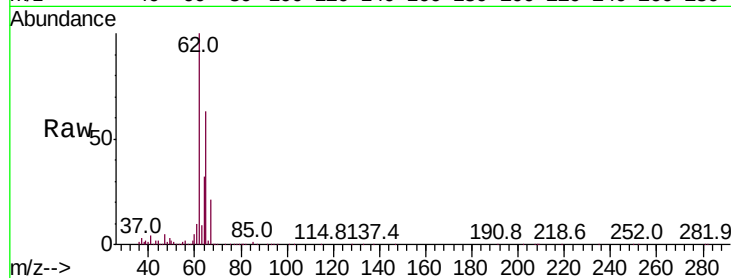
ClientSampleId :

Tot Ion: 62 Resp: 417015

Ion Ratio Lower Upper

62 100

64 32.2 23.7 43.9



#6

Bromomethane

Concen: 24.197 ug/L

RT: 2.79 min Scan# 197

Delta R.T. -0.00 min

Lab File: VW004726.D

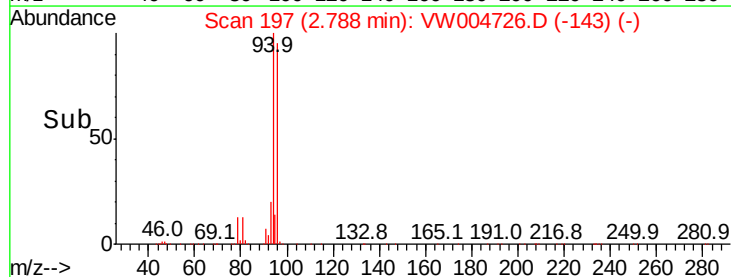
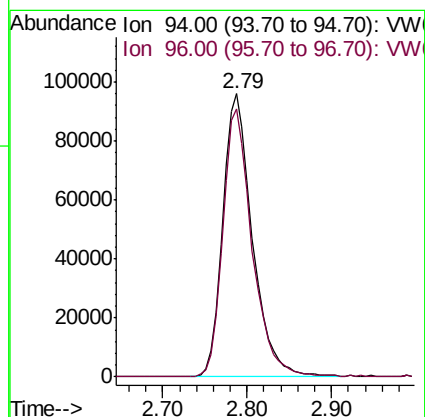
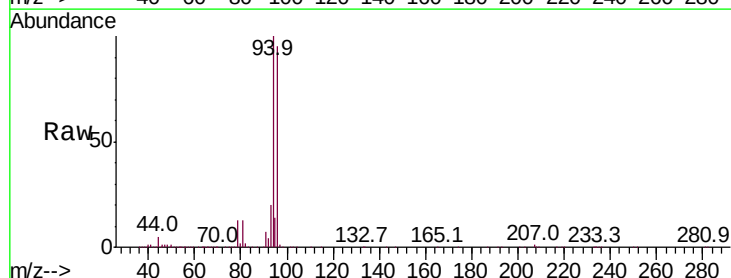
Acq: 16 Aug 2018 10:29

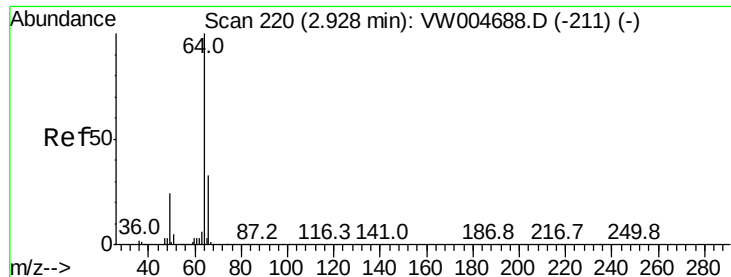
Tgt Ion: 94 Resp: 230028

Ion Ratio Lower Upper

94 100

96 93.4 9.3 177.7





#8

Chloroethane

Concen: 24.663 ug/L

RT: 2.93 min Scan# 221

Delta R.T. 0.01 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

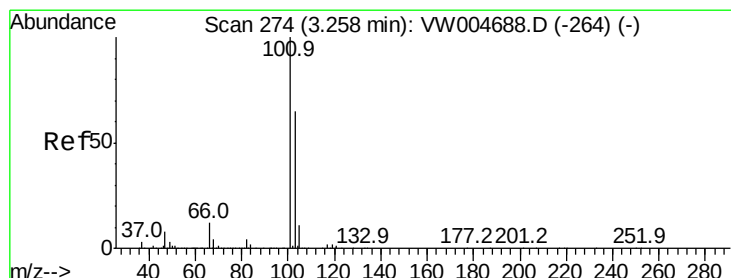
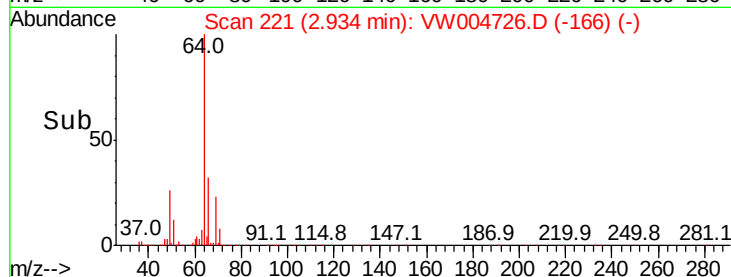
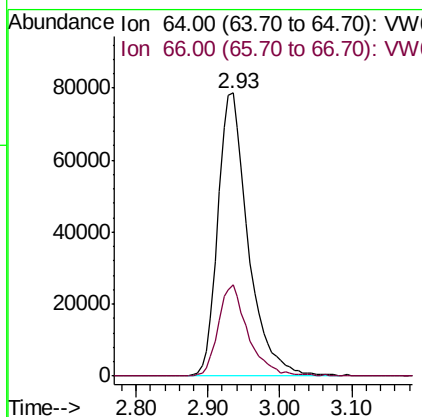
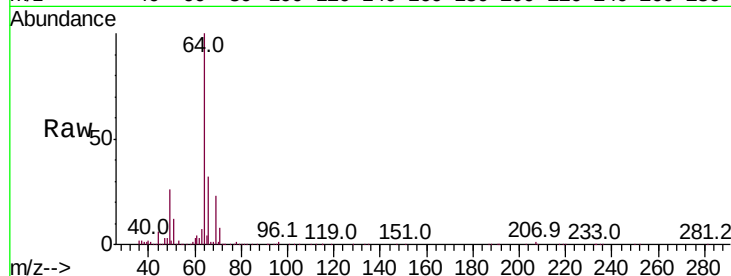
ClientSampleId :

Tot Ion: 64 Resp: 229467

Ion Ratio Lower Upper

64 100

66 32.2 24.2 45.0



#9

Trichlorofluoromethane

Concen: 24.040 ug/L

RT: 3.26 min Scan# 274

Delta R.T. -0.00 min

Lab File: VW004726.D

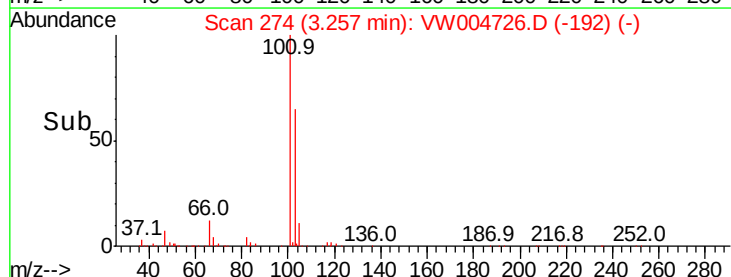
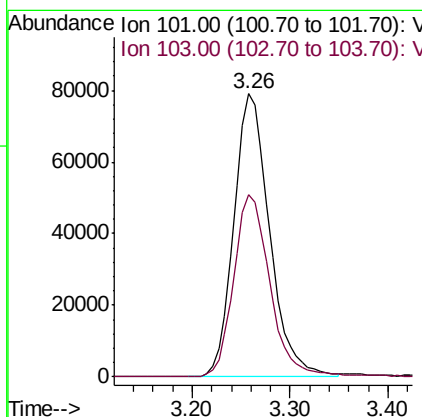
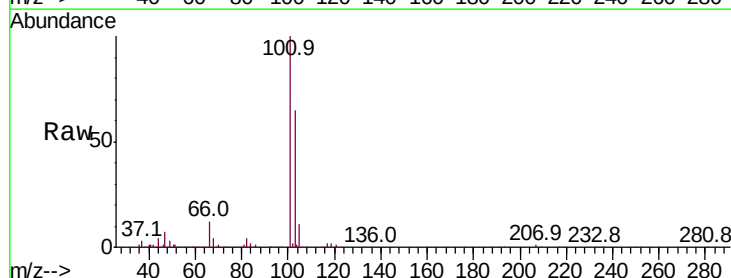
Acq: 16 Aug 2018 10:29

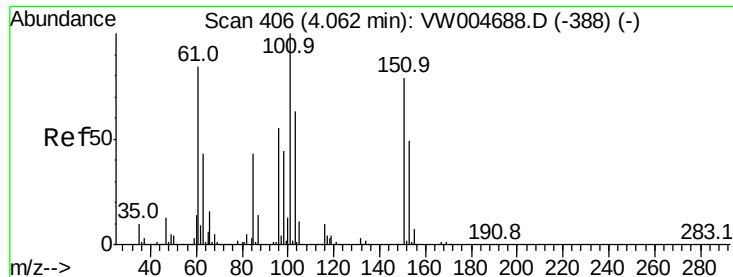
Tgt Ion: 101 Resp: 200909

Ion Ratio Lower Upper

101 100

103 64.6 45.1 83.7





#11

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

Concen: 25.802 ug/L

RT: 4.06 min Scan# 406

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

ClientSampled :

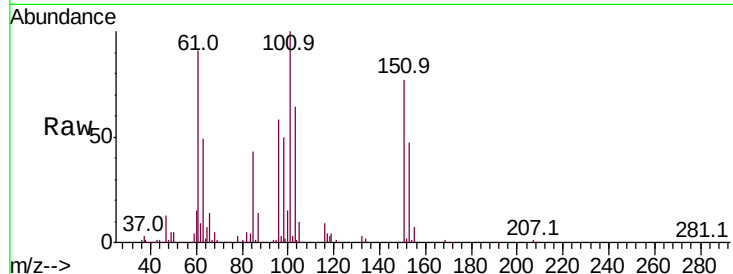
Tot Ion:101 Resp: 316910

Ion Ratio Lower Upper

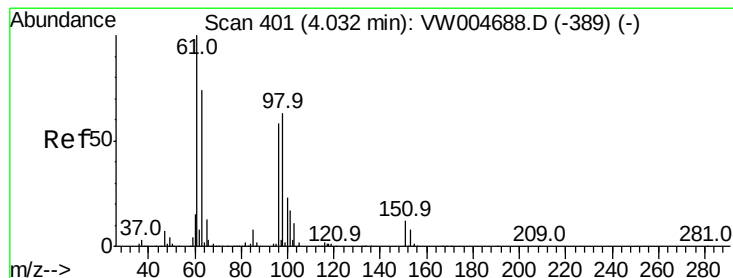
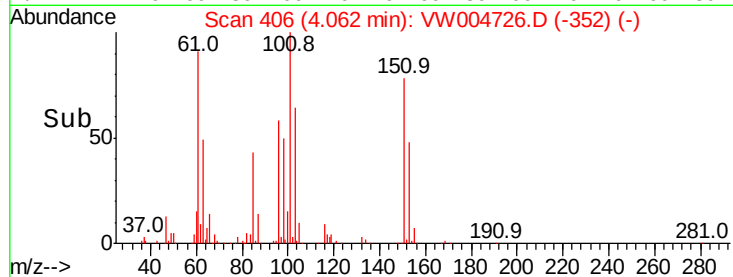
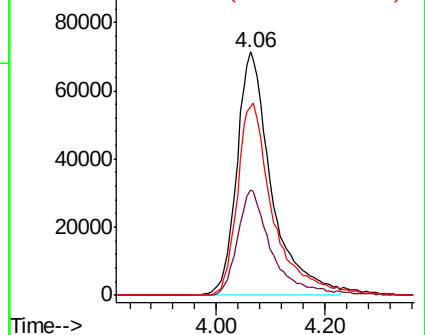
101 100

85 40.3 33.2 49.8

151 79.1 63.0 94.6



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: 25.330 ug/L

RT: 4.03 min Scan# 401

Delta R.T. -0.01 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

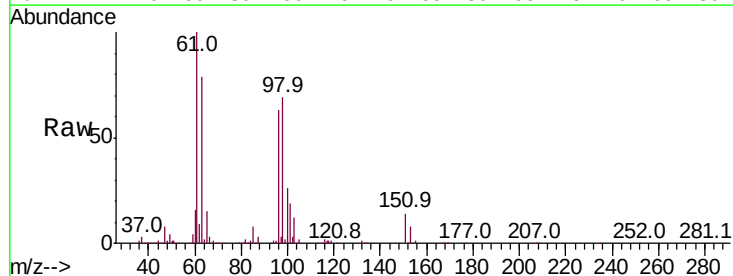
Tgt Ion: 96 Resp: 305445

Ion Ratio Lower Upper

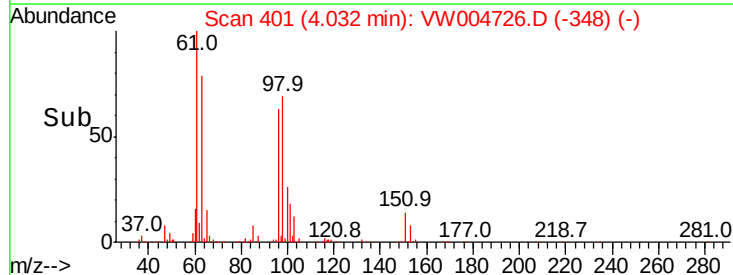
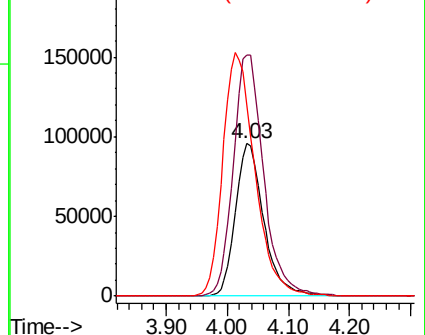
96 100

61 158.5 118.9 220.7

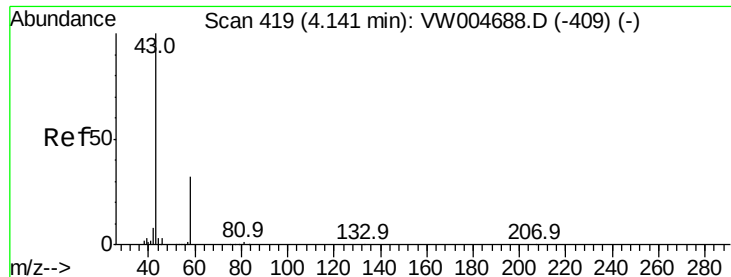
63 125.8 88.9 165.1



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: 62.199 ug/L

RT: 4.14 min Scan# 419

Delta R.T. 0.01 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

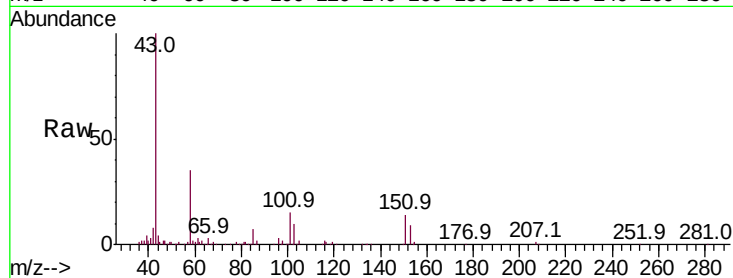
ClientSampleId :

Tot Ion: 43 Resp: 197671

Ion Ratio Lower Upper

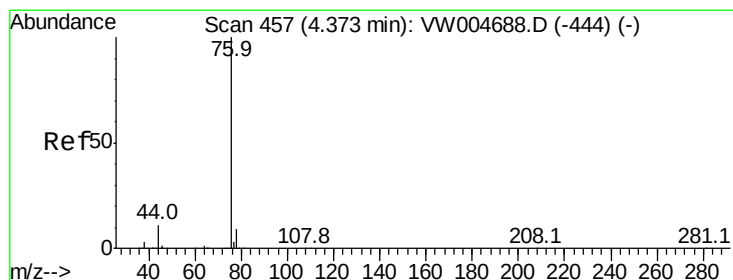
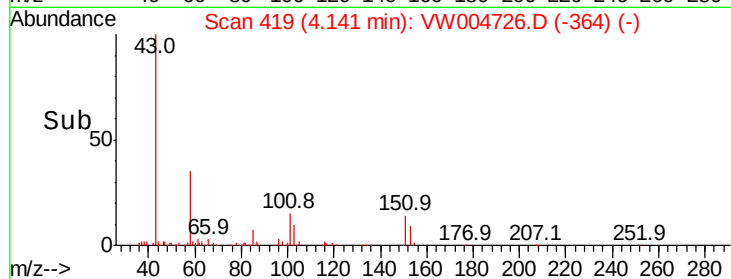
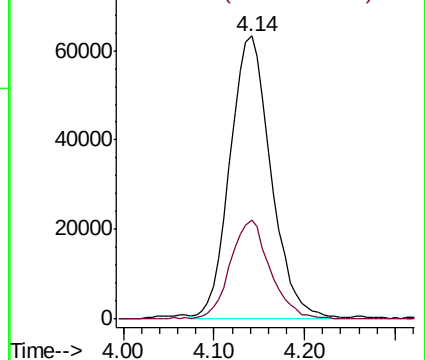
43 100

