

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041020\  
 Data File : VW015184.D  
 Acq On : 10 Apr 2020 18:45  
 Operator : SY/VA  
 Sample : VSTDCCC025EC  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Apr 11 06:29:48 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM041020S.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Apr 10 13:10:27 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.84  | 114  | 1134430  | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 1009808  | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.55 | 152  | 452372   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 247502   | 23.07    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 92.28% |
| 7) Chloroethane-d5             | 2.89   | 69    | 176587   | 22.45    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 89.80% |
| 10) 1,1-Dichloroethene-d2      | 4.03   | 63    | 605811   | 21.32    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 85.28% |
| 20) 2-Butanone-d5              | 7.08   | 46    | 165658   | 45.14    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 90.28% |
| 24) Chloroform-d               | 7.65   | 84    | 568473   | 21.25    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 85.00% |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 287265   | 21.68    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 86.72% |
| 29) Benzene-d6                 | 8.27   | 84    | 1196799  | 21.42    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 85.68% |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 369284   | 21.38    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 85.52% |
| 37) Toluene-d8                 | 10.32  | 98    | 1124026  | 21.47    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 85.88% |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 167175   | 21.21    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 84.84% |
| 39) 2-Hexanone-d5              | 10.92  | 63    | 140678   | 45.58    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 91.16% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 284790   | 22.55    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 90.20% |
| 61) 1,2-Dichlorobenzene-d4     | 13.85  | 152   | 355111   | 21.90    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 87.60% |

## Target Compounds

|                                |      |     |         |        | Ovalue   |
|--------------------------------|------|-----|---------|--------|----------|
| 2) Dichlorodifluoromethane     | 2.01 | 85  | 199350  | 24.309 | ug/L 93  |
| 3) Chloromethane               | 2.21 | 50  | 237395  | 23.319 | ug/L 100 |
| 5) Vinyl chloride              | 2.37 | 62  | 346072  | 25.391 | ug/L 99  |
| 6) Bromomethane                | 2.78 | 94  | 177844  | 25.228 | ug/L 98  |
| 8) Chloroethane                | 2.93 | 64  | 167092  | 24.772 | ug/L 99  |
| 9) Trichlorofluoromethane      | 3.26 | 101 | 233812  | 21.642 | ug/L 100 |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.07 | 101 | 358431  | 22.954 | ug/L 98  |
| 12) 1,1-Dichloroethene         | 4.04 | 96  | 361271  | 23.419 | ug/L 94  |
| 13) Acetone                    | 4.12 | 43  | 104314  | 44.845 | ug/L 94  |
| 14) Carbon disulfide           | 4.39 | 76  | 1184949 | 23.174 | ug/L 100 |
| 15) Methyl Acetate             | 4.67 | 43  | 146543  | 26.242 | ug/L 98  |
| 16) Methylene chloride         | 4.92 | 84  | 368150  | 22.889 | ug/L 98  |
| 17) Methyl tert-butyl Ether    | 5.43 | 73  | 499161  | 24.124 | ug/L 99  |
| 18) trans-1,2-Dichloroethene   | 5.43 | 96  | 368865  | 23.584 | ug/L 97  |
| 19) 1,1-Dichloroethane         | 6.21 | 63  | 628005  | 23.308 | ug/L 99  |
| 21) 2-Butanone                 | 7.17 | 43  | 200207  | 52.788 | ug/L 100 |
| 22) cis-1,2-Dichloroethene     | 7.17 | 96  | 388335  | 23.904 | ug/L 99  |

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 MSVOA\_W  
 ClientSampleId :

Quant Time: Apr 11 06:29:48 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM041020S.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Apr 10 13:10:27 2020  
 Response via : Initial Calibration

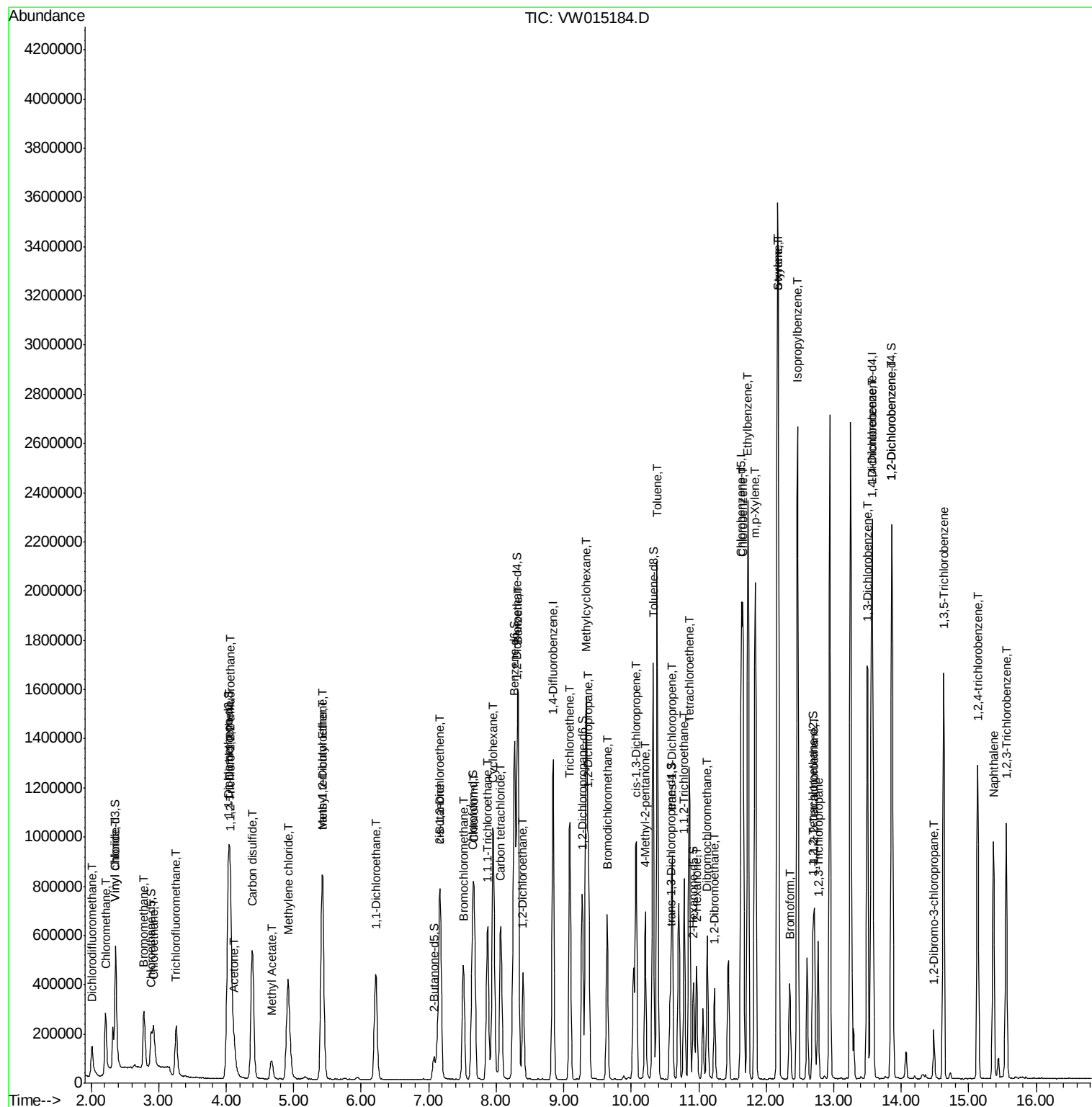
| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 7.51  | 128  | 165790   | 24.845 | ug/L  | 95       |
| 25) Chloroform                  | 7.68  | 83   | 609864   | 23.285 | ug/L  | 98       |
| 27) 1,2-Dichloroethane          | 8.40  | 62   | 377968   | 23.721 | ug/L  | 100      |
| 30) Cyclohexane                 | 7.95  | 56   | 637240   | 22.685 | ug/L  | 100      |
| 31) 1,1,1-Trichloroethane       | 7.87  | 97   | 514625   | 22.501 | ug/L  | 99       |
| 32) Carbon tetrachloride        | 8.07  | 117  | 466621   | 22.303 | ug/L  | 100      |
| 34) Benzene                     | 8.32  | 78   | 1465584  | 23.337 | ug/L  | 100      |
| 35) Trichloroethene             | 9.09  | 95   | 376185   | 22.678 | ug/L  | 99       |
| 36) Methylcyclohexane           | 9.34  | 83   | 686518   | 22.788 | ug/L  | 99       |
| 40) 1,2-Dichloropropane         | 9.37  | 63   | 366836   | 23.941 | ug/L  | 100      |
| 41) Bromodichloromethane        | 9.64  | 83   | 453036   | 22.999 | ug/L  | 98       |
| 42) cis-1,3-Dichloropropene     | 10.07 | 75   | 574902   | 23.261 | ug/L  | 98       |
| 43) 4-Methyl-2-pentanone        | 10.21 | 43   | 446964   | 48.974 | ug/L  | 99       |
| 44) Toluene                     | 10.38 | 91   | 1566509  | 23.673 | ug/L  | 98       |
| 45) trans-1,3-Dichloropropene   | 10.60 | 75   | 493083   | 23.177 | ug/L  | 98       |
| 46) 1,1,2-Trichloroethane       | 10.79 | 97   | 260482   | 23.865 | ug/L  | 99       |
| 47) Tetrachloroethene           | 10.86 | 164  | 277023   | 23.321 | ug/L  | 99       |
| 49) 2-Hexanone                  | 10.96 | 43   | 301436   | 50.121 | ug/L  | 99       |
| 50) Dibromochloromethane        | 11.13 | 129  | 308080   | 24.116 | ug/L  | 96       |
| 51) 1,2-Dibromoethane           | 11.23 | 107  | 253058   | 24.596 | ug/L  | 100      |
| 52) Chlorobenzene               | 11.66 | 112  | 962673   | 23.682 | ug/L  | 98       |
| 53) Ethylbenzene                | 11.73 | 91   | 1731395  | 23.265 | ug/L  | 100      |
| 54) m,p-Xylene                  | 11.84 | 106  | 672618   | 23.566 | ug/L  | 95       |
| 55) o-xylene                    | 12.16 | 106  | 645897   | 23.677 | ug/L  | 96       |
| 56) Styrene                     | 12.18 | 104  | 1089695  | 23.751 | ug/L  | 97       |
| 57) Isopropylbenzene            | 12.46 | 105  | 1721760  | 23.378 | ug/L  | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 12.71 | 83   | 315821   | 24.833 | ug/L  | 97       |
| 59) 1,2,3-Trichloropropane      | 12.77 | 75   | 229980   | 24.472 | ug/L  | 100      |
| 62) Bromoform                   | 12.35 | 173  | 172609   | 23.832 | ug/L  | 99       |
| 63) 1,3-Dichlorobenzene         | 13.50 | 146  | 702288   | 23.487 | ug/L  | 98       |
| 64) 1,4-Dichlorobenzene         | 13.58 | 146  | 676236   | 23.283 | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 13.87 | 146  | 633301   | 23.849 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 14.48 | 75   | 51260    | 23.309 | ug/L  | 92       |
| 67) 1,3,5-Trichlorobenzene      | 14.63 | 180  | 484387   | 23.528 | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene      | 15.13 | 180  | 405643   | 24.688 | ug/L  | 97       |
| 69) Naphthalene                 | 15.36 | 128  | 847029   | 25.732 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 15.55 | 180  | 350513   | 24.501 | ug/L  | 99       |

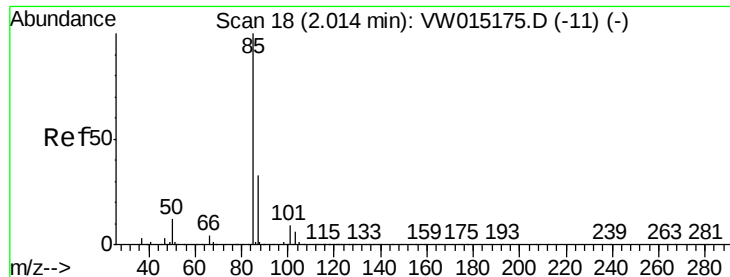
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : VOC Analysis  
QLast Update : Fri Apr 10 13:10:27 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 24.309 ug/L

RT: 2.01 min Scan# 18

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

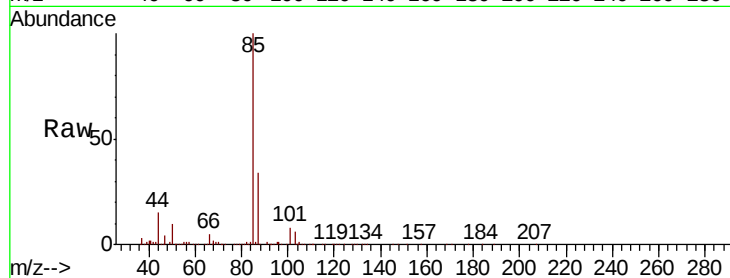
ClientSampleId :

Tot Ion: 85 Resp: 199350

Ion Ratio Lower Upper

85 100

87 28.2 22.5 41.9



Abundance Ion 85.00 (84.70 to 85.70): VW

Ion 87.00 (86.70 to 87.70): VW

2.01

80000

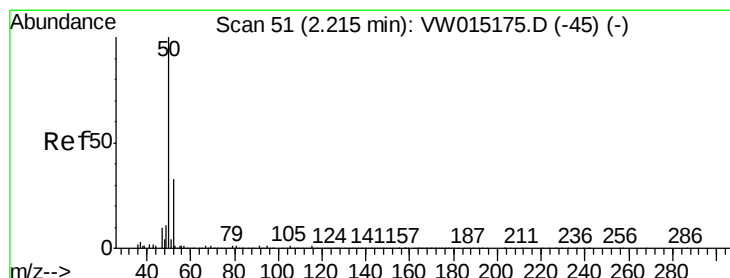
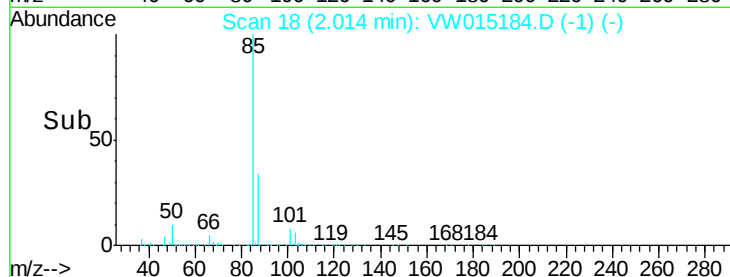
60000

40000

20000

0

Time--> 1.90 2.00 2.10



#3

Chloromethane

Concen: 23.319 ug/L

RT: 2.21 min Scan# 51

Delta R.T. -0.00 min

Lab File: VW015184.D

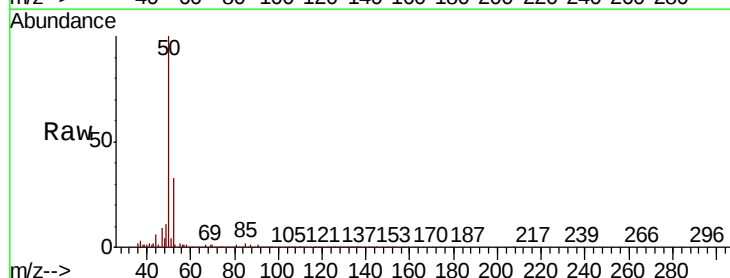
Acq: 10 Apr 2020 18:45

Tgt Ion: 50 Resp: 237395

Ion Ratio Lower Upper

50 100

52 33.2 23.2 43.0



Abundance Ion 50.00 (49.70 to 50.70): VW

Ion 52.00 (51.70 to 52.70): VW

2.21

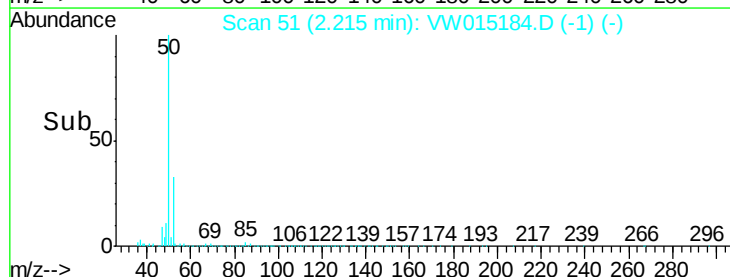
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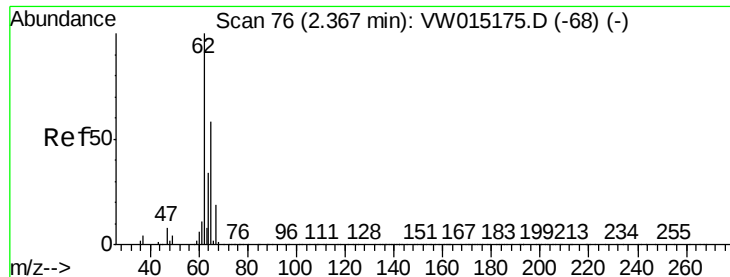
100000

50000

0

Time--> 2.10 2.15 2.20 2.25 2.30





#5

Vinyl chloride

Concen: 25.391 ug/L

RT: 2.37 min Scan# 76

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

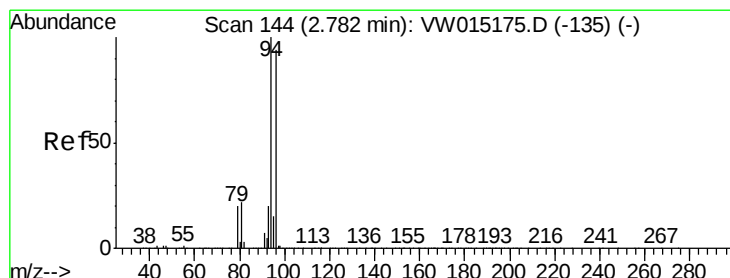
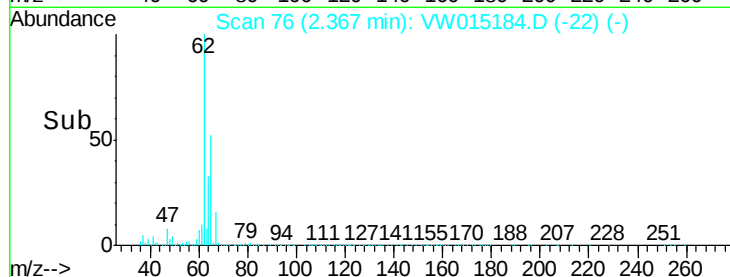
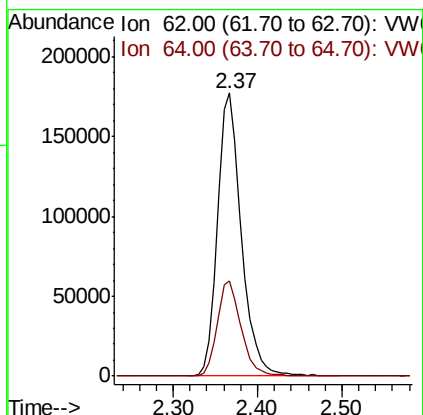
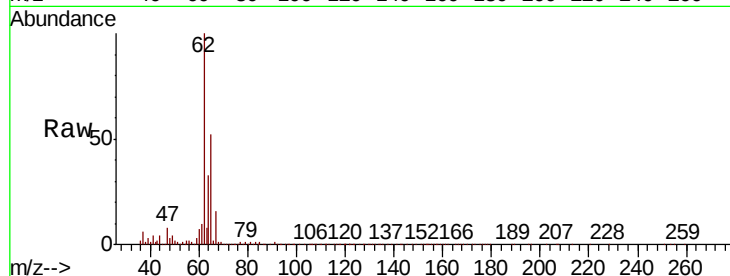
ClientSampled :

