

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW032519\  
 Data File : VW009454.D  
 Acq On : 26 Mar 2019 03:35  
 Operator : SY/VA  
 Sample : VSTDCCC025EC  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Mar 26 09:07:41 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM031419S.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Mar 26 09:00:24 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.84  | 114  | 394313   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 376689   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 190269   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 95386    | 20.24    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 80.96%  |
| 7) Chloroethane-d5             | 2.89   | 69    | 112194   | 20.35    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 81.40%  |
| 10) 1,1-Dichloroethene-d2      | 4.02   | 63    | 229488   | 22.53    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 90.12%  |
| 20) 2-Butanone-d5              | 7.07   | 46    | 109883   | 56.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 112.78% |
| 24) Chloroform-d               | 7.64   | 84    | 266391   | 24.76    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 99.04%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 165131   | 25.47    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 101.88% |
| 29) Benzene-d6                 | 8.27   | 84    | 483769   | 23.29    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 93.16%  |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 153332   | 24.57    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 98.28%  |
| 37) Toluene-d8                 | 10.32  | 98    | 447828   | 23.31    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 93.24%  |
| 38) trans-1,3-Dichloropropene- | 10.57  | 79    | 71743    | 22.89    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 91.56%  |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 79720    | 52.75    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 105.50% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 169484   | 27.58    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 110.32% |
| 61) 1,2-Dichlorobenzene-d4     | 13.86  | 152   | 173764   | 23.82    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 95.28%  |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 2.01 | 85  | 106993 | 20.598 | ug/L 97  |
| 3) Chloromethane               | 2.21 | 50  | 114321 | 20.744 | ug/L 100 |
| 5) Vinyl chloride              | 2.37 | 62  | 151658 | 26.736 | ug/L 97  |
| 6) Bromomethane                | 2.78 | 94  | 114353 | 24.062 | ug/L 99  |
| 8) Chloroethane                | 2.92 | 64  | 112108 | 23.888 | ug/L 97  |
| 9) Trichlorofluoromethane      | 3.25 | 101 | 86039  | 19.202 | ug/L 100 |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101 | 119923 | 23.175 | ug/L 94  |
| 12) 1,1-Dichloroethene         | 4.04 | 96  | 117750 | 24.250 | ug/L 89  |
| 13) Acetone                    | 4.12 | 43  | 79475  | 49.732 | ug/L 100 |
| 14) Carbon disulfide           | 4.38 | 76  | 327727 | 25.079 | ug/L 97  |
| 15) Methyl Acetate             | 4.67 | 43  | 96461  | 30.726 | ug/L 99  |
| 16) Methylene chloride         | 4.92 | 84  | 143210 | 24.905 | ug/L 97  |
| 17) Methyl tert-butyl Ether    | 5.43 | 73  | 182580 | 26.575 | ug/L 98  |
| 18) trans-1,2-Dichloroethene   | 5.42 | 96  | 124283 | 24.345 | ug/L 95  |
| 19) 1,1-Dichloroethane         | 6.21 | 63  | 246625 | 26.495 | ug/L 98  |
| 21) 2-Butanone                 | 7.17 | 43  | 117105 | 53.072 | ug/L 99  |
| 22) cis-1,2-Dichloroethene     | 7.16 | 96  | 141715 | 25.625 | ug/L 93  |

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 Sample : VSTDCCC025EC  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

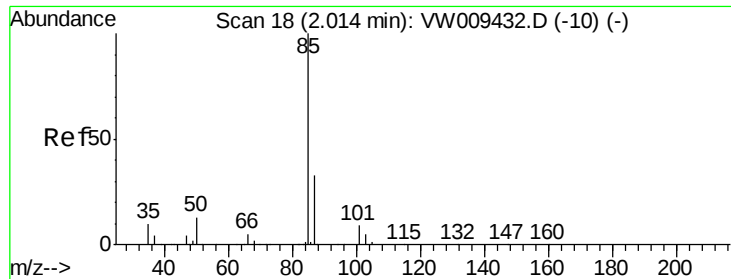
Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Mar 26 09:07:41 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM031419S.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Mar 26 09:00:24 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 7.51  | 128  | 68017    | 25.643 | ug/L  | 94       |
| 25) Chloroform                  | 7.67  | 83   | 257911   | 26.458 | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 8.40  | 62   | 202735   | 27.895 | ug/L  | 98       |
| 30) Cyclohexane                 | 7.95  | 56   | 198351   | 23.186 | ug/L  | 100      |
| 31) 1,1,1-Trichloroethane       | 7.87  | 97   | 196737   | 26.150 | ug/L  | 99       |
| 32) Carbon tetrachloride        | 8.06  | 117  | 195256   | 25.723 | ug/L  | 99       |
| 34) Benzene                     | 8.32  | 78   | 540863   | 26.233 | ug/L  | 100      |
| 35) Trichloroethene             | 9.09  | 95   | 139422   | 25.378 | ug/L  | 98       |
| 36) Methylcyclohexane           | 9.34  | 83   | 222426   | 23.401 | ug/L  | 99       |
| 40) 1,2-Dichloropropane         | 9.37  | 63   | 139358   | 26.340 | ug/L  | 99       |
| 41) Bromodichloromethane        | 9.64  | 83   | 194561   | 26.541 | ug/L  | 95       |
| 42) cis-1,3-Dichloropropene     | 10.07 | 75   | 211061   | 24.493 | ug/L  | 98       |
| 43) 4-Methyl-2-pentanone        | 10.21 | 43   | 264145   | 55.097 | ug/L  | 99       |
| 44) Toluene                     | 10.38 | 91   | 583141   | 25.868 | ug/L  | 100      |
| 45) trans-1,3-Dichloropropene   | 10.60 | 75   | 189310   | 25.255 | ug/L  | 99       |
| 46) 1,1,2-Trichloroethane       | 10.79 | 97   | 113541   | 26.900 | ug/L  | 98       |
| 47) Tetrachloroethene           | 10.86 | 164  | 110121   | 23.723 | ug/L  | 98       |
| 49) 2-Hexanone                  | 10.97 | 43   | 188089   | 55.704 | ug/L  | 99       |
| 50) Dibromochloromethane        | 11.13 | 129  | 136008   | 26.103 | ug/L  | 99       |
| 51) 1,2-Dibromoethane           | 11.23 | 107  | 114816   | 26.833 | ug/L  | 92       |
| 52) Chlorobenzene               | 11.66 | 112  | 370338   | 25.614 | ug/L  | 97       |
| 53) Ethylbenzene                | 11.73 | 91   | 655651   | 25.870 | ug/L  | 99       |
| 54) m,p-Xylene                  | 11.84 | 106  | 243865   | 25.327 | ug/L  | 95       |
| 55) o-xylene                    | 12.16 | 106  | 235581   | 25.079 | ug/L  | 97       |
| 56) Styrene                     | 12.18 | 104  | 418580   | 26.117 | ug/L  | 96       |
| 57) Isopropylbenzene            | 12.46 | 105  | 643887   | 25.588 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 12.71 | 83   | 159469   | 28.005 | ug/L  | 100      |
| 59) 1,2,3-Trichloropropane      | 12.77 | 75   | 119231   | 28.214 | ug/L  | 99       |
| 62) Bromoform                   | 12.35 | 173  | 90339    | 28.101 | ug/L  | 98       |
| 63) 1,3-Dichlorobenzene         | 13.50 | 146  | 280002   | 24.692 | ug/L  | 98       |
| 64) 1,4-Dichlorobenzene         | 13.58 | 146  | 297000   | 25.333 | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 13.87 | 146  | 276183   | 25.539 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 14.49 | 75   | 29803    | 28.120 | ug/L  | 89       |
| 67) 1,3,5-Trichlorobenzene      | 14.63 | 180  | 202052   | 22.844 | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene      | 15.14 | 180  | 165968   | 22.339 | ug/L  | 99       |
| 69) Naphthalene                 | 15.37 | 128  | 398008   | 25.839 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 15.56 | 180  | 167641   | 24.091 | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 20.598 ug/L

RT: 2.01 min Scan# 17

Delta R.T. -0.01 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

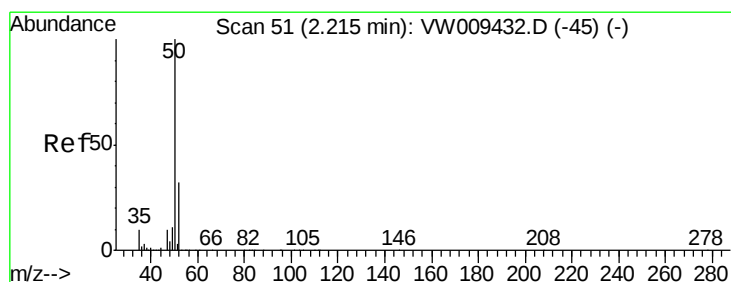
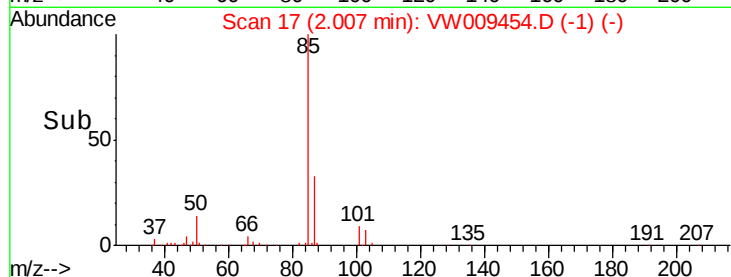
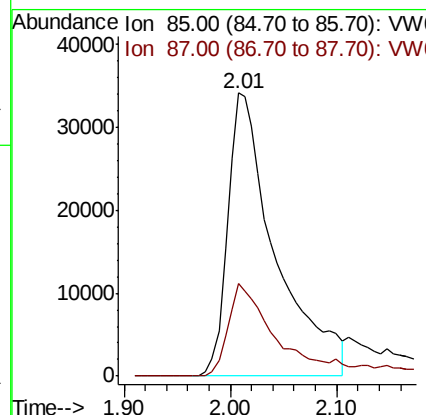
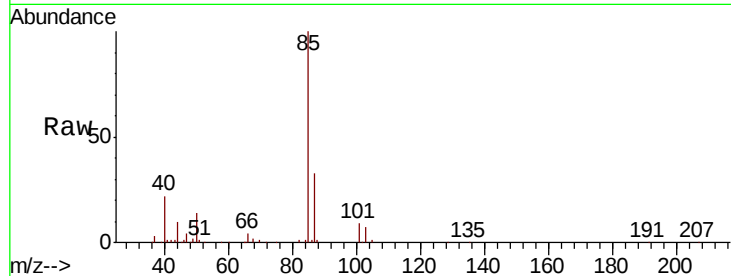
ClientSampleId :

Tot Ion: 85 Resp: 106993

Ion Ratio Lower Upper

85 100

87 26.5 19.5 36.3



#3

Chloromethane

Concen: 20.744 ug/L

RT: 2.21 min Scan# 51

Delta R.T. 0.00 min

Lab File: VW009454.D

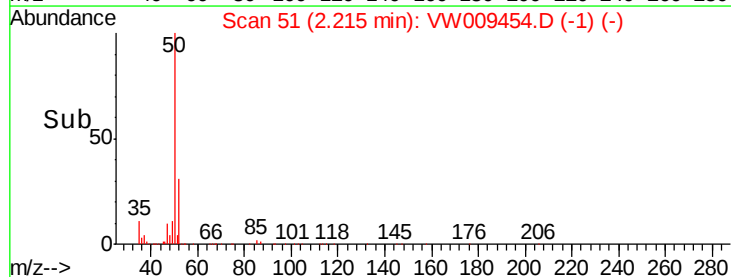
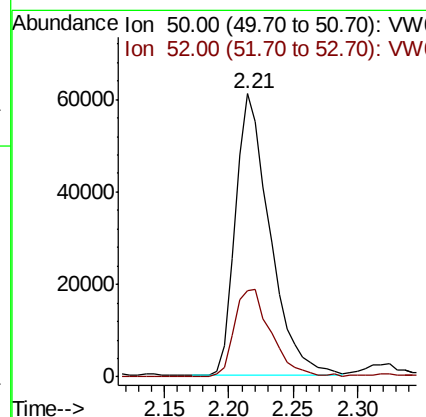
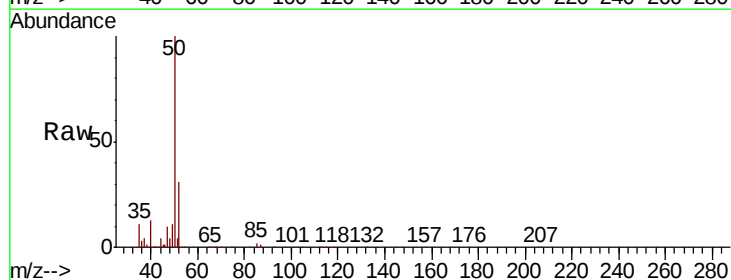
Acq: 26 Mar 2019 03:35

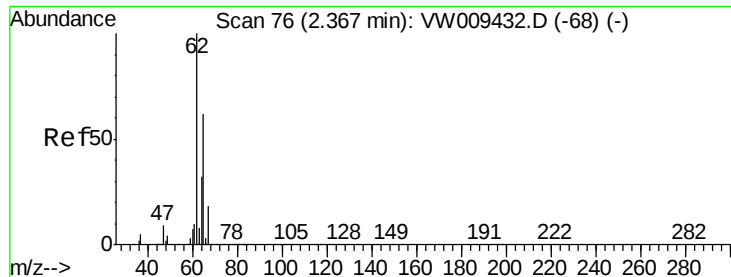
Tgt Ion: 50 Resp: 114321

Ion Ratio Lower Upper

50 100

52 30.6 21.6 40.2





#5

Vinyl chloride

Concen: 26.736 ug/L

RT: 2.37 min Scan# 76

Delta R.T. -0.01 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

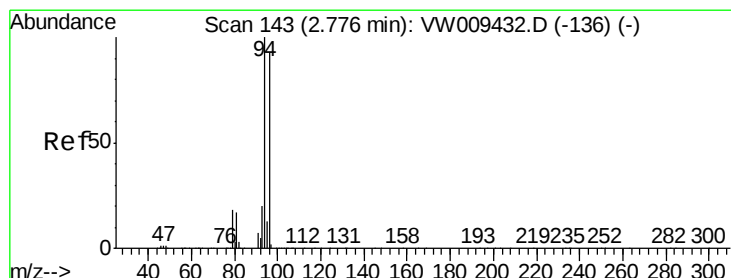
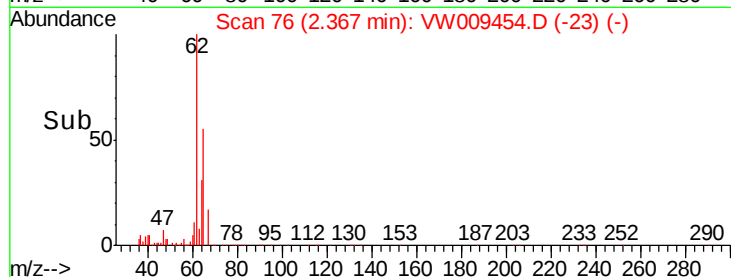
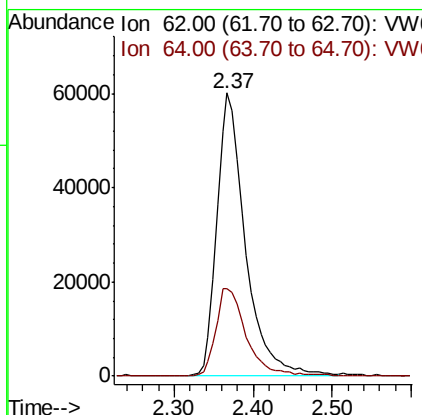
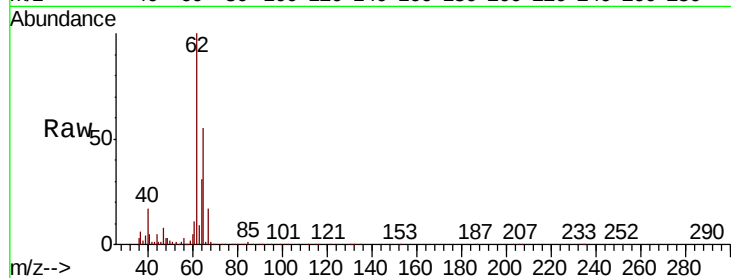
ClientSampleId :

Tot Ion: 62 Resp: 151658

Ion Ratio Lower Upper

62 100

64 31.0 23.0 42.6



#6

Bromomethane

Concen: 24.062 ug/L

RT: 2.78 min Scan# 144

Delta R.T. 0.01 min

Lab File: VW009454.D

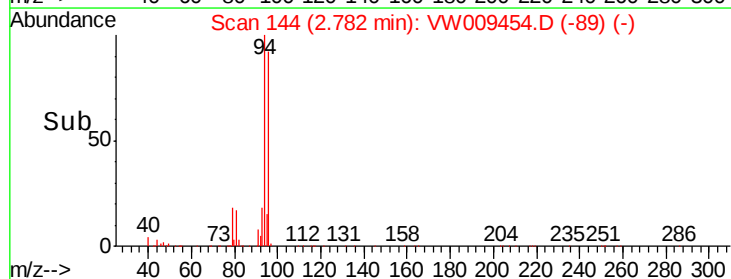
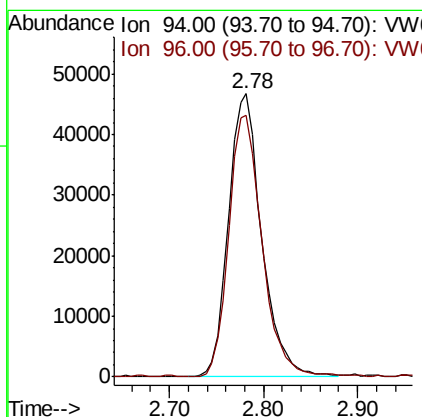
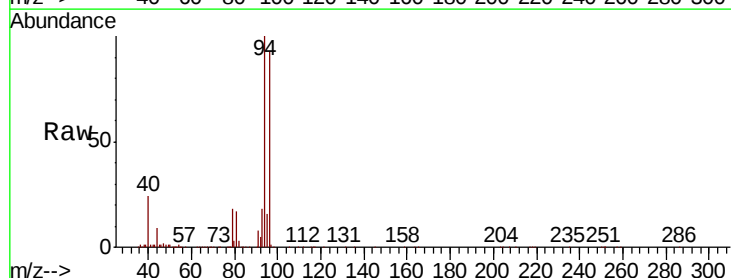
Acq: 26 Mar 2019 03:35