58 32.8 0.0 69.4



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#14

Carbon disulfide

Concen: 24.413 ug/L

RT: 4.37 min Scan# 457

Delta R.T. -0.01 min

Lab File: VW004726.D

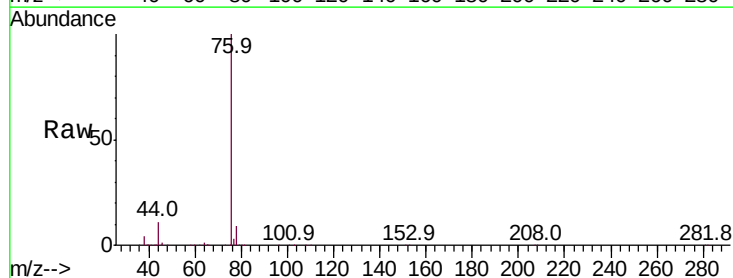
Acq: 16 Aug 2018 10:29

Tgt Ion: 76 Resp: 1026378

Ion Ratio Lower Upper

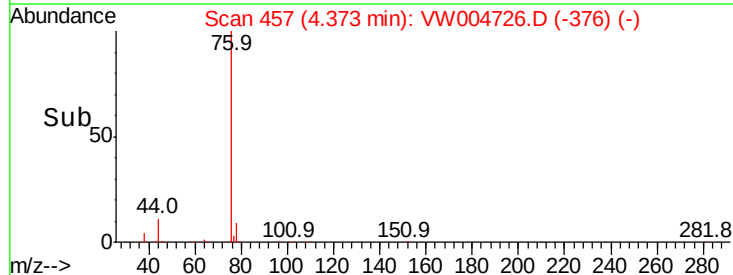
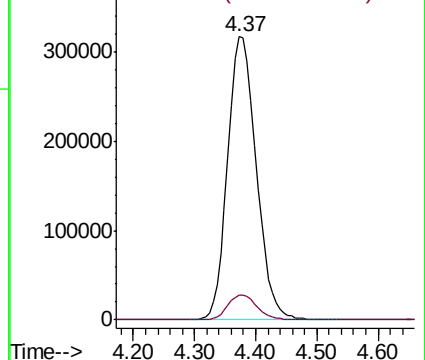
76 100

78 8.7 7.4 11.2

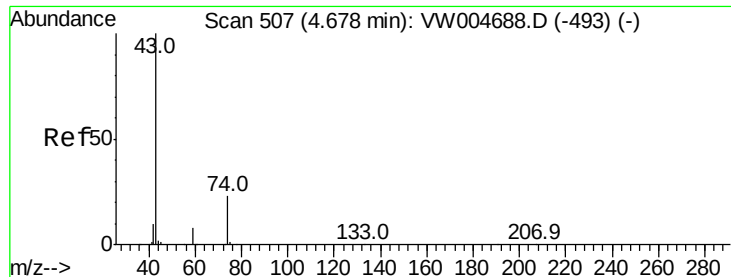


Abundance Ion 76.00 (75.70 to 76.70): VW

Ion 78.00 (77.70 to 78.70): VW



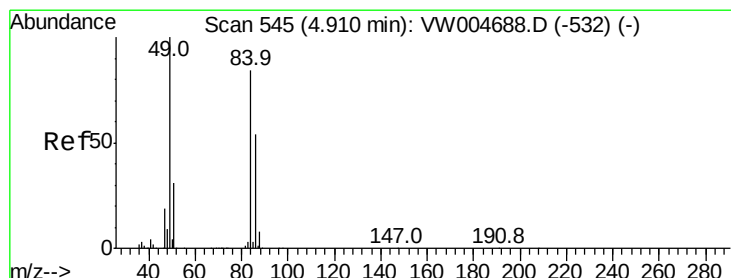
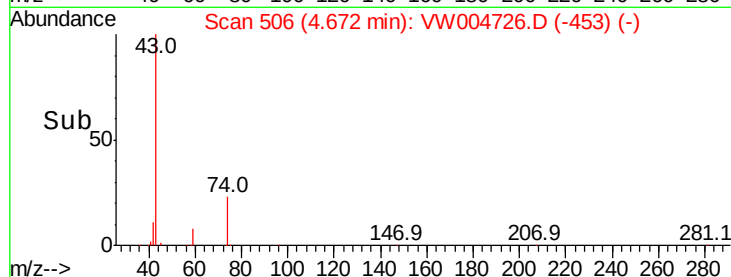
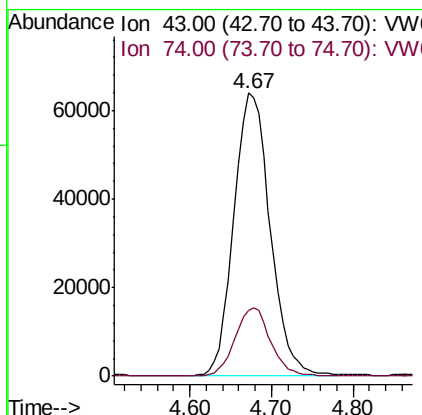
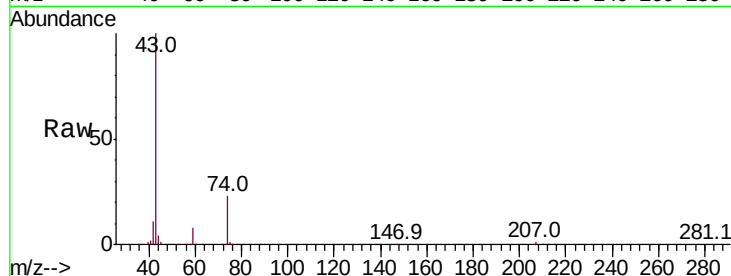




#15  
Methvl Acetate  
Concen: 28.558 ug/L  
RT: 4.67 min Scan# 506  
Delta R.T. -0.01 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

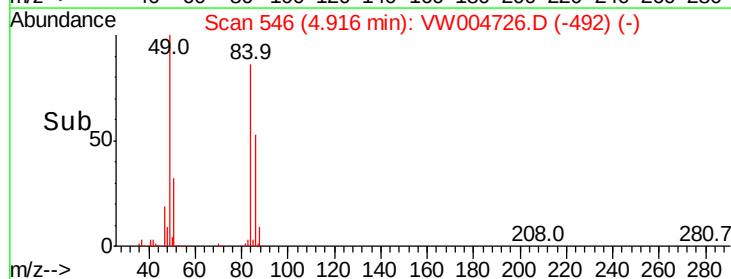
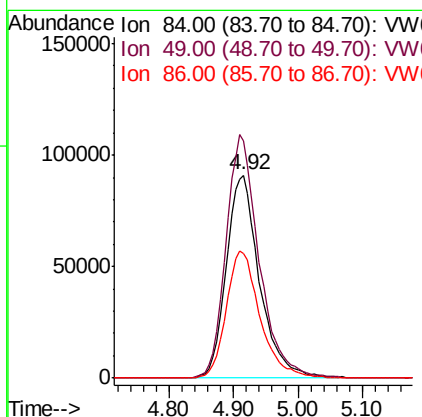
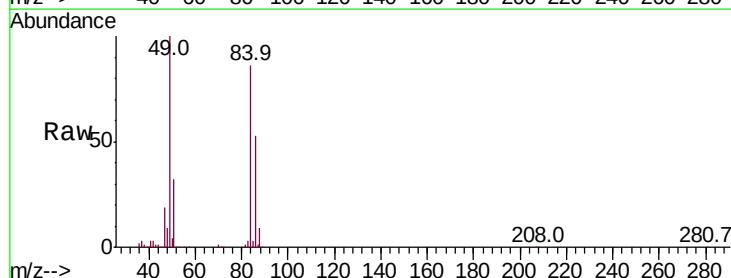
Instrument :  
MSVOA\_W  
ClientSampled :

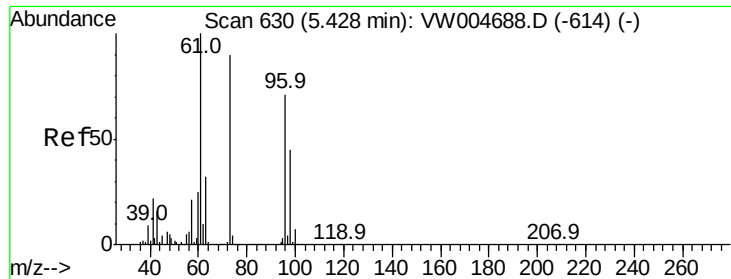
Tot Ion: 43 Resp: 196135  
Ion Ratio Lower Upper  
43 100  
74 23.8 18.8 28.2



#16  
Methylene chloride  
Concen: 20.436 ug/L  
RT: 4.92 min Scan# 546  
Delta R.T. -0.00 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

Tgt Ion: 84 Resp: 328777  
Ion Ratio Lower Upper  
84 100  
49 116.5 84.9 157.7  
86 61.6 45.7 84.9

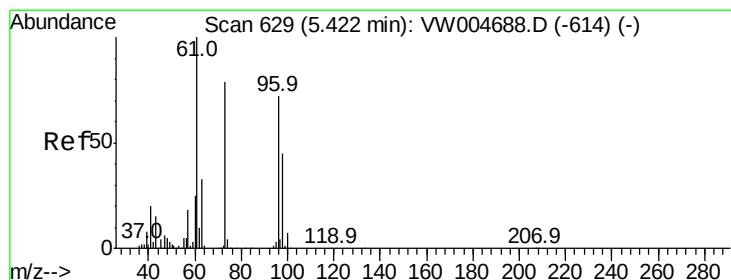
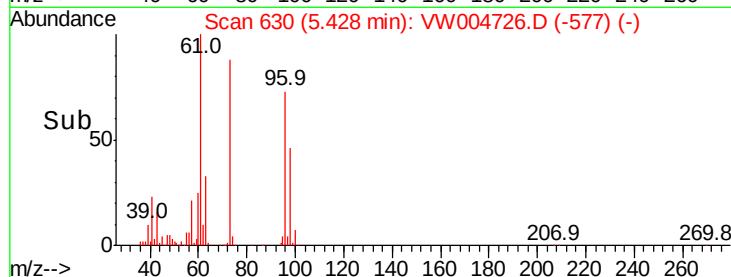
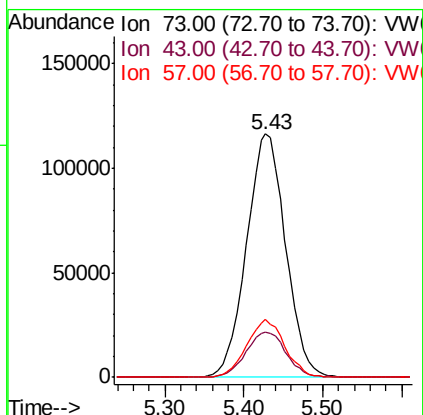
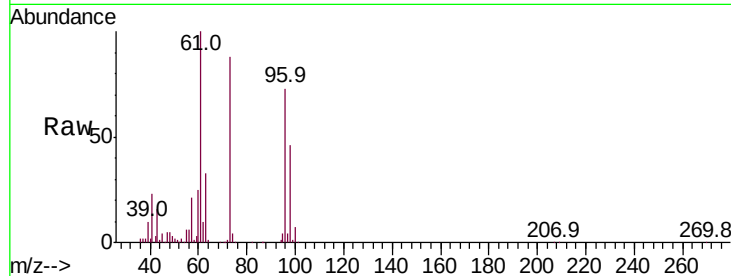




#17  
Methyl tert-butyl Ether  
Concen: 25.491 ug/L  
RT: 5.43 min Scan# 630  
Delta R.T. -0.01 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

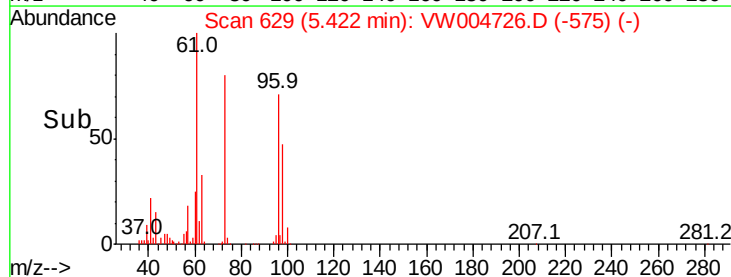
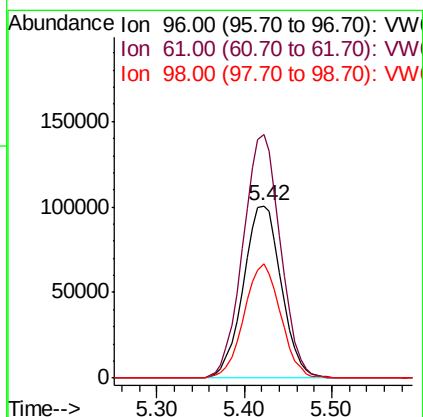
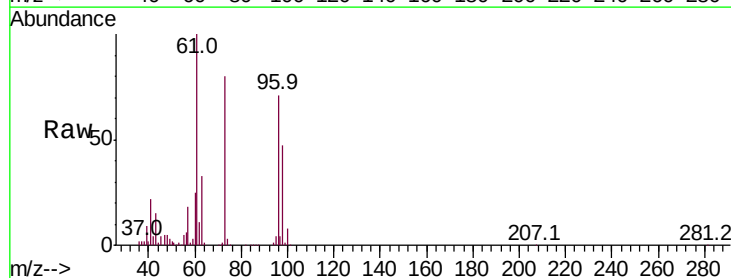
Instrument :  
MSVOA\_W  
ClientSampled :

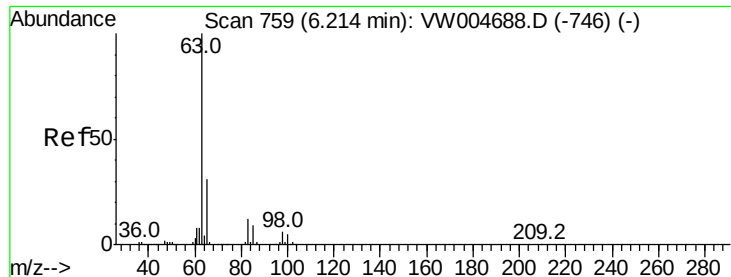
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 43      | 18.9  | 15.0  | 22.6  |
| 57      | 23.3  | 18.6  | 27.8  |



#18  
trans-1,2-Dichloroethene  
Concen: 24.585 ug/L  
RT: 5.42 min Scan# 629  
Delta R.T. -0.00 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 141.3 | 96.1  | 178.5 |
| 98      | 66.6  | 43.3  | 80.5  |

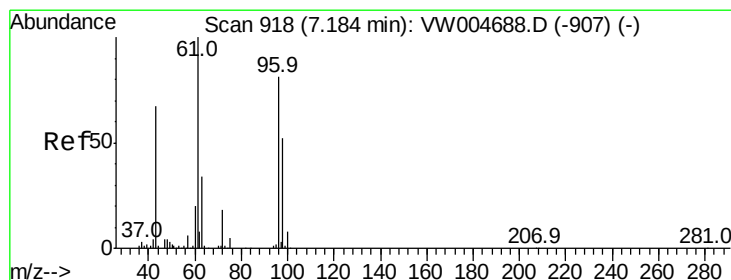
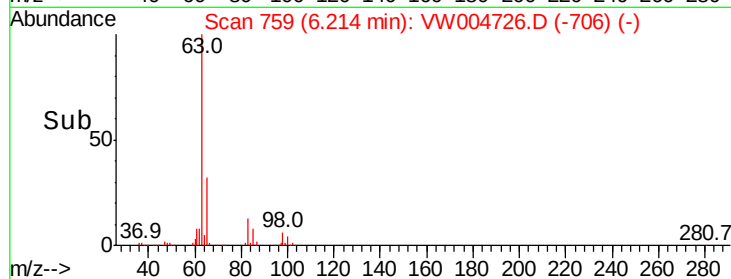
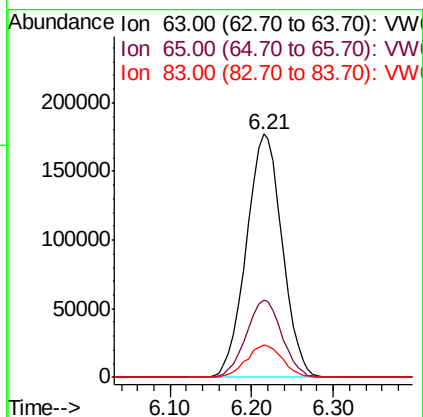
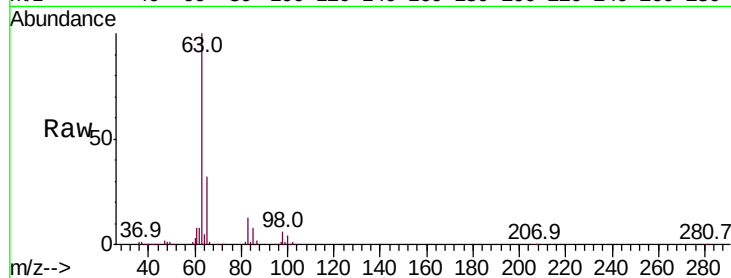




#19  
 1,1-Dichloroethane  
 Concen: 24.766 ug/L  
 RT: 6.21 min Scan# 759  
 Delta R.T. -0.01 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

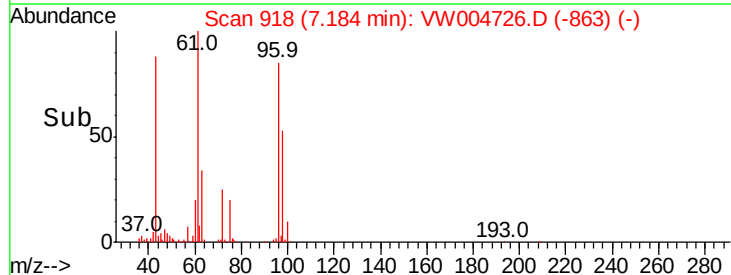
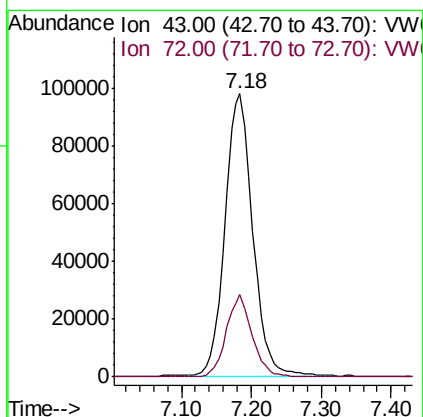
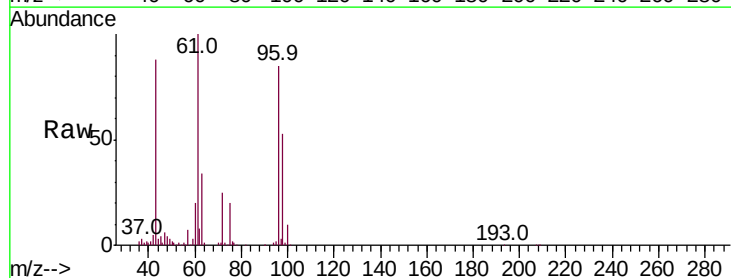
Instrument :  
 MSVOA\_W  
 ClientSampleId :