Tot Ion: 62 Resp: 346072

Ion Ratio Lower Upper

62 100

64 33.4 23.8 44.2



#6

Bromomethane

Concen: 25.228 ug/L

RT: 2.78 min Scan# 144

Delta R.T. -0.00 min

Lab File: VW015184.D

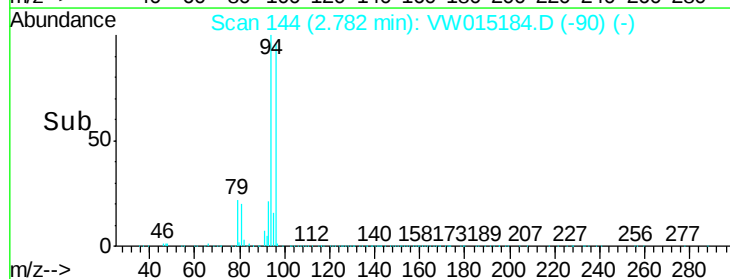
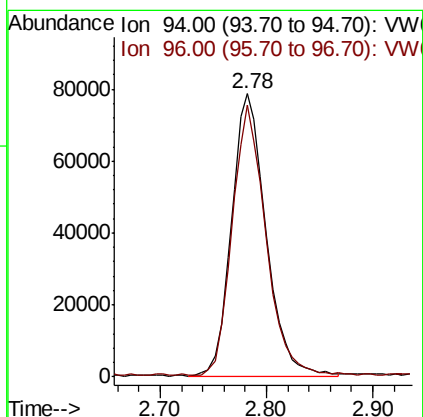
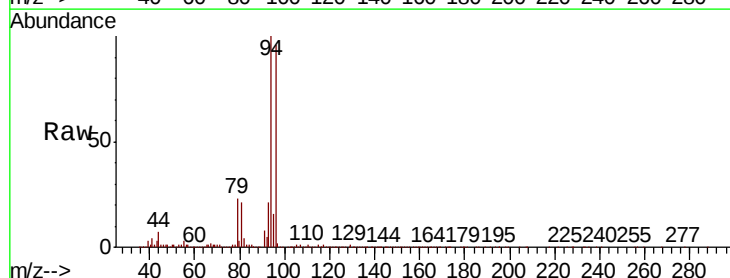
Acq: 10 Apr 2020 18:45

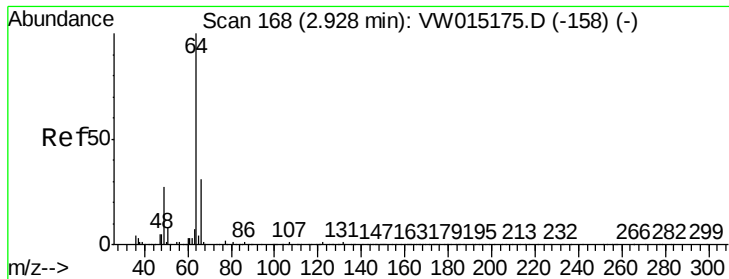
Tgt Ion: 94 Resp: 177844

Ion Ratio Lower Upper

94 100

96 93.3 9.5 181.3





#8

Chloroethane

Concen: 24.772 ug/L

RT: 2.93 min Scan# 168

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

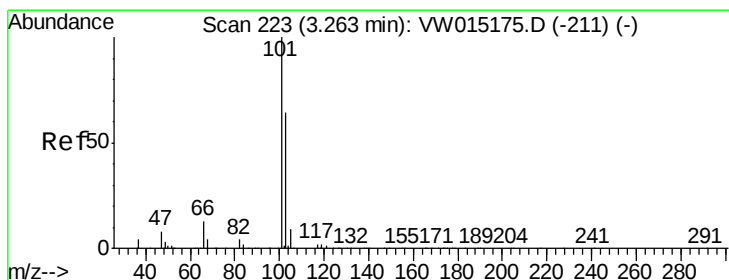
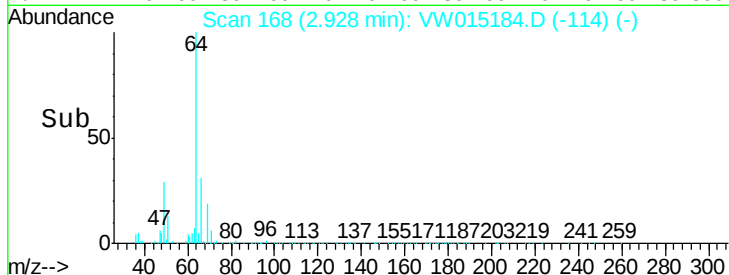
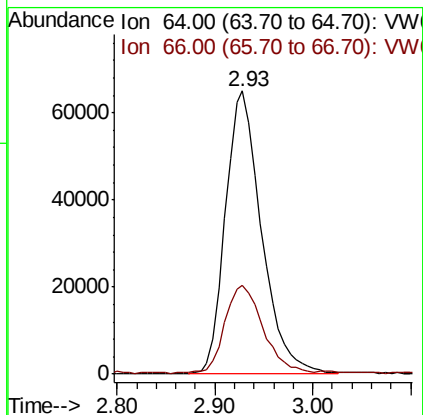
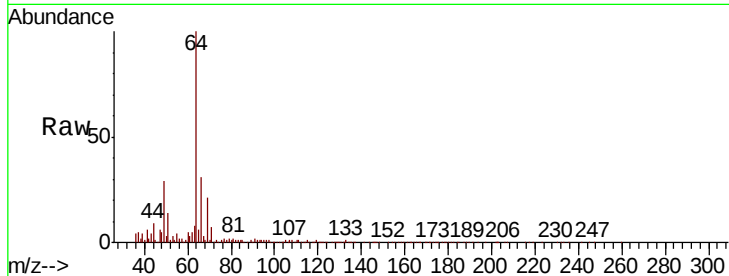
ClientSampleId :

Tot Ion: 64 Resp: 167092

Ion Ratio Lower Upper

64 100

66 31.3 22.5 41.7



#9

Trichlorofluoromethane

Concen: 21.642 ug/L

RT: 3.26 min Scan# 222

Delta R.T. -0.01 min

Lab File: VW015184.D

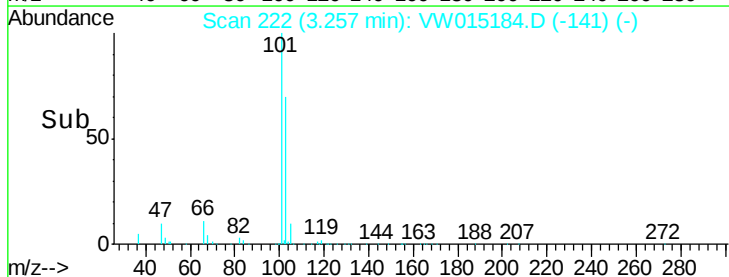
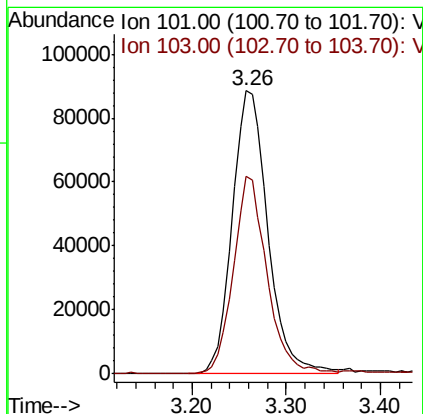
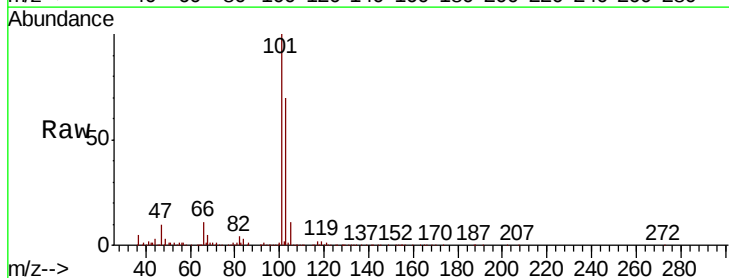
Acq: 10 Apr 2020 18:45

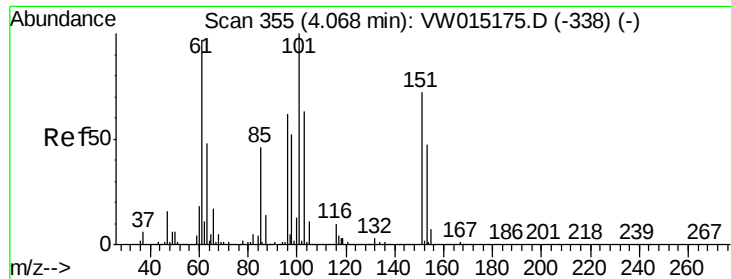
Tgt Ion: 101 Resp: 233812

Ion Ratio Lower Upper

101 100

103 64.3 44.9 83.5





#11

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

Concen: 22.954 ug/L

RT: 4.07 min Scan# 355

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

ClientSampleId :

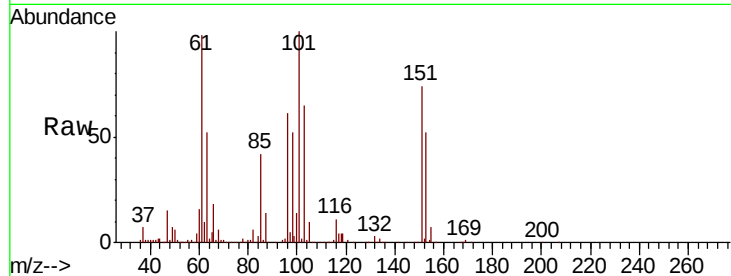
Tot Ion:101 Resp: 358431

Ion Ratio Lower Upper

101 100

85 41.8 34.0 51.0

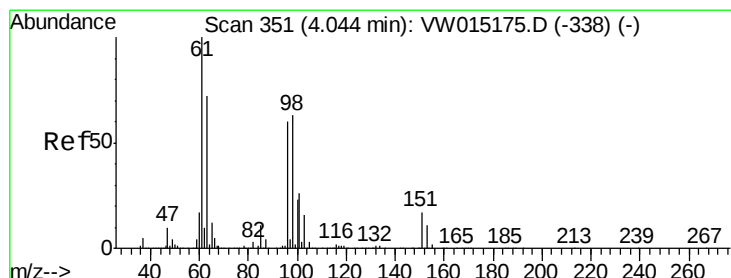
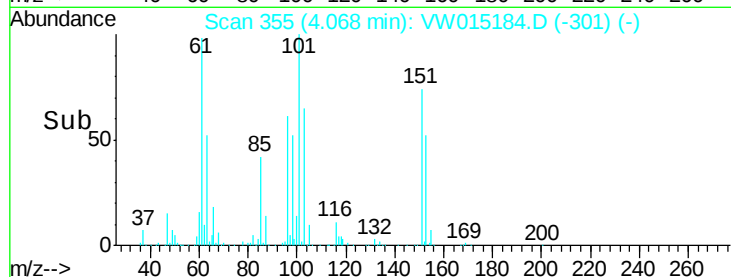
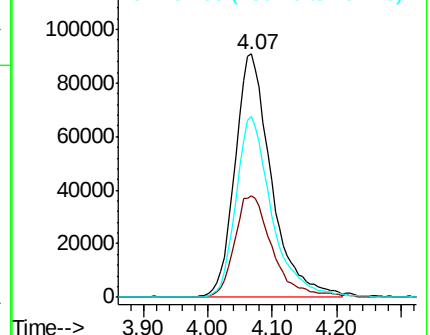
151 72.3 56.6 85.0



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: 23.419 ug/L

RT: 4.04 min Scan# 351

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

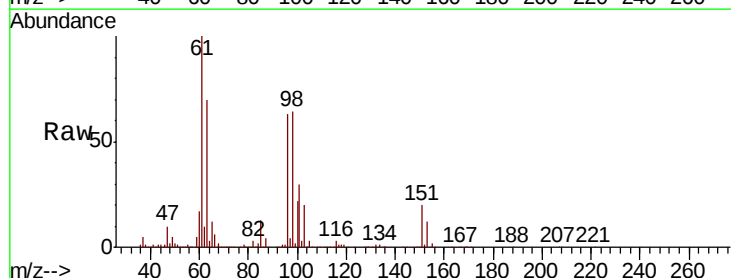
Tgt Ion: 96 Resp: 361271

Ion Ratio Lower Upper

96 100

61 159.2 116.4 216.2

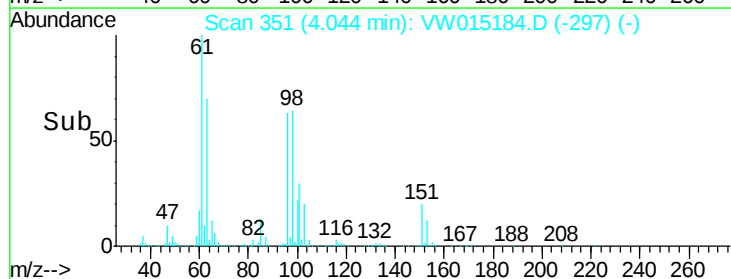
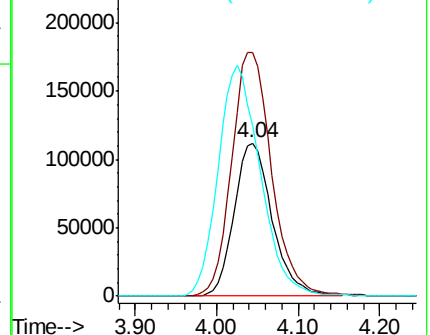
63 111.9 84.0 156.0

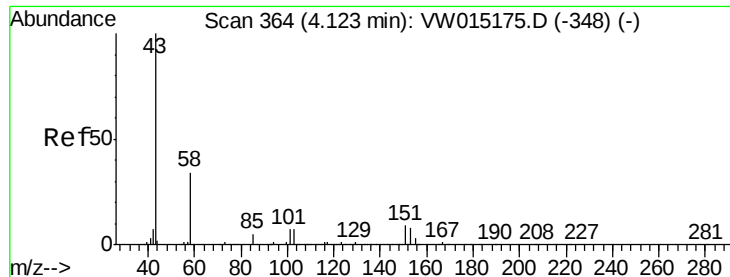


Abundance Ion 96.00 (95.70 to 96.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 63.00 (62.70 to 63.70): VW





#13

Acetone

Concen: 44.845 ug/L

RT: 4.12 min Scan# 364

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

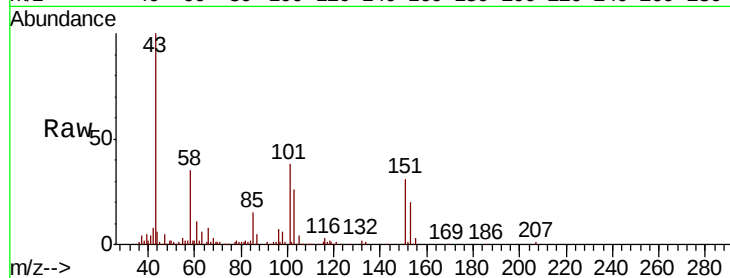
Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion: 43 Resp: 104314

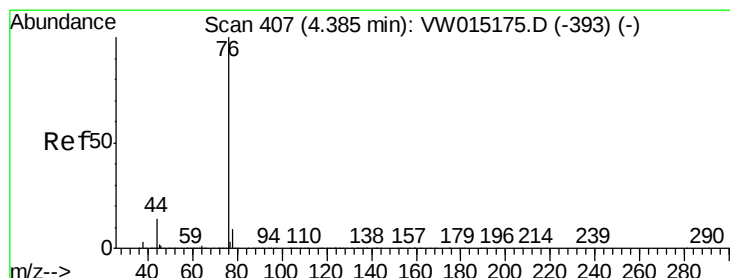
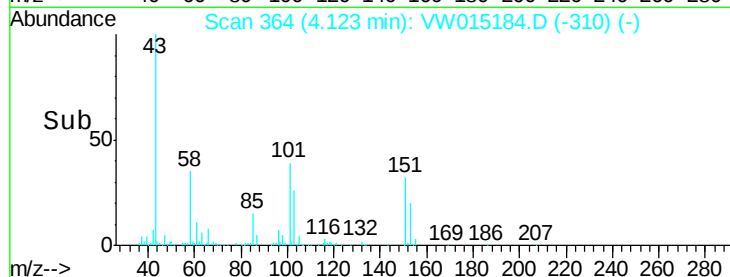
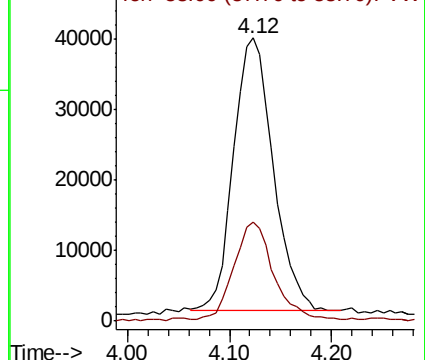
Ion Ratio Lower Upper

43 100

58 35.7 0.0 64.6



Abundance Ion 43.00 (42.70 to 43.70): VW  
Ion 58.00 (57.70 to 58.70): VW



#14

Carbon disulfide

Concen: 23.174 ug/L

RT: 4.39 min Scan# 407

Delta R.T. -0.00 min

Lab File: VW015184.D

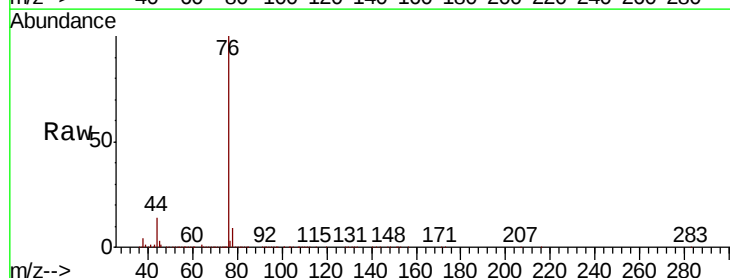
Acq: 10 Apr 2020 18:45

Tgt Ion: 76 Resp: 1184949

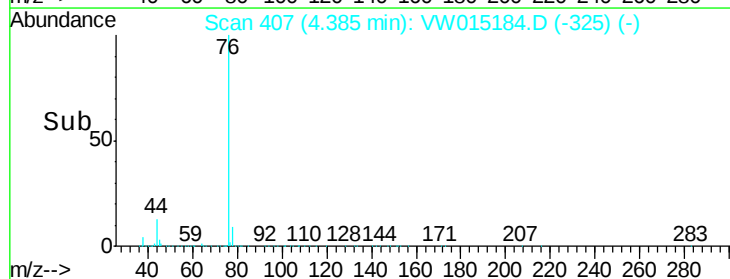
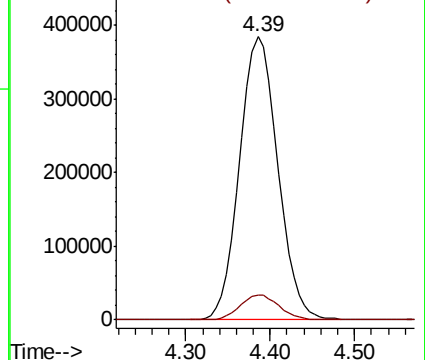
Ion Ratio Lower Upper

