

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW110119\  
 Data File : VW013907.D  
 Acq On : 01 Nov 2019 18:55  
 Operator : SY/VA  
 Sample : VSTDCCC025EC  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Nov 02 00:17:53 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM110119S.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Nov 02 00:12:22 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.84  | 114  | 311680   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 305846   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 186911   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.35   | 65    | 110138   | 22.71    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 90.84%  |
| 7) Chloroethane-d5             | 2.89   | 69    | 90546    | 23.37    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 93.48%  |
| 10) 1,1-Dichloroethene-d2      | 4.03   | 63    | 227831   | 23.06    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 92.24%  |
| 20) 2-Butanone-d5              | 7.07   | 46    | 89840    | 51.48    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 102.96% |
| 24) Chloroform-d               | 7.65   | 84    | 236116   | 24.04    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 96.16%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 128217   | 24.26    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 97.04%  |
| 29) Benzene-d6                 | 8.27   | 84    | 494777   | 24.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 96.60%  |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 149220   | 24.06    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 96.24%  |
| 37) Toluene-d8                 | 10.32  | 98    | 469459   | 24.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 96.60%  |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 66659    | 23.54    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 94.16%  |
| 39) 2-Hexanone-d5              | 10.92  | 63    | 75886    | 53.86    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 107.72% |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 137671   | 25.09    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 100.36% |
| 61) 1,2-Dichlorobenzene-d4     | 13.85  | 152   | 177792   | 24.04    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 96.16%  |

## Target Compounds

|                                |      |     |        |             | Ovalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 2.01 | 85  | 75301  | 22.477 ug/L | 97     |
| 3) Chloromethane               | 2.21 | 50  | 83446  | 21.719 ug/L | 99     |
| 5) Vinyl chloride              | 2.37 | 62  | 129839 | 23.661 ug/L | 97     |
| 6) Bromomethane                | 2.78 | 94  | 81249  | 23.539 ug/L | 100    |
| 8) Chloroethane                | 2.92 | 64  | 76332  | 24.502 ug/L | 97     |
| 9) Trichlorofluoromethane      | 3.25 | 101 | 62375  | 22.314 ug/L | 98     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101 | 129392 | 24.119 ug/L | 98     |
| 12) 1,1-Dichloroethene         | 4.04 | 96  | 129826 | 24.136 ug/L | 89     |
| 13) Acetone                    | 4.12 | 43  | 72568  | 42.696 ug/L | 98     |
| 14) Carbon disulfide           | 4.38 | 76  | 377776 | 24.573 ug/L | 98     |
| 15) Methyl Acetate             | 4.67 | 43  | 78165  | 26.559 ug/L | 98     |
| 16) Methylene chloride         | 4.92 | 84  | 141351 | 24.255 ug/L | 98     |
| 17) Methyl tert-butyl Ether    | 5.42 | 73  | 178864 | 26.285 ug/L | 99     |
| 18) trans-1,2-Dichloroethene   | 5.42 | 96  | 136715 | 24.388 ug/L | 96     |
| 19) 1,1-Dichloroethane         | 6.21 | 63  | 235115 | 24.702 ug/L | 100    |
| 21) 2-Butanone                 | 7.16 | 43  | 108785 | 46.629 ug/L | 99     |
| 22) cis-1,2-Dichloroethene     | 7.16 | 96  | 148322 | 25.160 ug/L | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW110119\  
 Data File : VW013907.D  
 Acq On : 01 Nov 2019 18:55  
 Operator : SY/VA  
 Sample : VSTDCCC025EC  
 Misc : 5.00G/10ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

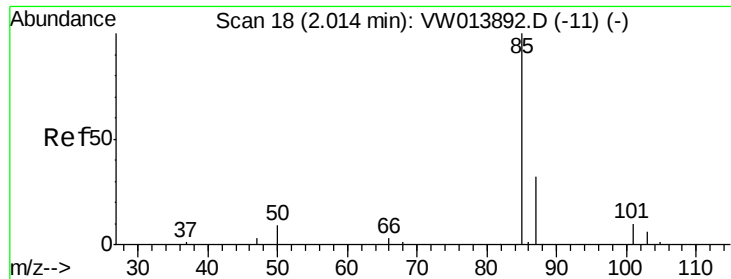
Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Nov 02 00:17:53 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM110119S.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Nov 02 00:12:22 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 7.51  | 128  | 69734    | 25.156 | ug/L  | 93       |
| 25) Chloroform                  | 7.68  | 83   | 234422   | 24.497 | ug/L  | 100      |
| 27) 1,2-Dichloroethane          | 8.40  | 62   | 160196   | 25.311 | ug/L  | 98       |
| 30) Cyclohexane                 | 7.95  | 56   | 227844   | 24.687 | ug/L  | 99       |
| 31) 1,1,1-Trichloroethane       | 7.87  | 97   | 182636   | 24.386 | ug/L  | 99       |
| 32) Carbon tetrachloride        | 8.07  | 117  | 179975   | 24.574 | ug/L  | 100      |
| 34) Benzene                     | 8.32  | 78   | 556722   | 25.073 | ug/L  | 100      |
| 35) Trichloroethene             | 9.09  | 95   | 142723   | 24.384 | ug/L  | 98       |
| 36) Methylcyclohexane           | 9.34  | 83   | 247845   | 24.124 | ug/L  | 98       |
| 40) 1,2-Dichloropropane         | 9.37  | 63   | 136189   | 24.989 | ug/L  | 100      |
| 41) Bromodichloromethane        | 9.64  | 83   | 173932   | 25.387 | ug/L  | 99       |
| 42) cis-1,3-Dichloropropene     | 10.07 | 75   | 218228   | 25.408 | ug/L  | 99       |
| 43) 4-Methyl-2-pentanone        | 10.21 | 43   | 219722   | 52.423 | ug/L  | 99       |
| 44) Toluene                     | 10.39 | 91   | 602409   | 25.248 | ug/L  | 100      |
| 45) trans-1,3-Dichloropropene   | 10.60 | 75   | 178829   | 25.198 | ug/L  | 98       |
| 46) 1,1,2-Trichloroethane       | 10.79 | 97   | 108667   | 24.970 | ug/L  | 97       |
| 47) Tetrachloroethene           | 10.86 | 164  | 130722   | 24.258 | ug/L  | 98       |
| 49) 2-Hexanone                  | 10.97 | 43   | 159911   | 51.934 | ug/L  | 99       |
| 50) Dibromochloromethane        | 11.13 | 129  | 128281   | 25.393 | ug/L  | 97       |
| 51) 1,2-Dibromoethane           | 11.23 | 107  | 110516   | 25.689 | ug/L  | 97       |
| 52) Chlorobenzene               | 11.66 | 112  | 385144   | 25.029 | ug/L  | 99       |
| 53) Ethylbenzene                | 11.73 | 91   | 659889   | 24.845 | ug/L  | 98       |
| 54) m,p-Xylene                  | 11.83 | 106  | 258074   | 25.213 | ug/L  | 98       |
| 55) o-xylene                    | 12.16 | 106  | 247908   | 25.623 | ug/L  | 97       |
| 56) Styrene                     | 12.18 | 104  | 429244   | 25.710 | ug/L  | 99       |
| 57) Isopropylbenzene            | 12.46 | 105  | 660642   | 25.323 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 12.71 | 83   | 142794   | 26.054 | ug/L  | 96       |
| 59) 1,2,3-Trichloropropane      | 12.77 | 75   | 106092   | 25.782 | ug/L  | 99       |
| 62) Bromoform                   | 12.35 | 173  | 85045    | 25.025 | ug/L  | 99       |
| 63) 1,3-Dichlorobenzene         | 13.50 | 146  | 315547   | 24.378 | ug/L  | 97       |
| 64) 1,4-Dichlorobenzene         | 13.58 | 146  | 313873   | 24.190 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 13.87 | 146  | 288902   | 24.684 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 14.48 | 75   | 24191    | 25.802 | ug/L  | 95       |
| 67) 1,3,5-Trichlorobenzene      | 14.63 | 180  | 245234   | 25.155 | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene      | 15.13 | 180  | 197571   | 25.032 | ug/L  | 97       |
| 69) Naphthalene                 | 15.36 | 128  | 408341   | 27.270 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 15.55 | 180  | 184835   | 25.414 | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 22.477 ug/L

RT: 2.01 min Scan# 18

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

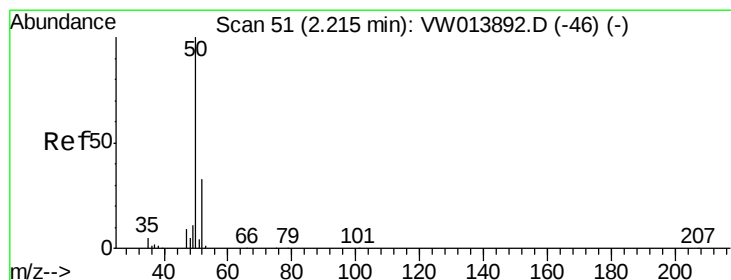
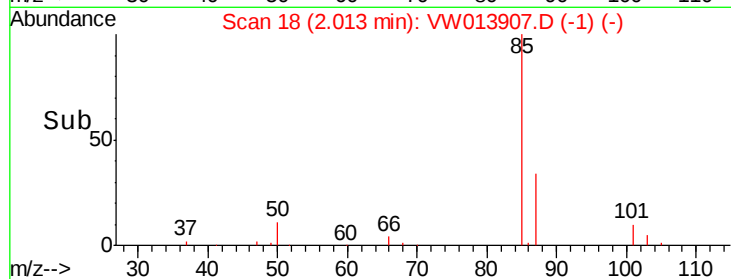
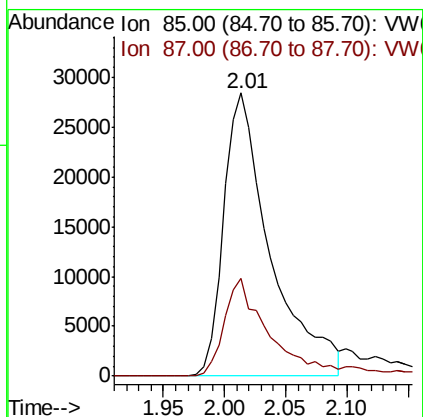
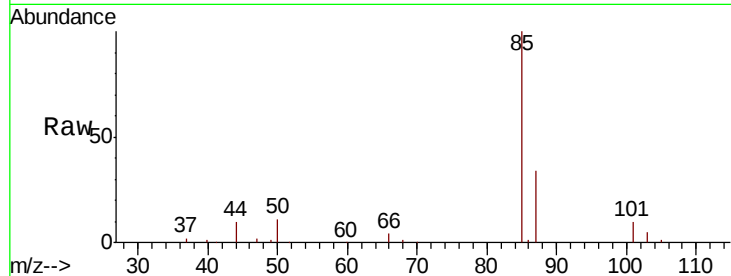
ClientSampleId :

Tot Ion: 85 Resp: 75301

Ion Ratio Lower Upper

85 100

87 32.5 21.6 40.2



#3

Chloromethane

Concen: 21.719 ug/L

RT: 2.21 min Scan# 51

Delta R.T. -0.00 min

Lab File: VW013907.D

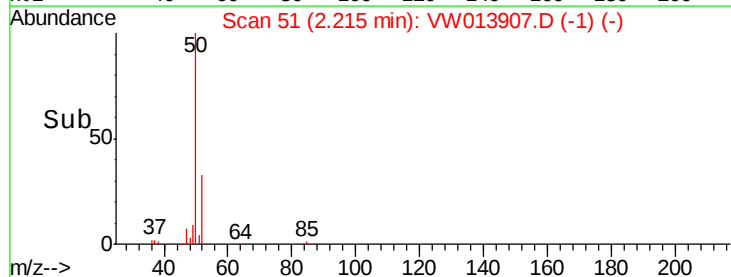
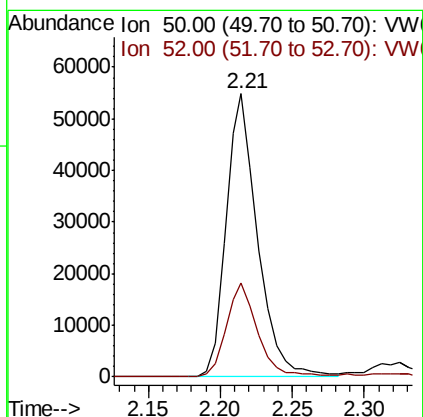
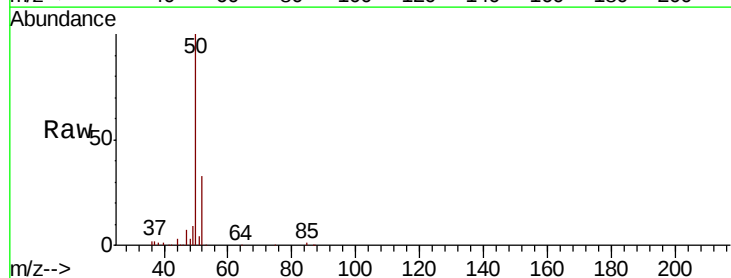
Acq: 01 Nov 2019 18:55

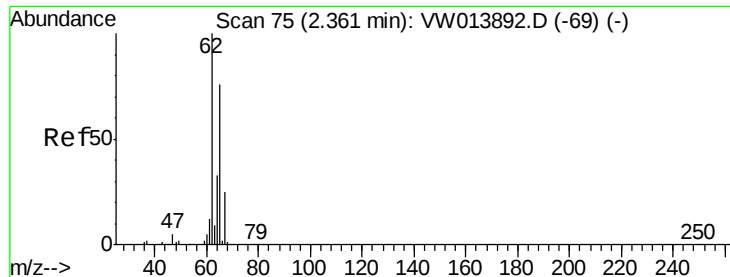
Tgt Ion: 50 Resp: 83446

Ion Ratio Lower Upper

50 100

52 33.4 23.0 42.6





#5

Vinyl chloride

Concen: 23.661 ug/L

RT: 2.37 min Scan# 76

Delta R.T. 0.01 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

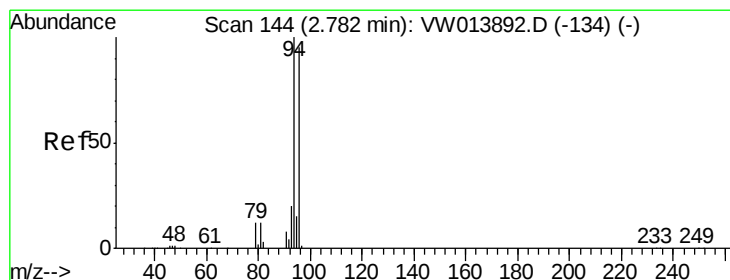
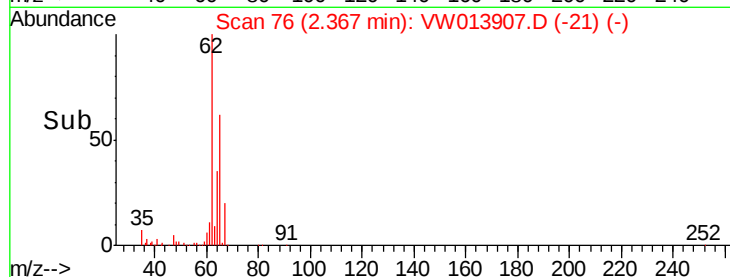
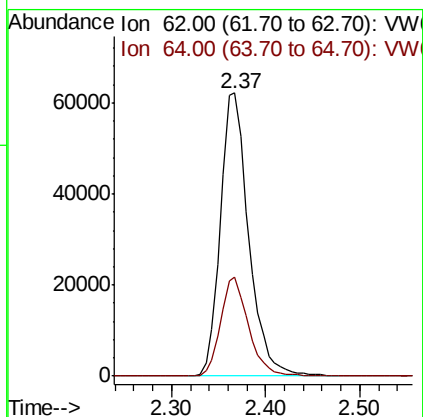
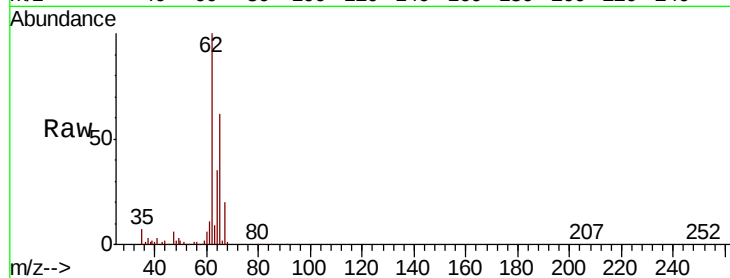
ClientSampleId :

Tot Ion: 62 Resp: 129839

Ion Ratio Lower Upper

62 100

64 35.0 23.3 43.3



#6

Bromomethane

Concen: 23.539 ug/L

RT: 2.78 min Scan# 144

Delta R.T. -0.00 min

Lab File: VW013907.D

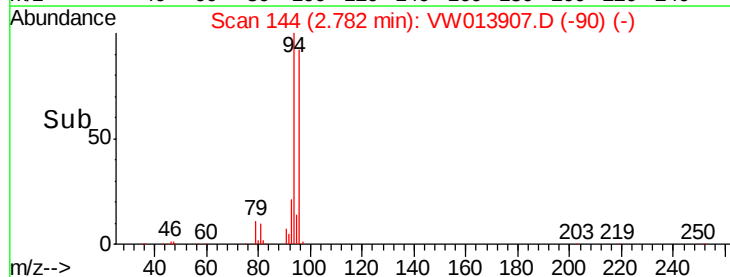
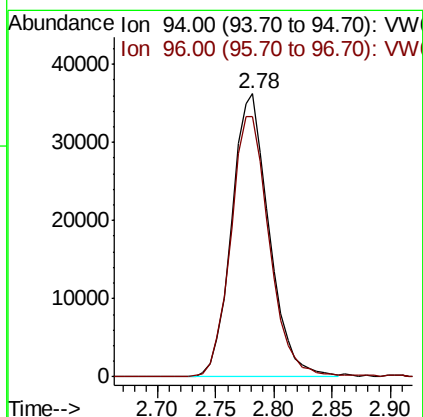
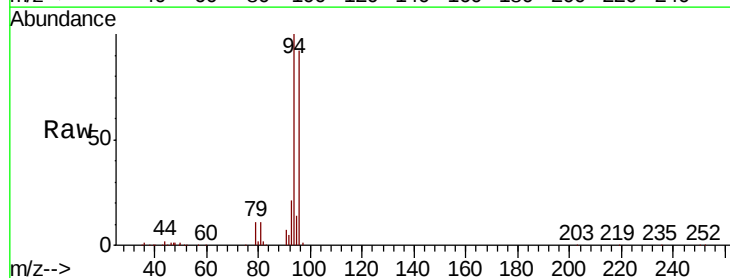
Acq: 01 Nov 2019 18:55

