

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW062218\  
 Data File : VW003436.D  
 Acq On : 22 Jun 2018 19:55  
 Operator : SY/AP  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA\_W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

Quant Time: Jun 23 02:17:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM062018S.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Jun 23 02:14:03 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.85  | 114  | 355838   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 338256   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 177606   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.35   | 65    | 95030    | 19.69    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 78.76%  |
| 7) Chloroethane-d5             | 2.89   | 69    | 83275    | 20.68    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 82.72%  |
| 10) 1,1-Dichloroethene-d2      | 4.01   | 63    | 212235   | 22.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 88.60%  |
| 20) 2-Butanone-d5              | 7.09   | 46    | 76933    | 50.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 101.18% |
| 24) Chloroform-d               | 7.65   | 84    | 220786   | 23.59    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 94.36%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 133634   | 24.03    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 96.12%  |
| 29) Benzene-d6                 | 8.27   | 84    | 401003   | 22.34    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 89.36%  |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 131466   | 23.14    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 92.56%  |
| 37) Toluene-d8                 | 10.33  | 98    | 381549   | 22.23    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 88.92%  |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 59680    | 22.38    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 89.52%  |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 60685    | 52.26    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 104.52% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.70  | 84    | 133432   | 25.24    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 100.96% |
| 61) 1,2-Dichlorobenzene-d4     | 13.87  | 152   | 151410   | 22.57    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 90.28%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 2.00 | 85   | 76589    | 39.187 | ug/L  | # 83   |
| 3) Chloromethane               | 2.21 | 50   | 102233   | 24.349 | ug/L  | 99     |
| 5) Vinyl chloride              | 2.36 | 62   | 154487   | 25.424 | ug/L  | 96     |
| 6) Bromomethane                | 2.78 | 94   | 83066    | 23.494 | ug/L  | 100    |
| 8) Chloroethane                | 2.92 | 64   | 89884    | 24.276 | ug/L  | 98     |
| 9) Trichlorofluoromethane      | 3.25 | 101  | 96394    | 27.657 | ug/L  | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101  | 121860   | 25.895 | ug/L  | 97     |
| 12) 1,1-Dichloroethene         | 4.03 | 96   | 117388   | 26.391 | ug/L  | 95     |
| 13) Acetone                    | 4.14 | 43   | 80847    | 49.877 | ug/L  | 98     |
| 14) Carbon disulfide           | 4.37 | 76   | 361016   | 25.157 | ug/L  | 100    |
| 16) Methylene chloride         | 4.91 | 84   | 126113   | 25.721 | ug/L  | 99     |
| 17) Methyl tert-butyl Ether    | 5.42 | 73   | 220075   | 26.816 | ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 5.42 | 96   | 120255   | 25.947 | ug/L  | 97     |
| 19) 1,1-Dichloroethane         | 6.21 | 63   | 232190   | 26.846 | ug/L  | 99     |
| 21) 2-Butanone                 | 7.18 | 43   | 96676    | 50.755 | ug/L  | 100    |
| 22) cis-1,2-Dichloroethene     | 7.17 | 96   | 131148   | 26.627 | ug/L  | 97     |
| 23) Bromochloromethane         | 7.51 | 128  | 61215    | 26.866 | ug/L  | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW062218\  
 Data File : VW003436.D  
 Acq On : 22 Jun 2018 19:55  
 Operator : SY/AP  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA\_W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

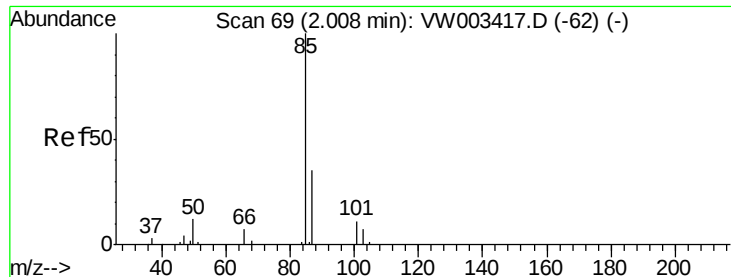
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

Quant Time: Jun 23 02:17:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM062018S.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Jun 23 02:14:03 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 25) Chloroform                 | 7.68  | 83   | 243745   | 27.412 | ug/L  | 99       |
| 27) 1,2-Dichloroethane         | 8.40  | 62   | 175316   | 27.226 | ug/L  | 100      |
| 30) Cyclohexane                | 7.95  | 56   | 207949   | 26.628 | ug/L  | 99       |
| 31) 1,1,1-Trichloroethane      | 7.87  | 97   | 192711   | 25.932 | ug/L  | 99       |
| 32) Carbon tetrachloride       | 8.07  | 117  | 183689   | 25.585 | ug/L  | 100      |
| 34) Benzene                    | 8.32  | 78   | 516409   | 26.772 | ug/L  | 100      |
| 35) Trichloroethene            | 9.09  | 95   | 136418   | 26.240 | ug/L  | 98       |
| 36) Methylcyclohexane          | 9.34  | 83   | 235422   | 26.526 | ug/L  | 100      |
| 40) 1,2-Dichloropropane        | 9.37  | 63   | 138680   | 27.321 | ug/L  | 99       |
| 41) Bromodichloromethane       | 9.65  | 83   | 173859   | 26.648 | ug/L  | 99       |
| 42) cis-1,3-Dichloropropene    | 10.07 | 75   | 203807   | 26.904 | ug/L  | 98       |
| 43) 4-Methyl-2-pentanone       | 10.21 | 43   | 198073   | 54.620 | ug/L  | 99       |
| 44) Toluene                    | 10.39 | 91   | 569917   | 27.244 | ug/L  | 99       |
| 45) trans-1,3-Dichloropropene  | 10.61 | 75   | 186357   | 27.185 | ug/L  | 99       |
| 46) 1,1,2-Trichloroethane      | 10.79 | 97   | 103258   | 27.249 | ug/L  | 97       |
| 47) Tetrachloroethene          | 10.87 | 164  | 112527   | 25.757 | ug/L  | 98       |
| 49) 2-Hexanone                 | 10.98 | 43   | 153331   | 56.740 | ug/L  | 99       |
| 50) Dibromochloromethane       | 11.13 | 129  | 123050   | 26.674 | ug/L  | 96       |
| 51) 1,2-Dibromoethane          | 11.24 | 107  | 100374   | 26.656 | ug/L  | 99       |
| 52) Chlorobenzene              | 11.66 | 112  | 363469   | 26.757 | ug/L  | 99       |
| 53) Ethylbenzene               | 11.74 | 91   | 647081   | 27.578 | ug/L  | 99       |
| 54) m,p-Xylene                 | 11.85 | 106  | 242173   | 27.789 | ug/L  | 98       |
| 55) o-xylene                   | 12.17 | 106  | 230759   | 27.838 | ug/L  | 97       |
| 56) Styrene                    | 12.19 | 104  | 405589   | 28.340 | ug/L  | 99       |
| 57) Isopropylbenzene           | 12.47 | 105  | 644060   | 28.003 | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 137565   | 27.538 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 12.77 | 75   | 106089   | 27.711 | ug/L  | 98       |
| 62) Bromoform                  | 12.35 | 173  | 76428    | 25.569 | ug/L  | 98       |
| 63) 1,3-Dichlorobenzene        | 13.51 | 146  | 284351   | 26.039 | ug/L  | 99       |
| 64) 1,4-Dichlorobenzene        | 13.58 | 146  | 298662   | 26.086 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 13.88 | 146  | 275444   | 26.419 | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan | 14.49 | 75   | 23423    | 25.599 | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene     | 14.64 | 180  | 228106   | 26.881 | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene     | 15.15 | 180  | 186003   | 26.925 | ug/L  | 97       |
| 69) Naphthalene                | 15.38 | 128  | 359414   | 27.807 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 15.57 | 180  | 176471   | 27.873 | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 39.187 ug/L

RT: 2.00 min Scan# 68

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

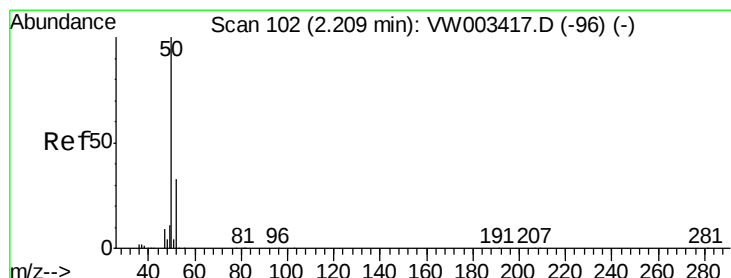
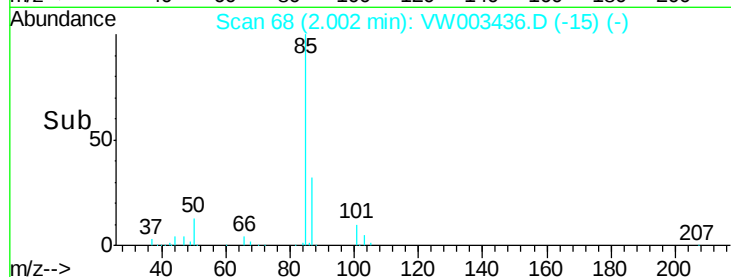
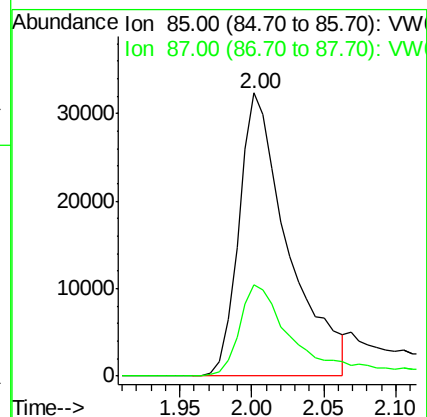
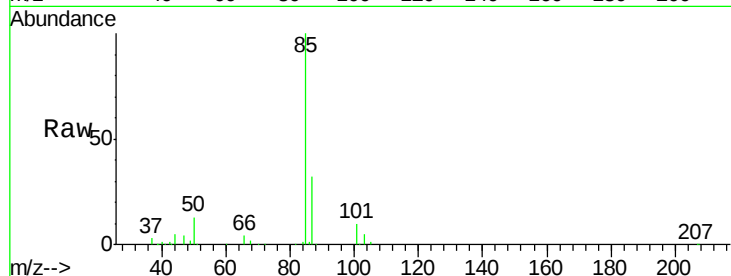
VSTD02598

Tgt Ion: 85 Resp: 76589

Ion Ratio Lower Upper

85 100

87 33.1 17.1 31.7#



#3

Chloromethane

Concen: 24.349 ug/L

RT: 2.21 min Scan# 102

Delta R.T. -0.00 min

Lab File: VW003436.D

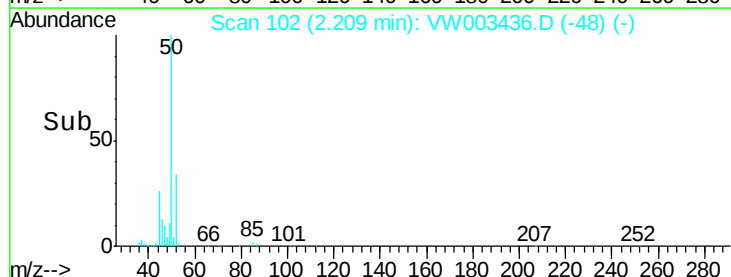
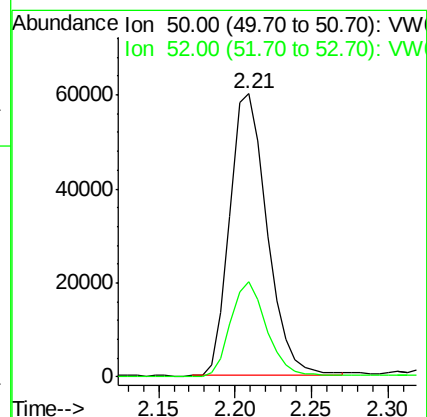
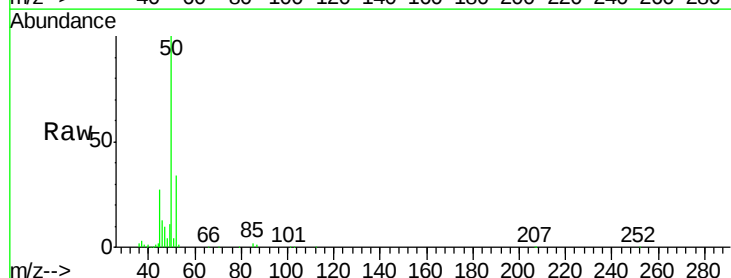
Acq: 22 Jun 2018 19:55

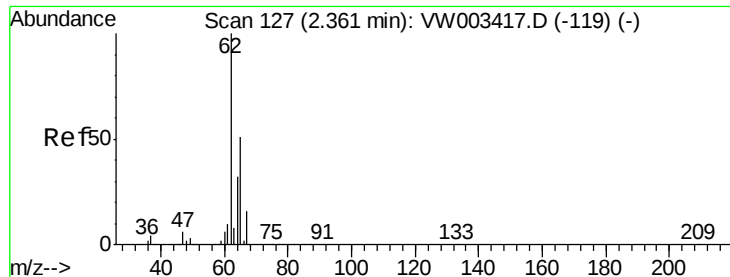
Tgt Ion: 50 Resp: 102233

Ion Ratio Lower Upper

50 100

52 33.7 23.3 43.3





#5

Vinyl chloride

Concen: 25.424 ug/L

RT: 2.36 min Scan# 126

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

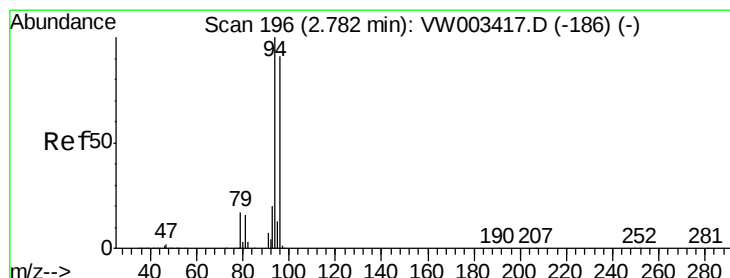
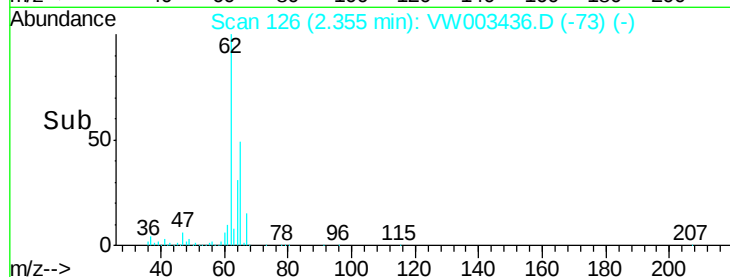
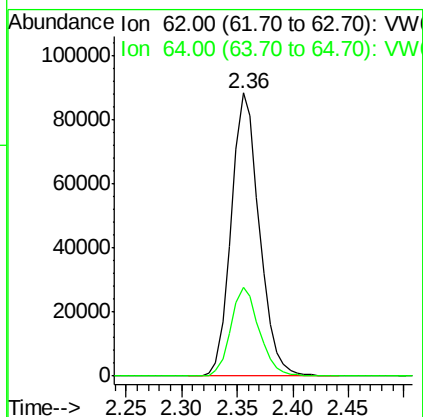
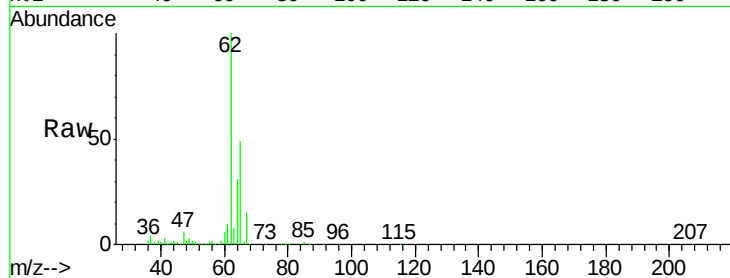
VSTD02598

Tgt Ion: 62 Resp: 154487

Ion Ratio Lower Upper

62 100

64 31.5 23.5 43.7



#6

Bromomethane

Concen: 23.494 ug/L

RT: 2.78 min Scan# 196

Delta R.T. -0.00 min

Lab File: VW003436.D

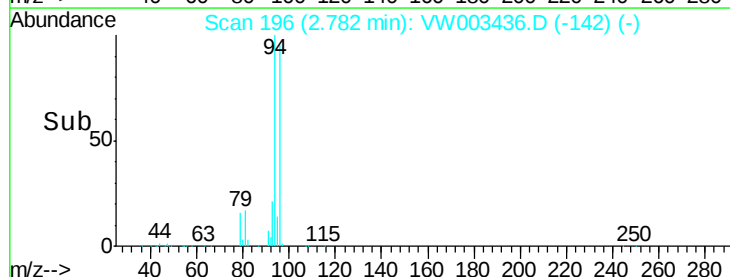
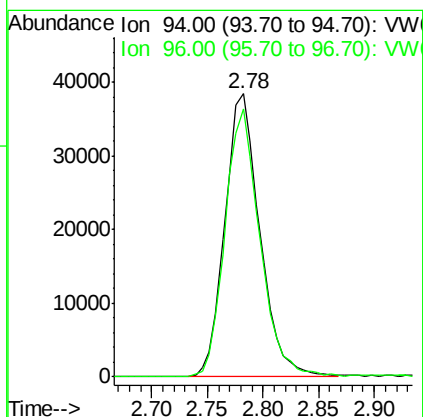
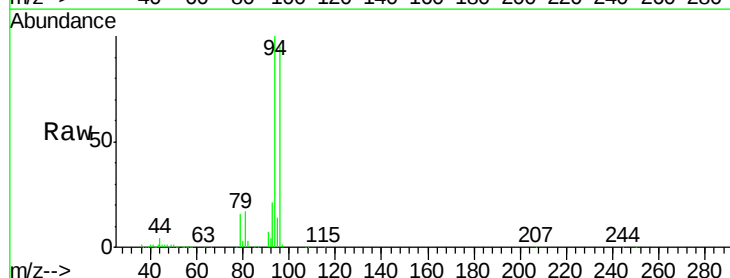
Acq: 22 Jun 2018 19:55