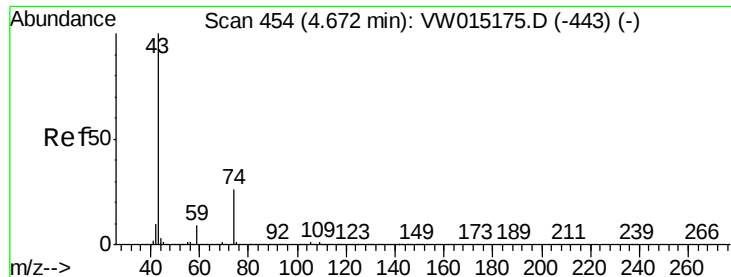
76 100

78 9.0 7.3 10.9



Abundance Ion 76.00 (75.70 to 76.70): VW  
Ion 78.00 (77.70 to 78.70): VW

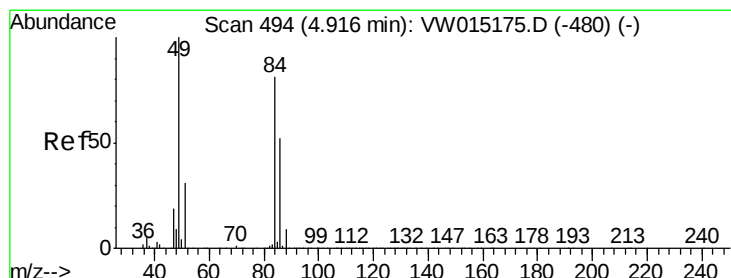
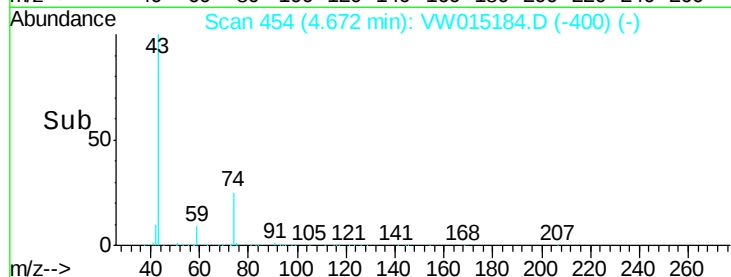
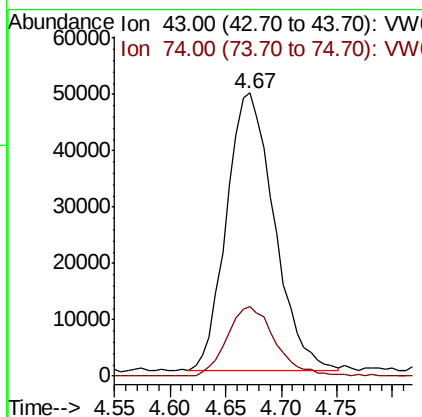
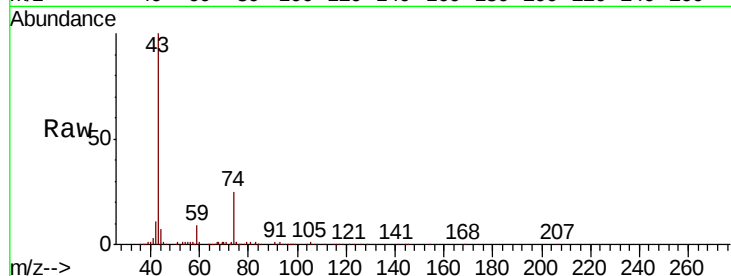




#15  
Methvl Acetate  
Concen: 26.242 ug/L  
RT: 4.67 min Scan# 454  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

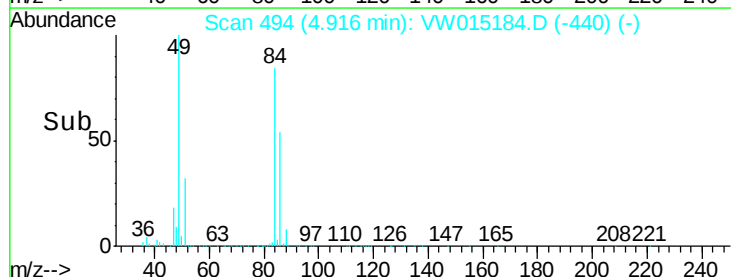
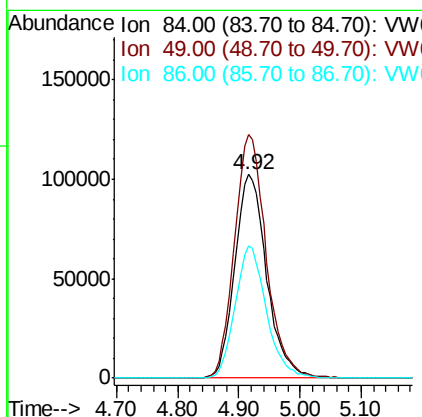
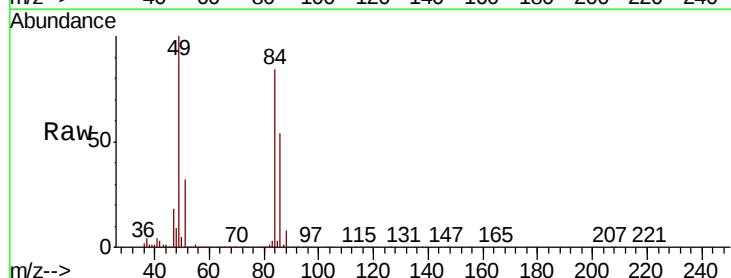
Instrument :  
MSVOA\_W  
ClientSampled :

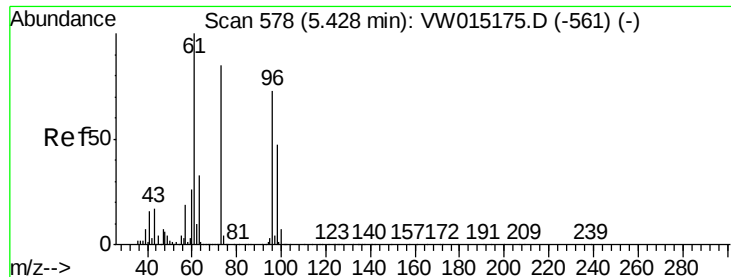
Tot Ion: 43 Resp: 146543  
Ion Ratio Lower Upper  
43 100  
74 25.2 19.4 29.2



#16  
Methylene chloride  
Concen: 22.889 ug/L  
RT: 4.92 min Scan# 494  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

Tgt Ion: 84 Resp: 368150  
Ion Ratio Lower Upper  
84 100  
49 119.5 85.8 159.4  
86 65.0 44.7 82.9

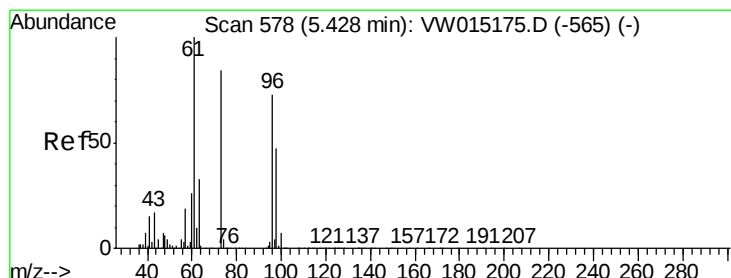
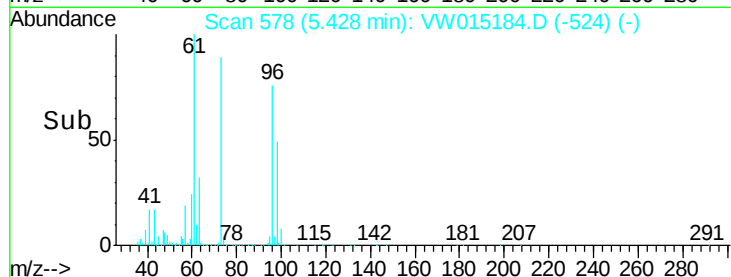
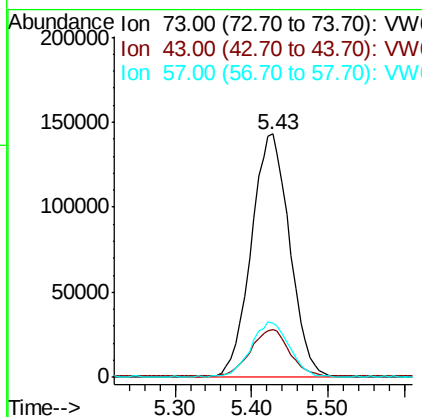
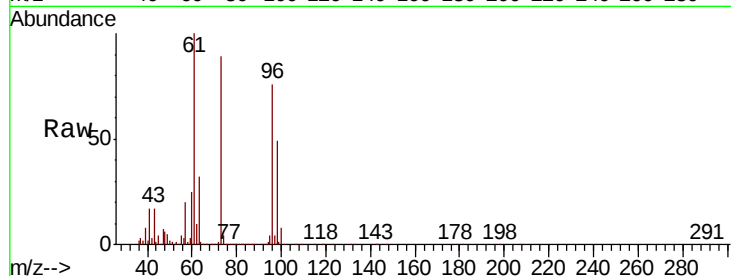




#17  
Methvl tert-butvl Ether  
Concen: 24.124 ug/L  
RT: 5.43 min Scan# 578  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

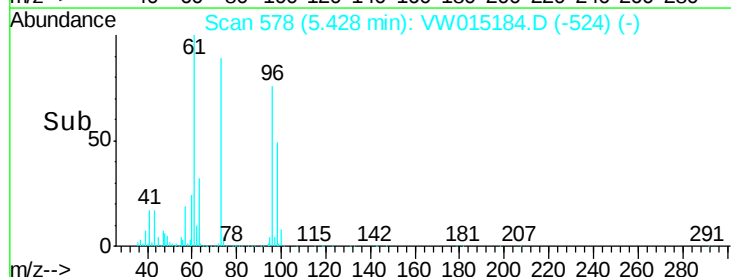
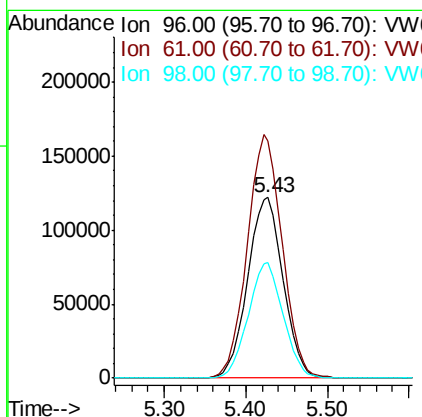
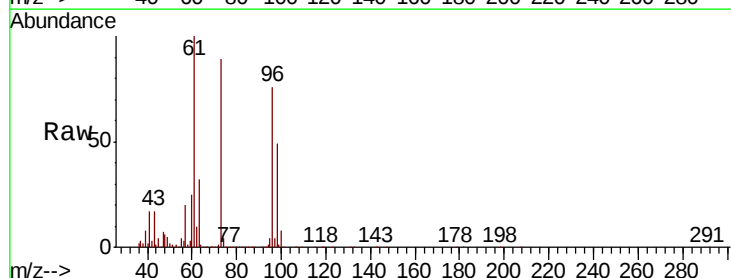
Instrument :  
MSVOA\_W  
ClientSampleId :

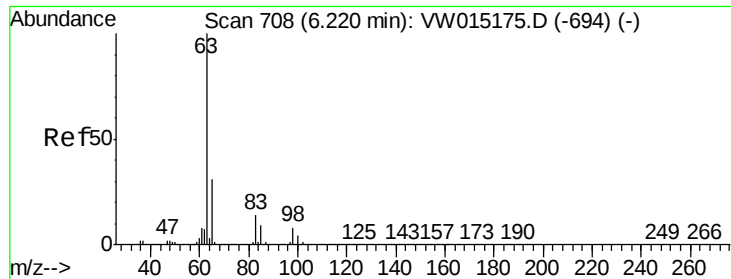
Tot Ion: 73 Resp: 499161  
Ion Ratio Lower Upper  
73 100  
43 19.2 15.8 23.8  
57 22.1 17.6 26.4



#18  
trans-1,2-Dichloroethene  
Concen: 23.584 ug/L  
RT: 5.43 min Scan# 578  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

Tgt Ion: 96 Resp: 368865  
Ion Ratio Lower Upper  
96 100  
61 131.7 95.5 177.3  
98 64.3 45.1 83.9

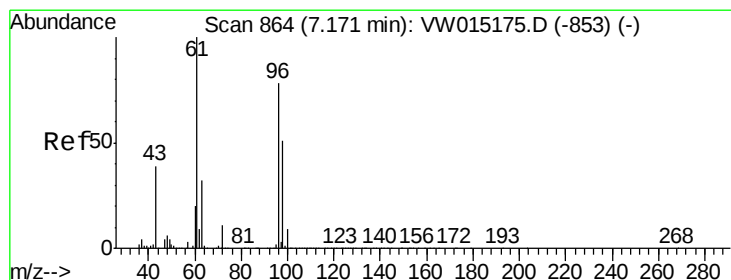
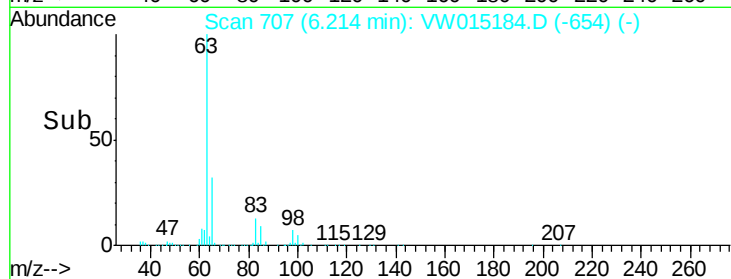
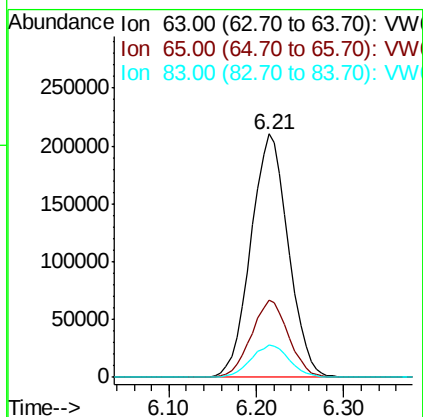
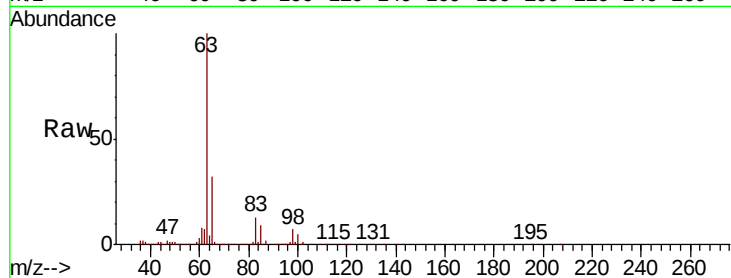




#19  
 1,1-Dichloroethane  
 Concen: 23.308 ug/L  
 RT: 6.21 min Scan# 707  
 Delta R.T. -0.01 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

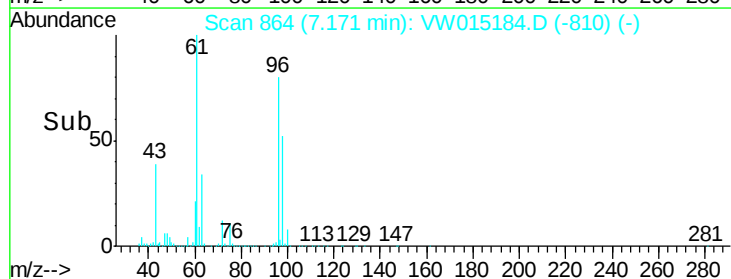
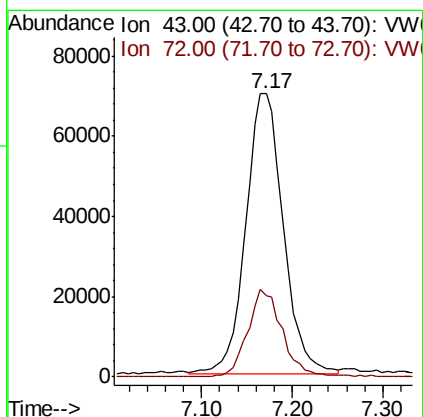
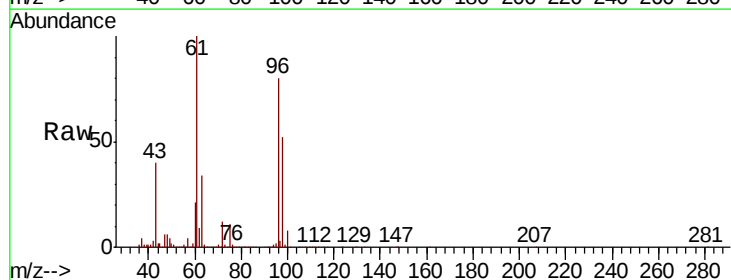
Instrument :  
 MSVOA\_W  
 ClientSampled :

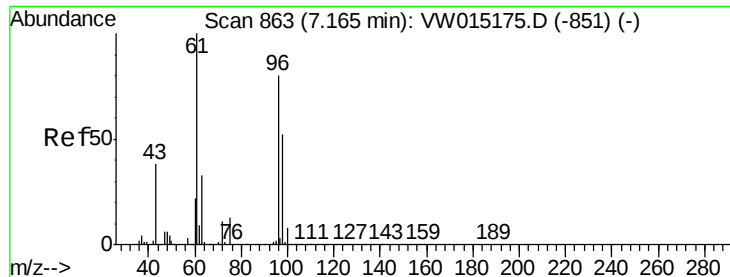
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 31.7  | 22.0  | 40.8  |
| 83      | 13.2  | 9.7   | 17.9  |



#21  
 2-Butanone  
 Concen: 52.788 ug/L  
 RT: 7.17 min Scan# 864  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 28.6  | 14.4  | 43.0  |



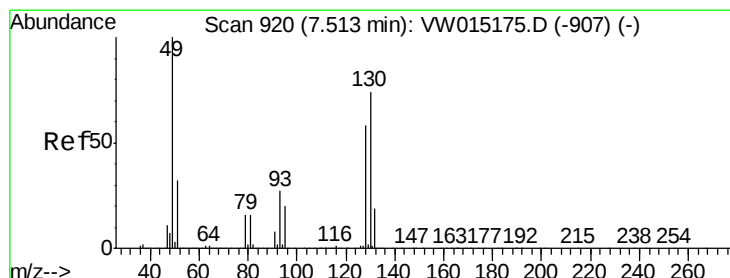
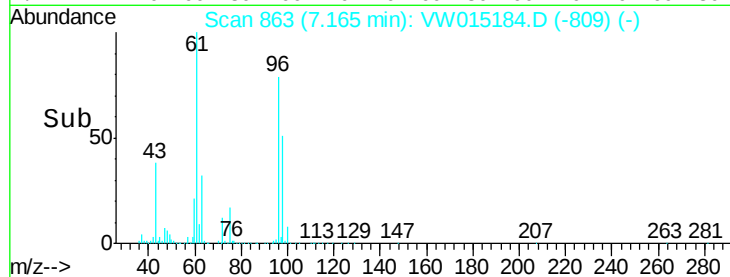
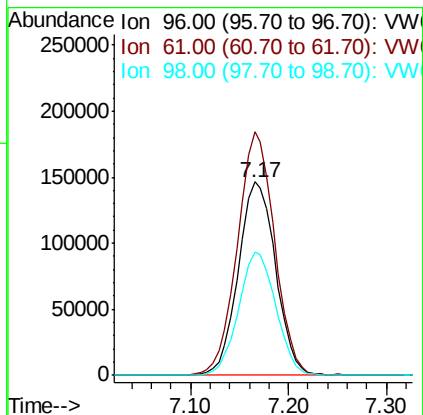
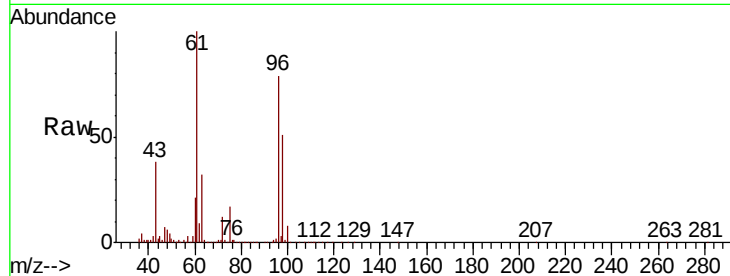


#22

cis-1,2-Dichloroethene  
 Concen: 23.904 ug/L  
 RT: 7.17 min Scan# 863  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

Instrument :  
 MSVOA\_W  
 ClientSampleId :