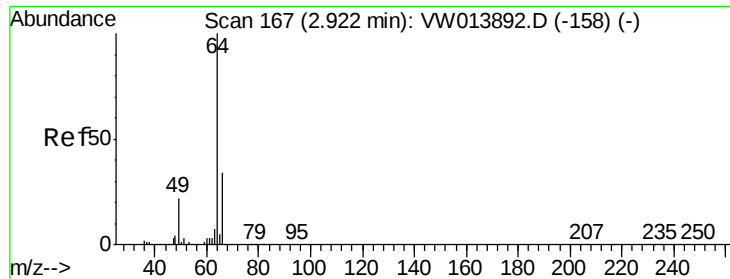
Tgt Ion: 94 Resp: 81249

Ion Ratio Lower Upper

94 100

96 94.6 9.5 179.7





#8

Chloroethane

Concen: 24.502 ug/L

RT: 2.92 min Scan# 167

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

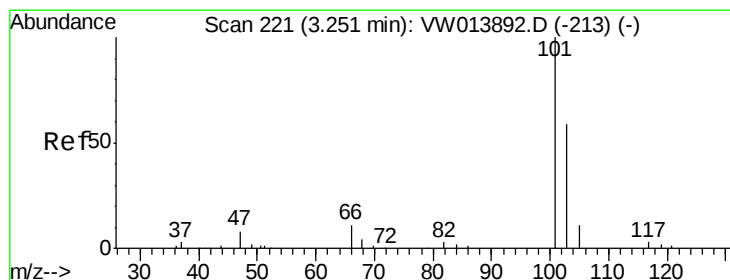
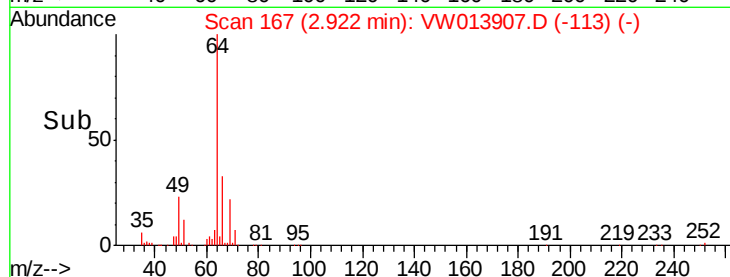
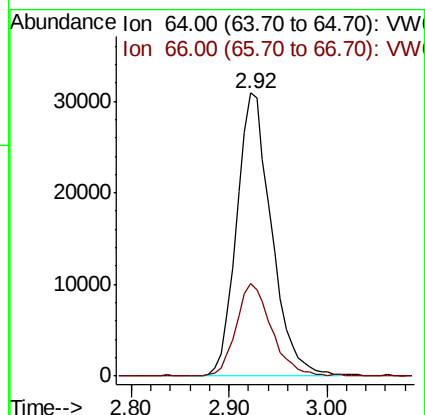
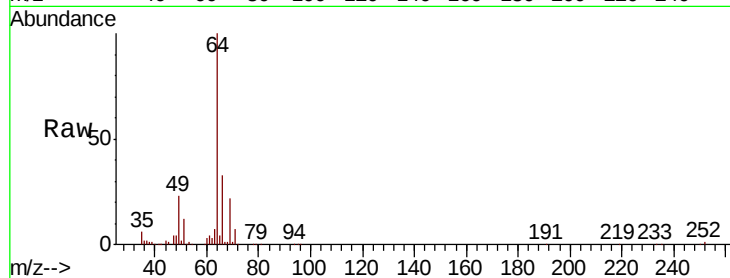
Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion: 64 Resp: 76332

Ion Ratio Lower Upper

64 100

66 32.5 24.1 44.7



#9

Trichlorofluoromethane

Concen: 22.314 ug/L

RT: 3.25 min Scan# 221

Delta R.T. -0.00 min

Lab File: VW013907.D

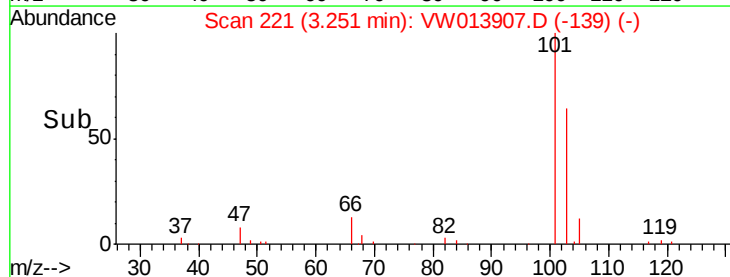
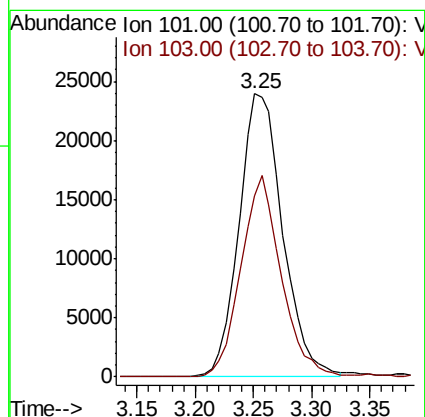
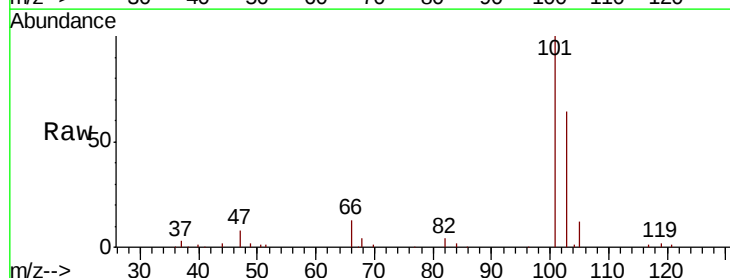
Acq: 01 Nov 2019 18:55

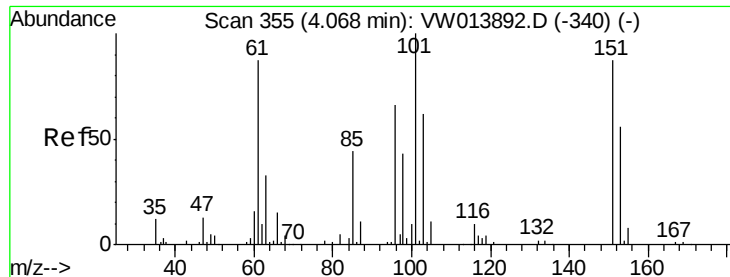
Tgt Ion: 101 Resp: 62375

Ion Ratio Lower Upper

101 100

103 65.6 44.9 83.3





#11

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

Concen: 24.119 ug/L

RT: 4.06 min Scan# 354

Delta R.T. -0.01 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

ClientSampled :

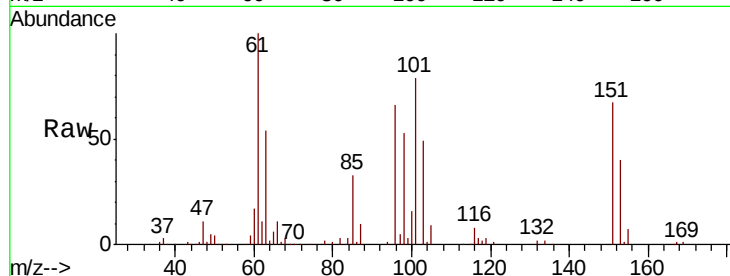
Tot Ion:101 Resp: 129392

Ion Ratio Lower Upper

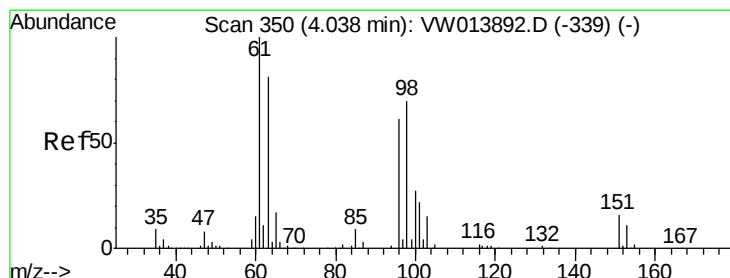
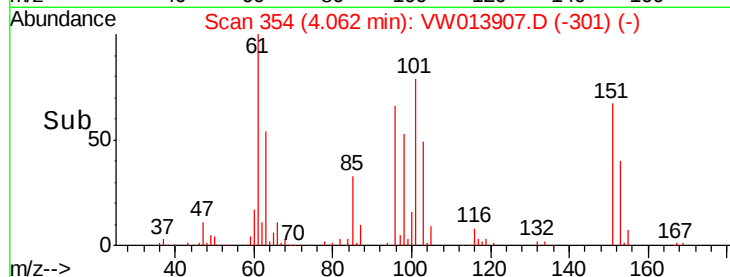
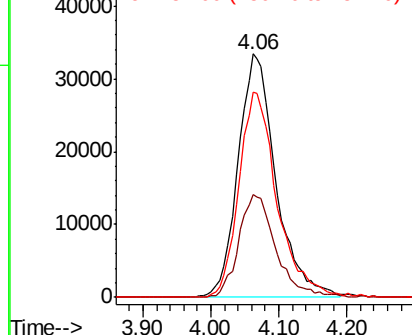
101 100

85 41.0 30.9 46.3

151 84.5 66.3 99.5



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: 24.136 ug/L

RT: 4.04 min Scan# 351

Delta R.T. 0.01 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

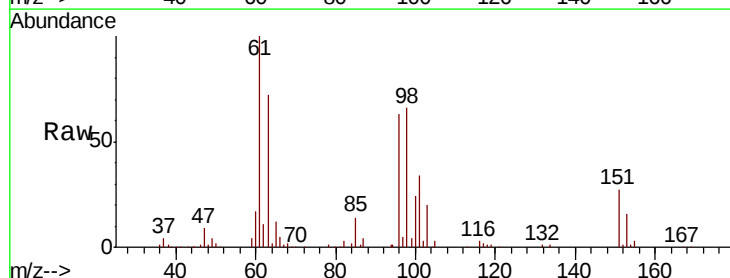
Tgt Ion: 96 Resp: 129826

Ion Ratio Lower Upper

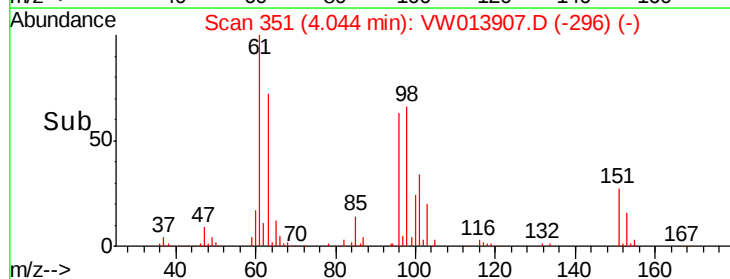
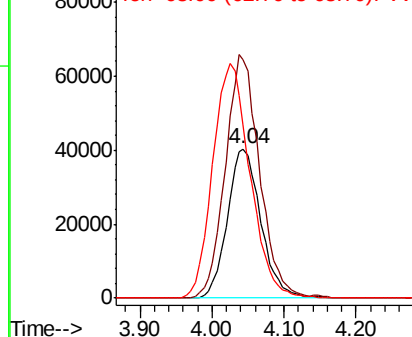
96 100

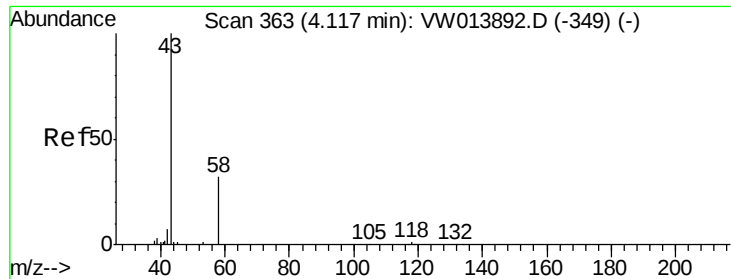
61 159.8 115.1 213.8

63 115.9 97.4 180.8



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: 42.696 ug/L

RT: 4.12 min Scan# 363

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

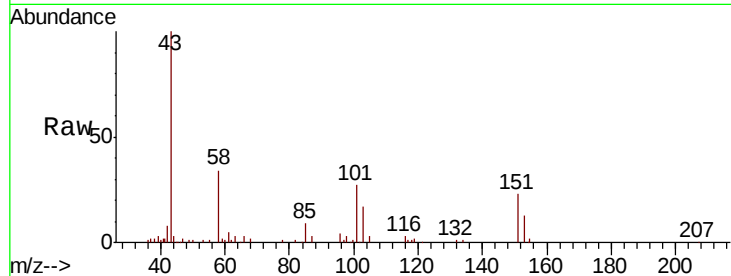
ClientSampled :

Tot Ion: 43 Resp: 72568

Ion Ratio Lower Upper

43 100

58 32.3 0.0 62.8



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

4.12

30000

25000

20000

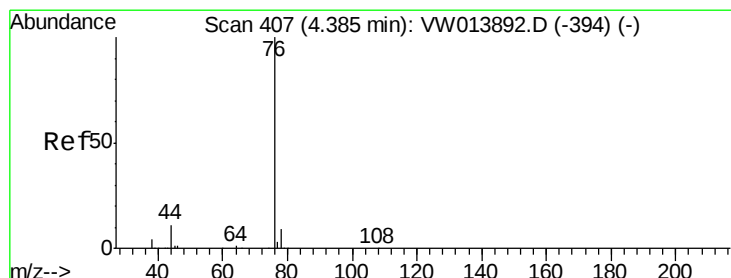
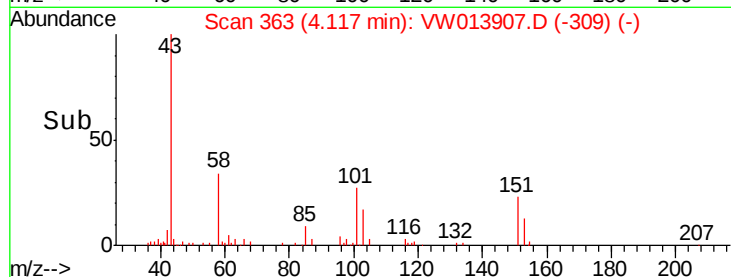
15000

10000

5000

0

Time--> 4.00 4.10 4.20



#14

Carbon disulfide

Concen: 24.573 ug/L

RT: 4.38 min Scan# 407

Delta R.T. -0.00 min

Lab File: VW013907.D

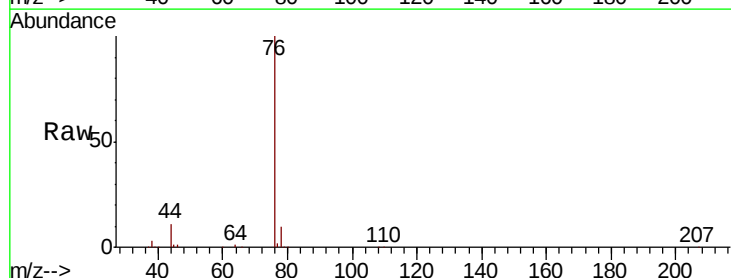
Acq: 01 Nov 2019 18:55

Tgt Ion: 76 Resp: 377776

Ion Ratio Lower Upper

76 100

78 9.7 7.3 10.9



Abundance Ion 76.00 (75.70 to 76.70): VW

Ion 78.00 (77.70 to 78.70): VW

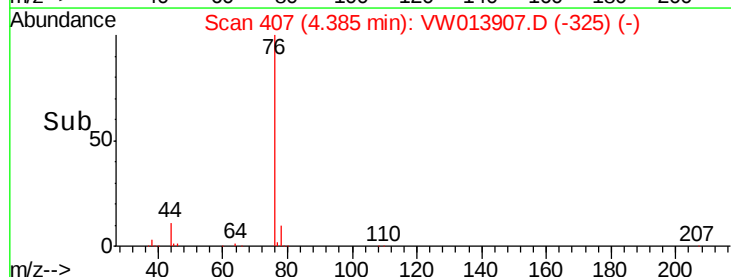
4.38

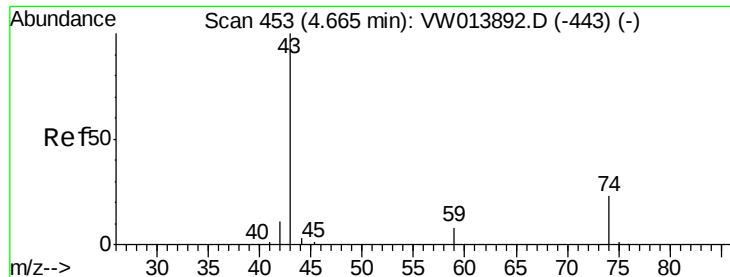
100000

50000

0

Time--> 4.30 4.40 4.50

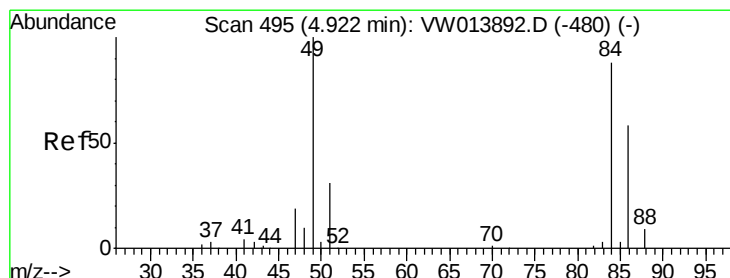
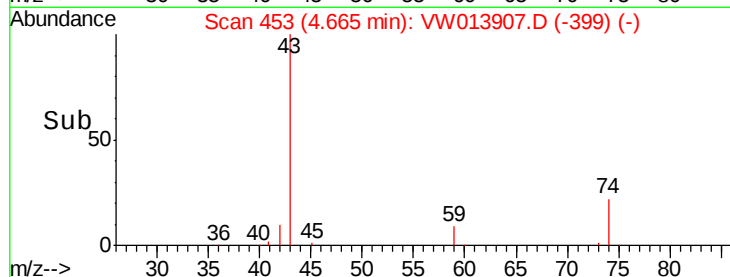
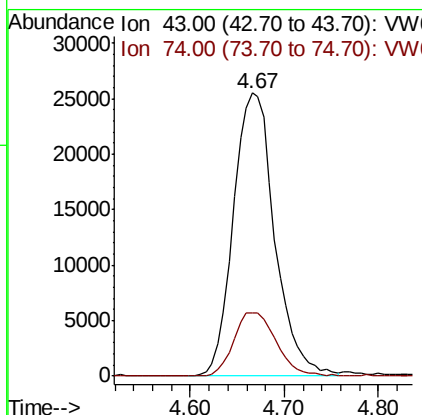
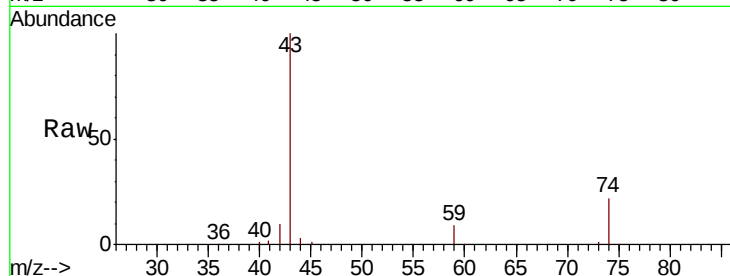




#15  
Methvl Acetate  
Concen: 26.559 ug/L  
RT: 4.67 min Scan# 453  
Delta R.T. -0.00 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

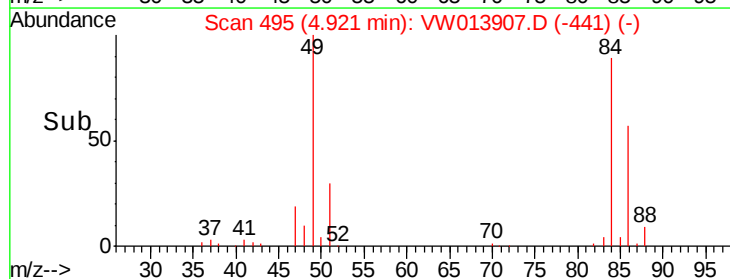
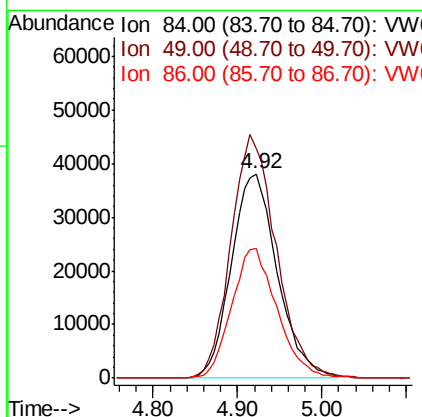
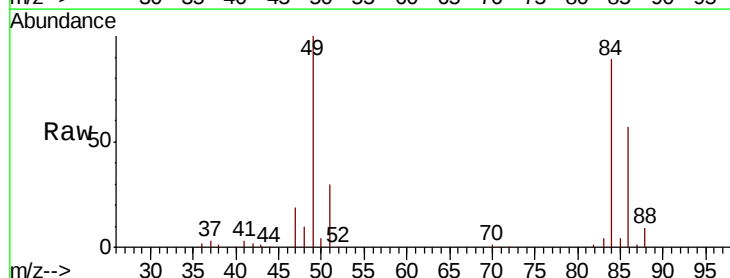
Instrument :  
MSVOA\_W  
ClientSampled :