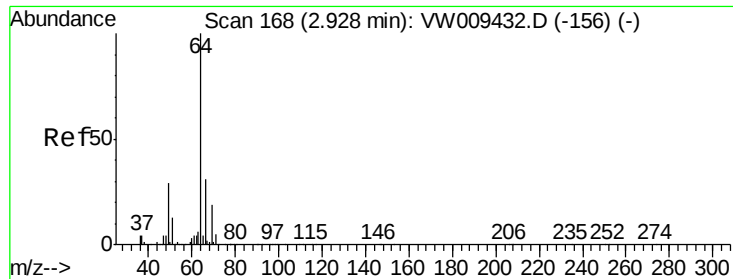
Tgt Ion: 94 Resp: 114353

Ion Ratio Lower Upper

94 100

96 92.7 9.4 178.4





#8

Chloroethane

Concen: 23.888 ug/L

RT: 2.92 min Scan# 167

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

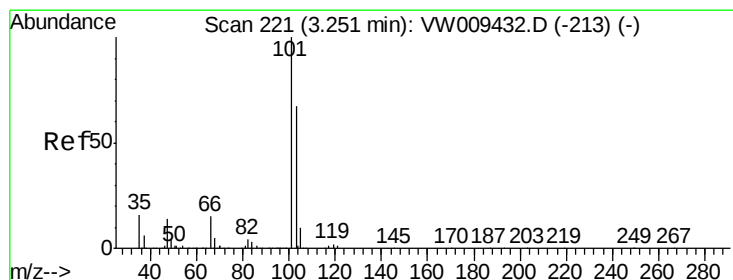
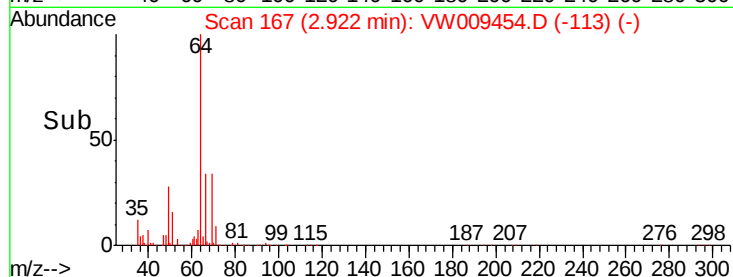
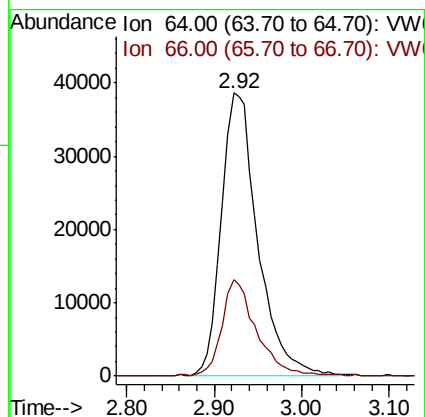
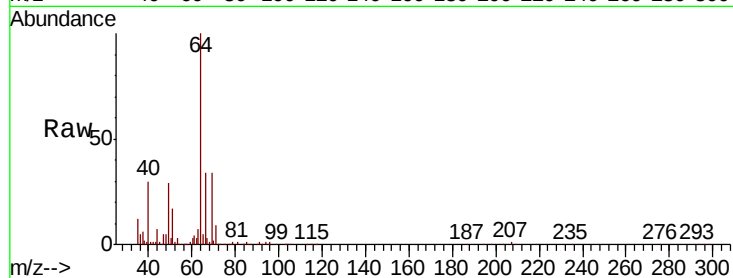
ClientSampleId :

Tot Ion: 64 Resp: 112108

Ion Ratio Lower Upper

64 100

66 34.1 25.1 46.7



#9

Trichlorofluoromethane

Concen: 19.202 ug/L

RT: 3.25 min Scan# 221

Delta R.T. 0.00 min

Lab File: VW009454.D

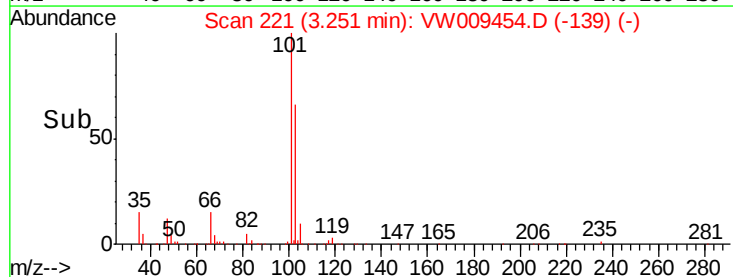
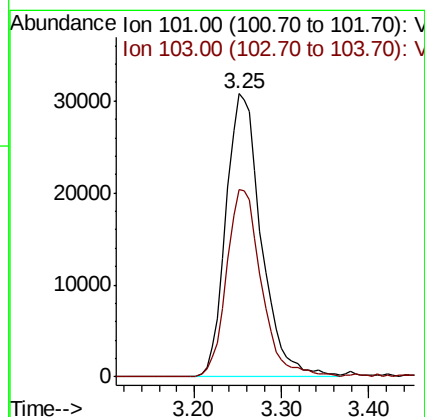
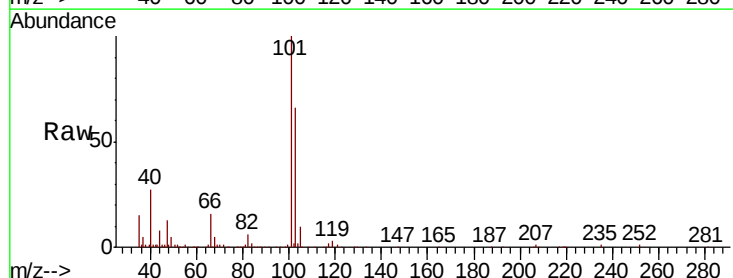
Acq: 26 Mar 2019 03:35

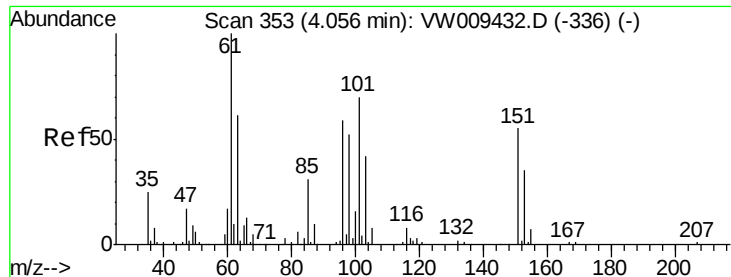
Tgt Ion: 101 Resp: 86039

Ion Ratio Lower Upper

101 100

103 64.6 45.0 83.6





#11

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

Concen: 23.175 ug/L

RT: 4.06 min Scan# 353

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

ClientSampleId :

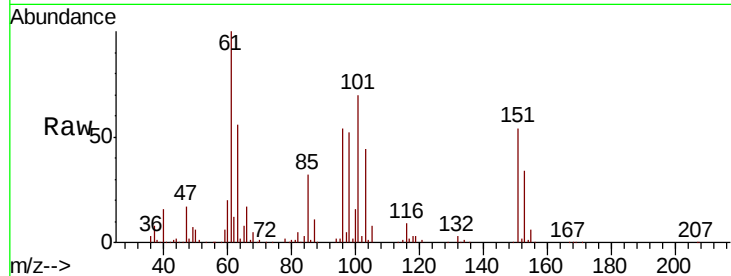
Tot Ion:101 Resp: 119923

Ion Ratio Lower Upper

101 100

85 48.2 32.6 48.8

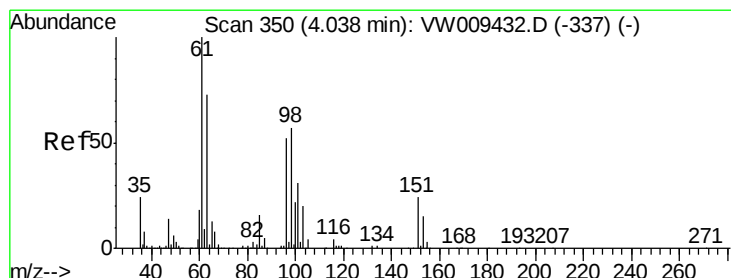
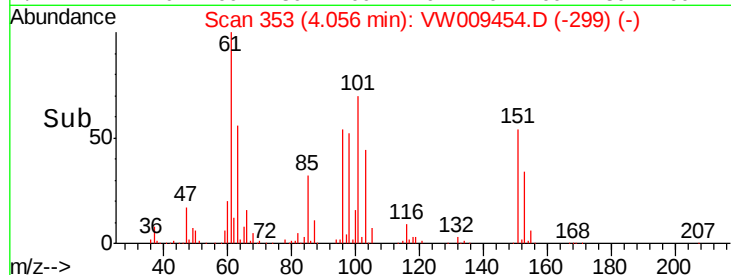
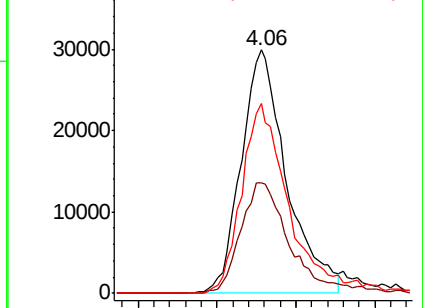
151 76.2 63.3 94.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VW

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 24.250 ug/L

RT: 4.04 min Scan# 350

Delta R.T. 0.01 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

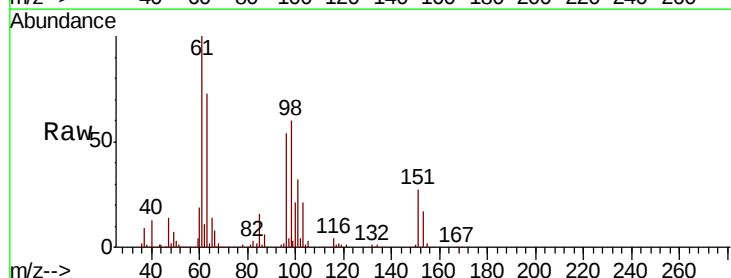
Tgt Ion: 96 Resp: 117750

Ion Ratio Lower Upper

96 100

61 184.7 129.4 240.2

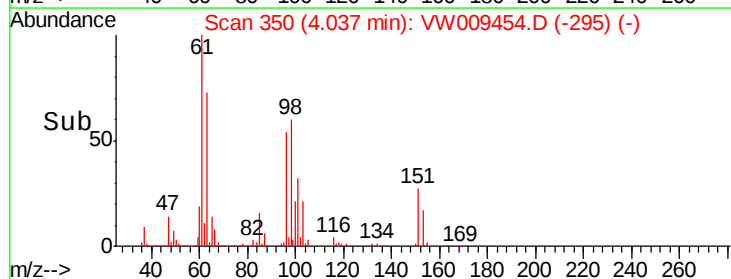
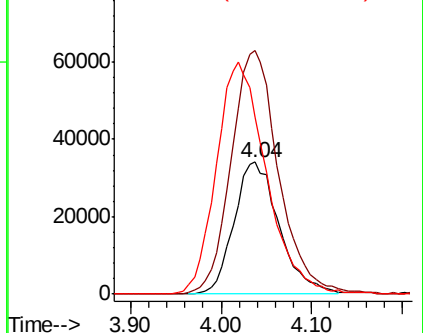
63 134.6 116.8 217.0

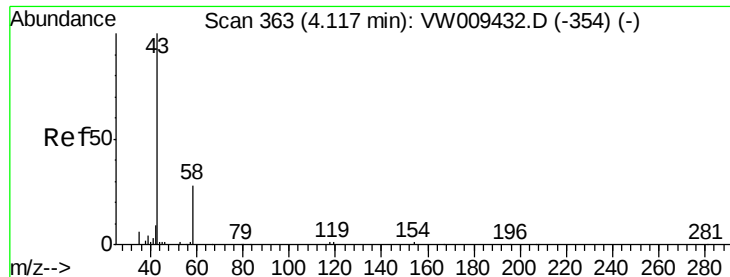


Abundance Ion 96.00 (95.70 to 96.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 63.00 (62.70 to 63.70): VW





#13

Acetone

Concen: 49.732 ug/L

RT: 4.12 min Scan# 363

Delta R.T. -0.01 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

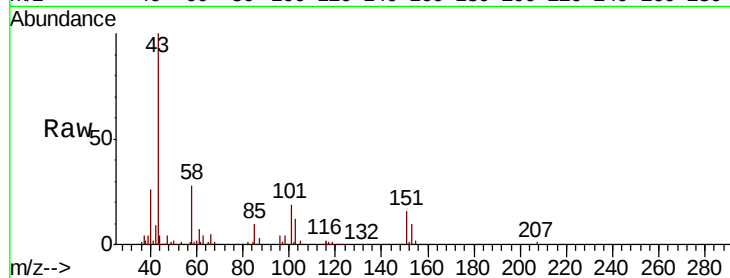
ClientSampleId :

Tot Ion: 43 Resp: 79475

Ion Ratio Lower Upper

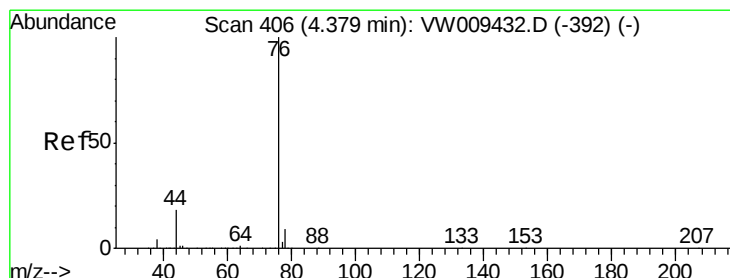
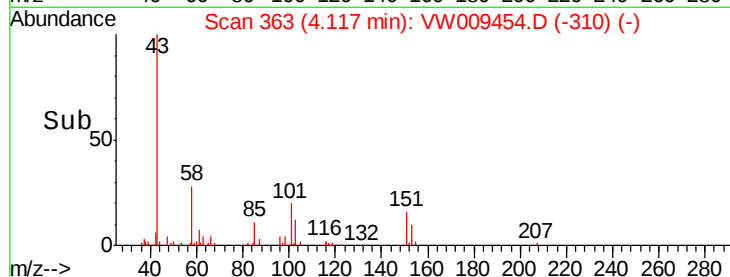
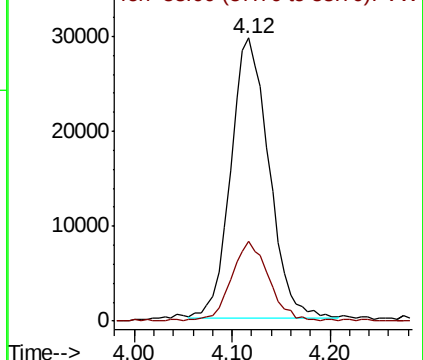
43 100

58 28.0 0.0 56.2



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#14

Carbon disulfide

Concen: 25.079 ug/L

RT: 4.38 min Scan# 406

Delta R.T. 0.01 min

Lab File: VW009454.D

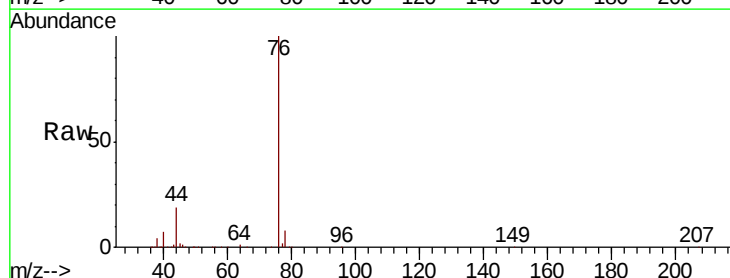
Acq: 26 Mar 2019 03:35

Tgt Ion: 76 Resp: 327727

Ion Ratio Lower Upper

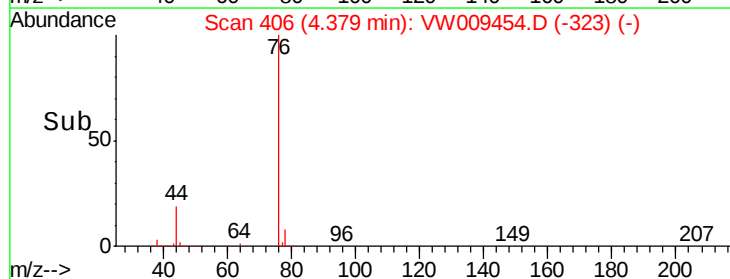
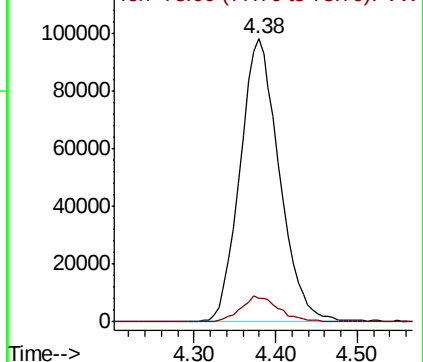
76 100

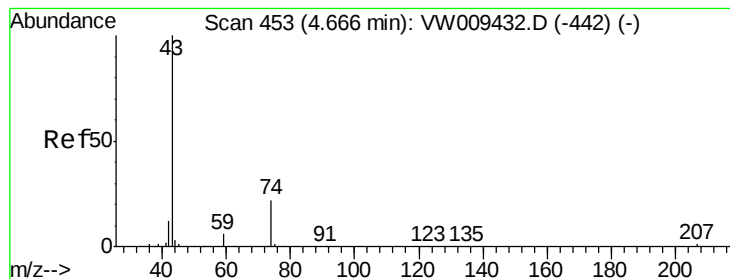
78 8.1 7.3 10.9



Abundance Ion 76.00 (75.70 to 76.70): VW

Ion 78.00 (77.70 to 78.70): VW





#15

Methvl Acetate

Concen: 30.726 ug/L

RT: 4.67 min Scan# 453

Delta R.T. -0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

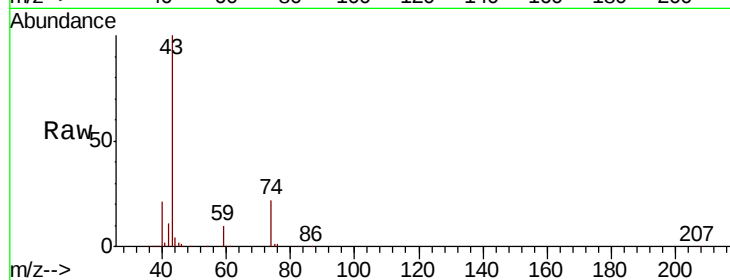
ClientSampleId :

Tot Ion: 43 Resp: 96461

Ion Ratio Lower Upper

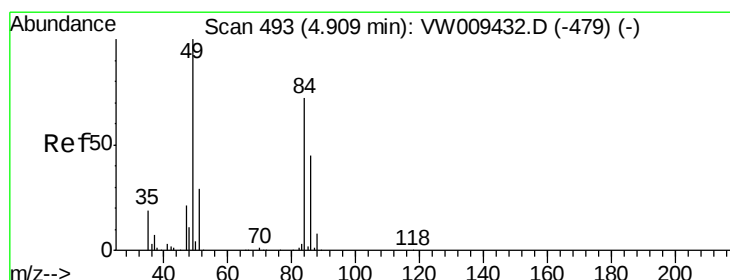
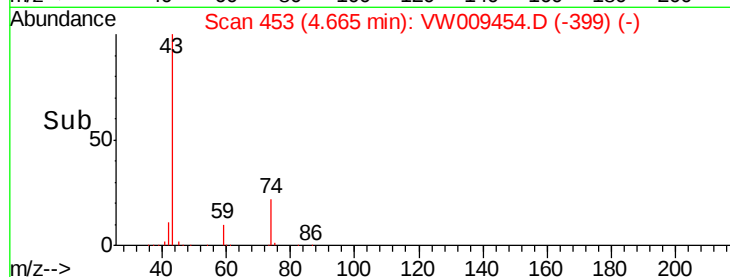
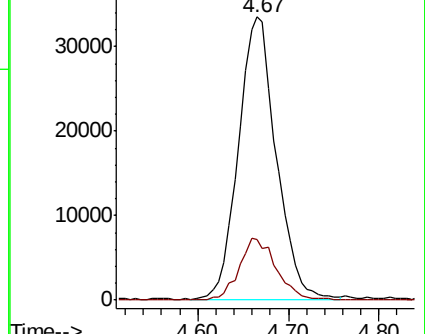
43 100

74 21.4 16.7 25.1



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 74.00 (73.70 to 74.70): VW



#16

Methylene chloride

Concen: 24.905 ug/L

RT: 4.92 min Scan# 494

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

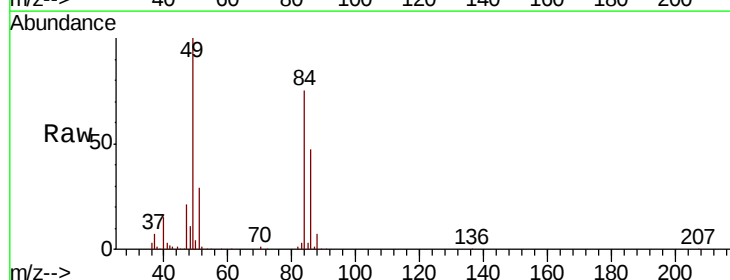
Tgt Ion: 84 Resp: 143210

Ion Ratio Lower Upper

84 100

49 132.8 96.0 178.2

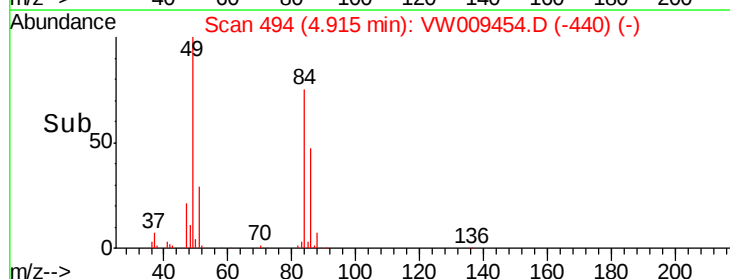
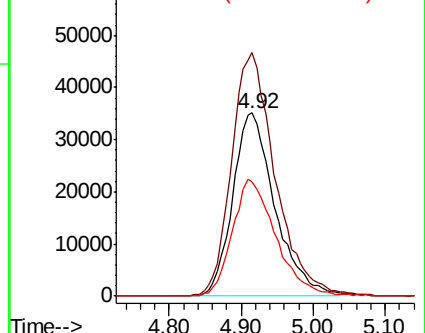
86 62.6 44.4 82.5

