

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW102318\  
 Data File : VW006299.D  
 Acq On : 23 Oct 2018 16:50  
 Operator : SY/AP  
 Sample : MDL  
 Misc : 5.00G/10ML/MSVOA\_W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

Manual Integrations  
 APPROVED

MMDadoda  
 10/24/2018 2:07:25 PM

Quant Time: Oct 24 04:27:39 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM100918S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Oct 24 01:59:01 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.85  | 114  | 340716   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 311157   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 165946   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 78936    | 20.54    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 82.16%  |
| 7) Chloroethane-d5             | 2.90   | 69    | 75440    | 22.81    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 91.24%  |
| 10) 1,1-Dichloroethene-d2      | 4.01   | 63    | 125071   | 16.95    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 67.80%  |
| 20) 2-Butanone-d5              | 7.09   | 46    | 63670    | 49.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 99.98%  |
| 24) Chloroform-d               | 7.65   | 84    | 176072   | 23.86    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 95.44%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 101450   | 24.85    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 99.40%  |
| 29) Benzene-d6                 | 8.28   | 84    | 358386   | 25.37    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 101.48% |
| 33) 1,2-Dichloropropane-d6     | 9.28   | 67    | 104652   | 24.55    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 98.20%  |
| 37) Toluene-d8                 | 10.33  | 98    | 340592   | 24.11    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 96.44%  |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 41300    | 19.93    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 79.72%  |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 49582    | 48.13    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 96.26%  |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 101542   | 24.49    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 97.96%  |
| 61) 1,2-Dichlorobenzene-d4     | 13.86  | 152   | 141109   | 24.81    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 99.24%  |

## Target Compounds

|                                |      |     |       |              | Qvalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 2.01 | 85  | 4523m | 1.405 ug/L   |        |
| 3) Chloromethane               | 2.21 | 50  | 4661  | 1.474 ug/L   | 97     |
| 5) Vinyl chloride              | 2.37 | 62  | 5871  | 1.152 ug/L # | 69     |
| 6) Bromomethane                | 2.79 | 94  | 4700  | 1.184 ug/L   | 99     |
| 8) Chloroethane                | 2.94 | 64  | 3768  | 1.206 ug/L   | 93     |
| 9) Trichlorofluoromethane      | 3.26 | 101 | 5155m | 1.264 ug/L   |        |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.06 | 101 | 6174m | 1.514 ug/L   |        |
| 12) 1,1-Dichloroethene         | 4.04 | 96  | 5706m | 1.459 ug/L   |        |
| 13) Acetone                    | 4.13 | 43  | 3751m | 2.915 ug/L   |        |
| 14) Carbon disulfide           | 4.38 | 76  | 12479 | 0.976 ug/L # | 94     |
| 15) Methyl Acetate             | 4.67 | 43  | 2851m | 1.368 ug/L   |        |
| 16) Methylene chloride         | 4.92 | 84  | 12179 | 2.769 ug/L   | 92     |
| 17) Methyl tert-butyl Ether    | 5.43 | 73  | 7076  | 1.111 ug/L # | 78     |
| 18) trans-1,2-Dichloroethene   | 5.42 | 96  | 4989  | 1.152 ug/L   | 97     |
| 19) 1,1-Dichloroethane         | 6.21 | 63  | 7706  | 1.100 ug/L   | 95     |
| 21) 2-Butanone                 | 7.18 | 43  | 4168m | 2.438 ug/L   |        |
| 22) cis-1,2-Dichloroethene     | 7.17 | 96  | 5326  | 1.127 ug/L   | 99     |

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 Sample : MDL  
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 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

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Quant Time: Oct 24 04:27:39 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM100918S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Oct 24 01:59:01 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 23) Bromochloromethane         | 7.52  | 128  | 2611     | 1.175 | ug/L   | 92       |
| 25) Chloroform                 | 7.68  | 83   | 9482     | 1.257 | ug/L   | 78       |
| 27) 1,2-Dichloroethane         | 8.40  | 62   | 6209     | 1.207 | ug/L   | 98       |
| 30) Cyclohexane                | 7.96  | 56   | 7187     | 1.051 | ug/L   | 97       |
| 31) 1,1,1-Trichloroethane      | 7.88  | 97   | 7431     | 1.141 | ug/L   | 98       |
| 32) Carbon tetrachloride       | 8.07  | 117  | 6725     | 1.053 | ug/L   | 98       |
| 34) Benzene                    | 8.32  | 78   | 19020    | 1.191 | ug/L   | 100      |
| 35) Trichloroethene            | 9.09  | 95   | 5194     | 1.156 | ug/L   | 98       |
| 36) Methylcyclohexane          | 9.34  | 83   | 8976     | 1.090 | ug/L   | 99       |
| 40) 1,2-Dichloropropane        | 9.37  | 63   | 4578     | 1.155 | ug/L # | 94       |
| 41) Bromodichloromethane       | 9.65  | 83   | 5280     | 0.987 | ug/L   | 90       |
| 42) cis-1,3-Dichloropropene    | 10.08 | 75   | 6226     | 0.962 | ug/L   | 99       |
| 43) 4-Methyl-2-pentanone       | 10.21 | 43   | 7129     | 2.245 | ug/L   | 99       |
| 44) Toluene                    | 10.39 | 91   | 21093    | 1.176 | ug/L   | 94       |
| 45) trans-1,3-Dichloropropene  | 10.60 | 75   | 7373     | 1.304 | ug/L   | 99       |
| 46) 1,1,2-Trichloroethane      | 10.79 | 97   | 3854     | 1.168 | ug/L   | 94       |
| 47) Tetrachloroethene          | 10.87 | 164  | 4832     | 1.161 | ug/L   | 91       |
| 49) 2-Hexanone                 | 10.98 | 43   | 4851     | 2.073 | ug/L   | 96       |
| 50) Dibromochloromethane       | 11.13 | 129  | 4043     | 0.956 | ug/L   | 98       |
| 51) 1,2-Dibromoethane          | 11.24 | 107  | 3744     | 1.090 | ug/L   | 97       |
| 52) Chlorobenzene              | 11.66 | 112  | 14092    | 1.161 | ug/L   | 98       |
| 53) Ethylbenzene               | 11.74 | 91   | 23263    | 1.114 | ug/L   | 94       |
| 54) m,p-Xylene                 | 11.84 | 106  | 8721     | 1.066 | ug/L   | 86       |
| 55) o-xylene                   | 12.17 | 106  | 7679     | 0.983 | ug/L   | 90       |
| 56) Styrene                    | 12.18 | 104  | 12941    | 0.962 | ug/L   | 95       |
| 57) Isopropylbenzene           | 12.47 | 105  | 21776    | 1.001 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 5281     | 1.232 | ug/L # | 95       |
| 59) 1,2,3-Trichloropropane     | 12.77 | 75   | 3806     | 1.190 | ug/L   | 96       |
| 62) Bromoform                  | 12.35 | 173  | 2270     | 0.816 | ug/L   | 98       |
| 63) 1,3-Dichlorobenzene        | 13.51 | 146  | 11405    | 1.119 | ug/L   | 93       |
| 64) 1,4-Dichlorobenzene        | 13.58 | 146  | 11790    | 1.149 | ug/L   | 94       |
| 65) 1,2-Dichlorobenzene        | 13.88 | 146  | 10910    | 1.164 | ug/L   | 91       |
| 66) 1,2-Dibromo-3-chloropropan | 14.49 | 75   | 748m     | 0.991 | ug/L   |          |
| 67) 1,3,5-Trichlorobenzene     | 14.63 | 180  | 8958     | 1.091 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 15.14 | 180  | 7309     | 1.043 | ug/L   | 99       |
| 69) Naphthalene                | 15.38 | 128  | 13217    | 0.932 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 15.57 | 180  | 6420     | 1.020 | ug/L   | 94       |
| -----                          |       |      |          |       |        |          |

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

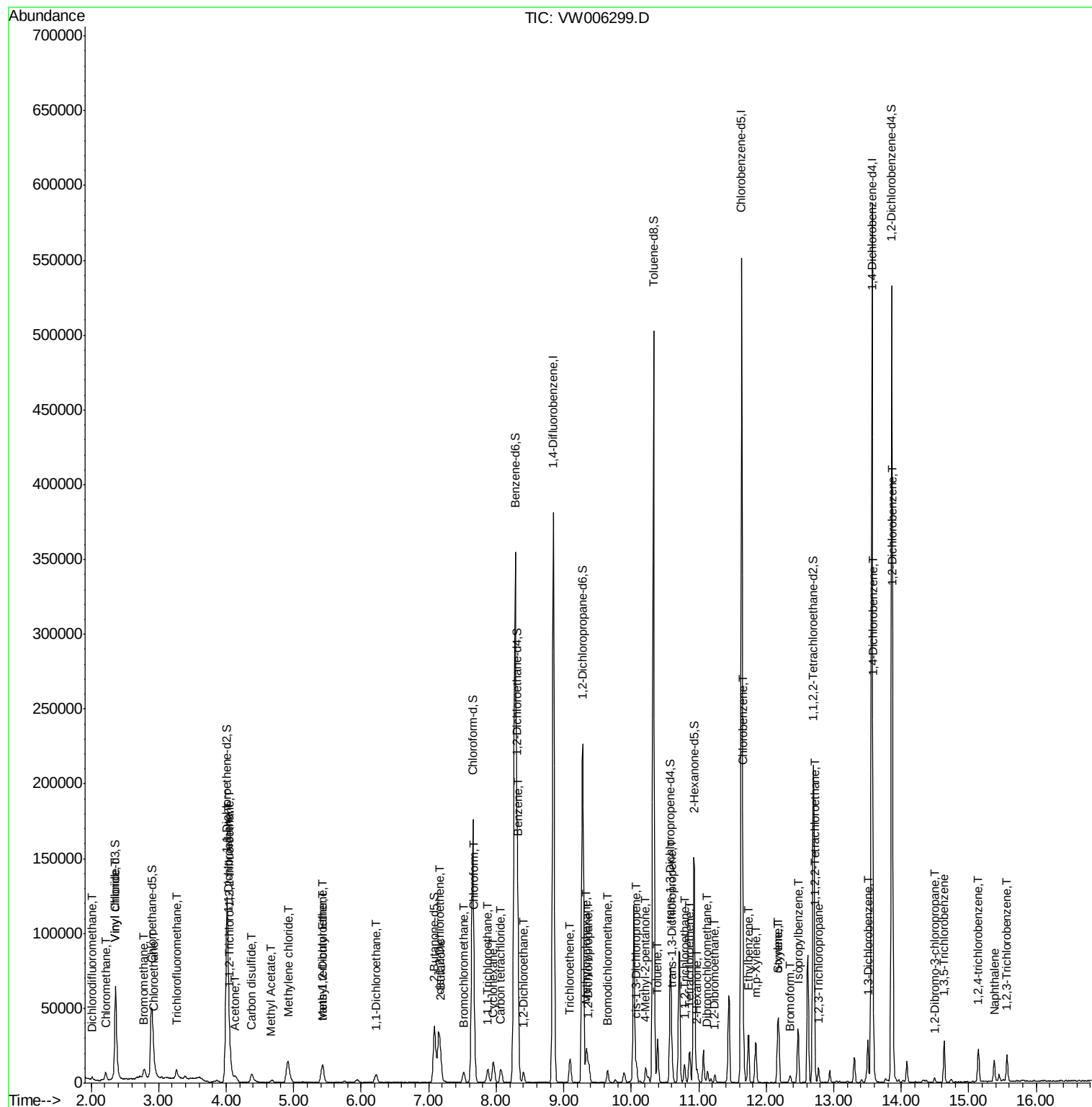
Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW102318\  
Data File : VW006299.D  
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Operator : SY/AP  
Sample : MDL  
Misc : 5.00G/10ML/MSVOA\_W/SOIL  
ALS Vial : 1 Sample Multiplier: 1

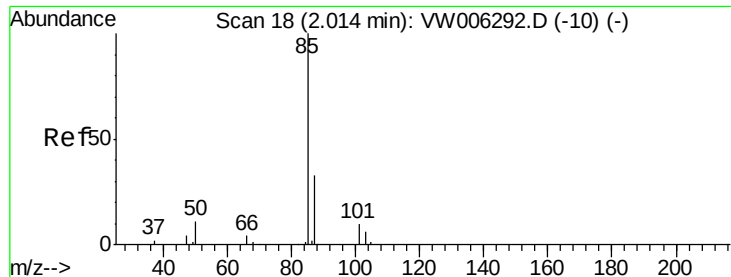
Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

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Quant Title : VOC Analysis  
QLast Update : Wed Oct 24 01:59:01 2018  
Response via : Initial Calibration





#2

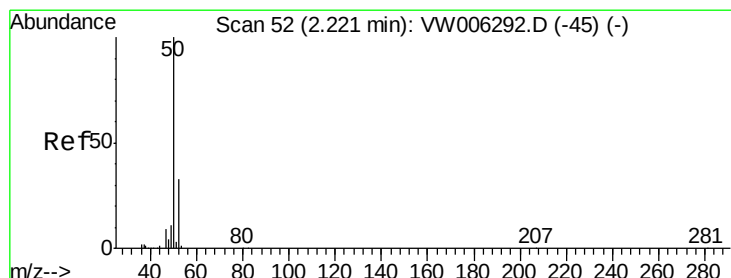
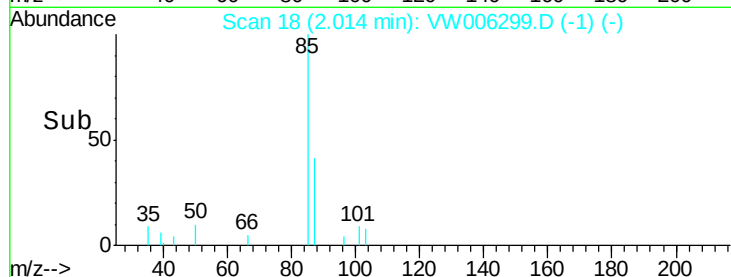
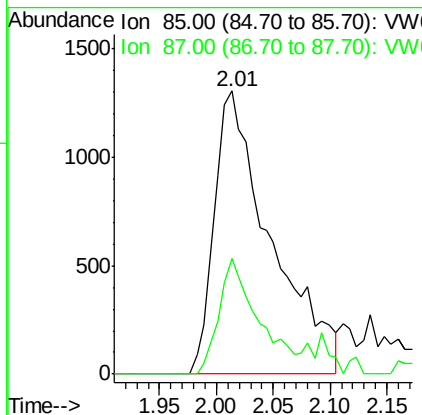
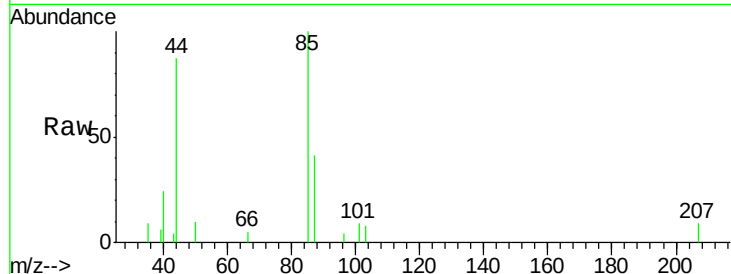
Dichlorodifluoromethane  
Concen: 1.405 ug/L m  
RT: 2.01 min Scan# 18  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 85      | 100   | 4523 |       |       |
| 87      | 25.1  | 19.2 | 35.6  |       |