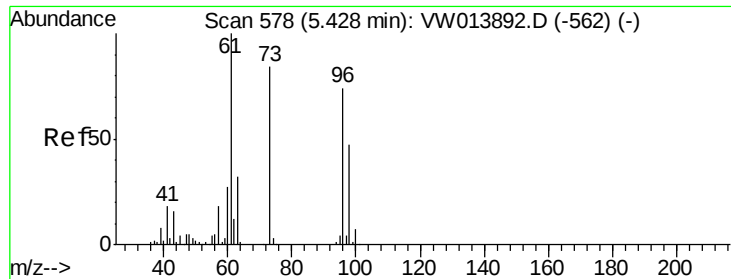
Tot Ion: 43 Resp: 78165  
Ion Ratio Lower Upper  
43 100  
74 23.1 19.1 28.7



#16  
Methylene chloride  
Concen: 24.255 ug/L  
RT: 4.92 min Scan# 495  
Delta R.T. -0.00 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

Tgt Ion: 84 Resp: 141351  
Ion Ratio Lower Upper  
84 100  
49 112.5 79.7 148.1  
86 63.7 46.4 86.2

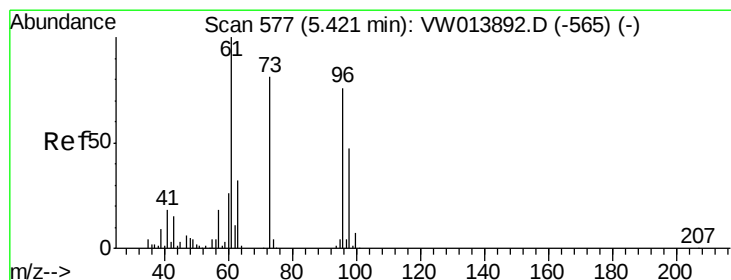
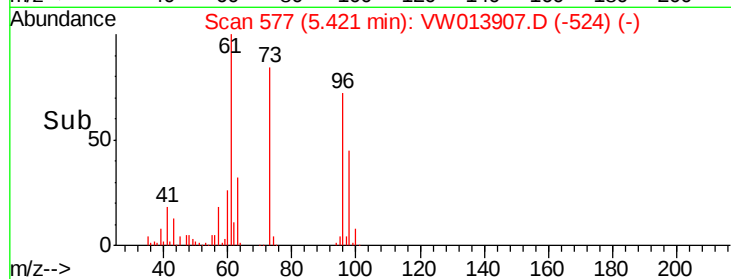
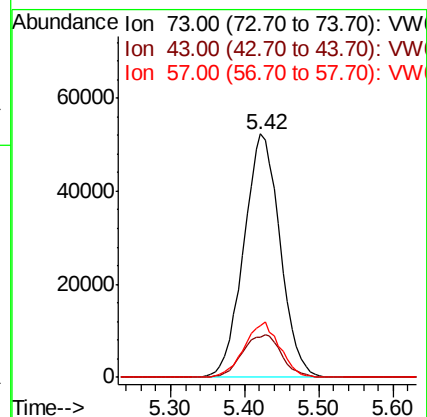
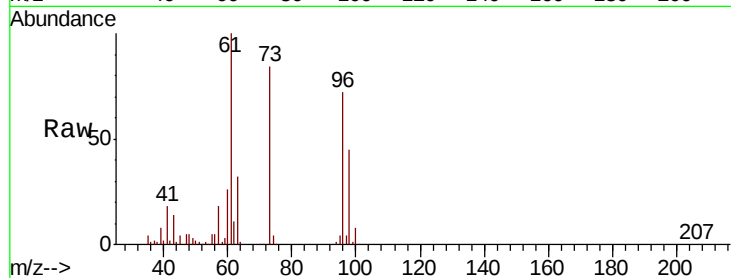




#17  
Methvl tert-butvl Ether  
Concen: 26.285 ug/L  
RT: 5.42 min Scan# 577  
Delta R.T. -0.01 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

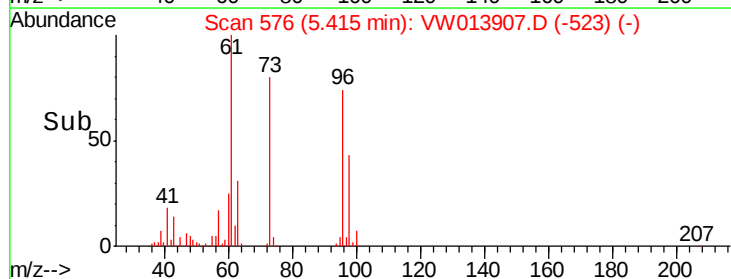
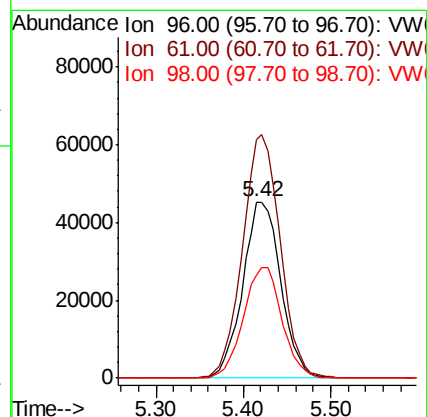
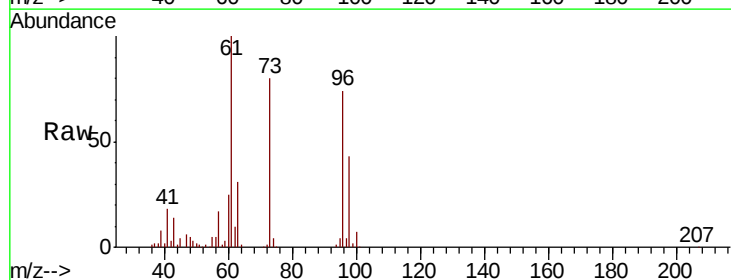
Instrument :  
MSVOA\_W  
ClientSampleId :

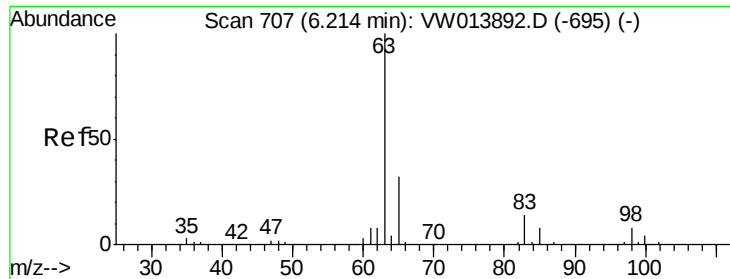
Tot Ion: 73 Resp: 178864  
Ion Ratio Lower Upper  
73 100  
43 18.9 14.4 21.6  
57 22.1 17.8 26.6



#18  
trans-1,2-Dichloroethene  
Concen: 24.388 ug/L  
RT: 5.42 min Scan# 576  
Delta R.T. -0.01 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

Tgt Ion: 96 Resp: 136715  
Ion Ratio Lower Upper  
96 100  
61 135.5 92.6 172.0  
98 58.5 43.8 81.3

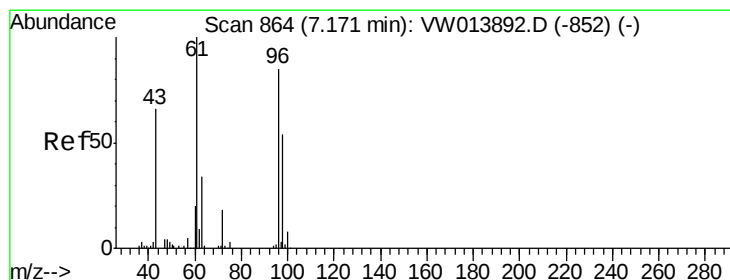
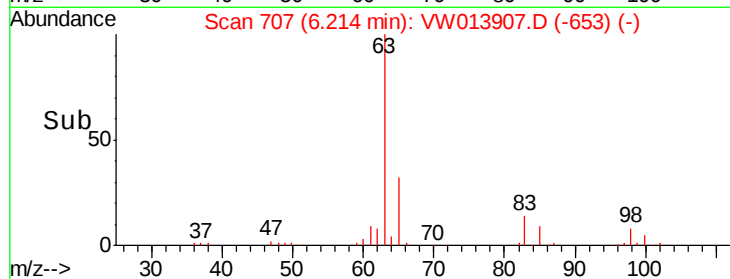
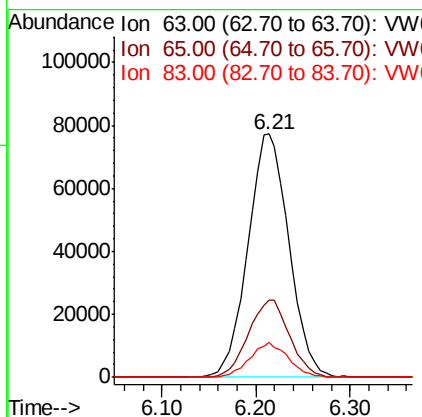
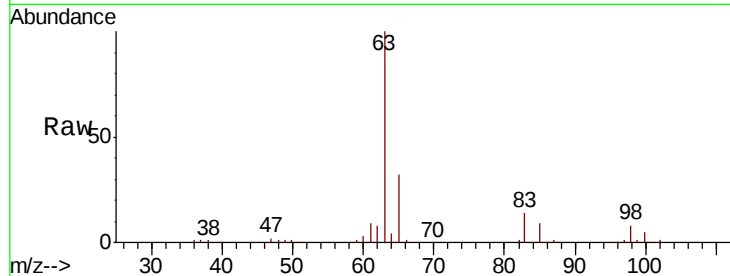




#19  
 1,1-Dichloroethane  
 Concen: 24.702 ug/L  
 RT: 6.21 min Scan# 707  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

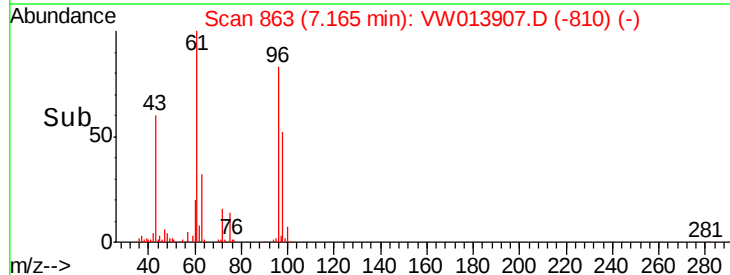
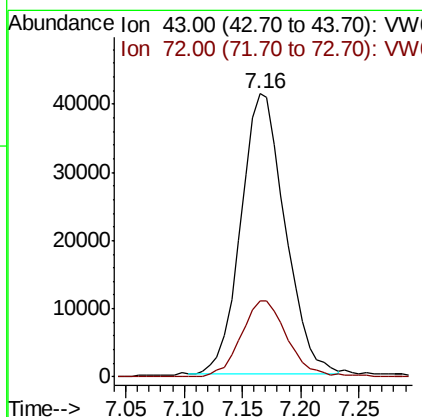
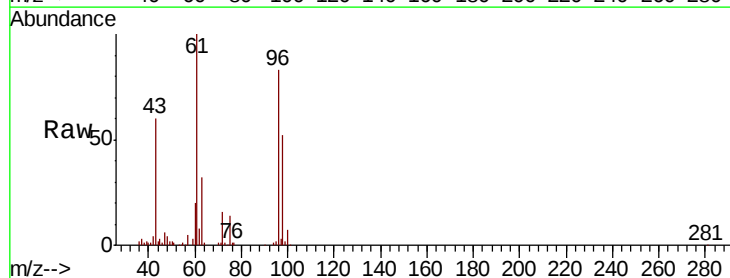
Instrument :  
 MSVOA\_W  
 ClientSampled :

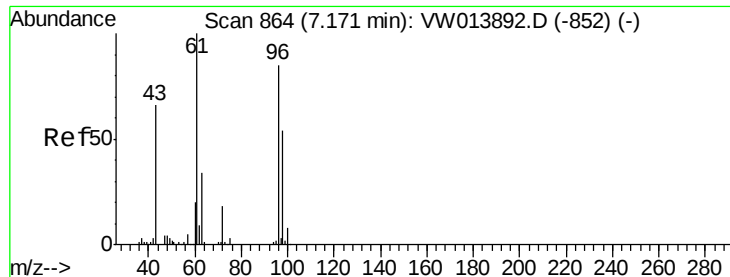
Tot Ion: 63 Resp: 235115  
 Ion Ratio Lower Upper  
 63 100  
 65 31.7 22.3 41.5  
 83 14.4 10.1 18.7



#21  
 2-Butanone  
 Concen: 46.629 ug/L  
 RT: 7.16 min Scan# 863  
 Delta R.T. -0.01 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

Tgt Ion: 43 Resp: 108785  
 Ion Ratio Lower Upper  
 43 100  
 72 27.9 13.6 40.8



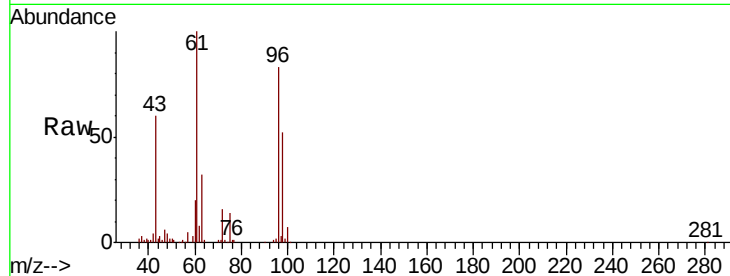


#22

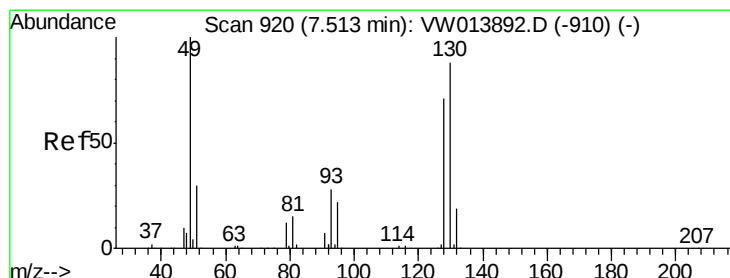
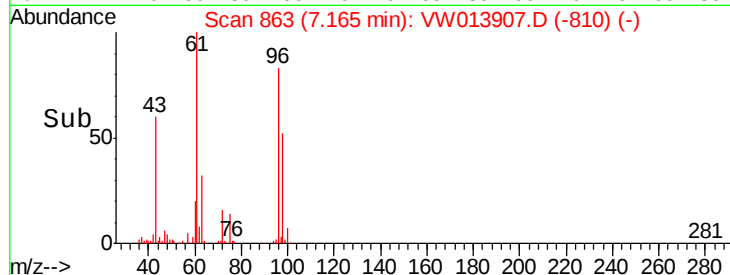
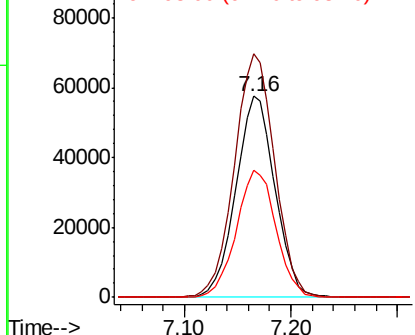
cis-1,2-Dichloroethene  
Concen: 25.160 ug/L  
RT: 7.16 min Scan# 863  
Delta R.T. -0.01 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion: 96 Resp: 148322  
Ion Ratio Lower Upper  
96 100  
61 121.1 82.3 152.9  
98 63.3 44.0 81.8



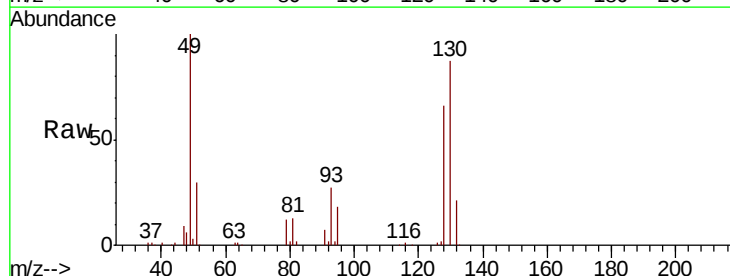
Abundance Ion 96.00 (95.70 to 96.70): VW  
Ion 61.00 (60.70 to 61.70): VW  
Ion 98.00 (97.70 to 98.70): VW



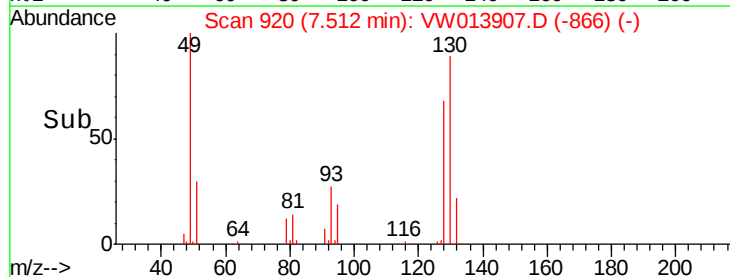
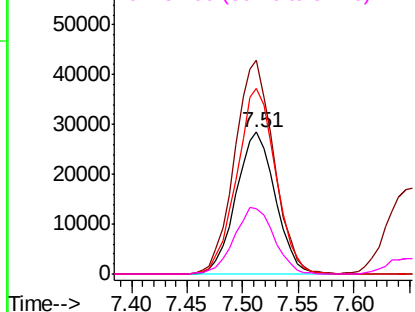
#23

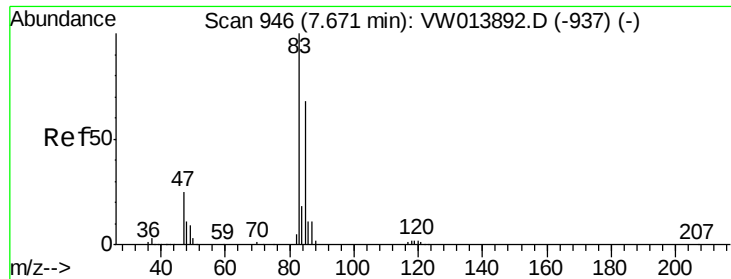
Bromochloromethane  
Concen: 25.156 ug/L  
RT: 7.51 min Scan# 920  
Delta R.T. -0.00 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

Tgt Ion:128 Resp: 69734  
Ion Ratio Lower Upper  
128 100  
49 150.6 98.7 183.3  
130 130.7 86.8 161.2  
51 45.8 34.2 51.2