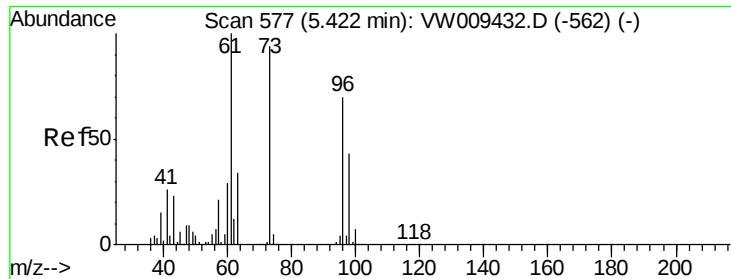


Abundance Ion 84.00 (83.70 to 84.70): VW

Ion 49.00 (48.70 to 49.70): VW

Ion 86.00 (85.70 to 86.70): VW

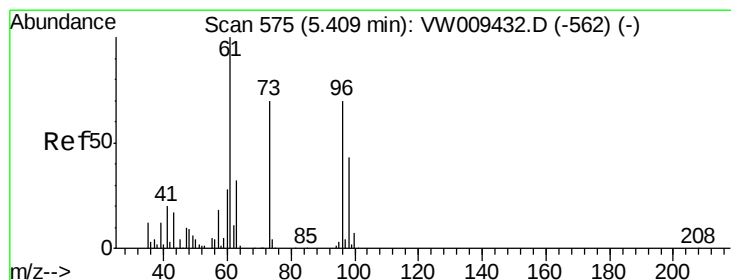
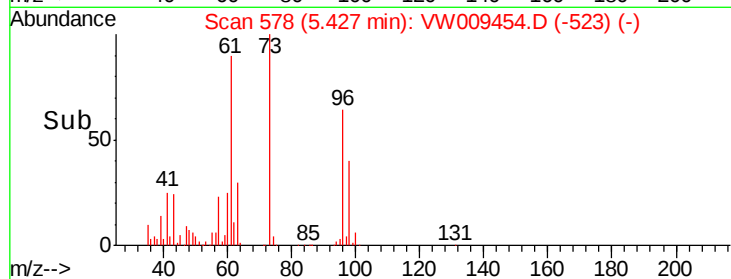
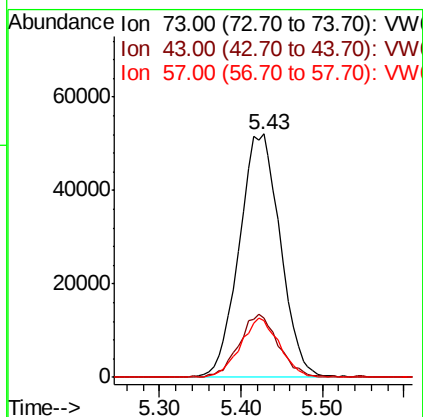
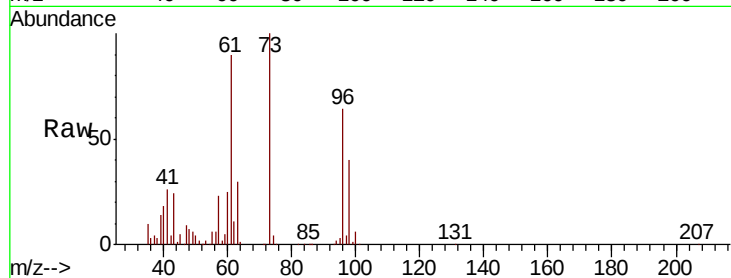




#17  
Methvl tert-butvl Ether  
Concen: 26.575 ug/L  
RT: 5.43 min Scan# 578  
Delta R.T. 0.01 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

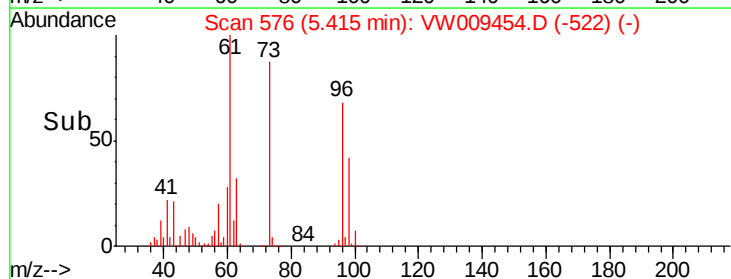
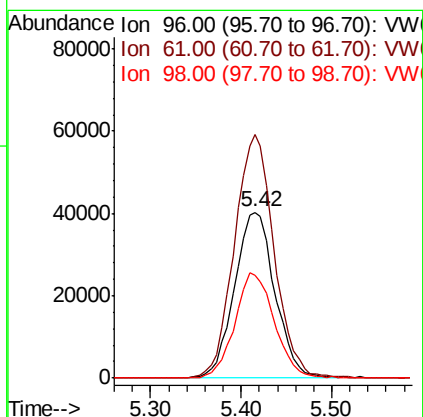
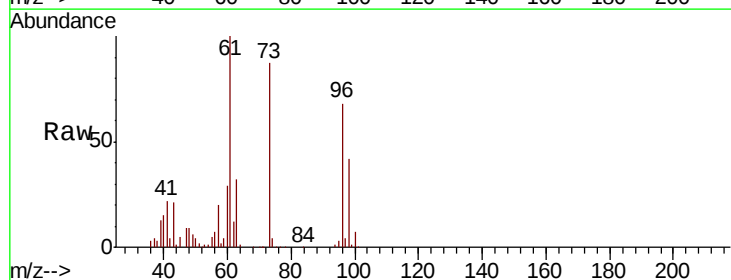
Instrument :  
MSVOA\_W  
ClientSampleId :

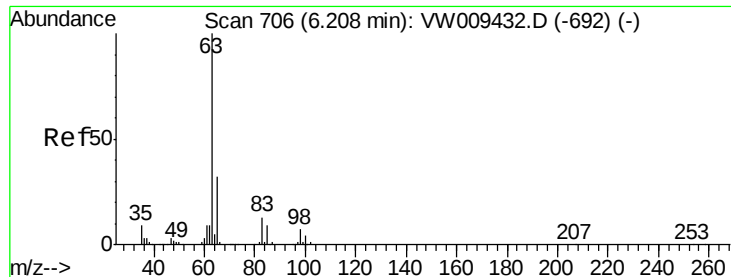
Tot Ion: 73 Resp: 182580  
Ion Ratio Lower Upper  
73 100  
43 23.7 18.2 27.4  
57 23.1 17.8 26.8



#18  
trans-1,2-Dichloroethene  
Concen: 24.345 ug/L  
RT: 5.42 min Scan# 576  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

Tgt Ion: 96 Resp: 124283  
Ion Ratio Lower Upper  
96 100  
61 147.0 96.7 179.5  
98 61.7 43.8 81.4

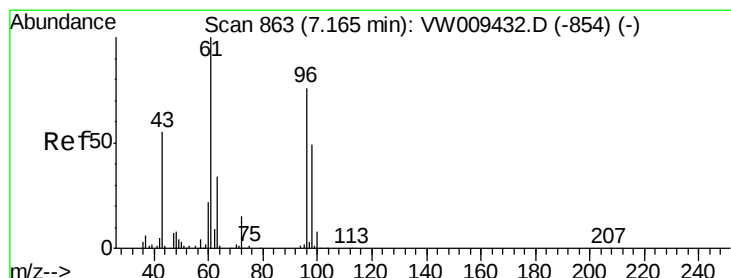
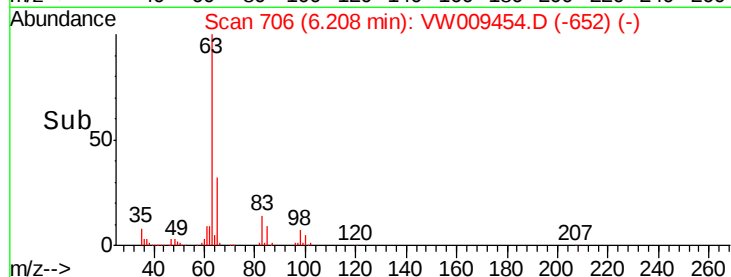
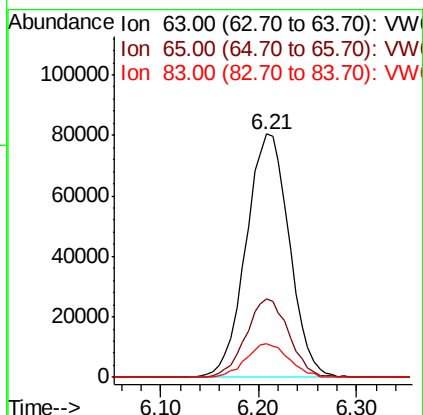
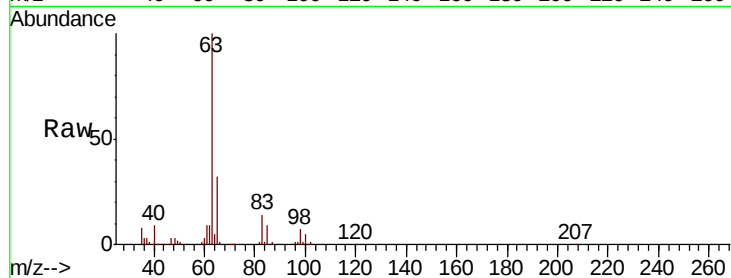




#19  
 1,1-Dichloroethane  
 Concen: 26.495 ug/L  
 RT: 6.21 min Scan# 706  
 Delta R.T. 0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

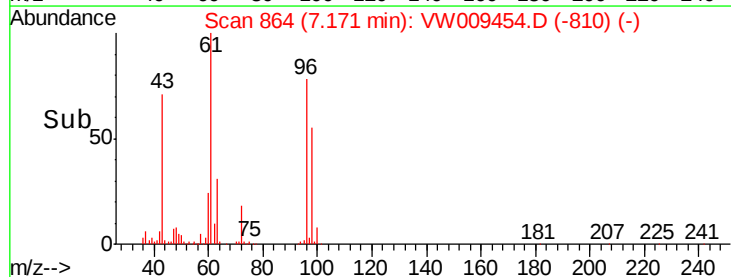
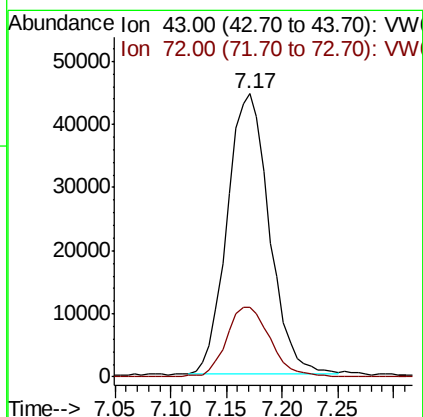
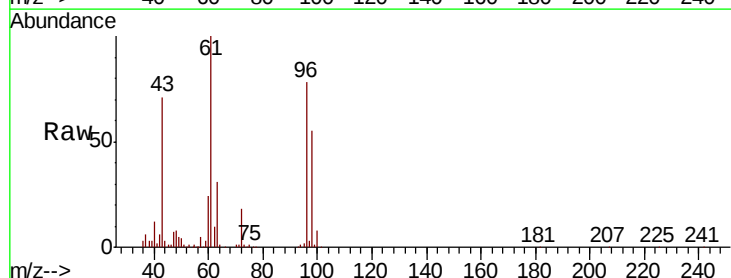
Instrument :  
 MSVOA\_W  
 ClientSampled :

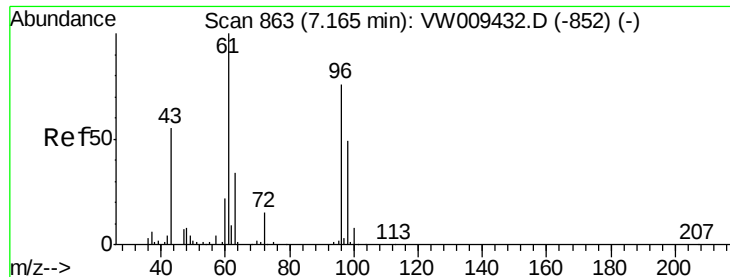
| Tot Ion   | 63    | Resp  | 246625 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 63        | 100   |       |        |
| 65        | 32.2  | 21.6  | 40.0   |
| 83        | 14.1  | 10.1  | 18.7   |



#21  
 2-Butanone  
 Concen: 53.072 ug/L  
 RT: 7.17 min Scan# 864  
 Delta R.T. 0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

| Tgt Ion   | 43    | Resp  | 117105 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 43        | 100   |       |        |
| 72        | 25.5  | 13.1  | 39.1   |



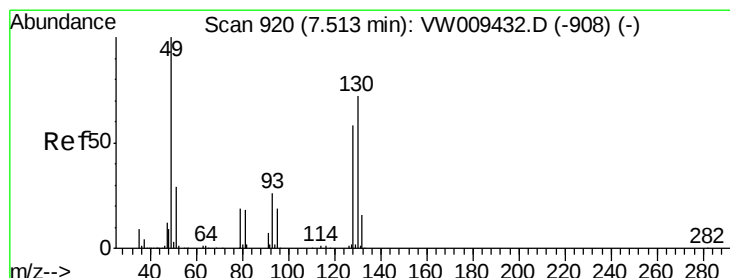
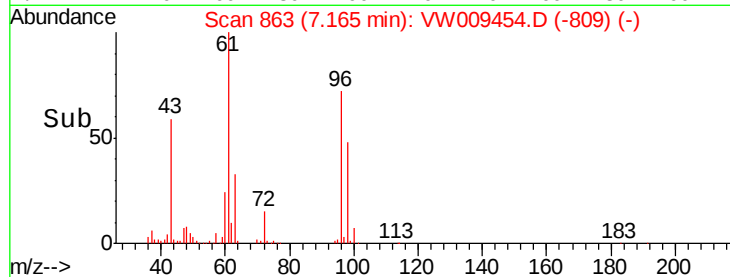
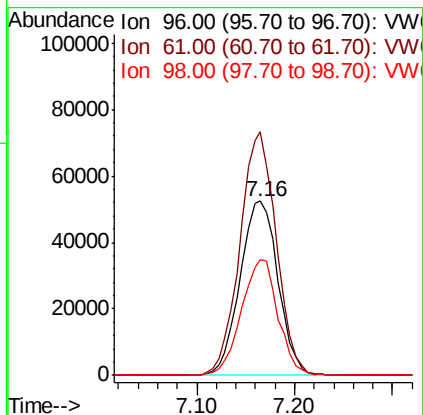
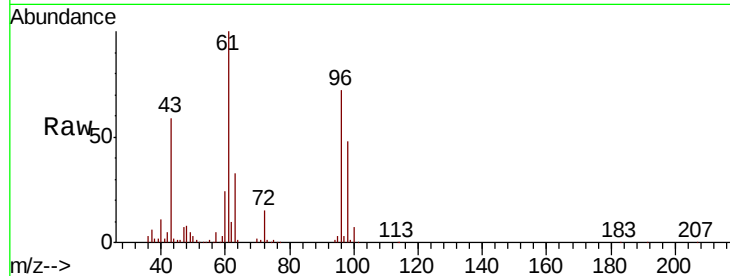


#22

cis-1,2-Dichloroethene  
 Concen: 25.625 ug/L  
 RT: 7.16 min Scan# 863  
 Delta R.T. -0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

Instrument :  
 MSVOA\_W  
 ClientSampled :

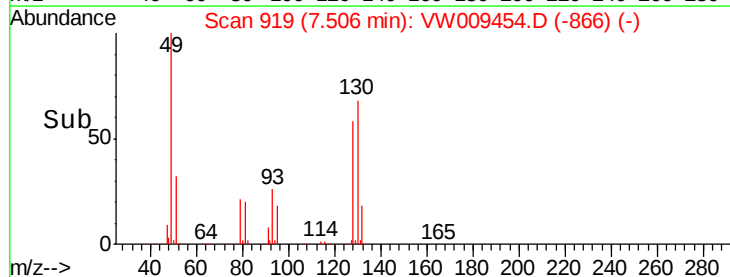
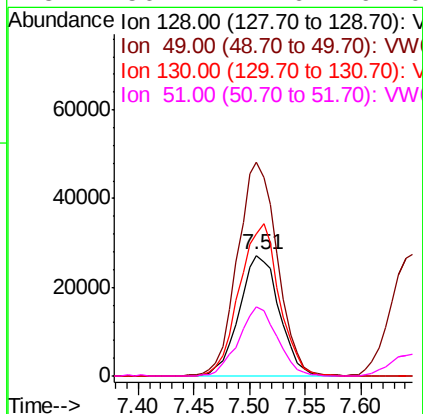
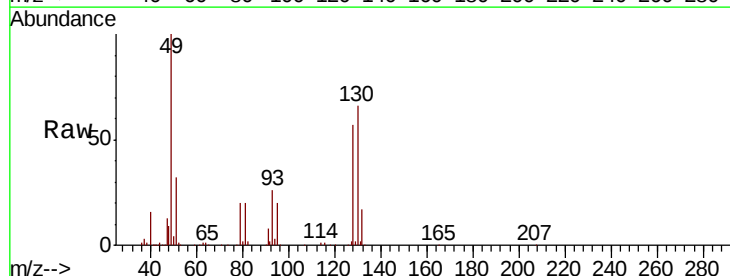
Tot Ion: 96 Resp: 141715  
 Ion Ratio Lower Upper  
 96 100  
 61 139.7 90.6 168.3  
 98 66.6 44.0 81.8

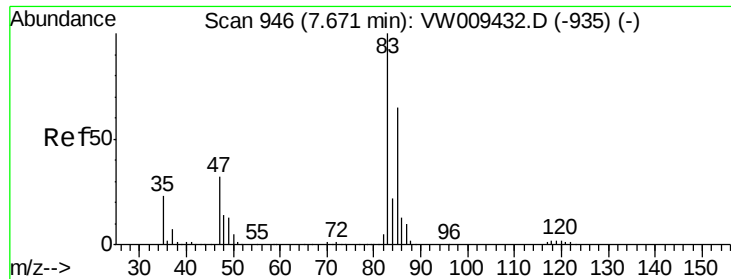


#23

Bromochloromethane  
 Concen: 25.643 ug/L  
 RT: 7.51 min Scan# 919  
 Delta R.T. -0.01 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

Tgt Ion: 128 Resp: 68017  
 Ion Ratio Lower Upper  
 128 100  
 49 176.6 118.4 219.8  
 130 117.0 87.8 163.2  
 51 56.7 44.6 67.0