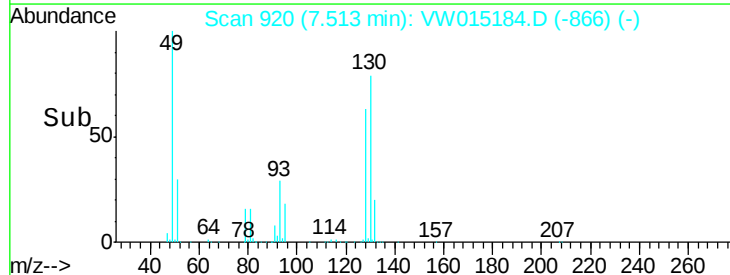
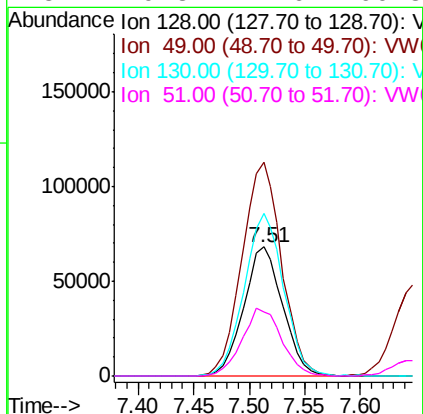
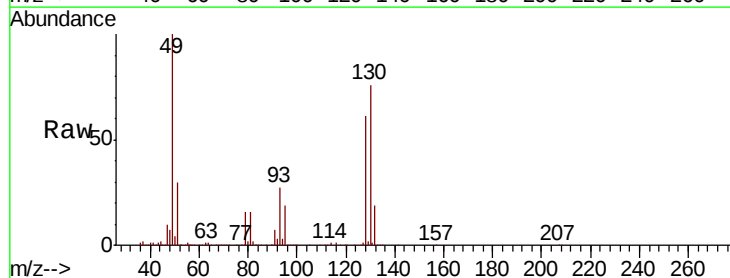
| Tot Ion | 96    | Resp  | 388335 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 96      | 100   |       |        |
| 61      | 126.0 | 87.8  | 163.0  |
| 98      | 63.9  | 45.7  | 84.9   |

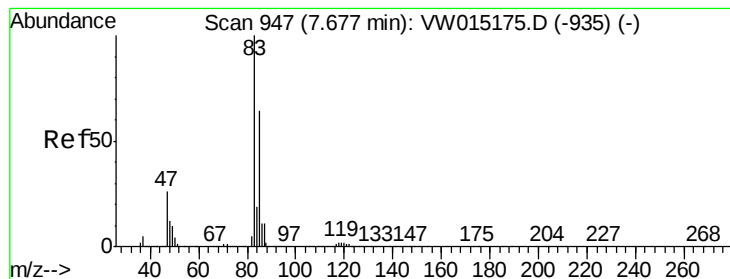


#23

Bromochloromethane  
 Concen: 24.845 ug/L  
 RT: 7.51 min Scan# 920  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

| Tgt Ion | 128   | Resp  | 165790 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 128     | 100   |       |        |
| 49      | 165.2 | 121.1 | 224.9  |
| 130     | 125.5 | 90.1  | 167.3  |
| 51      | 49.3  | 44.6  | 66.8   |





#25

Chloroform

Concen: 23.285 ug/L

RT: 7.68 min Scan# 947

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

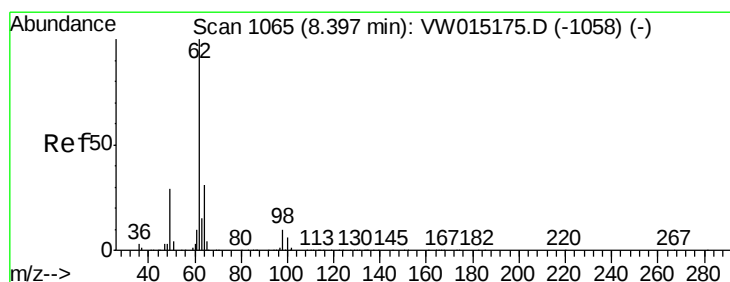
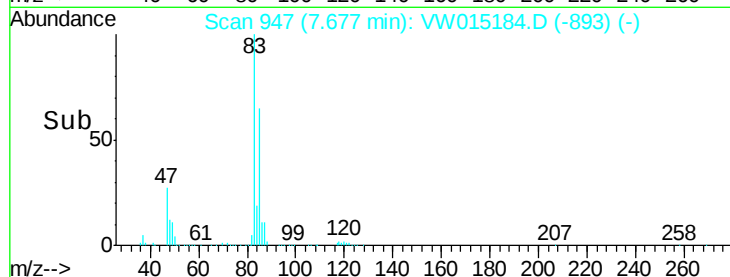
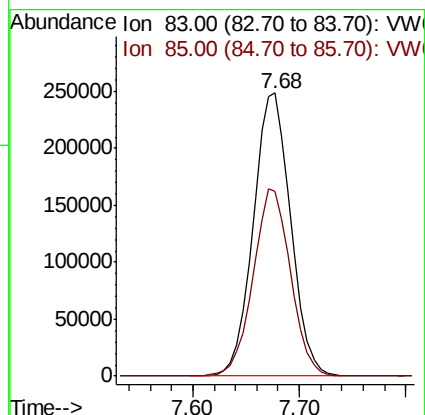
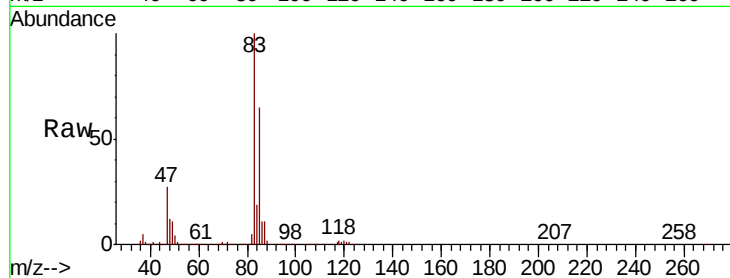
Instrument :  
MSVOA\_W  
ClientSampled :

Tot Ion: 83 Resp: 609864

Ion Ratio Lower Upper

83 100

85 66.1 45.3 84.1



#27

1,2-Dichloroethane

Concen: 23.721 ug/L

RT: 8.40 min Scan# 1065

Delta R.T. -0.00 min

Lab File: VW015184.D

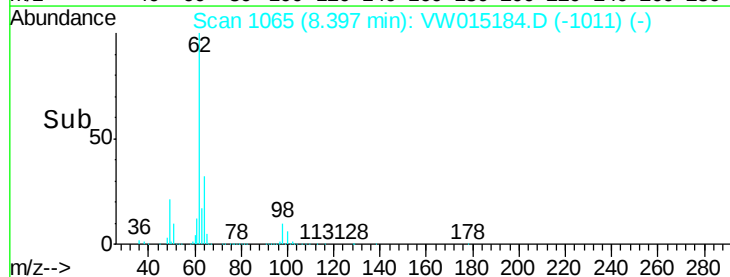
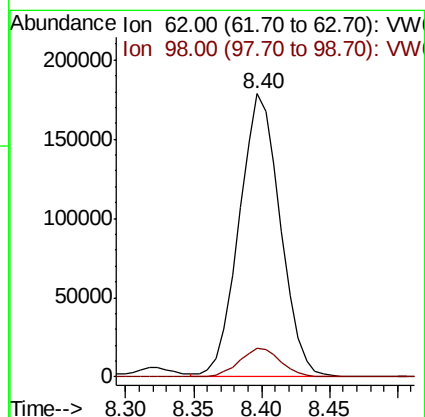
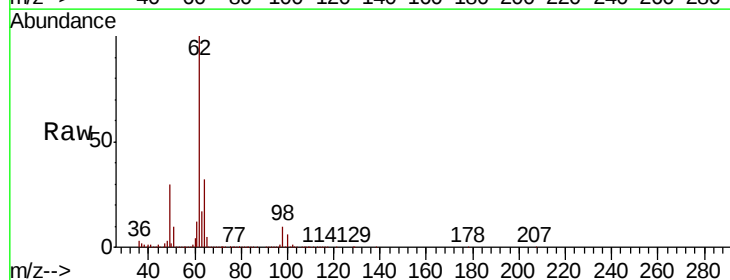
Acq: 10 Apr 2020 18:45

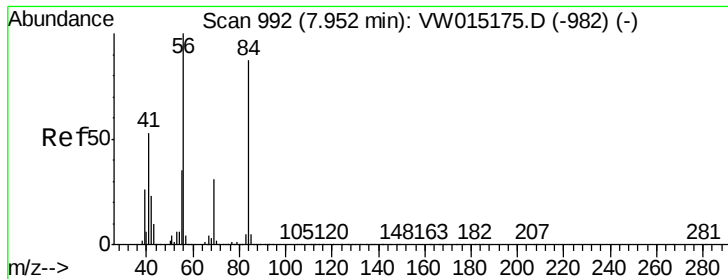
Tgt Ion: 62 Resp: 377968

Ion Ratio Lower Upper

62 100

98 10.0 7.9 11.9

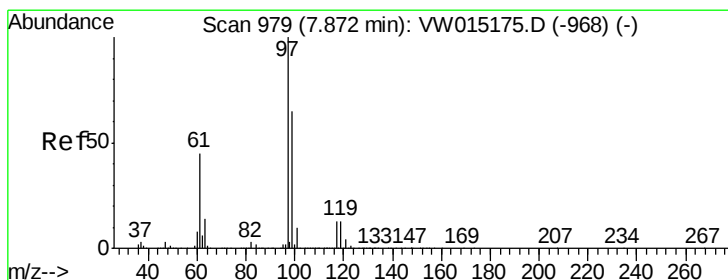
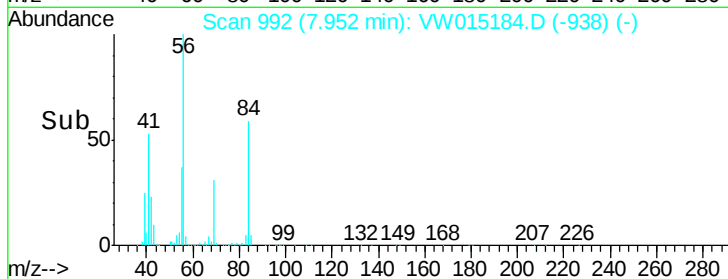
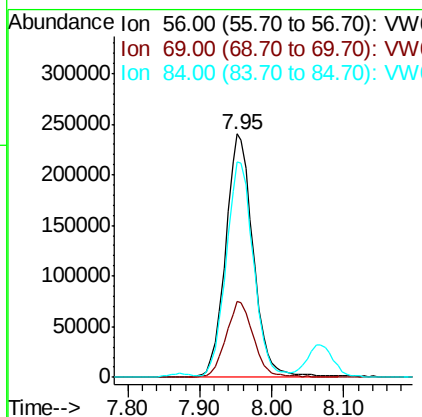
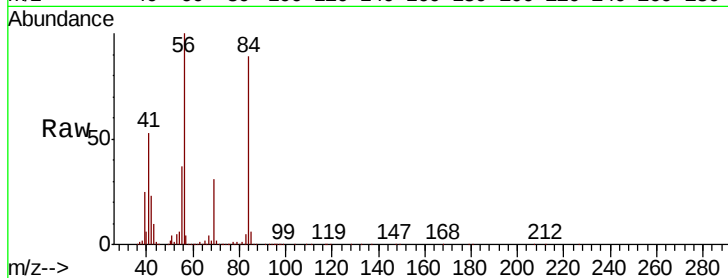




#30  
Cyclohexane  
Concen: 22.685 ug/L  
RT: 7.95 min Scan# 992  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

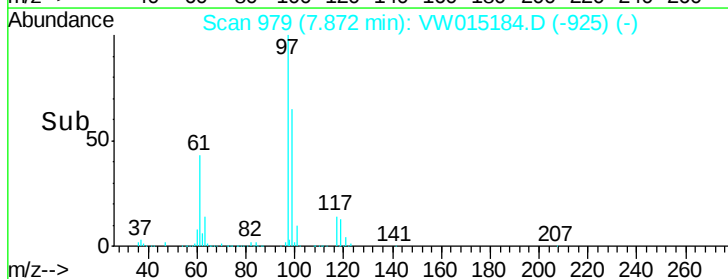
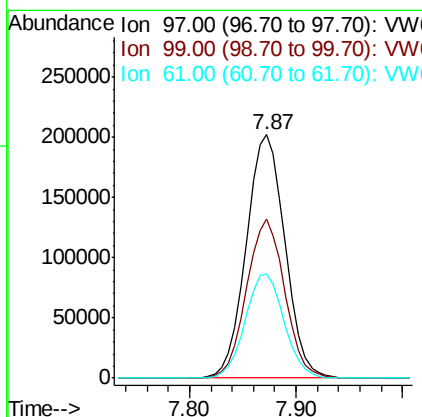
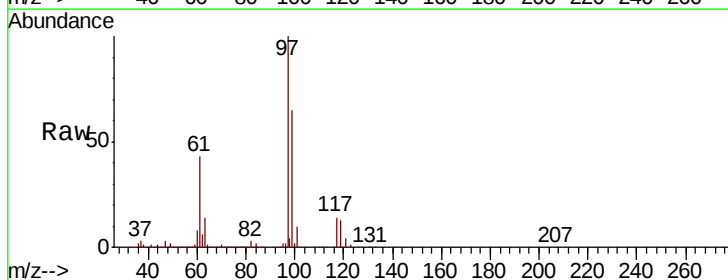
Instrument :  
MSVOA\_W  
ClientSampleId :

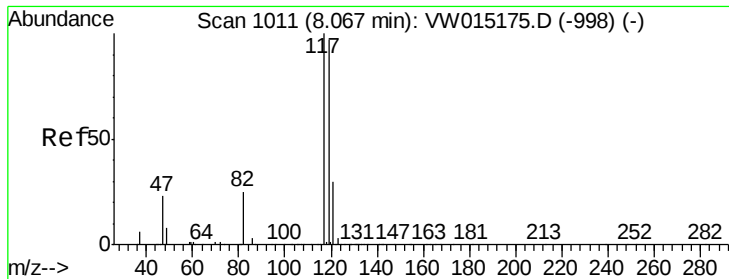
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 30.8  | 24.9  | 37.3  |
| 84      | 88.2  | 70.6  | 105.8 |



#31  
1,1,1-Trichloroethane  
Concen: 22.501 ug/L  
RT: 7.87 min Scan# 979  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.9  | 51.5  | 77.3  |
| 61      | 43.3  | 35.3  | 52.9  |





#32

Carbon tetrachloride

Concen: 22.303 ug/L

RT: 8.07 min Scan# 1011

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

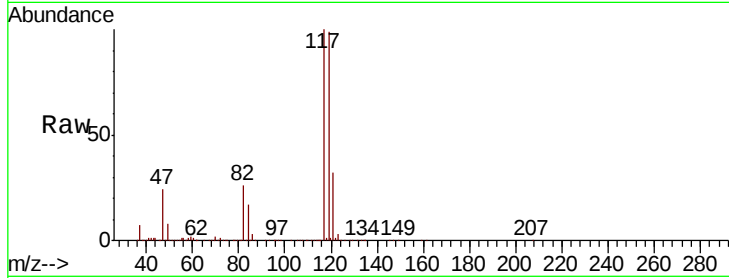
ClientSampleId :

Tot Ion:117 Resp: 466621

Ion Ratio Lower Upper

117 100

119 96.7 77.4 116.2



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

8.07

200000

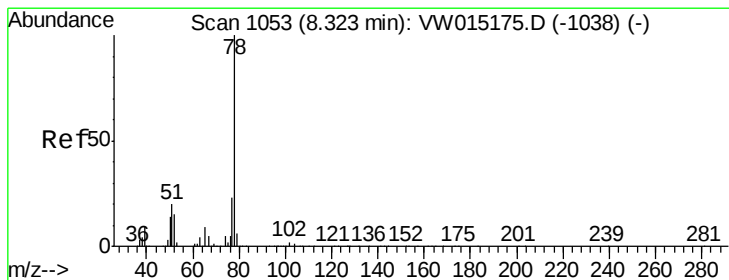
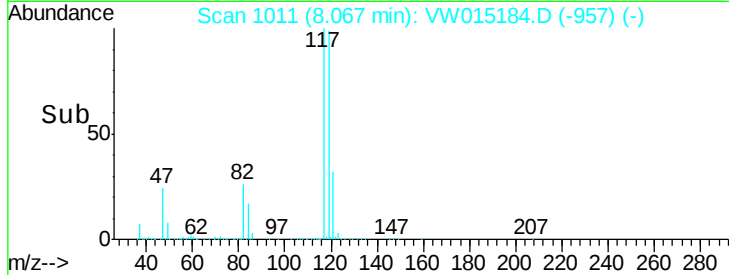
150000

100000

50000

0

Time-->



#34

Benzene

Concen: 23.337 ug/L

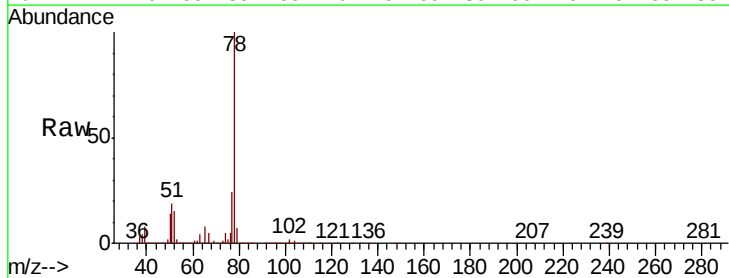
RT: 8.32 min Scan# 1053

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Tgt Ion: 78 Resp: 1465584



Abundance Ion 78.00 (77.70 to 78.70): VW

8.32

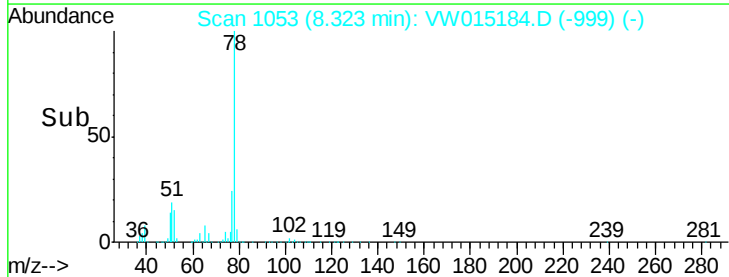
600000

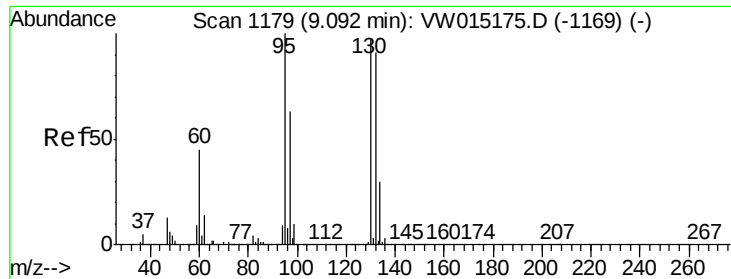
400000

200000

0

Time-->

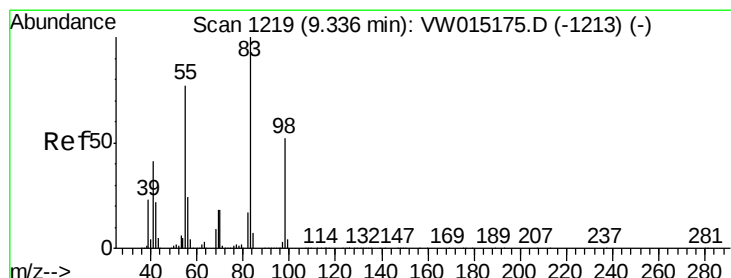
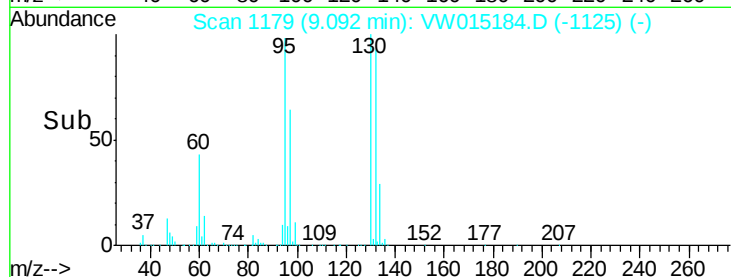
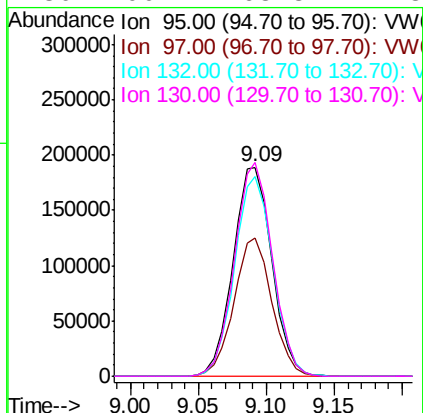
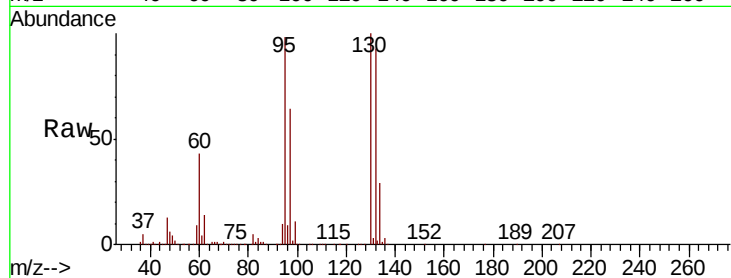