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: 24.497 ug/L

RT: 7.68 min Scan# 947

Delta R.T. 0.01 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

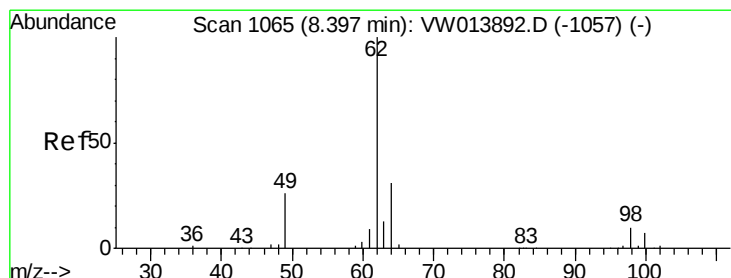
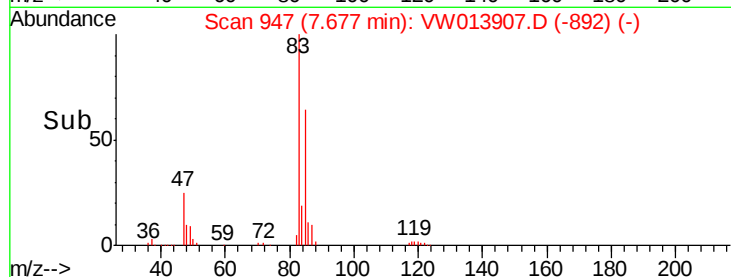
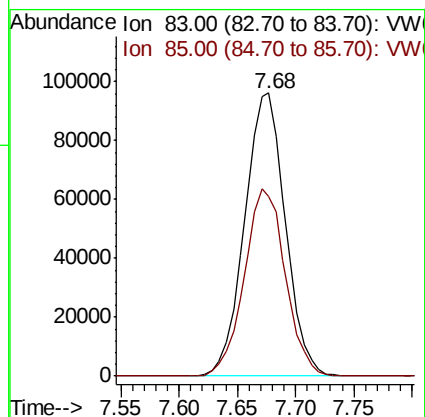
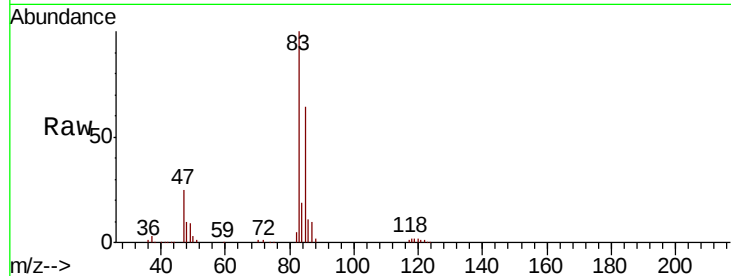
Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion: 83 Resp: 234422

Ion Ratio Lower Upper

83 100

85 66.6 46.9 87.1



#27

1,2-Dichloroethane

Concen: 25.311 ug/L

RT: 8.40 min Scan# 1065

Delta R.T. -0.00 min

Lab File: VW013907.D

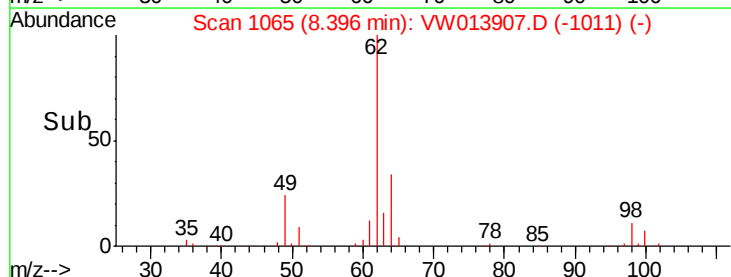
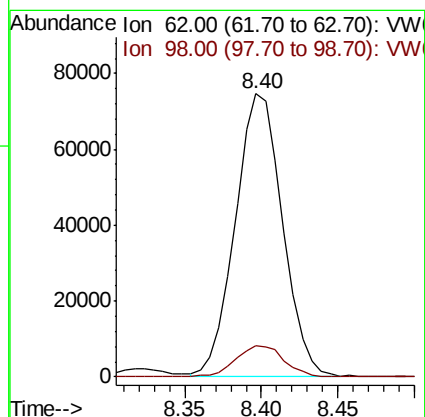
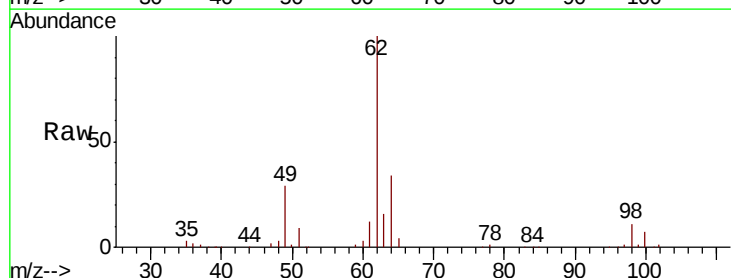
Acq: 01 Nov 2019 18:55

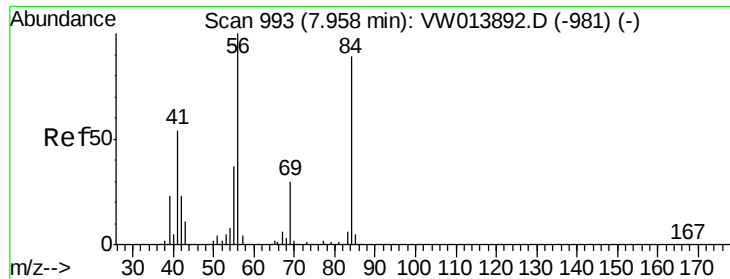
Tgt Ion: 62 Resp: 160196

Ion Ratio Lower Upper

62 100

98 11.1 8.2 12.2

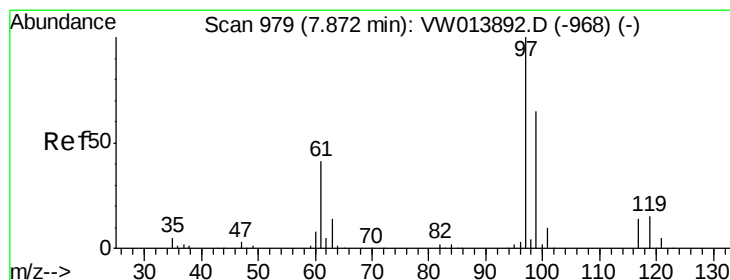
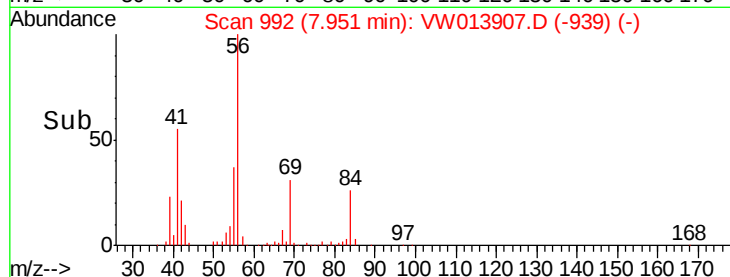
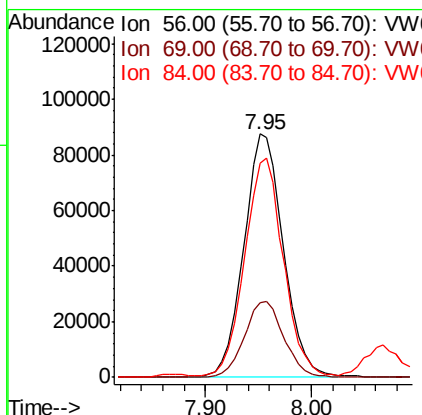
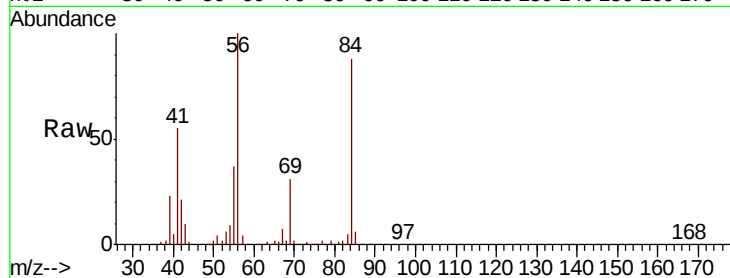




#30  
Cyclohexane  
Concen: 24.687 ug/L  
RT: 7.95 min Scan# 992  
Delta R.T. -0.01 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

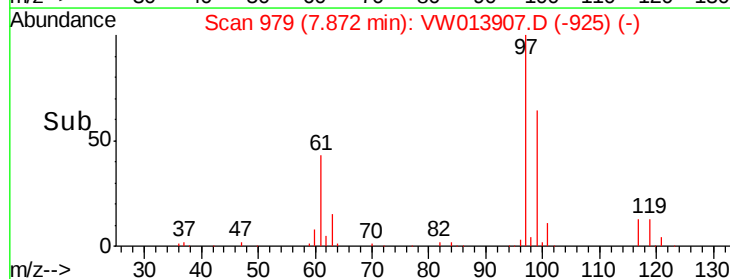
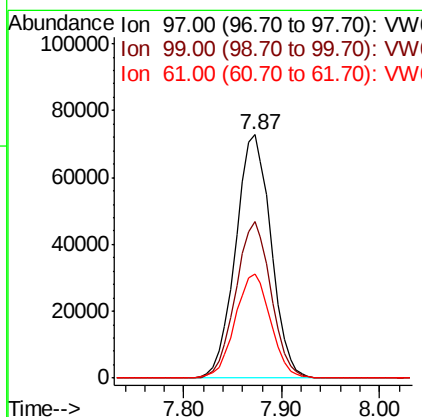
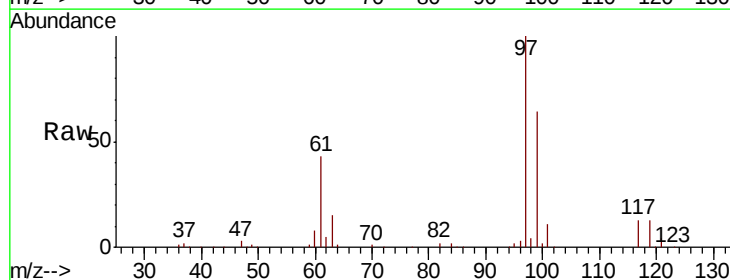
Instrument :  
MSVOA\_W  
ClientSampled :

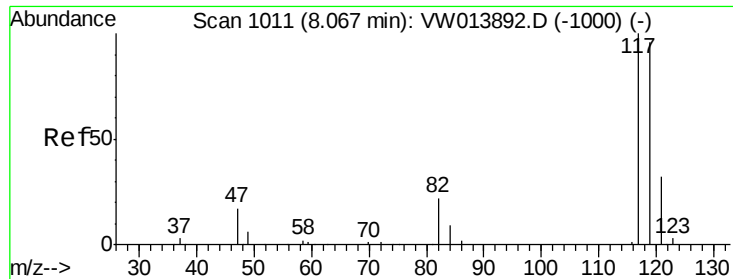
Tot Ion: 56 Resp: 227844  
Ion Ratio Lower Upper  
56 100  
69 31.2 24.5 36.7  
84 89.0 70.6 105.8



#31  
1,1,1-Trichloroethane  
Concen: 24.386 ug/L  
RT: 7.87 min Scan# 979  
Delta R.T. -0.00 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

Tgt Ion: 97 Resp: 182636  
Ion Ratio Lower Upper  
97 100  
99 64.2 52.0 78.0  
61 43.0 33.6 50.4





#32

Carbon tetrachloride

Concen: 24.574 ug/L

RT: 8.07 min Scan# 1011

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

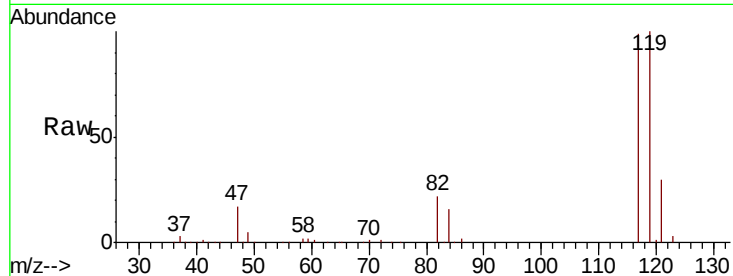
ClientSampleId :

Tot Ion:117 Resp: 179975

Ion Ratio Lower Upper

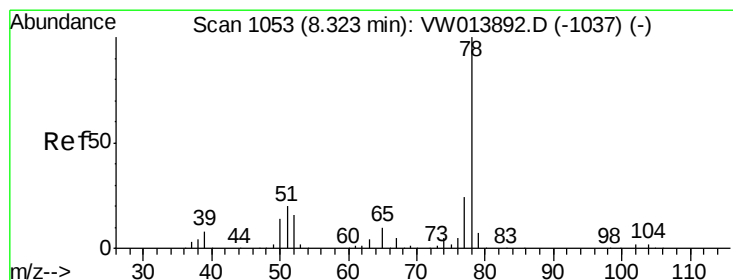
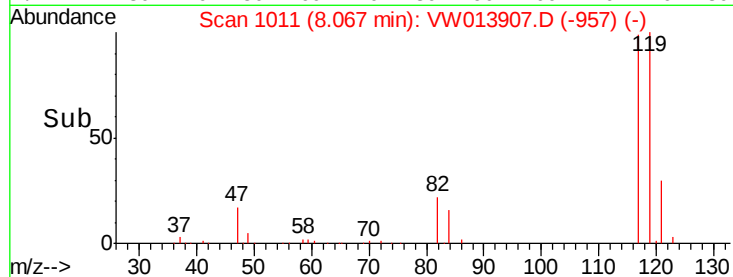
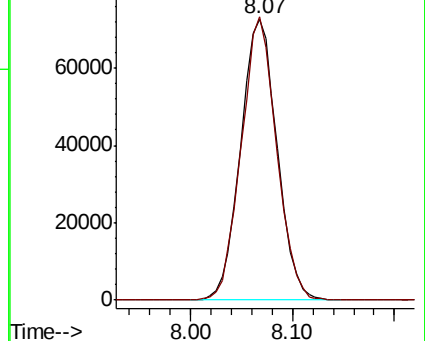
117 100

119 97.7 77.9 116.9



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 25.073 ug/L

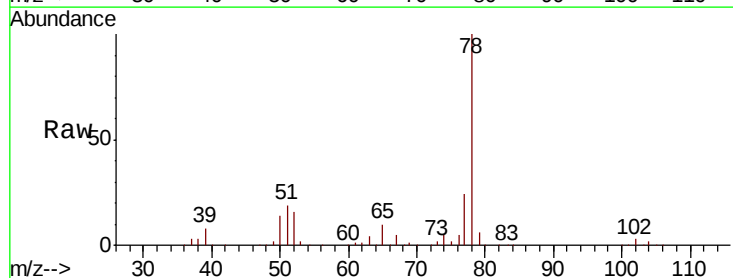
RT: 8.32 min Scan# 1053

Delta R.T. -0.00 min

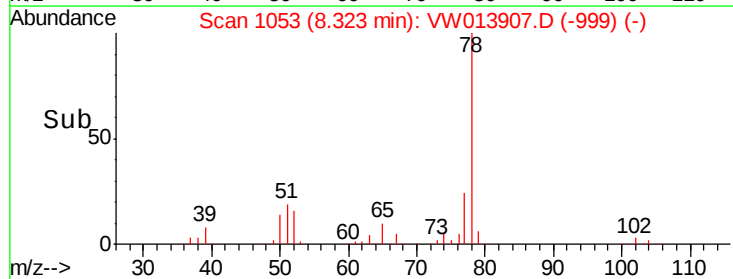
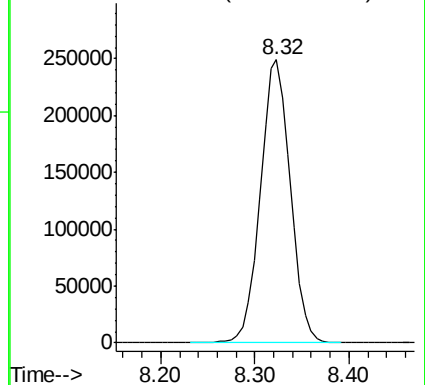
Lab File: VW013907.D

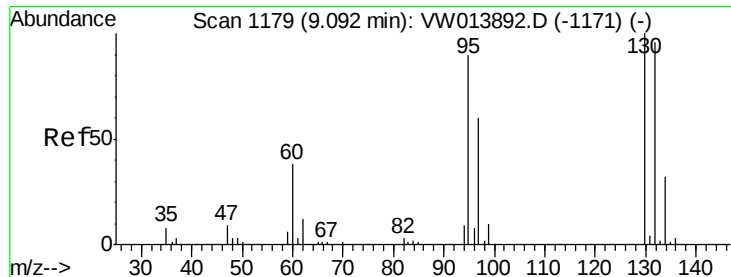
Acq: 01 Nov 2019 18:55

Tgt Ion: 78 Resp: 556722



Abundance Ion 78.00 (77.70 to 78.70): VW

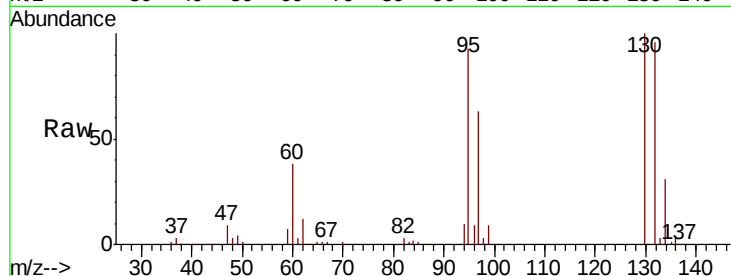




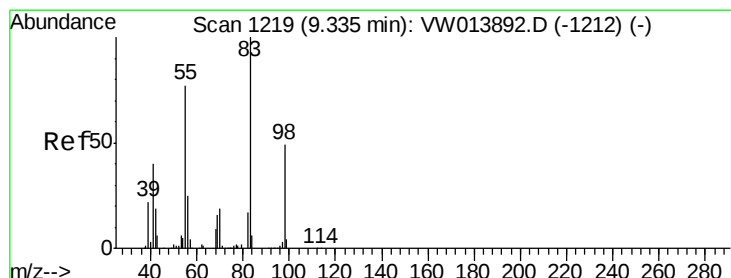
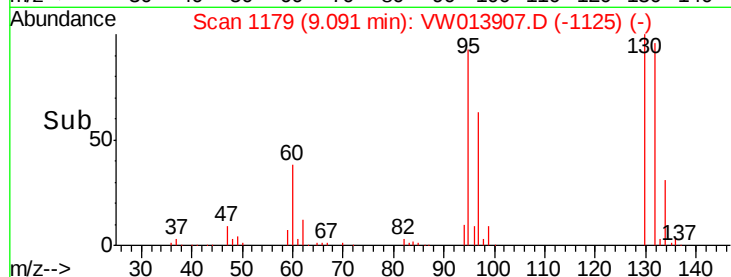
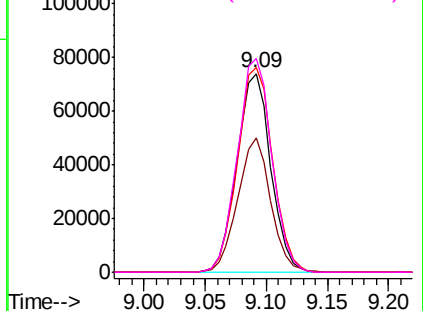
#35  
 Trichloroethene  
 Concen: 24.384 ug/L  
 RT: 9.09 min Scan# 1179  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

Instrument :  
 MSVOA\_W  
 ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 95    | Resp: | 142723 |
| Ion      | Ratio | Lower | Upper  |
| 95       | 100   |       |        |
| 97       | 65.5  | 44.9  | 83.5   |
| 132      | 106.4 | 73.3  | 136.1  |
| 130      | 109.2 | 75.5  | 140.1  |

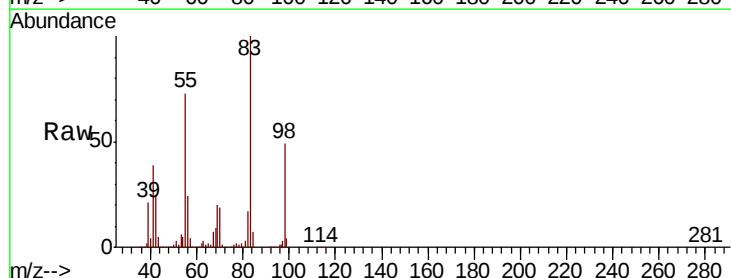


Abundance Ion 95.00 (94.70 to 95.70): VW  
 Ion 97.00 (96.70 to 97.70): VW  
 Ion 132.00 (131.70 to 132.70): V  
 Ion 130.00 (129.70 to 130.70): V