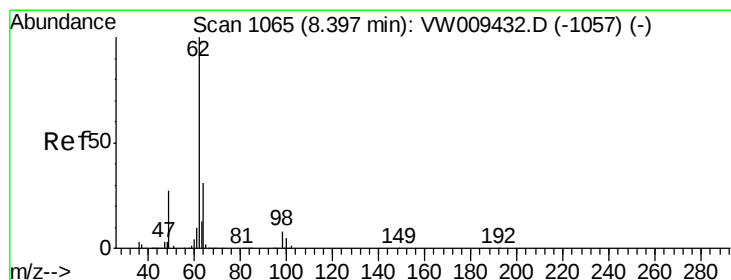
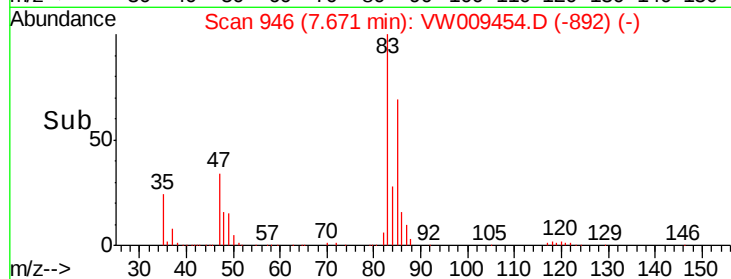
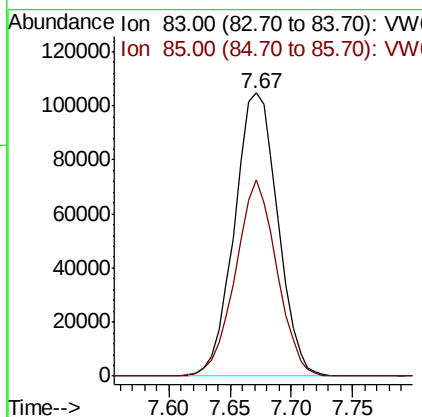
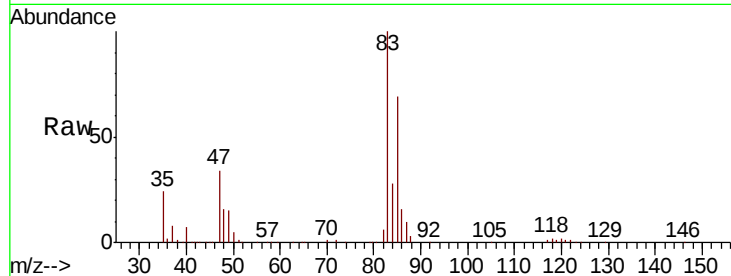




#25  
Chloroform  
Concen: 26.458 ug/L  
RT: 7.67 min Scan# 946  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

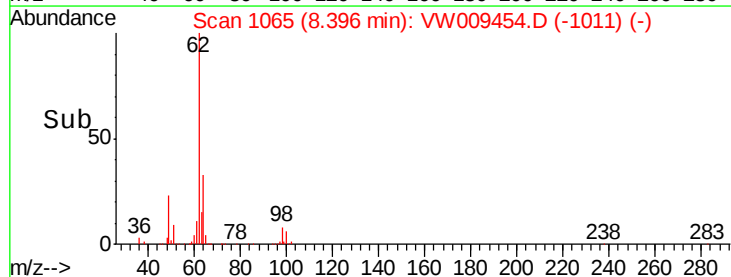
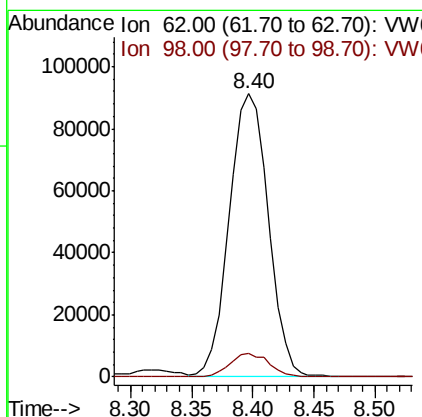
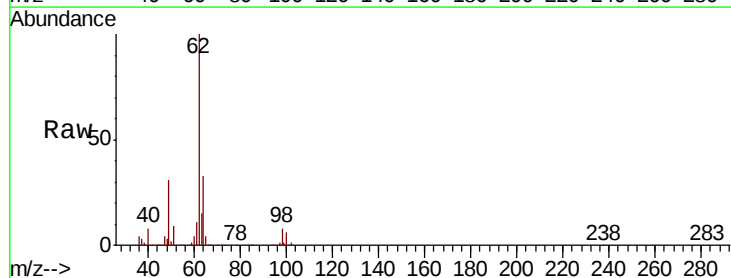
Instrument :  
MSVOA\_W  
ClientSampleId :

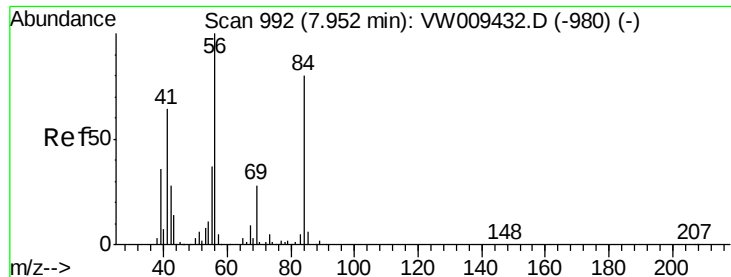
Tot Ion: 83 Resp: 257911  
Ion Ratio Lower Upper  
83 100  
85 66.4 46.0 85.4



#27  
1,2-Dichloroethane  
Concen: 27.895 ug/L  
RT: 8.40 min Scan# 1065  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

Tgt Ion: 62 Resp: 202735  
Ion Ratio Lower Upper  
62 100  
98 8.4 7.3 10.9

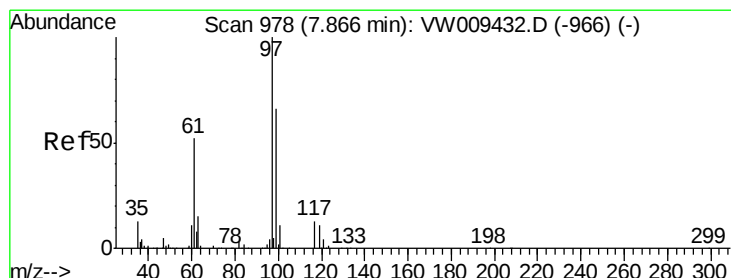
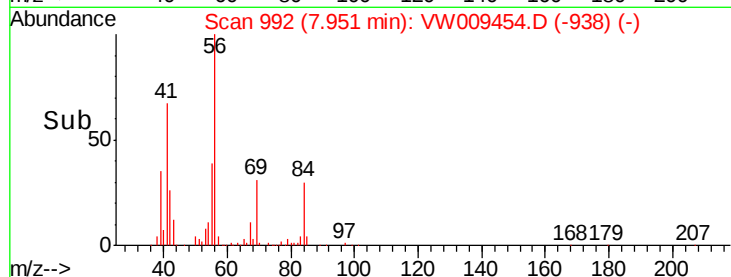
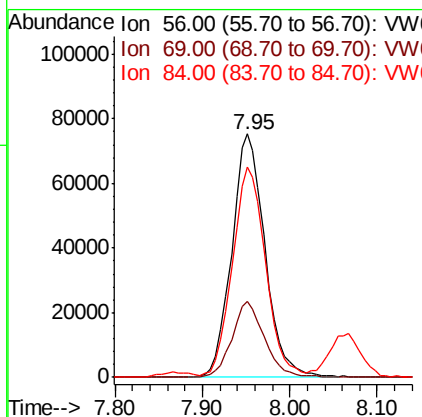
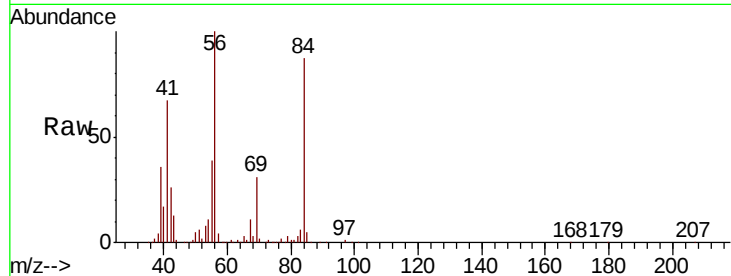




#30  
Cyclohexane  
Concen: 23.186 ug/L  
RT: 7.95 min Scan# 992  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

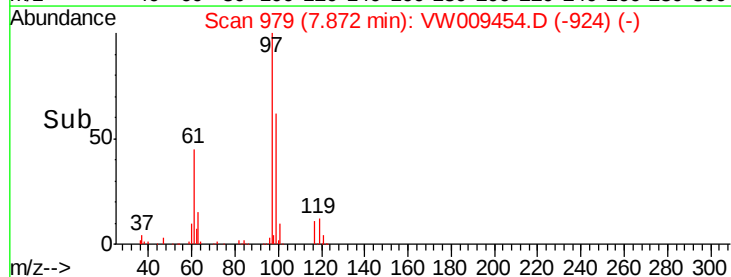
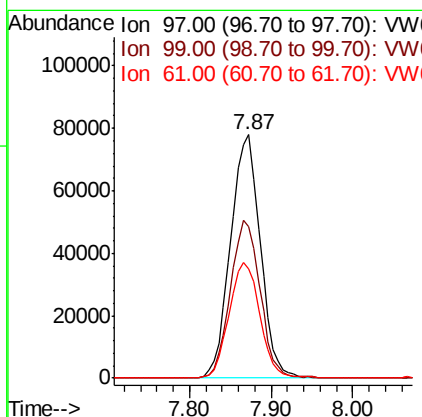
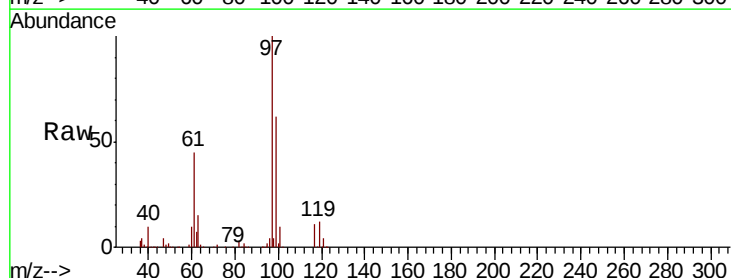
Instrument :  
MSVOA\_W  
ClientSampleId :

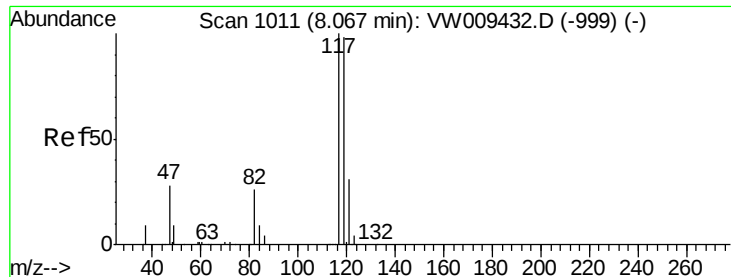
Tot Ion: 56 Resp: 198351  
Ion Ratio Lower Upper  
56 100  
69 30.2 24.0 36.0  
84 86.0 69.2 103.8



#31  
1,1,1-Trichloroethane  
Concen: 26.150 ug/L  
RT: 7.87 min Scan# 979  
Delta R.T. 0.01 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

Tgt Ion: 97 Resp: 196737  
Ion Ratio Lower Upper  
97 100  
99 64.3 51.2 76.8  
61 48.8 38.4 57.6





#32

Carbon tetrachloride

Concen: 25.723 ug/L

RT: 8.06 min Scan# 1010

Delta R.T. -0.01 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

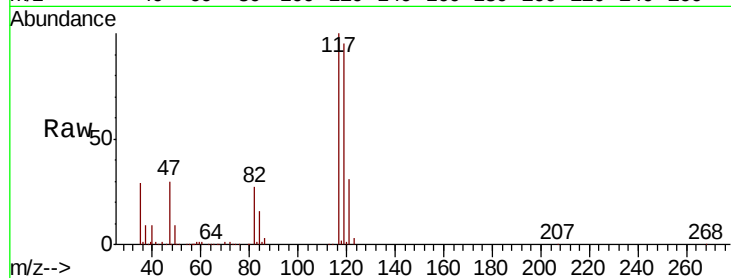
ClientSampleId :

Tot Ion:117 Resp: 195256

Ion Ratio Lower Upper

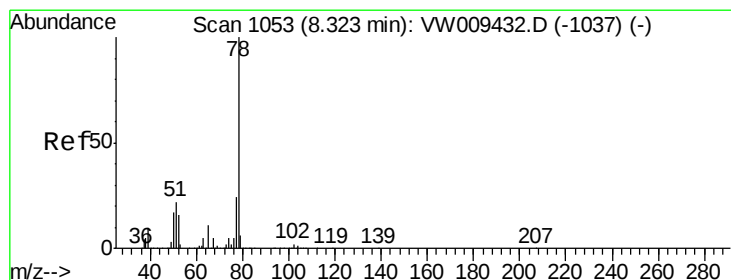
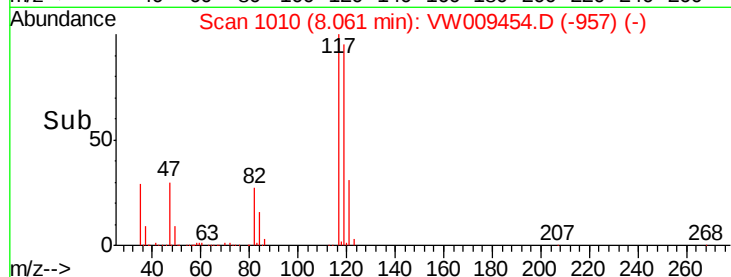
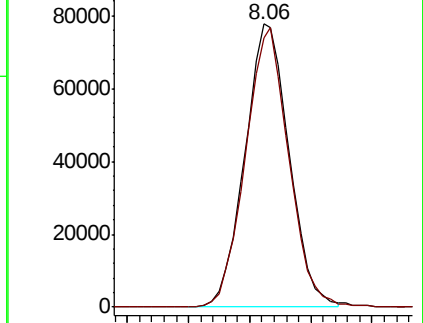
117 100

119 96.8 78.0 117.0



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 26.233 ug/L

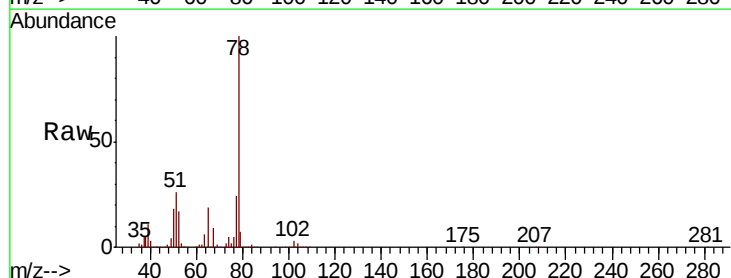
RT: 8.32 min Scan# 1052

Delta R.T. -0.01 min

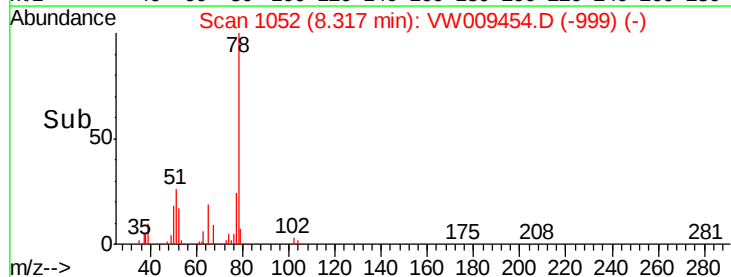
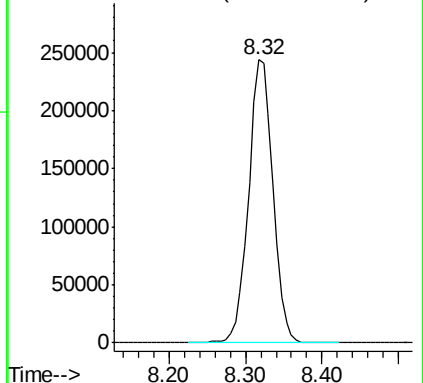
Lab File: VW009454.D

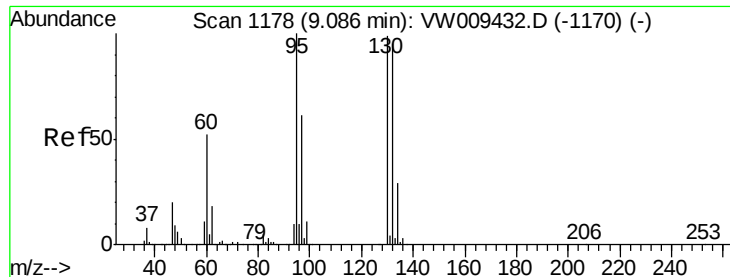
Acq: 26 Mar 2019 03:35

Tgt Ion: 78 Resp: 540863



Abundance Ion 78.00 (77.70 to 78.70): VW

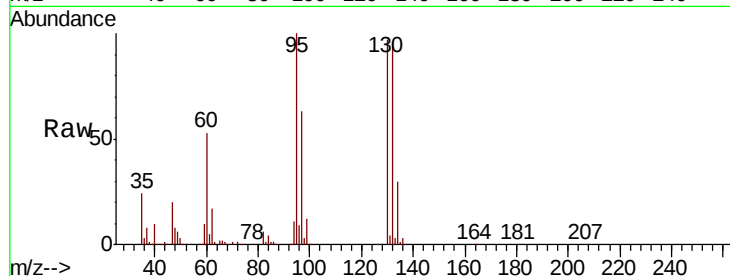




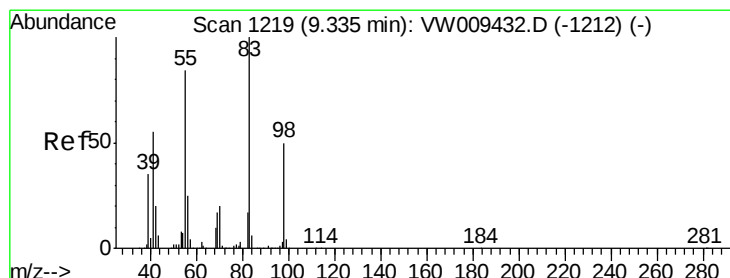
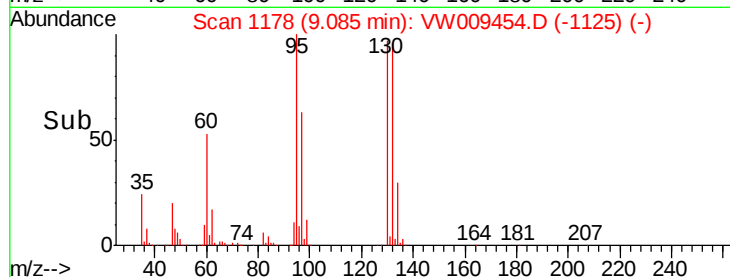
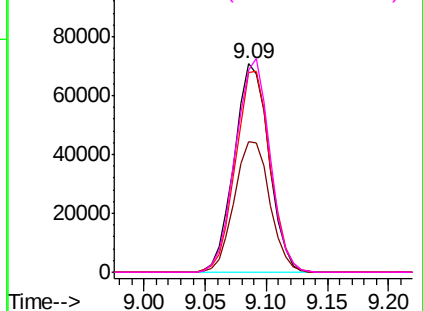
#35  
 Trichloroethene  
 Concen: 25.378 ug/L  
 RT: 9.09 min Scan# 1178  
 Delta R.T. -0.01 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

Instrument :  
 MSVOA\_W  
 ClientSampled :

Tot Ion: 95 Resp: 139422  
 Ion Ratio Lower Upper  
 95 100  
 97 64.3 44.7 82.9  
 132 96.3 69.0 128.2  
 130 101.5 72.7 134.9

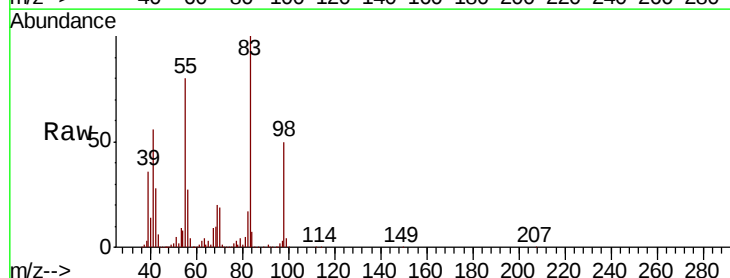


Abundance Ion 95.00 (94.70 to 95.70): VW  
 Ion 97.00 (96.70 to 97.70): VW  
 Ion 132.00 (131.70 to 132.70): V  
 Ion 130.00 (129.70 to 130.70): V