Manual Integrations  
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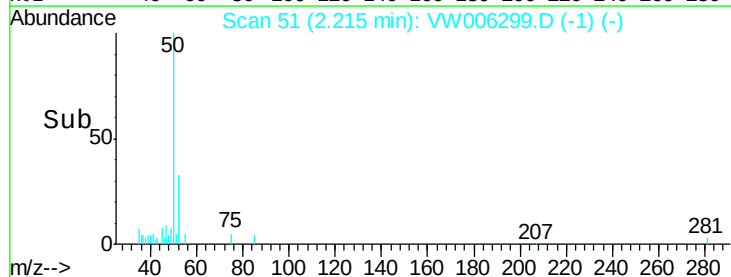
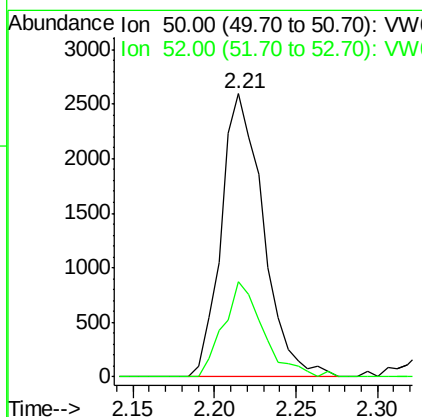
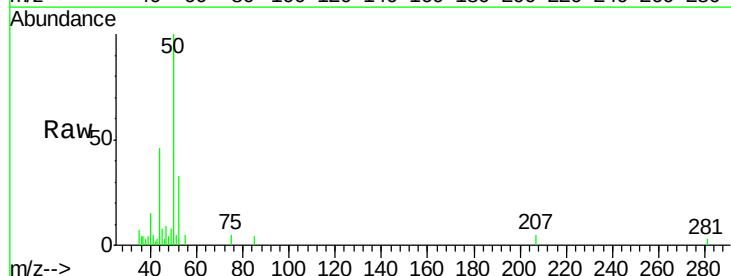
MMDadoda  
10/24/2018 2:07:25 PM

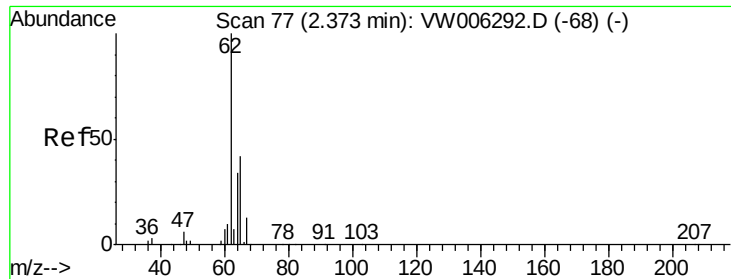


#3

Chloromethane  
Concen: 1.474 ug/L  
RT: 2.21 min Scan# 51  
Delta R.T. -0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 50      | 100   | 4661 |       |       |
| 52      | 33.5  | 22.3 | 41.3  |       |





#5

Vinyl chloride

Concen: 1.152 ug/L

RT: 2.37 min Scan# 76

Delta R.T. -0.01 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

ClientSampled :

MDL

Tgt Ion: 62 Resp: 5871

Ion Ratio Lower Upper

62 100

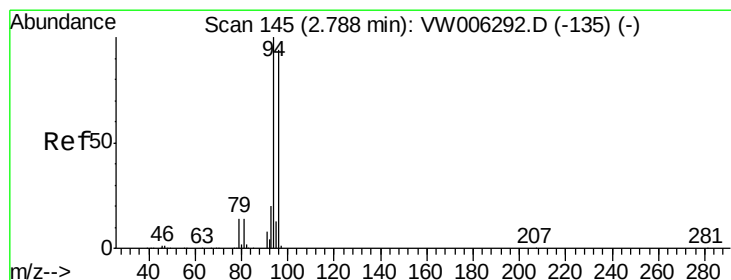
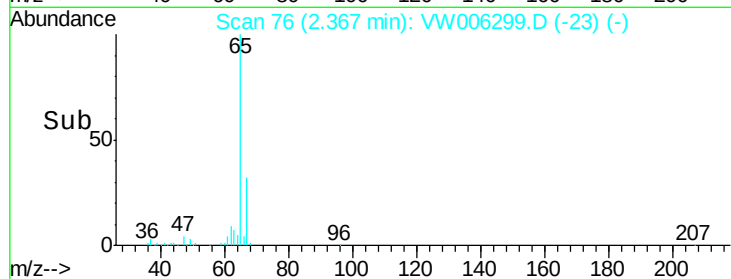
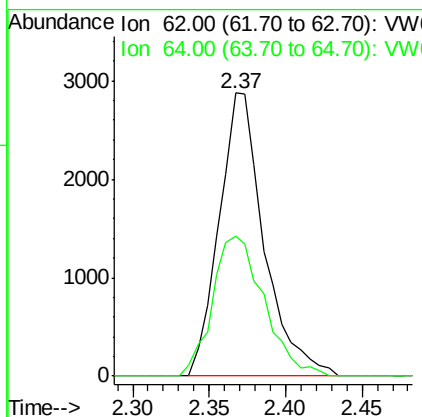
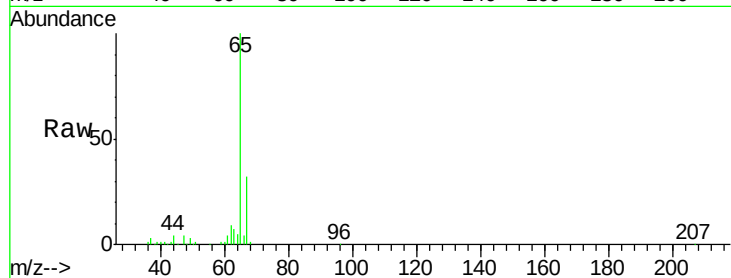
64 49.7 22.7 42.3#

Manual Integrations

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#6

Bromomethane

Concen: 1.184 ug/L

RT: 2.79 min Scan# 145

Delta R.T. 0.00 min

Lab File: VW006299.D

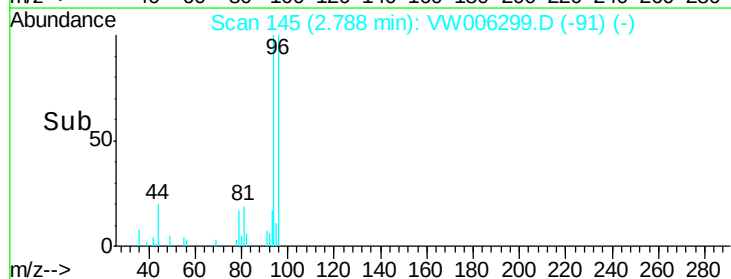
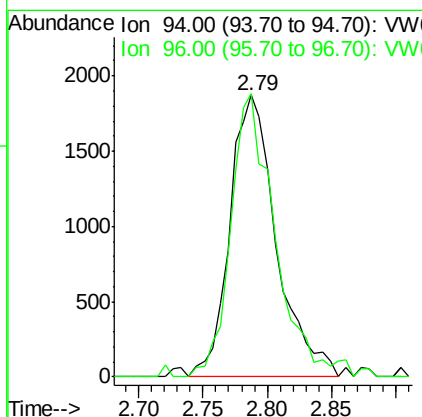
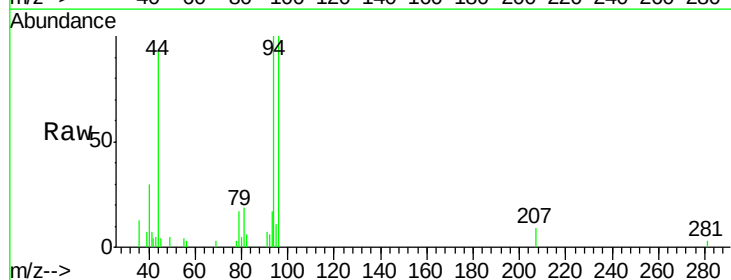
Acq: 23 Oct 2018 16:50

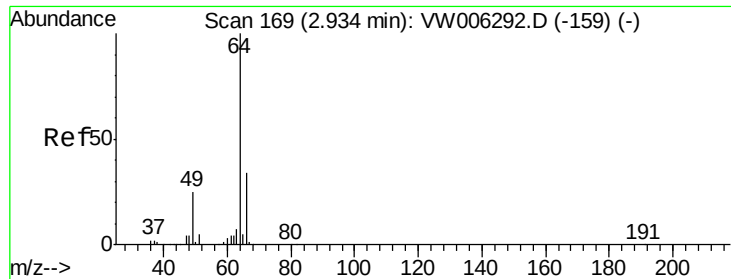
Tgt Ion: 94 Resp: 4700

Ion Ratio Lower Upper

94 100

96 94.3 9.5 181.3





#8

Chloroethane

Concen: 1.206 ug/L

RT: 2.94 min Scan# 170

Delta R.T. 0.01 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

ClientSampleId :

MDL

Tgt Ion: 64 Resp: 3768

Ion Ratio Lower Upper

64 100

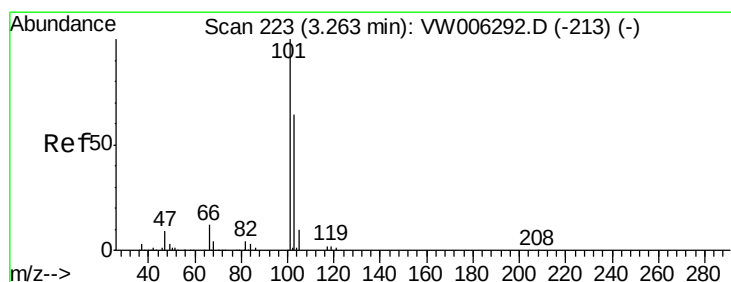
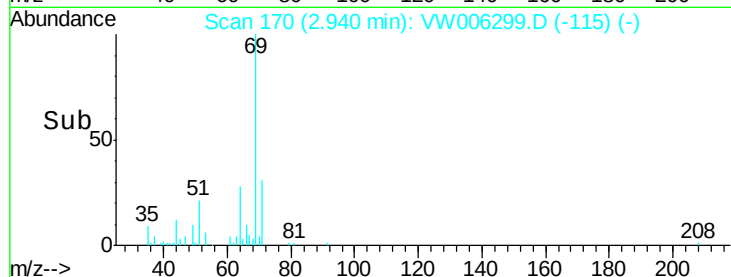
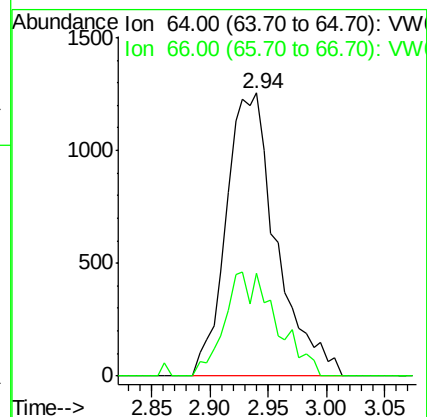
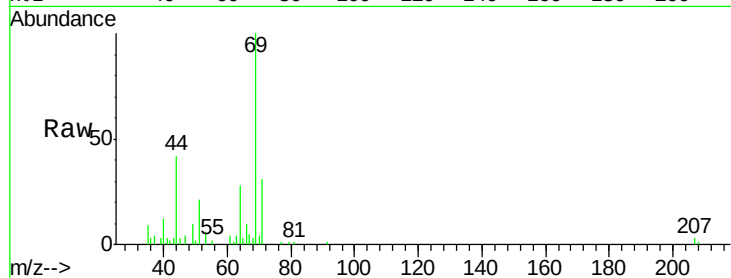
66 36.4 22.7 42.1

Manual Integrations

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10/24/2018 2:07:25 PM



#9

Trichlorofluoromethane

Concen: 1.264 ug/L m

RT: 3.26 min Scan# 223

Delta R.T. 0.00 min

Lab File: VW006299.D

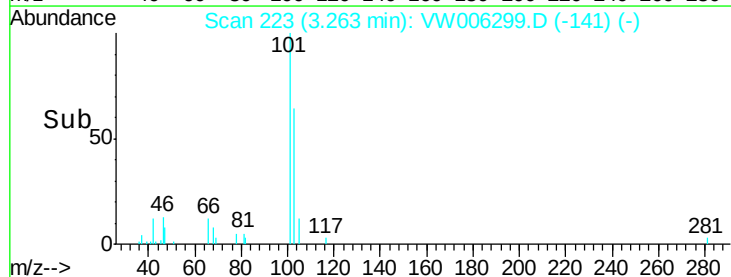
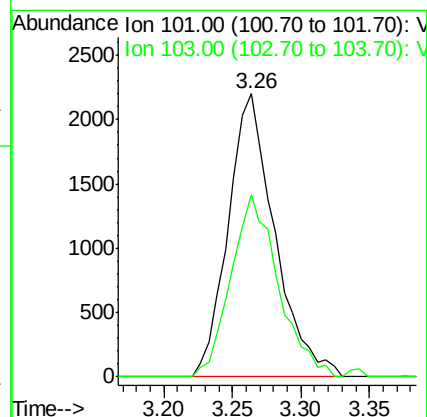
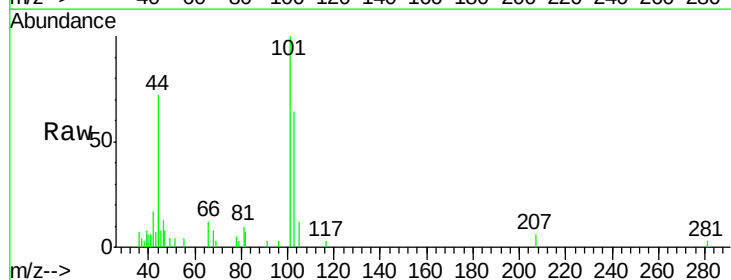
Acq: 23 Oct 2018 16:50

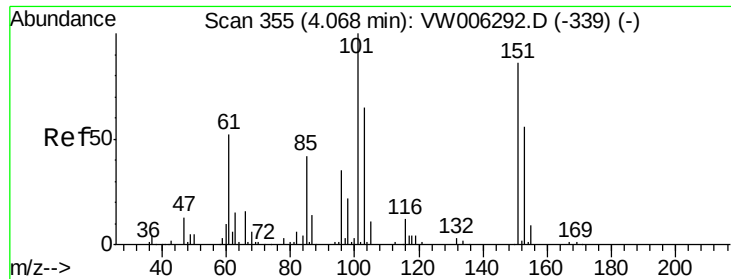
Tgt Ion: 101 Resp: 5155

Ion Ratio Lower Upper

101 100

103 65.4 45.6 84.6





#11

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

Concen: 1.514 ug/L m

RT: 4.06 min Scan# 353

Delta R.T. -0.01 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

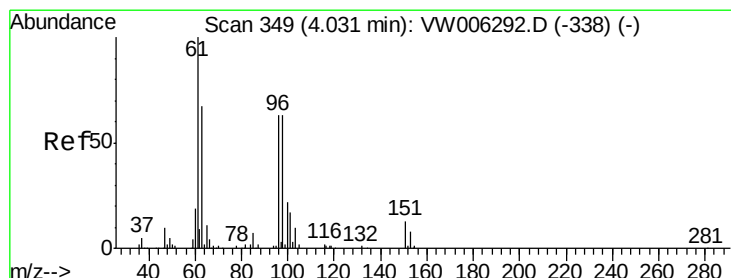
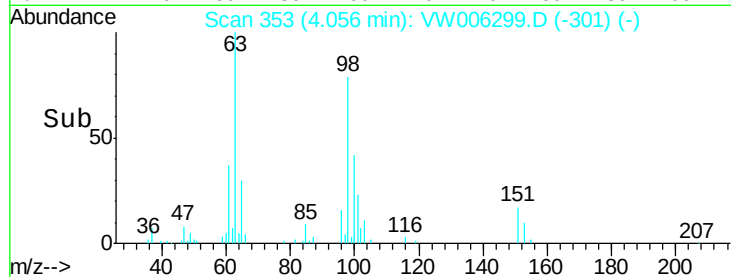
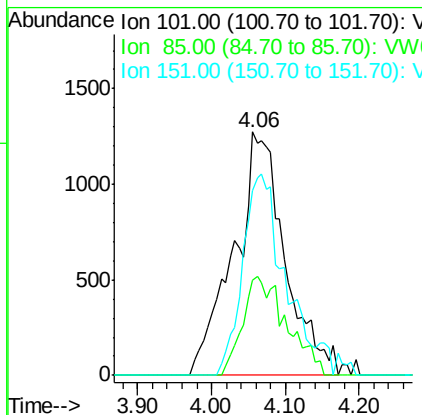
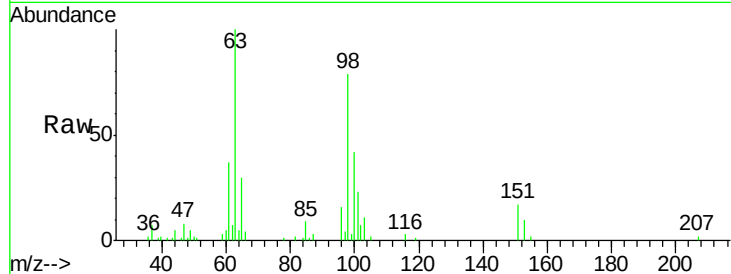
ClientSampleId :