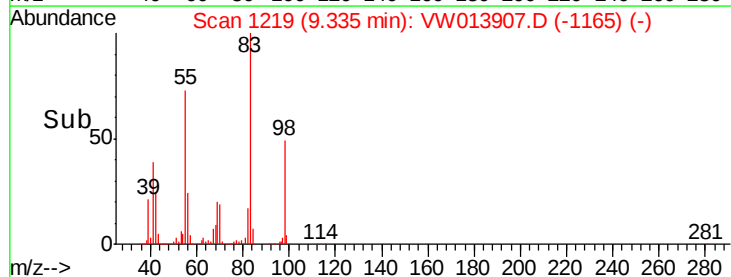
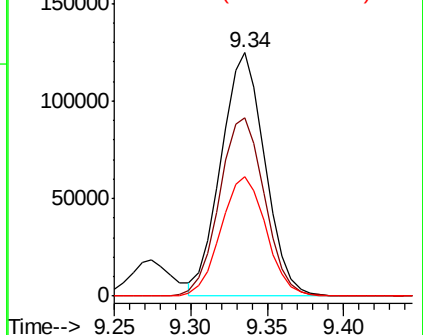


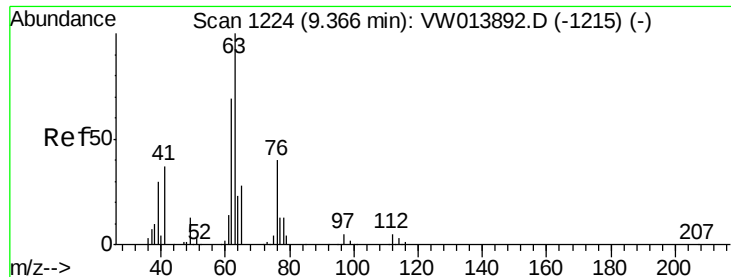
#36  
 Methylcyclohexane  
 Concen: 24.124 ug/L  
 RT: 9.34 min Scan# 1219  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 247845 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 55       | 75.9  | 60.2  | 90.2   |
| 98       | 50.7  | 39.2  | 58.8   |



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: 24.989 ug/L

RT: 9.37 min Scan# 1224

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

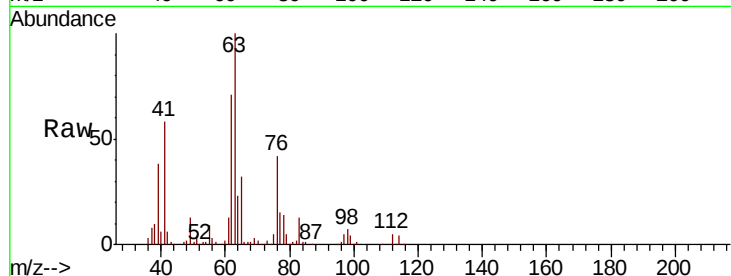
ClientSampleId :

Tot Ion: 63 Resp: 136189

Ion Ratio Lower Upper

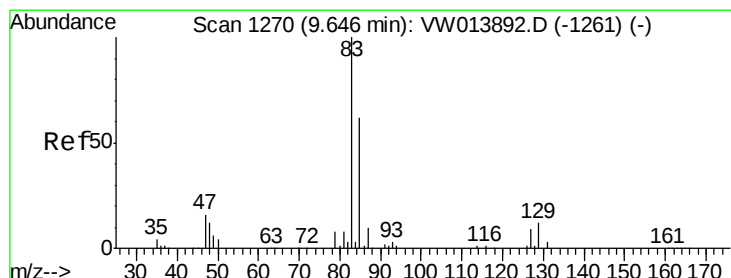
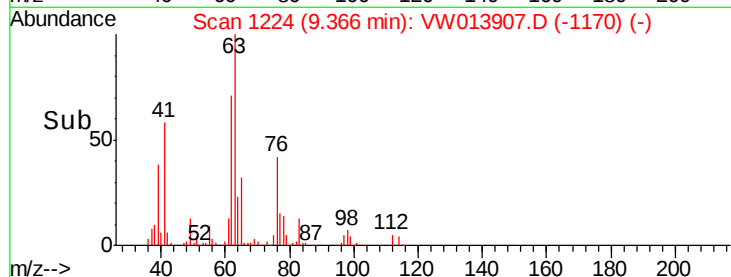
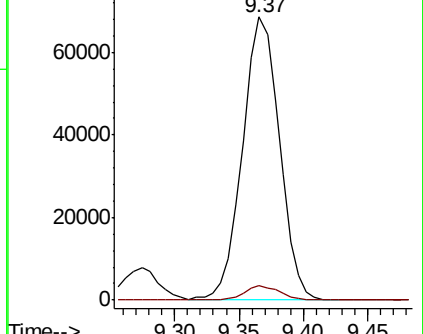
63 100

112 4.9 3.9 5.9



Abundance Ion 63.00 (62.70 to 63.70): VW

Ion 112.00 (111.70 to 112.70): V



#41

Bromodichloromethane

Concen: 25.387 ug/L

RT: 9.64 min Scan# 1269

Delta R.T. -0.01 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

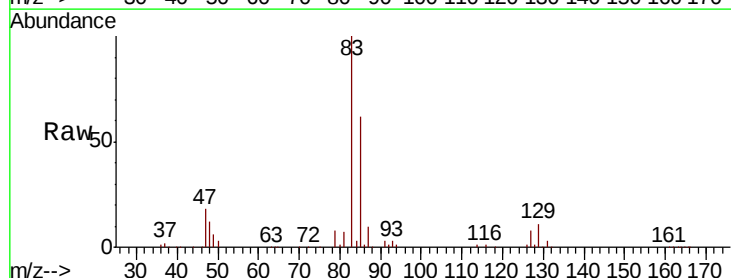
Tgt Ion: 83 Resp: 173932

Ion Ratio Lower Upper

83 100

85 61.7 43.5 80.7

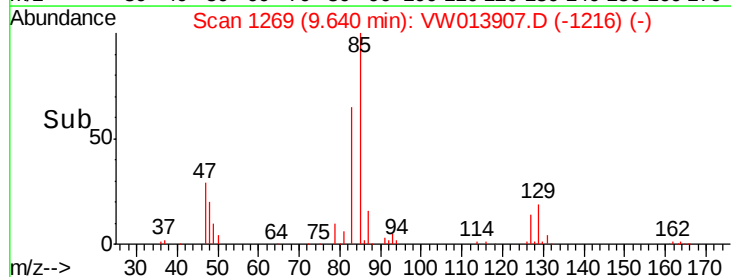
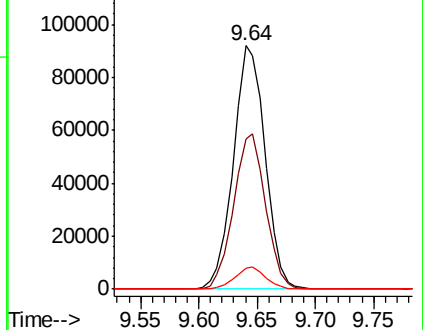
127 8.4 7.0 10.4

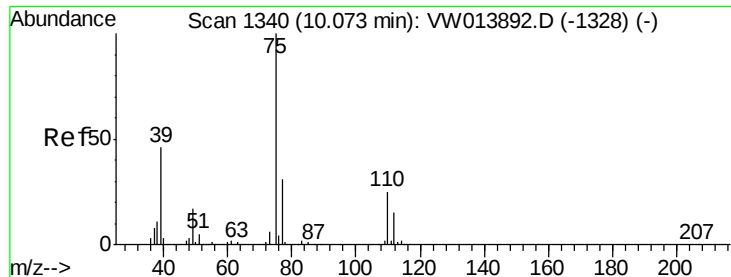


Abundance Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 127.00 (126.70 to 127.70): V





#42

cis-1,3-Dichloropropene

Concen: 25.408 ug/L

RT: 10.07 min Scan# 1340

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

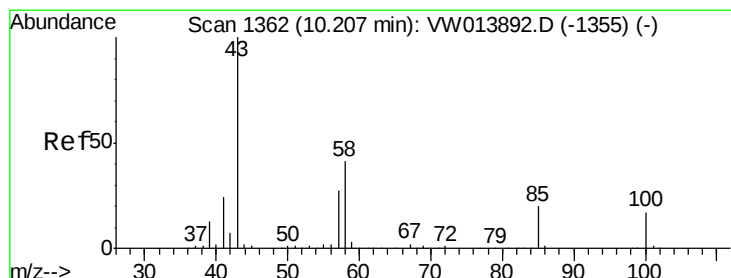
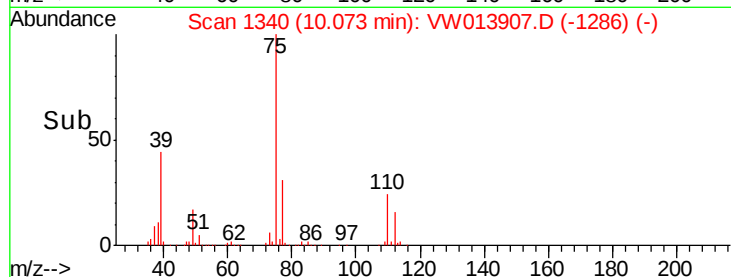
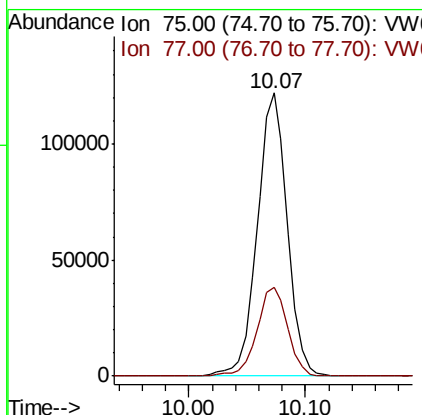
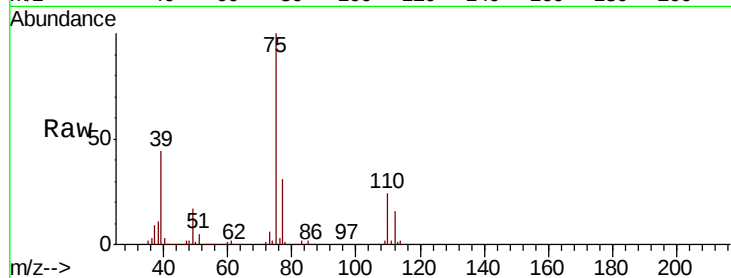
ClientSampled :

Tot Ion: 75 Resp: 218228

Ion Ratio Lower Upper

75 100

77 31.4 21.8 40.4



#43

4-Methyl-2-pentanone

Concen: 52.423 ug/L

RT: 10.21 min Scan# 1362

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

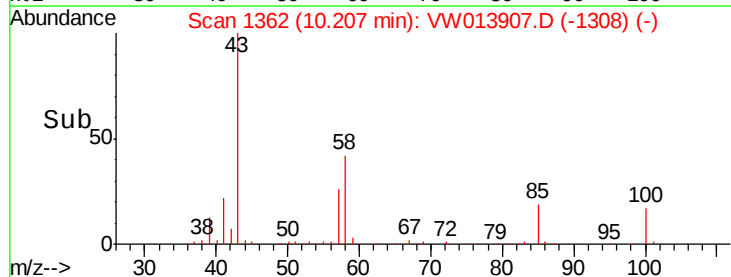
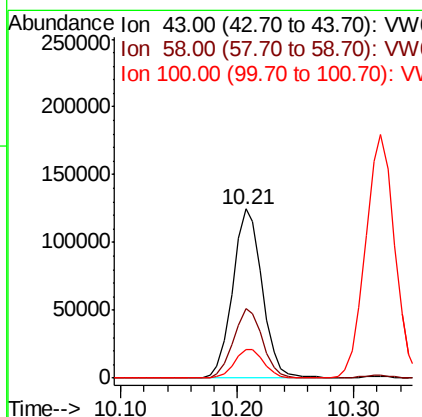
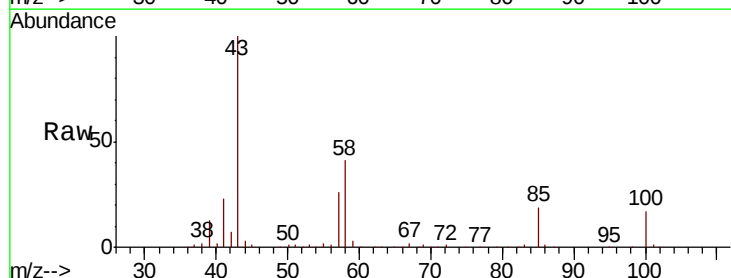
Tgt Ion: 43 Resp: 219722

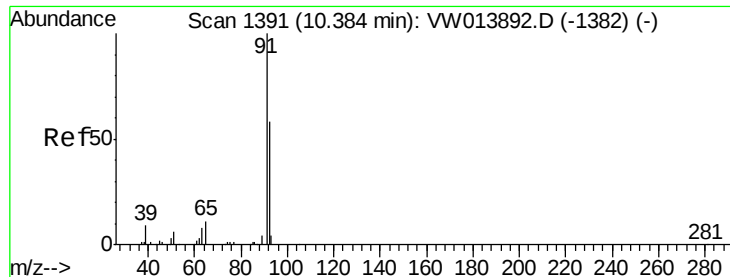
Ion Ratio Lower Upper

43 100

58 40.5 32.6 48.8

100 17.0 14.1 21.1





#44

Toluene

Concen: 25.248 ug/L

RT: 10.39 min Scan# 1392

Delta R.T. 0.01 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

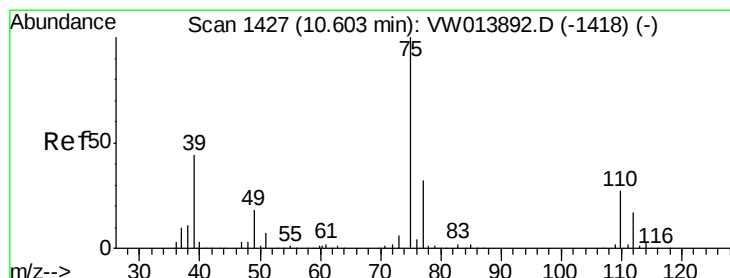
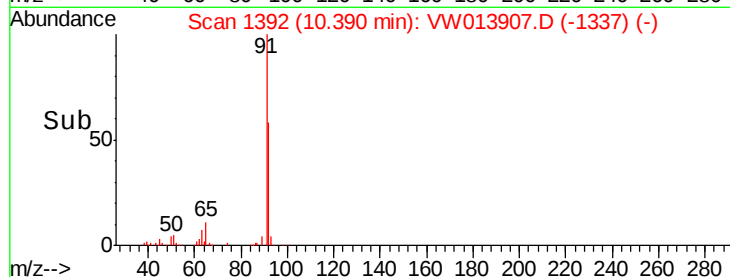
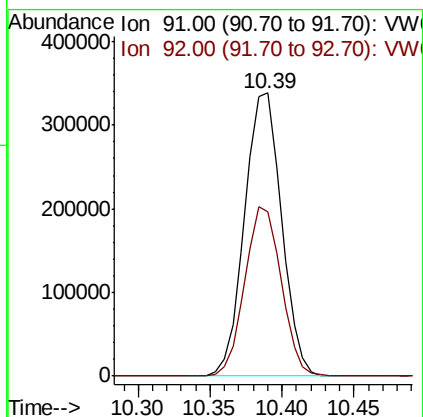
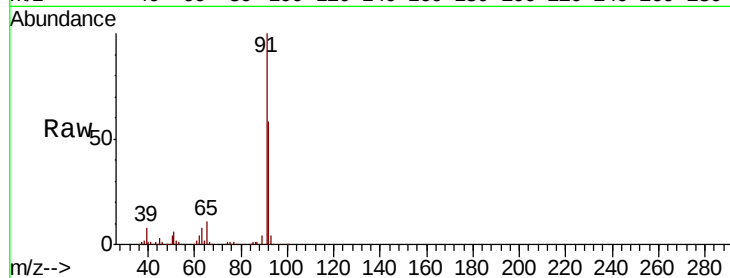
ClientSampleId :

Tot Ion: 91 Resp: 602409

Ion Ratio Lower Upper

91 100

92 58.0 40.3 74.9



#45

trans-1,3-Dichloropropene

Concen: 25.198 ug/L

RT: 10.60 min Scan# 1427

Delta R.T. -0.00 min

Lab File: VW013907.D

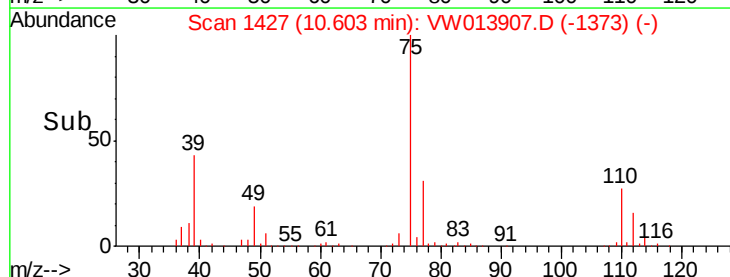
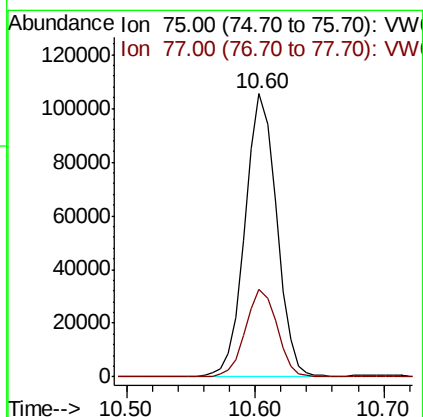
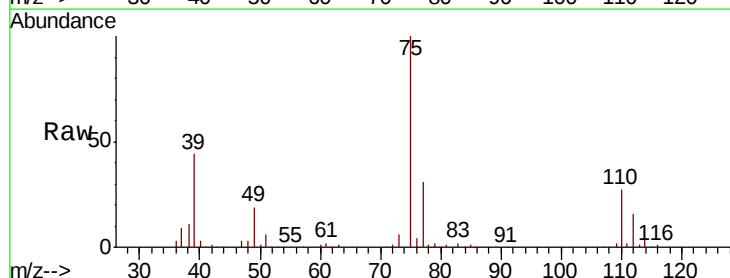
Acq: 01 Nov 2019 18:55

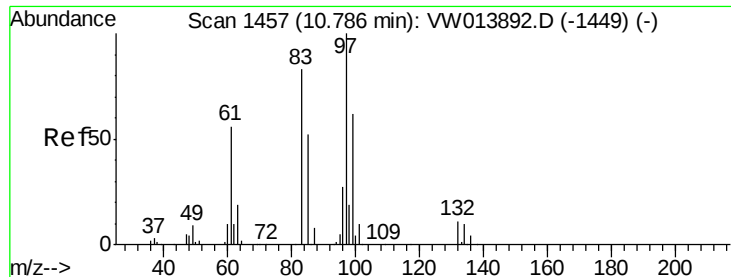
Tgt Ion: 75 Resp: 178829

Ion Ratio Lower Upper

75 100

77 30.7 22.5 41.7





#46

1,1,2-Trichloroethane

Concen: 24.970 ug/L

RT: 10.79 min Scan# 1457

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

ClientSampleId :

Tot Ion: 97 Resp: 108667

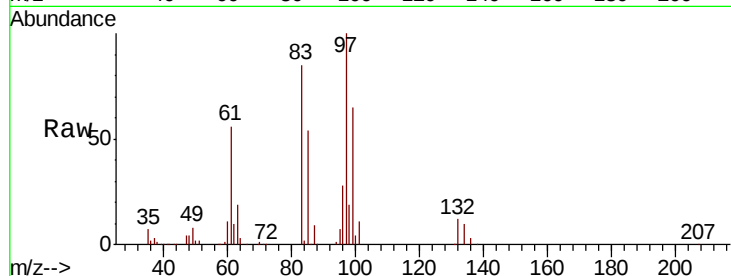
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 84.7  | 58.4  | 108.4 |
| 85  | 54.3  | 36.2  | 67.2  |
| 99  | 65.3  | 43.1  | 80.1  |