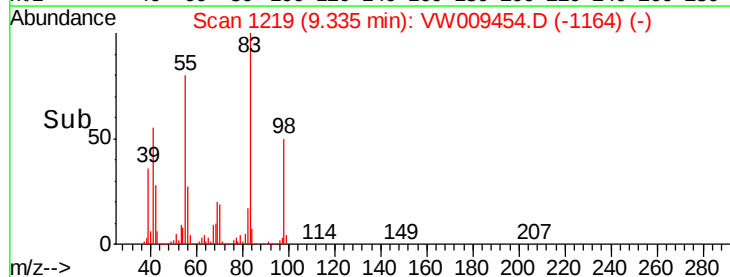
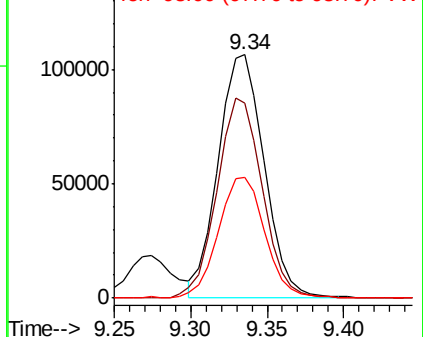


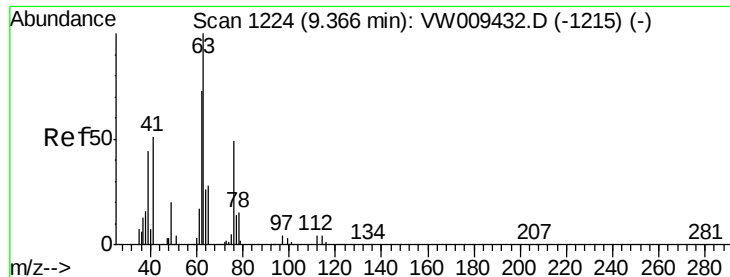
#36  
 Methylcyclohexane  
 Concen: 23.401 ug/L  
 RT: 9.34 min Scan# 1219  
 Delta R.T. 0.01 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

Tgt Ion: 83 Resp: 222426  
 Ion Ratio Lower Upper  
 83 100  
 55 80.2 63.5 95.3  
 98 49.5 39.8 59.8



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

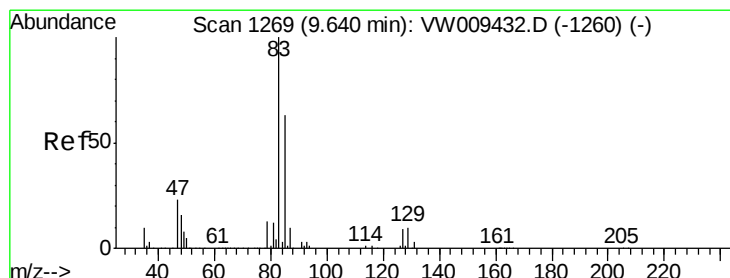
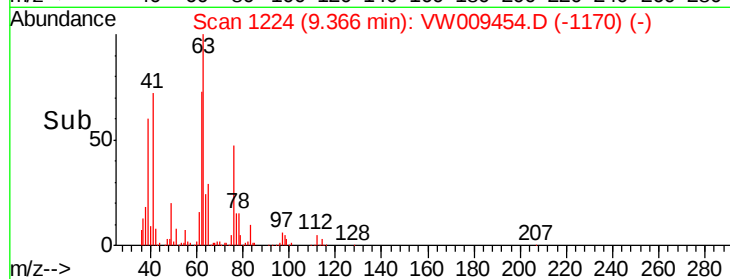
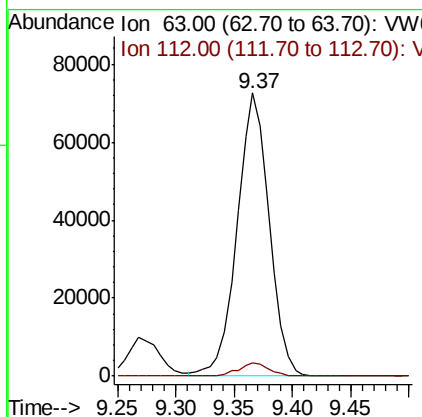
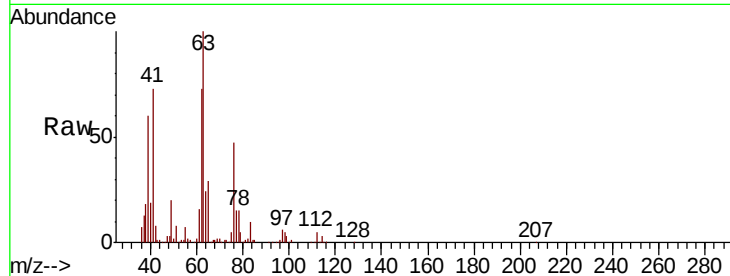




#40  
 1,2-Dichloropropane  
 Concen: 26.340 ug/L  
 RT: 9.37 min Scan# 1224  
 Delta R.T. 0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

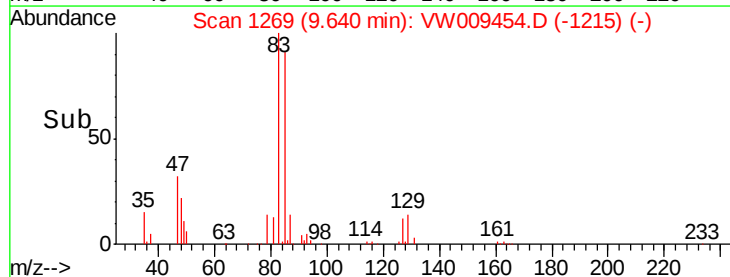
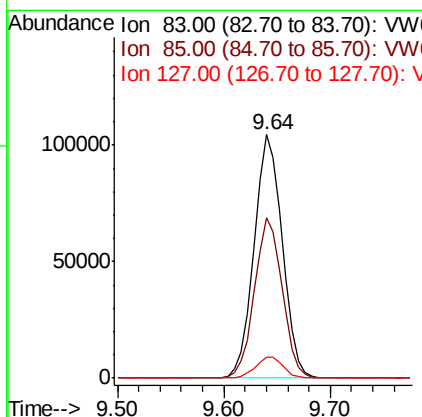
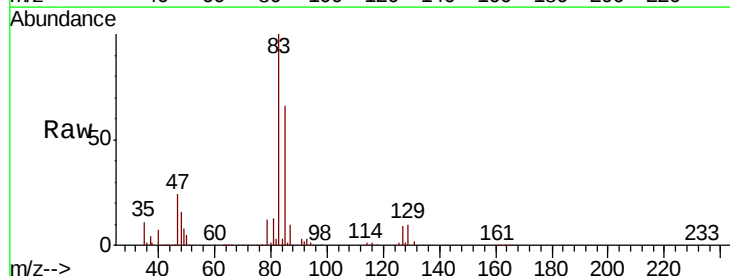
Instrument :  
 MSVOA\_W  
 ClientSampled :

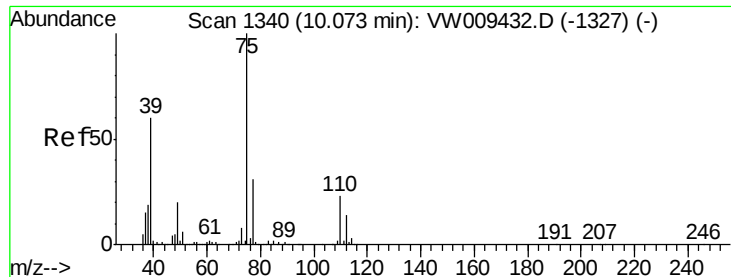
Tot Ion: 63 Resp: 139358  
 Ion Ratio Lower Upper  
 63 100  
 112 4.6 4.0 6.0



#41  
 Bromodichloromethane  
 Concen: 26.541 ug/L  
 RT: 9.64 min Scan# 1269  
 Delta R.T. -0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

Tgt Ion: 83 Resp: 194561  
 Ion Ratio Lower Upper  
 83 100  
 85 66.0 43.5 80.7  
 127 8.7 6.2 9.4





#42

cis-1,3-Dichloropropene

Concen: 24.493 ug/L

RT: 10.07 min Scan# 1340

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

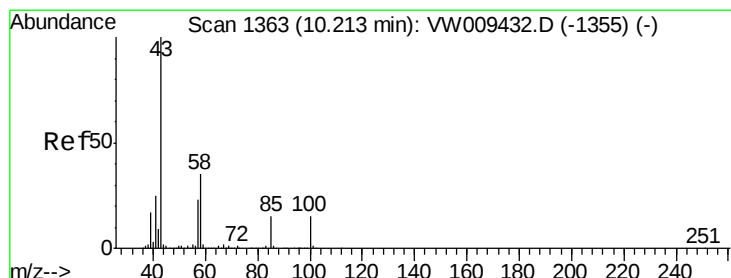
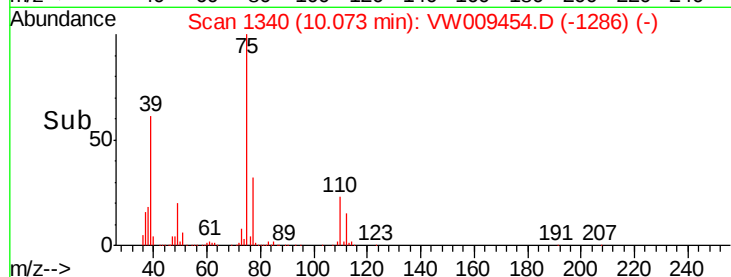
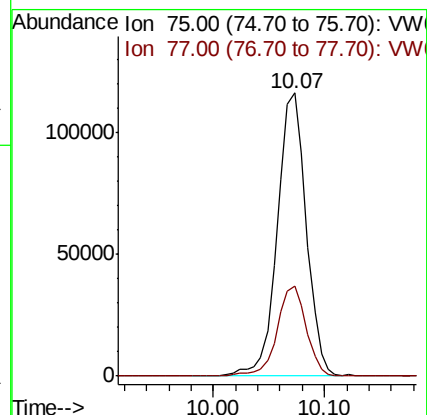
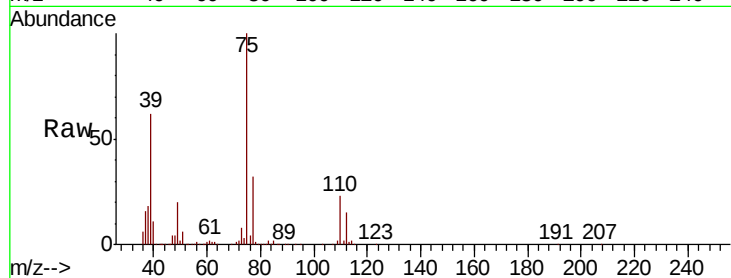
ClientSampled :

Tot Ion: 75 Resp: 211061

Ion Ratio Lower Upper

75 100

77 31.9 21.6 40.2



#43

4-Methyl-2-pentanone

Concen: 55.097 ug/L

RT: 10.21 min Scan# 1362

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

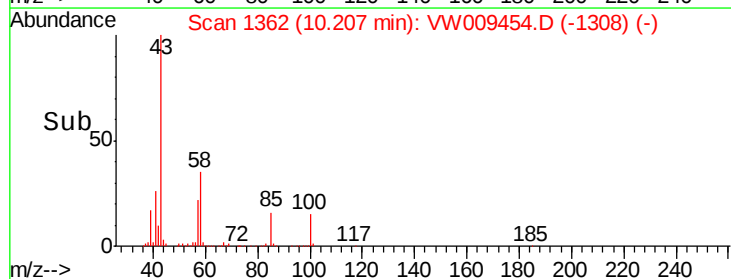
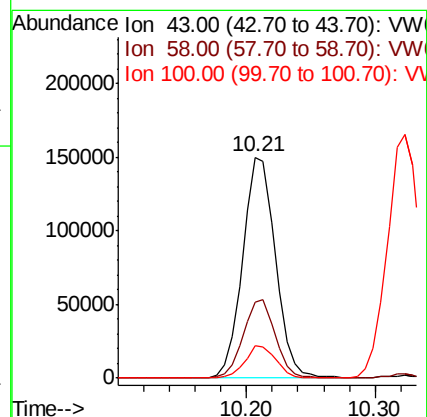
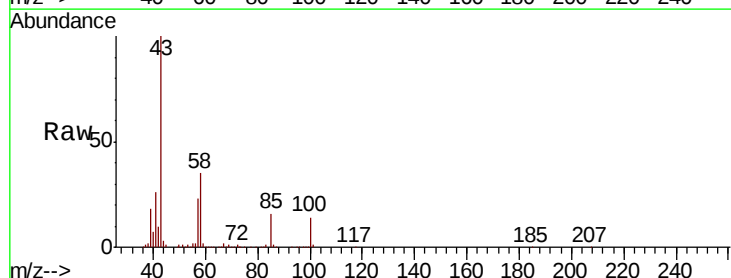
Tgt Ion: 43 Resp: 264145

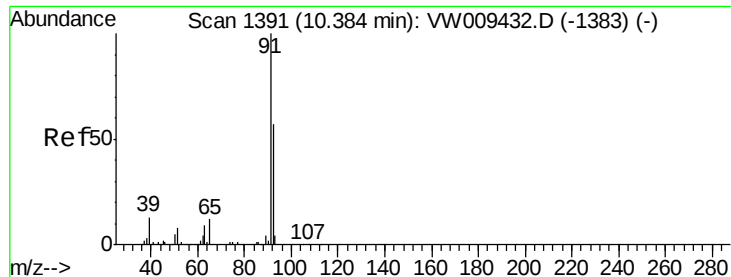
Ion Ratio Lower Upper

43 100

58 34.6 28.2 42.2

100 13.8 11.4 17.2





#44

Toluene

Concen: 25.868 ug/L

RT: 10.38 min Scan# 1391

Delta R.T. -0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

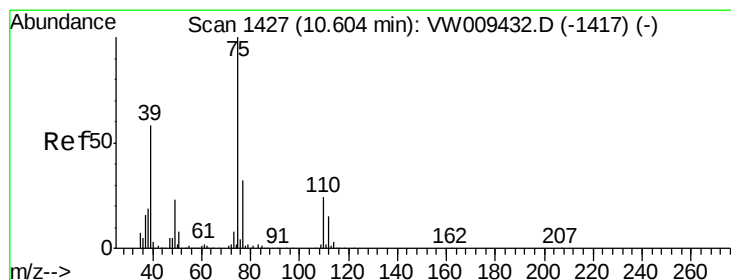
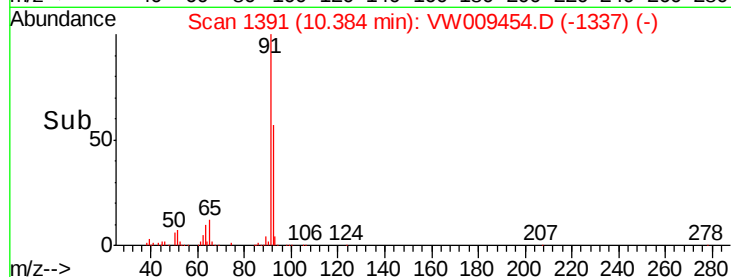
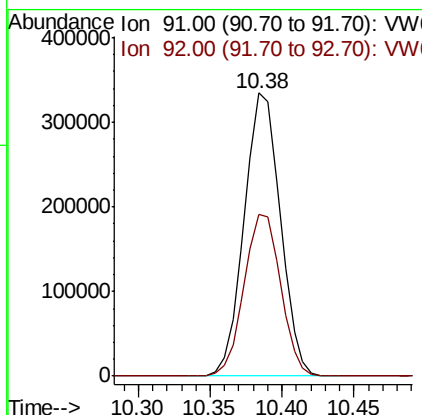
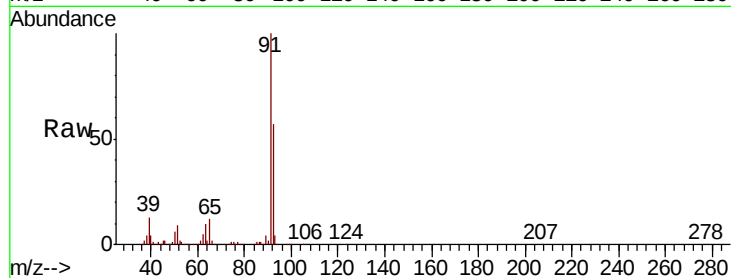
ClientSampleId :

Tot Ion: 91 Resp: 583141

Ion Ratio Lower Upper

91 100

92 57.1 39.8 73.8



#45

trans-1,3-Dichloropropene

Concen: 25.255 ug/L

RT: 10.60 min Scan# 1427

Delta R.T. 0.00 min

Lab File: VW009454.D

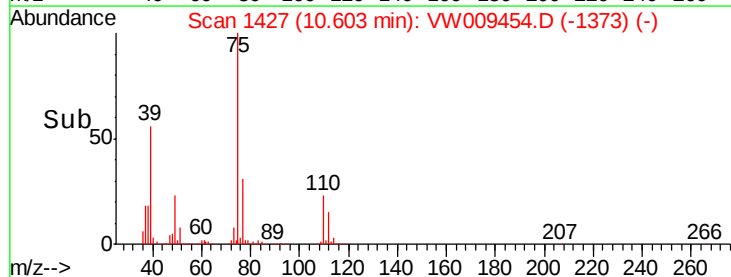
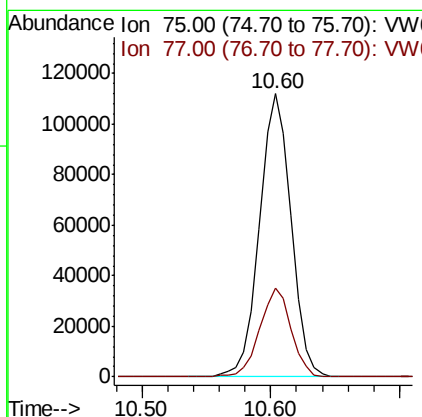
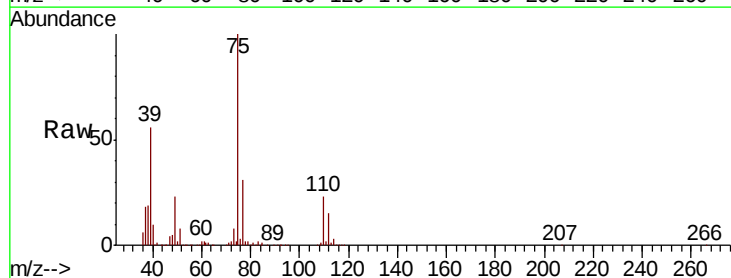
Acq: 26 Mar 2019 03:35

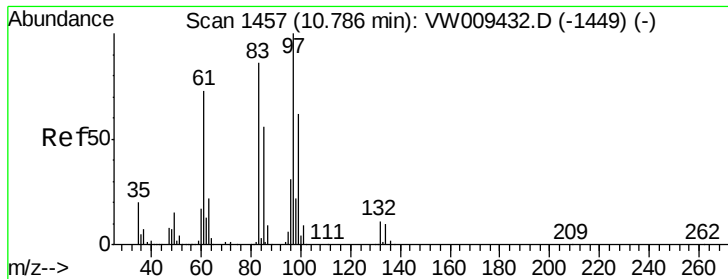
Tgt Ion: 75 Resp: 189310

Ion Ratio Lower Upper

75 100

77 31.3 22.5 41.7





#46

1,1,2-Trichloroethane

Concen: 26.900 ug/L

RT: 10.79 min Scan# 1457

Delta R.T. -0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

ClientSampled :