MDL

| Tgt Ion | Ratio | Resp | Lower  | Upper |
|---------|-------|------|--------|-------|
| 101     | 100   | 6174 |        |       |
| 85      | 18.4  | 33.4 | 50.2#  |       |
| 151     | 51.5  | 68.7 | 103.1# |       |

Manual Integrations  
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#12

1,1-Dichloroethene

Concen: 1.459 ug/L m

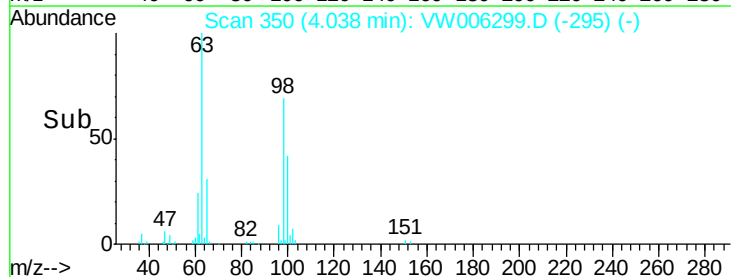
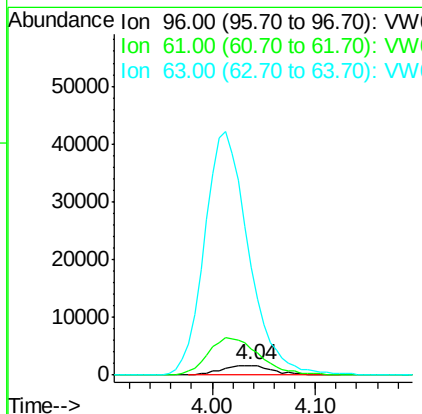
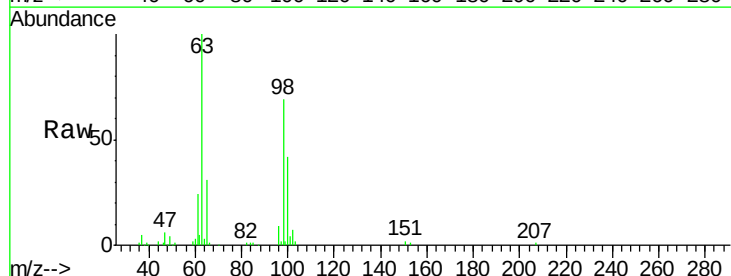
RT: 4.04 min Scan# 350

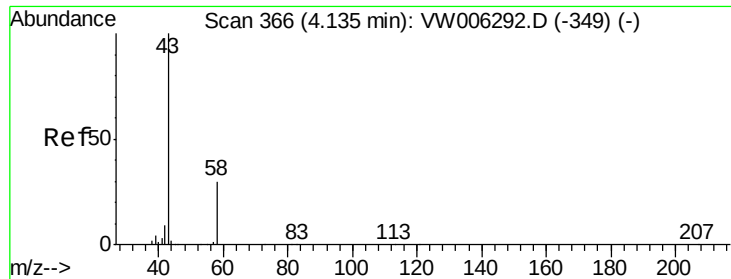
Delta R.T. 0.01 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio  | Resp  | Lower  | Upper |
|---------|--------|-------|--------|-------|
| 96      | 100    | 5706  |        |       |
| 61      | 270.7  | 112.3 | 208.7# |       |
| 63      | 1116.4 | 102.6 | 190.6# |       |





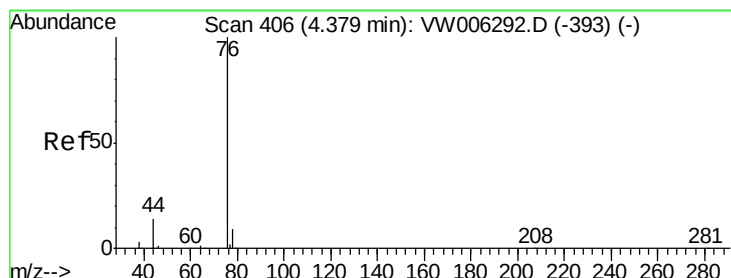
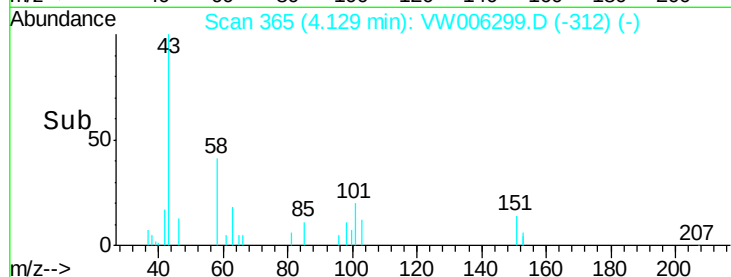
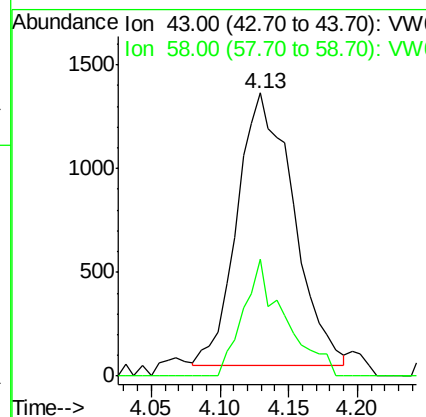
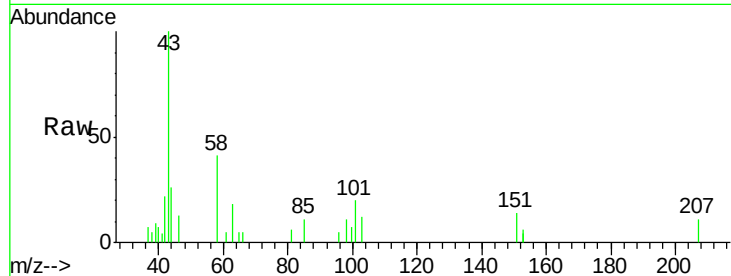
#13  
Acetone  
Concen: 2.915 ug/L m  
RT: 4.13 min Scan# 365  
Delta R.T. -0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

Tgt Ion: 43 Resp: 3751  
Ion Ratio Lower Upper  
43 100  
58 30.8 0.0 61.2

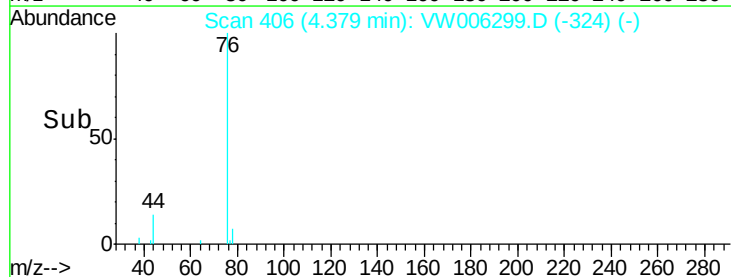
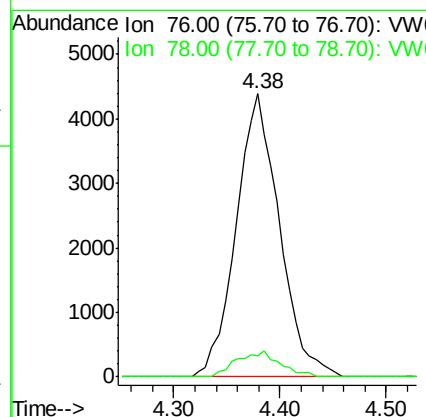
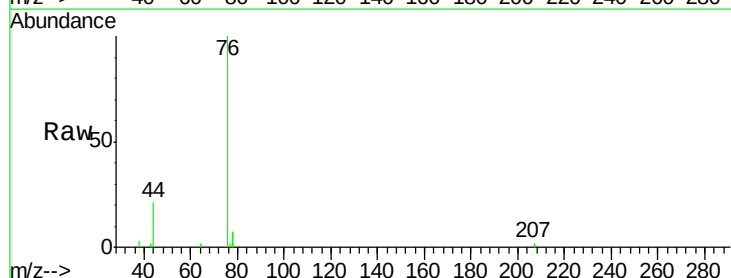
Manual Integrations  
APPROVED

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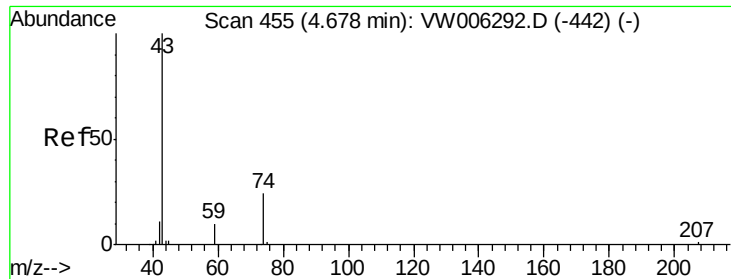


#14  
Carbon disulfide  
Concen: 0.976 ug/L  
RT: 4.38 min Scan# 406  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Tgt Ion: 76 Resp: 12479  
Ion Ratio Lower Upper  
76 100  
78 7.4 7.6 11.4#







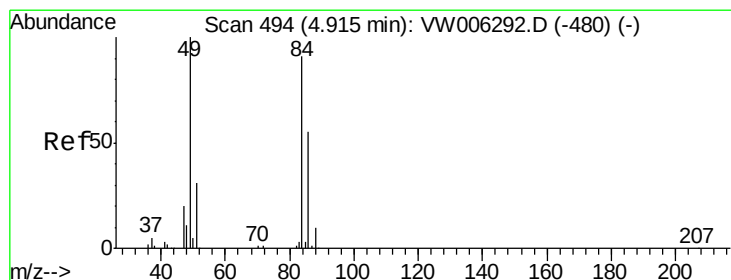
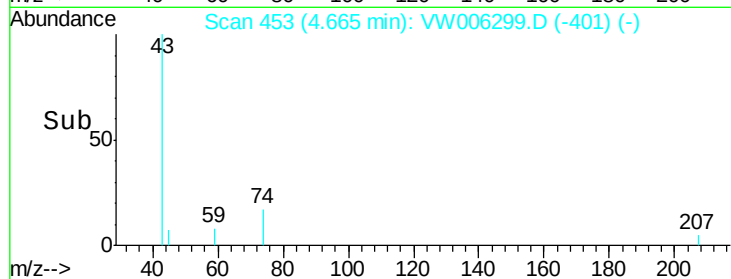
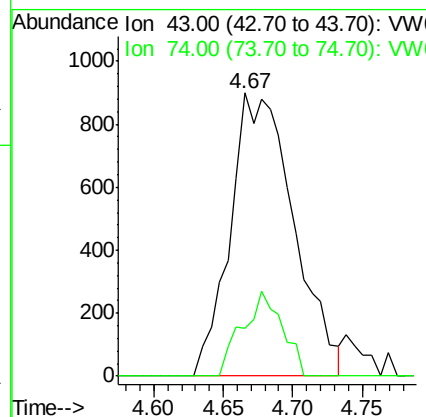
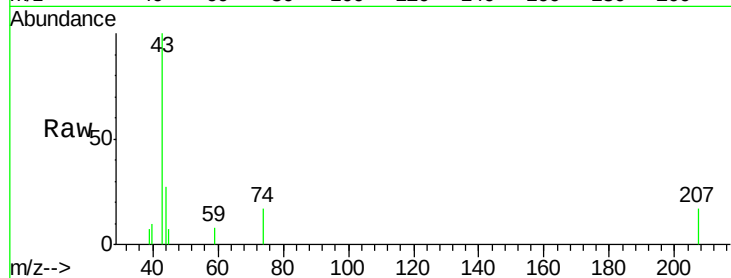
#15  
Methyl Acetate  
Concen: 1.368 ug/L m  
RT: 4.67 min Scan# 453  
Delta R.T. -0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

Tgt Ion: 43 Resp: 2851  
Ion Ratio Lower Upper  
43 100  
74 18.9 19.4 29.2#

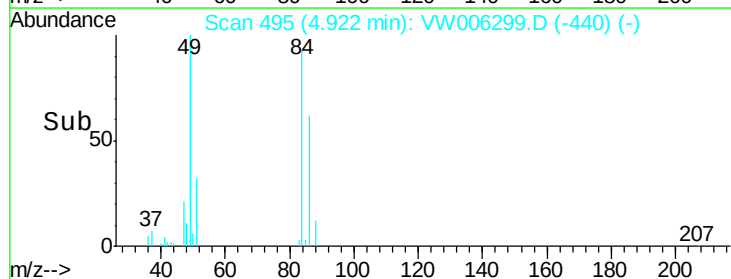
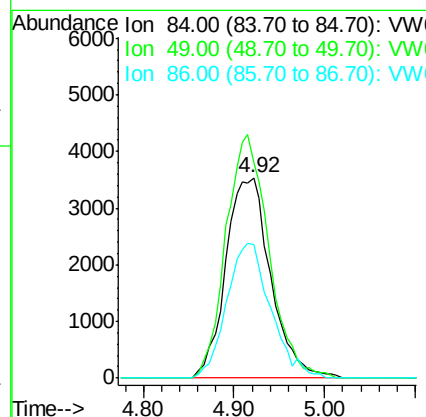
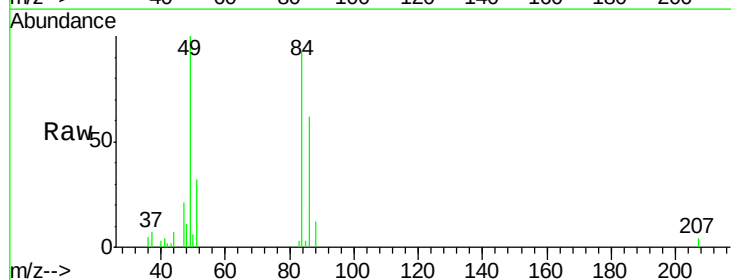
Manual Integrations  
APPROVED