#35  
 Trichloroethene  
 Concen: 22.678 ug/L  
 RT: 9.09 min Scan# 1179  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

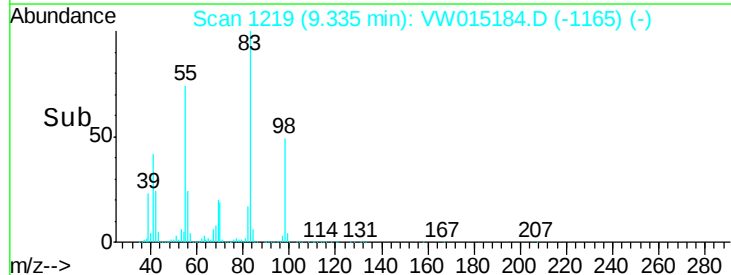
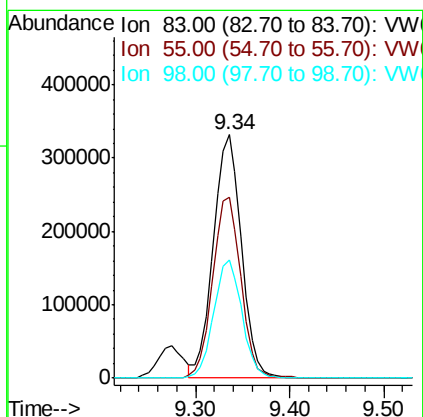
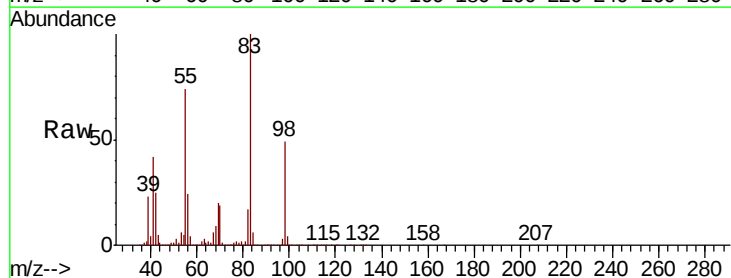
Instrument :  
 MSVOA\_W  
 ClientSampleId :

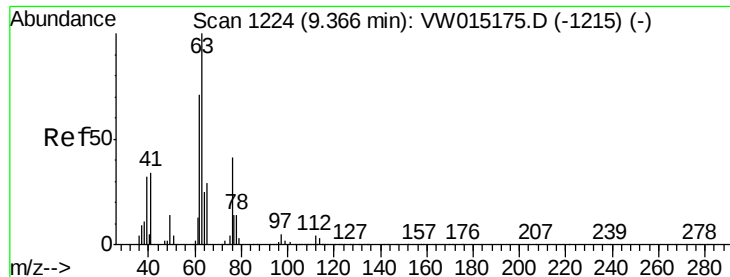
| Tot Ion   | 95    | Resp  | 376185 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 97        | 64.0  | 44.7  | 83.1   |
| 132       | 94.7  | 65.7  | 122.1  |
| 130       | 100.4 | 68.8  | 127.8  |



#36  
 Methylcyclohexane  
 Concen: 22.788 ug/L  
 RT: 9.34 min Scan# 1219  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

| Tgt Ion   | 83    | Resp  | 686518 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 83        | 100   |       |        |
| 55        | 74.3  | 60.6  | 91.0   |
| 98        | 48.6  | 39.4  | 59.0   |





#40

1,2-Dichloropropane

Concen: 23.941 ug/L

RT: 9.37 min Scan# 1224

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

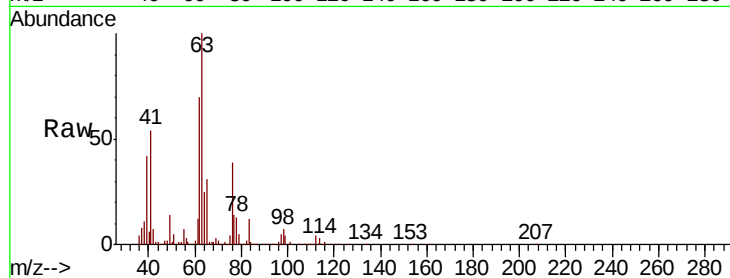
ClientSampleId :

Tot Ion: 63 Resp: 366836

Ion Ratio Lower Upper

63 100

112 4.4 3.4 5.2



Abundance Ion 63.00 (62.70 to 63.70): VW

Ion 112.00 (111.70 to 112.70): V

9.37

200000

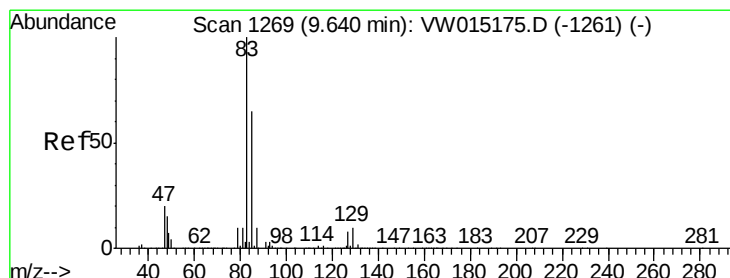
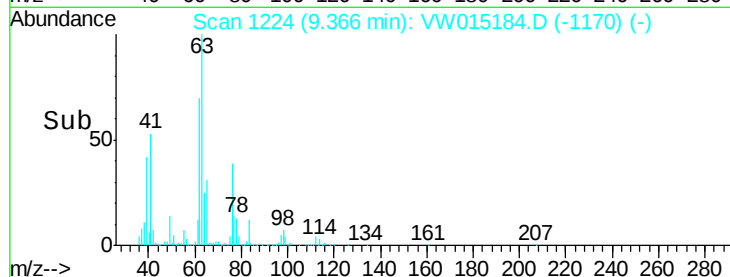
150000

100000

50000

0

Time--> 9.25 9.30 9.35 9.40 9.45



#41

Bromodichloromethane

Concen: 22.999 ug/L

RT: 9.64 min Scan# 1269

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

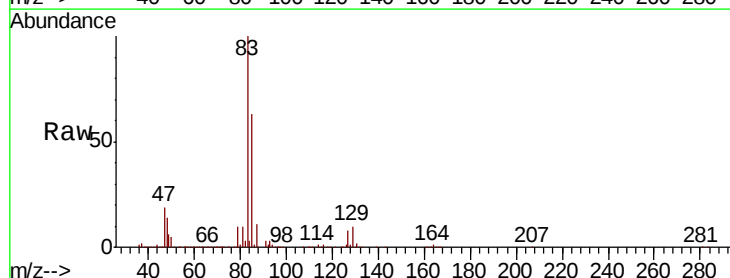
Tgt Ion: 83 Resp: 453036

Ion Ratio Lower Upper

83 100

85 63.2 45.4 84.4

127 8.2 6.5 9.7



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

9.64

300000

250000

200000

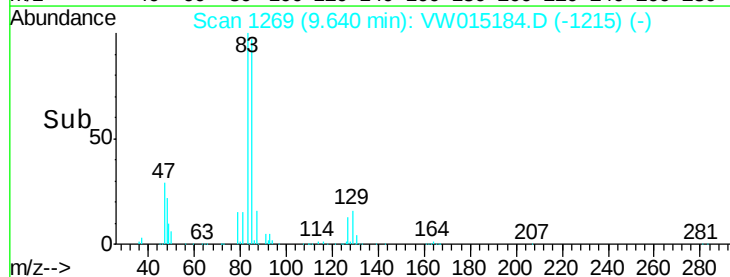
150000

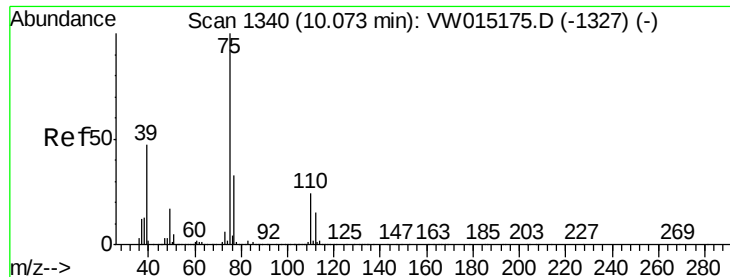
100000

50000

0

Time--> 9.55 9.60 9.65 9.70





#42

cis-1,3-Dichloropropene

Concen: 23.261 ug/L

RT: 10.07 min Scan# 1340

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

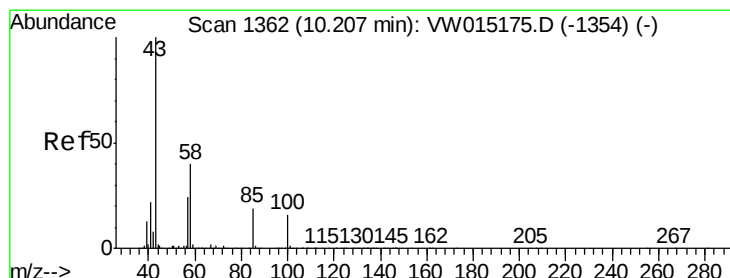
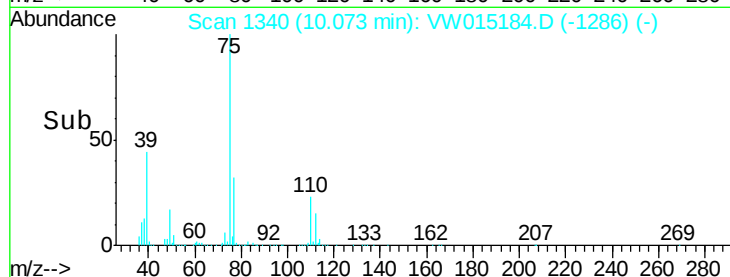
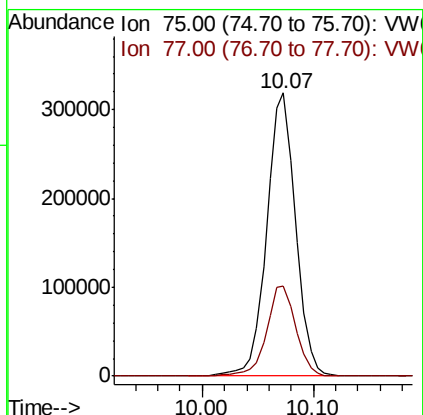
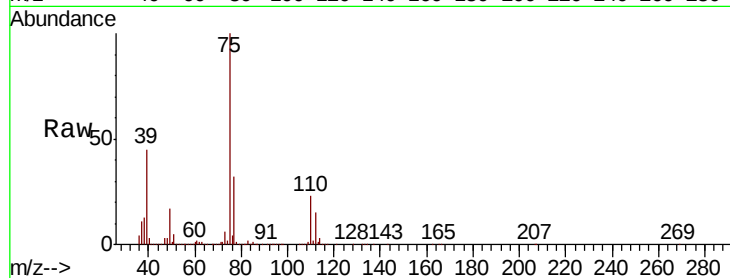
ClientSampleId :

Tot Ion: 75 Resp: 574902

Ion Ratio Lower Upper

75 100

77 31.9 23.0 42.8



#43

4-Methyl-2-pentanone

Concen: 48.974 ug/L

RT: 10.21 min Scan# 1362

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

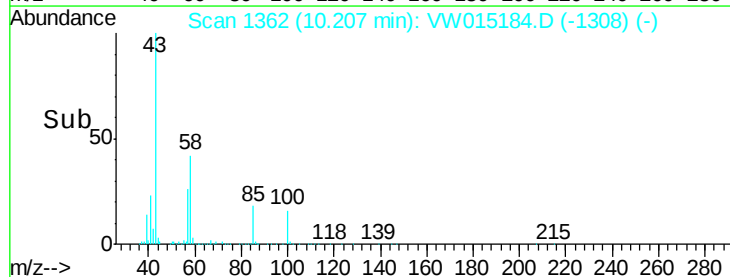
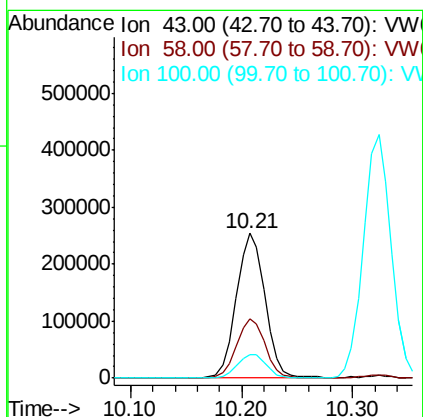
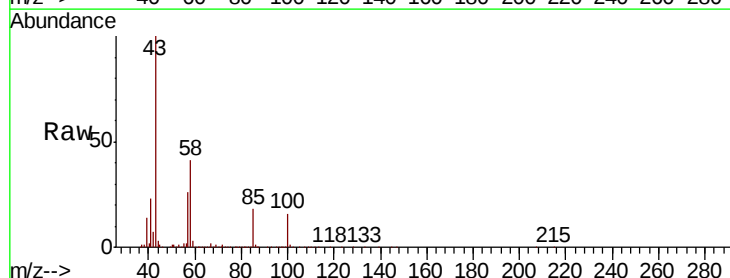
Tgt Ion: 43 Resp: 446964

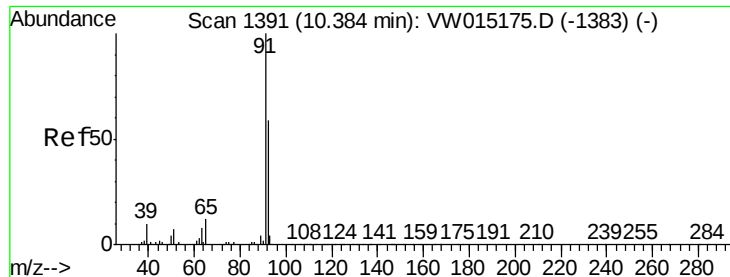
Ion Ratio Lower Upper

43 100

58 40.8 33.0 49.4

100 16.9 12.9 19.3





#44

Toluene

Concen: 23.673 ug/L

RT: 10.38 min Scan# 1391

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

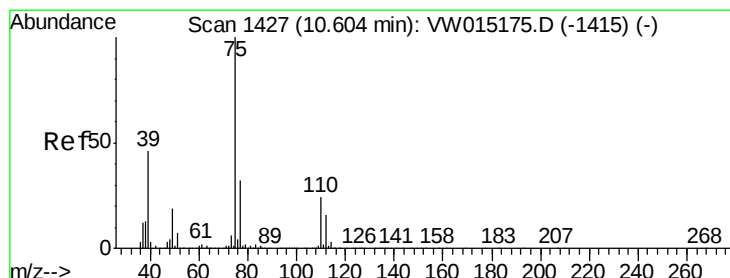
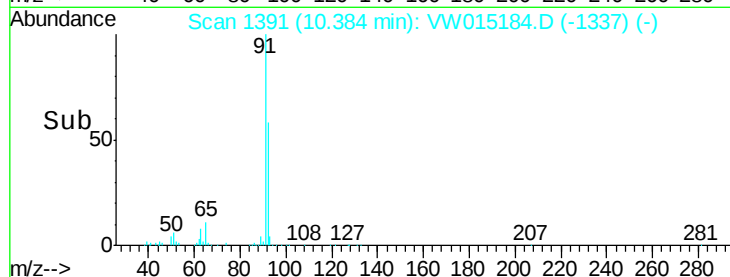
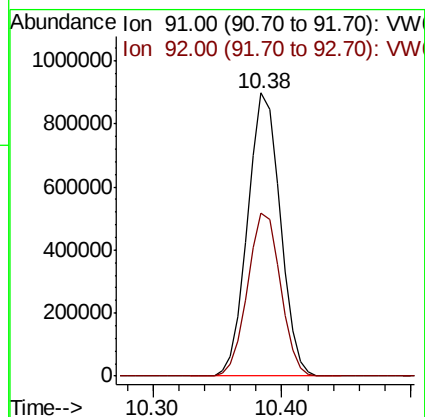
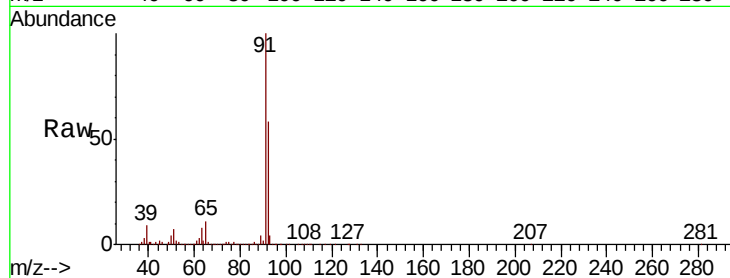
ClientSampled :

Tot Ion: 91 Resp: 1566509

Ion Ratio Lower Upper

91 100

92 57.8 41.6 77.2



#45

trans-1,3-Dichloropropene

Concen: 23.177 ug/L

RT: 10.60 min Scan# 1427

Delta R.T. -0.00 min

Lab File: VW015184.D

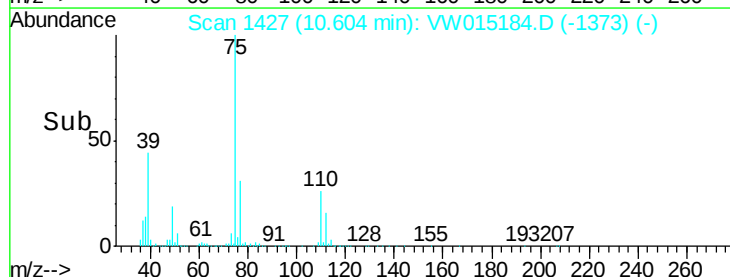
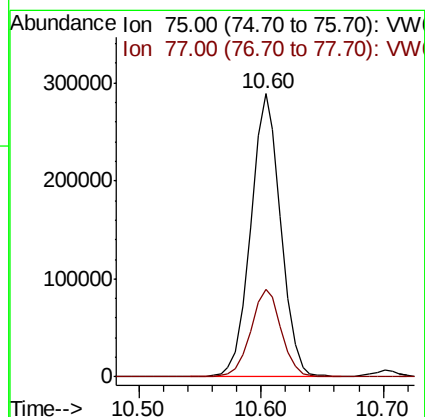
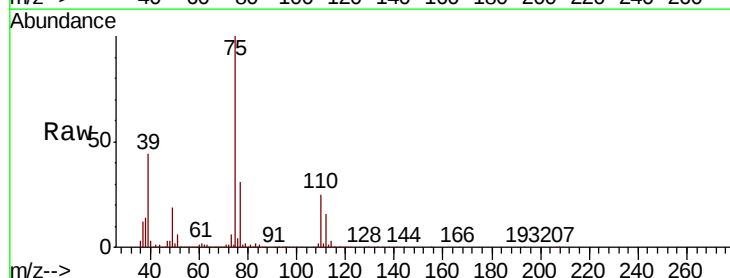
Acq: 10 Apr 2020 18:45