97 100

83 84.7 58.4 108.4

85 54.3 36.2 67.2

99 65.3 43.1 80.1



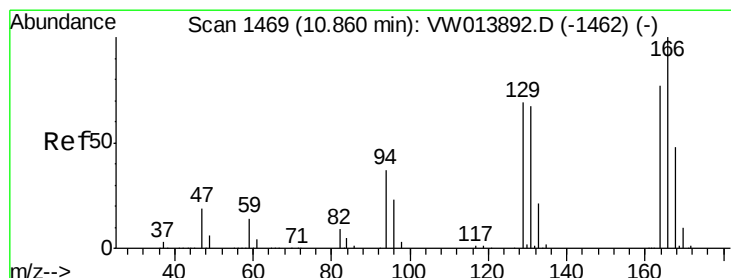
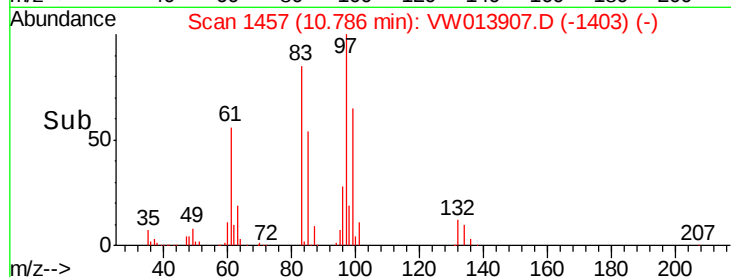
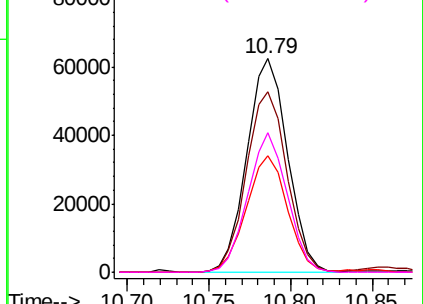
Abundance

Ion 97.00 (96.70 to 97.70): VW

Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 99.00 (98.70 to 99.70): VW



#47

Tetrachloroethene

Concen: 24.258 ug/L

RT: 10.86 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Tgt Ion: 164 Resp: 130722

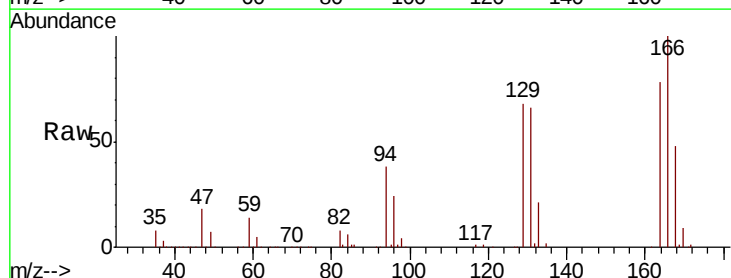
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 87.2  | 63.0  | 117.0 |
| 131 | 84.4  | 60.6  | 112.6 |
| 166 | 128.2 | 90.7  | 168.5 |

164 100

129 87.2 63.0 117.0

131 84.4 60.6 112.6

166 128.2 90.7 168.5



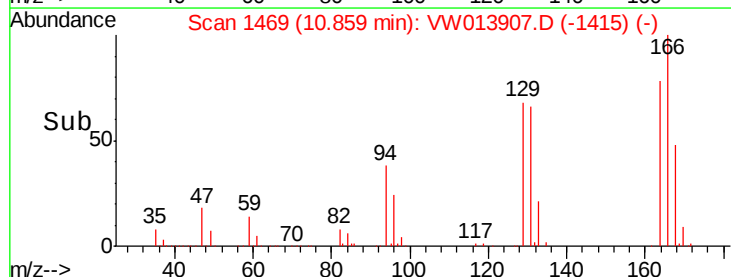
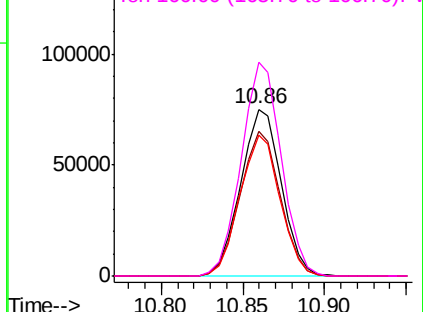
Abundance

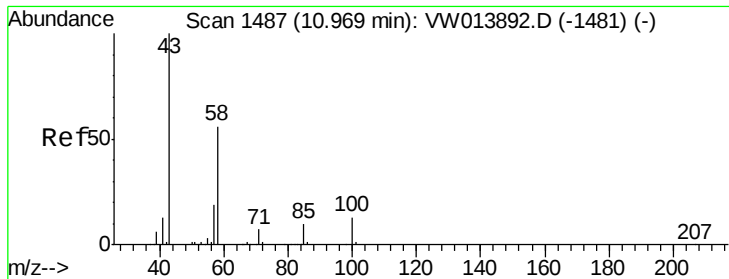
Ion 164.00 (163.70 to 164.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V





#49

2-Hexanone

Concen: 51.934 ug/L

RT: 10.97 min Scan# 1487

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

ClientSampled :

Tot Ion: 43 Resp: 159911

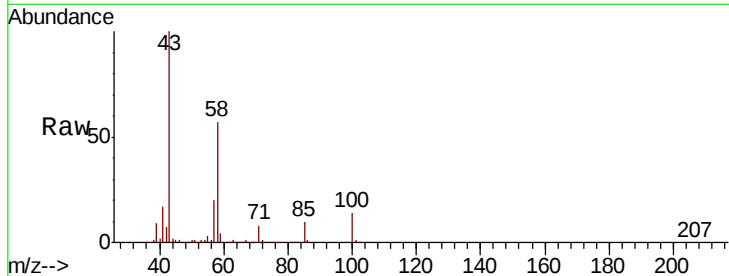
Ion Ratio Lower Upper

43 100

58 55.8 45.2 67.8

57 19.7 15.4 23.0

100 13.4 10.9 16.3



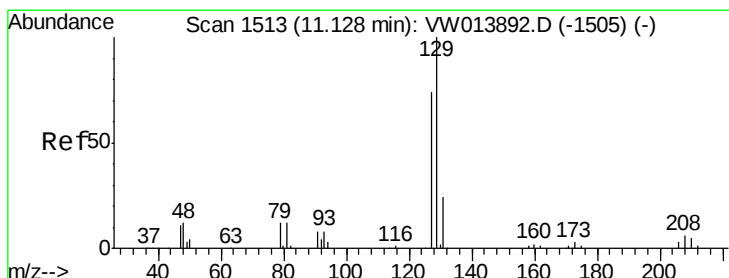
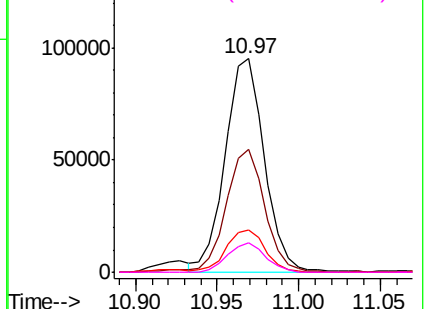
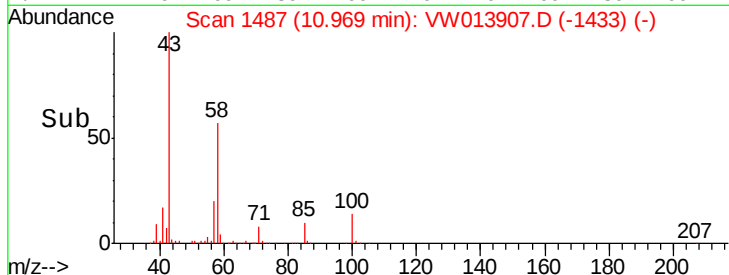
Abundance

Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

Ion 57.00 (56.70 to 57.70): VW

Ion 100.00 (99.70 to 100.70): VW



#50

Dibromochloromethane

Concen: 25.393 ug/L

RT: 11.13 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VW013907.D

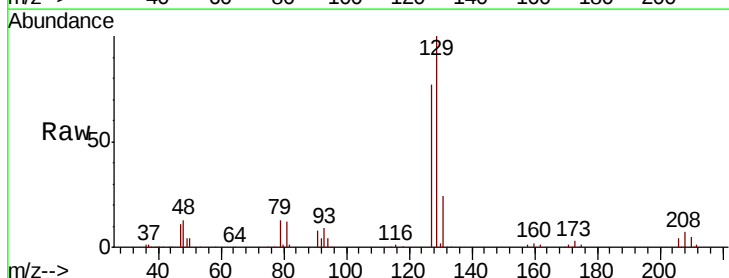
Acq: 01 Nov 2019 18:55

Tgt Ion: 129 Resp: 128281

Ion Ratio Lower Upper

129 100

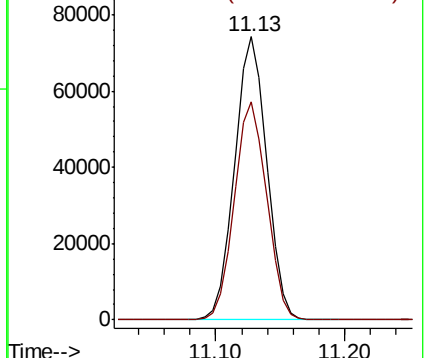
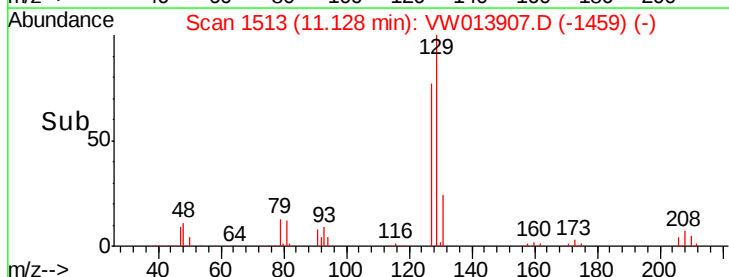
127 77.0 52.1 96.7

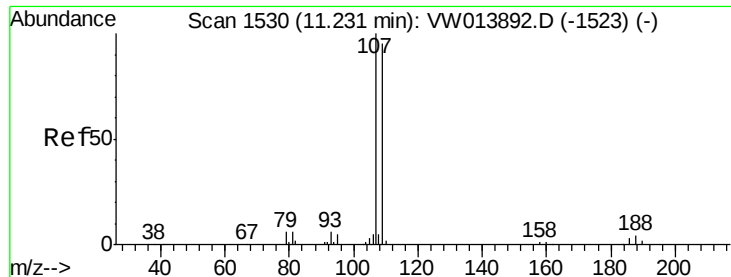


Abundance

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#51

1,2-Dibromoethane

Concen: 25.689 ug/L

RT: 11.23 min Scan# 1530

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

ClientSampleId :

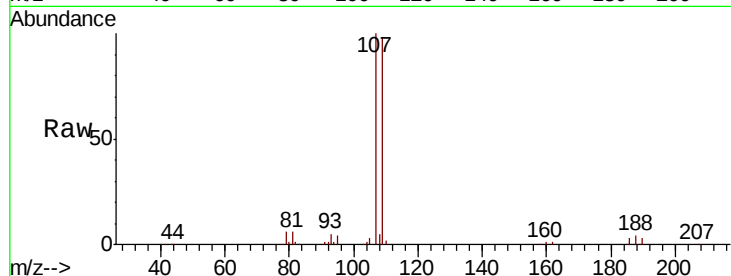
Tot Ion:107 Resp: 110516

Ion Ratio Lower Upper

107 100

109 97.9 66.3 123.1

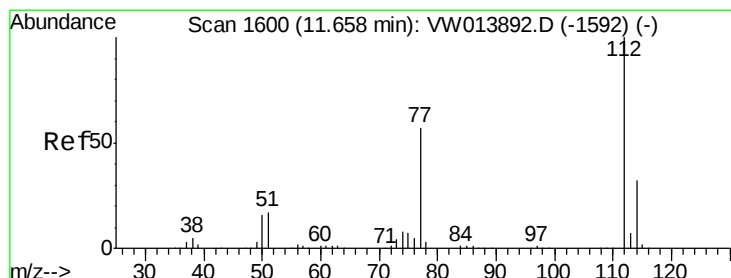
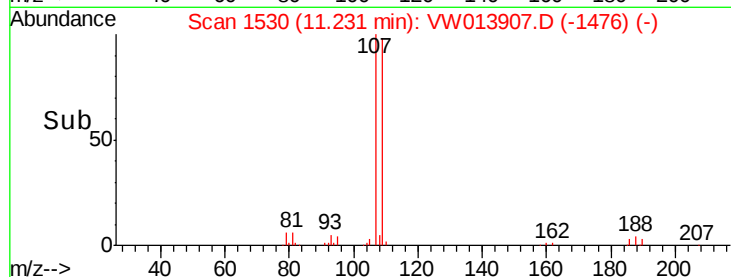
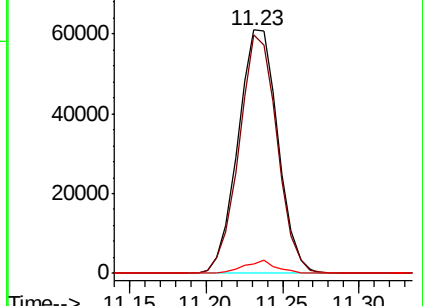
188 3.9 3.5 5.3



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: 25.029 ug/L

RT: 11.66 min Scan# 1600

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

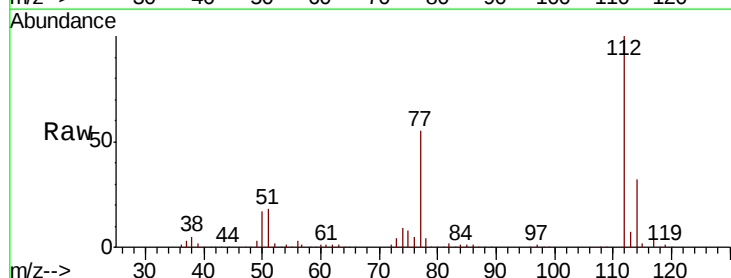
Tgt Ion:112 Resp: 385144

Ion Ratio Lower Upper

112 100

77 55.2 45.4 68.0

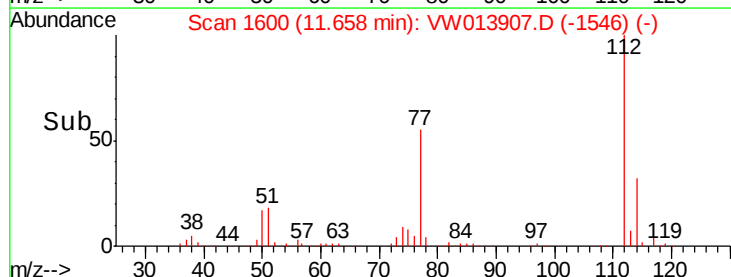
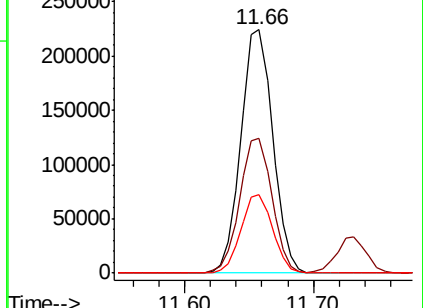
114 32.4 22.6 42.0

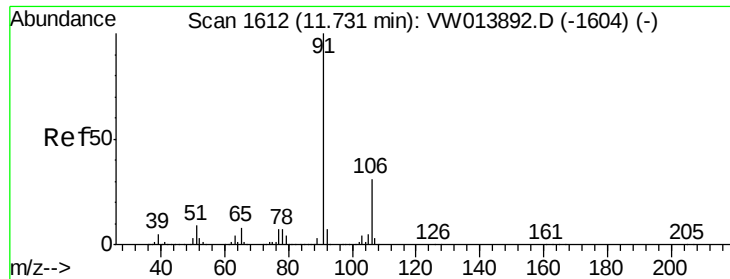


Abundance Ion 112.00 (111.70 to 112.70): V

Ion 77.00 (76.70 to 77.70): V

Ion 114.00 (113.70 to 114.70): V

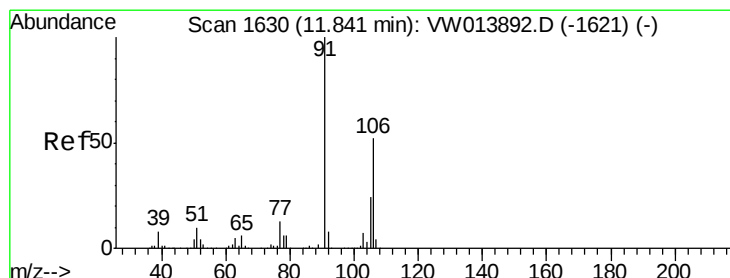
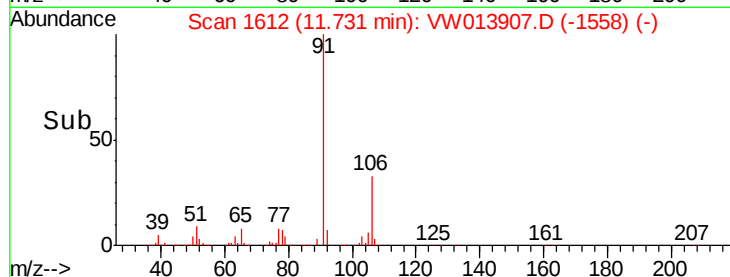
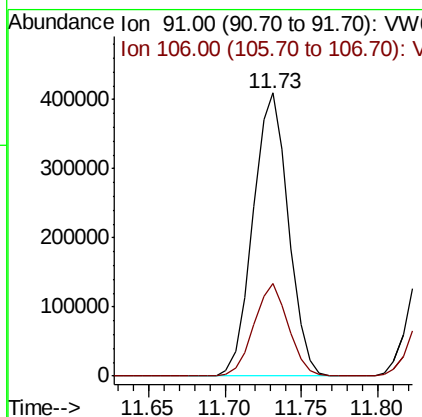
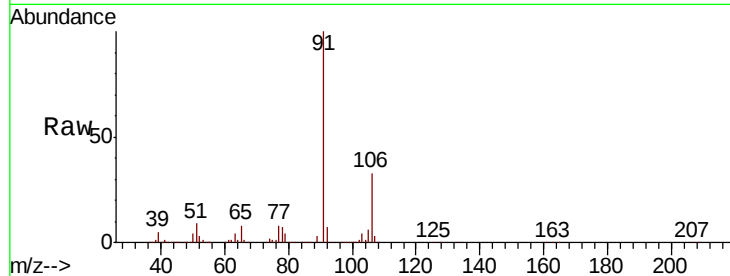




#53  
Ethylbenzene  
Concen: 24.845 ug/L  
RT: 11.73 min Scan# 1612  
Delta R.T. -0.00 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