Tot Ion: 97 Resp: 113541

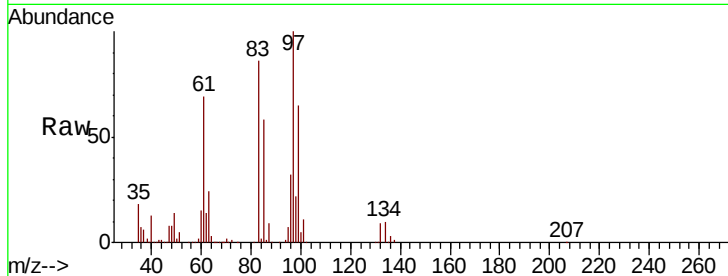
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 85.8  | 60.7  | 112.7 |
| 85  | 57.8  | 40.1  | 74.5  |
| 99  | 65.5  | 43.8  | 81.3  |

97 100

83 85.8 60.7 112.7

85 57.8 40.1 74.5

99 65.5 43.8 81.3



Abundance

Ion 97.00 (96.70 to 97.70): VW

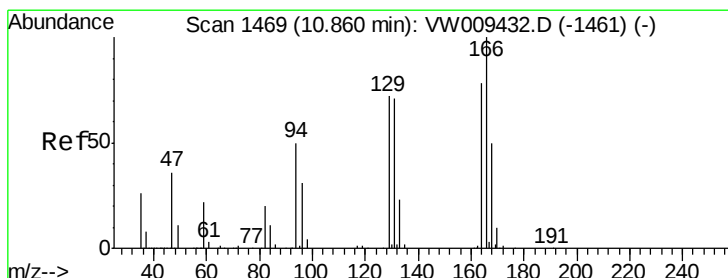
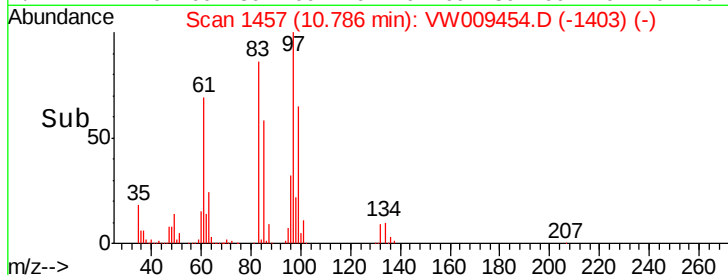
Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 99.00 (98.70 to 99.70): VW

10.79

Time-->



#47

Tetrachloroethene

Concen: 23.723 ug/L

RT: 10.86 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Tgt Ion:164 Resp: 110121

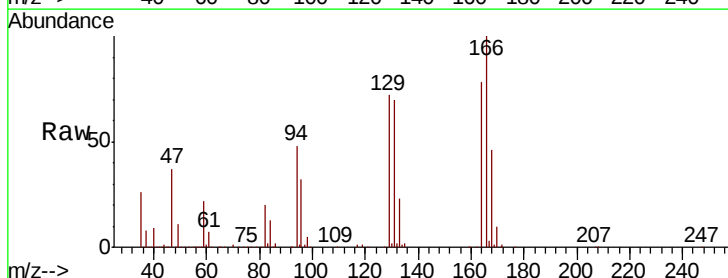
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 92.4  | 66.5  | 123.5 |
| 131 | 89.2  | 62.6  | 116.3 |
| 166 | 128.2 | 91.6  | 170.0 |

164 100

129 92.4 66.5 123.5

131 89.2 62.6 116.3

166 128.2 91.6 170.0



Abundance

Ion 164.00 (163.70 to 164.70): V

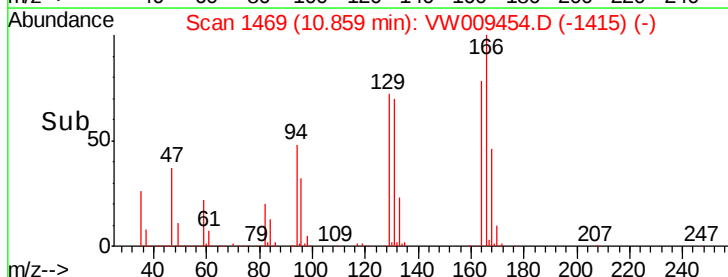
Ion 129.00 (128.70 to 129.70): V

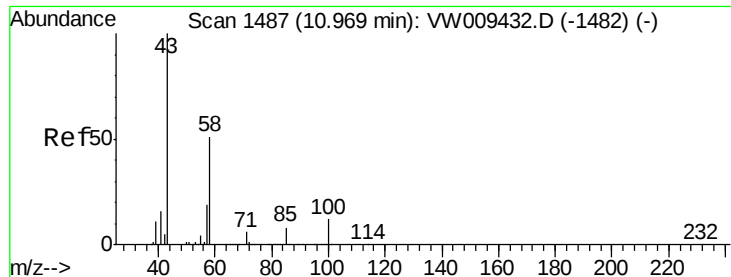
Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V

10.86

Time-->

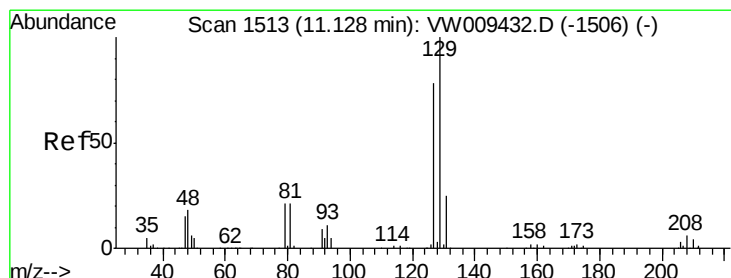
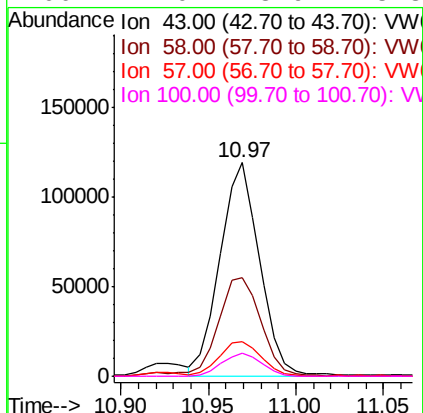
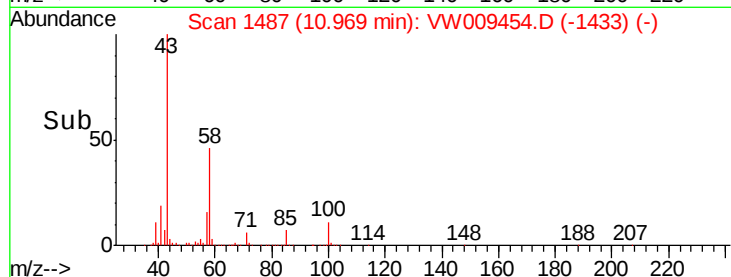
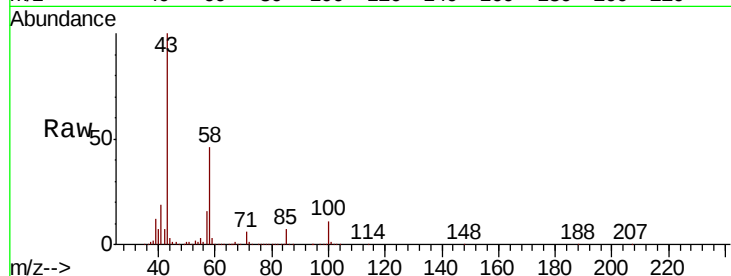




#49  
2-Hexanone  
Concen: 55.704 ug/L  
RT: 10.97 min Scan# 1487  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

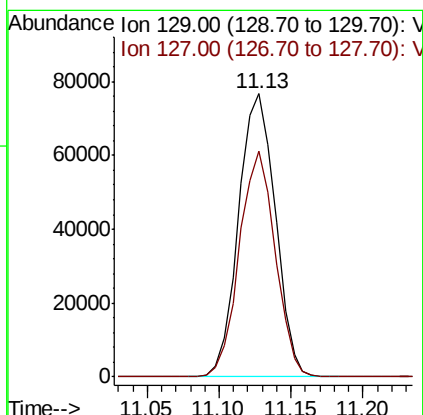
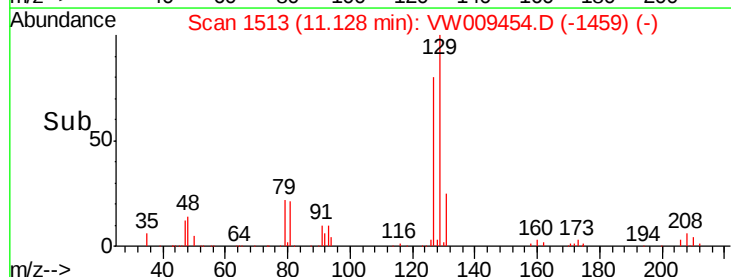
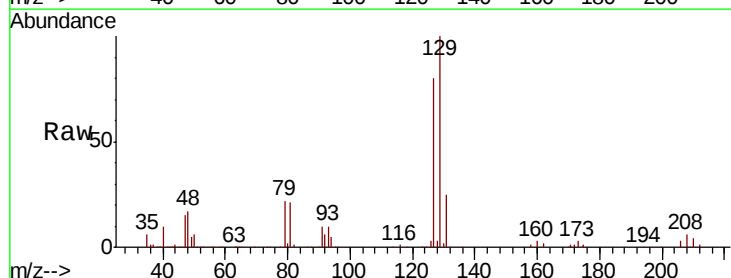
Instrument :  
MSVOA\_W  
ClientSampleId :

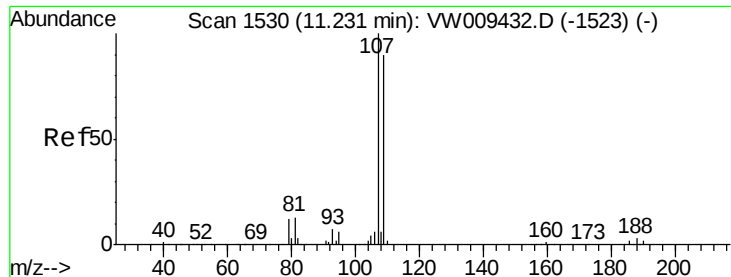
Tot Ion: 43 Resp: 188089  
Ion Ratio Lower Upper  
43 100  
58 49.9 39.2 58.8  
57 17.1 14.2 21.2  
100 11.0 8.9 13.3



#50  
Dibromochloromethane  
Concen: 26.103 ug/L  
RT: 11.13 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

Tgt Ion: 129 Resp: 136008  
Ion Ratio Lower Upper  
129 100  
127 79.9 56.8 105.6

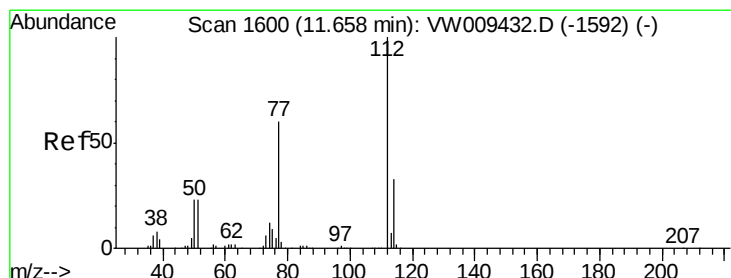
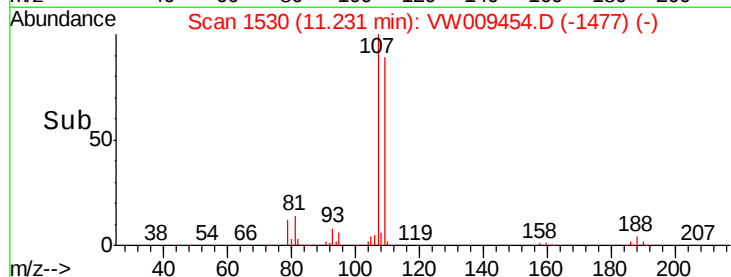
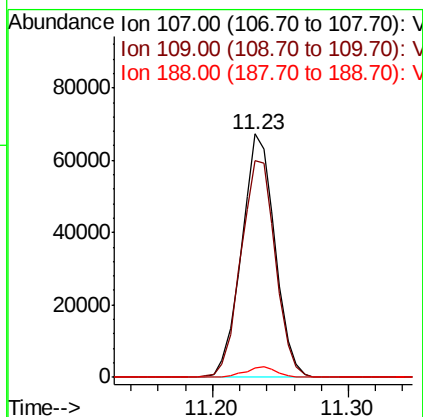
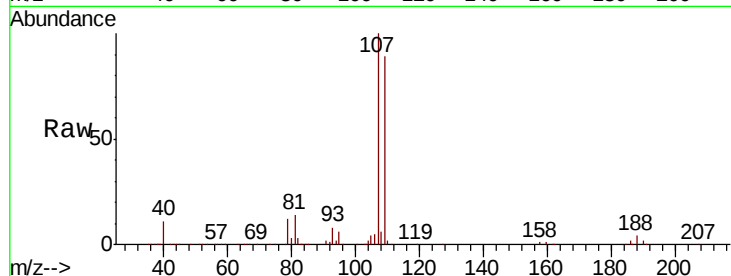




#51  
1,2-Dibromoethane  
Concen: 26.833 ug/L  
RT: 11.23 min Scan# 1530  
Delta R.T. -0.01 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

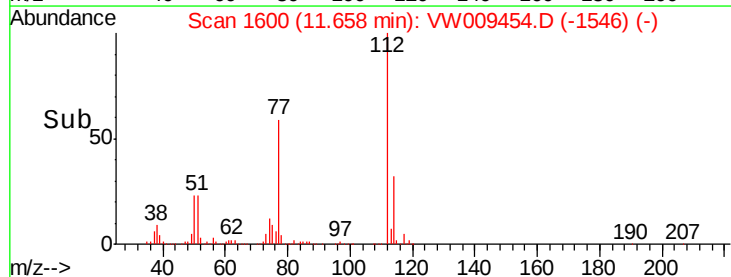
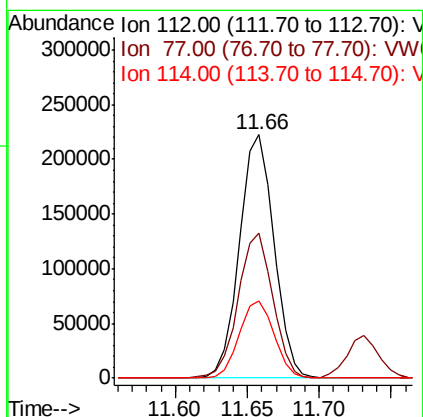
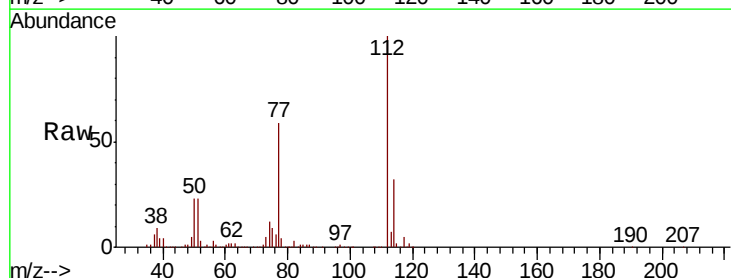
Instrument :  
MSVOA\_W  
ClientSampleId :

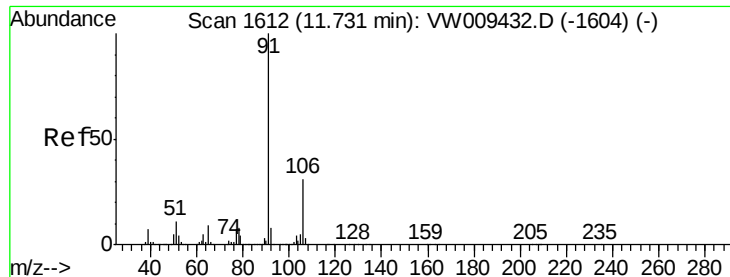
Tot Ion:107 Resp: 114816  
Ion Ratio Lower Upper  
107 100  
109 88.8 68.0 126.4  
188 3.8 3.5 5.3



#52  
Chlorobenzene  
Concen: 25.614 ug/L  
RT: 11.66 min Scan# 1600  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

Tgt Ion:112 Resp: 370338  
Ion Ratio Lower Upper  
112 100  
77 59.4 45.7 68.5  
114 31.6 22.8 42.4

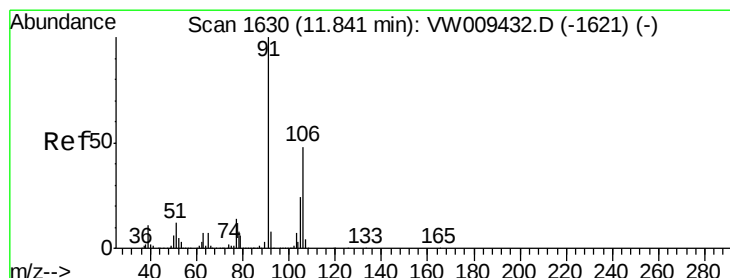
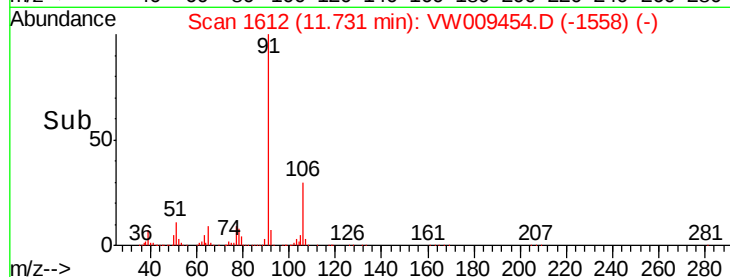
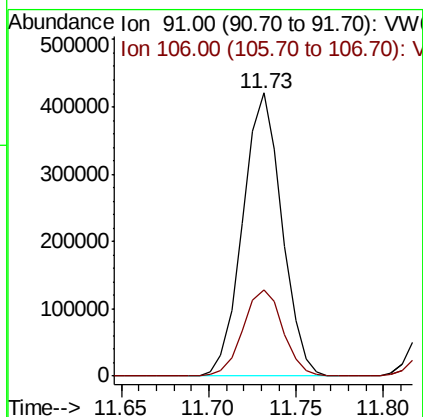
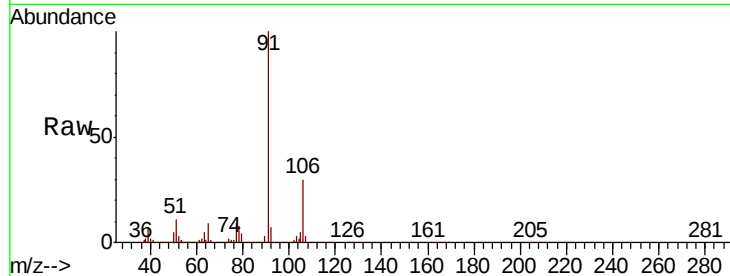




#53  
Ethylbenzene  
Concen: 25.870 ug/L  
RT: 11.73 min Scan# 1612  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

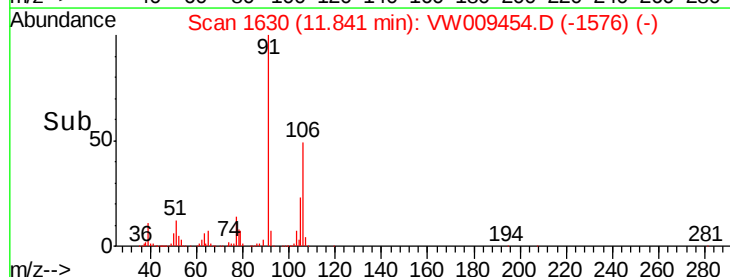
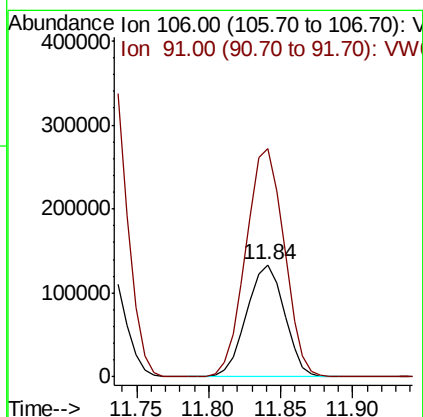
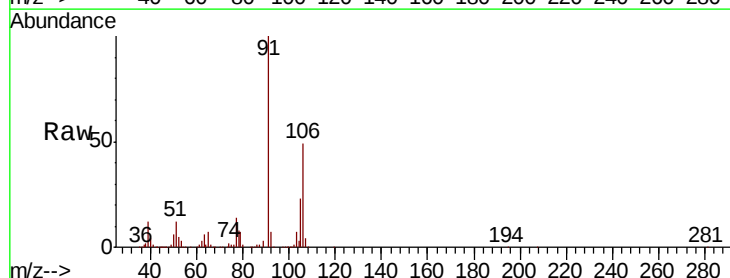
Instrument :  
MSVOA\_W  
ClientSampled :