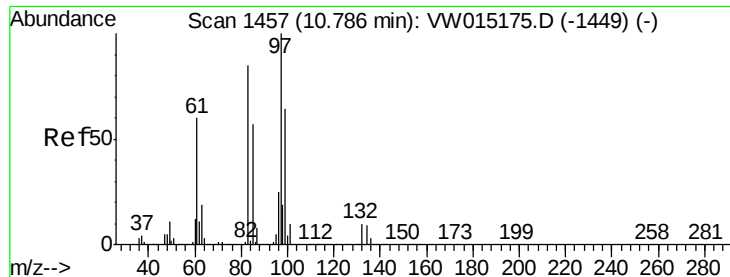
Tgt Ion: 75 Resp: 493083

Ion Ratio Lower Upper

75 100

77 31.0 22.4 41.6





#46

1,1,2-Trichloroethane

Concen: 23.865 ug/L

RT: 10.79 min Scan# 1457

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

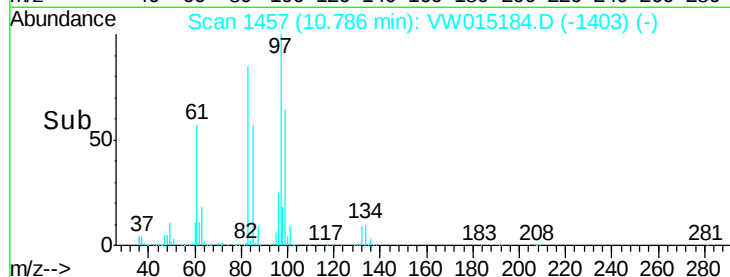
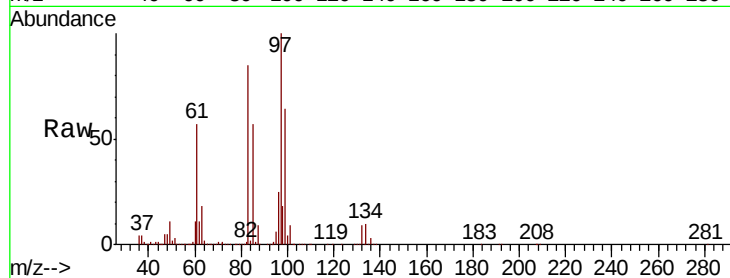
Instrument :

MSVOA\_W

ClientSampleId :

Tot Ion: 97 Resp: 260482

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 85.0  | 59.8  | 111.0 |
| 85  | 56.8  | 39.8  | 73.8  |
| 99  | 64.3  | 44.4  | 82.4  |

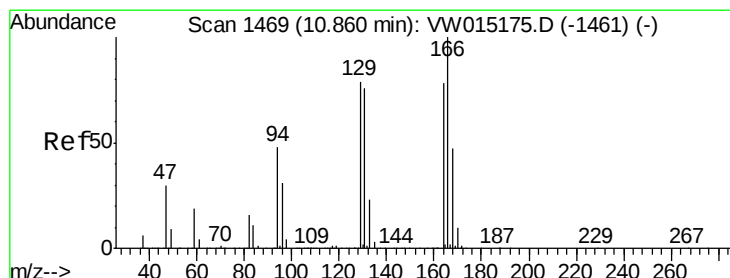
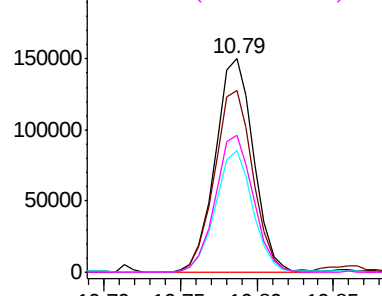


Abundance Ion 97.00 (96.70 to 97.70): VW

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: 23.321 ug/L

RT: 10.86 min Scan# 1469

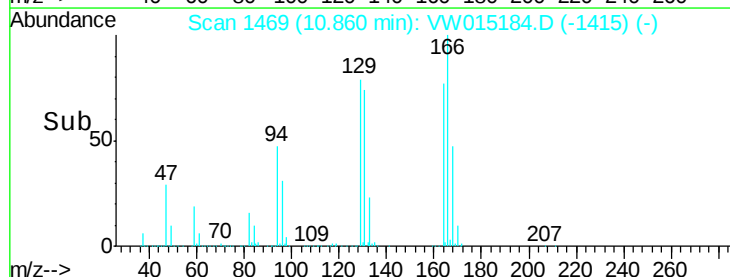
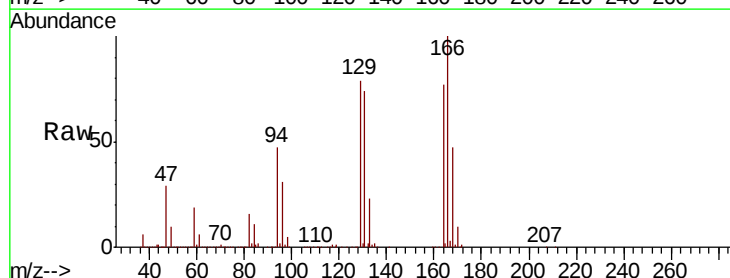
Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Tgt Ion: 164 Resp: 277023

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 102.1 | 70.7  | 131.3 |
| 131 | 95.9  | 67.6  | 125.6 |
| 166 | 129.6 | 89.3  | 165.9 |

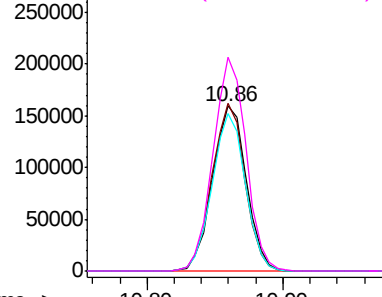


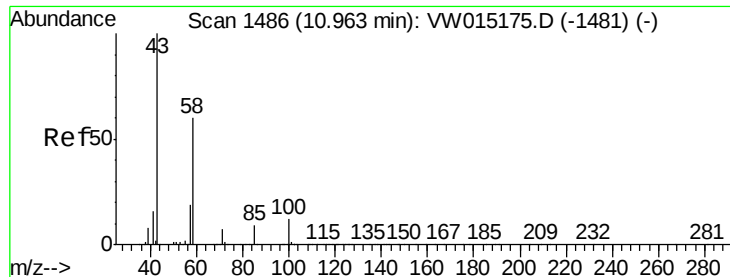
Abundance Ion 164.00 (163.70 to 164.70): V

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

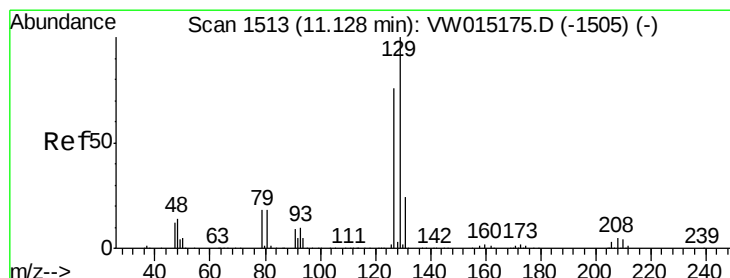
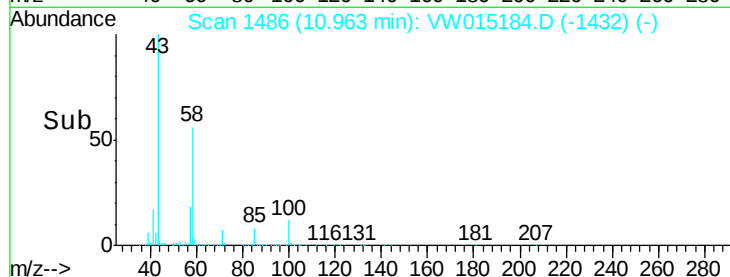
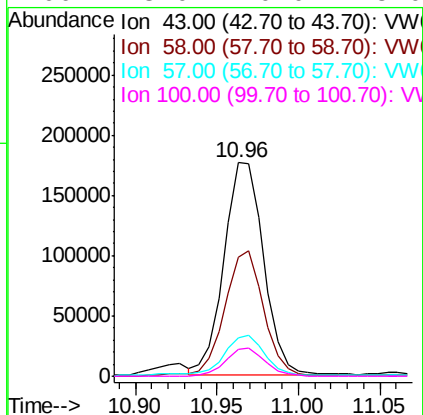
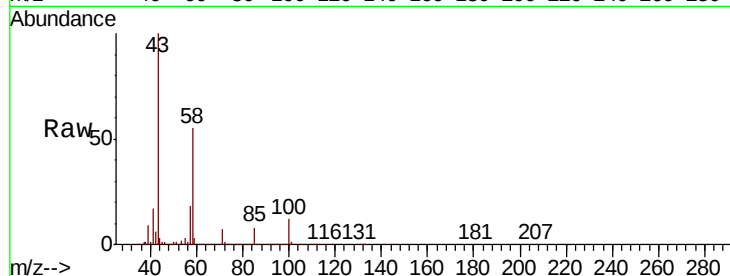




#49  
2-Hexanone  
Concen: 50.121 ug/L  
RT: 10.96 min Scan# 1486  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

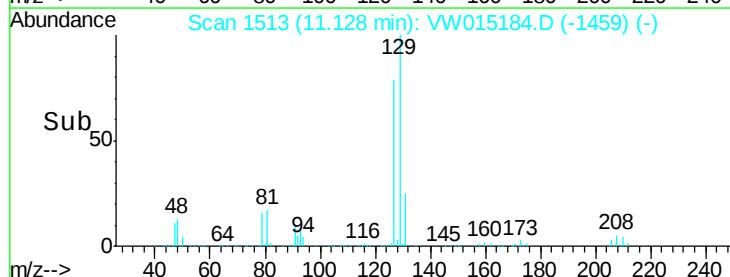
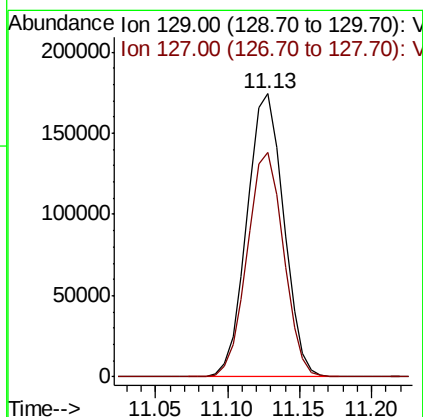
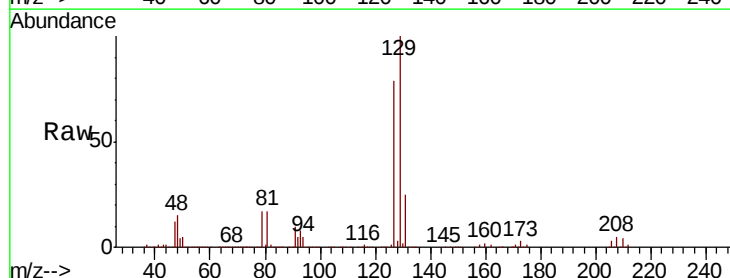
Instrument :  
MSVOA\_W  
ClientSampled :

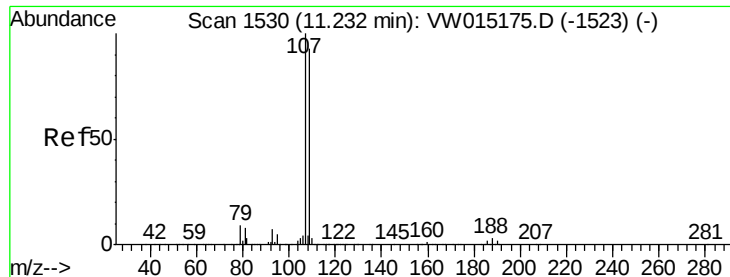
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 58.2  | 45.4  | 68.2  |
| 57      | 19.0  | 15.2  | 22.8  |
| 100     | 13.0  | 10.0  | 15.0  |



#50  
Dibromochloromethane  
Concen: 24.116 ug/L  
RT: 11.13 min Scan# 1513  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 79.2  | 53.1  | 98.7  |

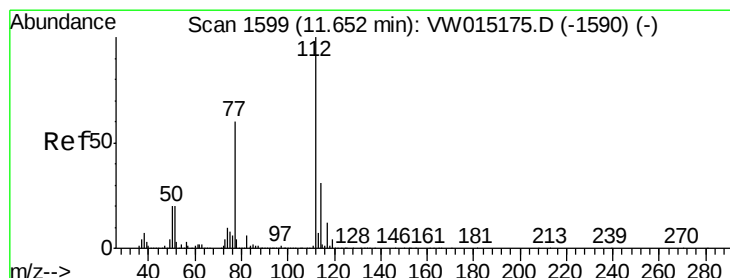
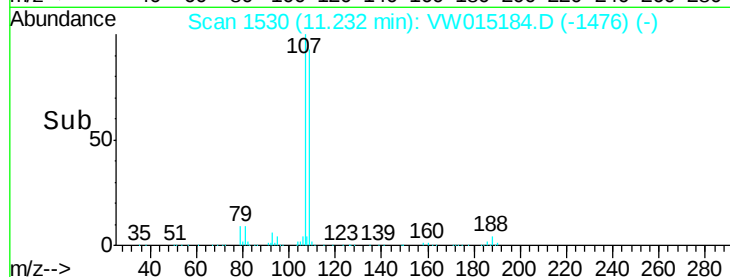
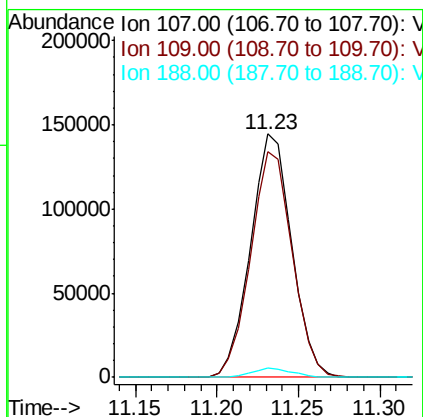
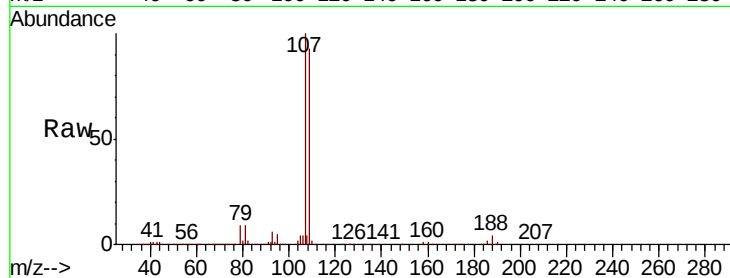




#51  
 1,2-Dibromoethane  
 Concen: 24.596 ug/L  
 RT: 11.23 min Scan# 1530  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

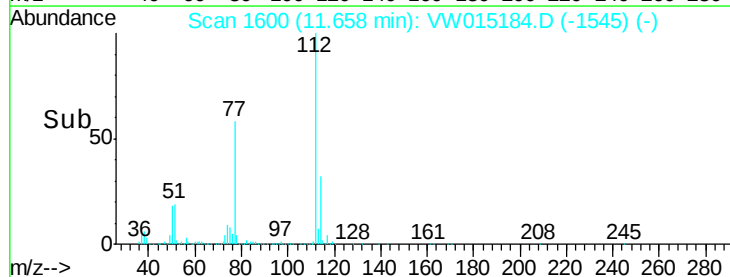
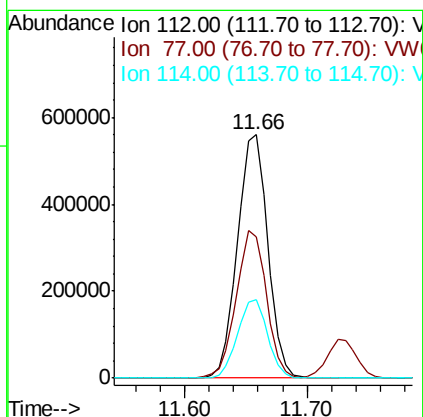
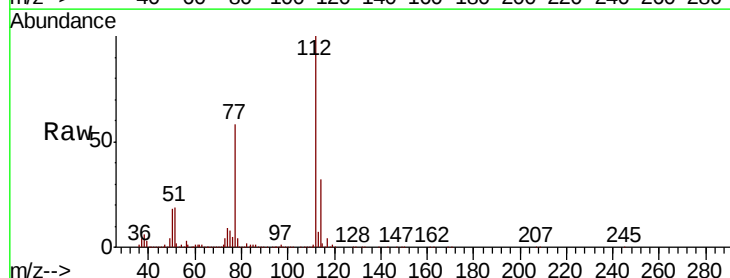
Instrument :  
 MSVOA\_W  
 ClientSampleId :

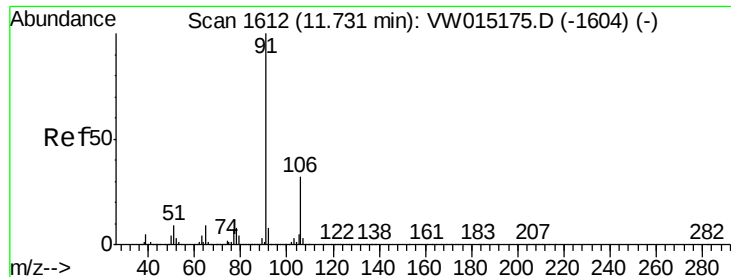
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 92.7  | 65.0  | 120.8 |
| 188     | 3.7   | 2.6   | 4.0   |



#52  
 Chlorobenzene  
 Concen: 23.682 ug/L  
 RT: 11.66 min Scan# 1600  
 Delta R.T. 0.01 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 57.8  | 47.8  | 71.8  |
| 114     | 32.2  | 21.8  | 40.6  |

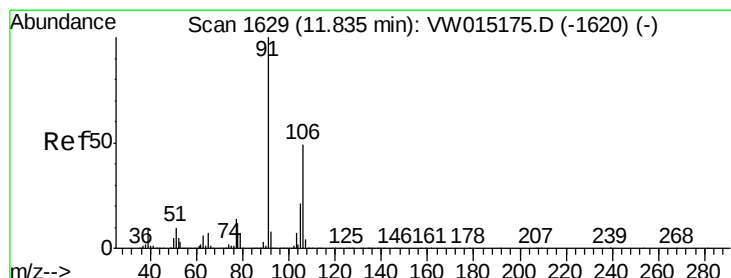
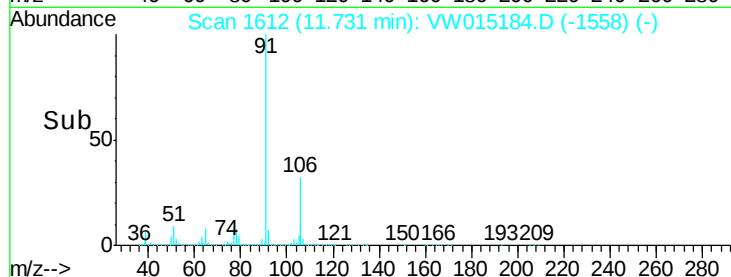
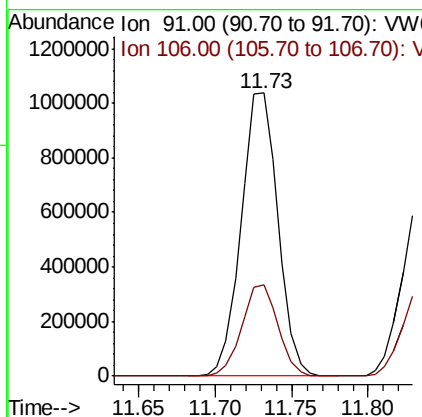
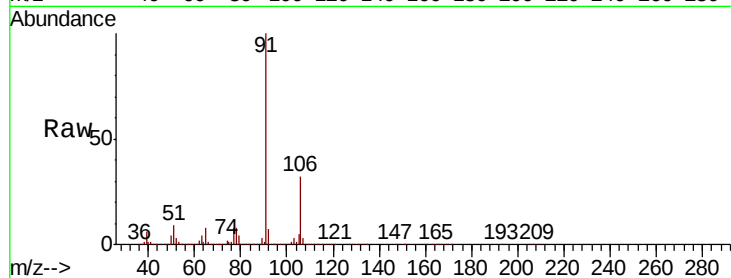