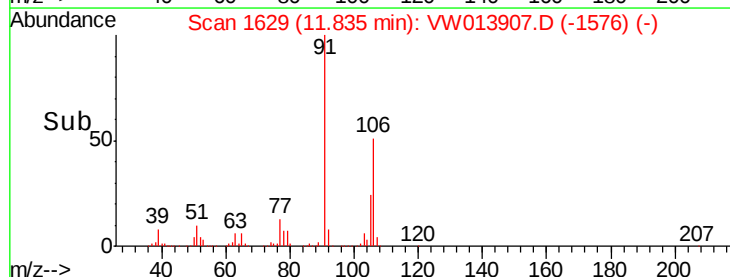
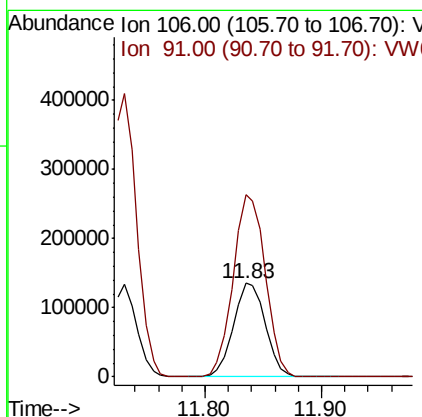
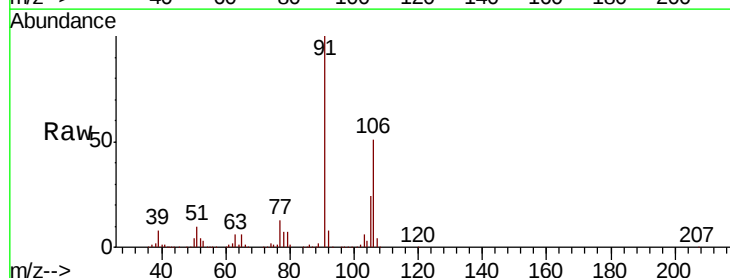
Instrument :  
MSVOA\_W  
ClientSampleId :

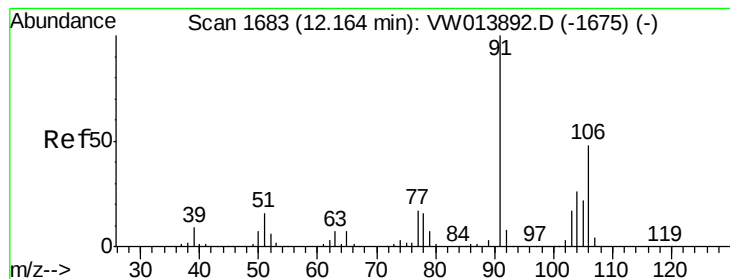
Tot Ion: 91 Resp: 659889  
Ion Ratio Lower Upper  
91 100  
106 32.7 22.0 40.8



#54  
m,p-Xylene  
Concen: 25.213 ug/L  
RT: 11.83 min Scan# 1629  
Delta R.T. -0.01 min  
Lab File: VW013907.D  
Acq: 01 Nov 2019 18:55

Tgt Ion: 106 Resp: 258074  
Ion Ratio Lower Upper  
106 100  
91 194.6 133.7 248.3





#55

o-xylene

Concen: 25.623 ug/L

RT: 12.16 min Scan# 1683

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

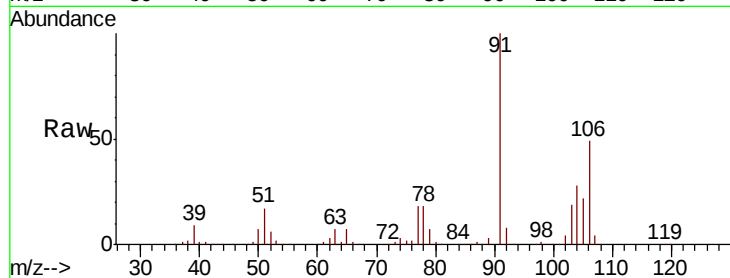
ClientSampleId :

Tot Ion:106 Resp: 247908

Ion Ratio Lower Upper

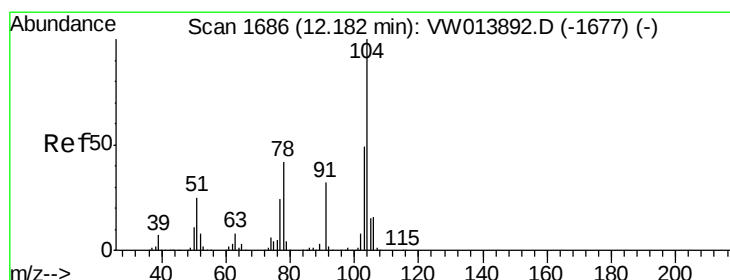
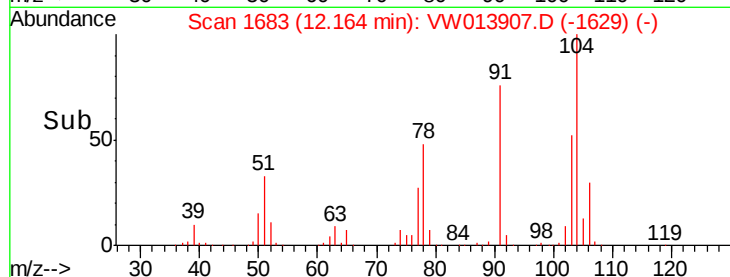
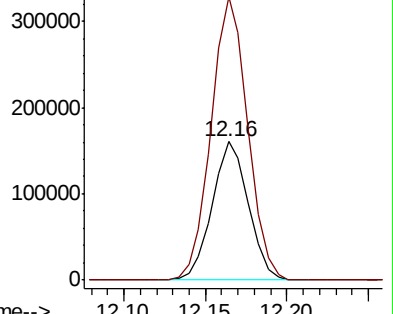
106 100

91 204.1 145.6 270.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#56

Styrene

Concen: 25.710 ug/L

RT: 12.18 min Scan# 1686

Delta R.T. -0.00 min

Lab File: VW013907.D

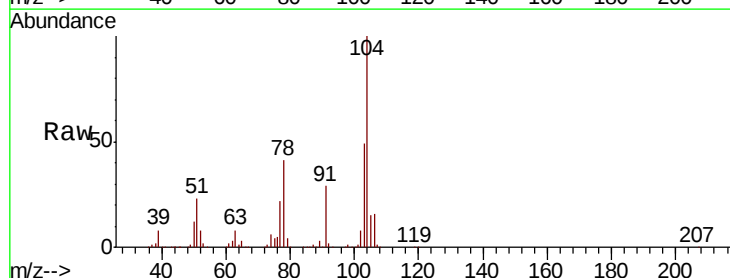
Acq: 01 Nov 2019 18:55

Tgt Ion:104 Resp: 429244

Ion Ratio Lower Upper

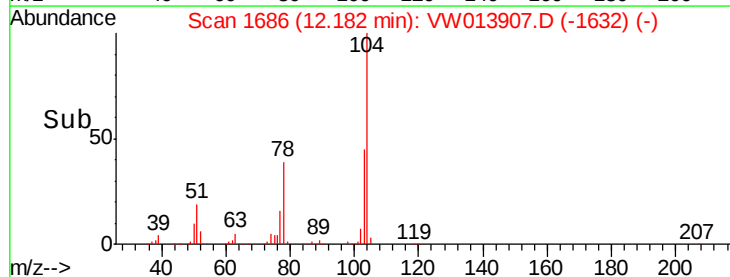
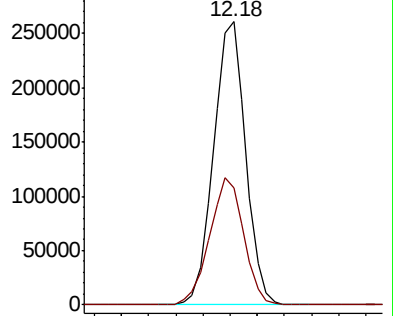
104 100

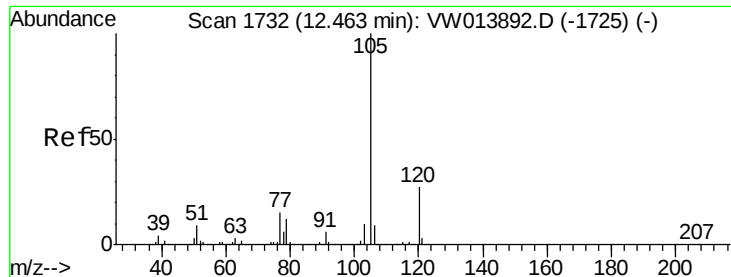
78 41.1 29.2 54.2



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VW





#57

Isopropylbenzene

Concen: 25.323 ug/L

RT: 12.46 min Scan# 1732

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

ClientSampleId :

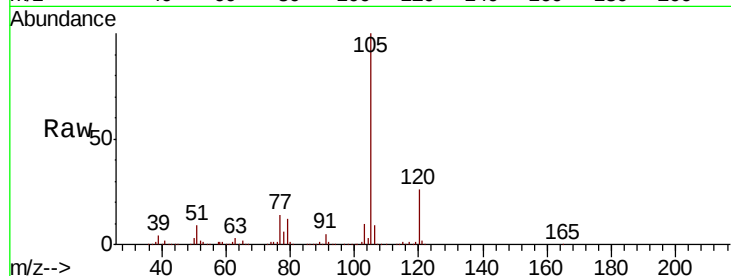
Tot Ion:105 Resp: 660642

Ion Ratio Lower Upper

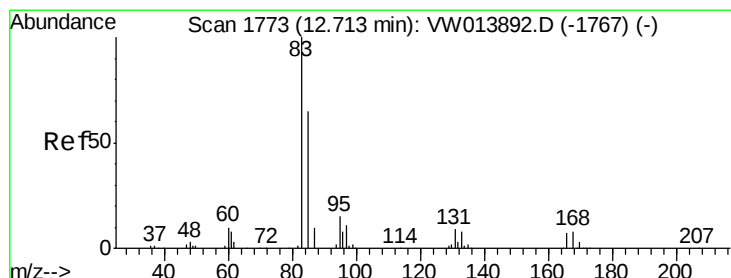
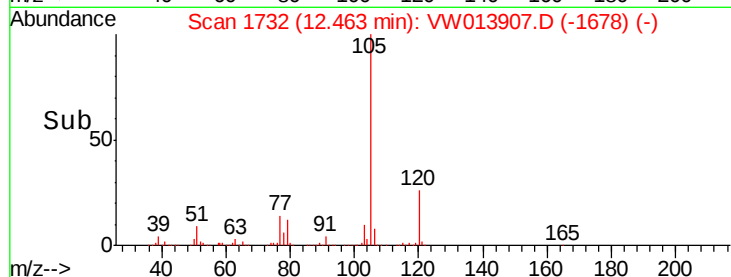
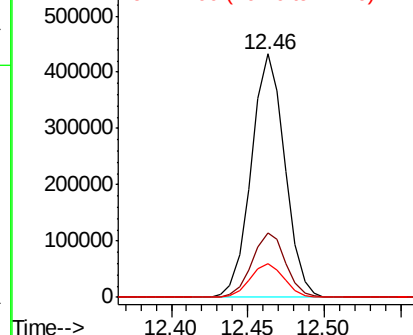
105 100

120 26.4 21.5 32.3

77 14.2 11.7 17.5



Abundance Ion 105.00 (104.70 to 105.70): V  
Ion 120.00 (119.70 to 120.70): V  
Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 26.054 ug/L

RT: 12.71 min Scan# 1773

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

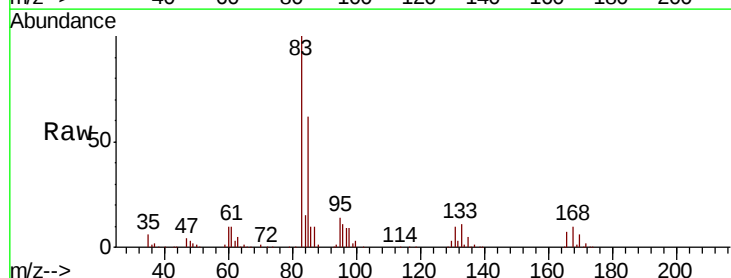
Tgt Ion: 83 Resp: 142794

Ion Ratio Lower Upper

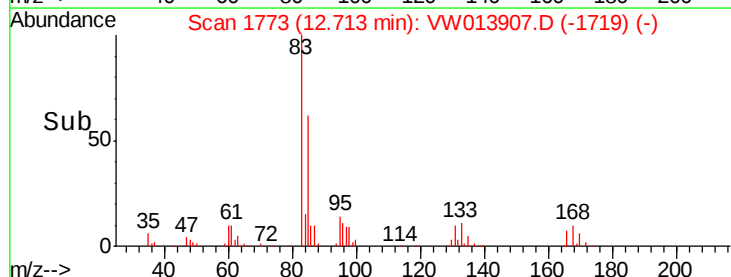
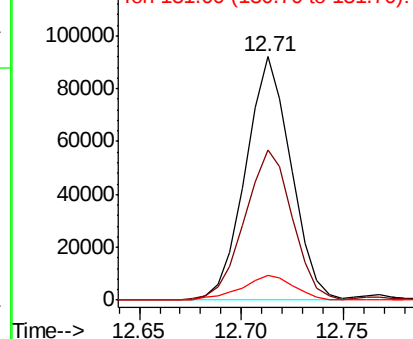
83 100

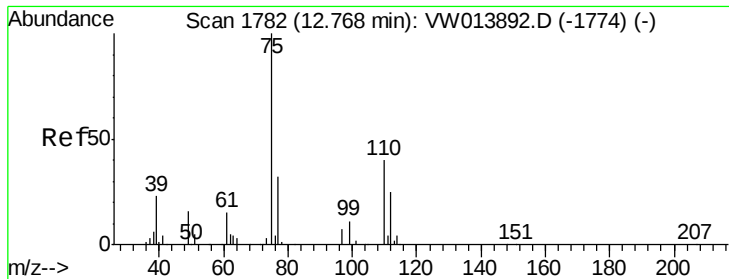
85 61.6 45.6 84.6

131 10.2 7.8 11.8



Abundance Ion 83.00 (82.70 to 83.70): VW  
Ion 85.00 (84.70 to 85.70): VW  
Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 25.782 ug/L

RT: 12.77 min Scan# 1782

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

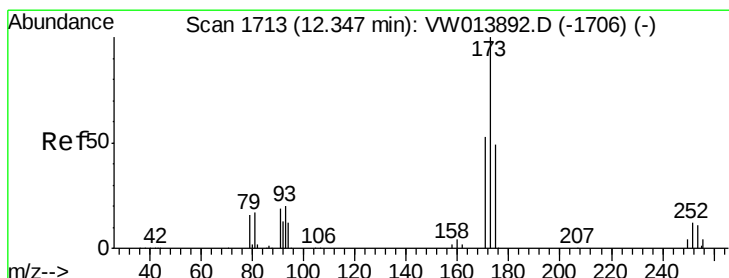
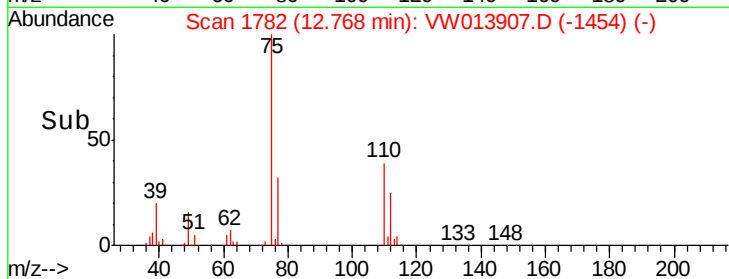
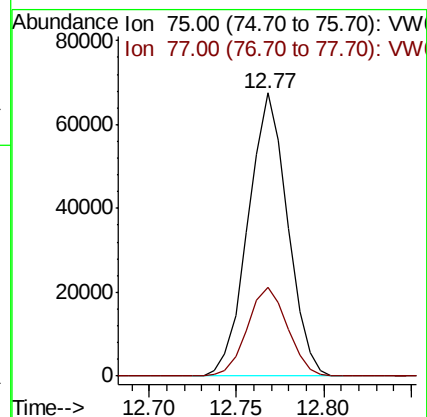
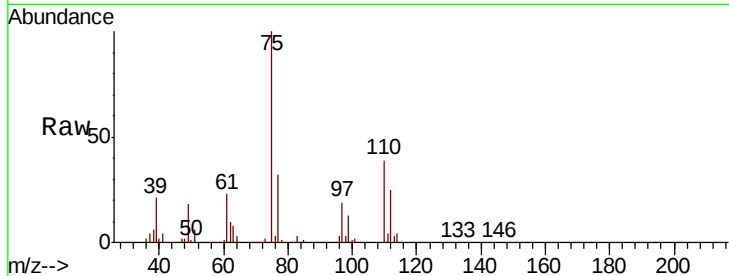
ClientSampleId :

Tot Ion: 75 Resp: 106092

Ion Ratio Lower Upper

75 100

77 31.9 25.9 38.9



#62

Bromoform

Concen: 25.025 ug/L

RT: 12.35 min Scan# 1713

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

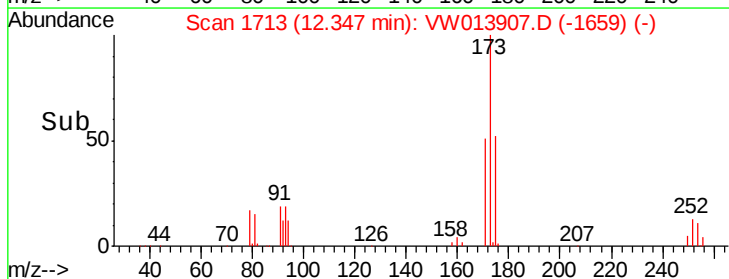
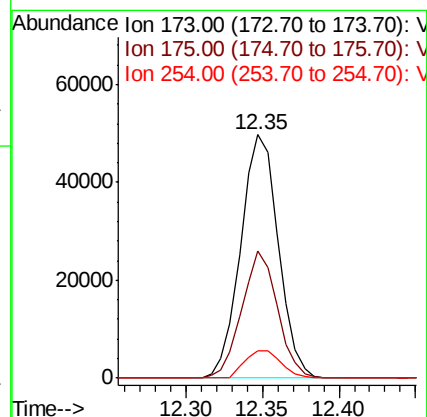
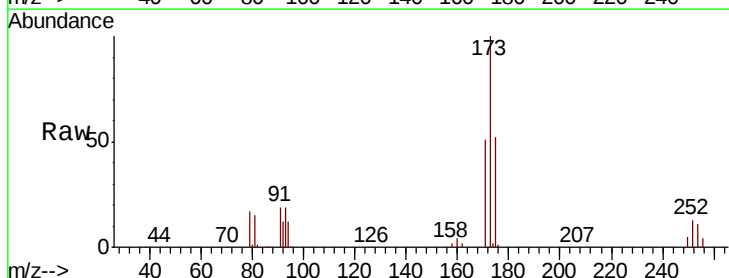
Tgt Ion: 173 Resp: 85045

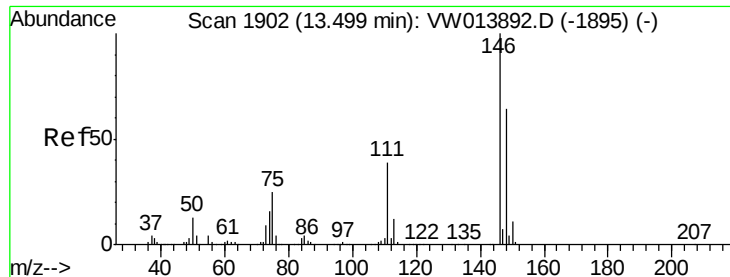
Ion Ratio Lower Upper

173 100

175 49.4 39.7 59.5

254 10.8 10.0 15.0

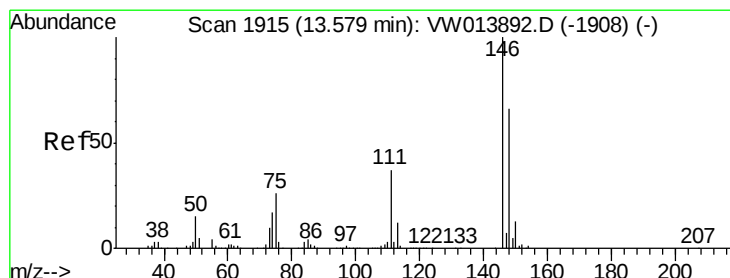
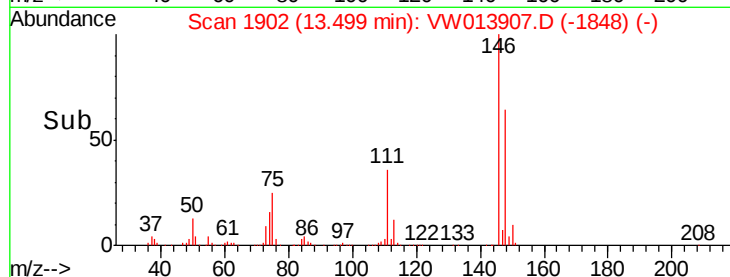
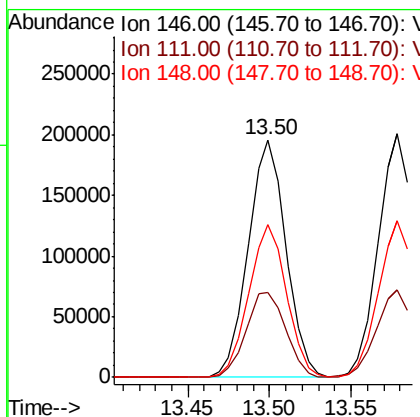
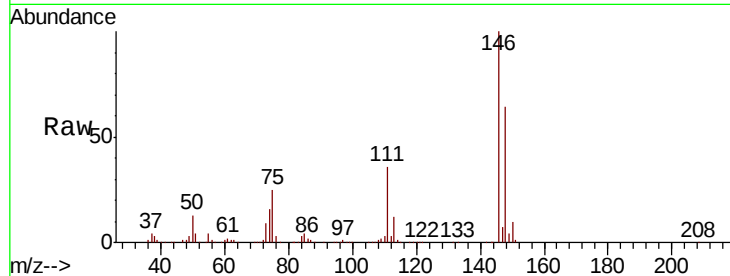