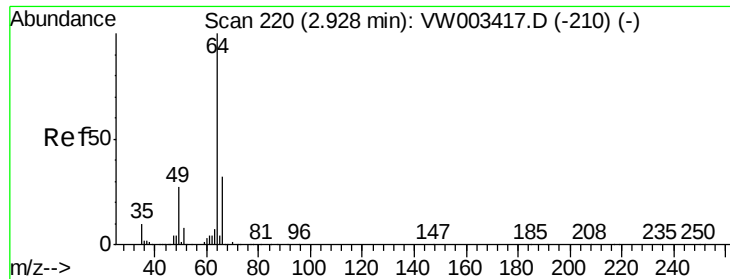
Tgt Ion: 94 Resp: 83066

Ion Ratio Lower Upper

94 100

96 95.1 9.5 180.3





#8

Chloroethane

Concen: 24.276 ug/L

RT: 2.92 min Scan# 219

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

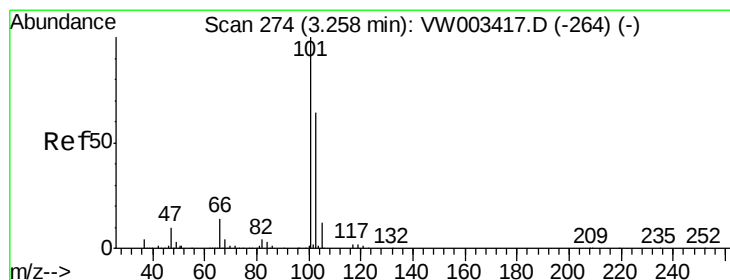
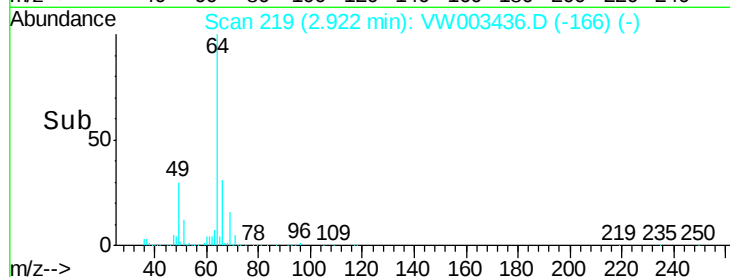
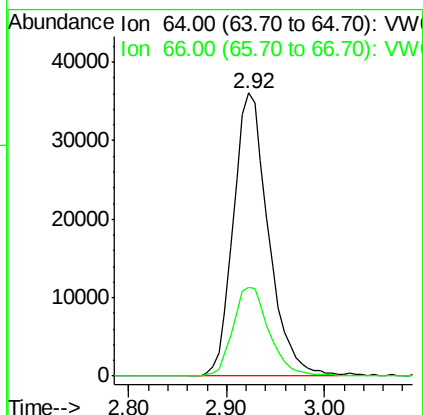
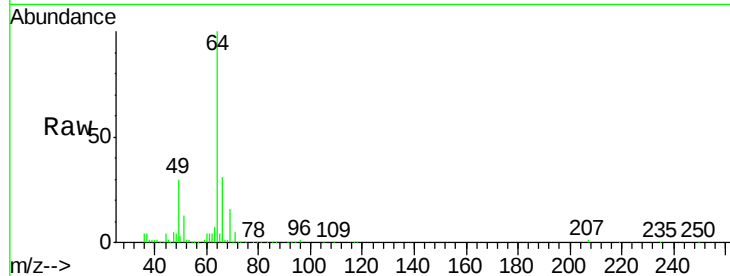
VSTD02598

Tgt Ion: 64 Resp: 89884

Ion Ratio Lower Upper

64 100

66 31.3 22.9 42.5



#9

Trichlorofluoromethane

Concen: 27.657 ug/L

RT: 3.25 min Scan# 273

Delta R.T. -0.01 min

Lab File: VW003436.D

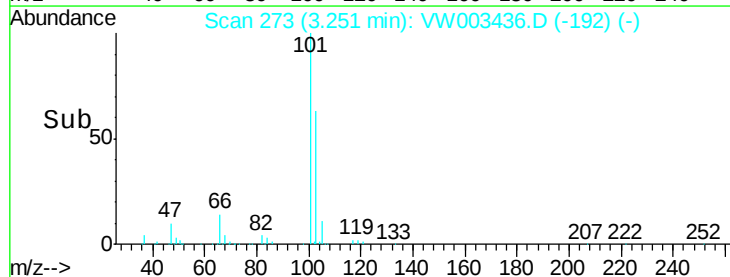
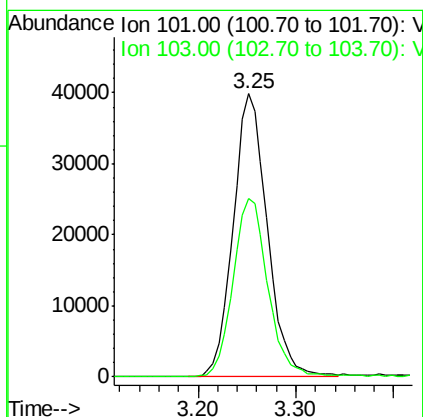
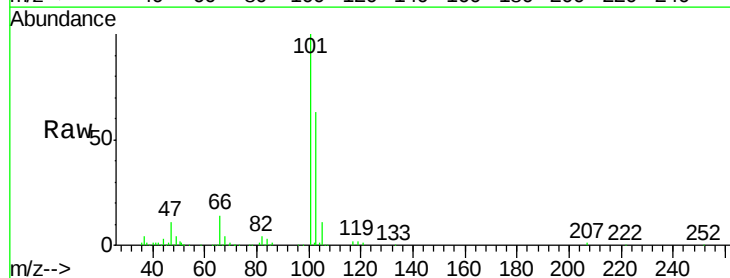
Acq: 22 Jun 2018 19:55

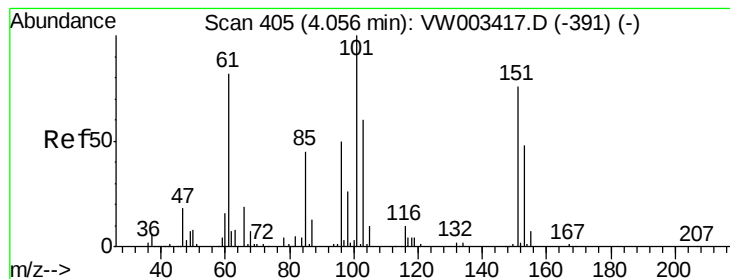
Tgt Ion: 101 Resp: 96394

Ion Ratio Lower Upper

101 100

103 64.2 45.1 83.7





#11

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

Concen: 25.895 ug/L

RT: 4.06 min Scan# 406

Delta R.T. 0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02598

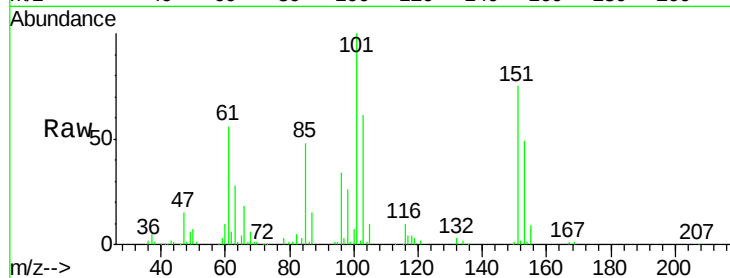
Tgt Ion:101 Resp: 121860

Ion Ratio Lower Upper

101 100

85 46.1 35.4 53.0

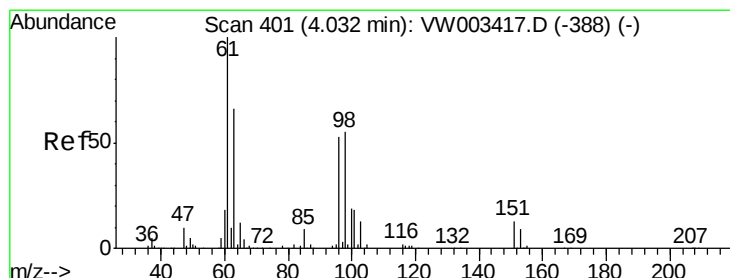
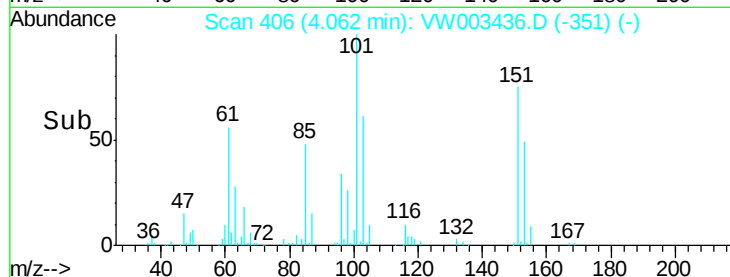
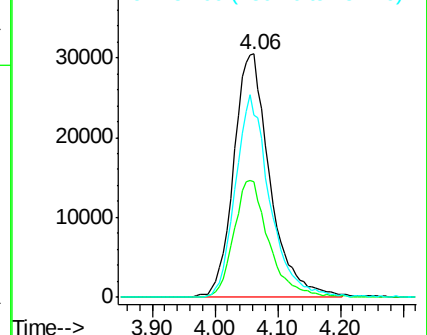
151 78.8 61.4 92.0



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: 26.391 ug/L

RT: 4.03 min Scan# 400

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

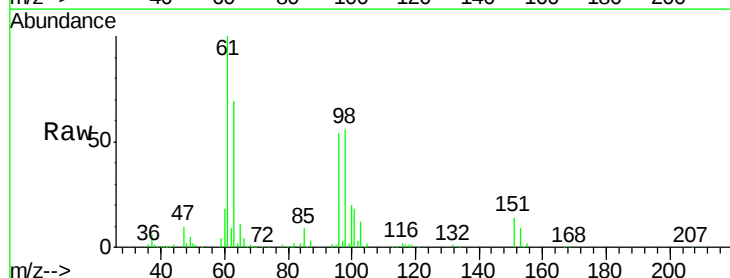
Tgt Ion: 96 Resp: 117388

Ion Ratio Lower Upper

96 100

61 183.9 124.1 230.5

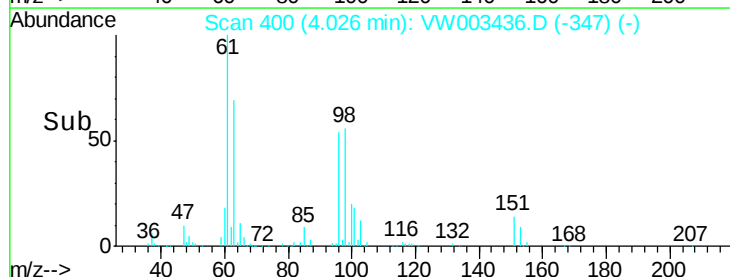
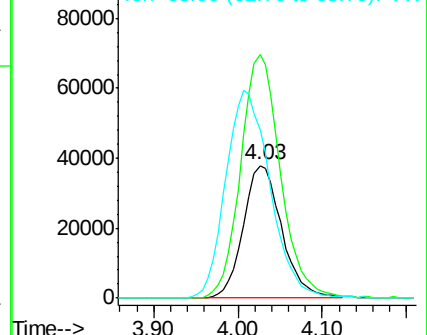
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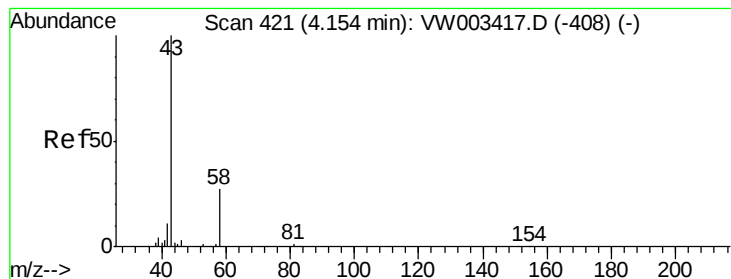


Abundance Ion 96.00 (95.70 to 96.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 63.00 (62.70 to 63.70): VW





#13

Acetone

Concen: 49.877 ug/L

RT: 4.14 min Scan# 419

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

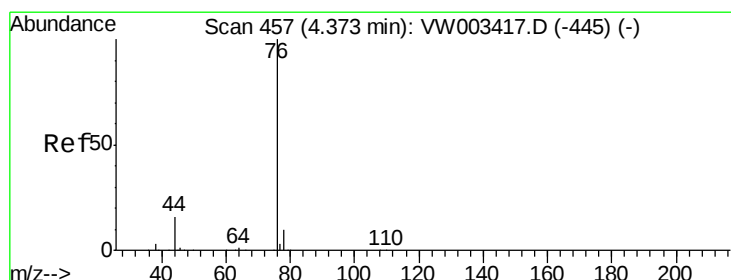
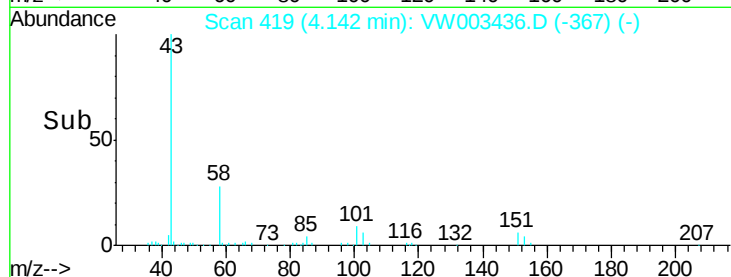
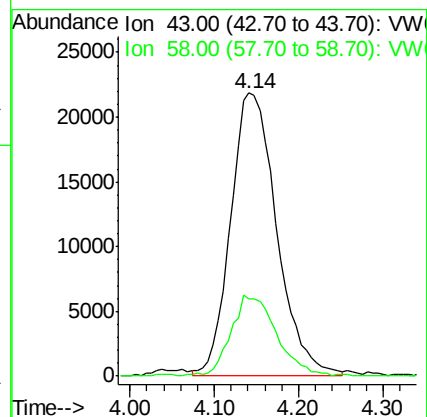
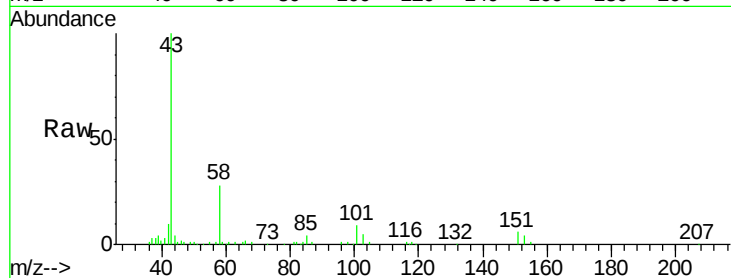
VSTD02598

Tgt Ion: 43 Resp: 80847

Ion Ratio Lower Upper

43 100

58 28.0 0.0 58.6



#14

Carbon disulfide

Concen: 25.157 ug/L

RT: 4.37 min Scan# 456

Delta R.T. -0.01 min

Lab File: VW003436.D

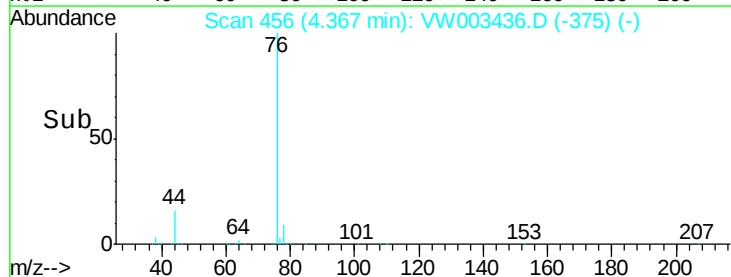
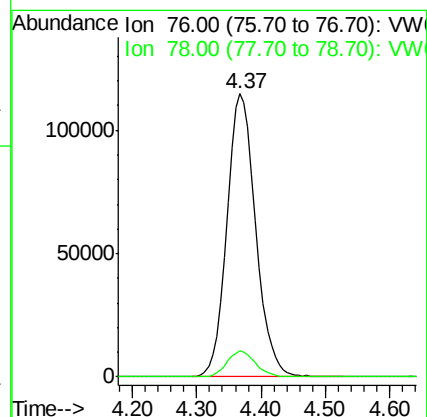
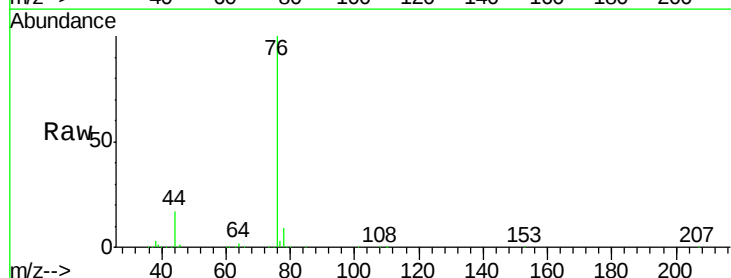
Acq: 22 Jun 2018 19:55

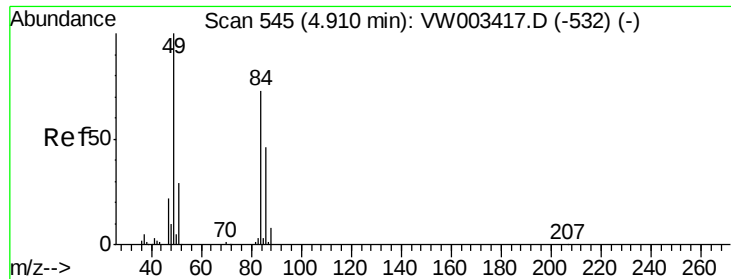
Tgt Ion: 76 Resp: 361016

Ion Ratio Lower Upper

76 100

78 9.2 7.3 10.9

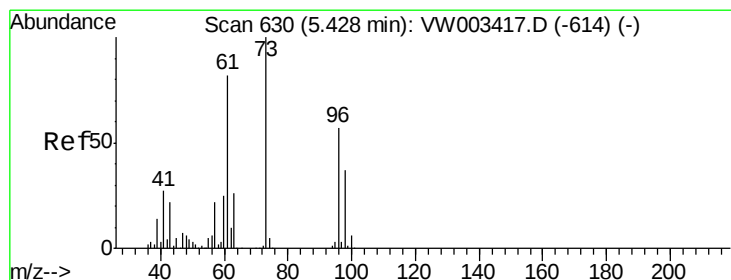
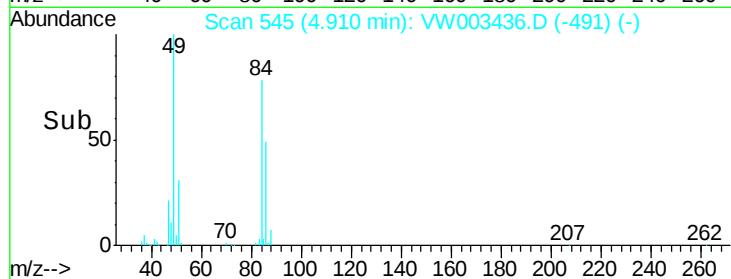
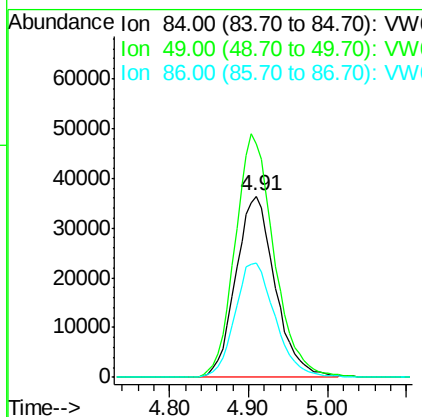
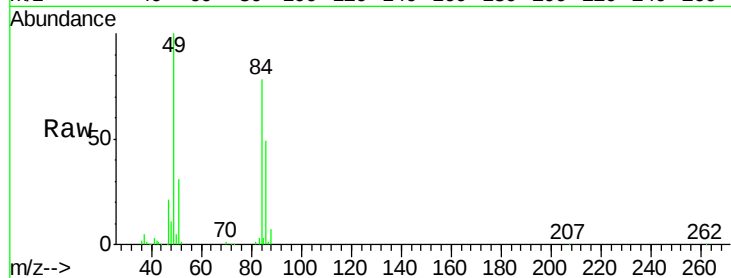




#16  
Methylene chloride  
Concen: 25.721 ug/L  
RT: 4.91 min Scan# 545  
Delta R.T. -0.00 min  
Lab File: VW003436.D  
Acq: 22 Jun 2018 19:55