#53  
Ethylbenzene  
Concen: 23.265 ug/L  
RT: 11.73 min Scan# 1612  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

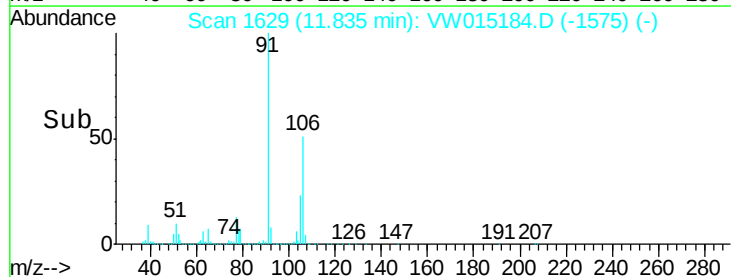
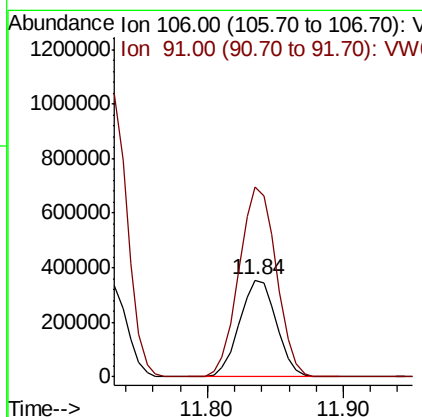
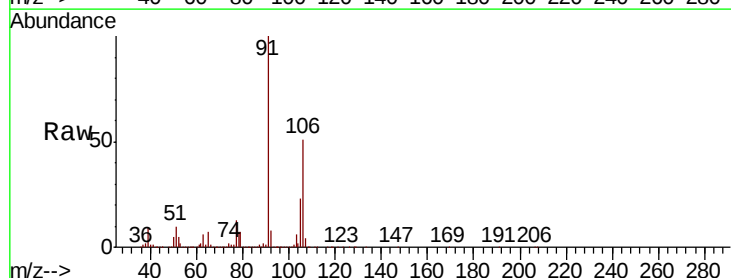
Instrument :  
MSVOA\_W  
ClientSampleId :

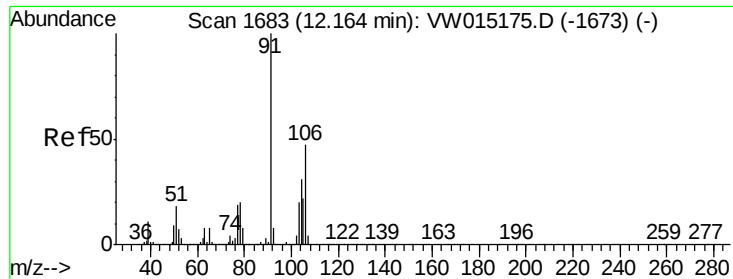
Tot Ion: 91 Resp: 1731395  
Ion Ratio Lower Upper  
91 100  
106 32.3 22.5 41.7



#54  
m,p-Xylene  
Concen: 23.566 ug/L  
RT: 11.84 min Scan# 1629  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

Tgt Ion: 106 Resp: 672618  
Ion Ratio Lower Upper  
106 100  
91 195.9 142.7 264.9





#55

o-xylene

Concen: 23.677 ug/L

RT: 12.16 min Scan# 1683

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

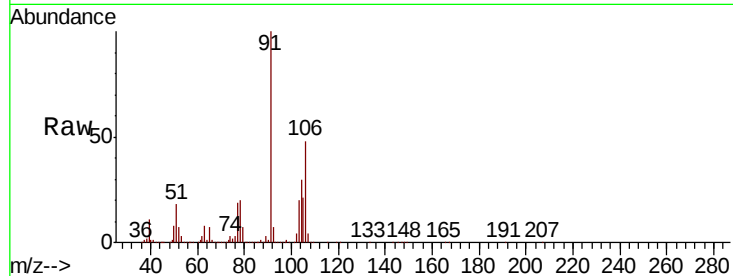
ClientSampled :

Tot Ion:106 Resp: 645897

Ion Ratio Lower Upper

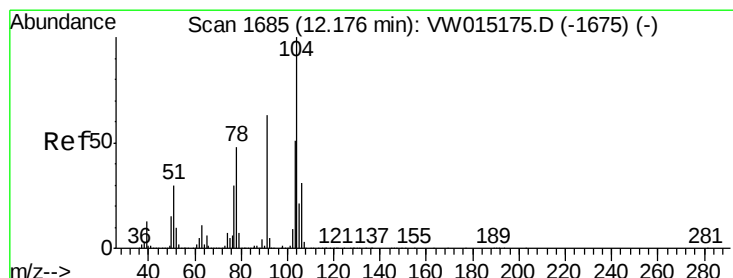
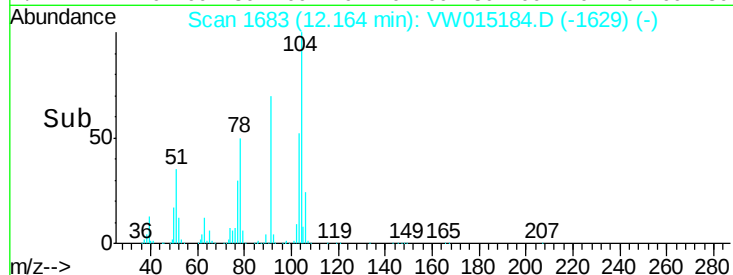
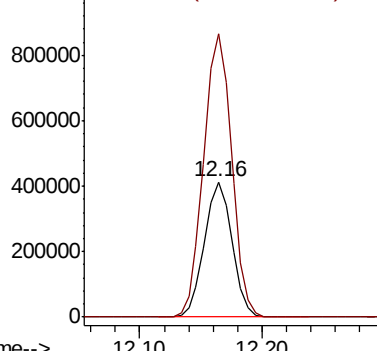
106 100

91 208.9 150.1 278.7



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#56

Styrene

Concen: 23.751 ug/L

RT: 12.18 min Scan# 1685

Delta R.T. -0.00 min

Lab File: VW015184.D

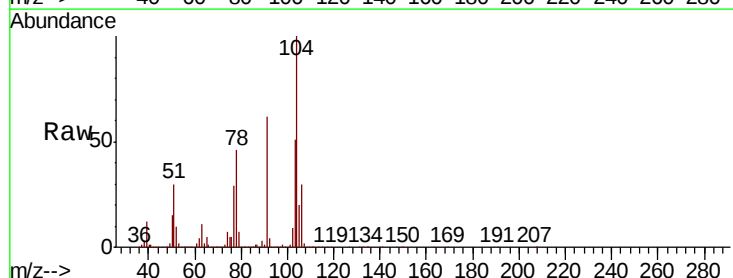
Acq: 10 Apr 2020 18:45

Tgt Ion:104 Resp: 1089695

Ion Ratio Lower Upper

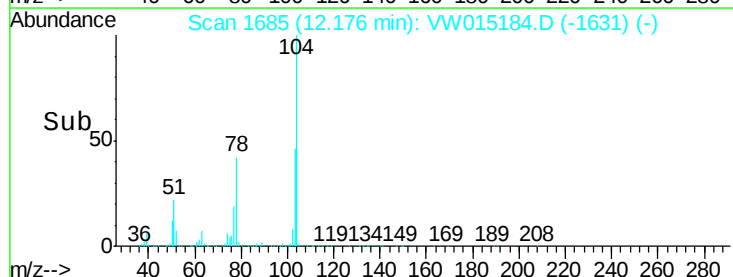
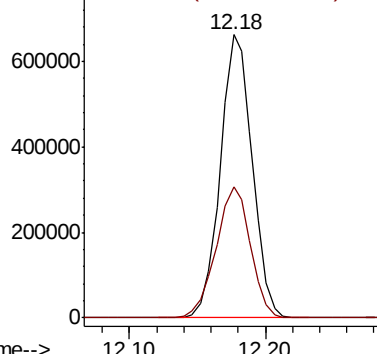
104 100

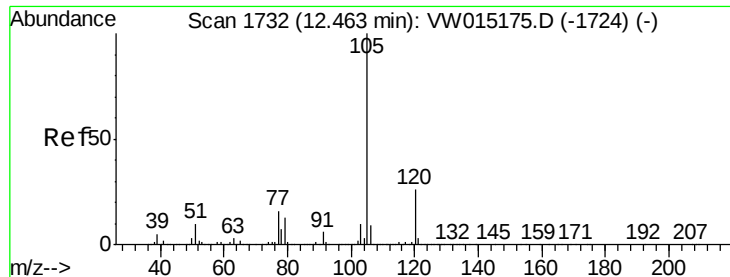
78 46.2 33.9 63.0



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VW





#57

Isopropylbenzene

Concen: 23.378 ug/L

RT: 12.46 min Scan# 1732

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

ClientSampleId :

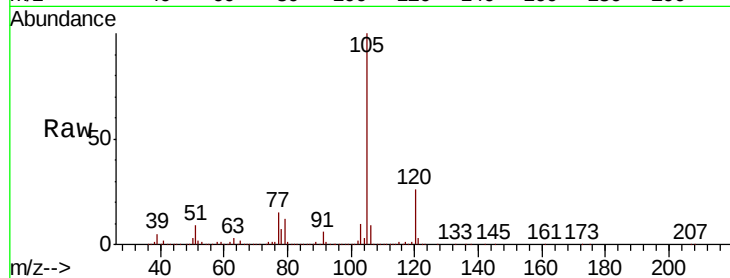
Tot Ion:105 Resp: 1721760

Ion Ratio Lower Upper

105 100

120 26.9 21.4 32.2

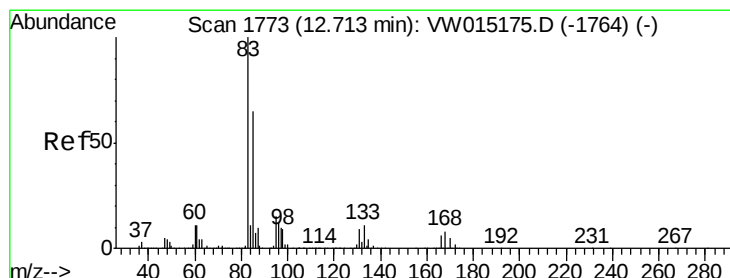
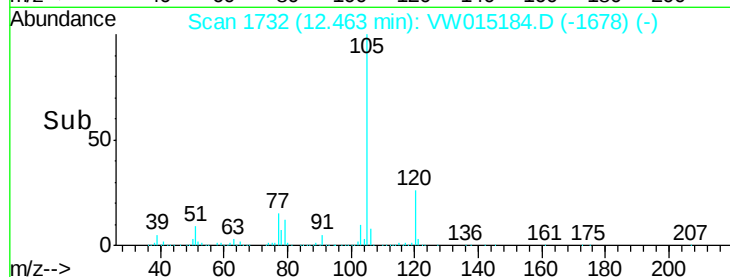
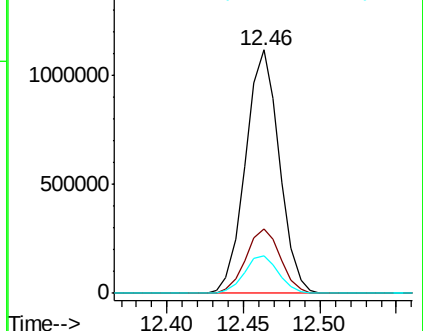
77 15.6 12.8 19.2



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: 24.833 ug/L

RT: 12.71 min Scan# 1773

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

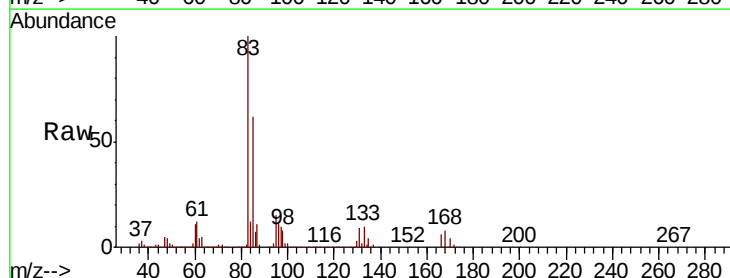
Tgt Ion: 83 Resp: 315821

Ion Ratio Lower Upper

83 100

85 62.4 45.8 85.0

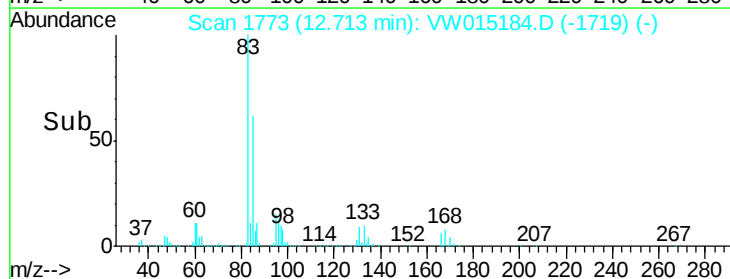
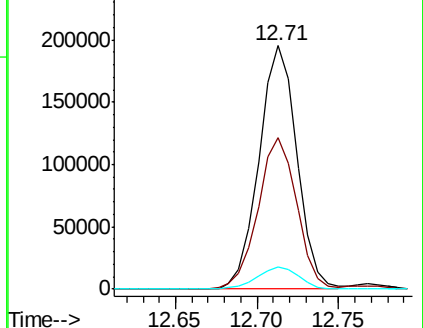
131 9.2 7.2 10.8

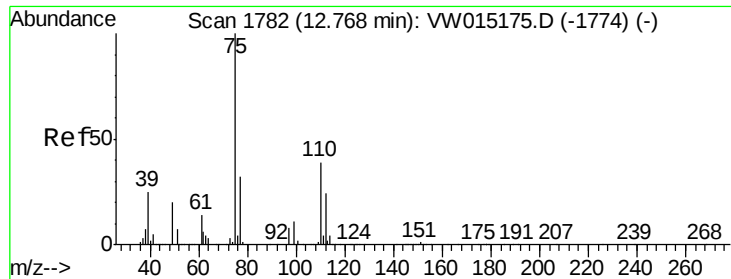


Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 24.472 ug/L

RT: 12.77 min Scan# 1782

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

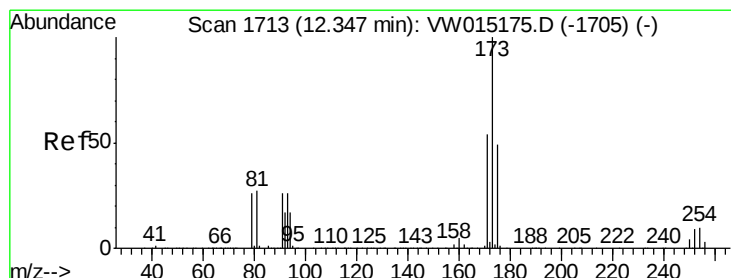
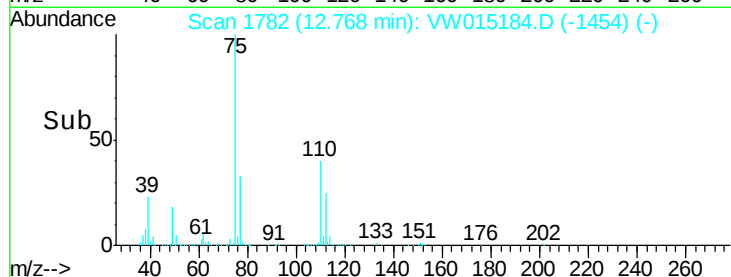
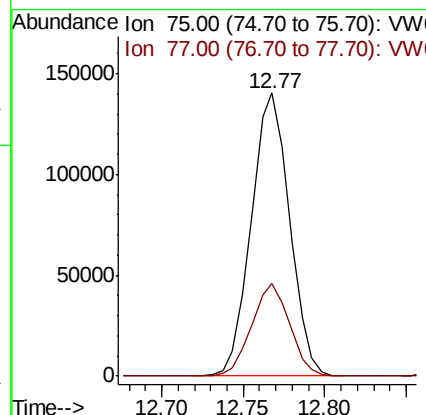
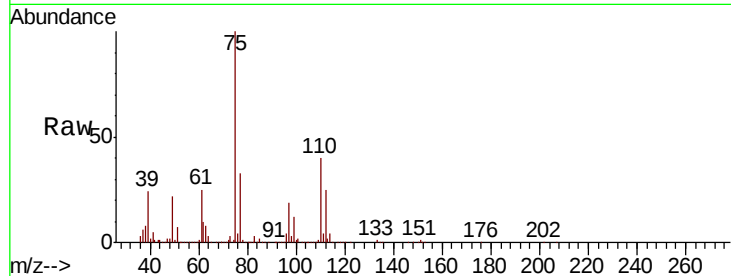
ClientSampleId :

Tot Ion: 75 Resp: 229980

Ion Ratio Lower Upper

75 100

77 32.2 25.7 38.5



#62

Bromoform

Concen: 23.832 ug/L

RT: 12.35 min Scan# 1713

Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

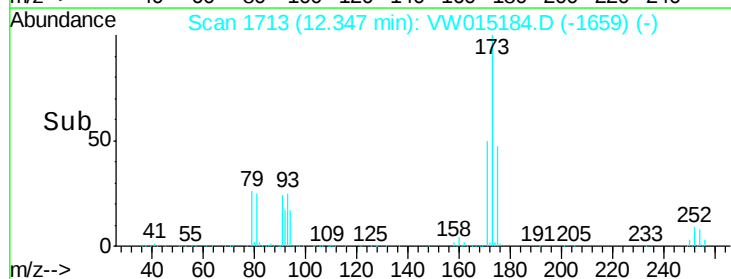
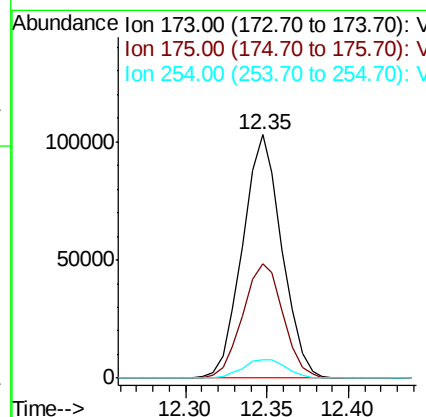
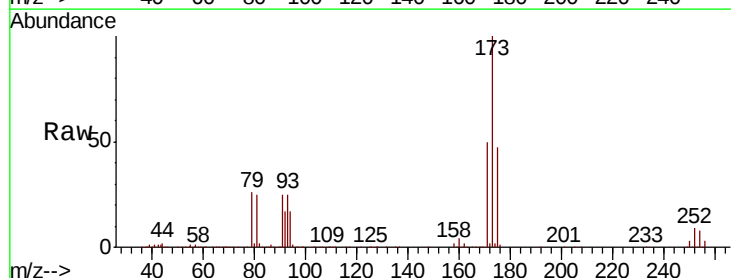
Tgt Ion: 173 Resp: 172609