#63  
 1,3-Dichlorobenzene  
 Concen: 24.378 ug/L  
 RT: 13.50 min Scan# 1902  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

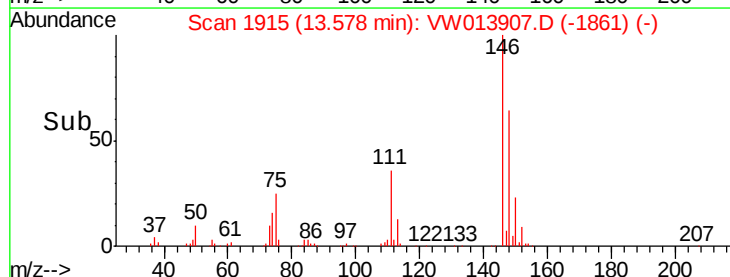
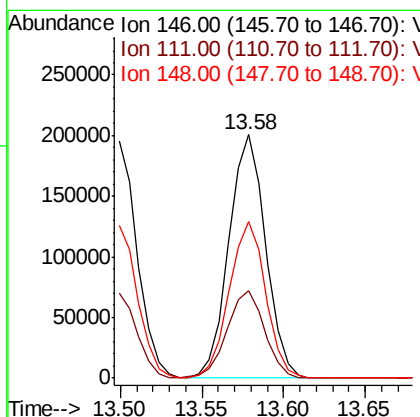
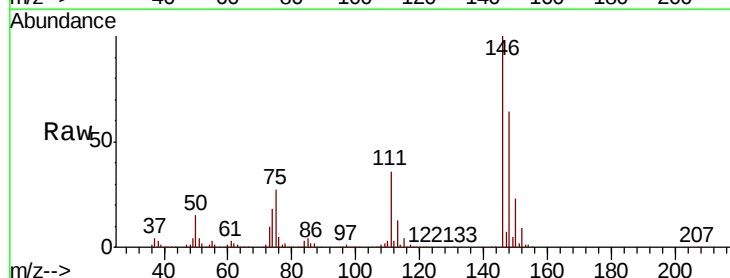
Instrument :  
 MSVOA\_W  
 ClientSampled :

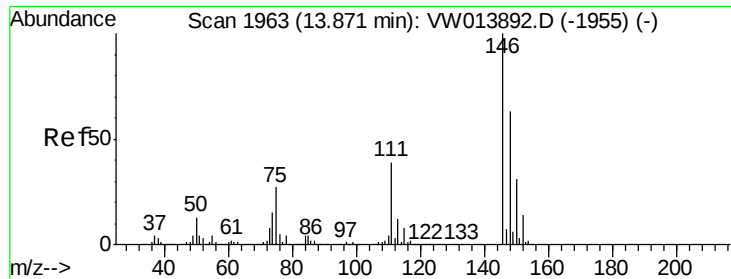
Tot Ion:146 Resp: 315547  
 Ion Ratio Lower Upper  
 146 100  
 111 35.9 27.4 51.0  
 148 64.3 44.6 82.8



#64  
 1,4-Dichlorobenzene  
 Concen: 24.190 ug/L  
 RT: 13.58 min Scan# 1915  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

Tgt Ion:146 Resp: 313873  
 Ion Ratio Lower Upper  
 146 100  
 111 35.8 25.9 48.1  
 148 64.2 46.3 86.1

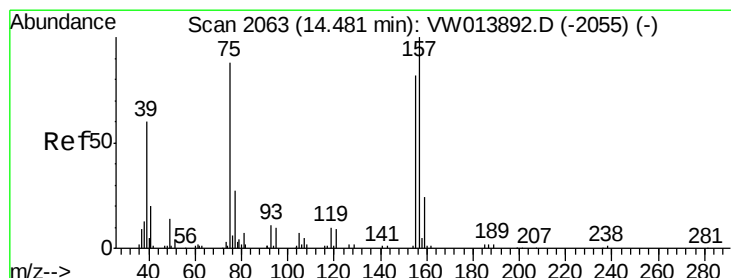
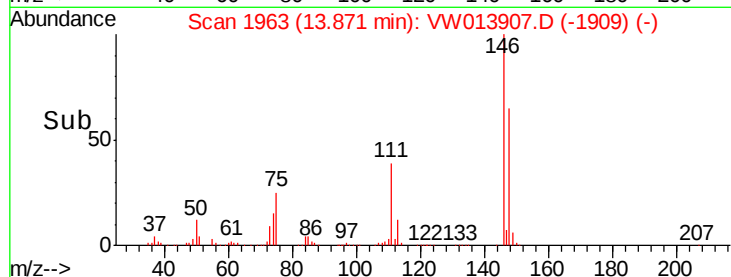
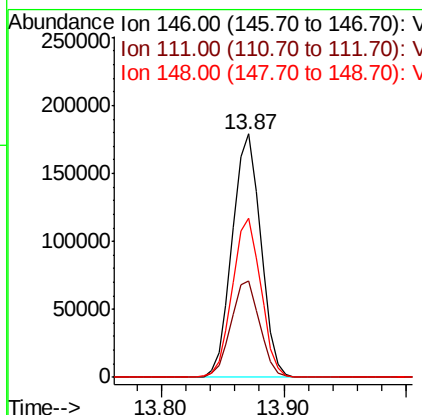
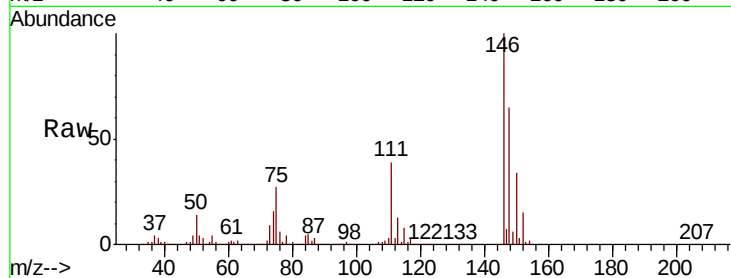




#65  
 1,2-Dichlorobenzene  
 Concen: 24.684 ug/L  
 RT: 13.87 min Scan# 1963  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

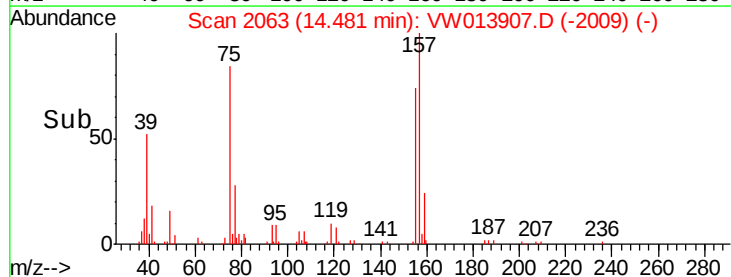
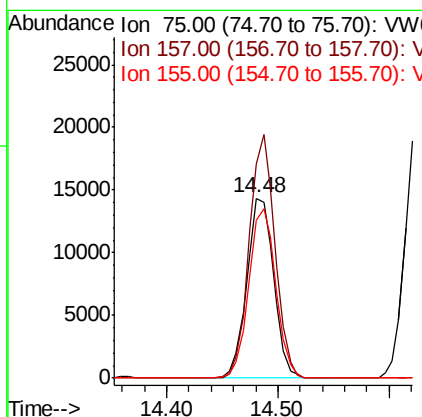
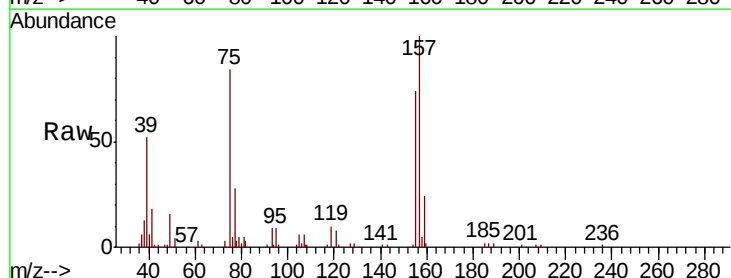
Instrument :  
 MSVOA\_W  
 ClientSampleId :

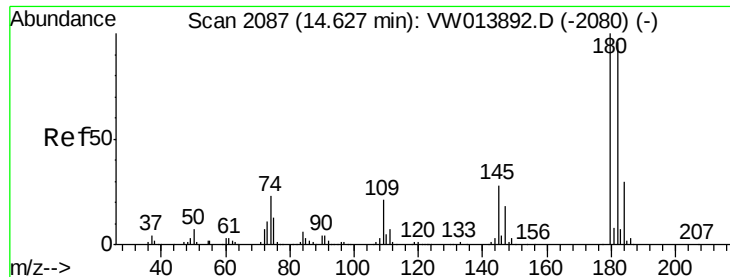
Tot Ion:146 Resp: 288902  
 Ion Ratio Lower Upper  
 146 100  
 111 39.5 31.6 47.4  
 148 65.3 50.7 76.1



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 25.802 ug/L  
 RT: 14.48 min Scan# 2063  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

Tgt Ion: 75 Resp: 24191  
 Ion Ratio Lower Upper  
 75 100  
 157 118.9 91.0 136.6  
 155 88.0 74.7 112.1

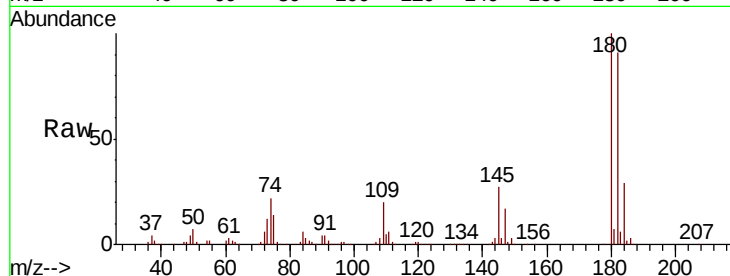




#67  
 1,3,5-Trichlorobenzene  
 Concen: 25.155 ug/L  
 RT: 14.63 min Scan# 2087  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

Instrument :  
 MSVOA\_W  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 93.4  | 76.8  | 115.2 |
| 184     | 30.0  | 23.8  | 35.8  |
| 145     | 27.0  | 21.9  | 32.9  |



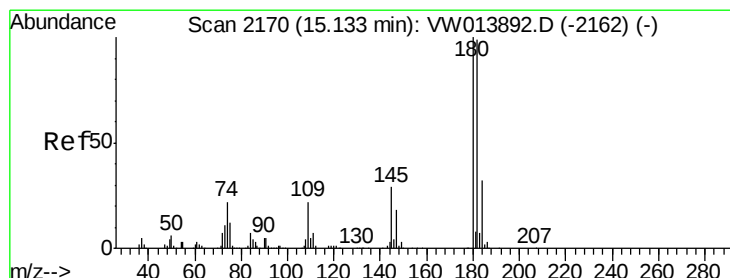
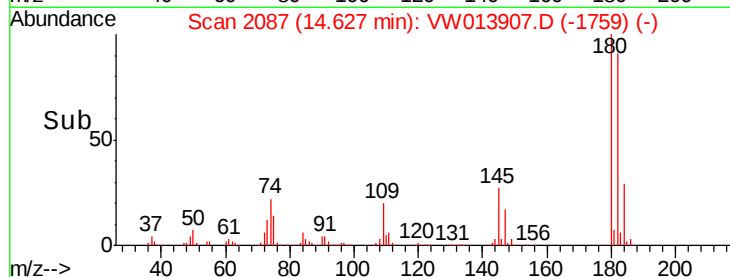
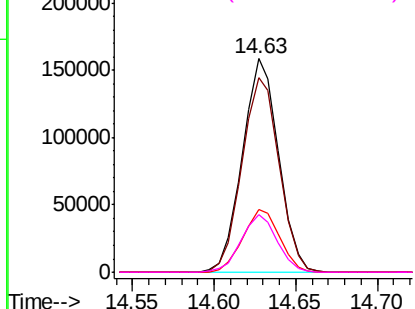
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

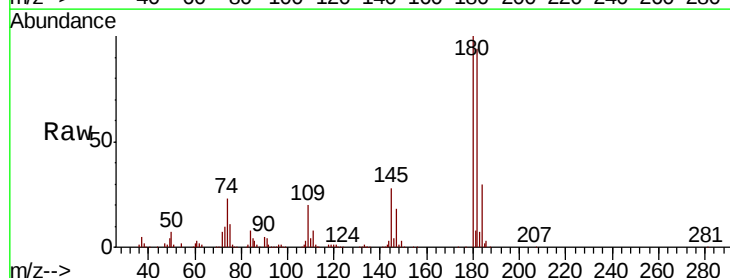
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 25.032 ug/L  
 RT: 15.13 min Scan# 2170  
 Delta R.T. -0.00 min  
 Lab File: VW013907.D  
 Acq: 01 Nov 2019 18:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.6  | 78.9  | 118.3 |
| 145     | 28.1  | 22.7  | 34.1  |

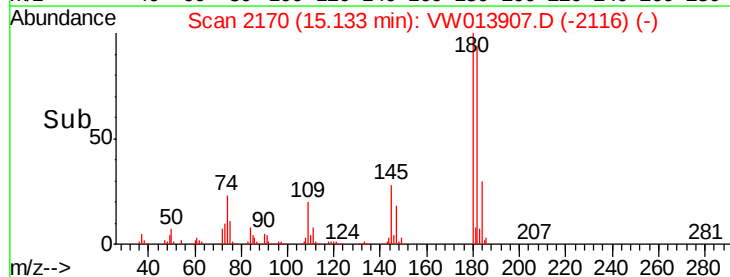
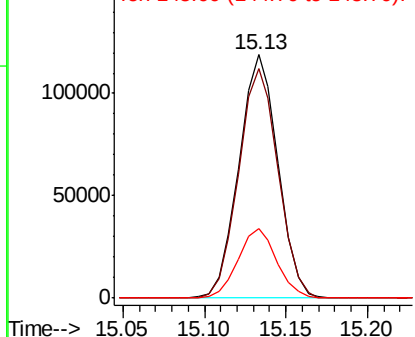


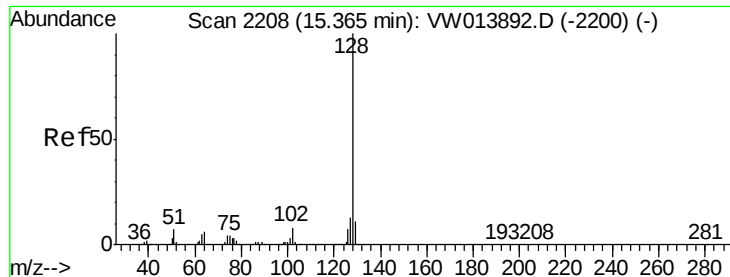
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V





#69

Naphthalene

Concen: 27.270 ug/L

RT: 15.36 min Scan# 2208

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

Instrument :

MSVOA\_W

ClientSampleId :

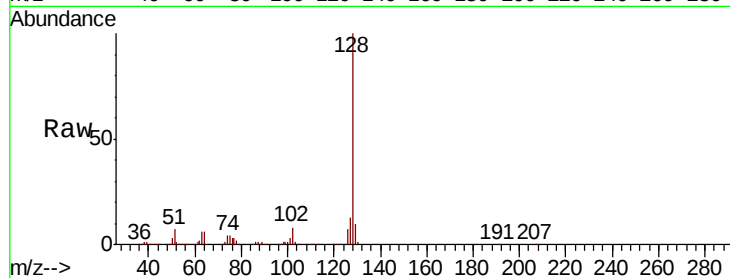
Tot Ion:128 Resp: 408341

Ion Ratio Lower Upper

128 100

129 10.8 8.8 13.2

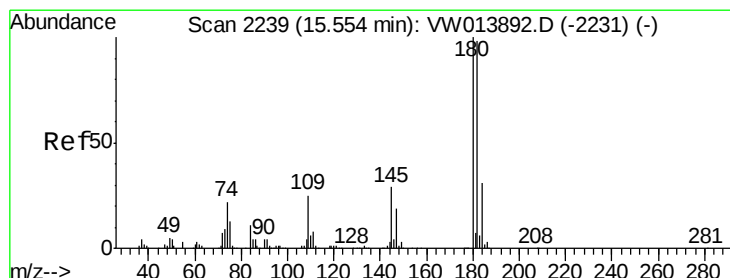
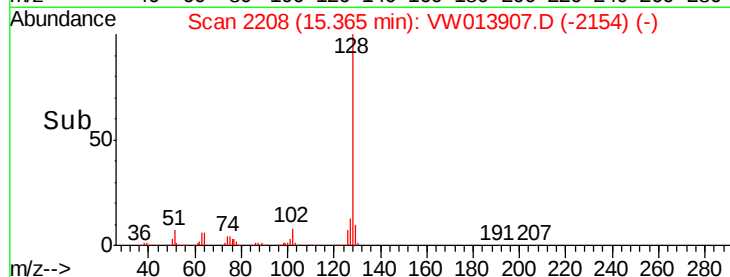
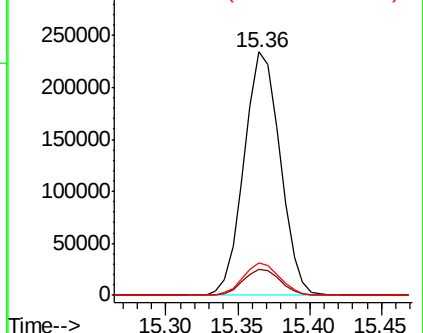
127 13.3 10.6 16.0



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: 25.414 ug/L

RT: 15.55 min Scan# 2239

Delta R.T. -0.00 min

Lab File: VW013907.D

Acq: 01 Nov 2019 18:55

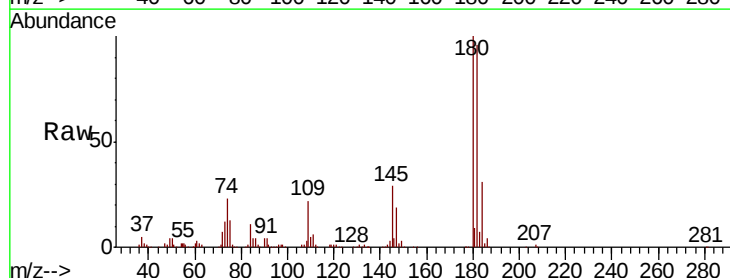
Tgt Ion:180 Resp: 184835

Ion Ratio Lower Upper

180 100

182 94.9 77.0 115.6

145 29.3 24.0 36.0



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