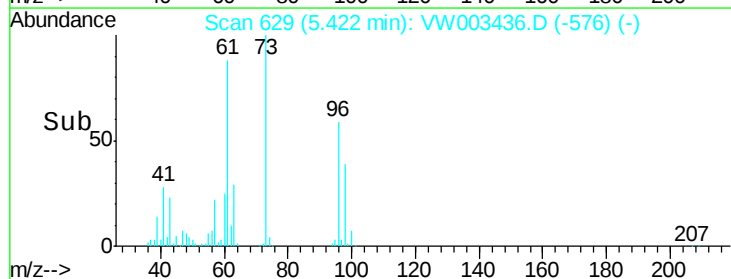
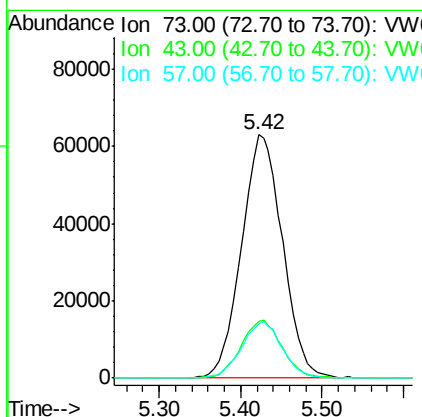
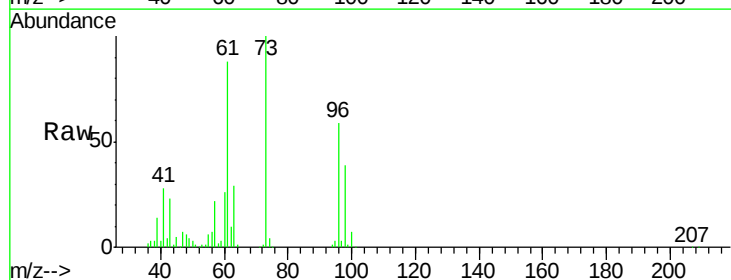
Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTD02598

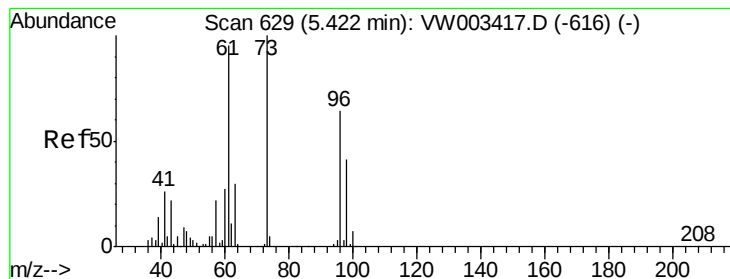
Tgt Ion: 84 Resp: 126113  
Ion Ratio Lower Upper  
84 100  
49 128.9 88.7 164.7  
86 63.2 44.2 82.0



#17  
Methyl tert-butyl Ether  
Concen: 26.816 ug/L  
RT: 5.42 min Scan# 629  
Delta R.T. -0.01 min  
Lab File: VW003436.D  
Acq: 22 Jun 2018 19:55

Tgt Ion: 73 Resp: 220075  
Ion Ratio Lower Upper  
73 100  
43 23.3 18.6 27.8  
57 23.0 18.1 27.1





#18

trans-1,2-Dichloroethene

Concen: 25.947 ug/L

RT: 5.42 min Scan# 628

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02598

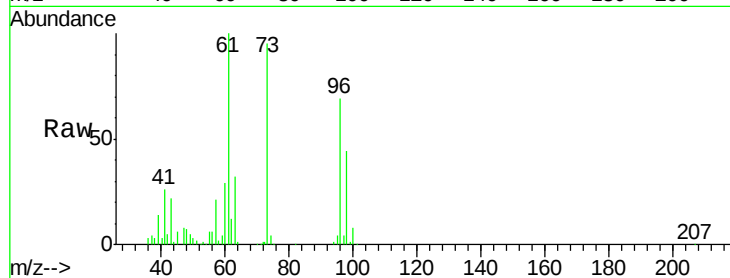
Tgt Ion: 96 Resp: 120255

Ion Ratio Lower Upper

96 100

61 145.4 98.0 182.0

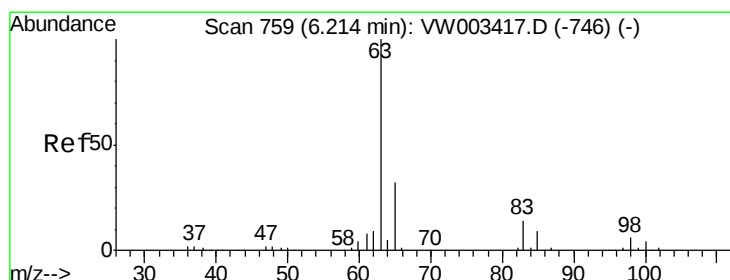
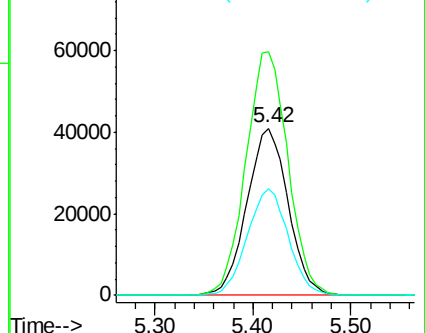
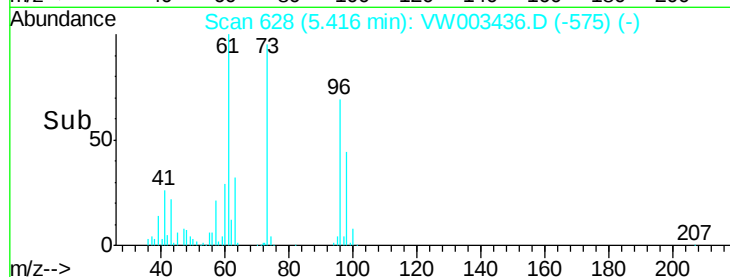
98 63.8 44.2 82.2



Abundance Ion 96.00 (95.70 to 96.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 98.00 (97.70 to 98.70): VW



#19

1,1-Dichloroethane

Concen: 26.846 ug/L

RT: 6.21 min Scan# 758

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

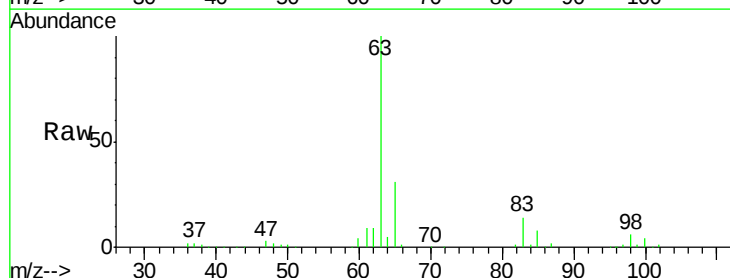
Tgt Ion: 63 Resp: 232190

Ion Ratio Lower Upper

63 100

65 30.7 21.8 40.4

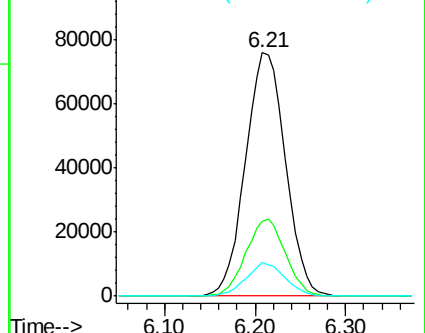
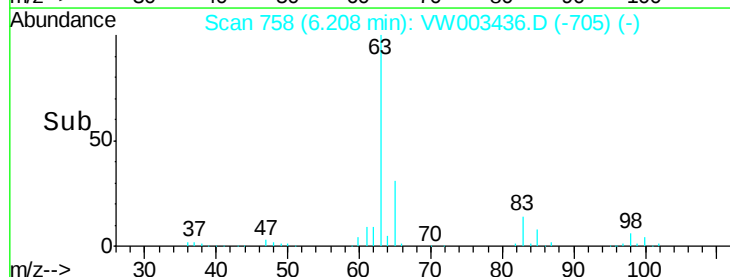
83 13.7 9.0 16.6

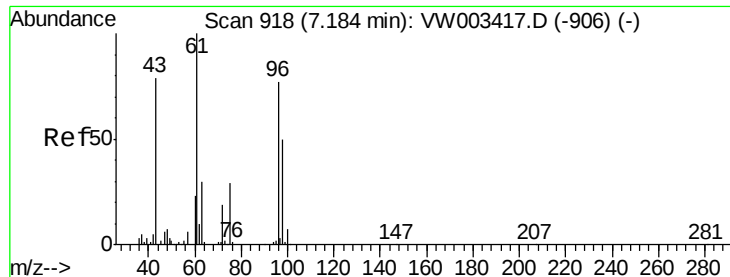


Abundance Ion 63.00 (62.70 to 63.70): VW

Ion 65.00 (64.70 to 65.70): VW

Ion 83.00 (82.70 to 83.70): VW





#21

2-Butanone

Concen: 50.755 ug/L

RT: 7.18 min Scan# 918

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

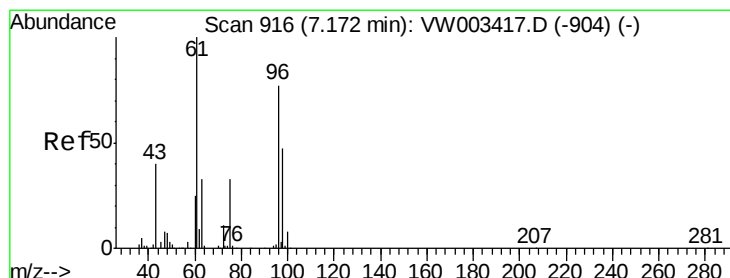
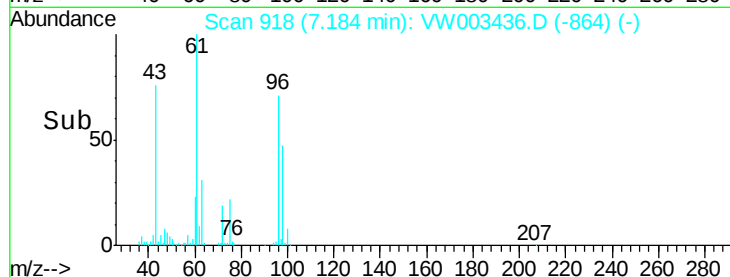
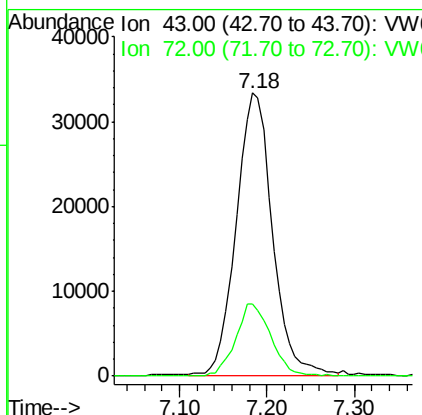
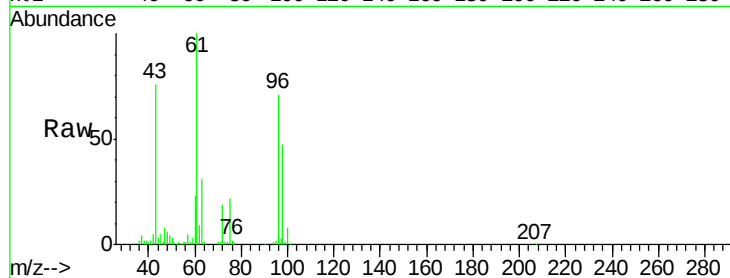
VSTD02598

Tgt Ion: 43 Resp: 96676

Ion Ratio Lower Upper

43 100

72 24.8 12.5 37.5



#22

cis-1,2-Dichloroethene

Concen: 26.627 ug/L

RT: 7.17 min Scan# 915

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

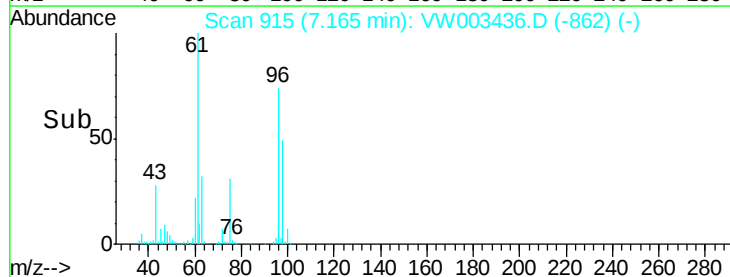
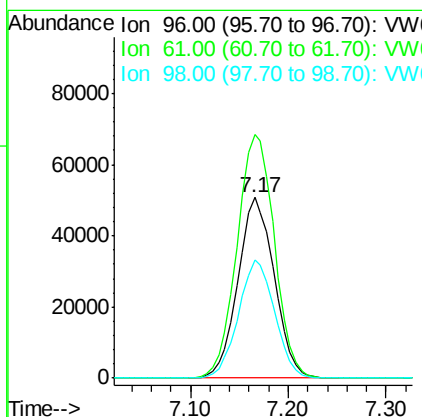
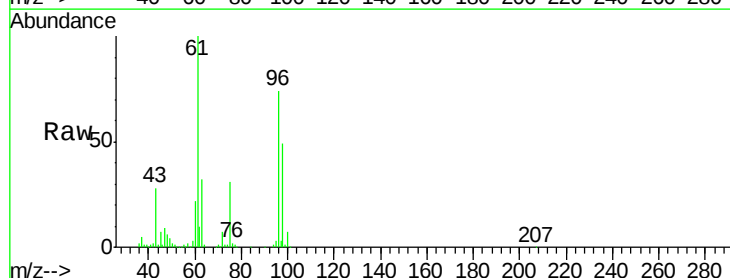
Tgt Ion: 96 Resp: 131148

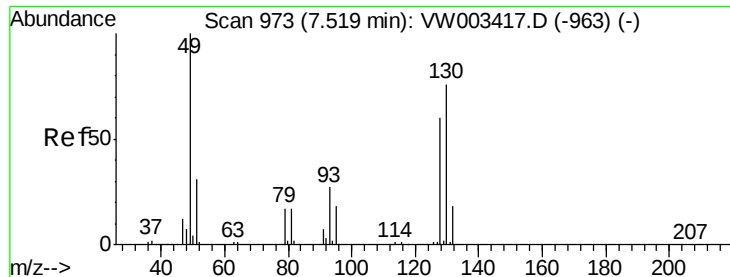
Ion Ratio Lower Upper

96 100

61 134.7 97.7 181.5

98 65.6 45.0 83.6

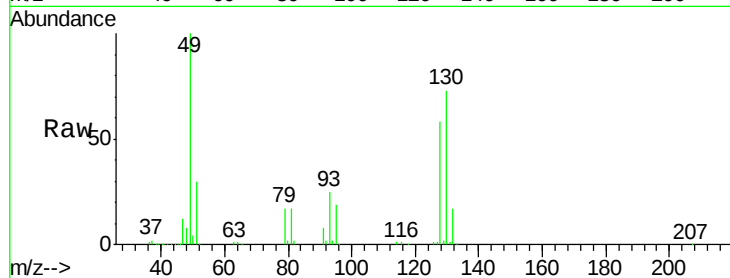




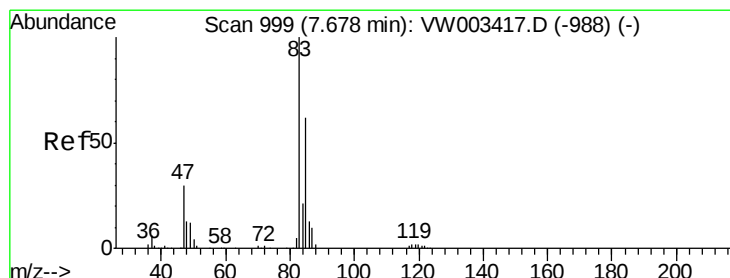
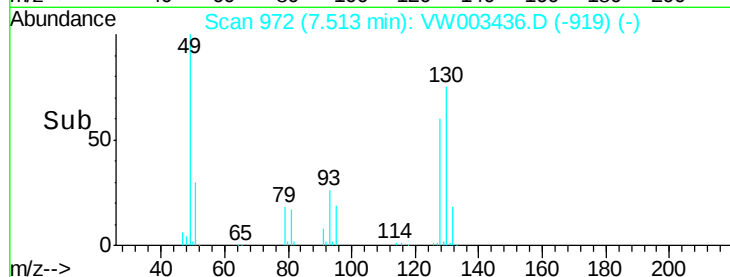
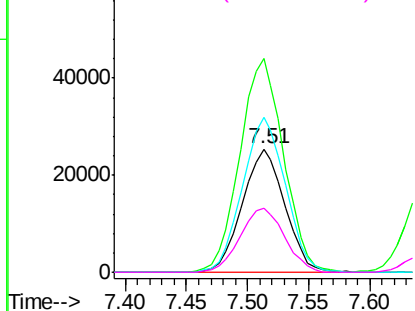
#23  
Bromochloromethane  
Concen: 26.866 ug/L  
RT: 7.51 min Scan# 972  
Delta R.T. -0.01 min  
Lab File: VW003436.D  
Acq: 22 Jun 2018 19:55

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTD02598

Tgt Ion:128 Resp: 61215  
Ion Ratio Lower Upper  
128 100  
49 173.0 122.0 226.6  
130 125.4 88.1 163.5  
51 52.0 43.5 65.3

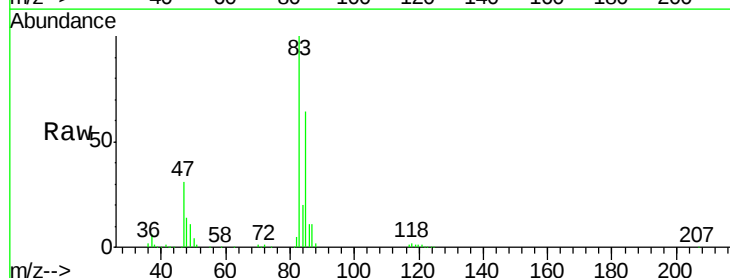


Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 49.00 (48.70 to 49.70): VW  
Ion 130.00 (129.70 to 130.70): V  
Ion 51.00 (50.70 to 51.70): VW

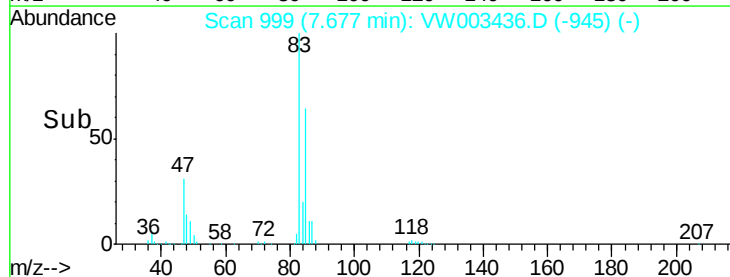
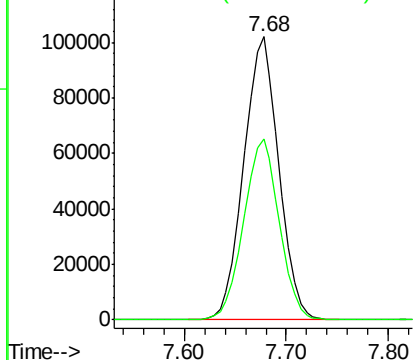


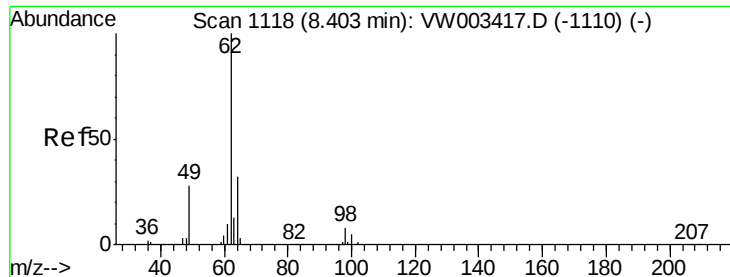
#25  
Chloroform  
Concen: 27.412 ug/L  
RT: 7.68 min Scan# 999  
Delta R.T. -0.00 min  
Lab File: VW003436.D  
Acq: 22 Jun 2018 19:55