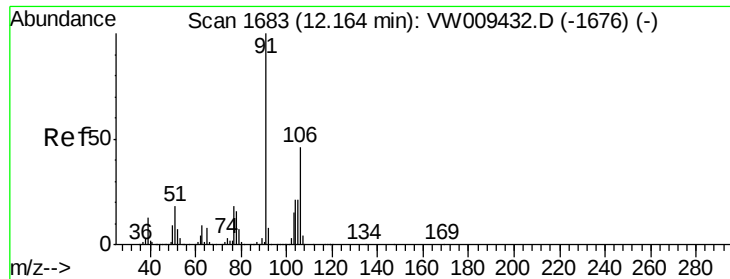
Tot Ion: 91 Resp: 655651  
Ion Ratio Lower Upper  
91 100  
106 30.3 21.0 39.0



#54  
m,p-Xylene  
Concen: 25.327 ug/L  
RT: 11.84 min Scan# 1630  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

Tgt Ion: 106 Resp: 243865  
Ion Ratio Lower Upper  
106 100  
91 204.5 138.4 257.0

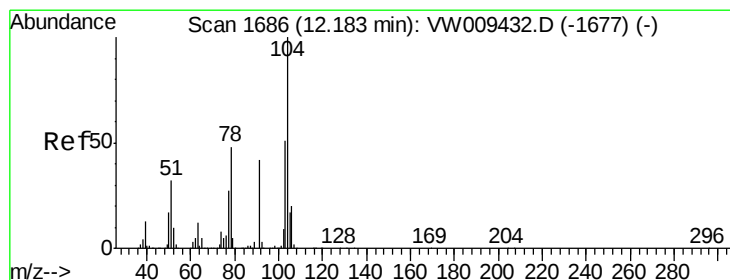
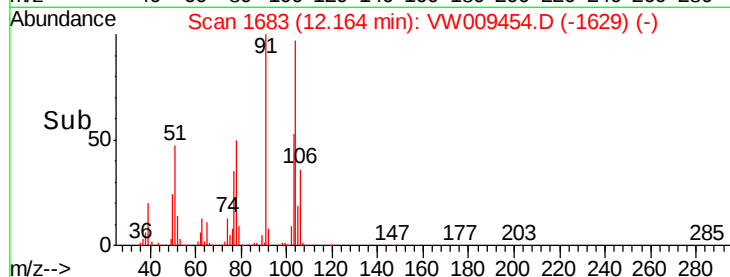
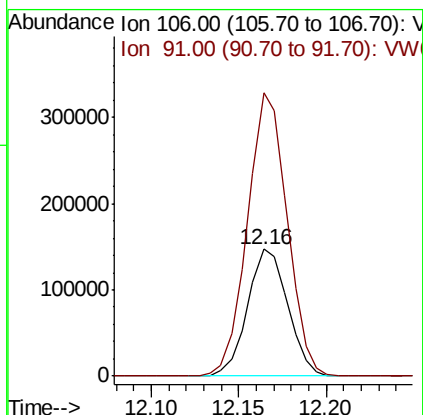
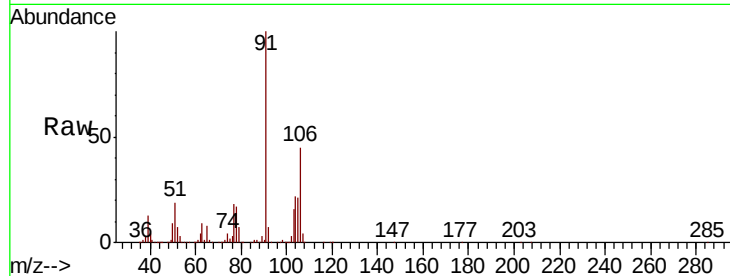




#55  
o-xylene  
Concen: 25.079 ug/L  
RT: 12.16 min Scan# 1683  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

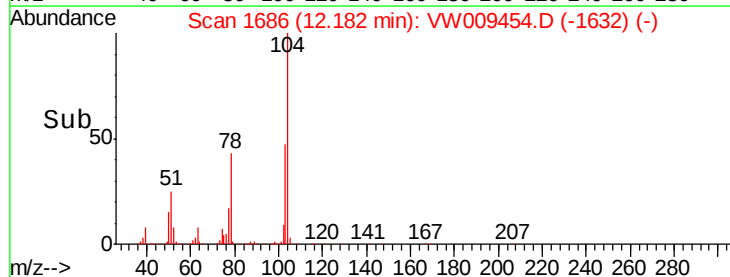
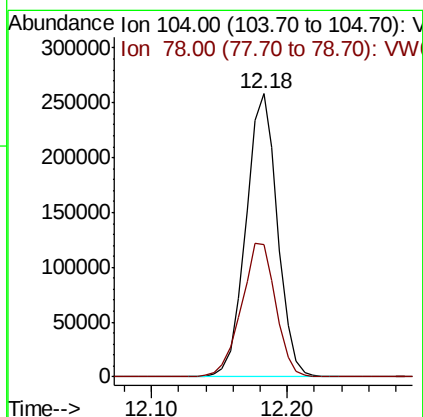
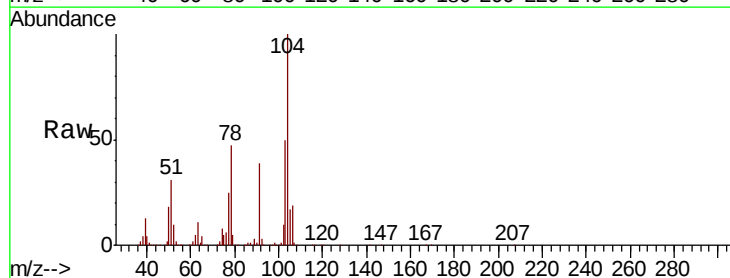
Instrument :  
MSVOA\_W  
ClientSampleId :

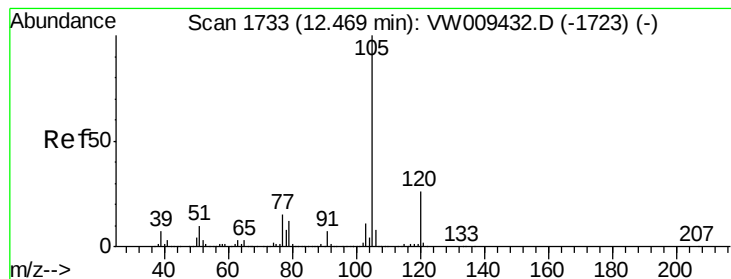
Tot Ion:106 Resp: 235581  
Ion Ratio Lower Upper  
106 100  
91 223.2 153.2 284.4



#56  
Styrene  
Concen: 26.117 ug/L  
RT: 12.18 min Scan# 1686  
Delta R.T. 0.00 min  
Lab File: VW009454.D  
Acq: 26 Mar 2019 03:35

Tgt Ion:104 Resp: 418580  
Ion Ratio Lower Upper  
104 100  
78 46.6 30.9 57.3





#57

Isopropylbenzene

Concen: 25.588 ug/L

RT: 12.46 min Scan# 1732

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

ClientSampled :

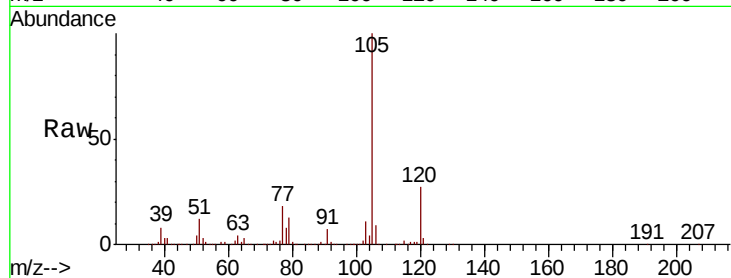
Tot Ion:105 Resp: 643887

Ion Ratio Lower Upper

105 100

120 26.1 21.3 31.9

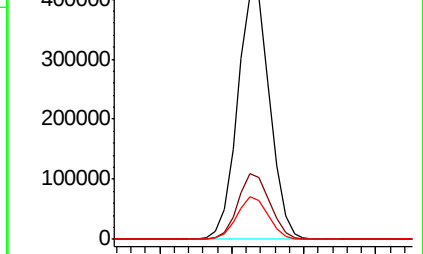
77 16.9 13.1 19.7



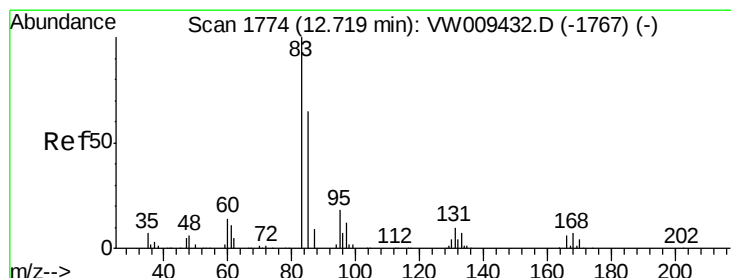
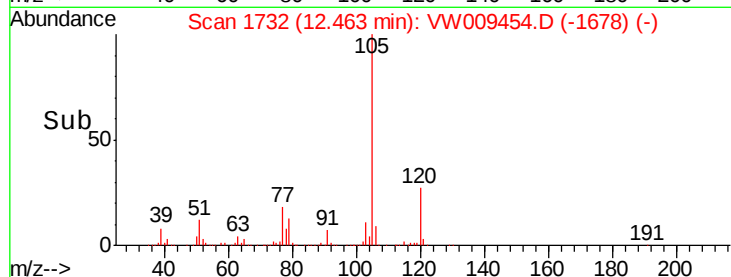
Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



Time-->



#58

1,1,2,2-Tetrachloroethane

Concen: 28.005 ug/L

RT: 12.71 min Scan# 1773

Delta R.T. -0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

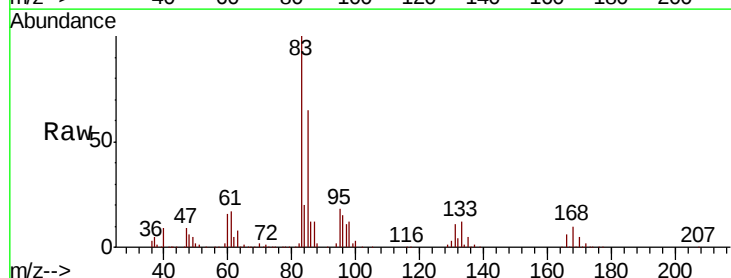
Tgt Ion: 83 Resp: 159469

Ion Ratio Lower Upper

83 100

85 65.2 45.6 84.8

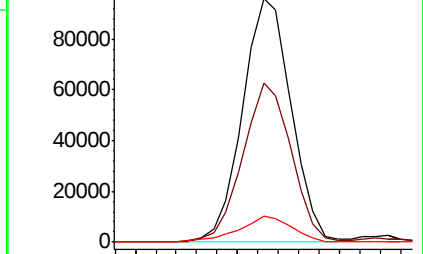
131 10.6 9.2 13.8



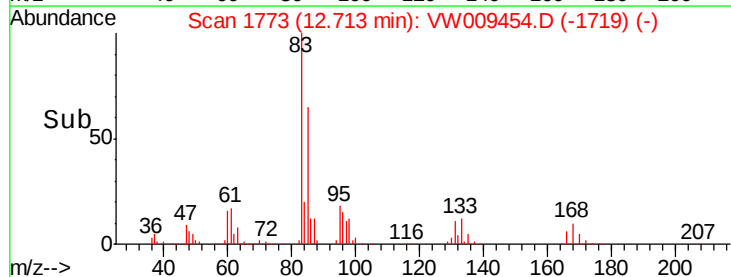
Abundance Ion 83.00 (82.70 to 83.70): VW

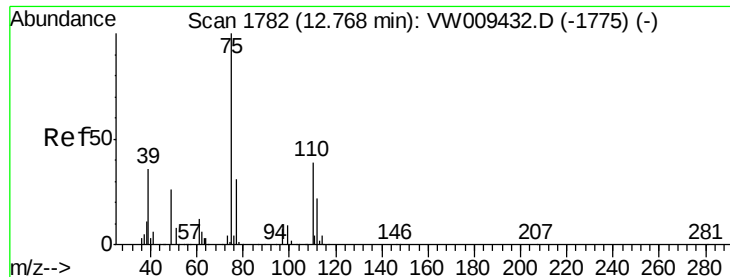
Ion 85.00 (84.70 to 85.70): VW

Ion 131.00 (130.70 to 131.70): V



Time-->





#59

1,2,3-Trichloropropane

Concen: 28.214 ug/L

RT: 12.77 min Scan# 1782

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

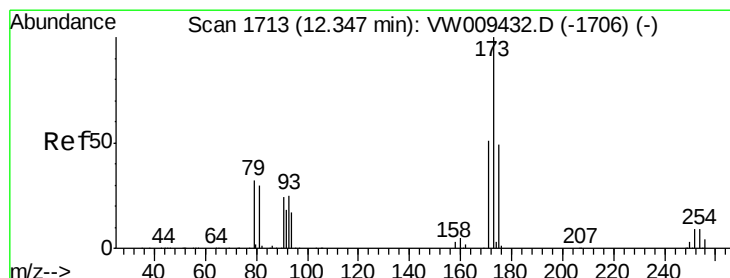
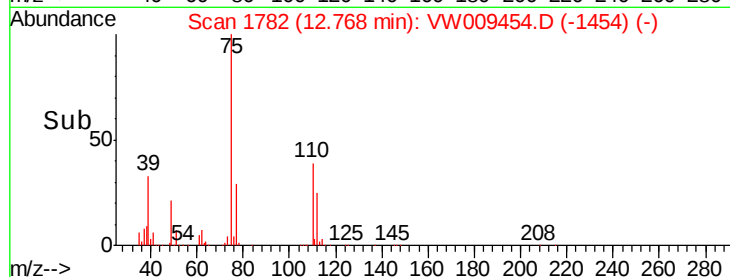
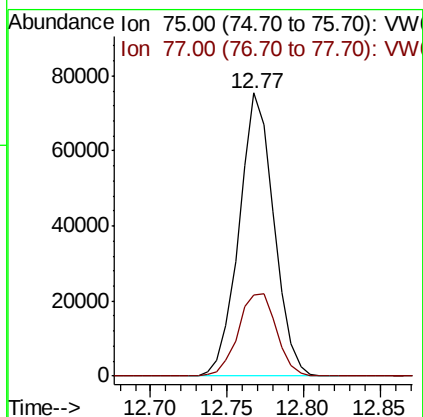
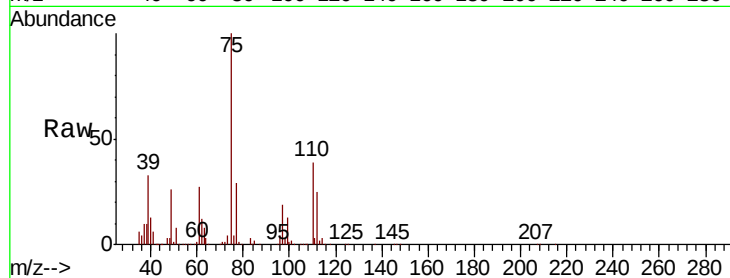
ClientSampled :

Tot Ion: 75 Resp: 119231

Ion Ratio Lower Upper

75 100

77 32.2 26.2 39.2



#62

Bromoform

Concen: 28.101 ug/L

RT: 12.35 min Scan# 1713

Delta R.T. -0.01 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

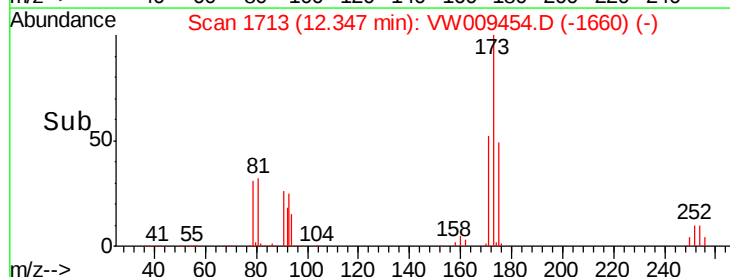
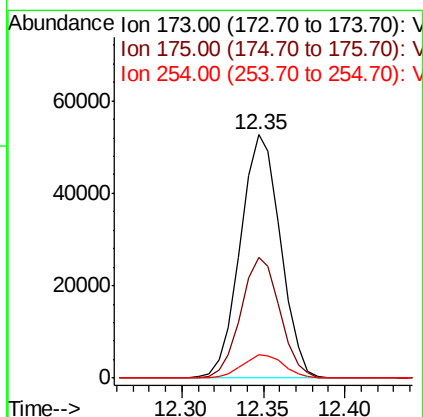
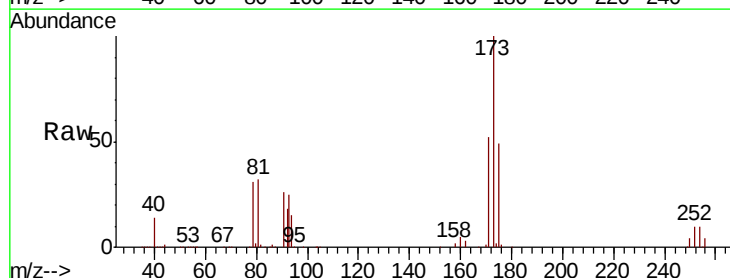
Tgt Ion: 173 Resp: 90339

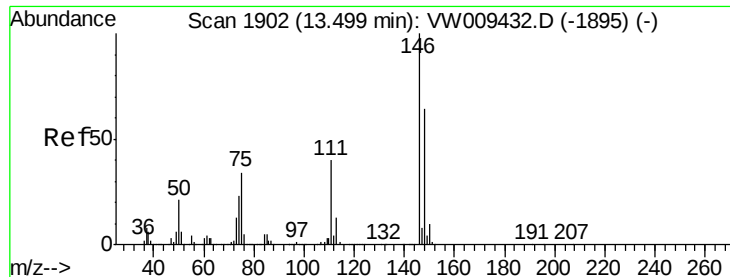
Ion Ratio Lower Upper

173 100

175 48.4 39.7 59.5

254 9.8 8.5 12.7

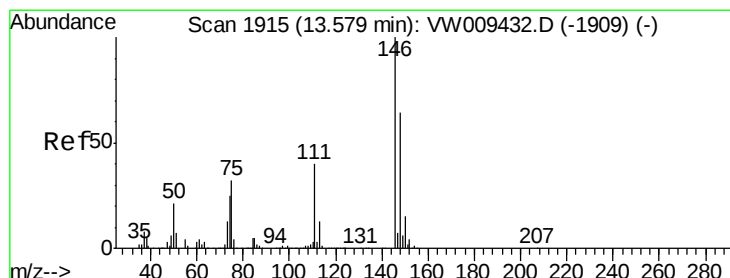
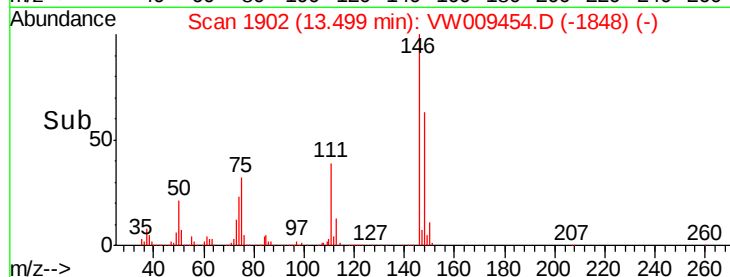
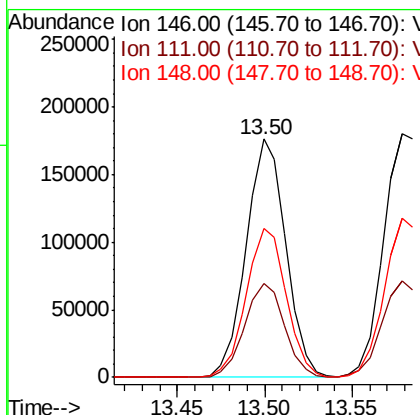
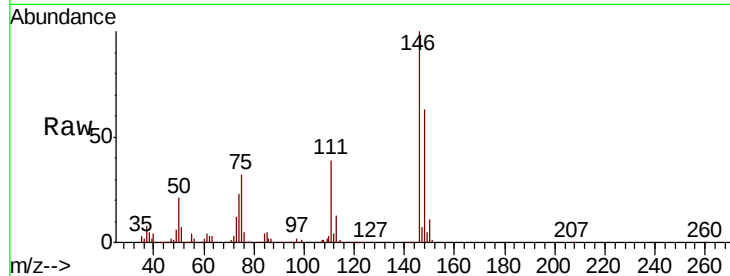