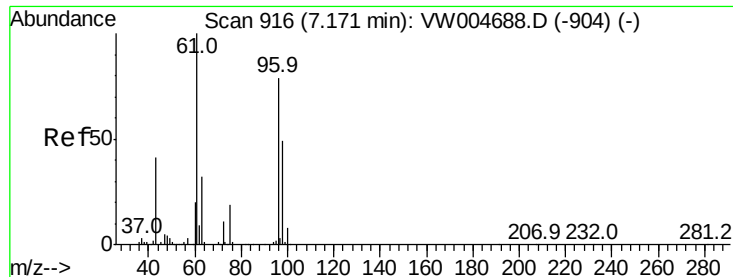
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 31.6  | 21.2  | 39.4  |
| 83      | 13.2  | 9.2   | 17.0  |



#21  
 2-Butanone  
 Concen: 60.531 ug/L  
 RT: 7.18 min Scan# 918  
 Delta R.T. 0.01 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 27.0  | 14.1  | 42.2  |



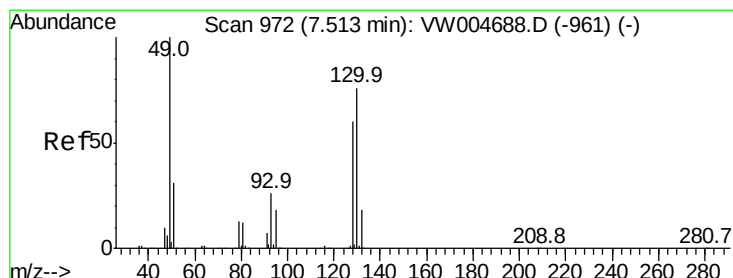
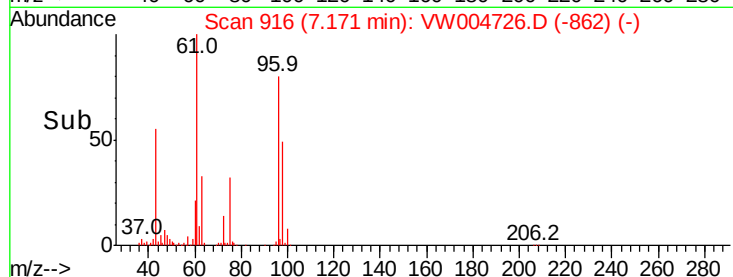
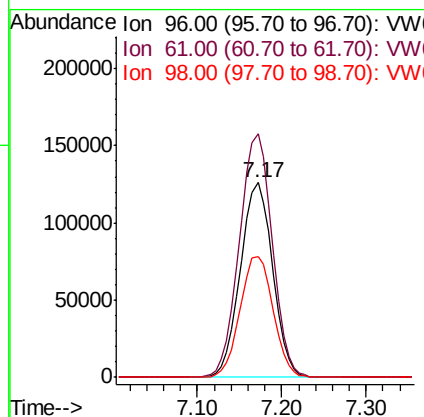
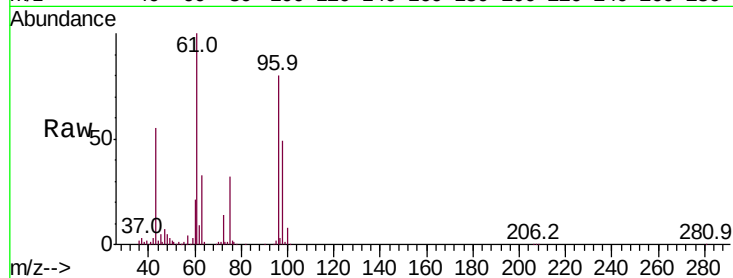


#22

cis-1,2-Dichloroethene  
 Concen: 25.055 ug/L  
 RT: 7.17 min Scan# 916  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

Instrument :  
 MSVOA\_W  
 ClientSampleId :

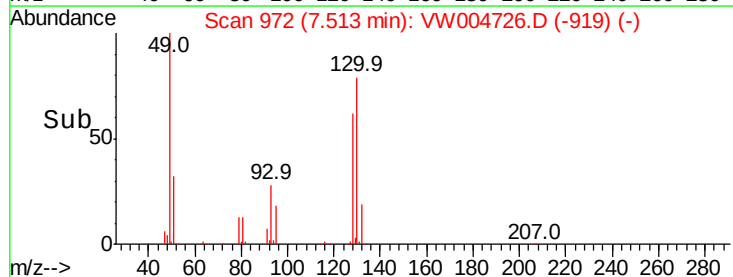
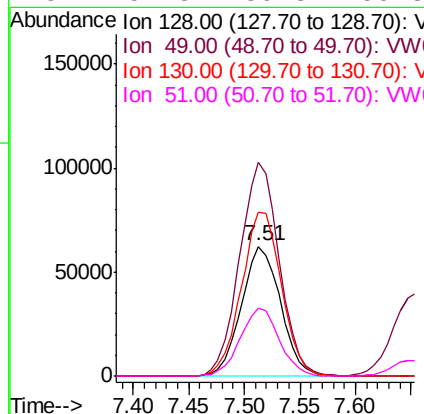
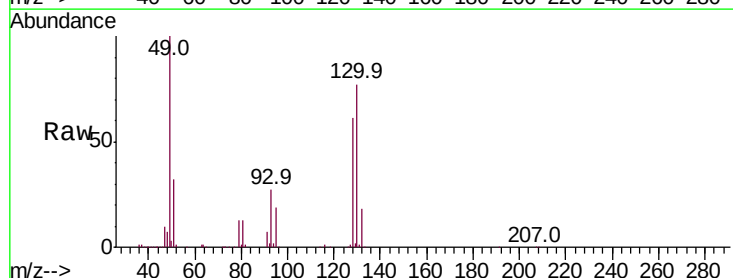
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 125.1 | 89.6  | 166.4 |
| 98      | 61.9  | 44.5  | 82.7  |

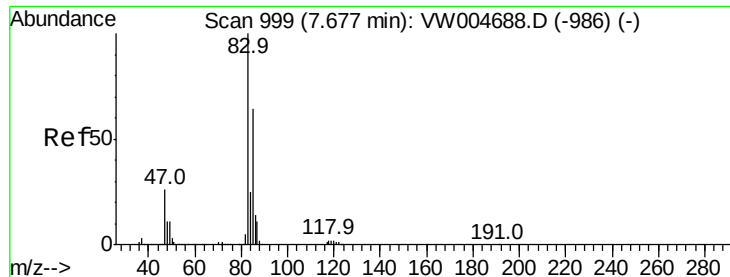


#23

Bromochloromethane  
 Concen: 24.913 ug/L  
 RT: 7.51 min Scan# 972  
 Delta R.T. -0.01 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 49      | 164.6 | 116.0 | 215.4 |
| 130     | 126.3 | 86.6  | 160.8 |
| 51      | 52.3  | 39.8  | 59.8  |





#25

Chloroform

Concen: 24.778 ug/L

RT: 7.68 min Scan# 999

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

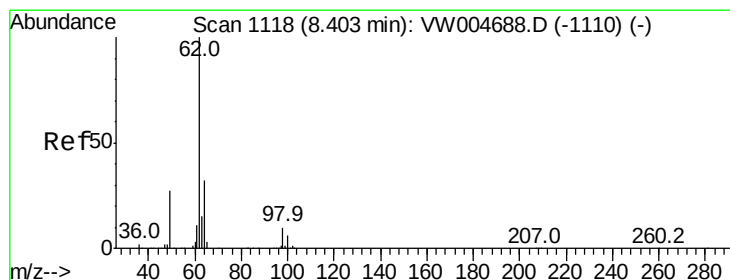
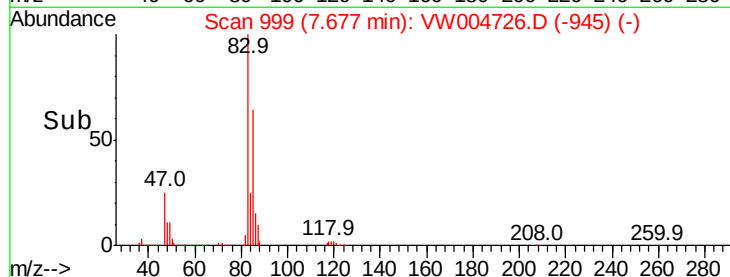
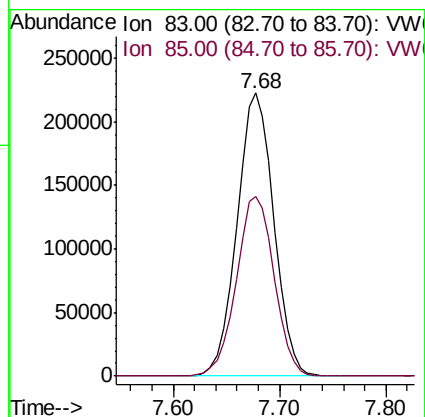
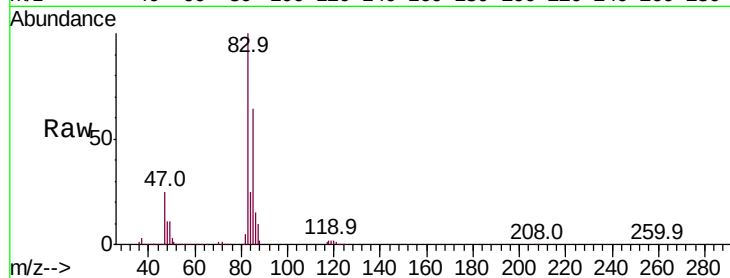
ClientSampled :

Tot Ion: 83 Resp: 540169

Ion Ratio Lower Upper

83 100

85 65.4 45.5 84.5



#27

1,2-Dichloroethane

Concen: 25.064 ug/L

RT: 8.40 min Scan# 1118

Delta R.T. -0.00 min

Lab File: VW004726.D

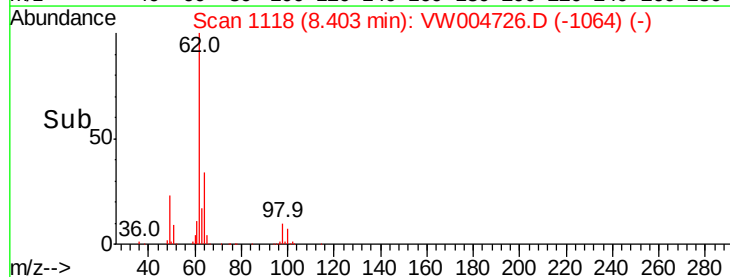
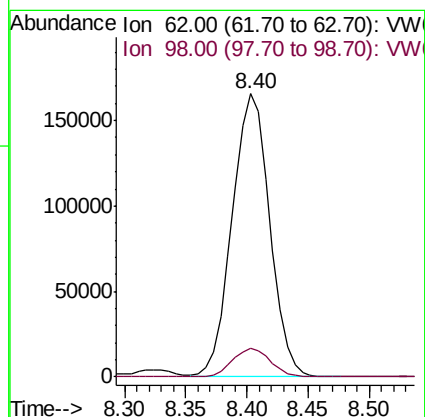
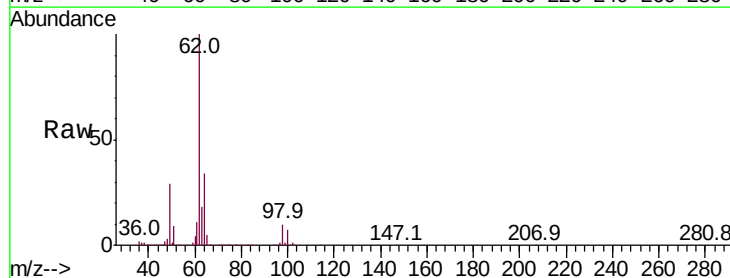
Acq: 16 Aug 2018 10:29

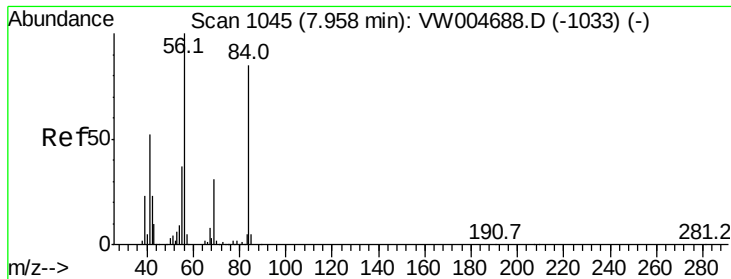
Tgt Ion: 62 Resp: 353259

Ion Ratio Lower Upper

62 100

98 10.3 7.8 11.8

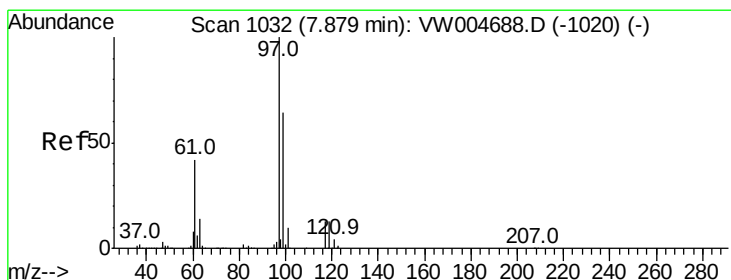
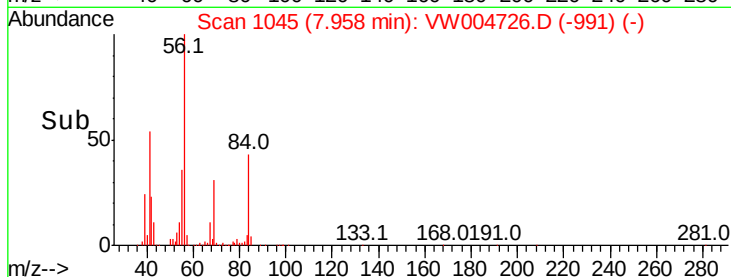
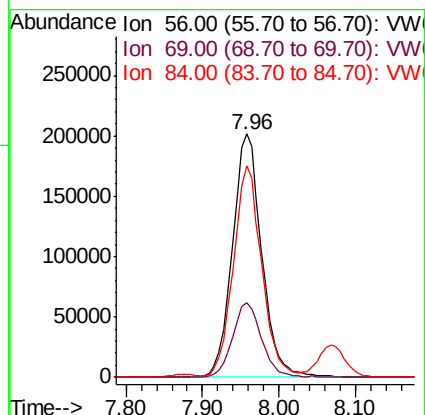
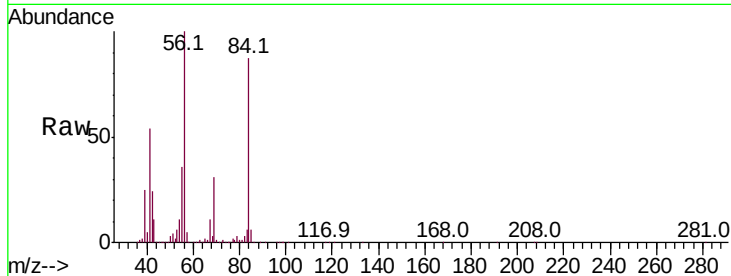




#30  
Cyclohexane  
Concen: 26.177 ug/L  
RT: 7.96 min Scan# 1045  
Delta R.T. -0.00 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

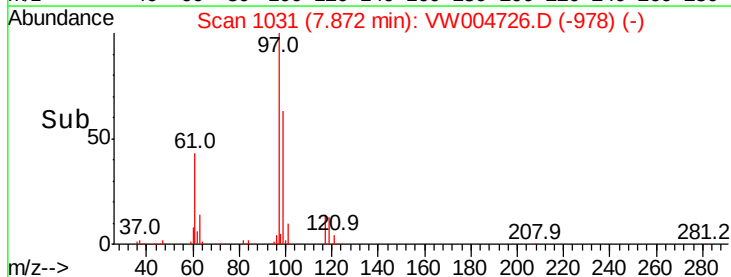
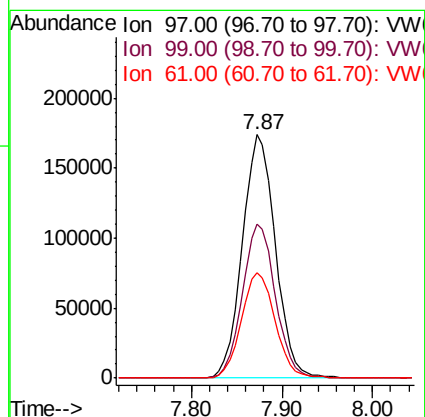
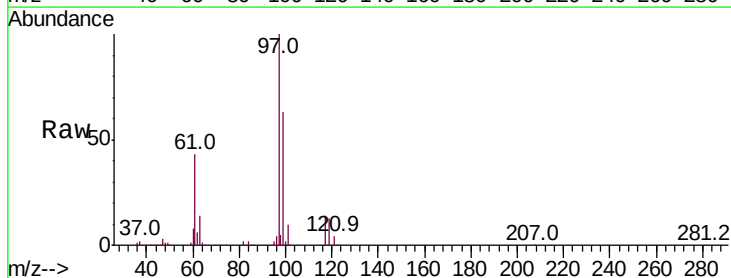
Instrument :  
MSVOA\_W  
ClientSampled :