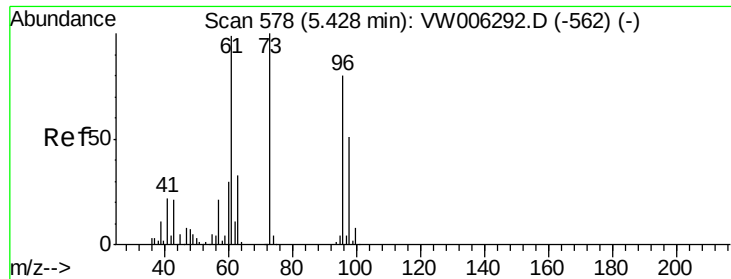
MMDadoda  
10/24/2018 2:07:25 PM



#16  
Methylene chloride  
Concen: 2.769 ug/L  
RT: 4.92 min Scan# 495  
Delta R.T. 0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Tgt Ion: 84 Resp: 12179  
Ion Ratio Lower Upper  
84 100  
49 107.6 83.5 155.1  
86 66.4 44.9 83.5





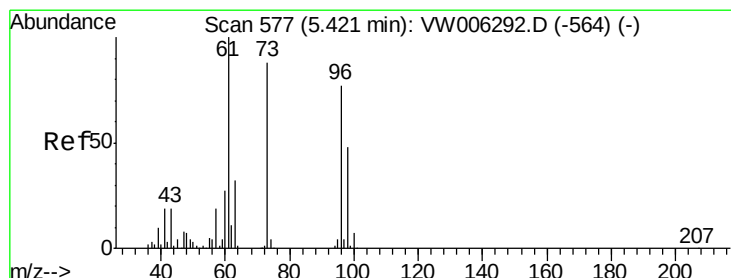
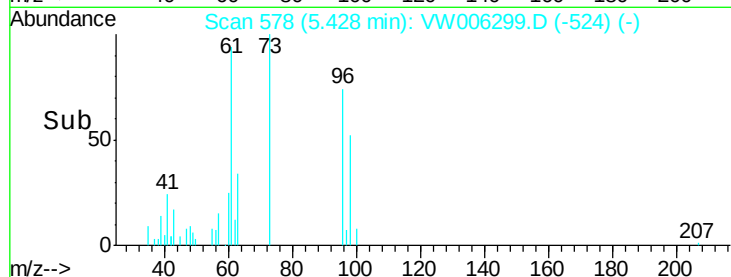
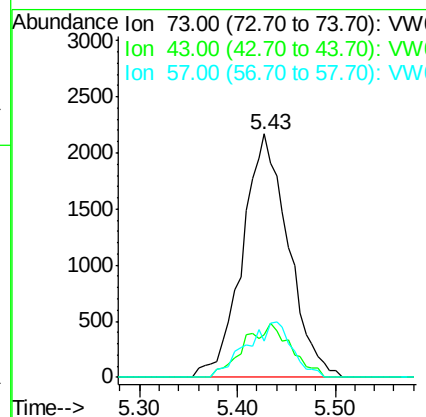
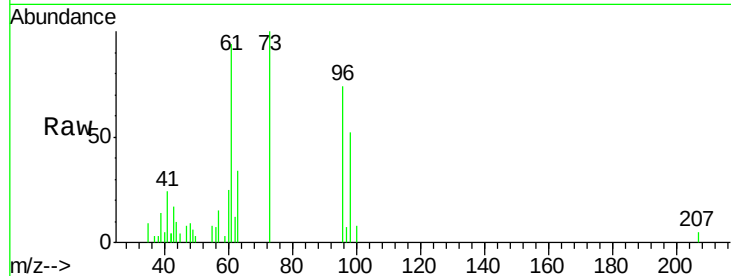
#17  
Methyl tert-butyl Ether  
Concen: 1.111 ug/L  
RT: 5.43 min Scan# 578  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 43      | 10.0  | 17.0  | 25.4# |
| 57      | 12.0  | 17.1  | 25.7# |

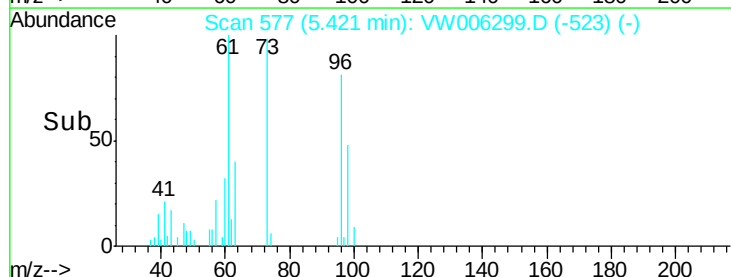
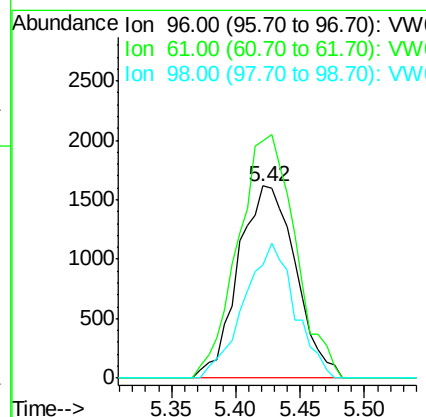
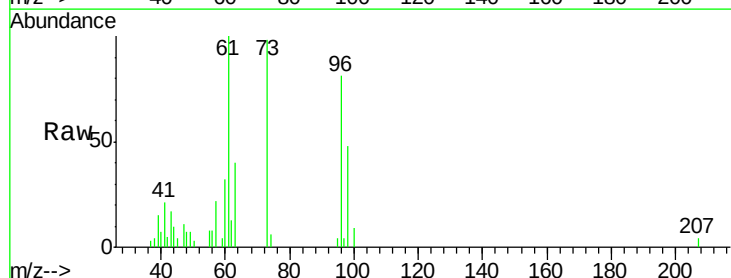
Manual Integrations  
APPROVED

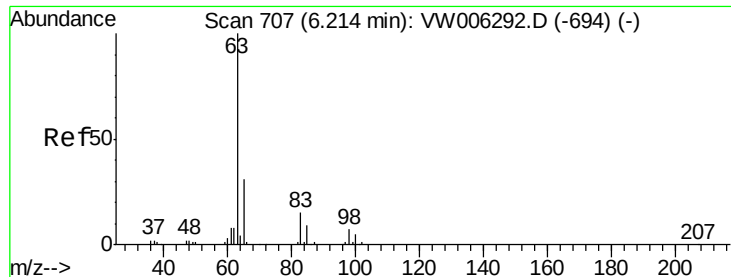
MMDadoda  
10/24/2018 2:07:25 PM



#18  
trans-1,2-Dichloroethene  
Concen: 1.152 ug/L  
RT: 5.42 min Scan# 577  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 123.5 | 89.0  | 165.2 |
| 98      | 59.1  | 42.4  | 78.6  |





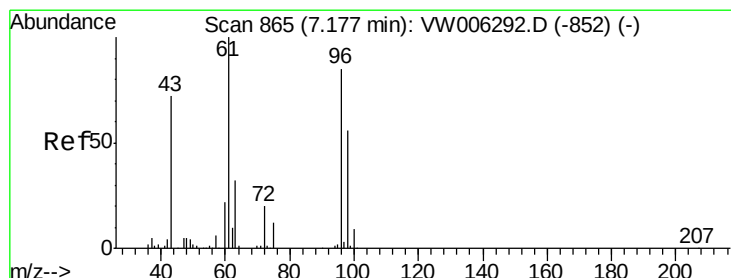
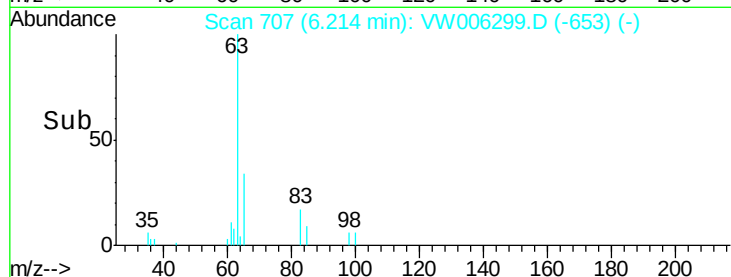
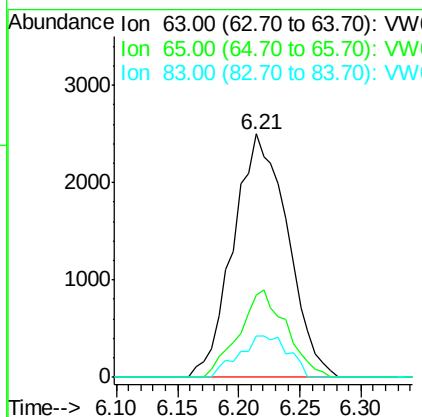
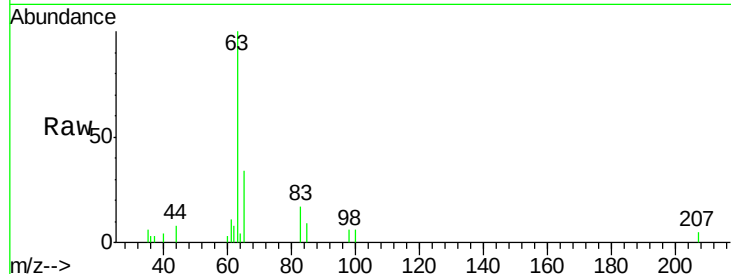
#19  
 1,1-Dichloroethane  
 Concen: 1.100 ug/L  
 RT: 6.21 min Scan# 707  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 33.9  | 22.3  | 41.5  |
| 83      | 16.8  | 9.7   | 18.1  |

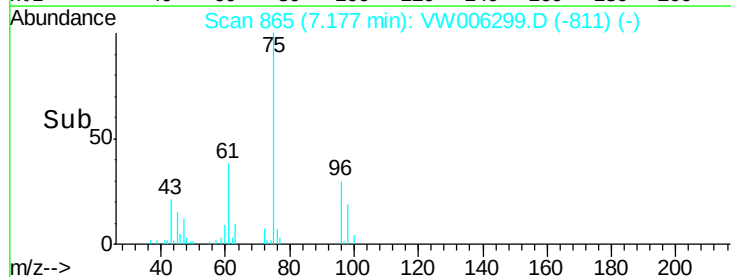
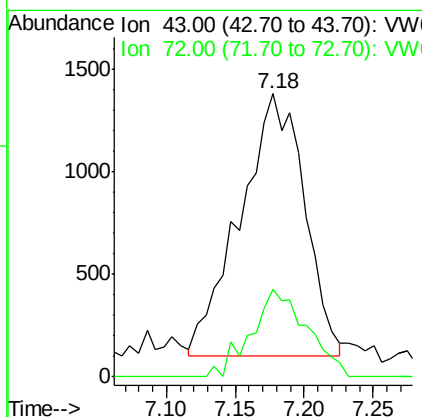
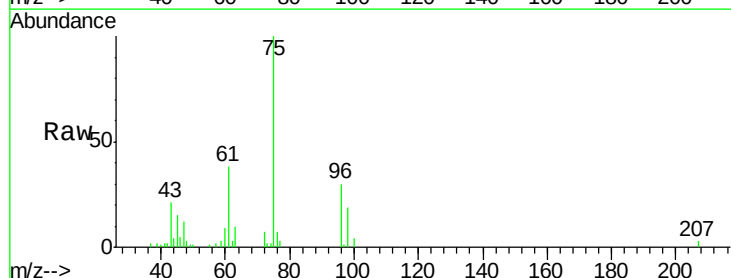
Manual Integrations  
 APPROVED

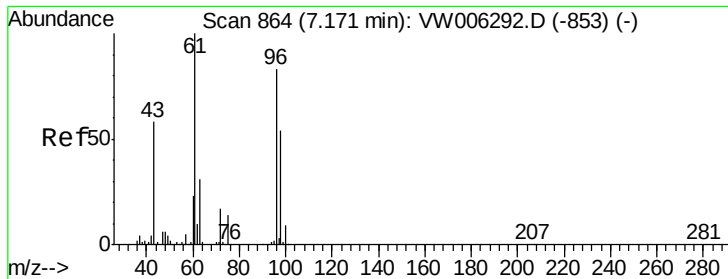
MMDadoda  
 10/24/2018 2:07:25 PM



#21  
 2-Butanone  
 Concen: 2.438 ug/L m  
 RT: 7.18 min Scan# 865  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 28.2  | 13.8  | 41.4  |





#22

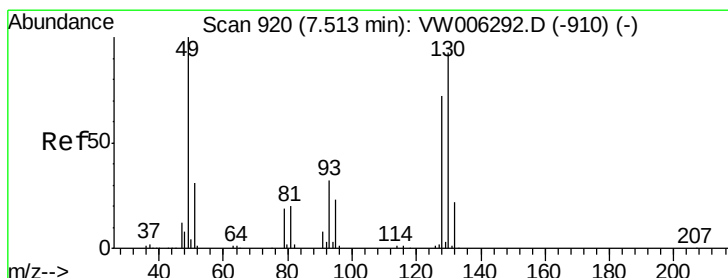
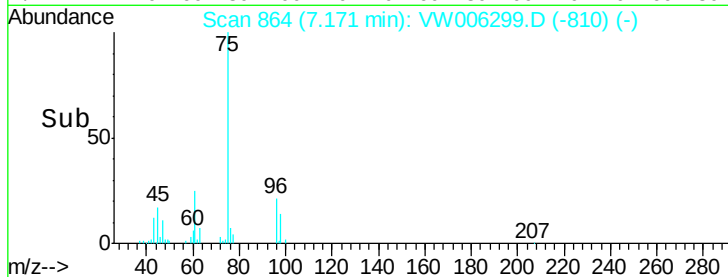
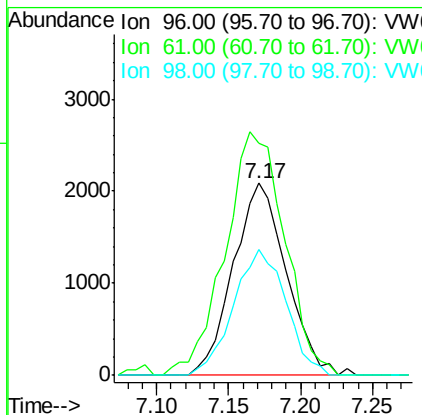
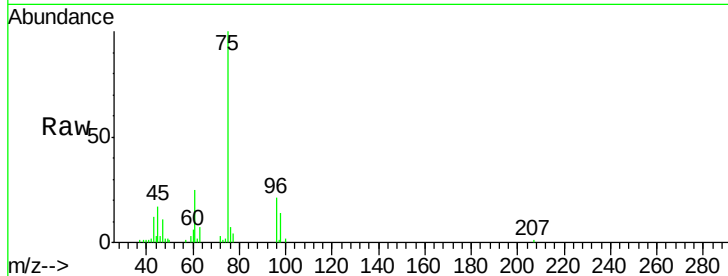
cis-1,2-Dichloroethene  
Concen: 1.127 ug/L  
RT: 7.17 min Scan# 864  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 5326  |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 120.8 | 85.1  | 158.1 |
| 98       | 65.6  | 46.3  | 86.1  |