Tgt Ion: 83 Resp: 243745  
Ion Ratio Lower Upper  
83 100  
85 64.9 46.1 85.5



Abundance Ion 83.00 (82.70 to 83.70): VW  
Ion 85.00 (84.70 to 85.70): VW

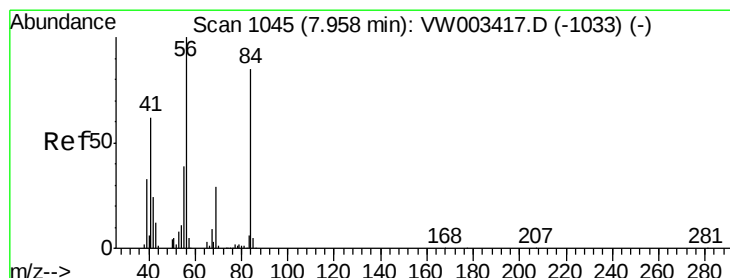
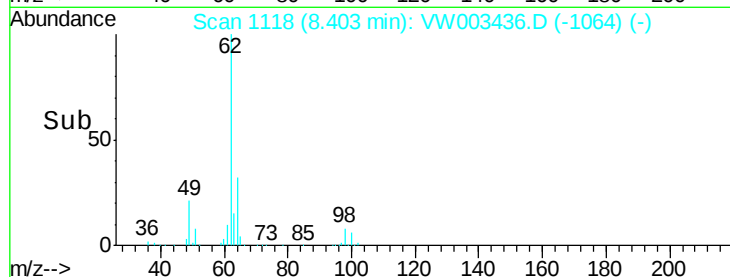
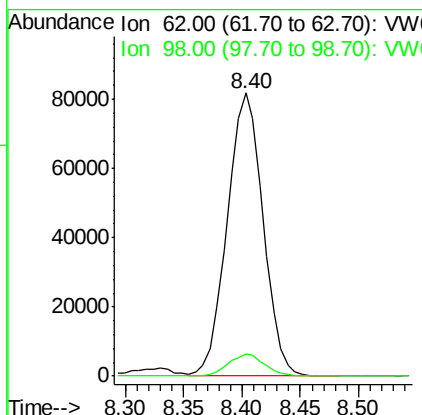
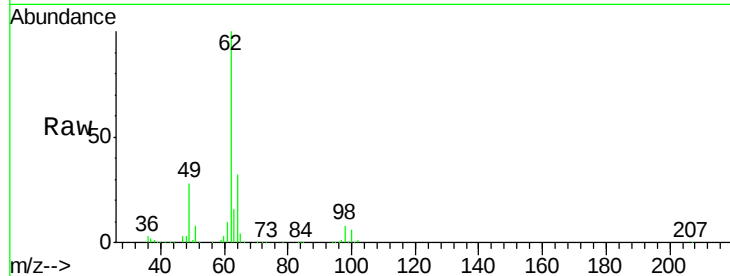




#27  
 1,2-Dichloroethane  
 Concen: 27.226 ug/L  
 RT: 8.40 min Scan# 1118  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

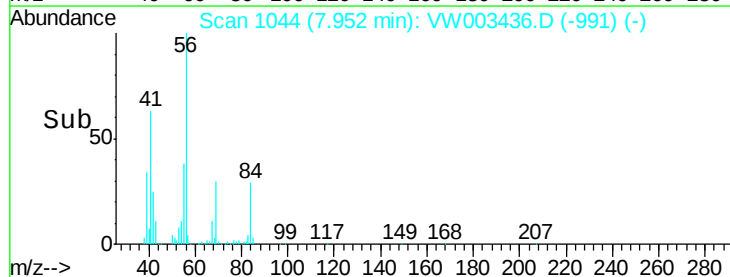
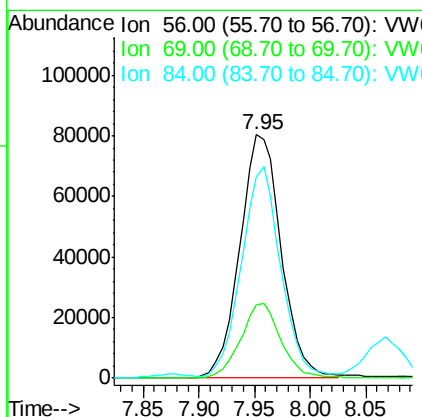
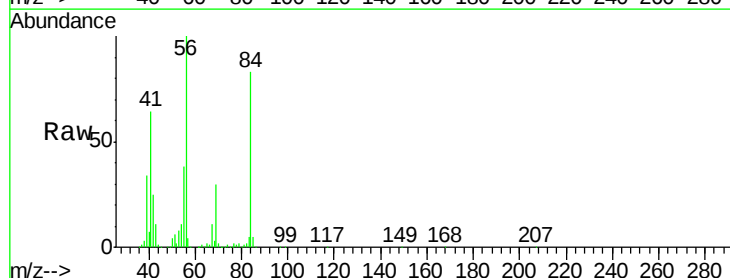
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

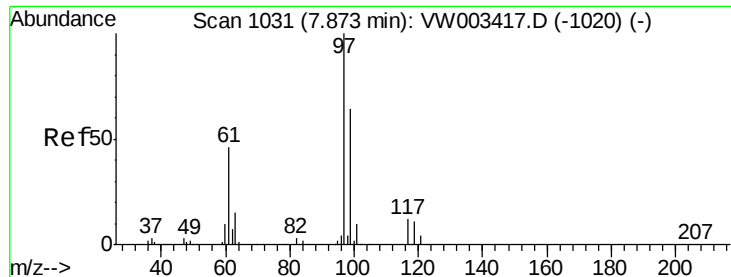
Tgt Ion: 62 Resp: 175316  
 Ion Ratio Lower Upper  
 62 100  
 98 8.1 6.5 9.7



#30  
 Cyclohexane  
 Concen: 26.628 ug/L  
 RT: 7.95 min Scan# 1044  
 Delta R.T. -0.01 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

Tgt Ion: 56 Resp: 207949  
 Ion Ratio Lower Upper  
 56 100  
 69 29.6 23.4 35.2  
 84 82.8 67.4 101.0





#31

1,1,1-Trichloroethane

Concen: 25.932 ug/L

RT: 7.87 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02598

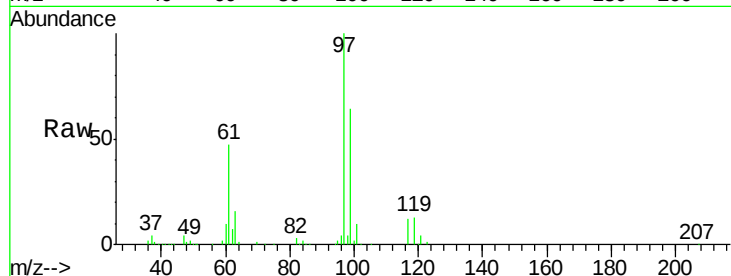
Tgt Ion: 97 Resp: 192711

Ion Ratio Lower Upper

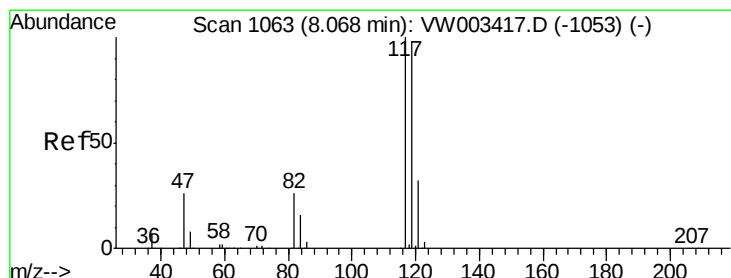
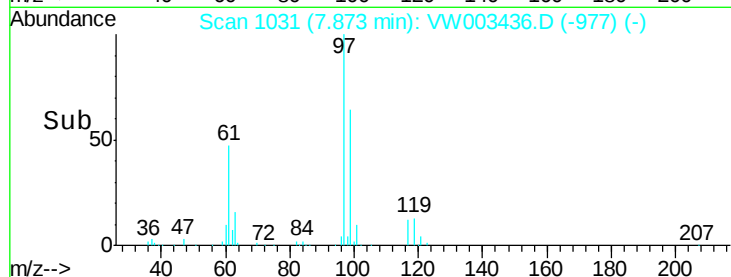
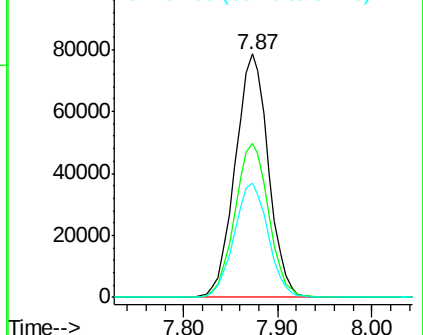
97 100

99 64.6 50.9 76.3

61 48.1 37.7 56.5



Abundance Ion 97.00 (96.70 to 97.70): VW  
Ion 99.00 (98.70 to 99.70): VW  
Ion 61.00 (60.70 to 61.70): VW



#32

Carbon tetrachloride

Concen: 25.585 ug/L

RT: 8.07 min Scan# 1063

Delta R.T. -0.00 min

Lab File: VW003436.D

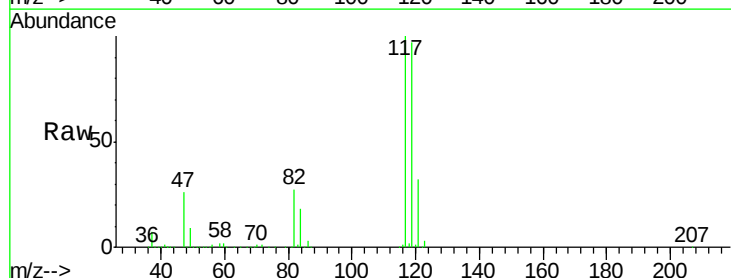
Acq: 22 Jun 2018 19:55

Tgt Ion: 117 Resp: 183689

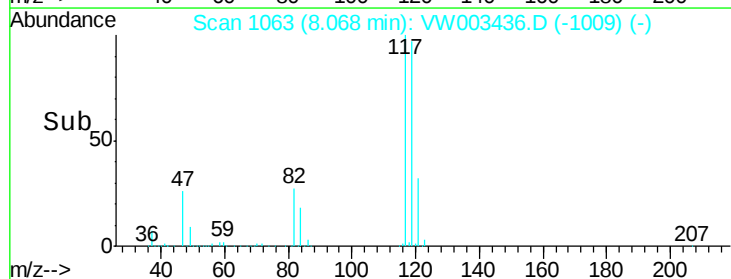
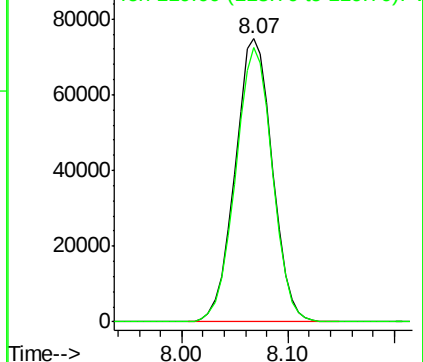
Ion Ratio Lower Upper

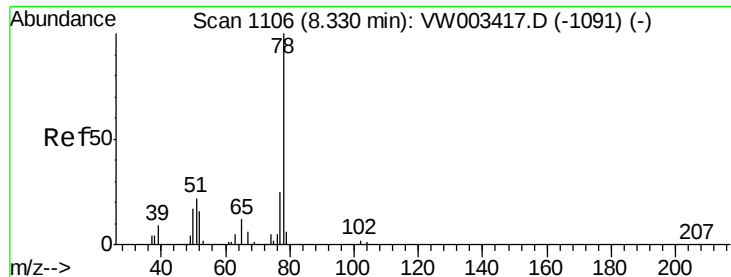
117 100

119 95.7 76.6 114.8



Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V





#34

Benzene

Concen: 26.772 ug/L

RT: 8.32 min Scan# 1105

Delta R.T. -0.01 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

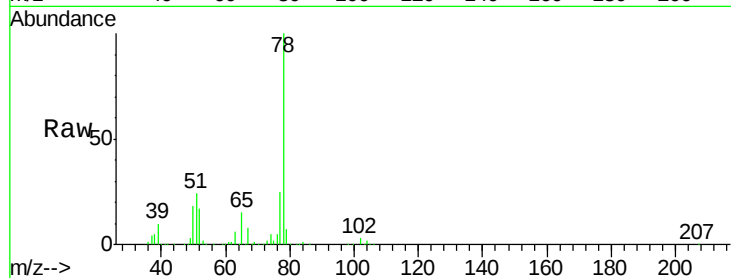
Instrument :

MSVOA\_W

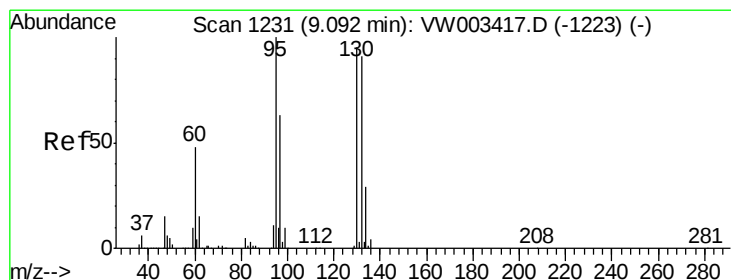
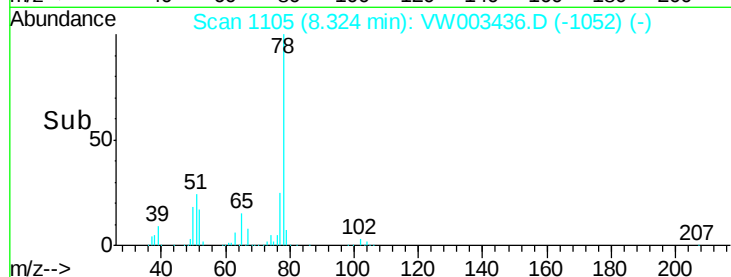
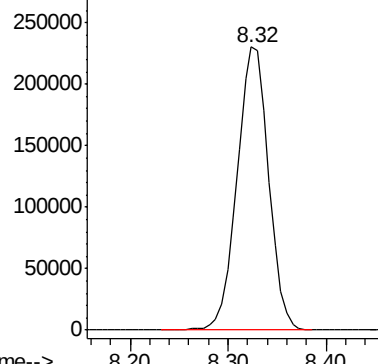
ClientSampleId :

VSTD02598

Tgt Ion: 78 Resp: 516409



Abundance Ion 78.00 (77.70 to 78.70): VW



#35

Trichloroethene

Concen: 26.240 ug/L

RT: 9.09 min Scan# 1231

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Tgt Ion: 95 Resp: 136418

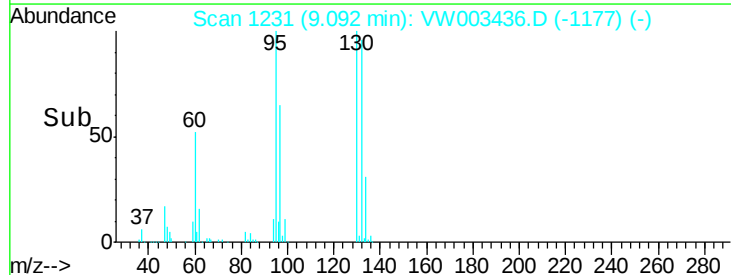
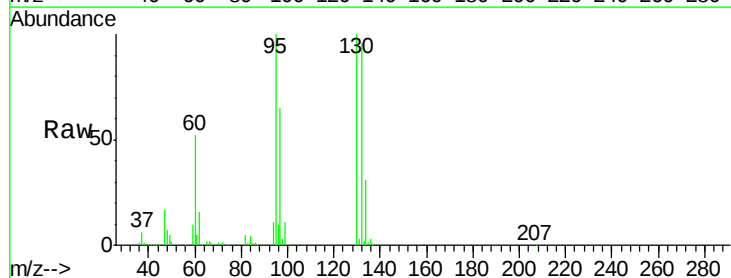
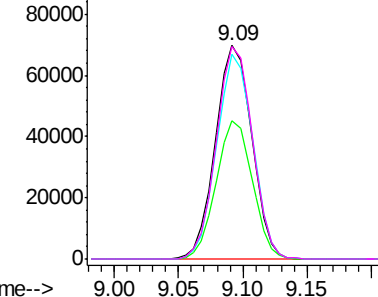
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 64.3  | 45.6  | 84.6  |
| 132 | 95.1  | 67.8  | 125.8 |
| 130 | 98.6  | 70.6  | 131.0 |

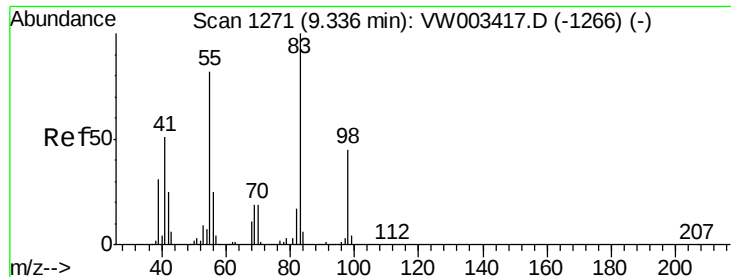
Abundance Ion 95.00 (94.70 to 95.70): VW

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

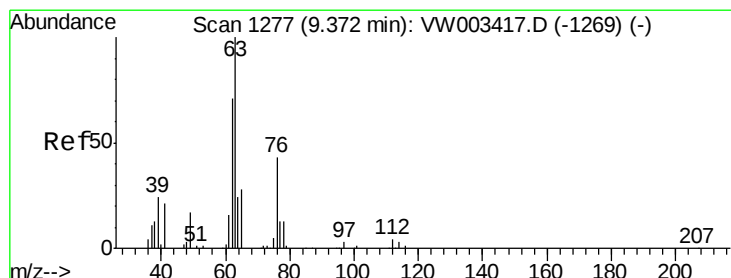
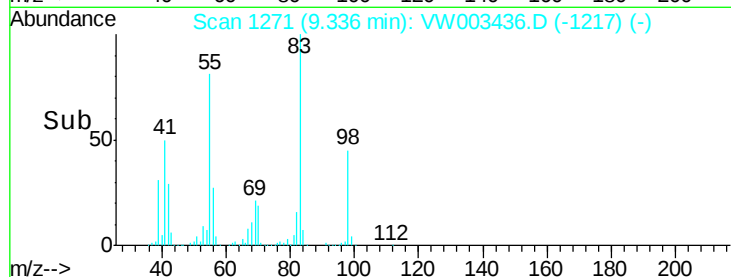
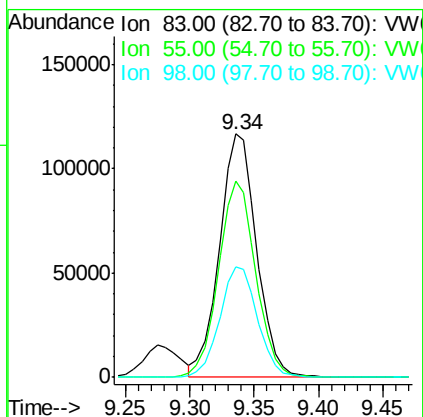
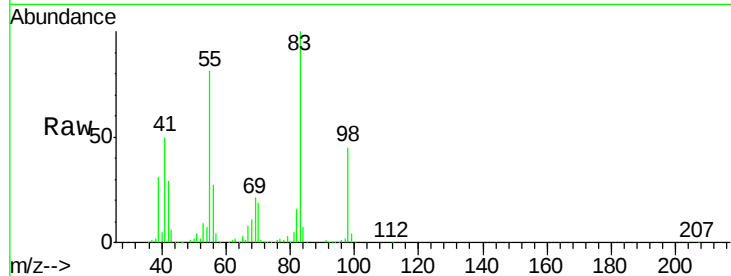