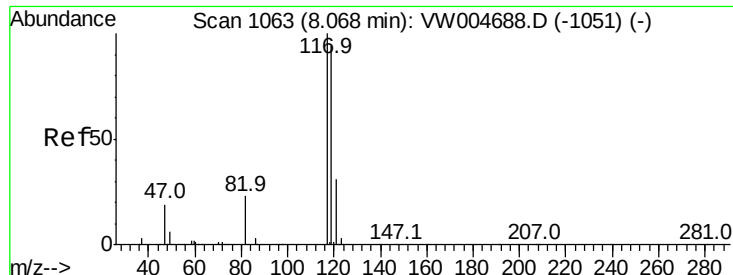
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 30.2  | 23.9  | 35.9  |
| 84      | 84.0  | 66.4  | 99.6  |



#31  
1,1,1-Trichloroethane  
Concen: 25.242 ug/L  
RT: 7.87 min Scan# 1031  
Delta R.T. -0.01 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 63.6  | 51.3  | 76.9  |
| 61      | 44.5  | 35.6  | 53.4  |





#32

Carbon tetrachloride

Concen: 25.078 ug/L

RT: 8.07 min Scan# 1063

Delta R.T. -0.01 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

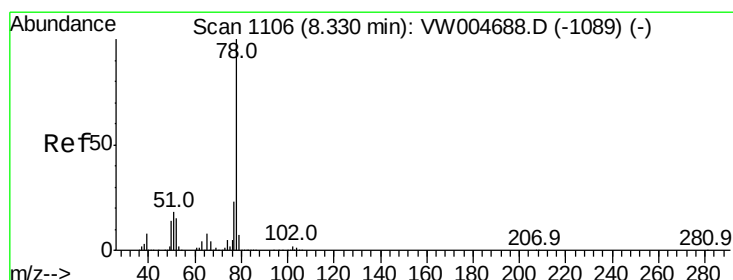
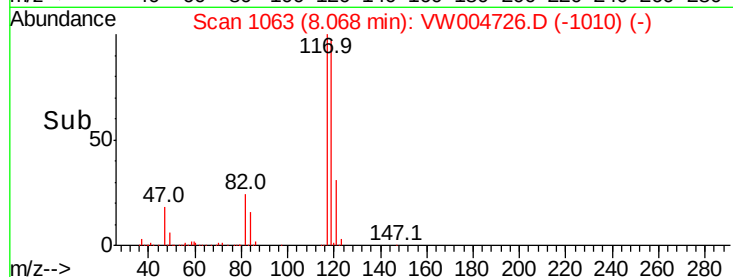
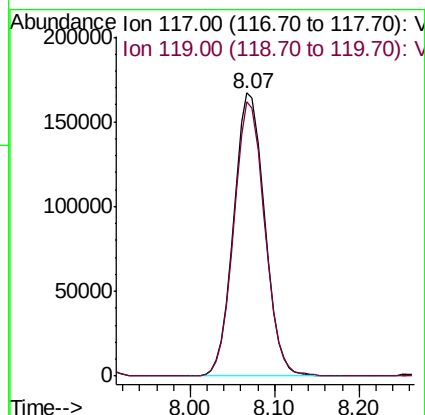
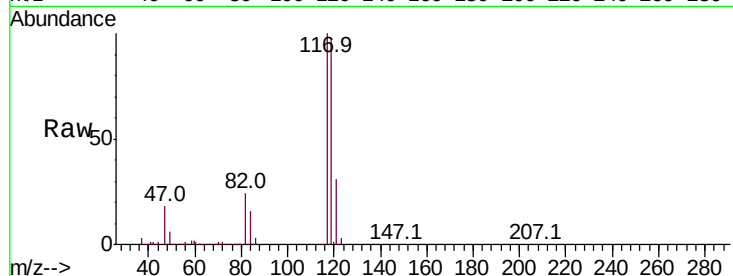
ClientSampleId :

Tot Ion:117 Resp: 416064

Ion Ratio Lower Upper

117 100

119 96.5 76.2 114.4



#34

Benzene

Concen: 25.321 ug/L

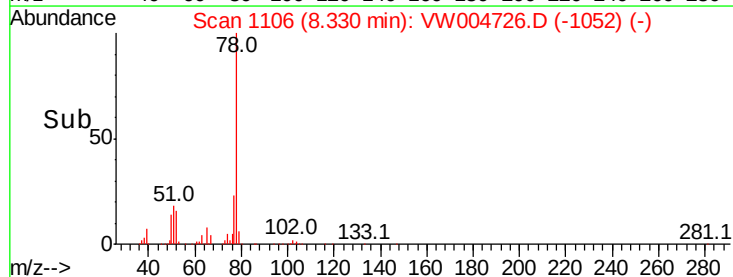
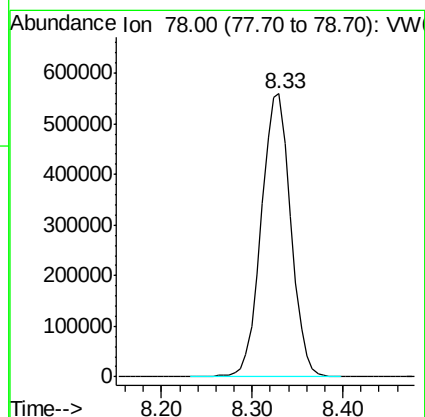
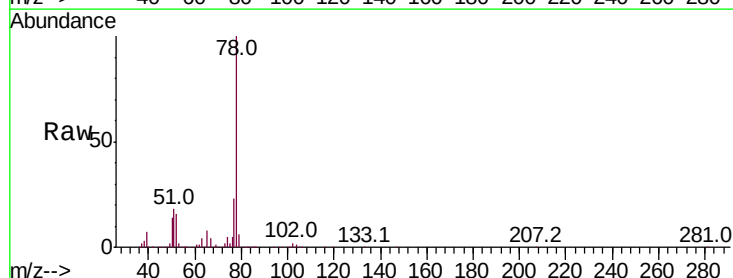
RT: 8.33 min Scan# 1106

Delta R.T. -0.00 min

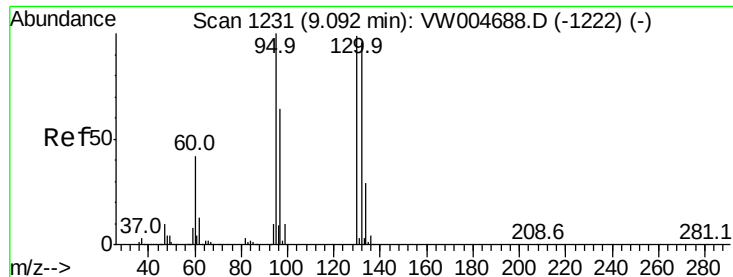
Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Tgt Ion: 78 Resp: 1256300



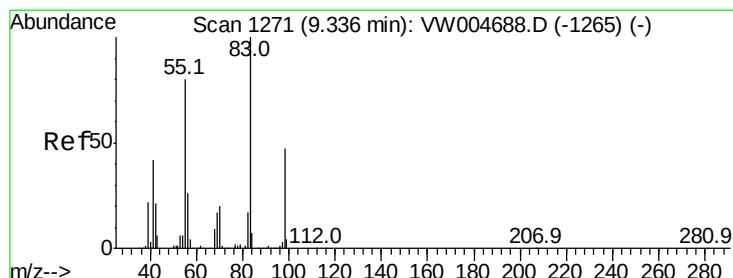
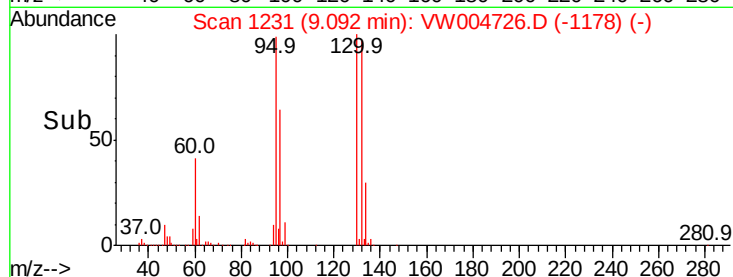
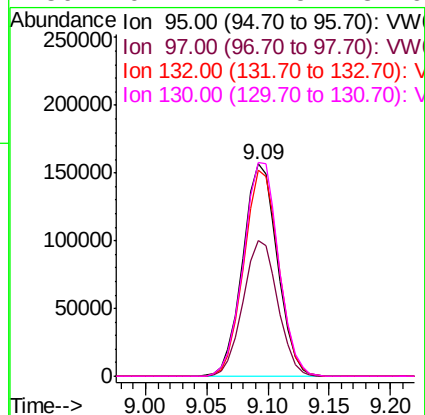
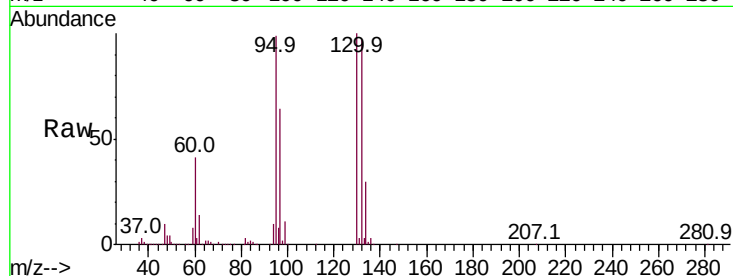




#35  
 Trichloroethene  
 Concen: 24.665 ug/L  
 RT: 9.09 min Scan# 1231  
 Delta R.T. -0.01 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

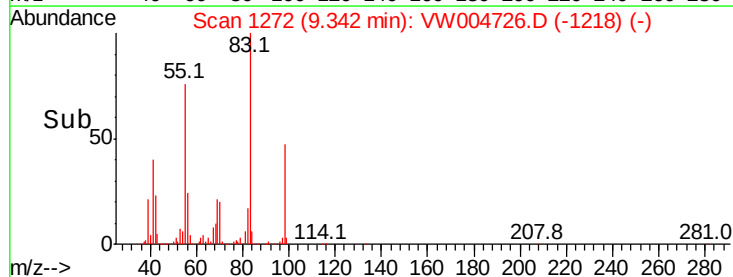
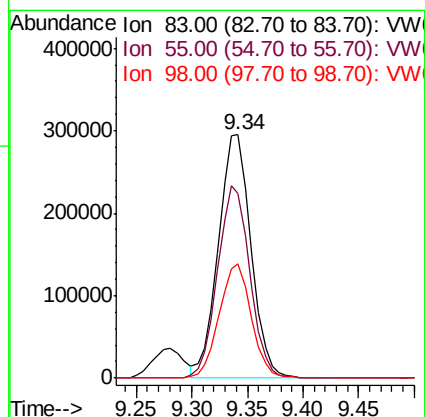
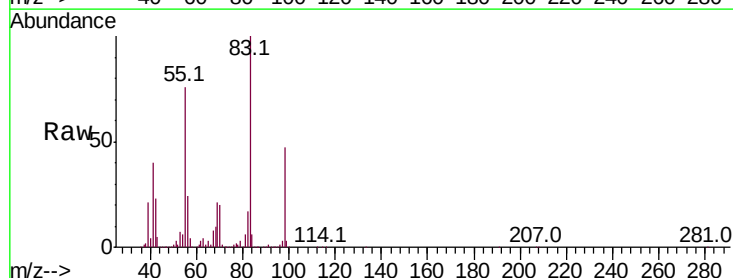
Instrument :  
 MSVOA\_W  
 ClientSampled :

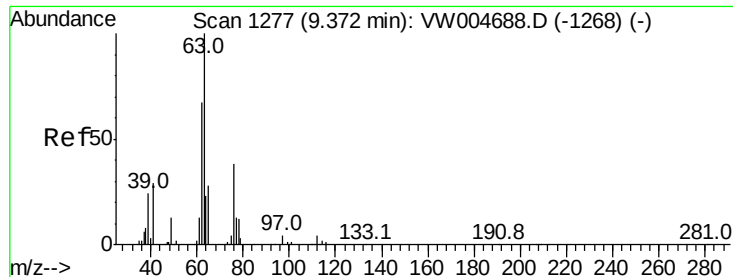
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 95    | Resp: | 307960 |
| Ion      | Ratio | Lower | Upper  |
| 95       | 100   |       |        |
| 97       | 64.2  | 45.1  | 83.9   |
| 132      | 97.6  | 68.8  | 127.8  |
| 130      | 102.7 | 71.5  | 132.9  |



#36  
 Methylcyclohexane  
 Concen: 25.671 ug/L  
 RT: 9.34 min Scan# 1272  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 598059 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 55       | 78.7  | 61.4  | 92.2   |
| 98       | 46.3  | 36.2  | 54.4   |





#40

1,2-Dichloropropane

Concen: 25.326 ug/L

RT: 9.37 min Scan# 1277

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

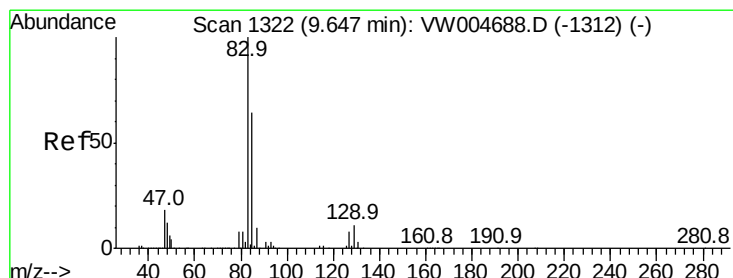
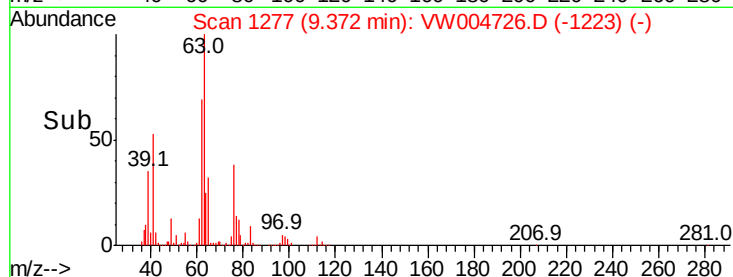
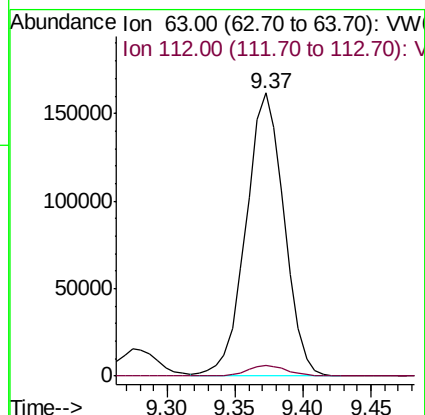
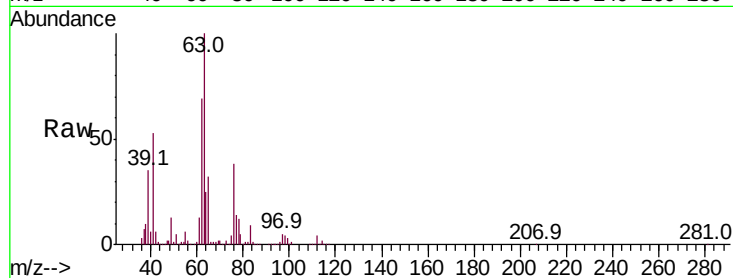
ClientSampleId :

Tot Ion: 63 Resp: 318845

Ion Ratio Lower Upper

63 100

112 4.2 3.4 5.0



#41

Bromodichloromethane

Concen: 24.873 ug/L

RT: 9.65 min Scan# 1322

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

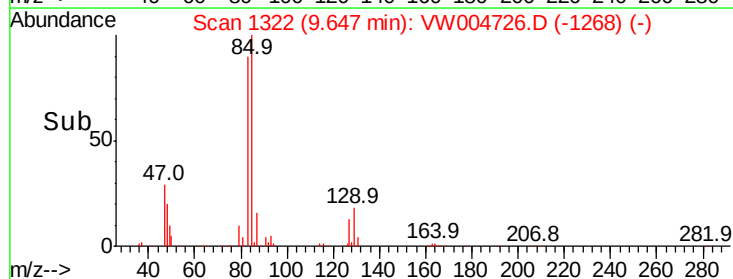
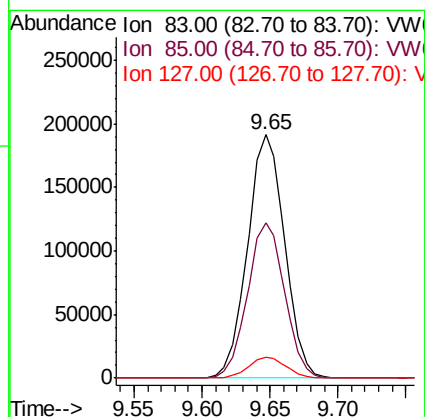
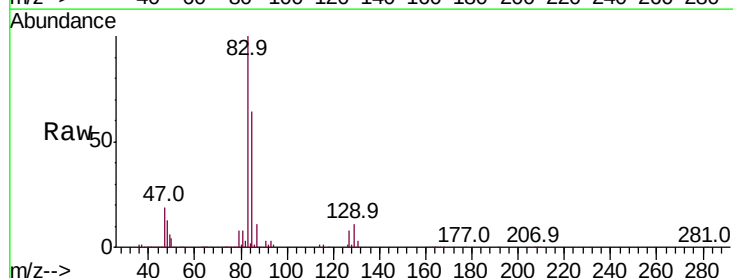
Tgt Ion: 83 Resp: 365872