Manual Integrations  
APPROVED

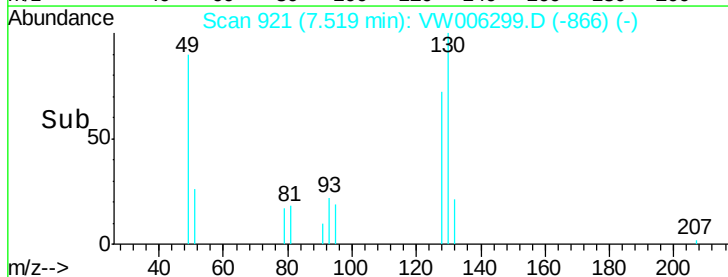
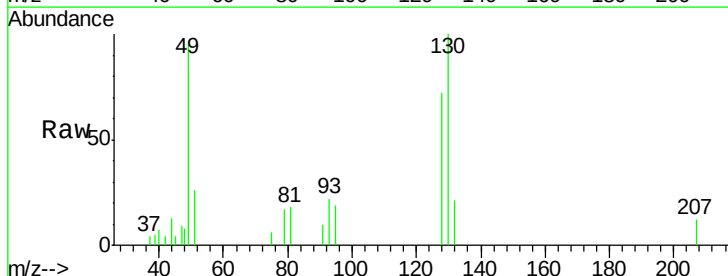
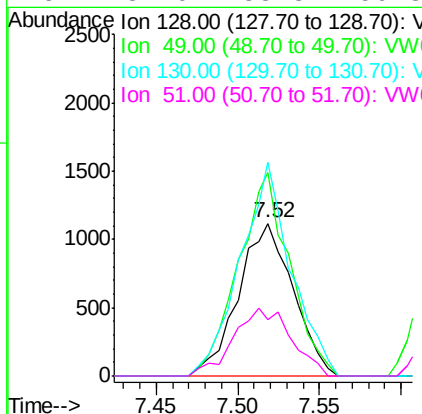
MMDadoda  
10/24/2018 2:07:25 PM

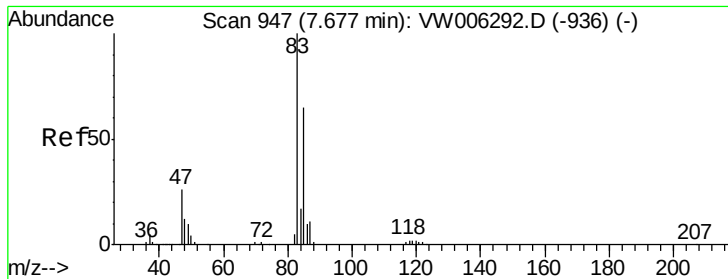


#23

Bromochloromethane  
Concen: 1.175 ug/L  
RT: 7.52 min Scan# 921  
Delta R.T. 0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 2611  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 49       | 133.1 | 95.2  | 176.8 |
| 130      | 139.8 | 86.3  | 160.3 |
| 51       | 37.0  | 33.8  | 50.8  |





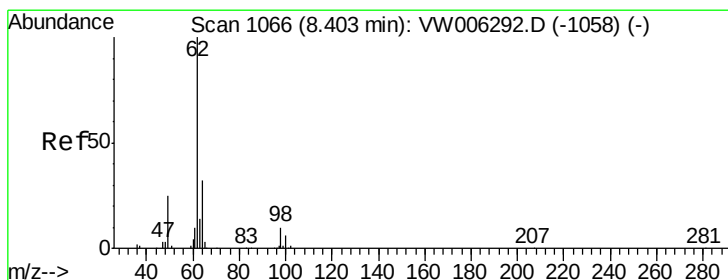
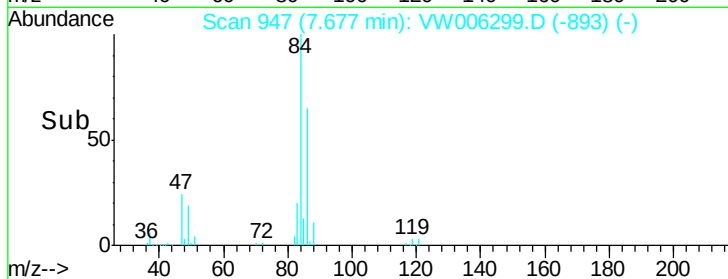
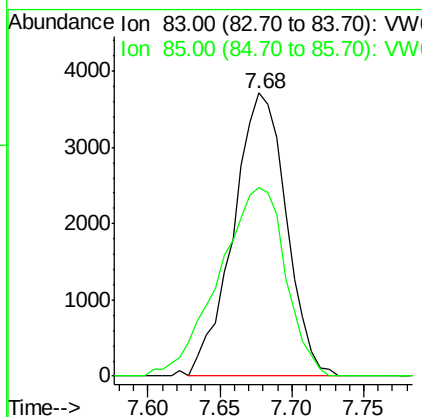
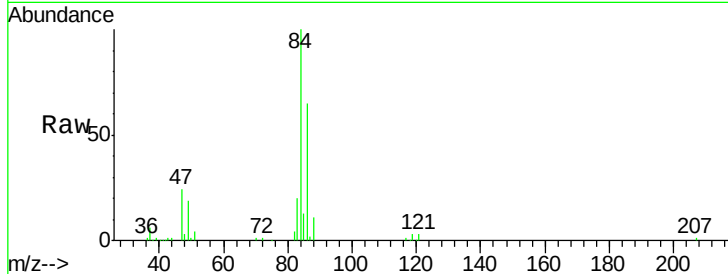
#25  
Chloroform  
Concen: 1.257 ug/L  
RT: 7.68 min Scan# 947  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

Tgt Ion: 83 Resp: 9482  
Ion Ratio Lower Upper  
83 100  
85 83.4 46.3 85.9

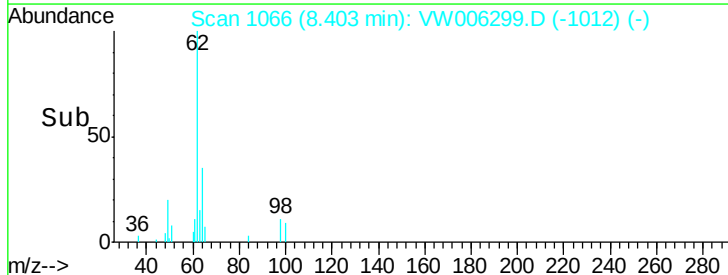
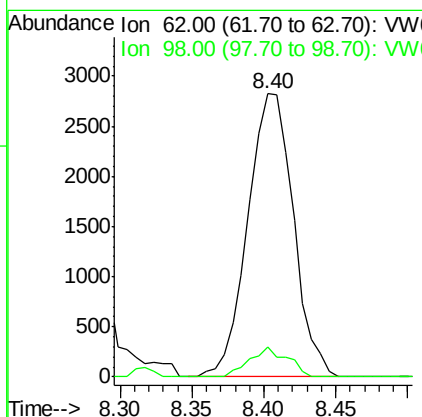
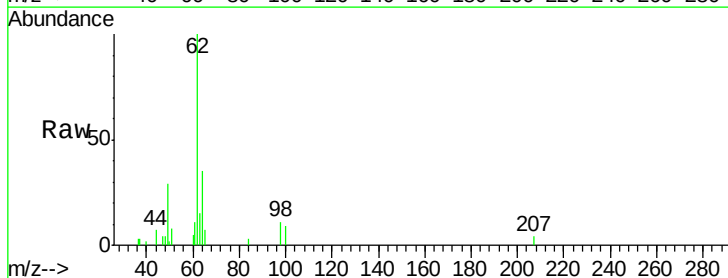
Manual Integrations  
APPROVED

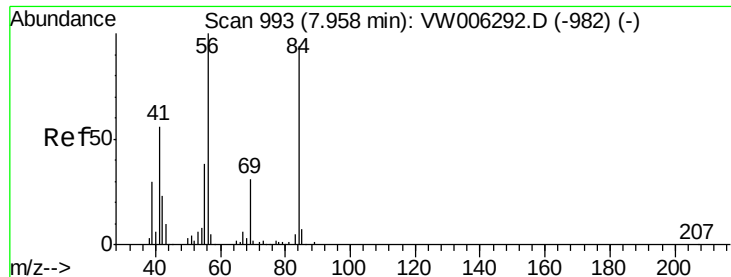
MMDadoda  
10/24/2018 2:07:25 PM



#27  
1,2-Dichloroethane  
Concen: 1.207 ug/L  
RT: 8.40 min Scan# 1066  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Tgt Ion: 62 Resp: 6209  
Ion Ratio Lower Upper  
62 100  
98 10.6 8.0 12.0





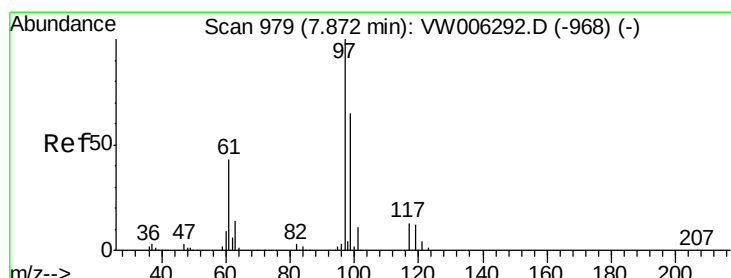
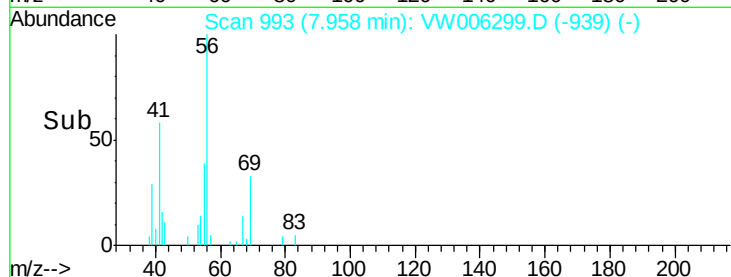
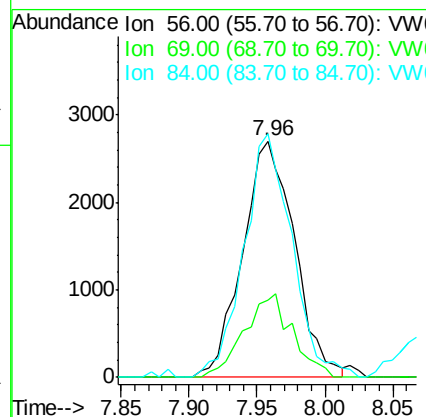
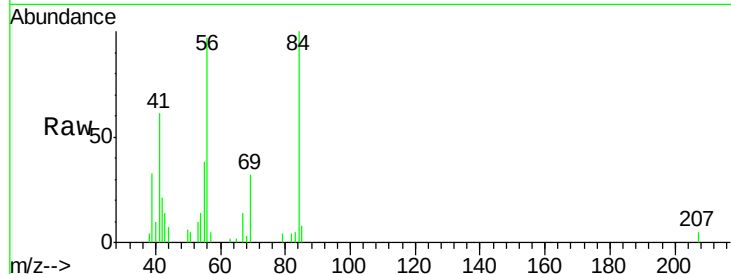
#30  
Cyclohexane  
Concen: 1.051 ug/L  
RT: 7.96 min Scan# 993  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 32.8  | 25.4  | 38.0  |
| 84      | 95.9  | 73.9  | 110.9 |

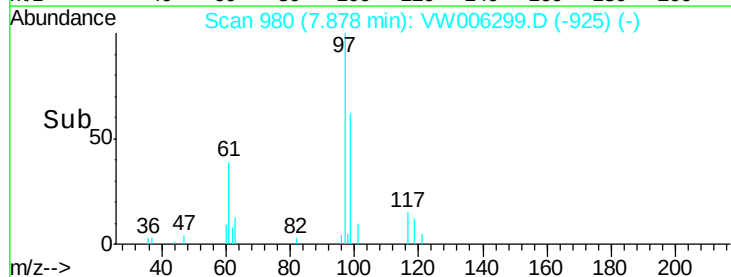
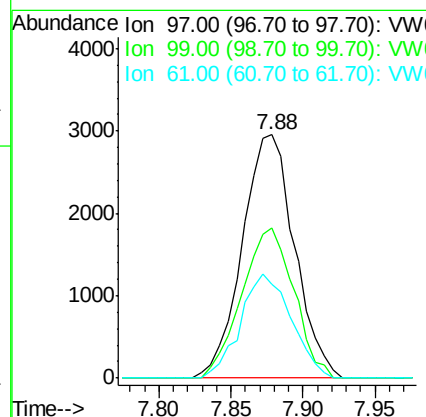
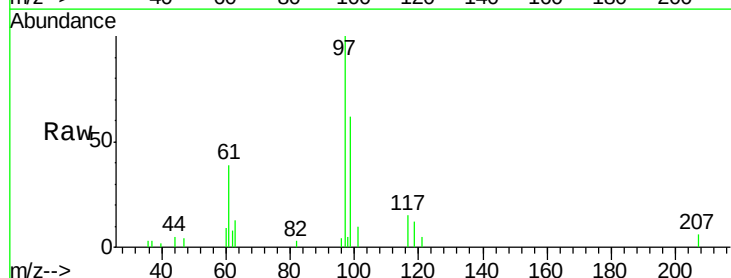
Manual Integrations  
APPROVED

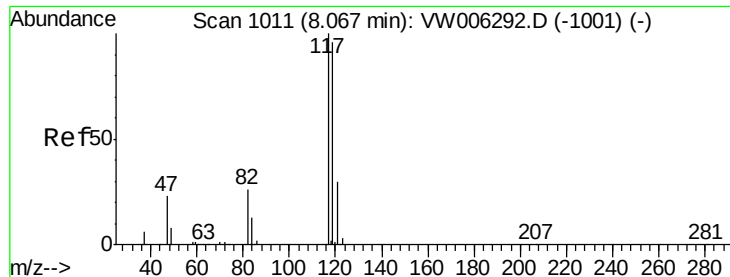
MMDadoda  
10/24/2018 2:07:25 PM



#31  
1,1,1-Trichloroethane  
Concen: 1.141 ug/L  
RT: 7.88 min Scan# 980  
Delta R.T. 0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 61.4  | 51.0  | 76.4  |
| 61      | 41.8  | 33.6  | 50.4  |





#32

Carbon tetrachloride

Concen: 1.053 ug/L

RT: 8.07 min Scan# 1011

Delta R.T. 0.00 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

ClientSampled :

MDL

Tgt Ion: 117 Resp: 6725

Ion Ratio Lower Upper

117 100

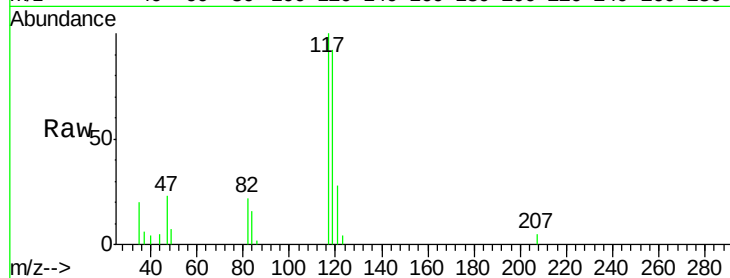
119 94.4 76.9 115.3

Manual Integrations

APPROVED

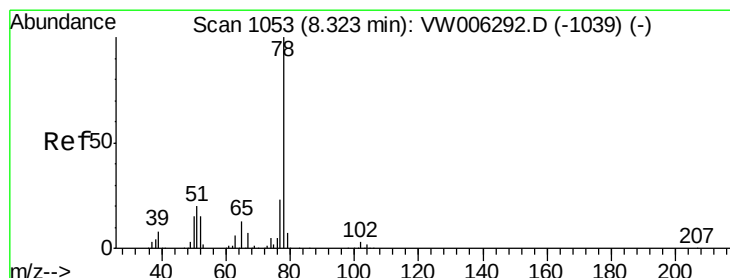
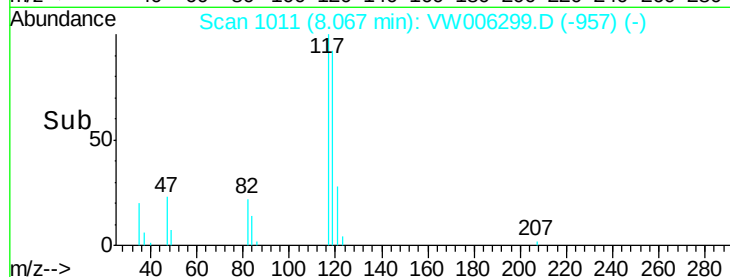
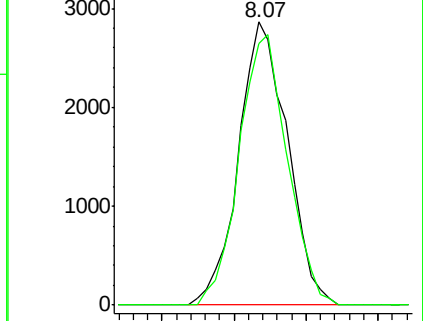
MMDadoda