#36  
Methylcyclohexane  
Concen: 26.526 ug/L  
RT: 9.34 min Scan# 1271  
Delta R.T. -0.00 min  
Lab File: VW003436.D  
Acq: 22 Jun 2018 19:55

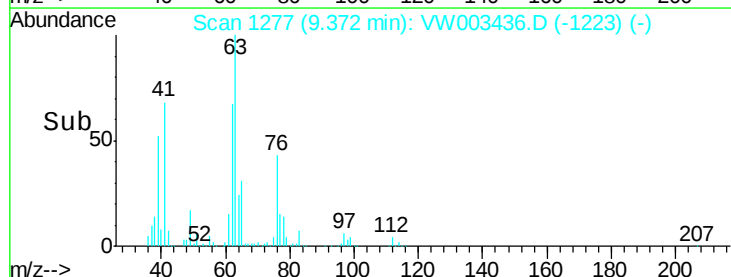
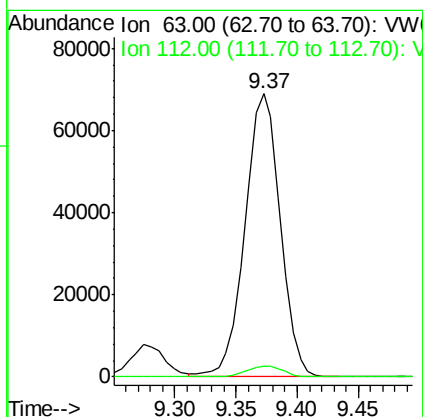
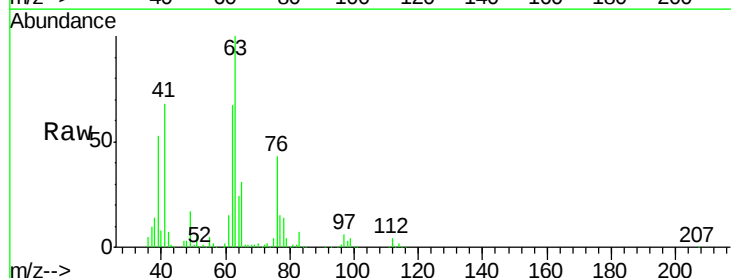
Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTD02598

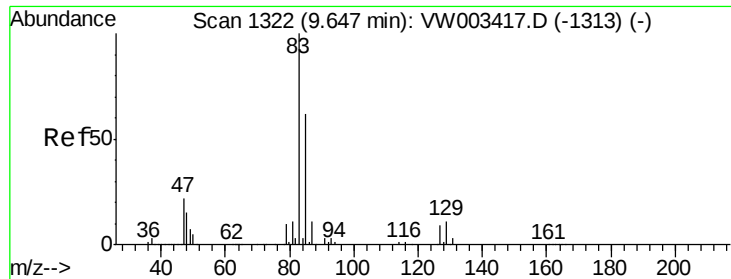
Tgt Ion: 83 Resp: 235422  
Ion Ratio Lower Upper  
83 100  
55 80.3 63.9 95.9  
98 46.2 37.1 55.7



#40  
1,2-Dichloropropane  
Concen: 27.321 ug/L  
RT: 9.37 min Scan# 1277  
Delta R.T. -0.00 min  
Lab File: VW003436.D  
Acq: 22 Jun 2018 19:55

Tgt Ion: 63 Resp: 138680  
Ion Ratio Lower Upper  
63 100  
112 4.0 3.4 5.0

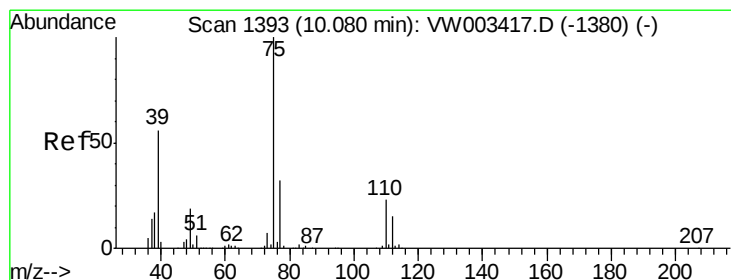
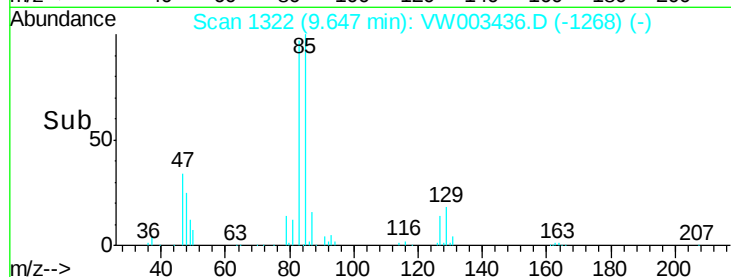
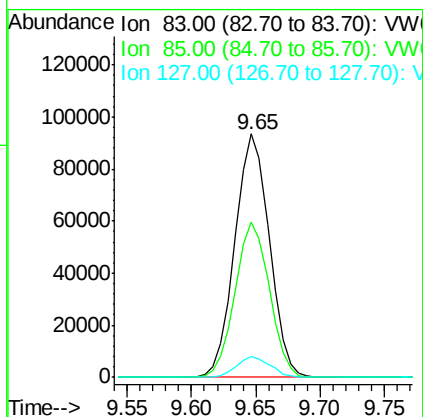
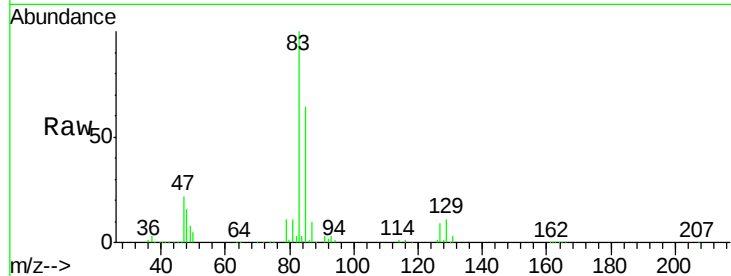




#41  
 Bromodichloromethane  
 Concen: 26.648 ug/L  
 RT: 9.65 min Scan# 1322  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

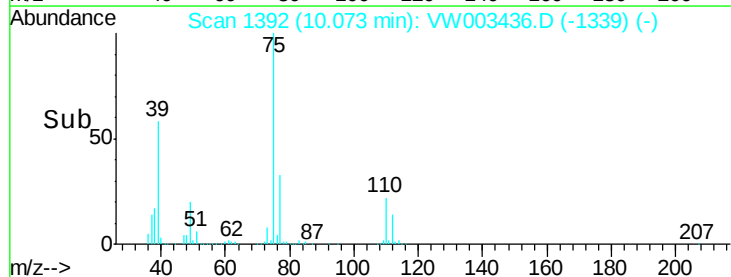
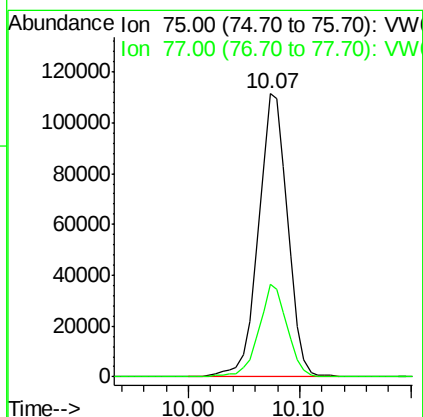
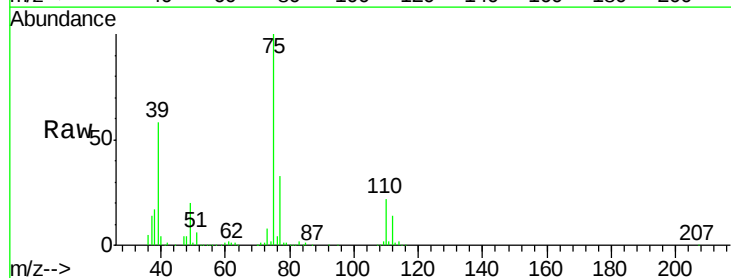
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

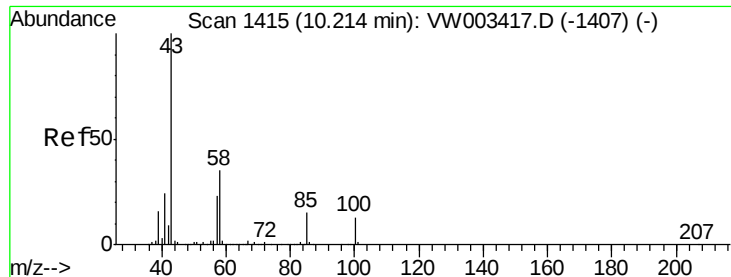
Tgt Ion: 83 Resp: 173859  
 Ion Ratio Lower Upper  
 83 100  
 85 63.6 44.7 83.1  
 127 8.7 6.2 9.2



#42  
 cis-1,3-Dichloropropene  
 Concen: 26.904 ug/L  
 RT: 10.07 min Scan# 1392  
 Delta R.T. -0.01 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

Tgt Ion: 75 Resp: 203807  
 Ion Ratio Lower Upper  
 75 100  
 77 32.5 21.8 40.6





#43

4-Methyl-2-pentanone

Concen: 54.620 ug/L

RT: 10.21 min Scan# 1415

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02598

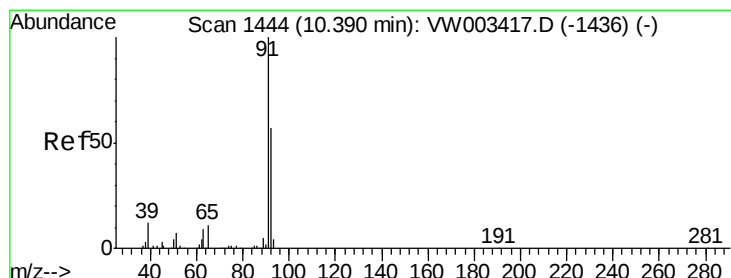
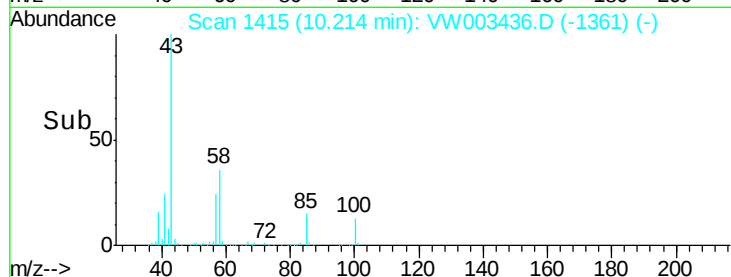
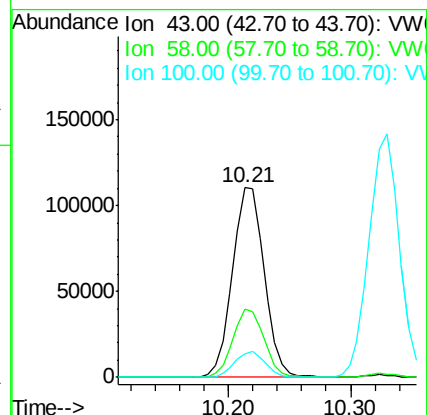
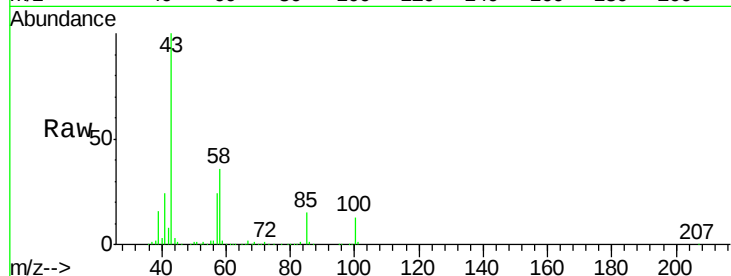
Tgt Ion: 43 Resp: 198073

Ion Ratio Lower Upper

43 100

58 35.2 28.7 43.1

100 13.1 11.1 16.7



#44

Toluene

Concen: 27.244 ug/L

RT: 10.39 min Scan# 1444

Delta R.T. -0.00 min

Lab File: VW003436.D

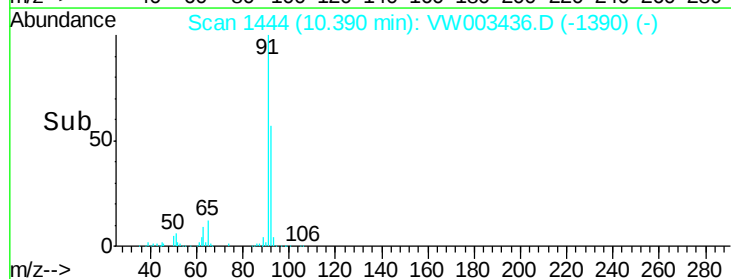
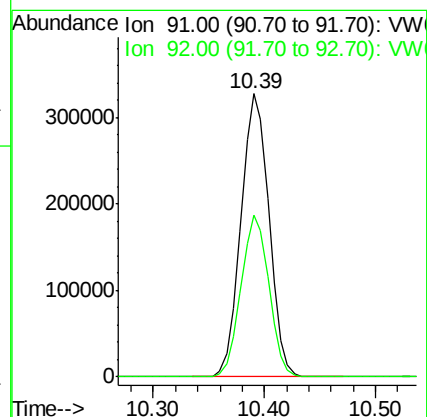
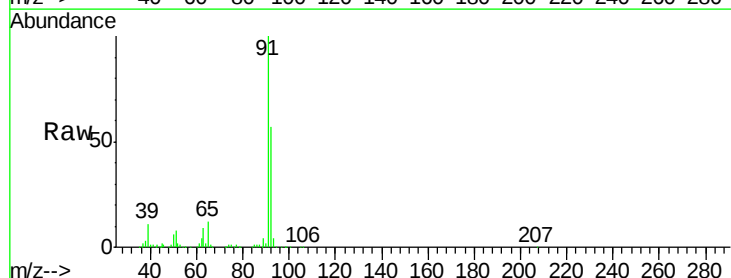
Acq: 22 Jun 2018 19:55

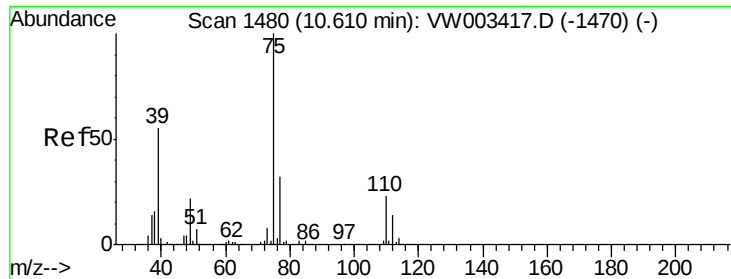
Tgt Ion: 91 Resp: 569917

Ion Ratio Lower Upper

91 100

92 57.1 39.5 73.4

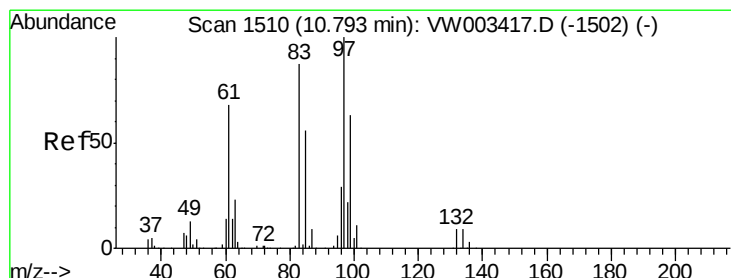
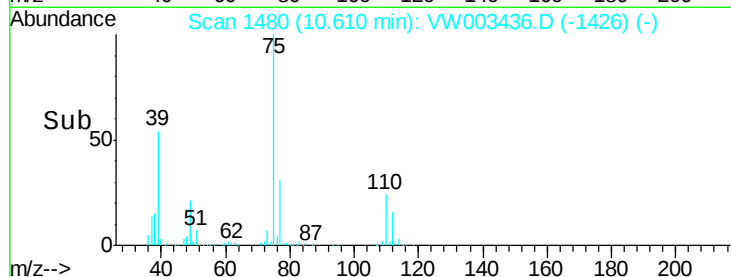
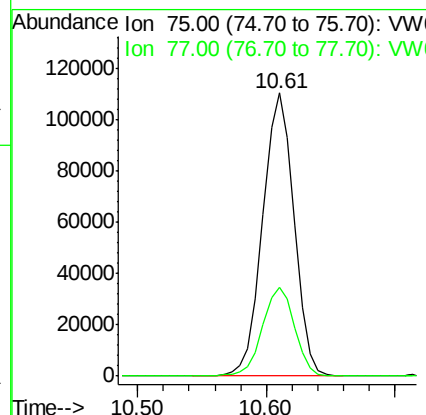
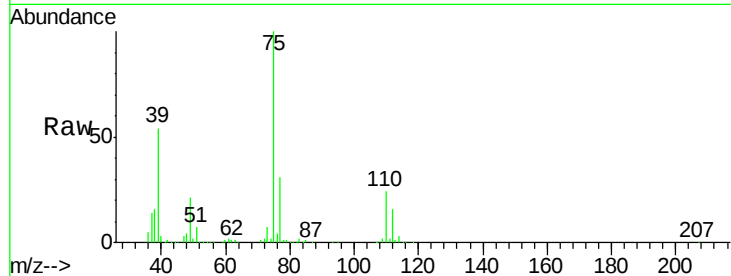




#45  
 trans-1,3-Dichloropropene  
 Concen: 27.185 ug/L  
 RT: 10.61 min Scan# 1480  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

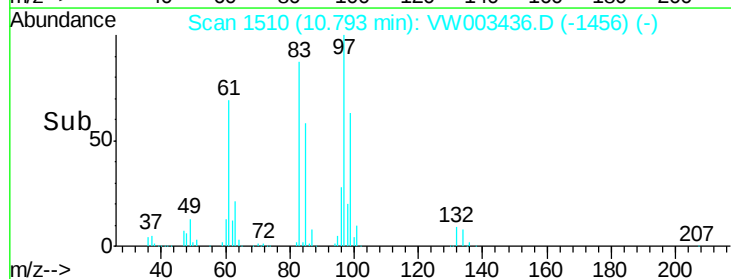
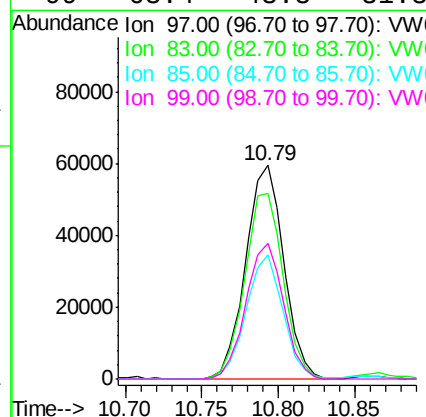
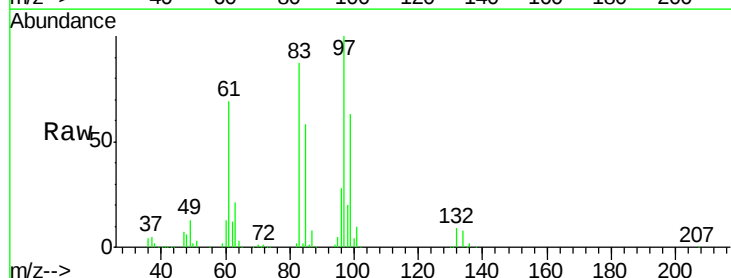
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