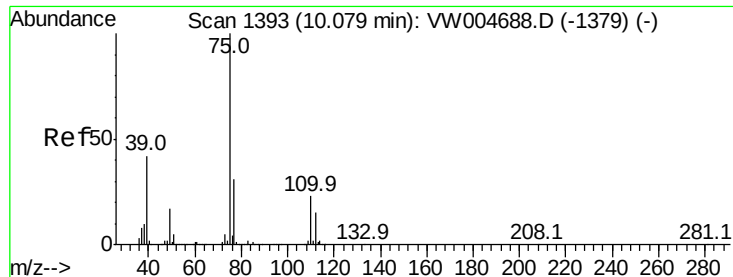
Ion Ratio Lower Upper

83 100

85 63.6 44.9 83.5

127 8.4 7.0 10.6





#42

cis-1,3-Dichloropropene

Concen: 25.652 ug/L

RT: 10.08 min Scan# 1393

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

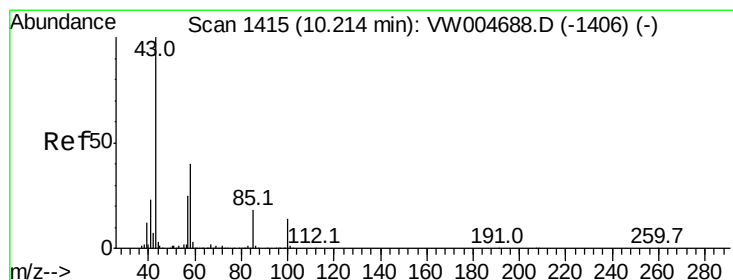
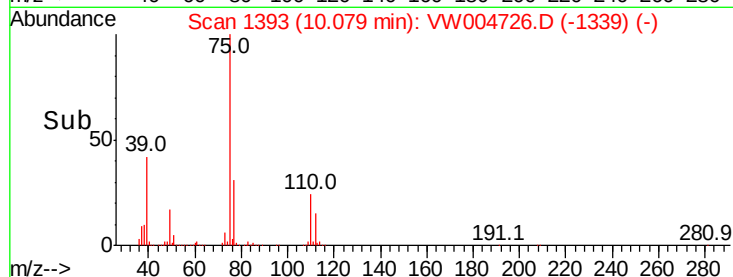
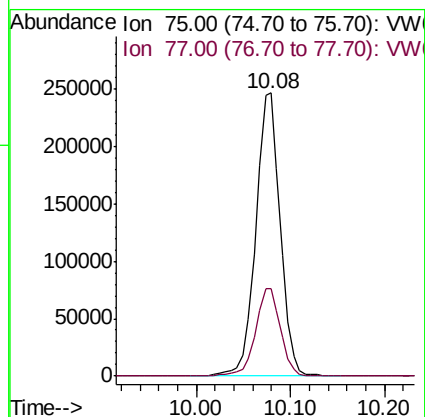
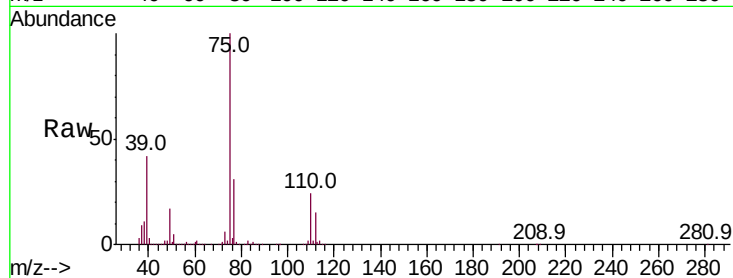
ClientSampled :

Tot Ion: 75 Resp: 449477

Ion Ratio Lower Upper

75 100

77 31.1 21.7 40.3



#43

4-Methyl-2-pentanone

Concen: 60.055 ug/L

RT: 10.21 min Scan# 1415

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

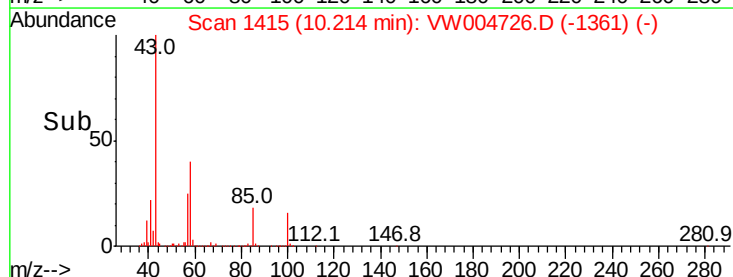
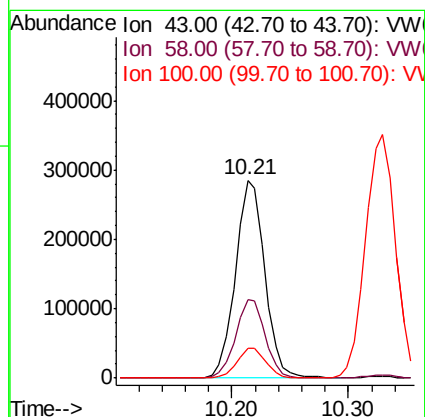
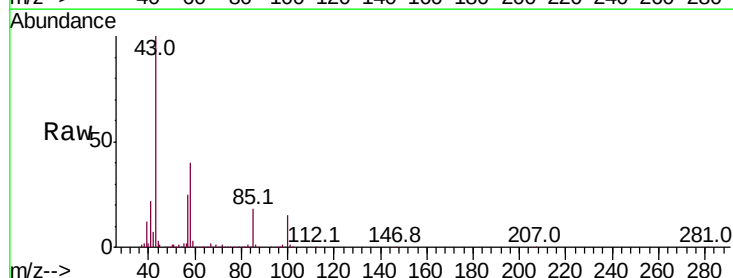
Tgt Ion: 43 Resp: 500626

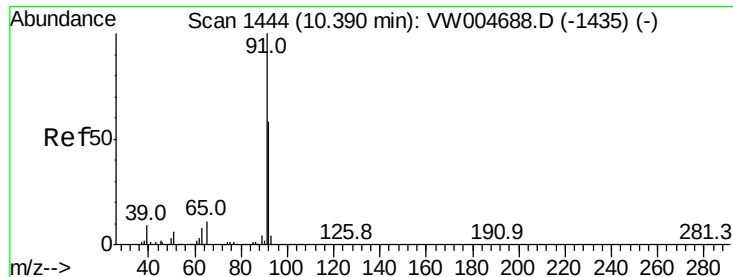
Ion Ratio Lower Upper

43 100

58 40.0 31.8 47.8

100 15.1 12.2 18.4





#44

Toluene

Concen: 26.313 ug/L

RT: 10.39 min Scan# 1444

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

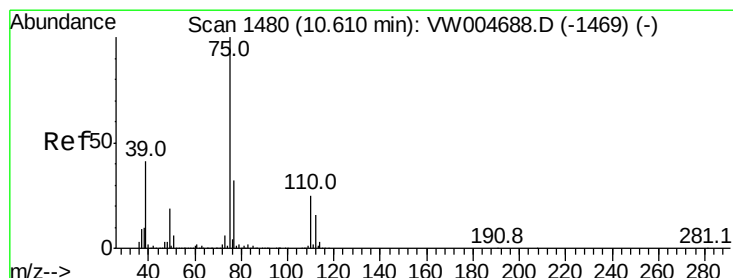
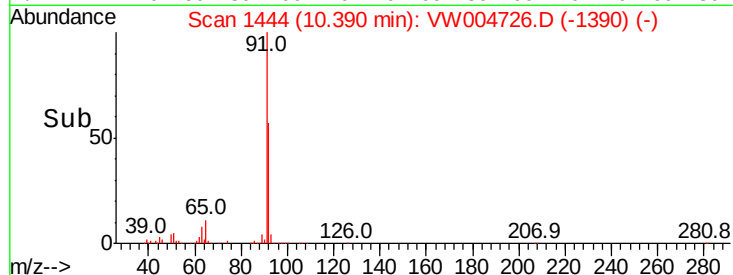
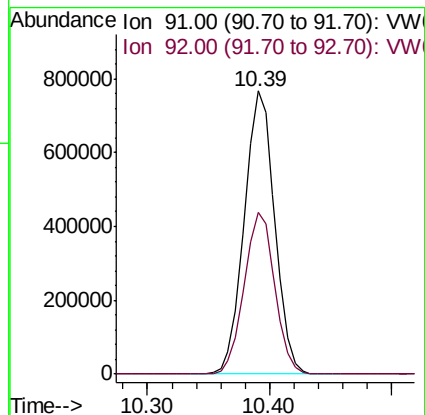
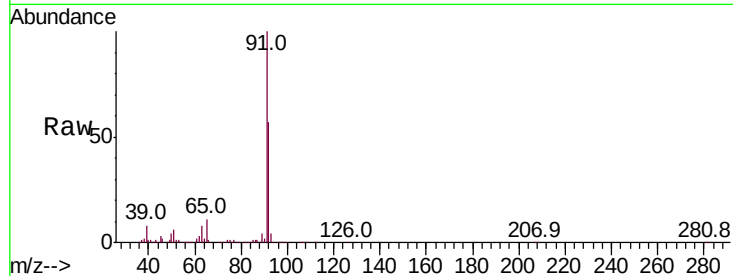
ClientSampled :

Tot Ion: 91 Resp: 1322004

Ion Ratio Lower Upper

91 100

92 57.1 40.3 74.8



#45

trans-1,3-Dichloropropene

Concen: 26.103 ug/L

RT: 10.61 min Scan# 1480

Delta R.T. -0.00 min

Lab File: VW004726.D

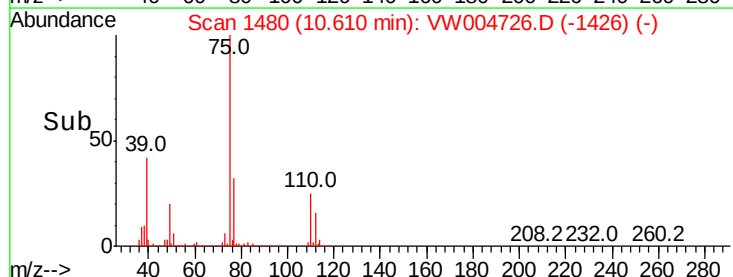
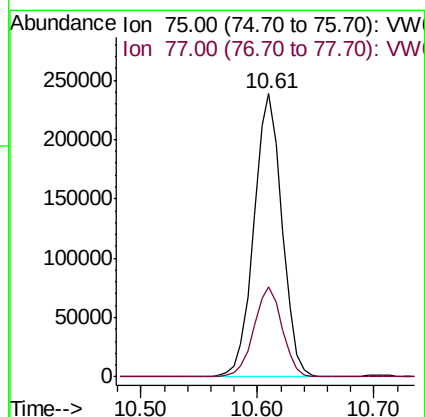
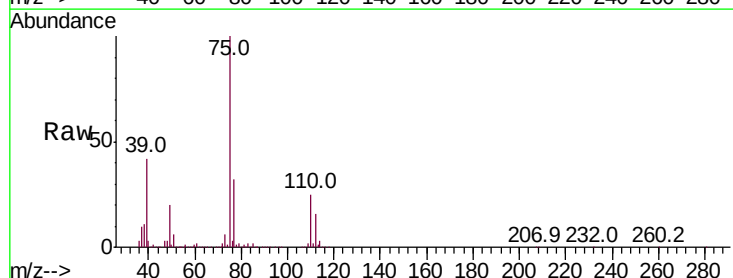
Acq: 16 Aug 2018 10:29

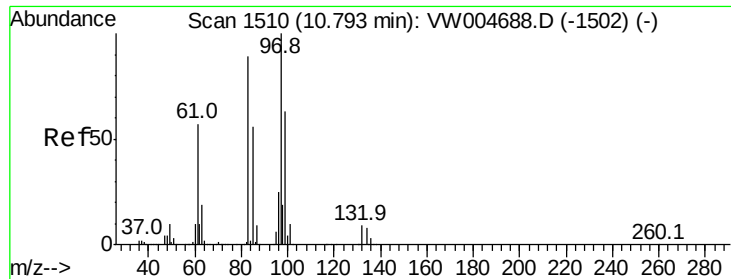
Tgt Ion: 75 Resp: 403289

Ion Ratio Lower Upper

75 100

77 31.6 21.8 40.6

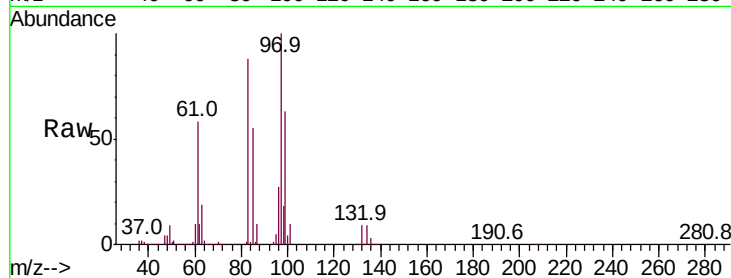




#46  
 1,1,2-Trichloroethane  
 Concen: 26.303 ug/L  
 RT: 10.79 min Scan# 1510  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

Instrument :  
 MSVOA\_W  
 ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 97    | Resp: | 250288 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 83       | 87.5  | 60.6  | 112.6  |
| 85       | 55.5  | 37.9  | 70.5   |
| 99       | 62.7  | 43.8  | 81.4   |



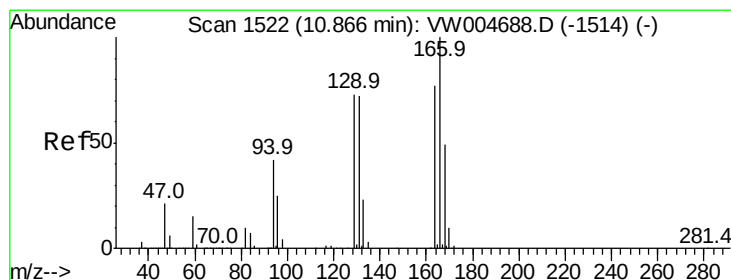
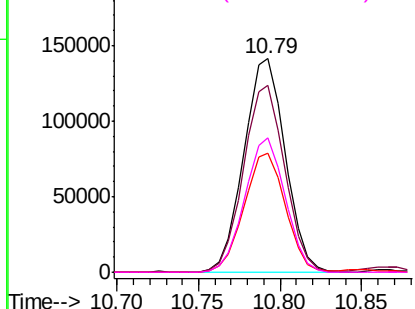
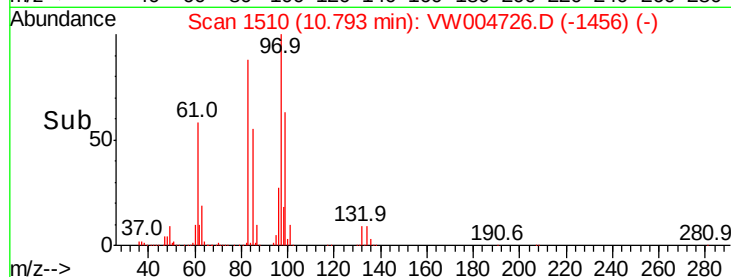
Abundance

Ion 97.00 (96.70 to 97.70): VW

Ion 83.00 (82.70 to 83.70): VW

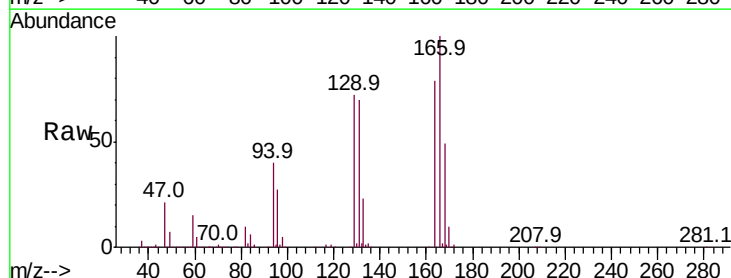
Ion 85.00 (84.70 to 85.70): VW

Ion 99.00 (98.70 to 99.70): VW



#47  
 Tetrachloroethene  
 Concen: 25.233 ug/L  
 RT: 10.87 min Scan# 1522  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 261383 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 92.0  | 65.0  | 120.6  |
| 131      | 89.1  | 62.2  | 115.4  |
| 166      | 127.0 | 88.9  | 165.1  |



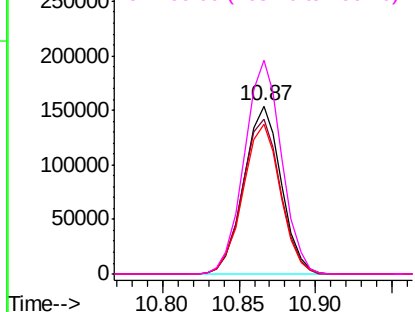
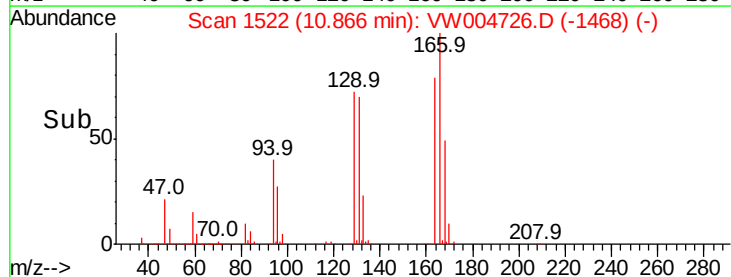
Abundance