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Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 1.191 ug/L

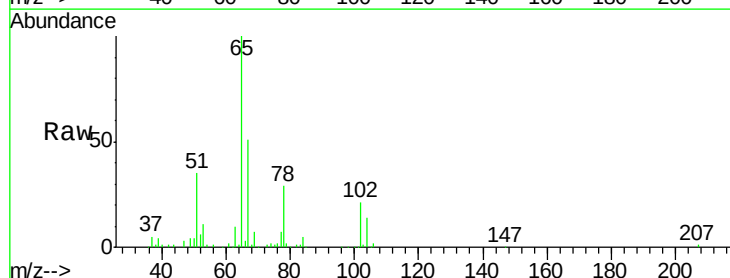
RT: 8.32 min Scan# 1053

Delta R.T. 0.00 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Tgt Ion: 78 Resp: 19020



Abundance Ion 78.00 (77.70 to 78.70): VW

10000

8000

6000

4000

2000

0

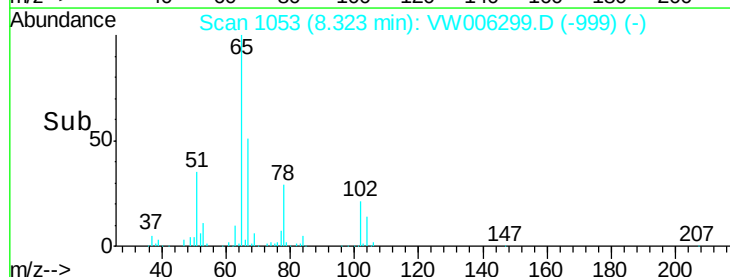
8.25

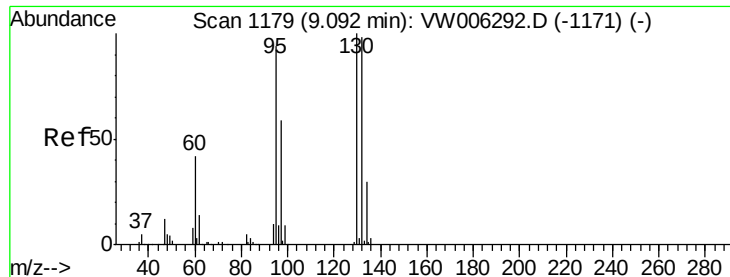
8.30

8.35

8.40

Time-->





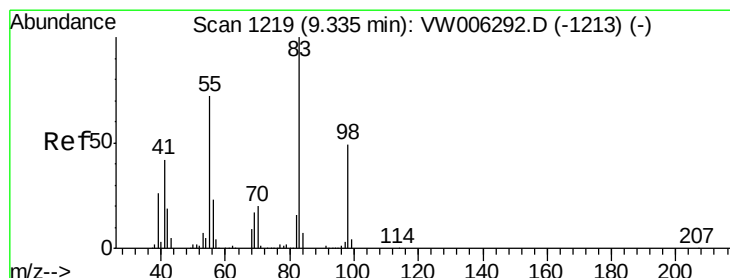
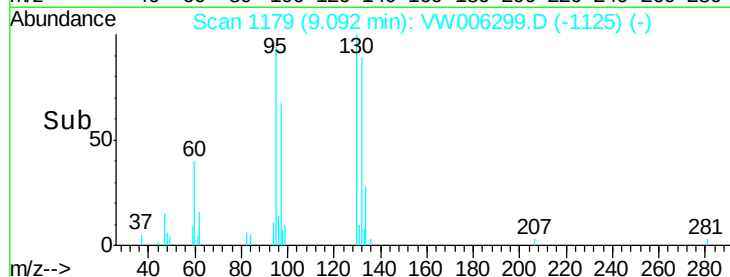
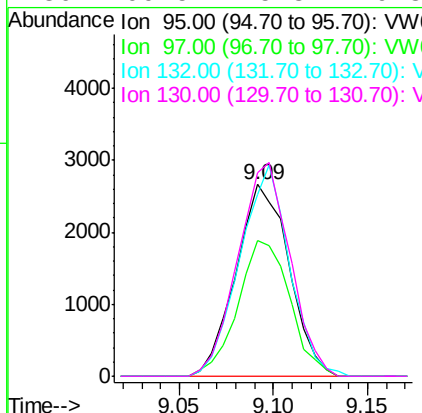
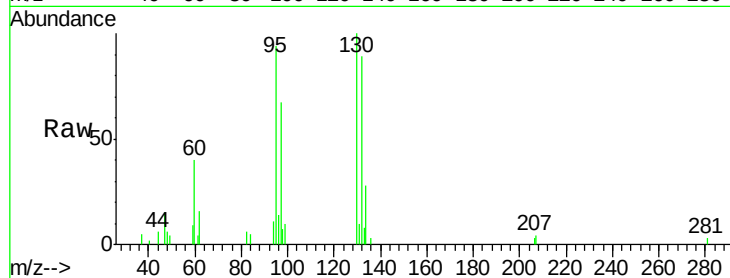
#35  
 Trichloroethene  
 Concen: 1.156 ug/L  
 RT: 9.09 min Scan# 1179  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 97      | 69.6  | 45.8  | 85.0  |
| 132     | 103.3 | 72.9  | 135.3 |
| 130     | 109.5 | 75.8  | 140.8 |

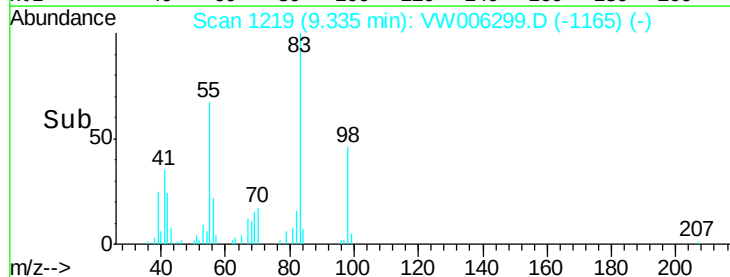
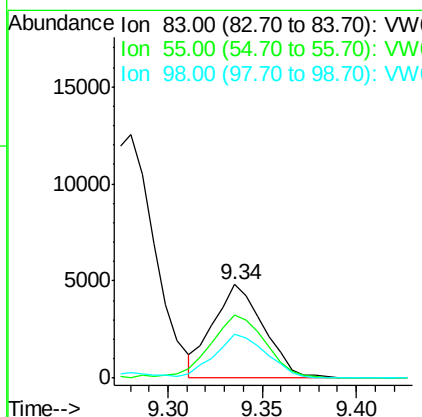
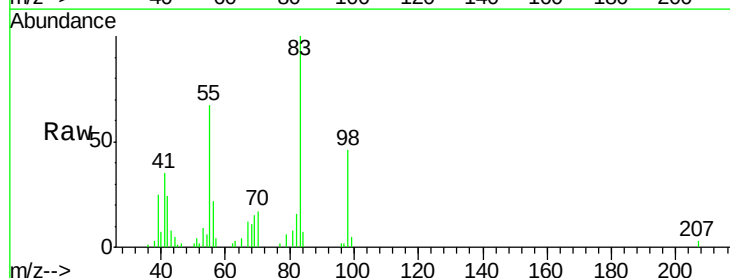
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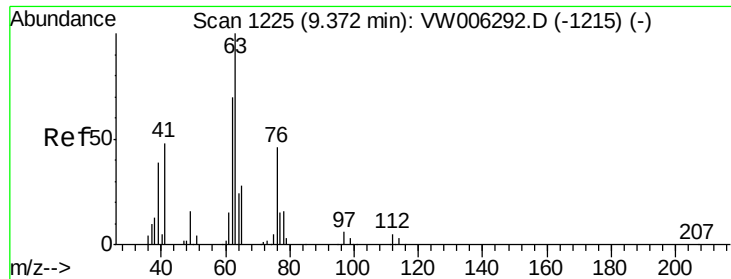


#36  
 Methylcyclohexane  
 Concen: 1.090 ug/L  
 RT: 9.34 min Scan# 1219  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 72.6  | 57.1  | 85.7  |
| 98      | 48.0  | 38.9  | 58.3  |







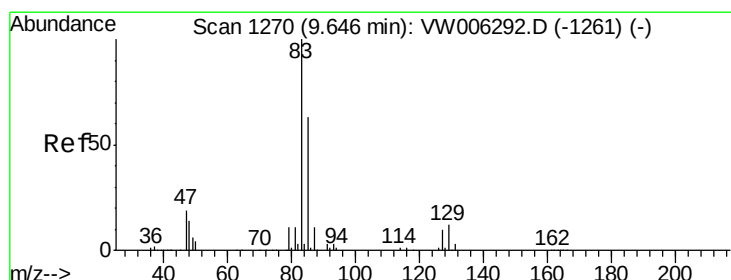
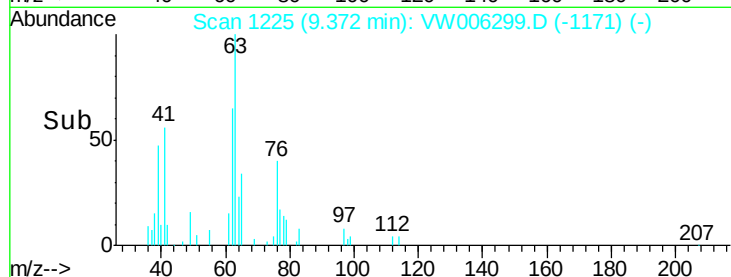
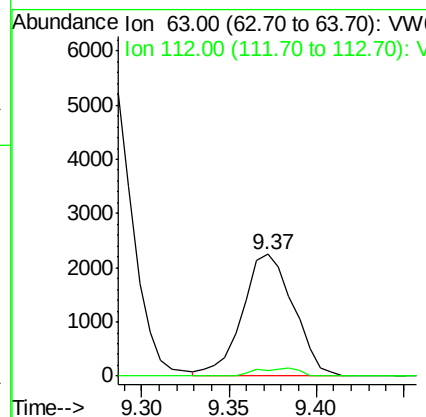
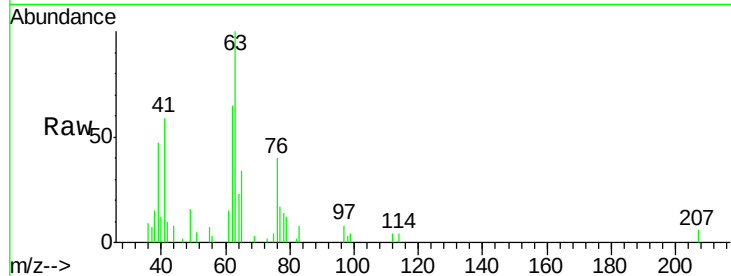
#40  
 1,2-Dichloropropane  
 Concen: 1.155 ug/L  
 RT: 9.37 min Scan# 1225  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

Tgt Ion: 63 Resp: 4578  
 Ion Ratio Lower Upper  
 63 100  
 112 2.4 3.5 5.3#

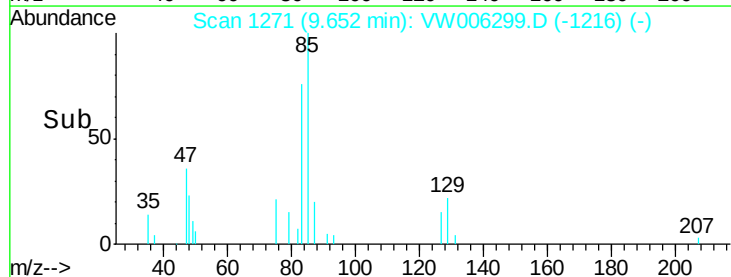
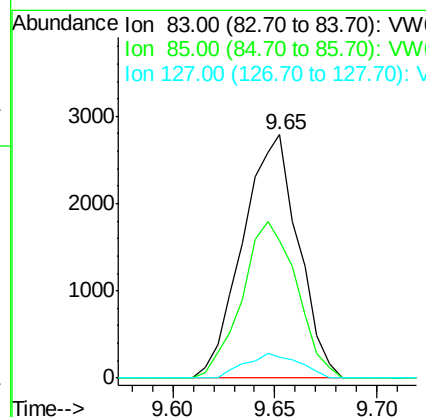
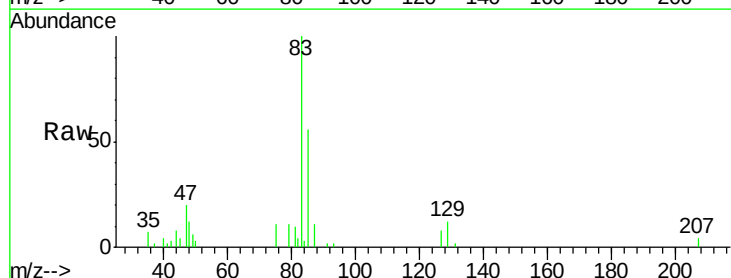
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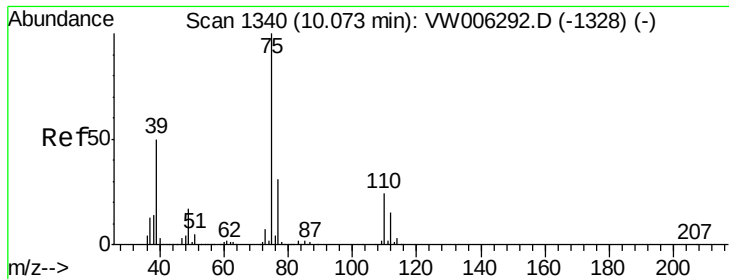
MMDadoda  
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#41  
 Bromodichloromethane  
 Concen: 0.987 ug/L  
 RT: 9.65 min Scan# 1271  
 Delta R.T. 0.01 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Tgt Ion: 83 Resp: 5280  
 Ion Ratio Lower Upper  
 83 100  
 85 56.4 45.5 84.5  
 127 8.3 7.4 11.2





#42

cis-1,3-Dichloropropene

Concen: 0.962 ug/L

RT: 10.08 min Scan# 1341

Delta R.T. 0.01 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

ClientSampled :