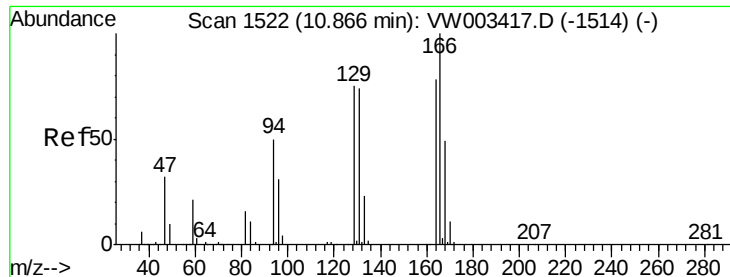
Tgt Ion: 75 Resp: 186357  
 Ion Ratio Lower Upper  
 75 100  
 77 31.4 22.4 41.6



#46  
 1,1,2-Trichloroethane  
 Concen: 27.249 ug/L  
 RT: 10.79 min Scan# 1510  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

Tgt Ion: 97 Resp: 103258  
 Ion Ratio Lower Upper  
 97 100  
 83 87.2 58.8 109.2  
 85 58.0 38.8 72.0  
 99 63.4 43.8 81.3





#47

Tetrachloroethene

Concen: 25.757 ug/L

RT: 10.87 min Scan# 1522

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02598

Tgt Ion:164 Resp: 112527

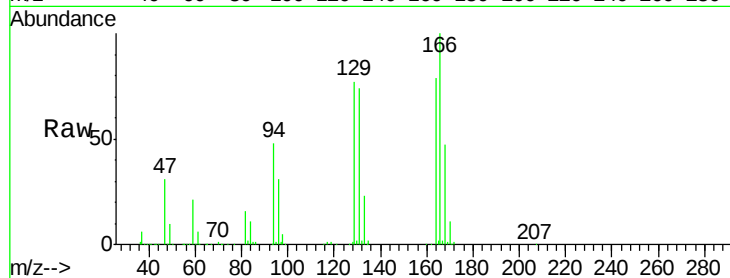
Ion Ratio Lower Upper

164 100

129 97.0 67.3 124.9

131 93.5 63.8 118.4

166 126.1 90.2 167.4



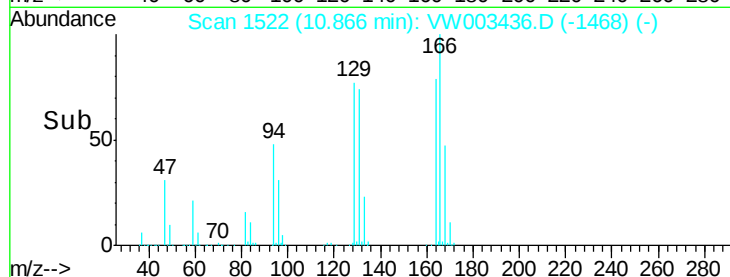
Abundance Ion 164.00 (163.70 to 164.70): V

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

Time-->



Abundance

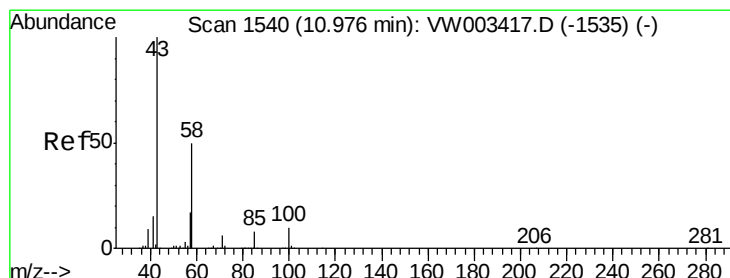
Ion 164.00 (163.70 to 164.70): V

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

Time-->



#49

2-Hexanone

Concen: 56.740 ug/L

RT: 10.98 min Scan# 1540

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Tgt Ion: 43 Resp: 153331

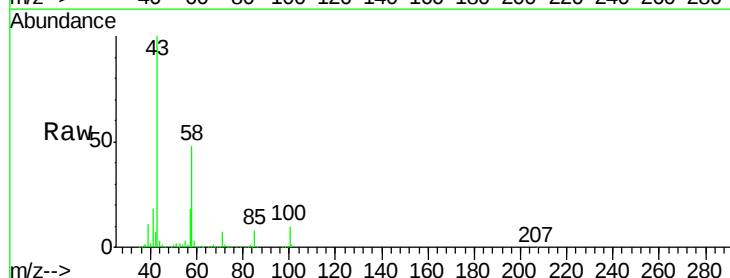
Ion Ratio Lower Upper

43 100

58 49.8 40.4 60.6

57 17.6 14.6 21.8

100 10.1 8.6 12.8



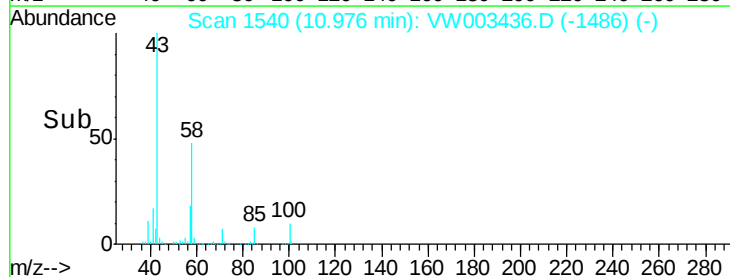
Abundance Ion 43.00 (42.70 to 43.70): VV

Ion 58.00 (57.70 to 58.70): VV

Ion 57.00 (56.70 to 57.70): VV

Ion 100.00 (99.70 to 100.70): VV

Time-->



Abundance

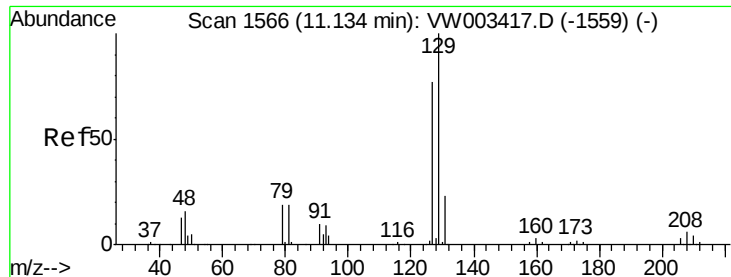
Ion 43.00 (42.70 to 43.70): VV

Ion 58.00 (57.70 to 58.70): VV

Ion 57.00 (56.70 to 57.70): VV

Ion 100.00 (99.70 to 100.70): VV

Time-->



#50

Dibromochloromethane

Concen: 26.674 ug/L

RT: 11.13 min Scan# 1566

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

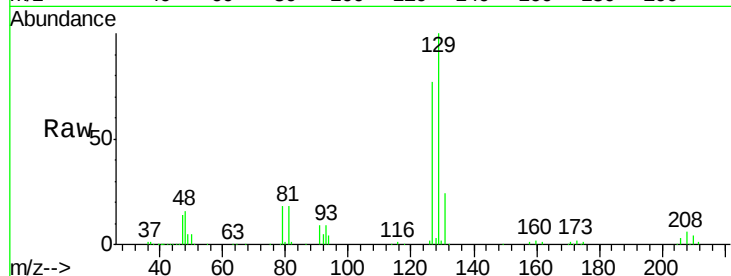
VSTD02598

Tgt Ion:129 Resp: 123050

Ion Ratio Lower Upper

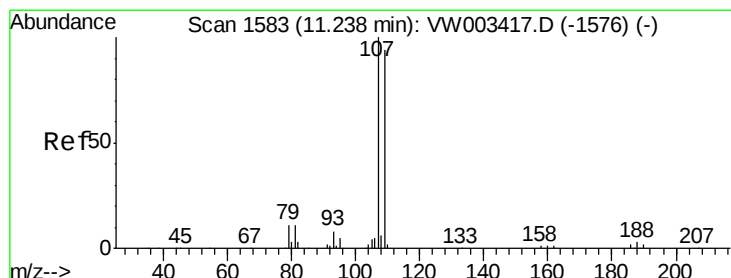
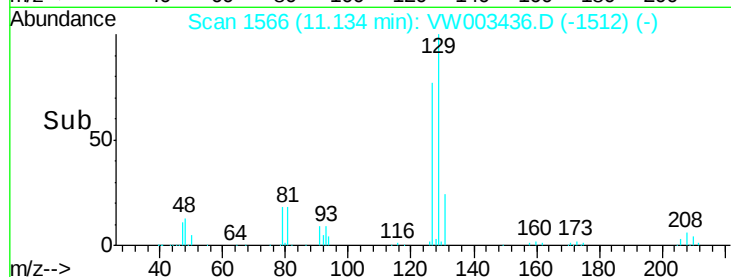
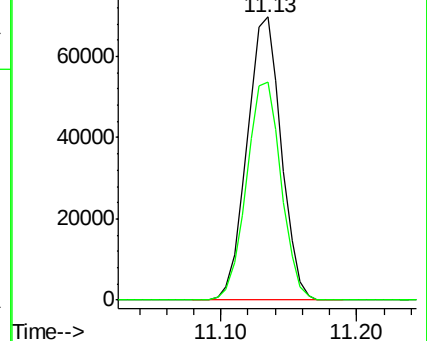
129 100

127 76.9 56.0 104.0



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#51

1,2-Dibromoethane

Concen: 26.656 ug/L

RT: 11.24 min Scan# 1583

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

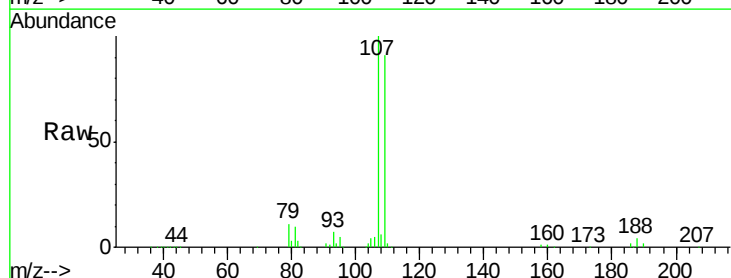
Tgt Ion:107 Resp: 100374

Ion Ratio Lower Upper

107 100

109 91.1 64.5 119.9

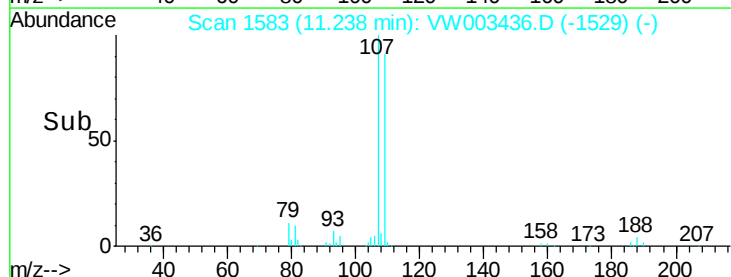
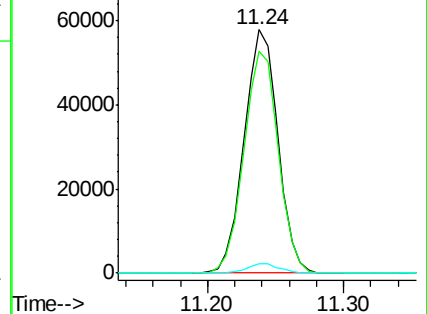
188 3.8 2.8 4.2

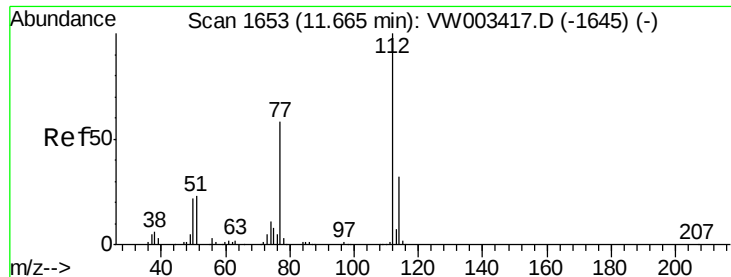


Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

Ion 188.00 (187.70 to 188.70): V





#52

Chlorobenzene

Concen: 26.757 ug/L

RT: 11.66 min Scan# 1653

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

VSTD02598

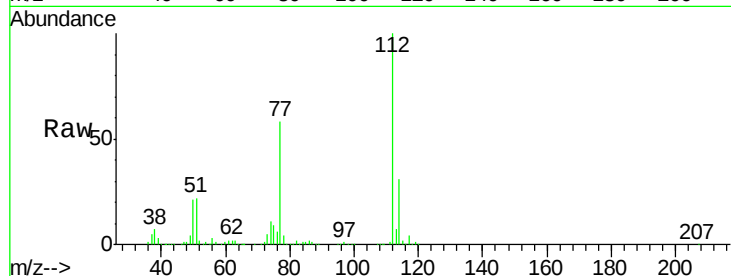
Tgt Ion: 112 Resp: 363469

Ion Ratio Lower Upper

112 100

77 58.1 47.3 70.9

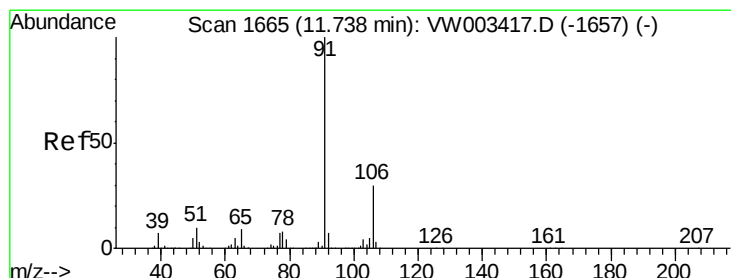
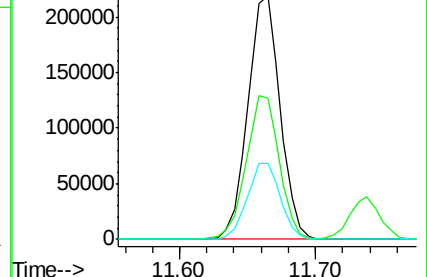
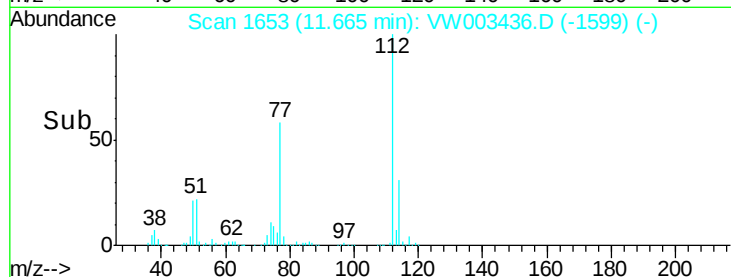
114 31.4 22.2 41.2



Abundance Ion 112.00 (111.70 to 112.70): V

Ion 77.00 (76.70 to 77.70): VW

Ion 114.00 (113.70 to 114.70): V



#53

Ethylbenzene

Concen: 27.578 ug/L

RT: 11.74 min Scan# 1665

Delta R.T. -0.00 min

Lab File: VW003436.D

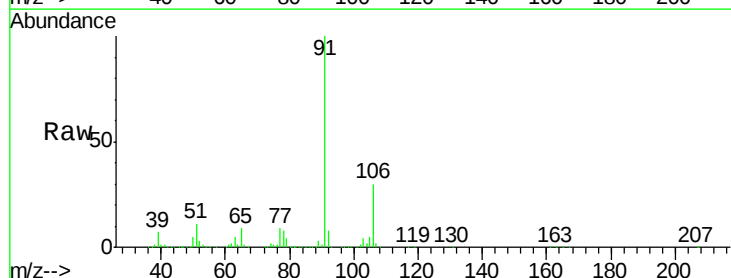
Acq: 22 Jun 2018 19:55

Tgt Ion: 91 Resp: 647081

Ion Ratio Lower Upper

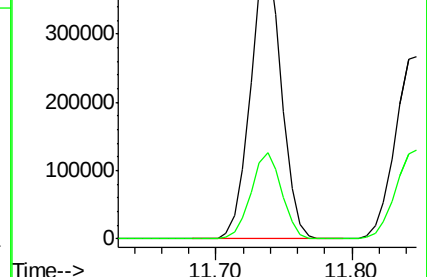
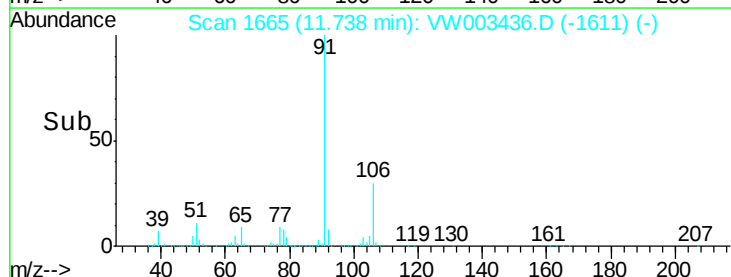
91 100

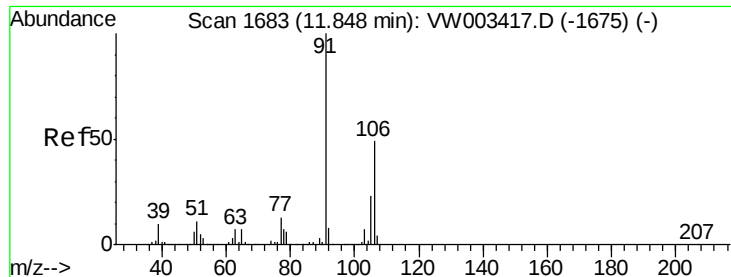
106 30.3 21.8 40.4



Abundance Ion 91.00 (90.70 to 91.70): VW

Ion 106.00 (105.70 to 106.70): V





#54

m,p-Xylene

Concen: 27.789 ug/L

RT: 11.85 min Scan# 1683

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampled :

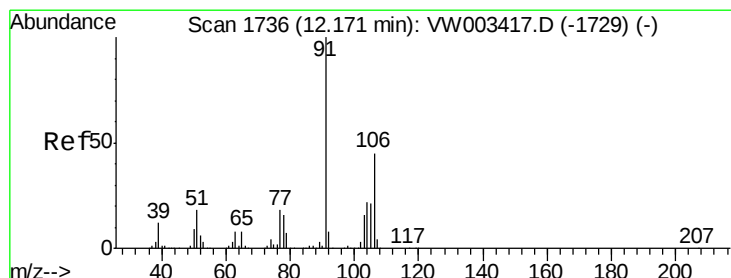
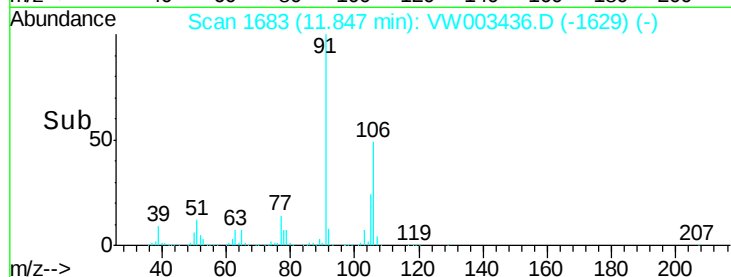
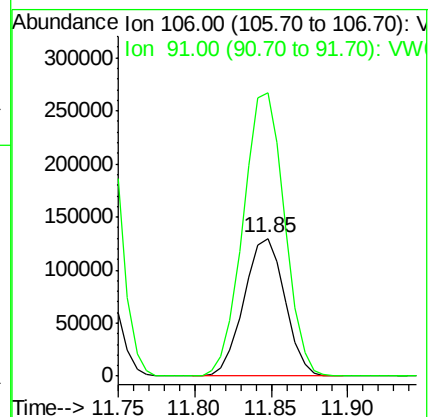
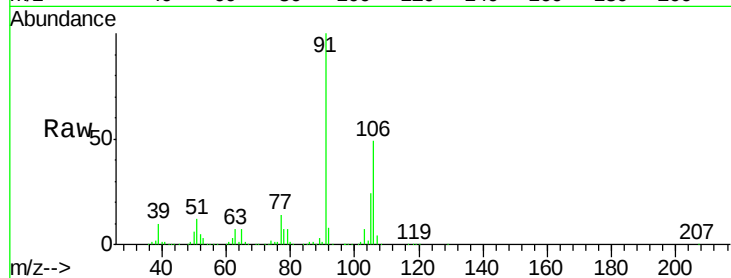
VSTD02598