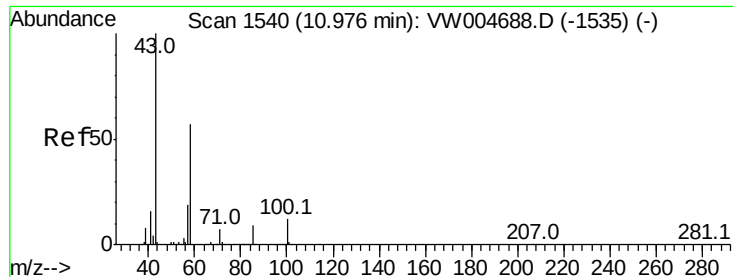
Ion 164.00 (163.70 to 164.70): V

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

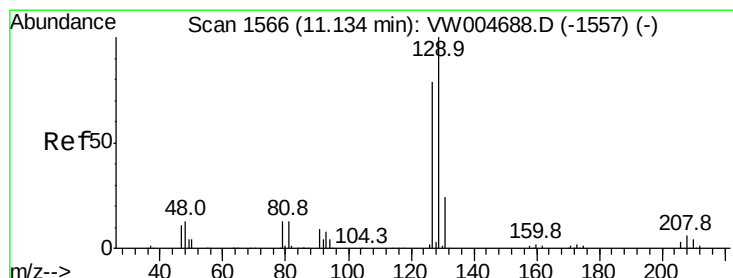
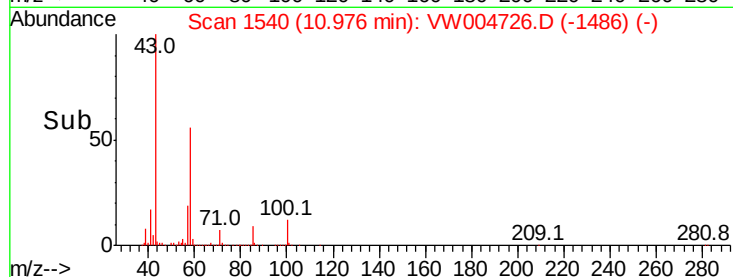
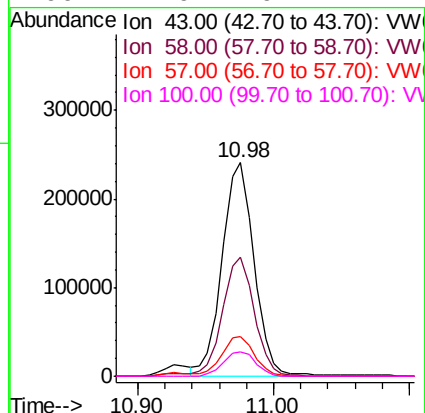
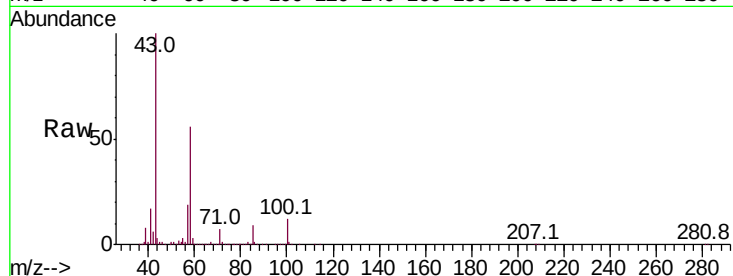




#49  
2-Hexanone  
Concen: 65.047 ug/L  
RT: 10.98 min Scan# 1540  
Delta R.T. -0.00 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

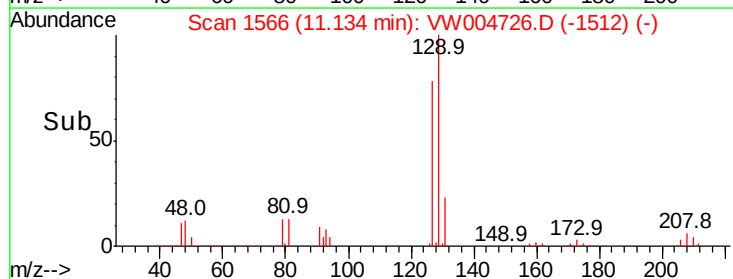
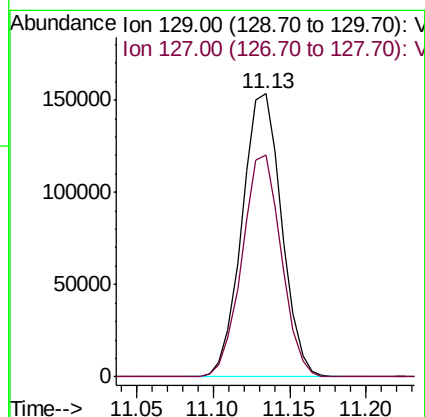
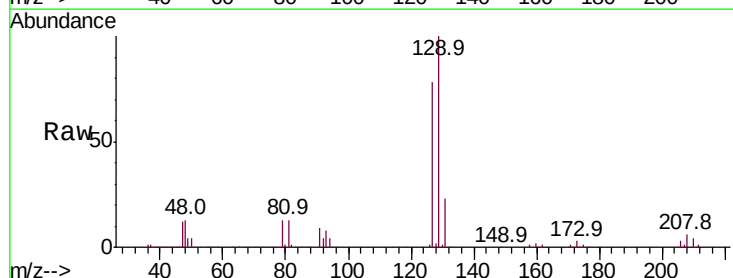
Instrument :  
MSVOA\_W  
ClientSampleId :

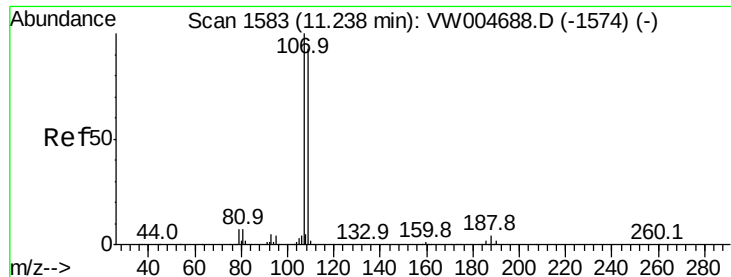
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 43    | Resp: | 394916 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 54.9  | 44.4  | 66.6   |
| 57       | 18.8  | 14.8  | 22.2   |
| 100      | 11.9  | 9.4   | 14.2   |



#50  
Dibromochloromethane  
Concen: 25.826 ug/L  
RT: 11.13 min Scan# 1566  
Delta R.T. -0.00 min  
Lab File: VW004726.D  
Acq: 16 Aug 2018 10:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 129   | Resp: | 276416 |
| Ion      | Ratio | Lower | Upper  |
| 129      | 100   |       |        |
| 127      | 78.2  | 53.3  | 98.9   |

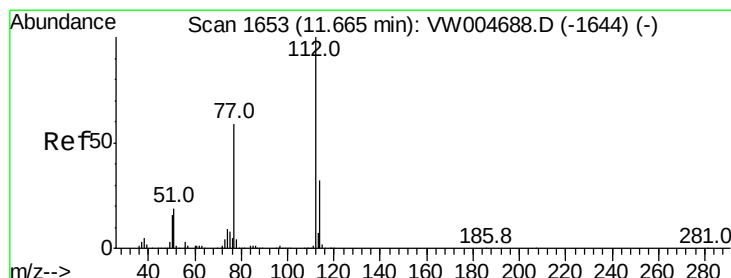
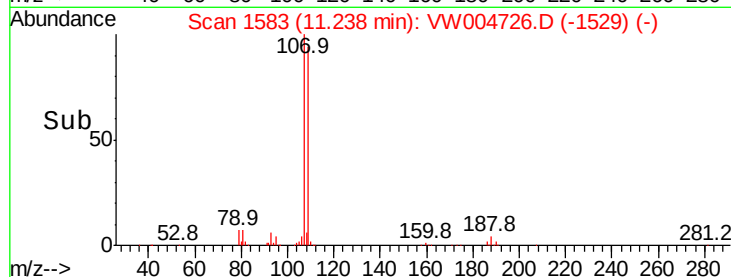
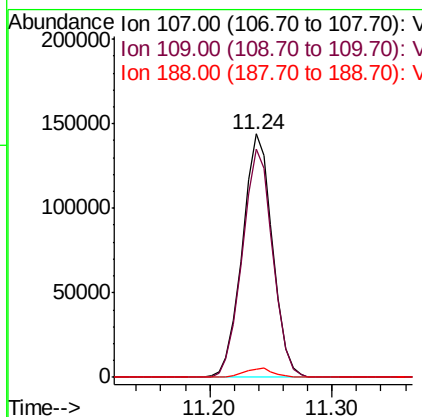
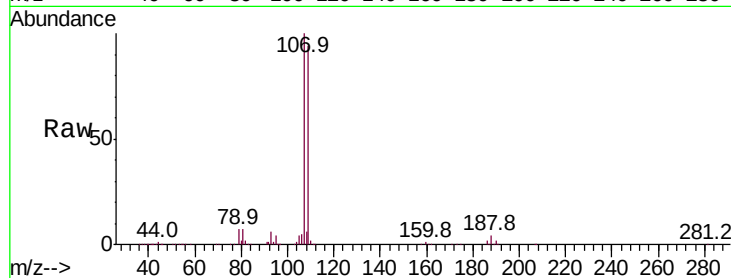




#51  
 1,2-Dibromoethane  
 Concen: 26.822 ug/L  
 RT: 11.24 min Scan# 1583  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

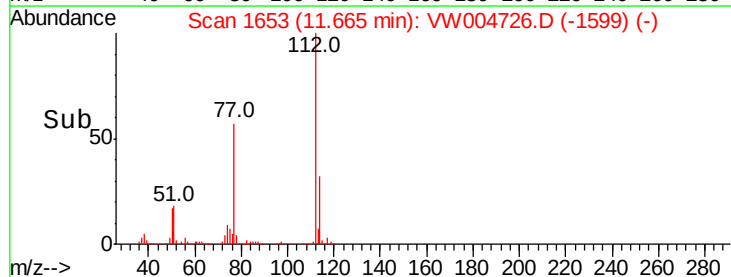
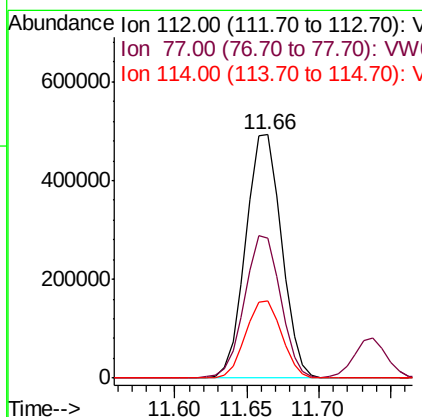
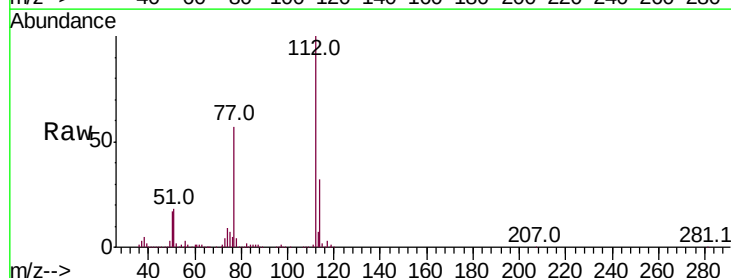
Instrument :  
 MSVOA\_W  
 ClientSampleId :

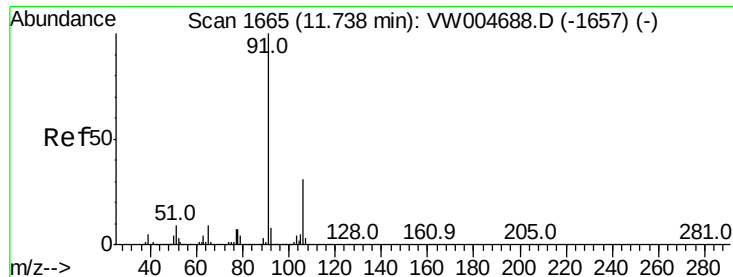
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 93.9  | 64.5  | 119.9 |
| 188     | 3.5   | 2.8   | 4.2   |



#52  
 Chlorobenzene  
 Concen: 25.312 ug/L  
 RT: 11.66 min Scan# 1653  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 57.4  | 46.0  | 69.0  |
| 114     | 31.9  | 22.3  | 41.5  |





#53

Ethylbenzene

Concen: 26.152 ug/L

RT: 11.74 min Scan# 1665

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

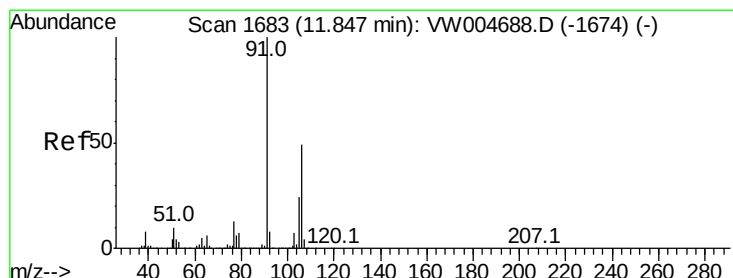
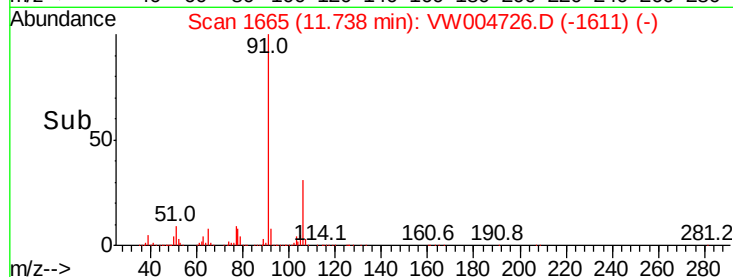
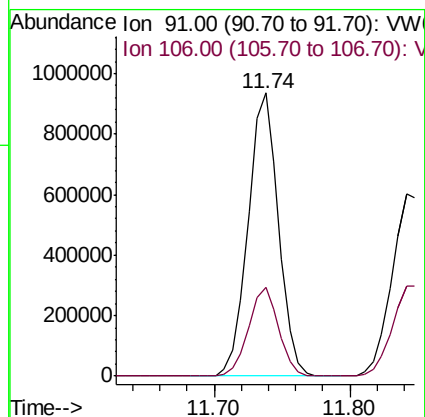
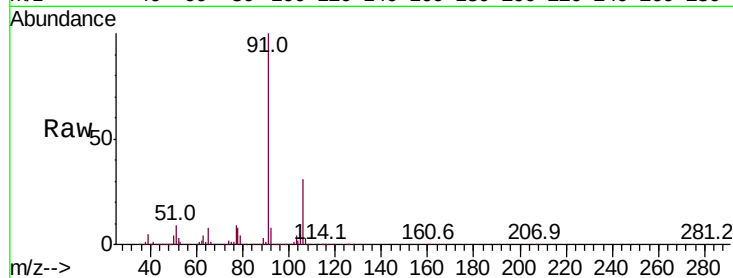
ClientSampleId :

Tot Ion: 91 Resp: 1463587

Ion Ratio Lower Upper

91 100

106 31.3 22.0 40.8



#54

m,p-Xylene

Concen: 26.372 ug/L

RT: 11.85 min Scan# 1683

Delta R.T. 0.01 min

Lab File: VW004726.D

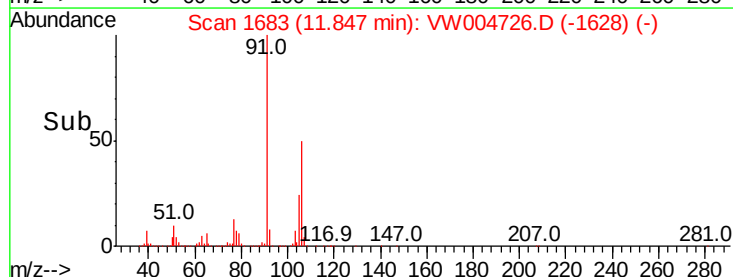
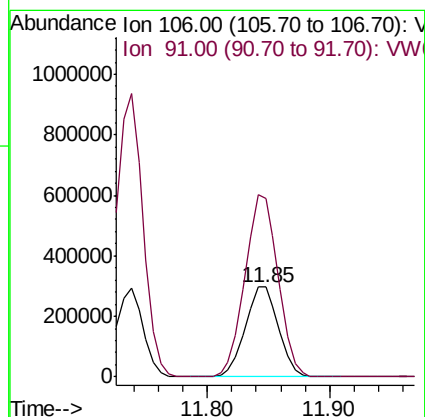
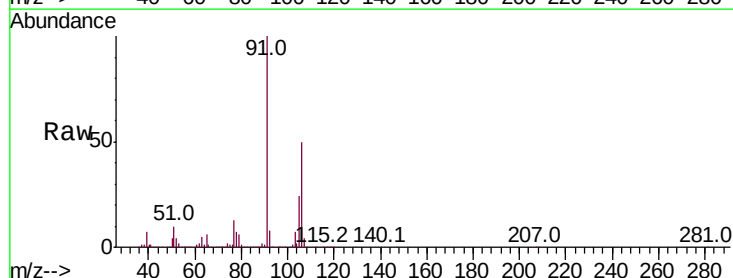
Acq: 16 Aug 2018 10:29

Tgt Ion:106 Resp: 560877

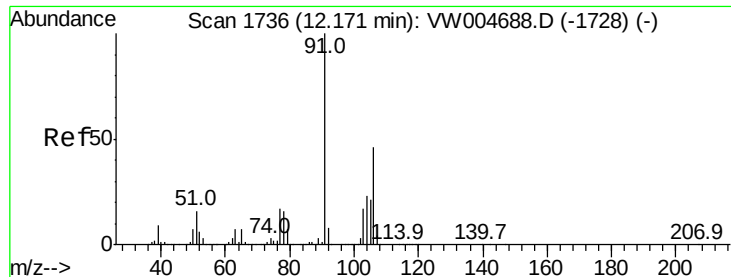
Ion Ratio Lower Upper

106 100

91 199.3 139.2 258.4







#55

o-xylene

Concen: 26.282 ug/L

RT: 12.17 min Scan# 1736

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

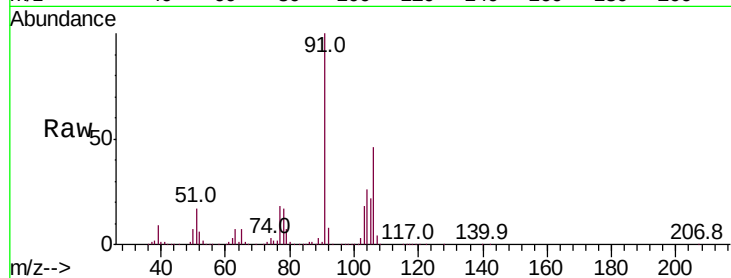
ClientSampleId :