MDL

Tgt Ion: 75 Resp: 6226

Ion Ratio Lower Upper

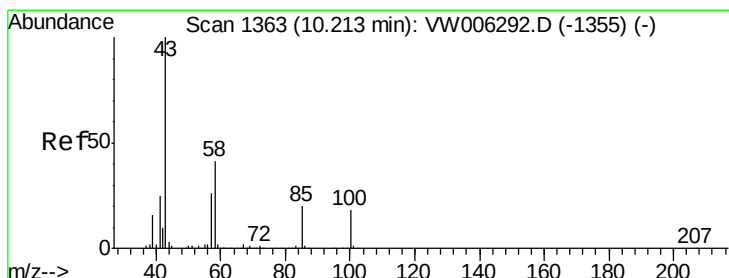
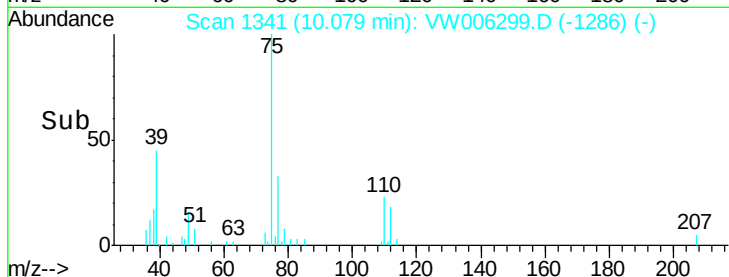
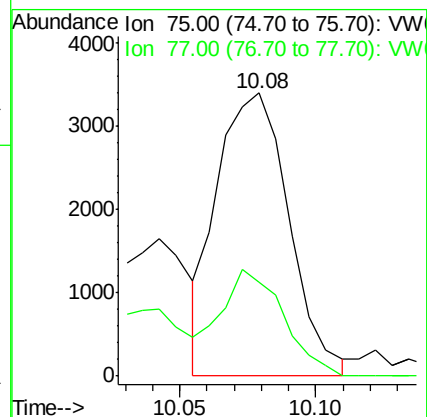
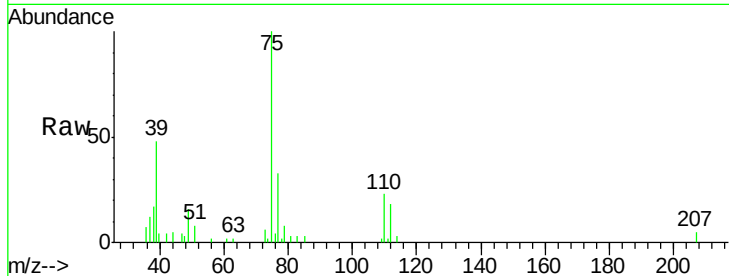
75 100

77 33.1 22.6 42.0

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#43

4-Methyl-2-pentanone

Concen: 2.245 ug/L

RT: 10.21 min Scan# 1363

Delta R.T. 0.00 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

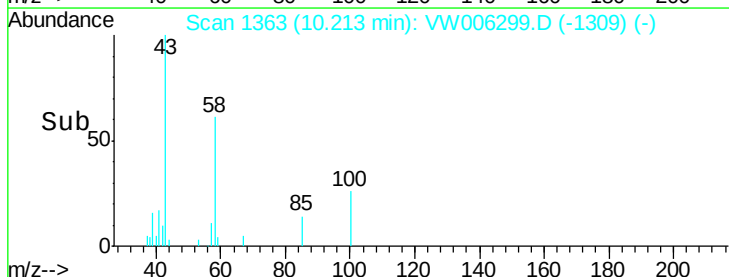
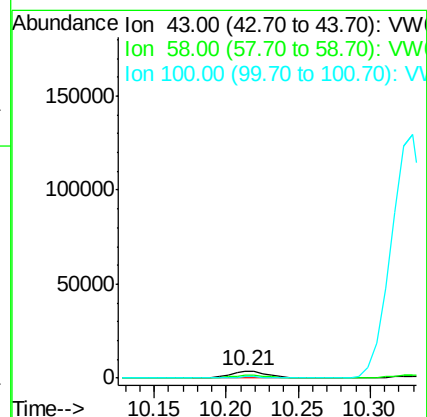
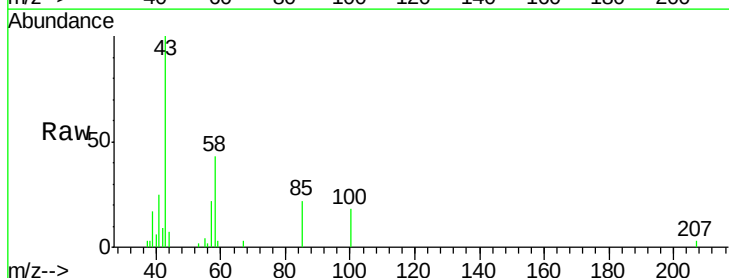
Tgt Ion: 43 Resp: 7129

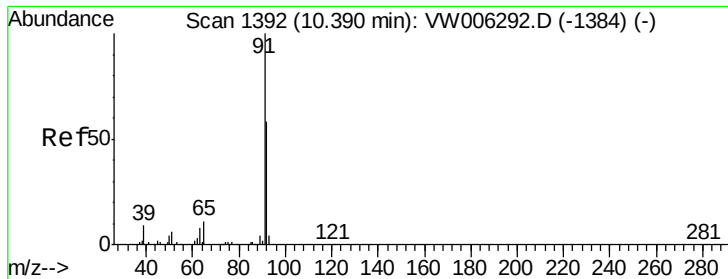
Ion Ratio Lower Upper

43 100

58 38.8 31.4 47.2

100 15.5 13.3 19.9





#44

Toluene

Concen: 1.176 ug/L

RT: 10.39 min Scan# 1392

Delta R.T. 0.00 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

ClientSampleId :

MDL

Tgt Ion: 91 Resp: 21093

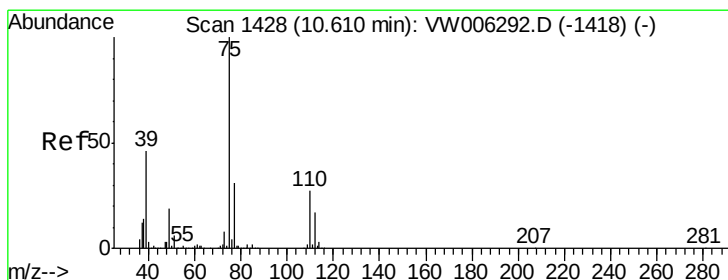
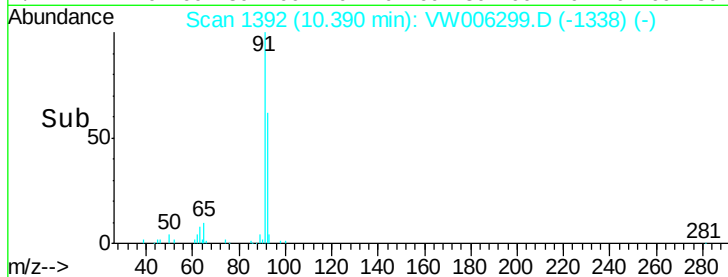
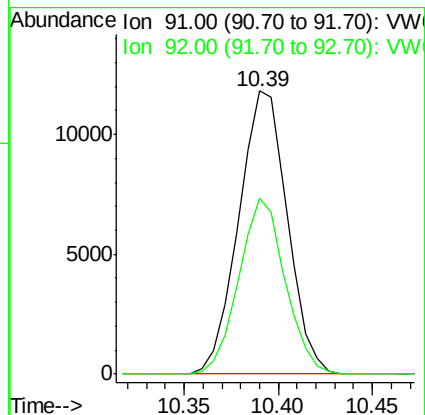
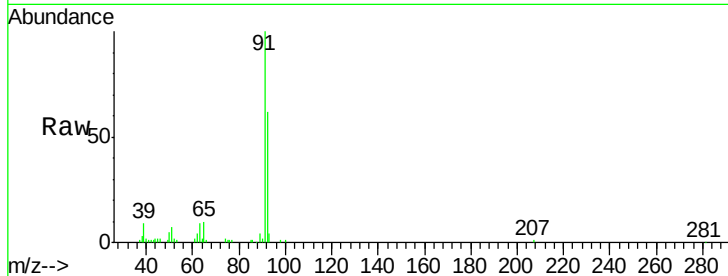
Ion Ratio Lower Upper

91 100

92 62.0 40.4 75.0

Manual Integrations  
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#45

trans-1,3-Dichloropropene

Concen: 1.304 ug/L

RT: 10.60 min Scan# 1427

Delta R.T. -0.01 min

Lab File: VW006299.D

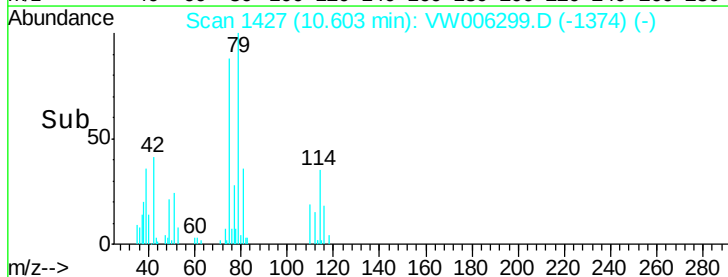
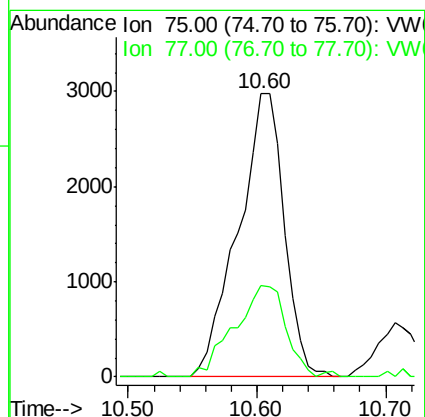
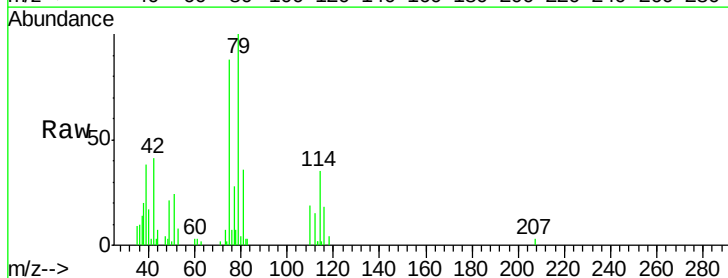
Acq: 23 Oct 2018 16:50

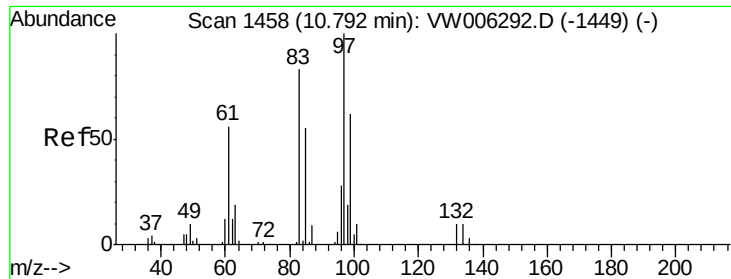
Tgt Ion: 75 Resp: 7373

Ion Ratio Lower Upper

75 100

77 32.4 22.4 41.6





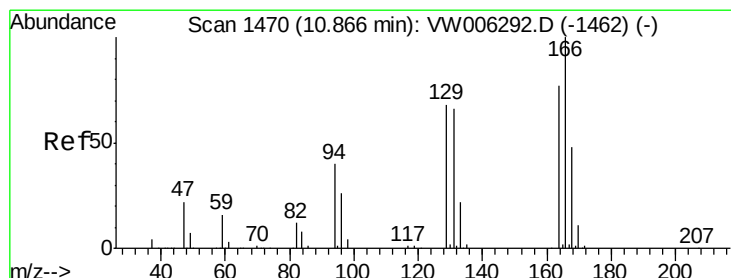
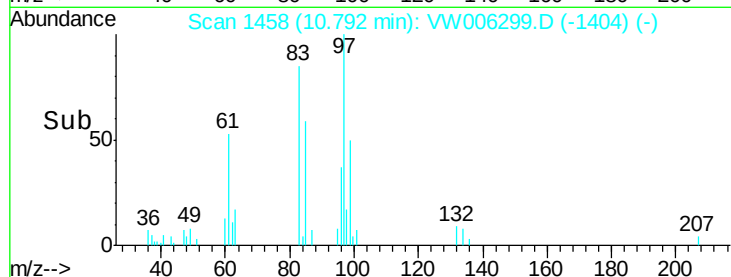
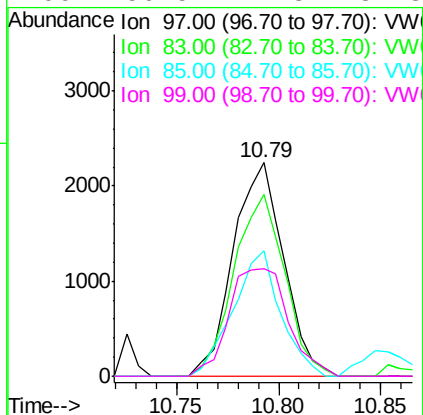
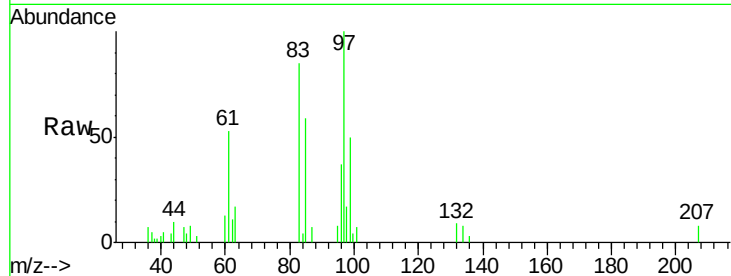
#46  
 1,1,2-Trichloroethane  
 Concen: 1.168 ug/L  
 RT: 10.79 min Scan# 1458  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 3854  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 85.4  | 60.0  | 111.4 |
| 85       | 58.6  | 38.7  | 71.9  |
| 99       | 50.5  | 44.3  | 82.3  |

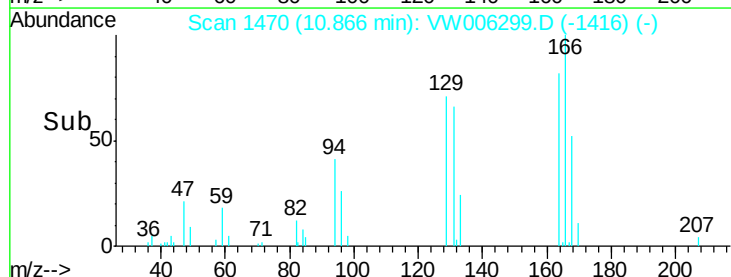
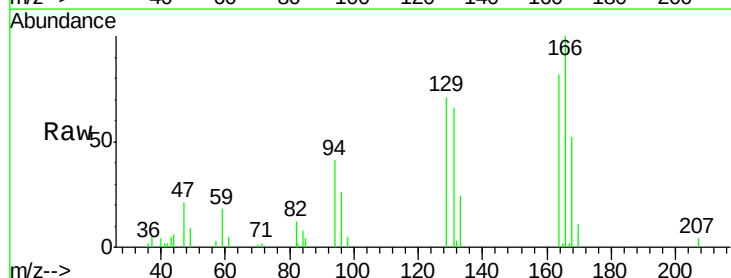
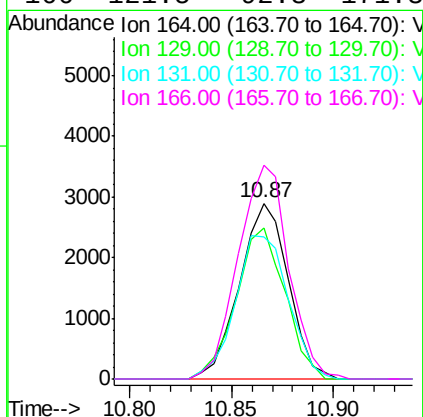
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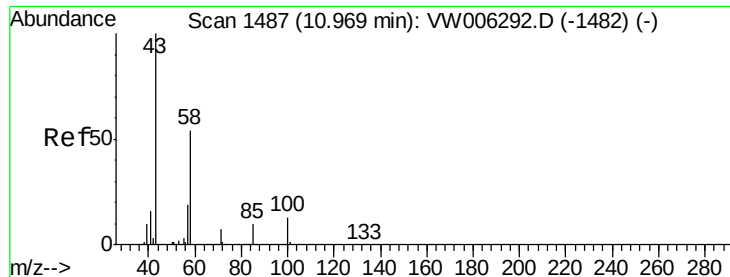
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#47  
 Tetrachloroethene  
 Concen: 1.161 ug/L  
 RT: 10.87 min Scan# 1470  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 4832  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 86.3  | 65.4  | 121.4 |
| 131      | 80.6  | 63.8  | 118.4 |
| 166      | 121.5 | 92.3  | 171.3 |