Tgt Ion:106 Resp: 242173

Ion Ratio Lower Upper

106 100

91 205.9 146.4 271.8



#55

o-xylene

Concen: 27.838 ug/L

RT: 12.17 min Scan# 1736

Delta R.T. -0.00 min

Lab File: VW003436.D

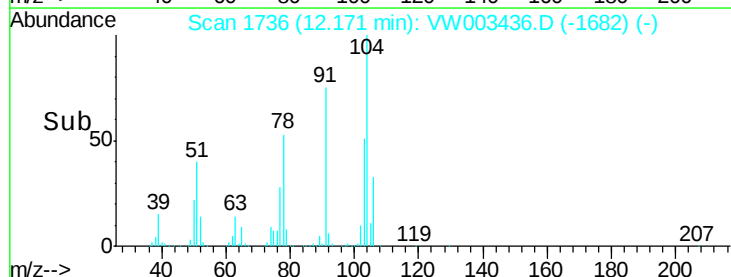
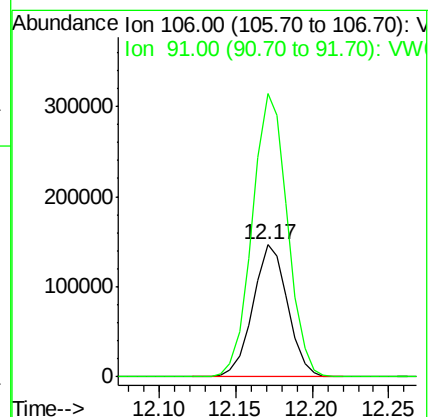
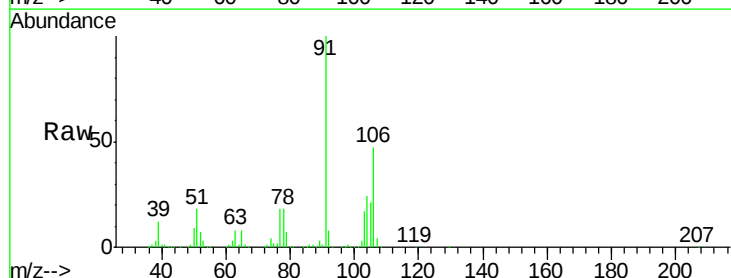
Acq: 22 Jun 2018 19:55

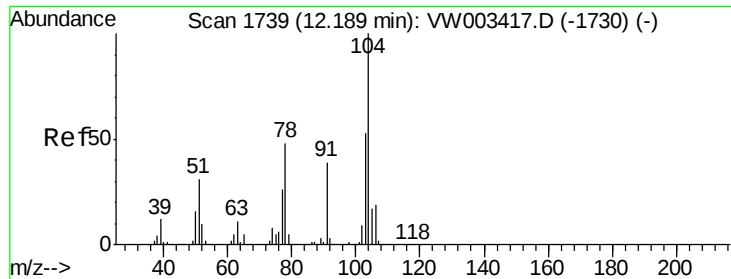
Tgt Ion:106 Resp: 230759

Ion Ratio Lower Upper

106 100

91 214.7 153.4 285.0





#56

Styrene

Concen: 28.340 ug/L

RT: 12.19 min Scan# 1739

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampleId :

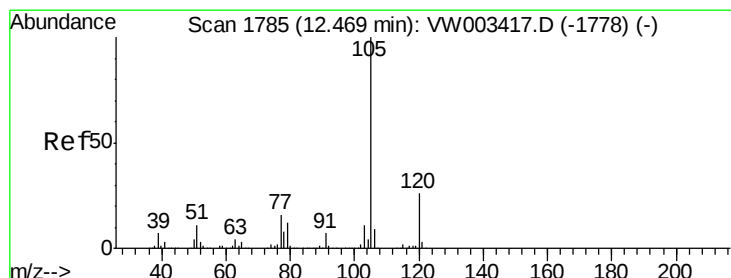
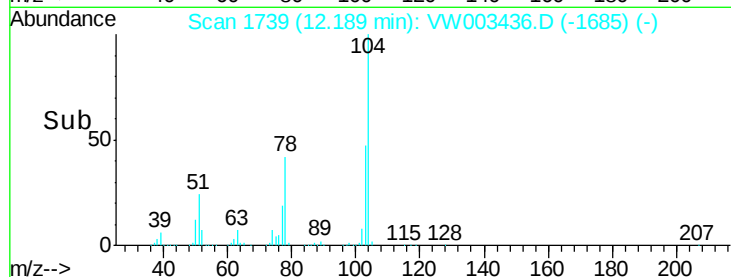
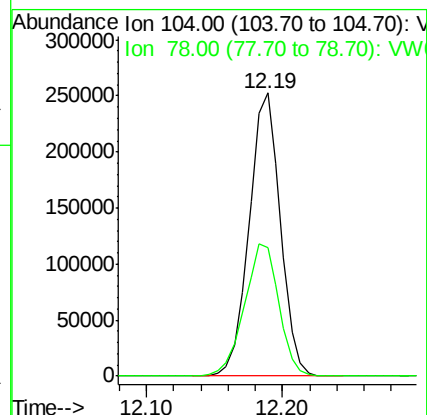
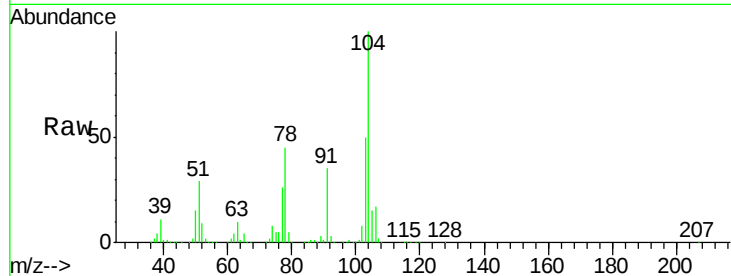
VSTD02598

Tgt Ion:104 Resp: 405589

Ion Ratio Lower Upper

104 100

78 45.4 32.1 59.7



#57

Isopropylbenzene

Concen: 28.003 ug/L

RT: 12.47 min Scan# 1785

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

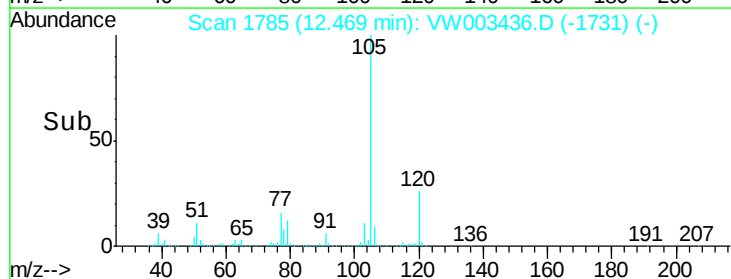
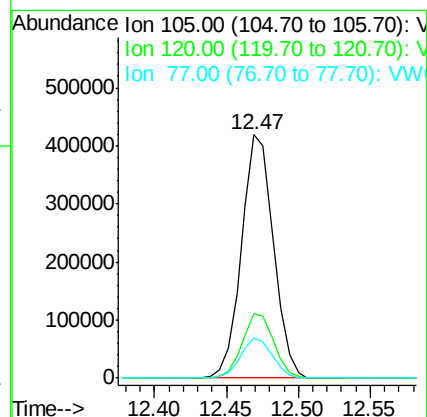
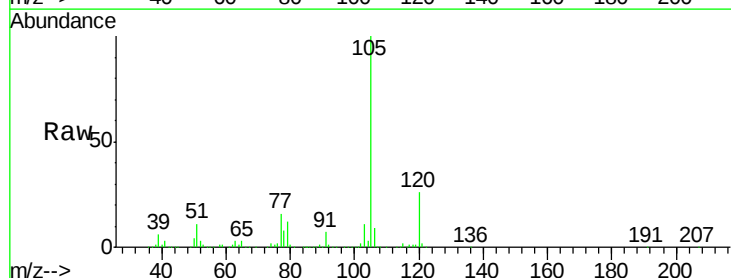
Tgt Ion:105 Resp: 644060

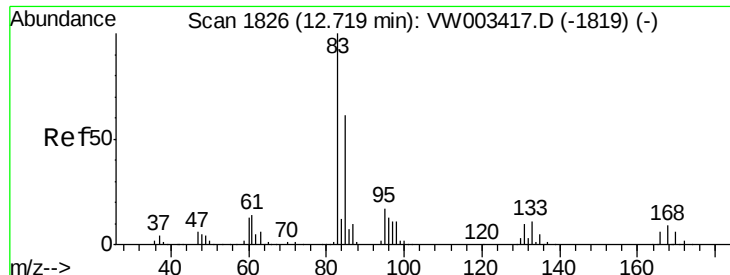
Ion Ratio Lower Upper

105 100

120 26.2 21.0 31.4

77 16.6 13.3 19.9





#58

1,1,2,2-Tetrachloroethane

Concen: 27.538 ug/L

RT: 12.72 min Scan# 1826

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampled :

VSTD02598

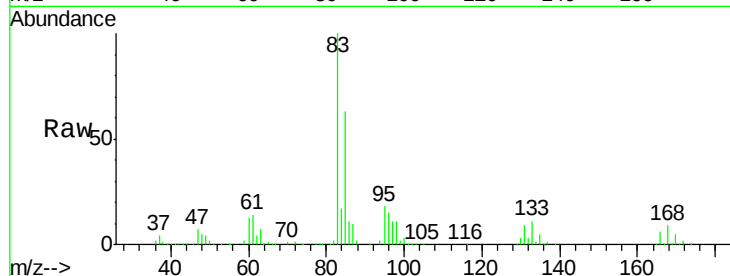
Tgt Ion: 83 Resp: 137565

Ion Ratio Lower Upper

83 100

85 63.4 45.1 83.9

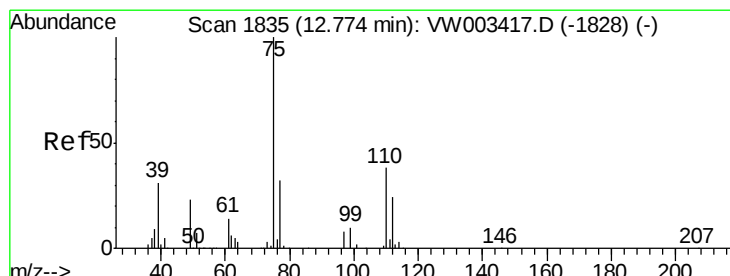
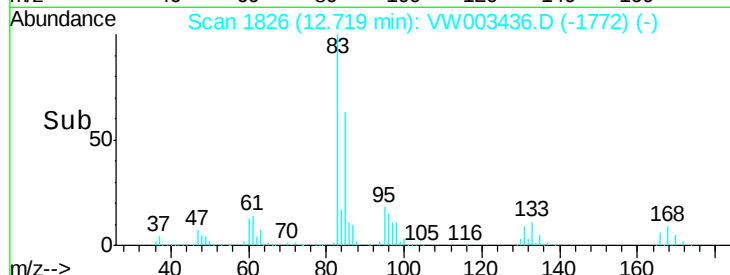
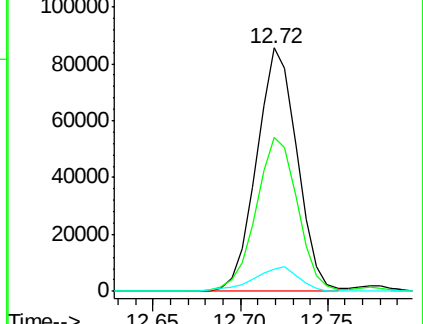
131 9.3 8.2 12.2



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): VW



#59

1,2,3-Trichloropropane

Concen: 27.711 ug/L

RT: 12.77 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VW003436.D

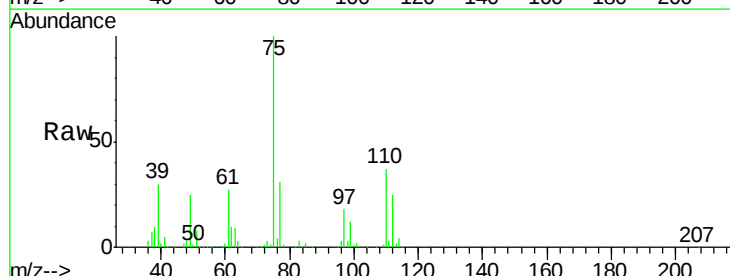
Acq: 22 Jun 2018 19:55

Tgt Ion: 75 Resp: 106089

Ion Ratio Lower Upper

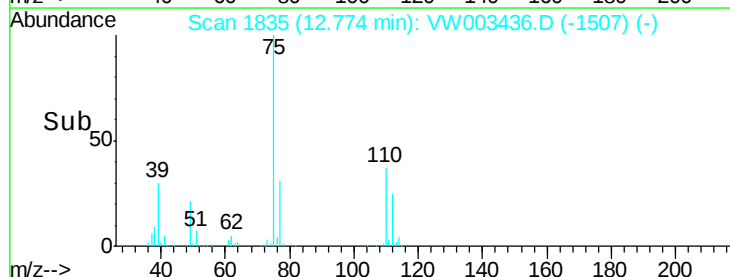
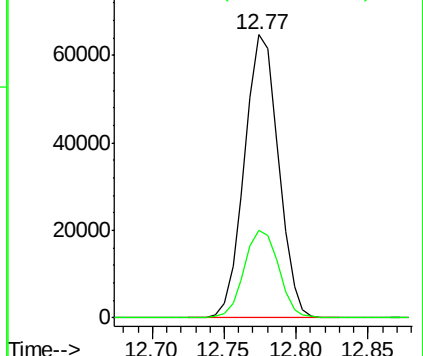
75 100

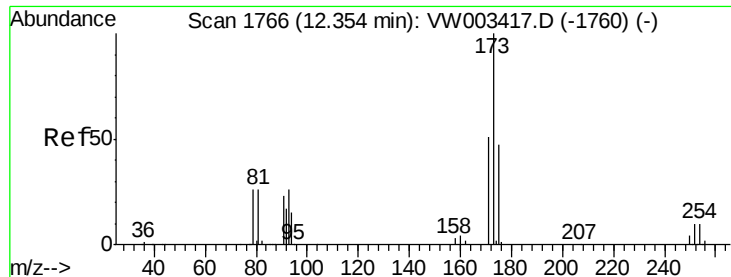
77 31.4 26.0 39.0



Abundance Ion 75.00 (74.70 to 75.70): VW

Ion 77.00 (76.70 to 77.70): VW





#62

Bromoform

Concen: 25.569 ug/L

RT: 12.35 min Scan# 1766

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

Instrument :

MSVOA\_W

ClientSampled :

VSTD02598

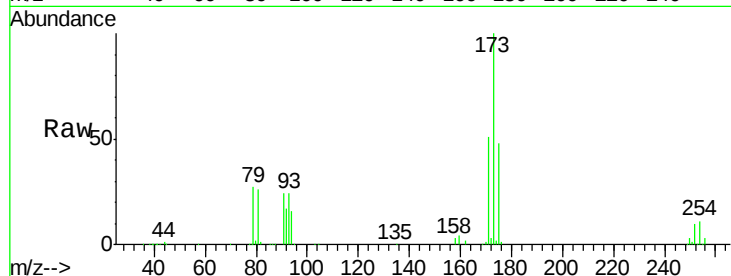
Tgt Ion:173 Resp: 76428

Ion Ratio Lower Upper

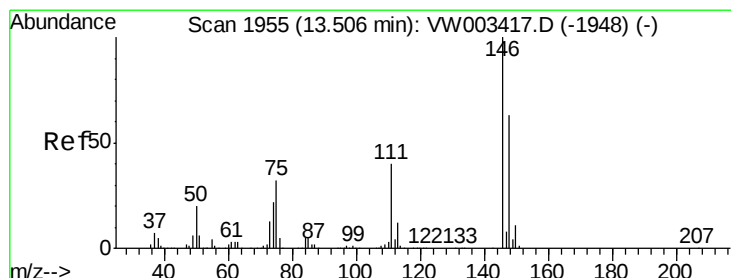
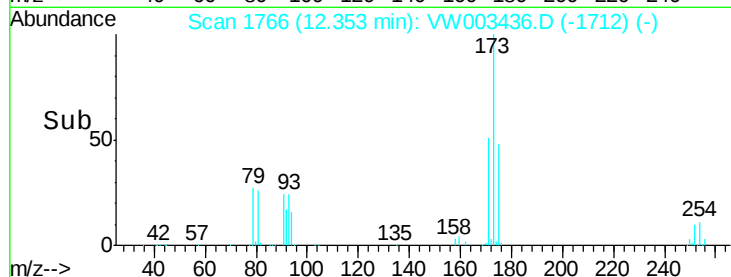
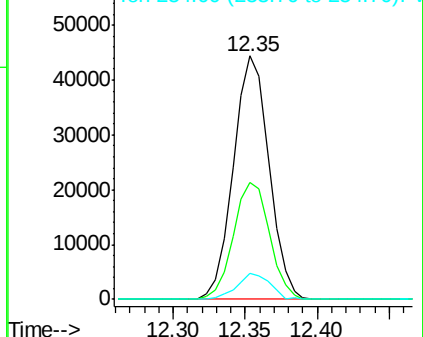
173 100

175 48.6 39.9 59.9

254 9.6 7.7 11.5



Abundance Ion 173.00 (172.70 to 173.70): V  
Ion 175.00 (174.70 to 175.70): V  
Ion 254.00 (253.70 to 254.70): V