Tot Ion:106 Resp: 528294

Ion Ratio Lower Upper

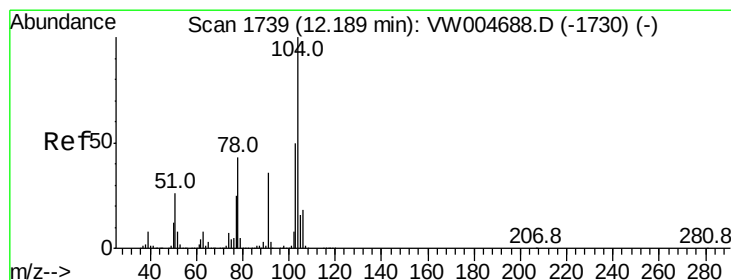
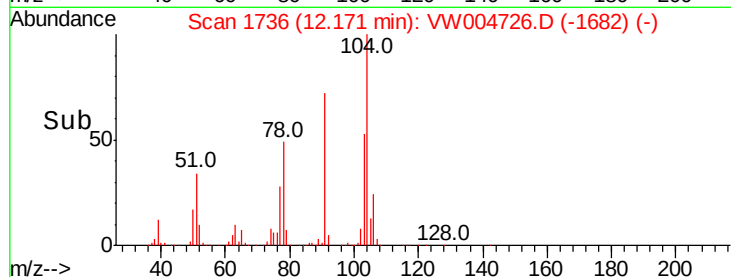
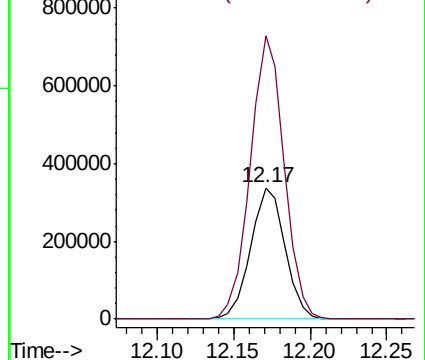
106 100

91 215.7 150.1 278.7



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#56

Styrene

Concen: 27.145 ug/L

RT: 12.19 min Scan# 1739

Delta R.T. -0.00 min

Lab File: VW004726.D

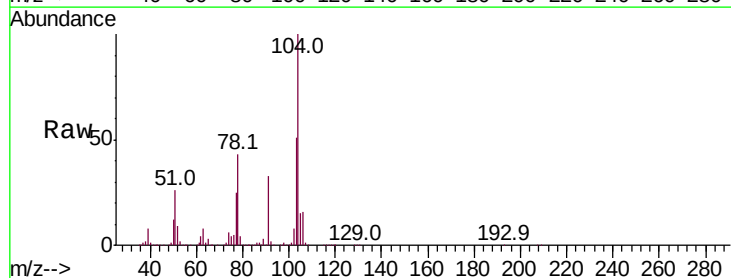
Acq: 16 Aug 2018 10:29

Tgt Ion:104 Resp: 935931

Ion Ratio Lower Upper

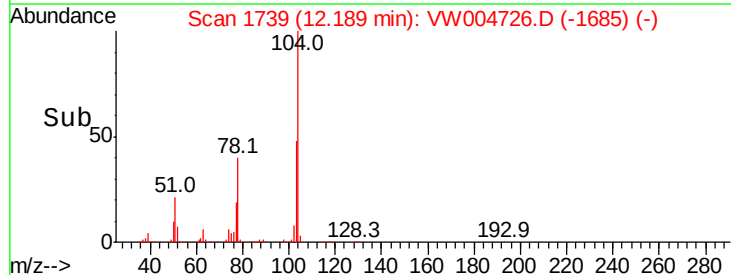
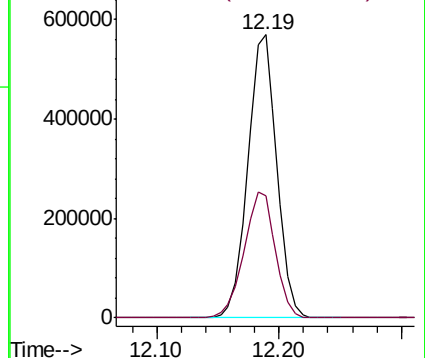
104 100

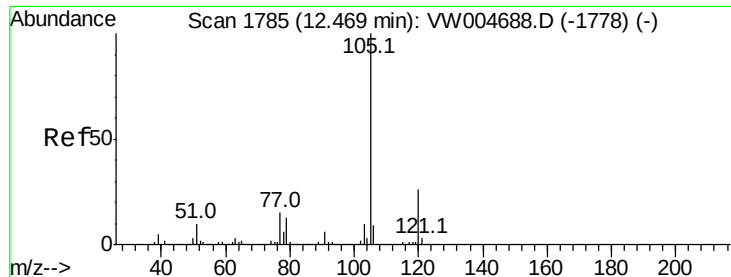
78 43.0 29.9 55.5



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VW





#57

Isopropylbenzene

Concen: 27.034 ug/L

RT: 12.47 min Scan# 1785

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

ClientSampleId :

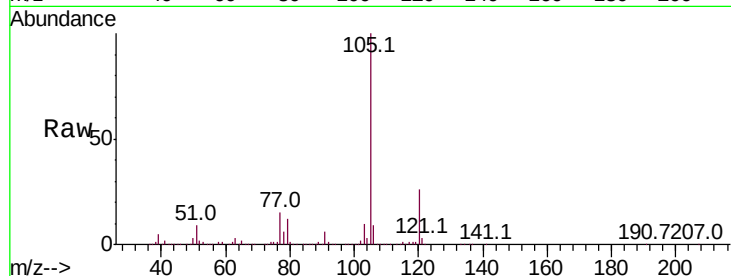
Tot Ion:105 Resp: 1471696

Ion Ratio Lower Upper

105 100

120 26.1 21.2 31.8

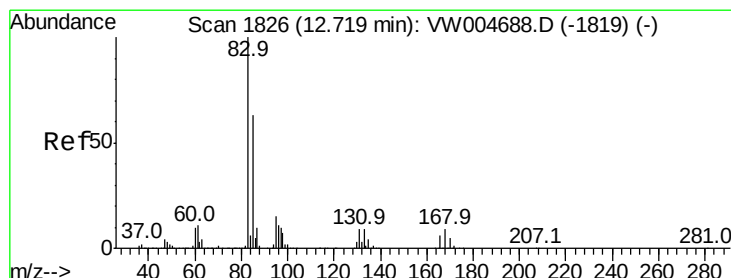
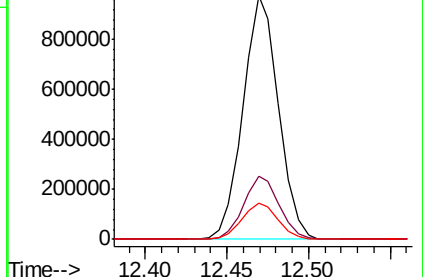
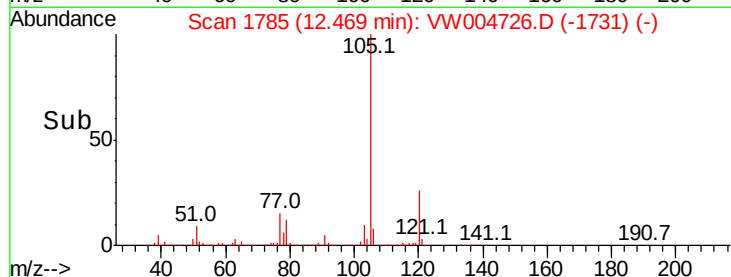
77 15.1 12.1 18.1



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: 27.694 ug/L

RT: 12.72 min Scan# 1826

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

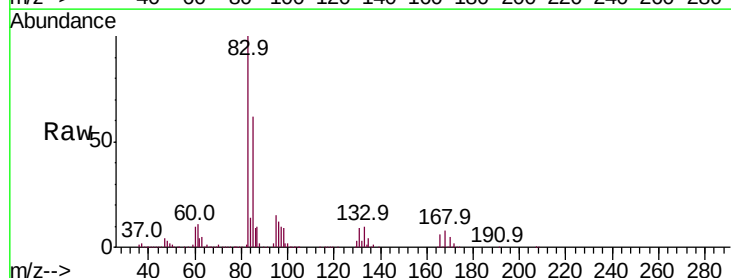
Tgt Ion: 83 Resp: 363389

Ion Ratio Lower Upper

83 100

85 62.2 44.4 82.5

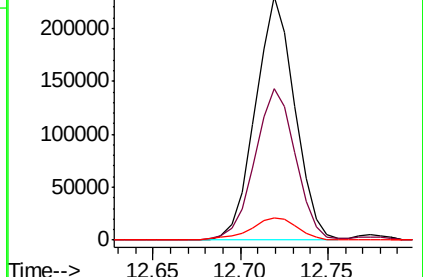
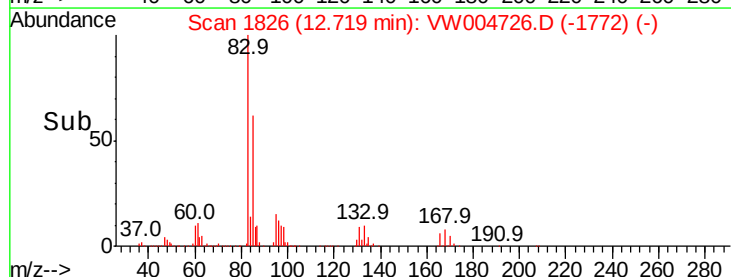
131 8.9 8.2 12.4

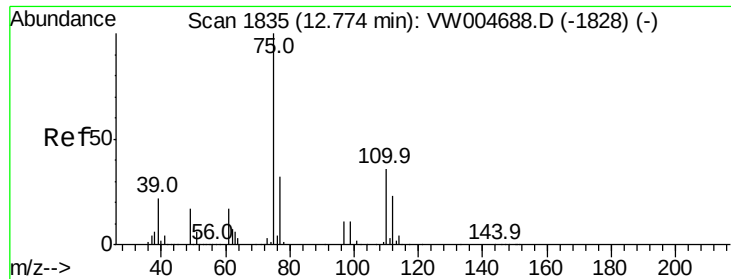


Abundance Ion 83.00 (82.70 to 83.70): V

Ion 85.00 (84.70 to 85.70): V

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 27.700 ug/L

RT: 12.77 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

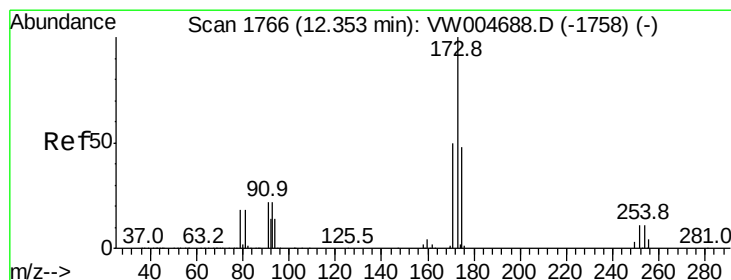
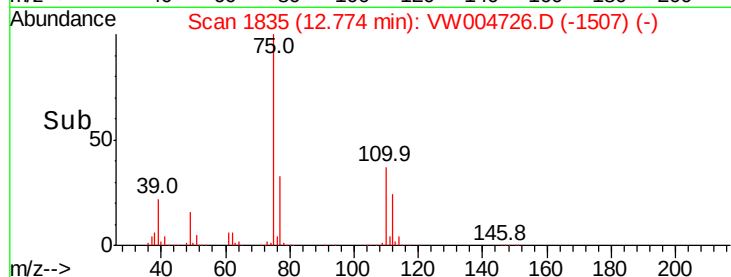
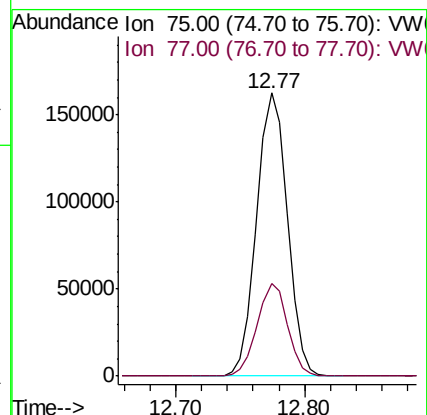
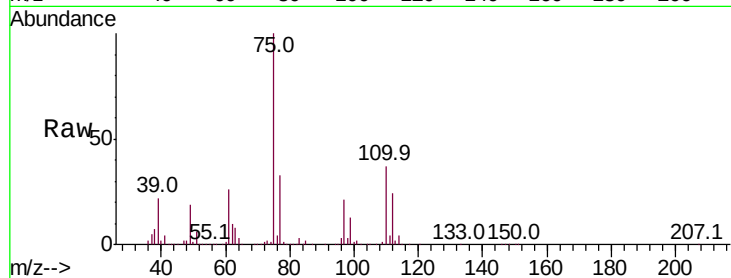
ClientSampleId :

Tot Ion: 75 Resp: 267598

Ion Ratio Lower Upper

75 100

77 32.5 25.8 38.6



#62

Bromoform

Concen: 26.735 ug/L

RT: 12.35 min Scan# 1766

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

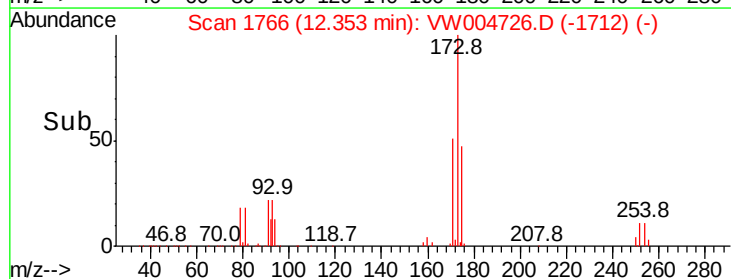
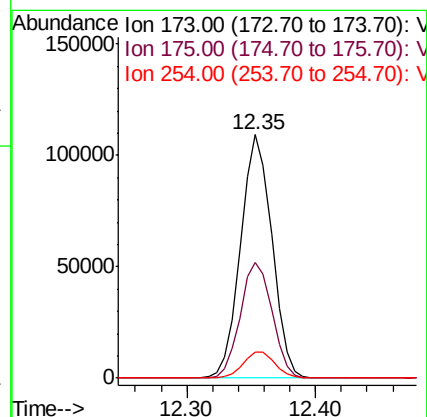
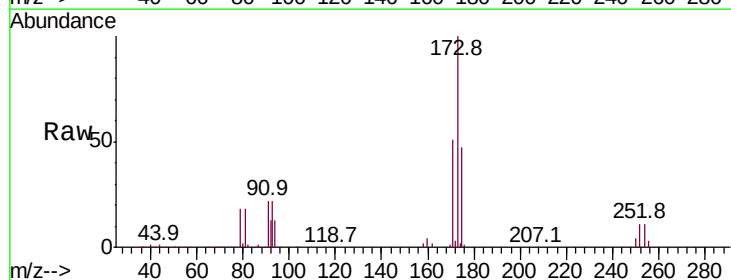
Tgt Ion:173 Resp: 183921

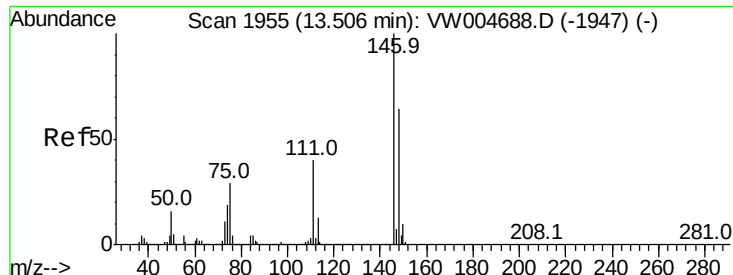
Ion Ratio Lower Upper

173 100

175 48.2 39.2 58.8

254 10.9 8.8 13.2





#63

1,3-Dichlorobenzene

Concen: 25.093 ug/L

RT: 13.51 min Scan# 1955

Delta R.T. -0.00 min

Lab File: VW004726.D

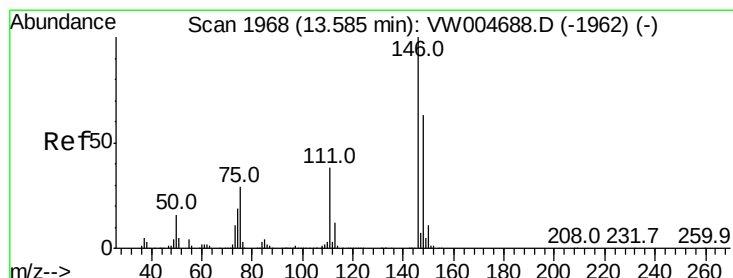
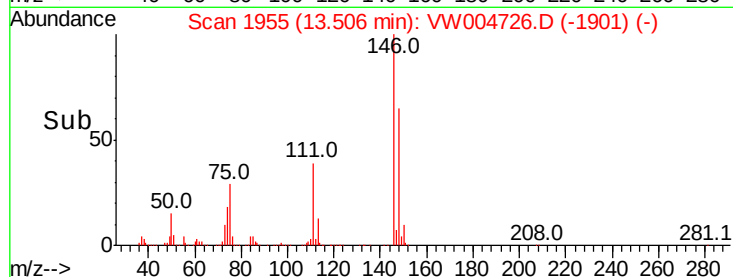
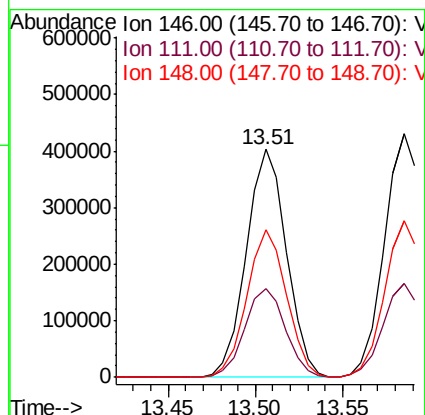
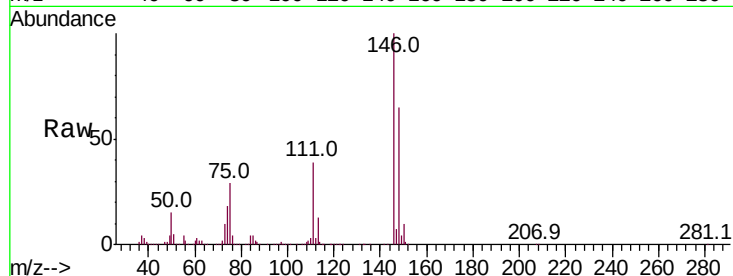
Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