#63  
 1,3-Dichlorobenzene  
 Concen: 24.692 ug/L  
 RT: 13.50 min Scan# 1902  
 Delta R.T. 0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

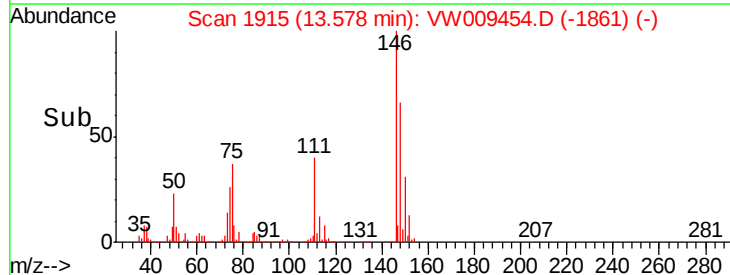
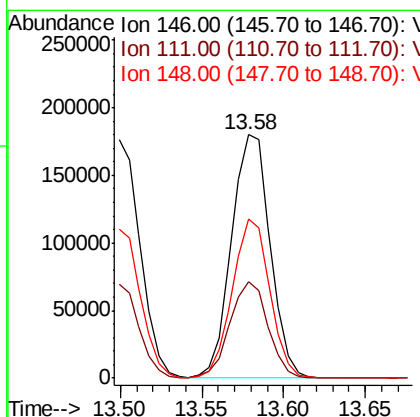
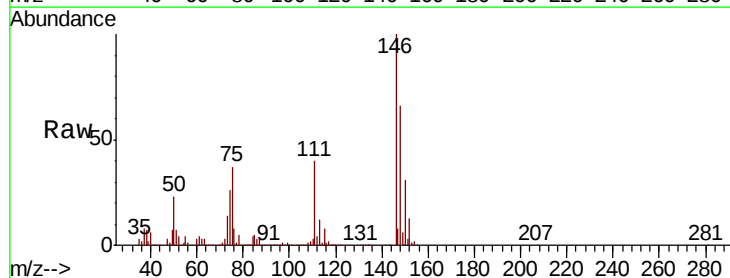
Instrument :  
 MSVOA\_W  
 ClientSampleId :

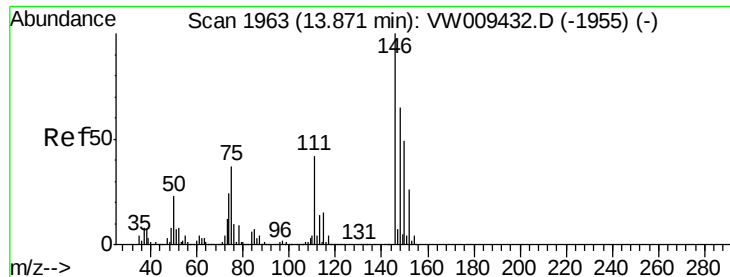
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 39.3  | 26.9  | 49.9  |
| 148     | 62.7  | 45.1  | 83.7  |



#64  
 1,4-Dichlorobenzene  
 Concen: 25.333 ug/L  
 RT: 13.58 min Scan# 1915  
 Delta R.T. -0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 39.5  | 27.8  | 51.6  |
| 148     | 65.5  | 46.3  | 86.1  |





#65

1,2-Dichlorobenzene

Concen: 25.539 ug/L

RT: 13.87 min Scan# 1963

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

ClientSampleId :

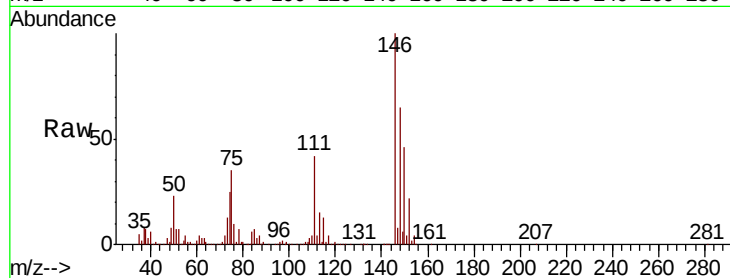
Tot Ion:146 Resp: 276183

Ion Ratio Lower Upper

146 100

111 41.8 33.5 50.3

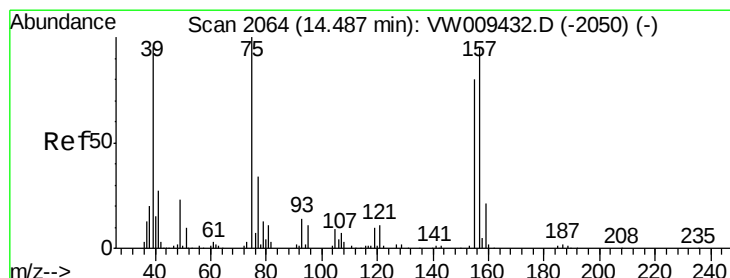
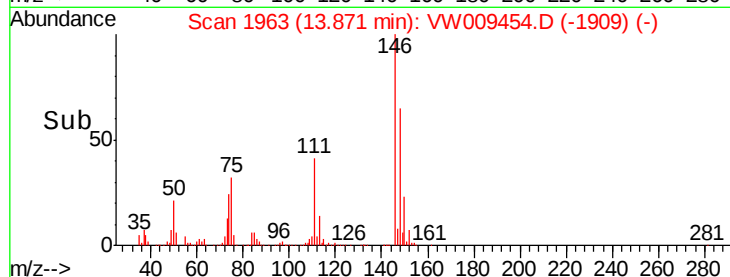
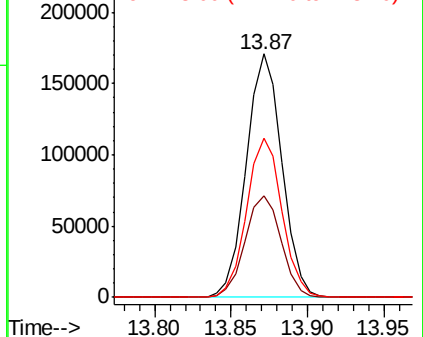
148 65.2 50.2 75.2



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 28.120 ug/L

RT: 14.49 min Scan# 2064

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

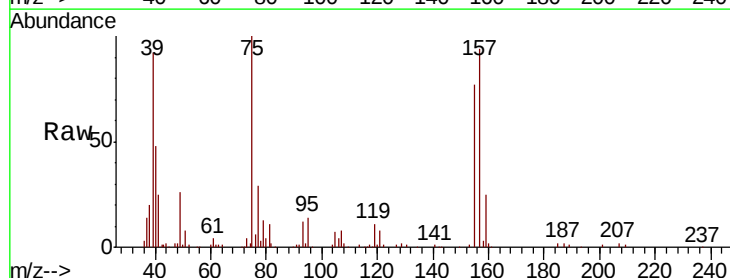
Tgt Ion: 75 Resp: 29803

Ion Ratio Lower Upper

75 100

157 94.0 89.0 133.4

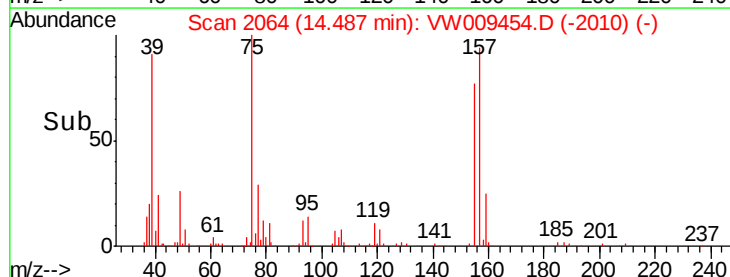
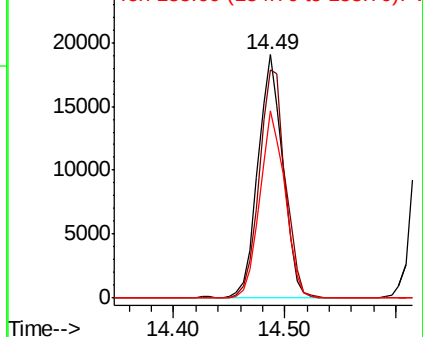
155 76.8 64.2 96.2

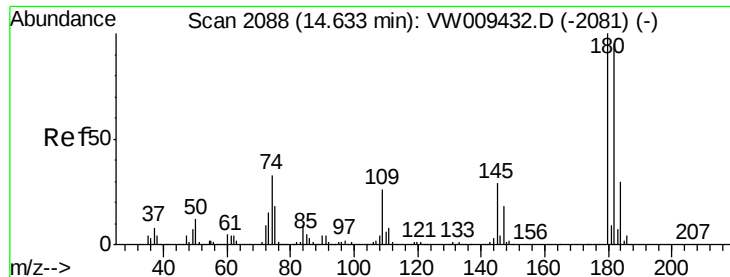


Abundance Ion 75.00 (74.70 to 75.70): VW

Ion 157.00 (156.70 to 157.70): V

Ion 155.00 (154.70 to 155.70): V

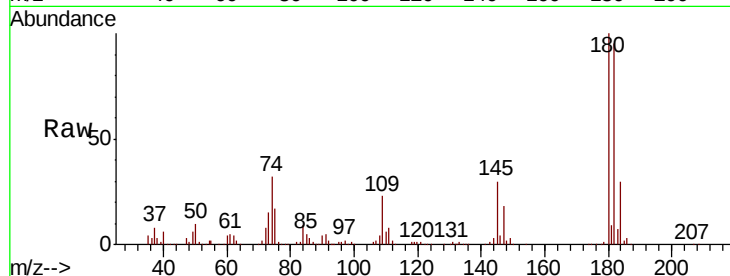




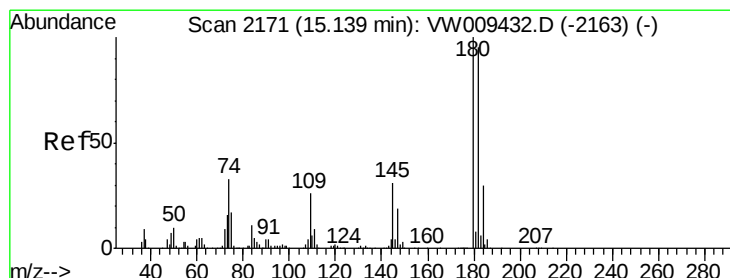
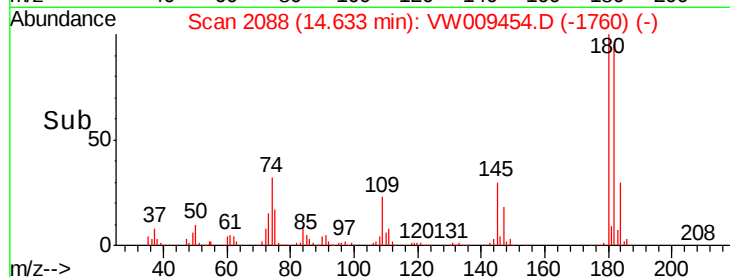
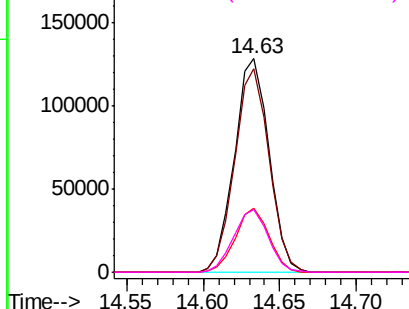
#67  
 1,3,5-Trichlorobenzene  
 Concen: 22.844 ug/L  
 RT: 14.63 min Scan# 2088  
 Delta R.T. 0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

Instrument :  
 MSVOA\_W  
 ClientSampleId :

|             |       |             |
|-------------|-------|-------------|
| Tot Ion:180 | Resp: | 202052      |
| Ion         | Ratio | Lower Upper |
| 180         | 100   |             |
| 182         | 94.8  | 76.1 114.1  |
| 184         | 29.3  | 23.8 35.6   |
| 145         | 29.4  | 23.4 35.2   |

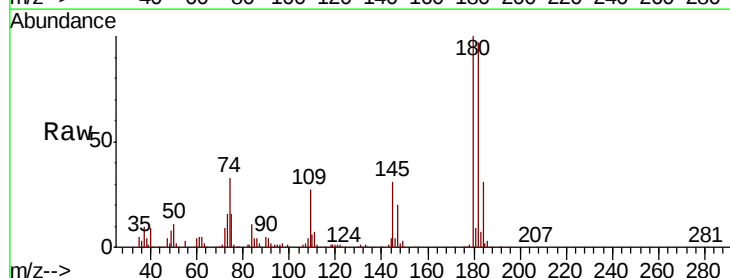


Abundance Ion 180.00 (179.70 to 180.70): V  
 200000  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

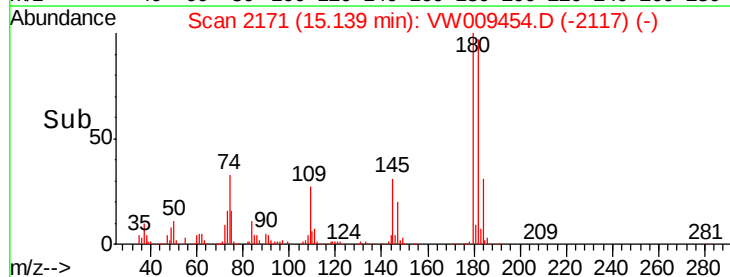
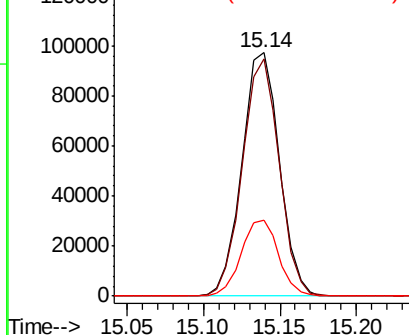


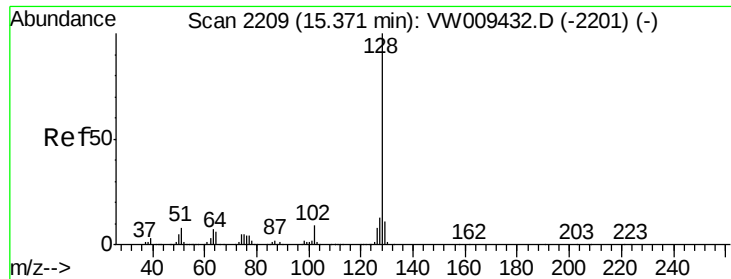
#68  
 1,2,4-trichlorobenzene  
 Concen: 22.339 ug/L  
 RT: 15.14 min Scan# 2171  
 Delta R.T. 0.00 min  
 Lab File: VW009454.D  
 Acq: 26 Mar 2019 03:35

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:180 | Resp: | 165968      |
| Ion         | Ratio | Lower Upper |
| 180         | 100   |             |
| 182         | 95.2  | 75.5 113.3  |
| 145         | 31.2  | 24.1 36.1   |



Abundance Ion 180.00 (179.70 to 180.70): V  
 120000  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V





#69

Naphthalene

Concen: 25.839 ug/L

RT: 15.37 min Scan# 2209

Delta R.T. 0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

Instrument :

MSVOA\_W

ClientSampleId :

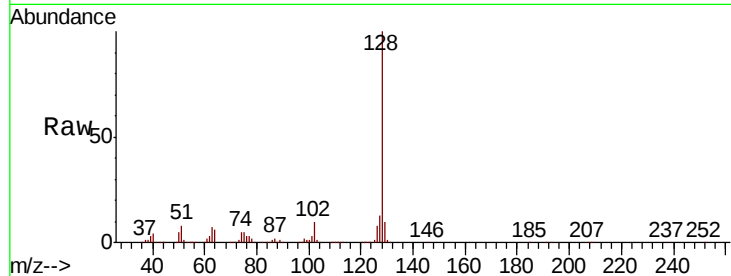
Tot Ion:128 Resp: 398008

Ion Ratio Lower Upper

128 100

129 10.9 8.7 13.1

127 13.7 11.1 16.7

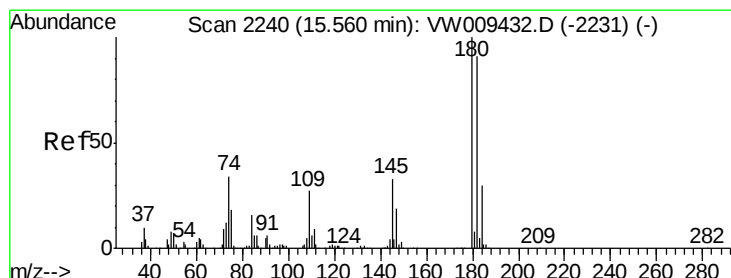
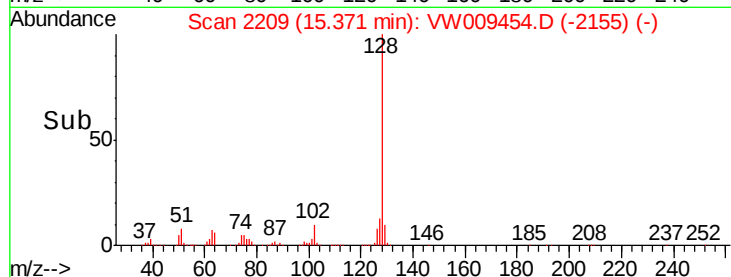
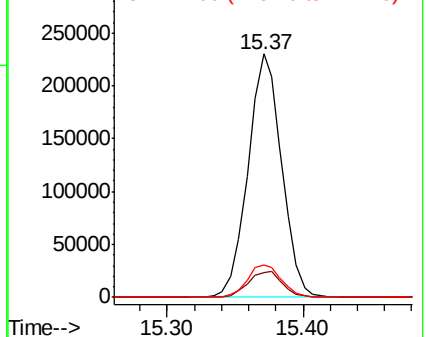


Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 24.091 ug/L

RT: 15.56 min Scan# 2240

Delta R.T. -0.00 min

Lab File: VW009454.D

Acq: 26 Mar 2019 03:35

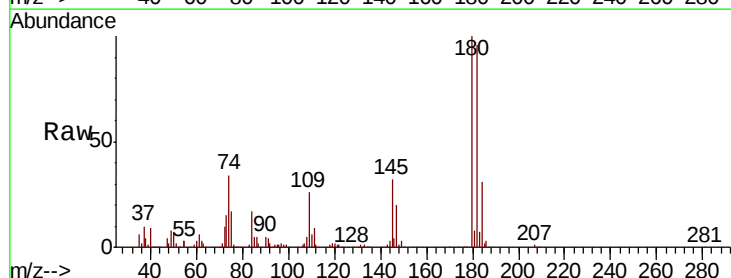
Tgt Ion:180 Resp: 167641

Ion Ratio Lower Upper

180 100

182 95.8 77.2 115.8

145 32.5 25.8 38.6



Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