#63

1,3-Dichlorobenzene

Concen: 26.039 ug/L

RT: 13.51 min Scan# 1955

Delta R.T. -0.00 min

Lab File: VW003436.D

Acq: 22 Jun 2018 19:55

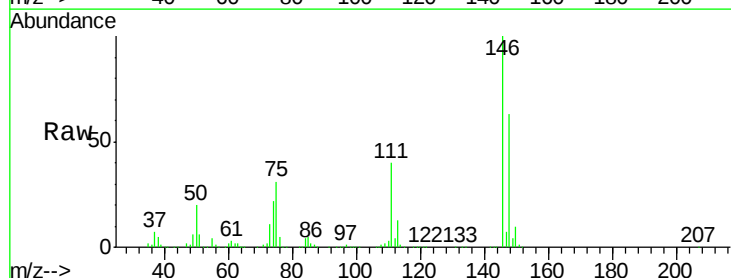
Tgt Ion:146 Resp: 284351

Ion Ratio Lower Upper

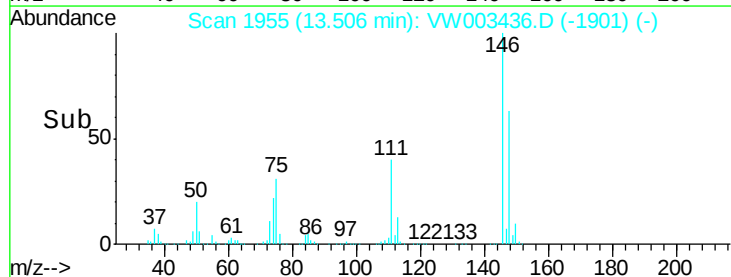
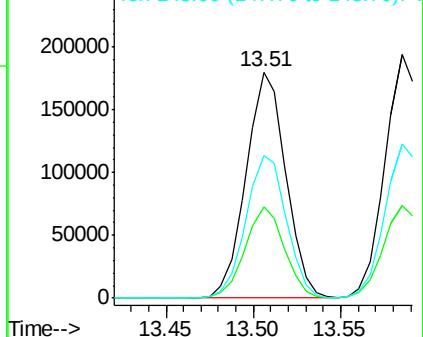
146 100

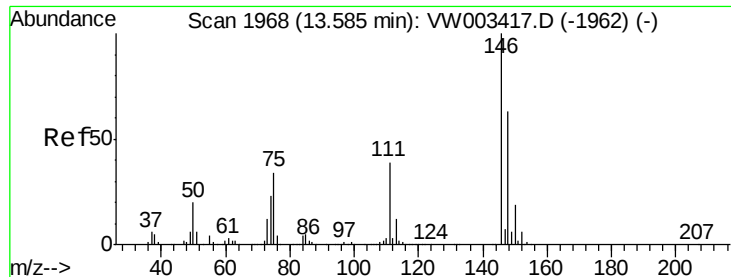
111 40.3 27.9 51.7

148 63.3 44.9 83.3



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

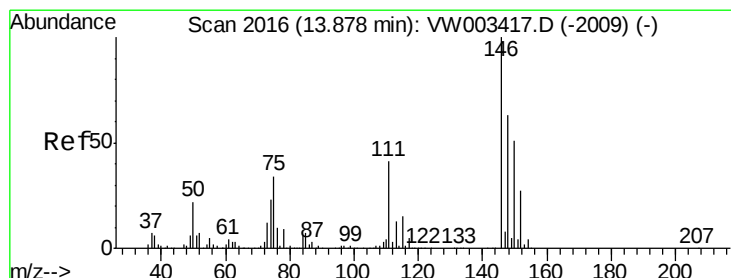
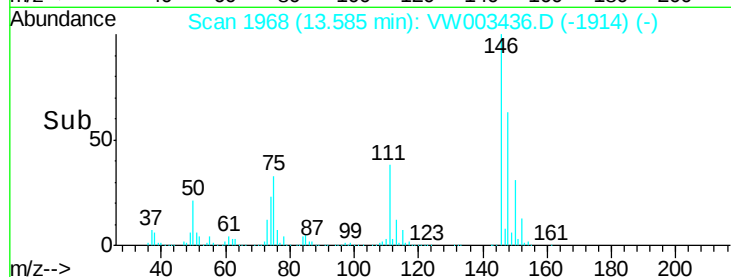
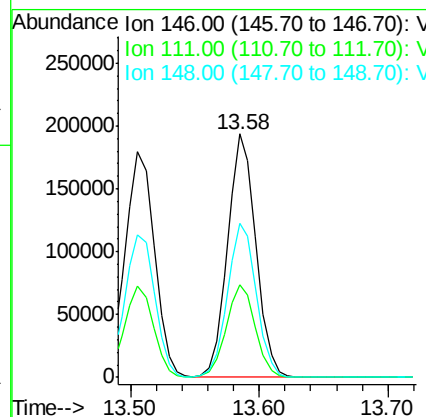
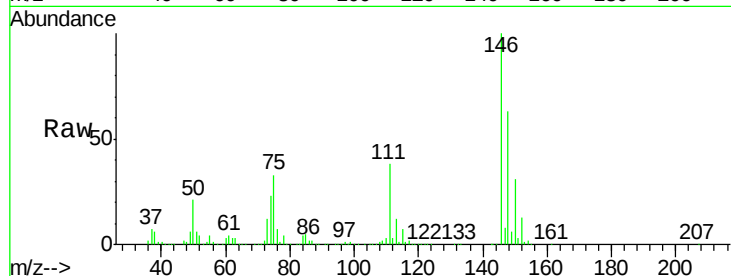




#64  
 1,4-Dichlorobenzene  
 Concen: 26.086 ug/L  
 RT: 13.58 min Scan# 1968  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

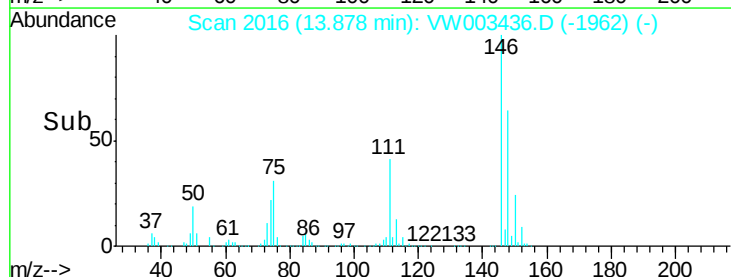
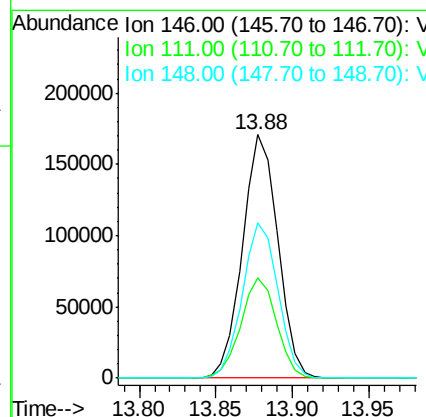
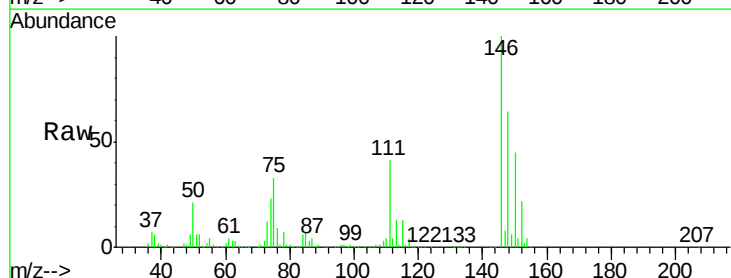
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

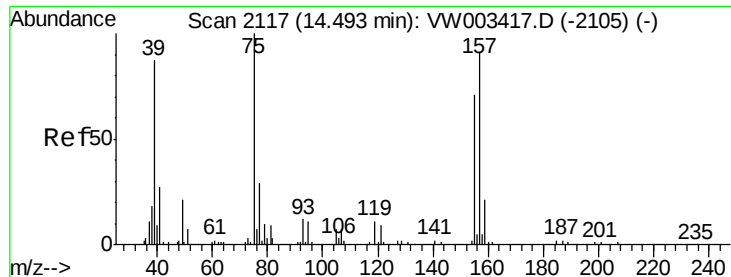
Tgt Ion:146 Resp: 298662  
 Ion Ratio Lower Upper  
 146 100  
 111 38.1 26.8 49.8  
 148 63.1 45.4 84.2



#65  
 1,2-Dichlorobenzene  
 Concen: 26.419 ug/L  
 RT: 13.88 min Scan# 2016  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

Tgt Ion:146 Resp: 275444  
 Ion Ratio Lower Upper  
 146 100  
 111 41.4 33.1 49.7  
 148 63.9 51.0 76.6

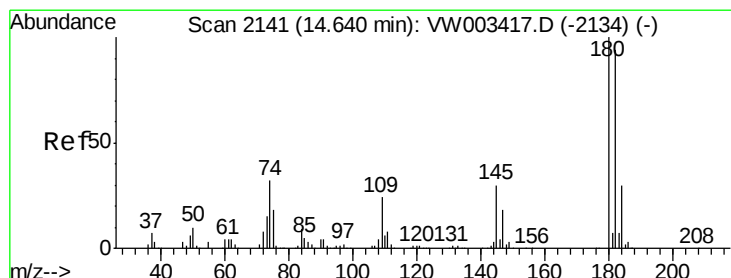
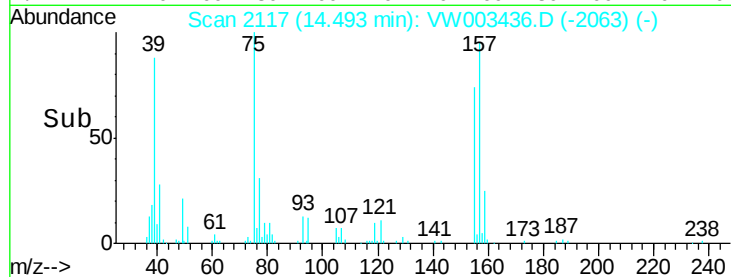
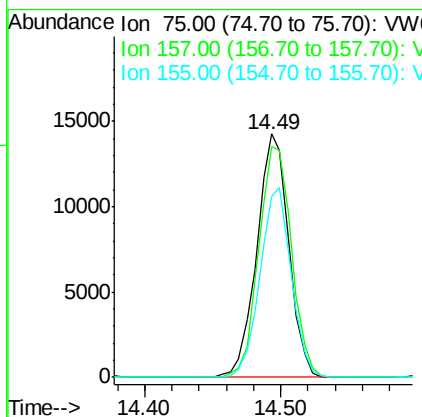
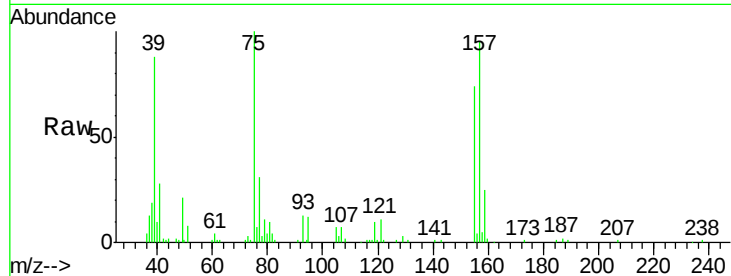




#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 25.599 ug/L  
 RT: 14.49 min Scan# 2117  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

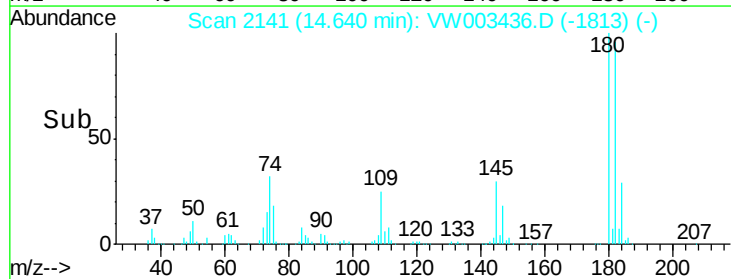
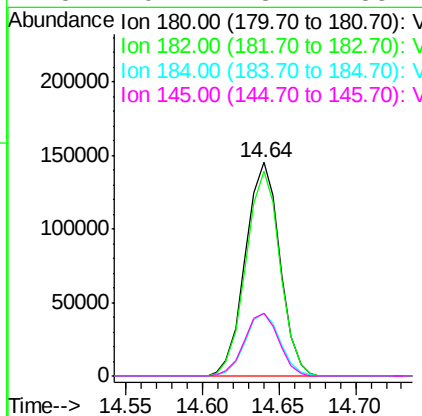
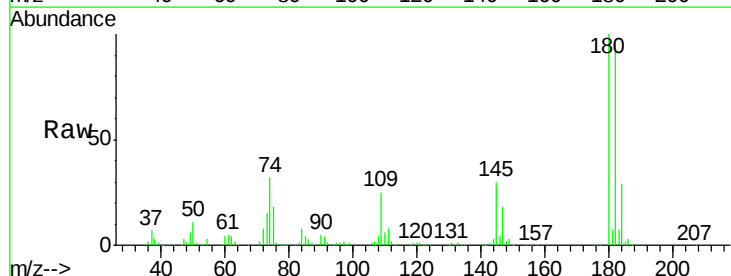
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

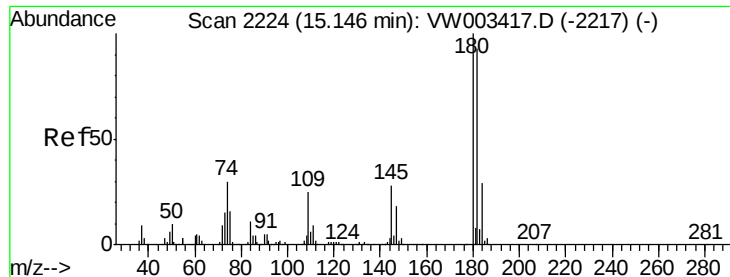
Tgt Ion: 75 Resp: 23423  
 Ion Ratio Lower Upper  
 75 100  
 157 94.8 70.7 106.1  
 155 74.3 59.0 88.6



#67  
 1,3,5-Trichlorobenzene  
 Concen: 26.881 ug/L  
 RT: 14.64 min Scan# 2141  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

Tgt Ion: 180 Resp: 228106  
 Ion Ratio Lower Upper  
 180 100  
 182 95.0 75.9 113.9  
 184 29.7 24.5 36.7  
 145 29.4 23.4 35.2

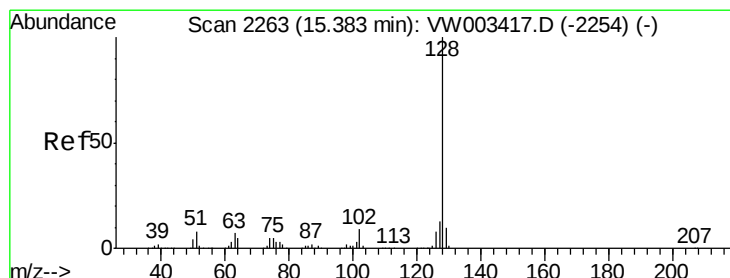
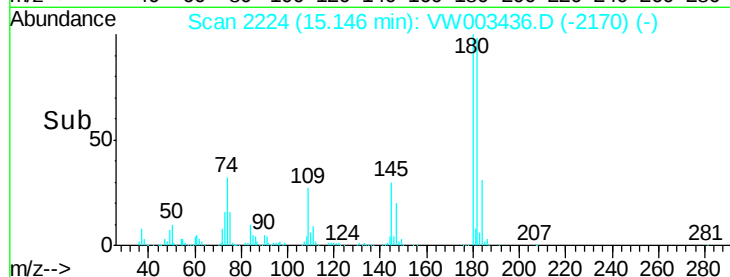
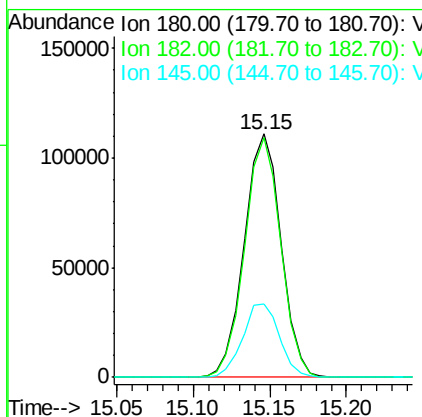
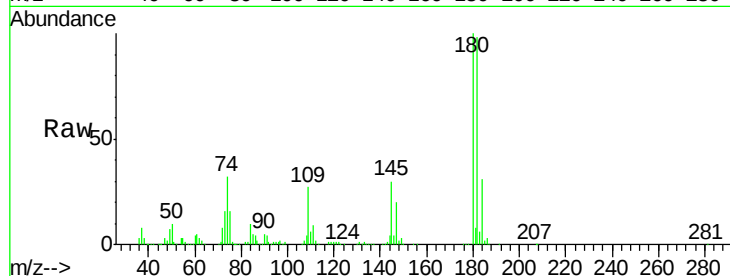




#68  
 1,2,4-trichlorobenzene  
 Concen: 26.925 ug/L  
 RT: 15.15 min Scan# 2224  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

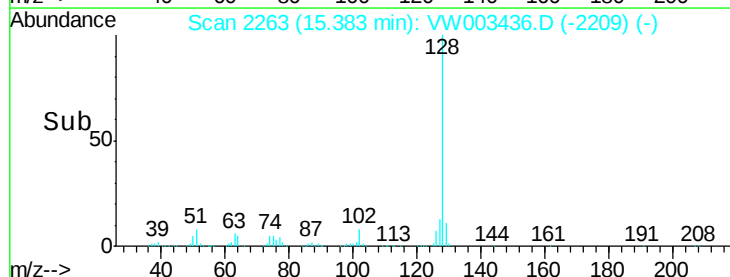
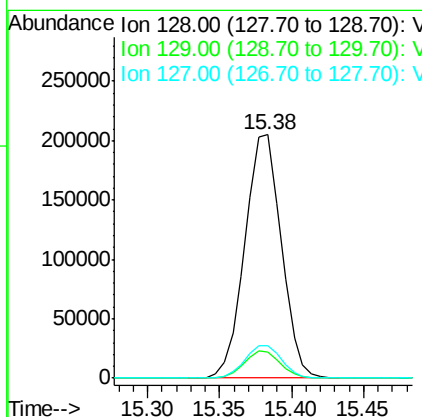
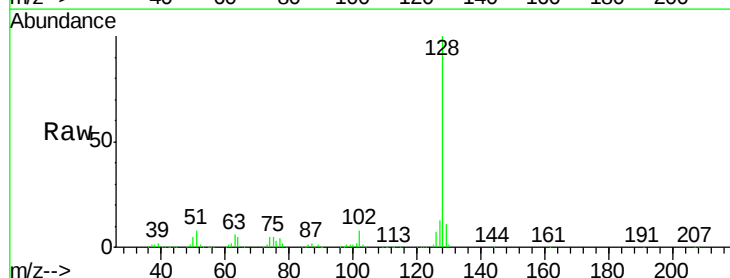
Instrument :  
 MSVOA\_W  
 ClientSampled :  
 VSTD02598

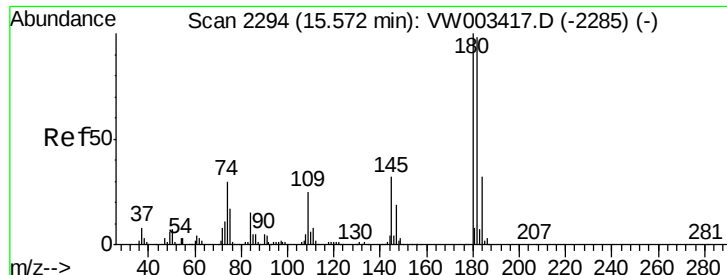
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.5  | 74.8  | 112.2 |
| 145     | 30.0  | 23.6  | 35.4  |



#69  
 Naphthalene  
 Concen: 27.807 ug/L  
 RT: 15.38 min Scan# 2263  
 Delta R.T. -0.00 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 10.9  | 8.6   | 13.0  |
| 127     | 13.6  | 10.9  | 16.3  |





#70  
 1,2,3-Trichlorobenzene  
 Concen: 27.873 ug/L  
 RT: 15.57 min Scan# 2293  
 Delta R.T. -0.01 min  
 Lab File: VW003436.D  
 Acq: 22 Jun 2018 19:55

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTD02598

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.4  | 75.4  | 113.0 |
| 145     | 32.1  | 25.4  | 38.2  |