ClientSampled :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 146   | Resp: | 644182 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 39.2  | 27.5  | 51.1   |
| 148      | 64.6  | 45.1  | 83.9   |



#64

1,4-Dichlorobenzene

Concen: 25.061 ug/L

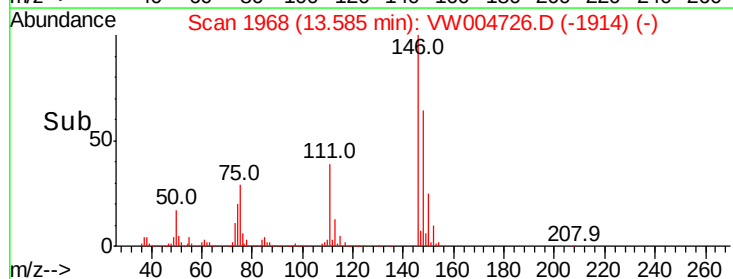
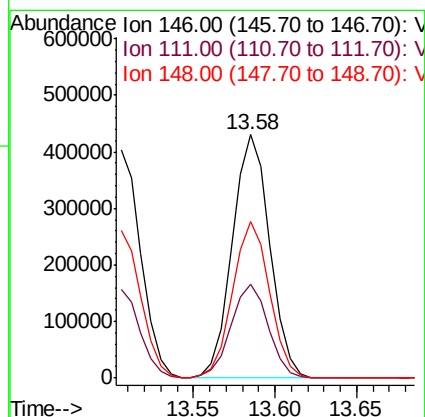
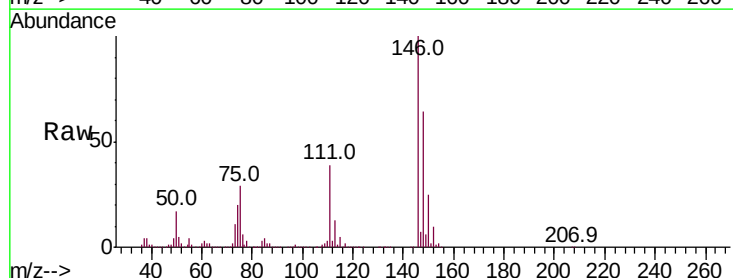
RT: 13.58 min Scan# 1968

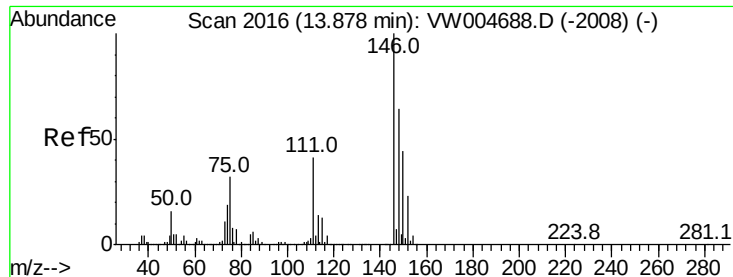
Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 687225 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 38.7  | 26.7  | 49.5   |
| 148      | 64.1  | 44.8  | 83.2   |

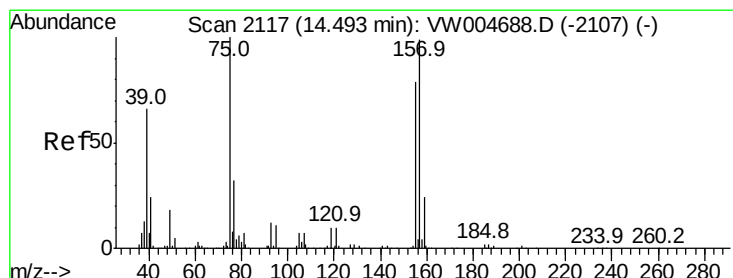
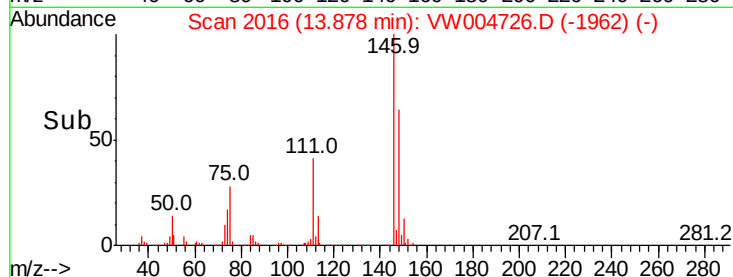
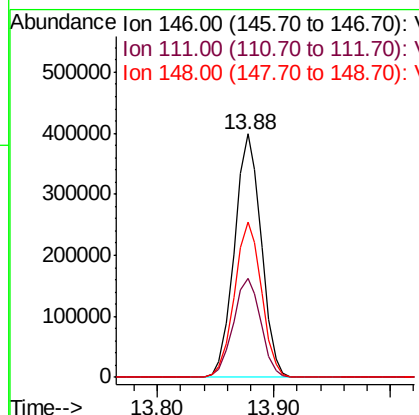
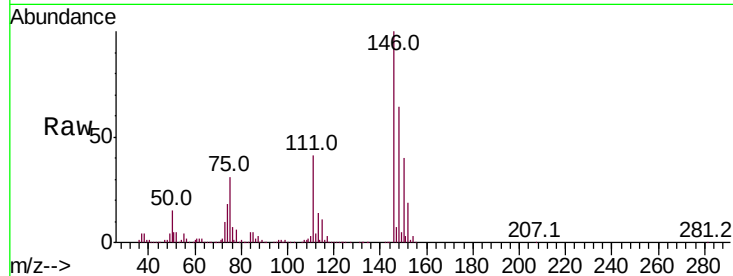




#65  
 1,2-Dichlorobenzene  
 Concen: 25.211 ug/L  
 RT: 13.88 min Scan# 2016  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

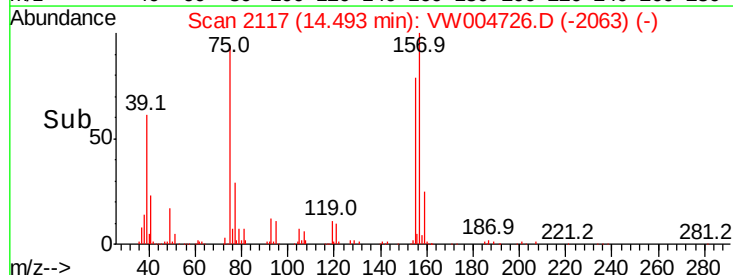
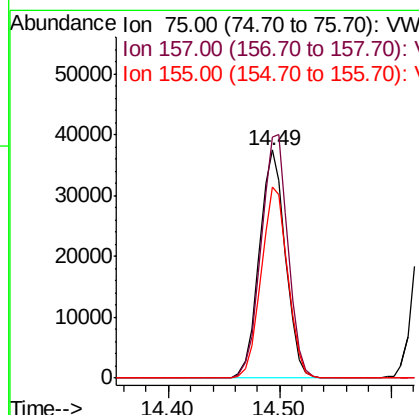
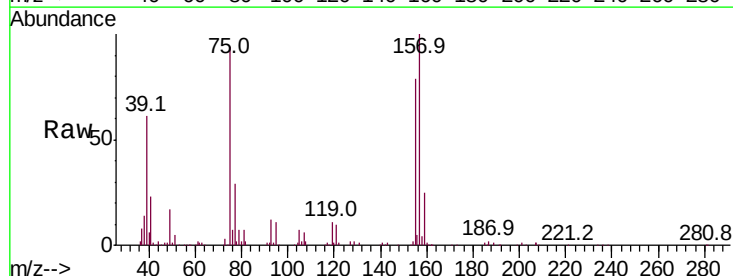
Instrument :  
 MSVOA\_W  
 ClientSampleId :

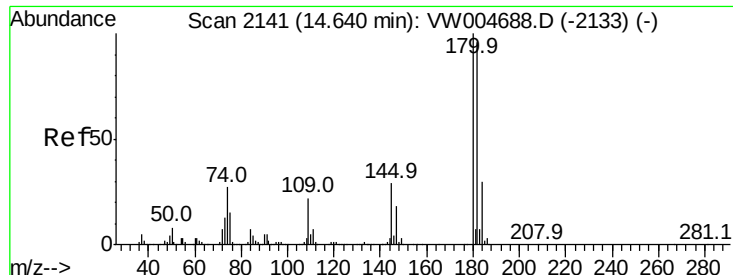
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 40.9  | 32.9  | 49.3  |
| 148     | 63.8  | 50.7  | 76.1  |



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 28.691 ug/L  
 RT: 14.49 min Scan# 2117  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 157     | 106.0 | 81.8  | 122.8 |
| 155     | 83.7  | 65.4  | 98.0  |

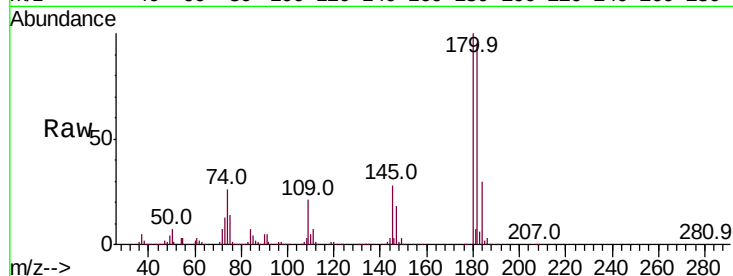




#67  
 1,3,5-Trichlorobenzene  
 Concen: 25.266 ug/L  
 RT: 14.64 min Scan# 2141  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

Instrument :  
 MSVOA\_W  
 ClientSampled :

|             |       |            |
|-------------|-------|------------|
| Tot Ion:180 | Resp: | 521783     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 95.6  | 76.1 114.1 |
| 184         | 30.4  | 24.2 36.4  |
| 145         | 28.8  | 22.6 34.0  |



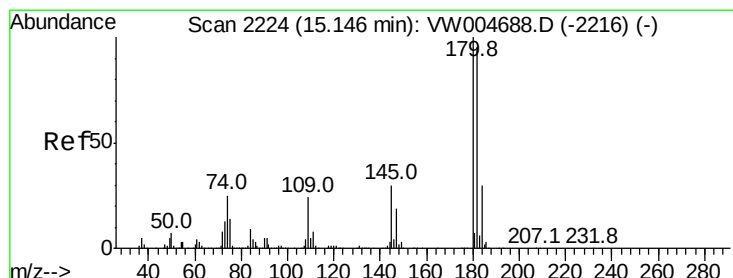
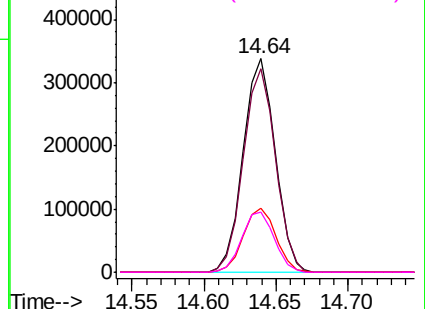
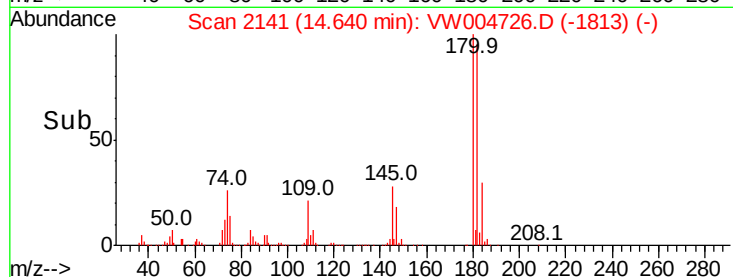
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

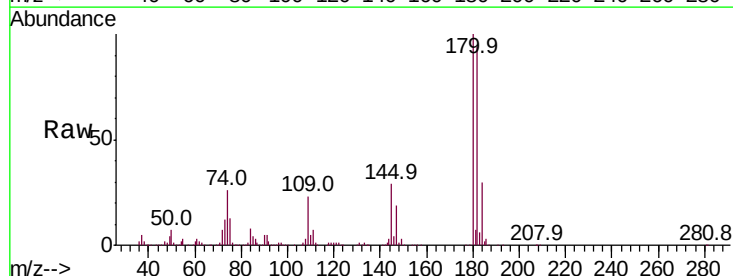
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 25.587 ug/L  
 RT: 15.15 min Scan# 2224  
 Delta R.T. -0.00 min  
 Lab File: VW004726.D  
 Acq: 16 Aug 2018 10:29

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:180 | Resp: | 428063     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 94.8  | 76.7 115.1 |
| 145         | 29.1  | 23.4 35.2  |

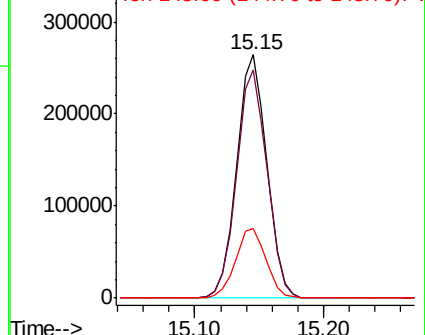
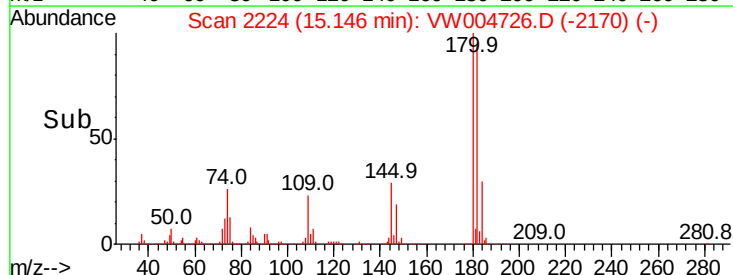


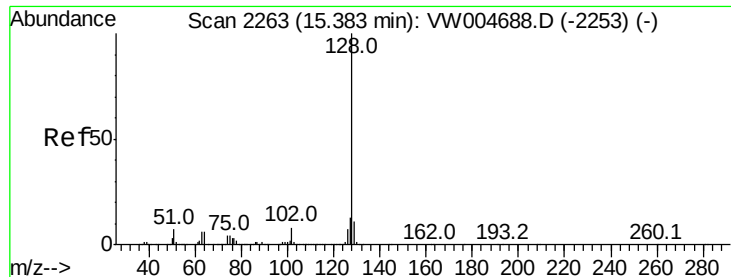
Abundance

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: 28.581 ug/L

RT: 15.38 min Scan# 2262

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

Instrument :

MSVOA\_W

ClientSampleId :

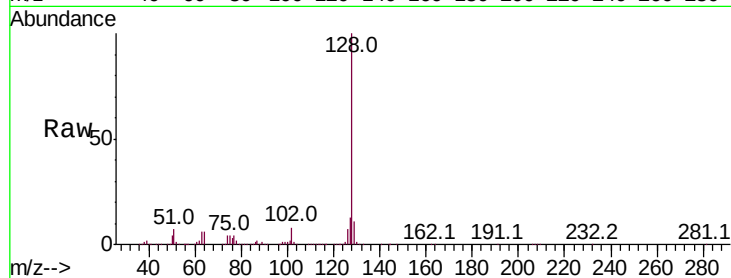
Tot Ion:128 Resp: 984155

Ion Ratio Lower Upper

128 100

129 10.9 8.8 13.2

127 13.2 10.6 15.8



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

600000

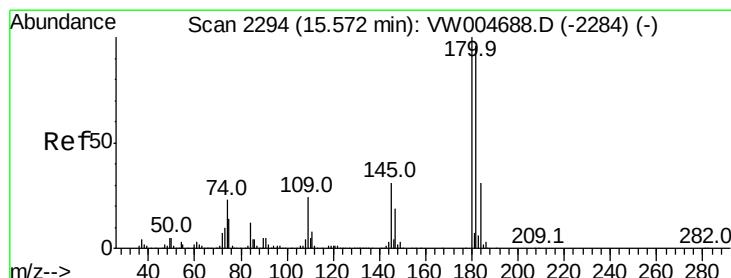
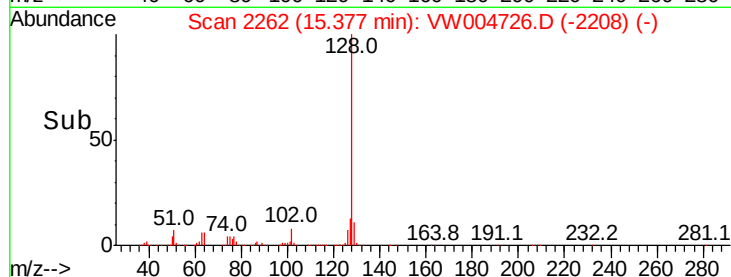
400000

200000

0

15.38

Time-->



#70

1,2,3-Trichlorobenzene

Concen: 26.362 ug/L

RT: 15.57 min Scan# 2293

Delta R.T. -0.00 min

Lab File: VW004726.D

Acq: 16 Aug 2018 10:29

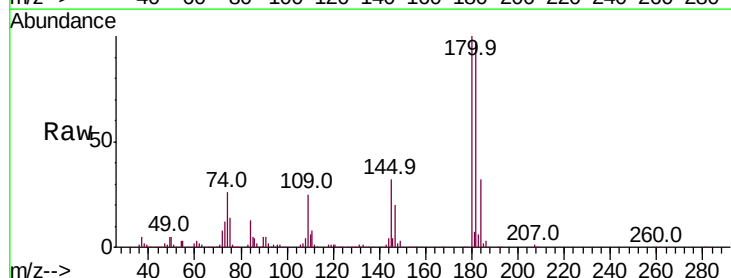
Tgt Ion:180 Resp: 420965

Ion Ratio Lower Upper

180 100

182 95.6 75.8 113.8

145 31.4 24.4 36.6



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

300000

250000

200000

150000

100000

50000

0

15.57

Time-->