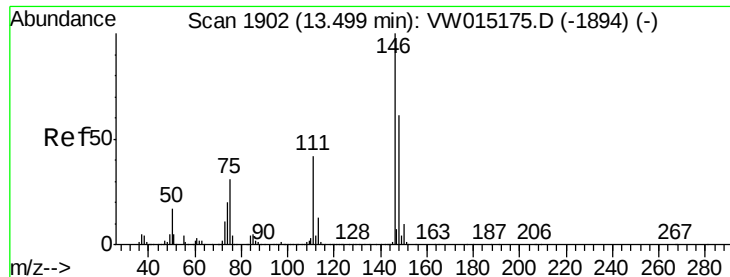
Ion Ratio Lower Upper

173 100

175 48.6 38.5 57.7

254 8.5 7.2 10.8

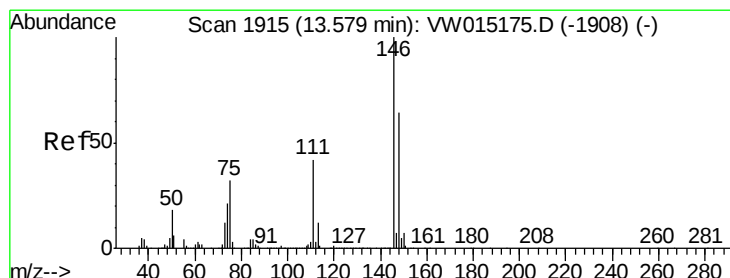
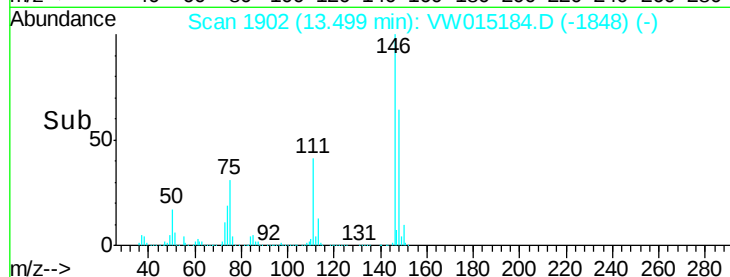
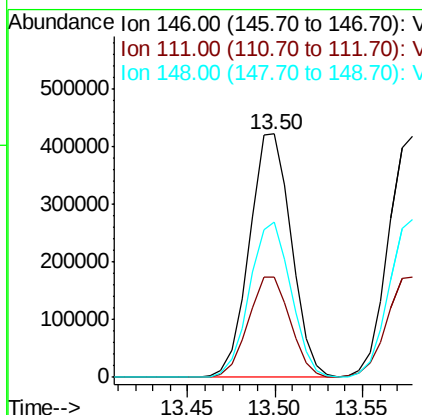
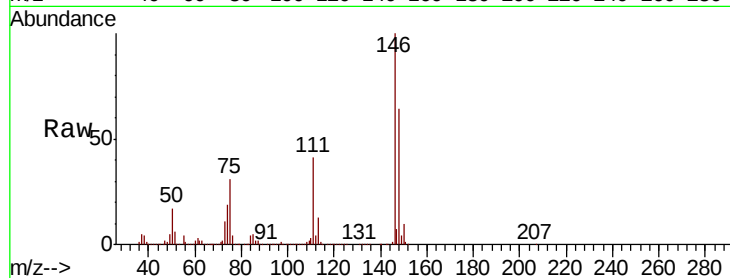




#63  
 1,3-Dichlorobenzene  
 Concen: 23.487 ug/L  
 RT: 13.50 min Scan# 1902  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

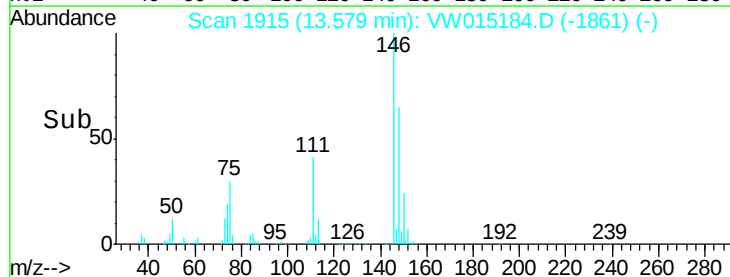
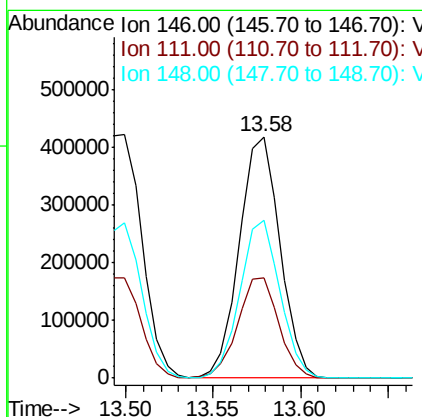
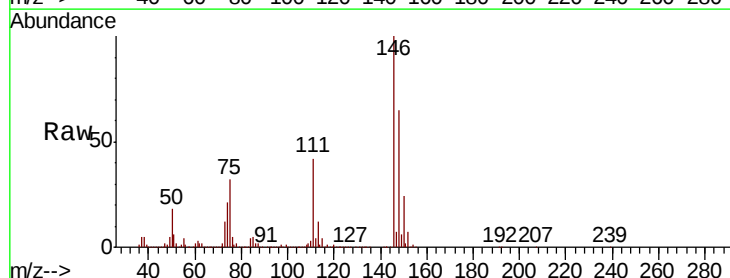
Instrument :  
 MSVOA\_W  
 ClientSampleId :

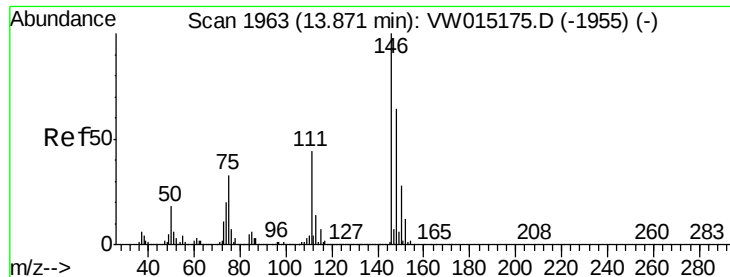
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.4  | 29.3  | 54.3  |
| 148     | 64.0  | 42.9  | 79.7  |



#64  
 1,4-Dichlorobenzene  
 Concen: 23.283 ug/L  
 RT: 13.58 min Scan# 1915  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.5  | 29.4  | 54.6  |
| 148     | 65.4  | 44.8  | 83.2  |





#65

1,2-Dichlorobenzene

Concen: 23.849 ug/L

RT: 13.87 min Scan# 1962

Delta R.T. -0.01 min

Lab File: VW015184.D

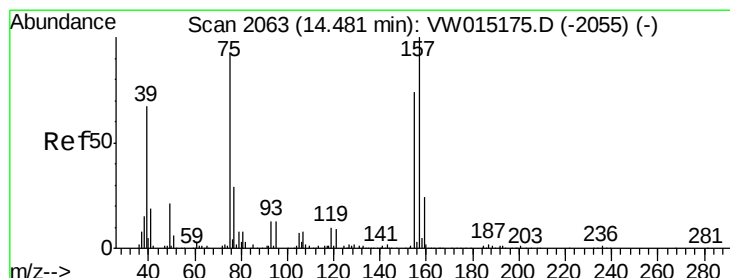
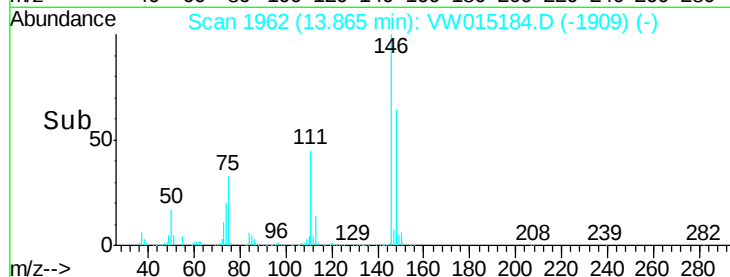
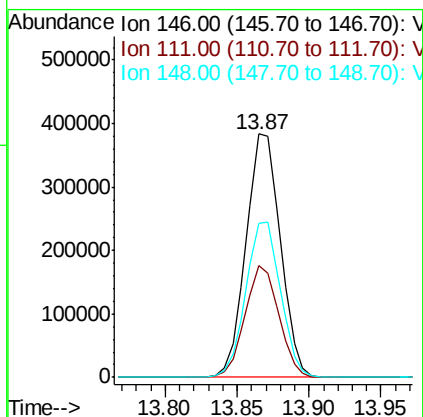
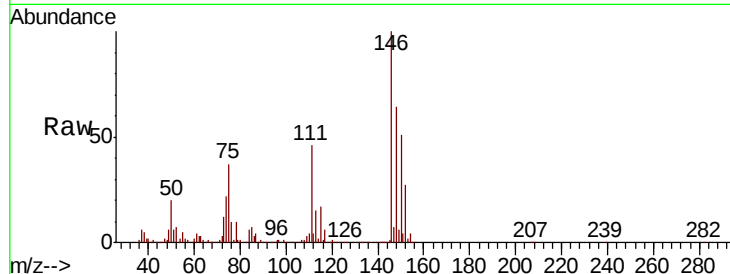
Acq: 10 Apr 2020 18:45

Instrument :

MSVOA\_W

ClientSampled :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 146   | Resp: | 633301 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 45.8  | 35.2  | 52.8   |
| 148      | 63.5  | 51.6  | 77.4   |



#66

1,2-Dibromo-3-chloropropane

Concen: 23.309 ug/L

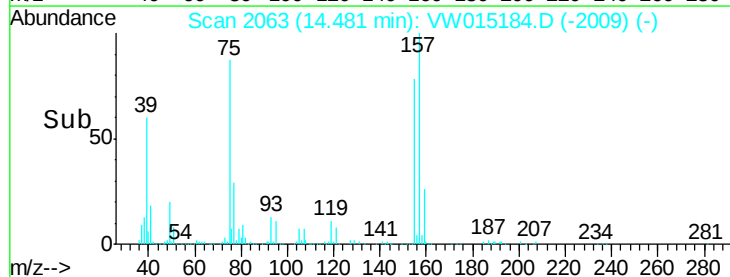
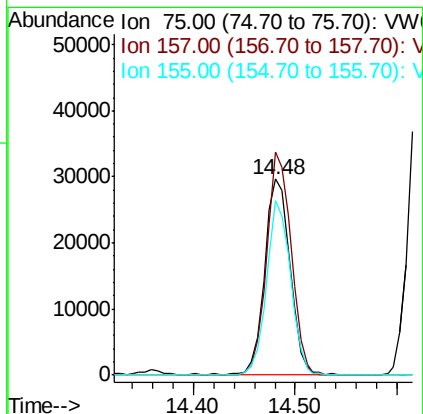
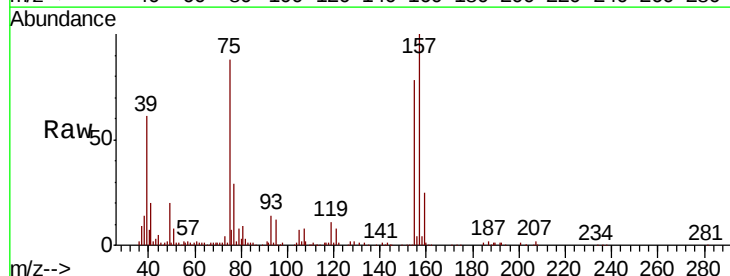
RT: 14.48 min Scan# 2063

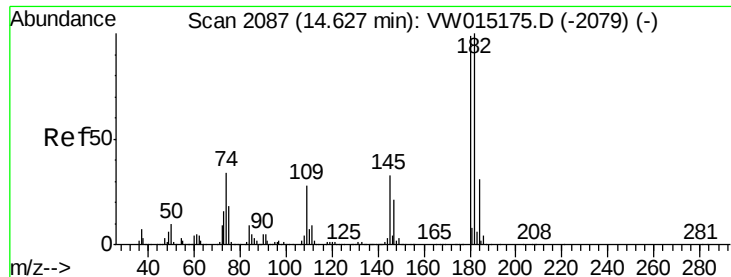
Delta R.T. -0.00 min

Lab File: VW015184.D

Acq: 10 Apr 2020 18:45

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 51260 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 157      | 114.1 | 85.7  | 128.5 |
| 155      | 89.1  | 63.8  | 95.6  |

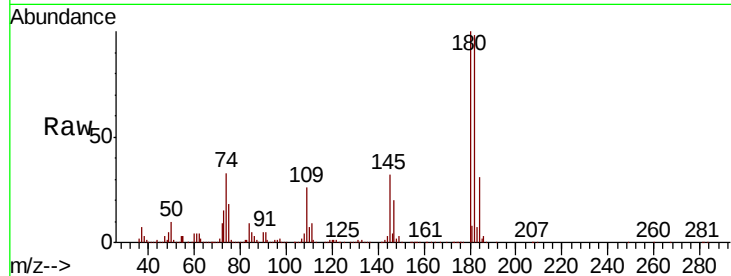




#67  
 1,3,5-Trichlorobenzene  
 Concen: 23.528 ug/L  
 RT: 14.63 min Scan# 2087  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

Instrument :  
 MSVOA\_W  
 ClientSampleId :

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 180     | 100   | 484387 |       |       |
| 182     | 96.4  |        | 77.1  | 115.7 |
| 184     | 31.0  |        | 24.5  | 36.7  |
| 145     | 32.0  |        | 25.4  | 38.2  |



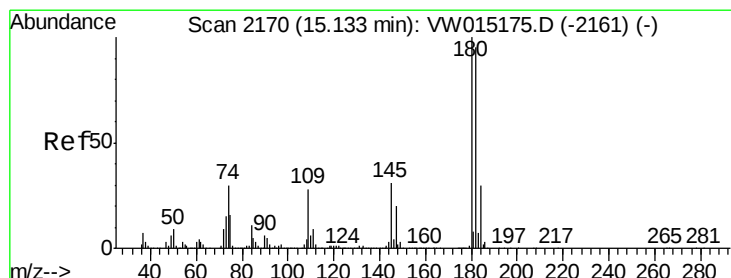
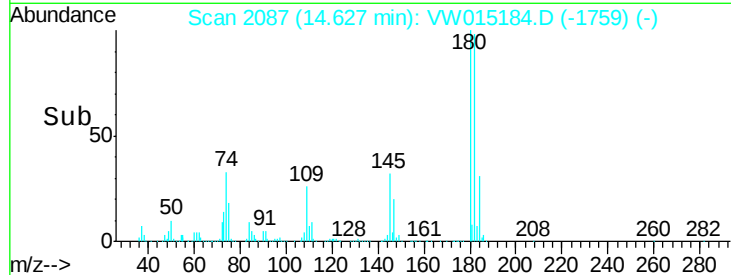
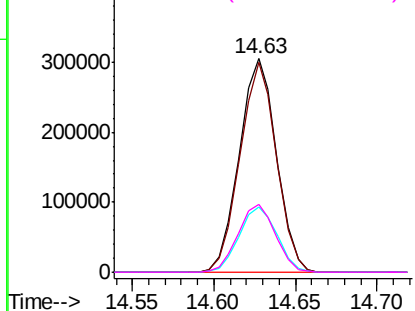
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

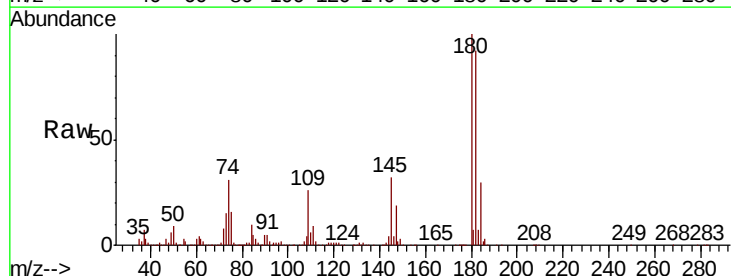
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 24.688 ug/L  
 RT: 15.13 min Scan# 2170  
 Delta R.T. -0.00 min  
 Lab File: VW015184.D  
 Acq: 10 Apr 2020 18:45

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 180     | 100   | 405643 |       |       |
| 182     | 93.8  |        | 77.7  | 116.5 |
| 145     | 32.2  |        | 25.9  | 38.9  |

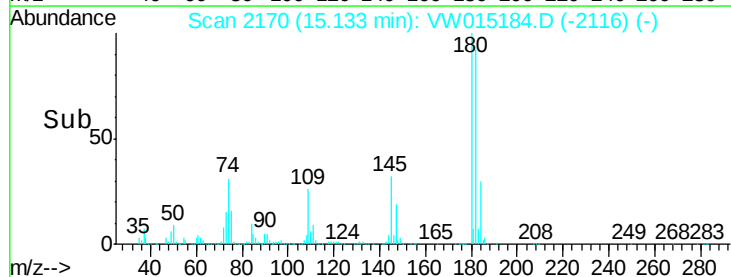
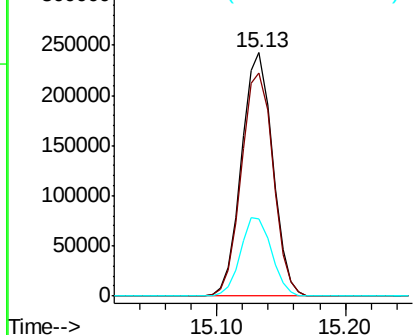


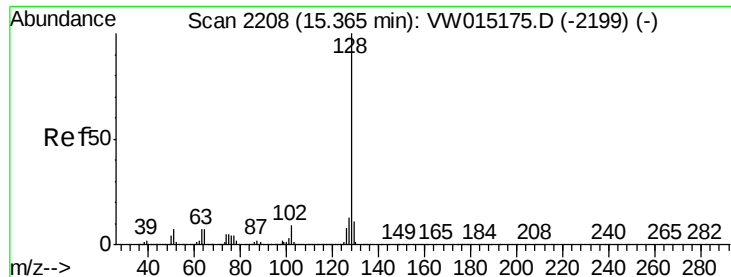
Abundance

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

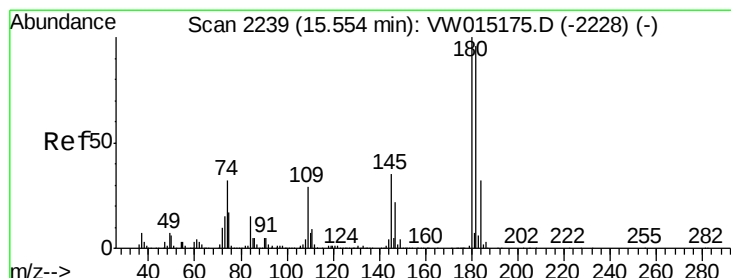
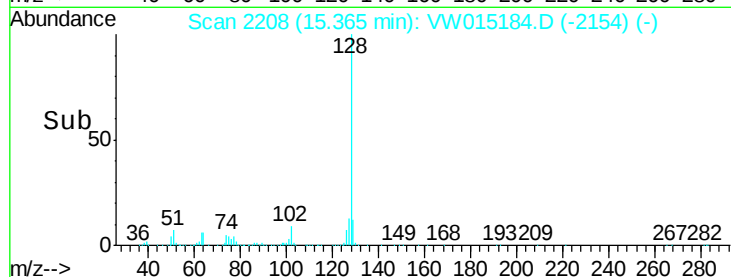
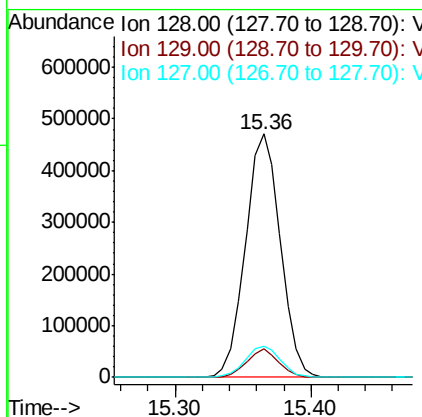
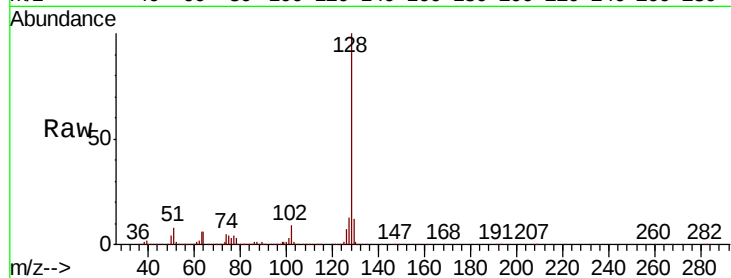




#69  
Naphthalene  
Concen: 25.732 ug/L  
RT: 15.36 min Scan# 2208  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:128 Resp: 847029  
Ion Ratio Lower Upper  
128 100  
129 10.7 8.9 13.3  
127 12.9 10.4 15.6



#70  
1,2,3-Trichlorobenzene  
Concen: 24.501 ug/L  
RT: 15.55 min Scan# 2239  
Delta R.T. -0.00 min  
Lab File: VW015184.D  
Acq: 10 Apr 2020 18:45

Tgt Ion:180 Resp: 350513  
Ion Ratio Lower Upper  
180 100  
182 94.6 75.0 112.6  
145 34.3 27.4 41.2