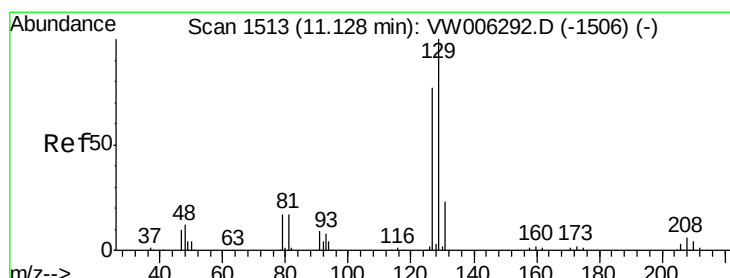
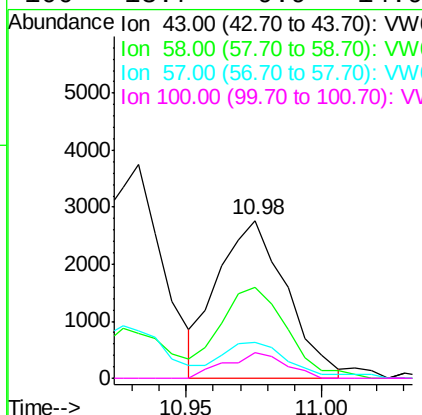
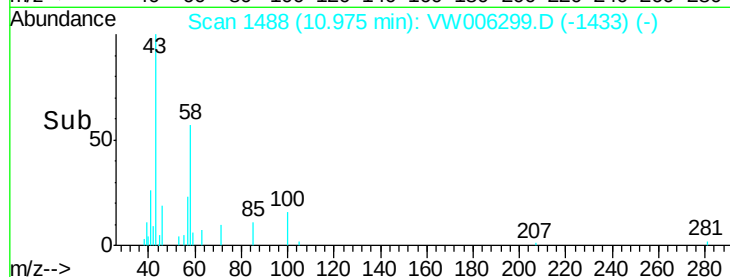
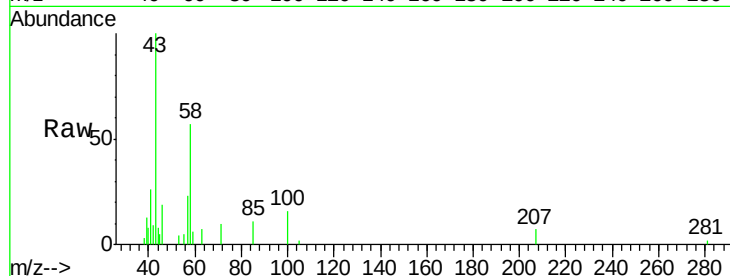
#49  
2-Hexanone  
Concen: 2.073 ug/L  
RT: 10.98 min Scan# 1488  
Delta R.T. 0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

Tgt Ion: 43 Resp: 4851  
Ion Ratio Lower Upper  
43 100  
58 56.2 42.1 63.1  
57 19.0 15.1 22.7  
100 13.7 9.9 14.9

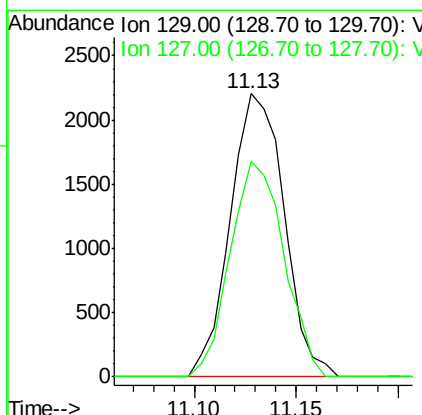
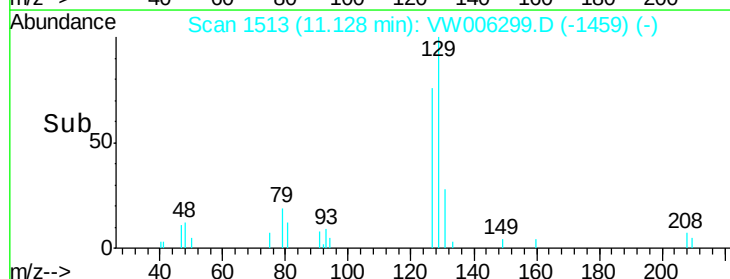
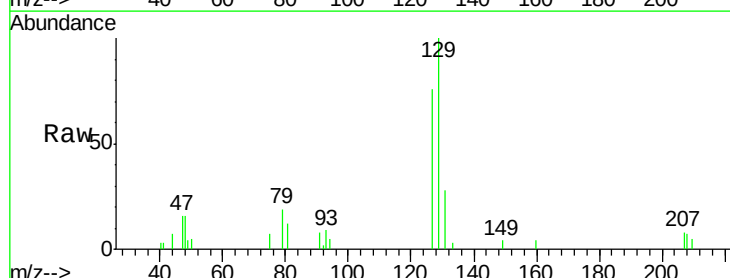
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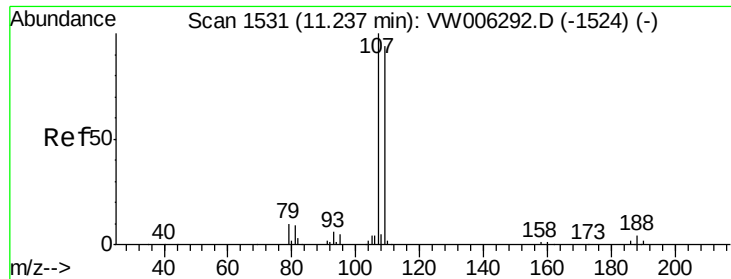
MMDadoda  
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#50  
Dibromochloromethane  
Concen: 0.956 ug/L  
RT: 11.13 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Tgt Ion: 129 Resp: 4043  
Ion Ratio Lower Upper  
129 100  
127 76.2 54.4 101.0





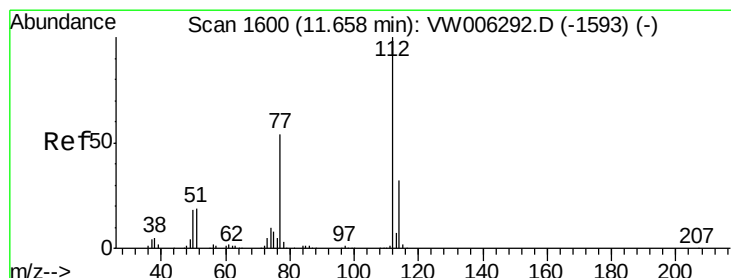
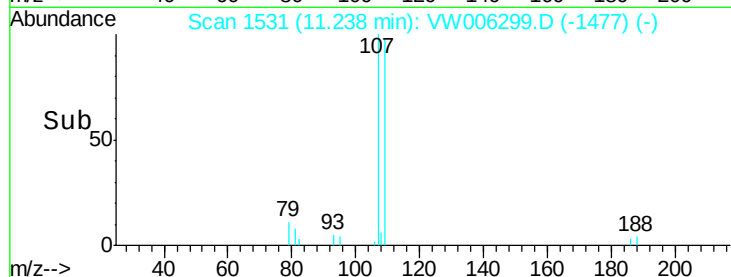
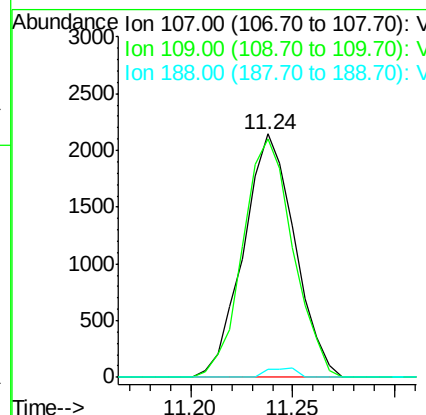
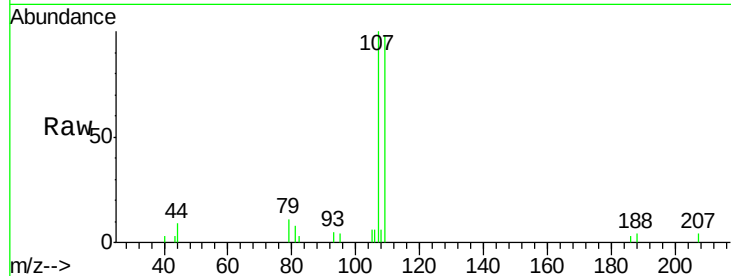
#51  
1,2-Dibromoethane  
Concen: 1.090 ug/L  
RT: 11.24 min Scan# 1531  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 97.8  | 66.6  | 123.8 |
| 188     | 3.6   | 3.4   | 5.0   |

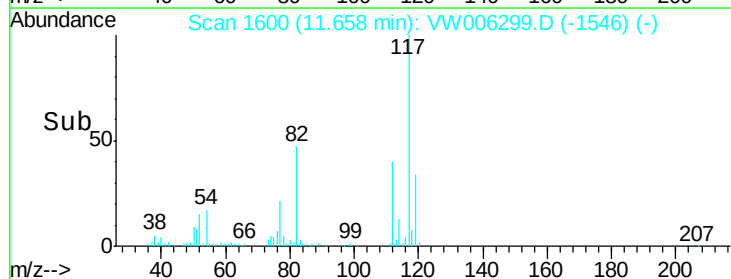
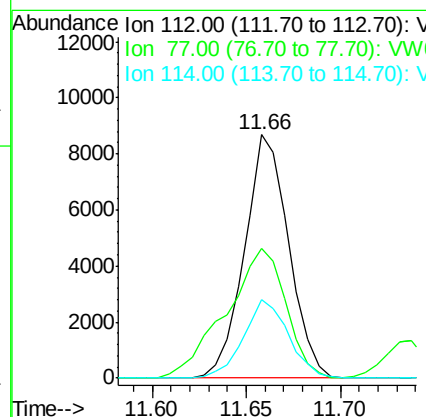
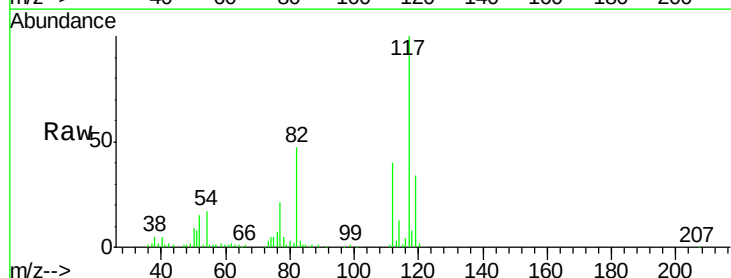
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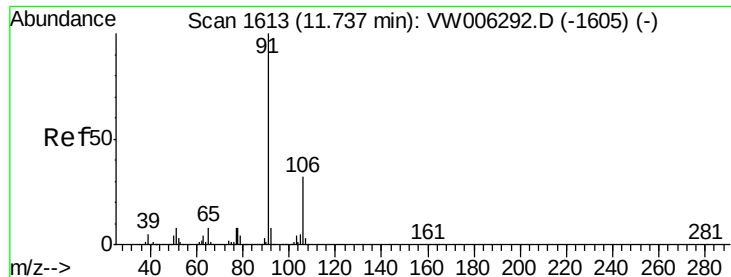
MMDadoda  
10/24/2018 2:07:25 PM



#52  
Chlorobenzene  
Concen: 1.161 ug/L  
RT: 11.66 min Scan# 1600  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 53.3  | 44.2  | 66.2  |
| 114     | 32.1  | 22.1  | 41.1  |





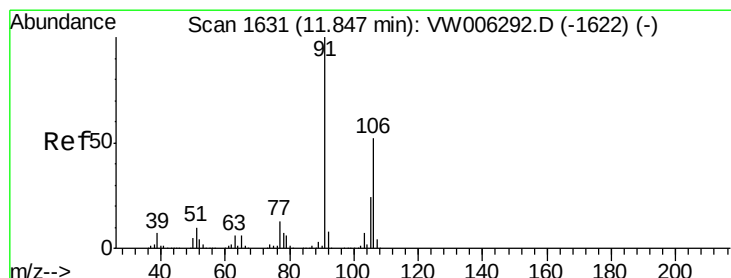
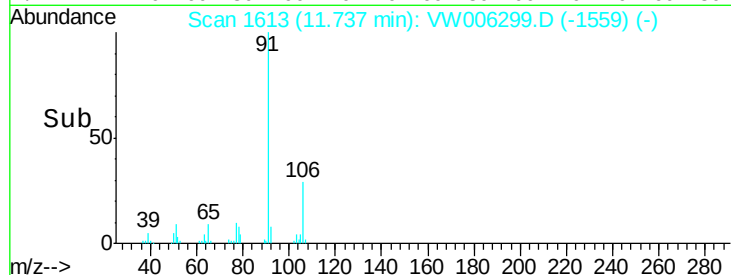
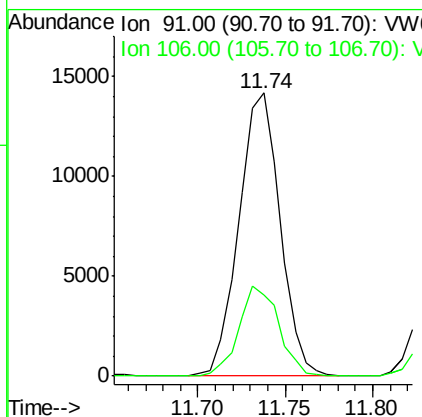
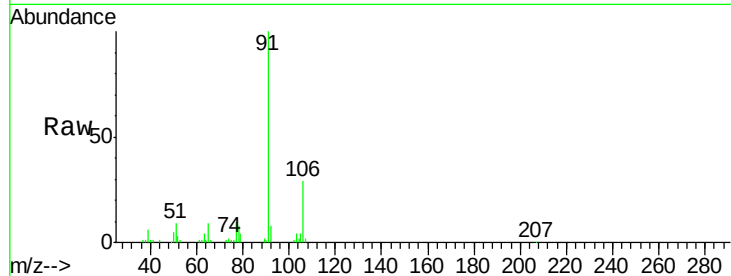
#53  
Ethylbenzene  
Concen: 1.114 ug/L  
RT: 11.74 min Scan# 1613  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

Tgt Ion: 91 Resp: 23263  
Ion Ratio Lower Upper  
91 100  
106 28.8 22.6 42.0

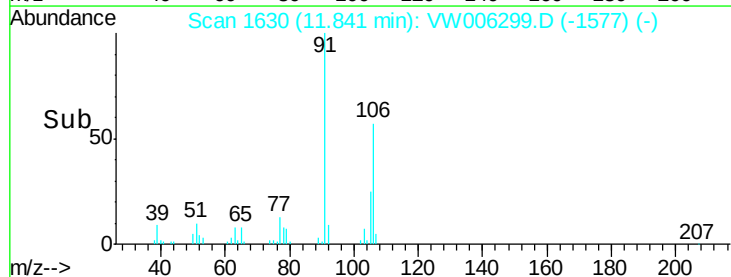
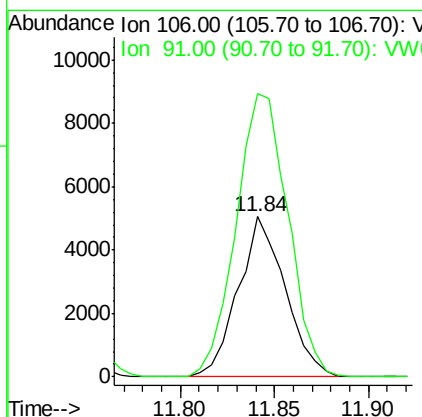
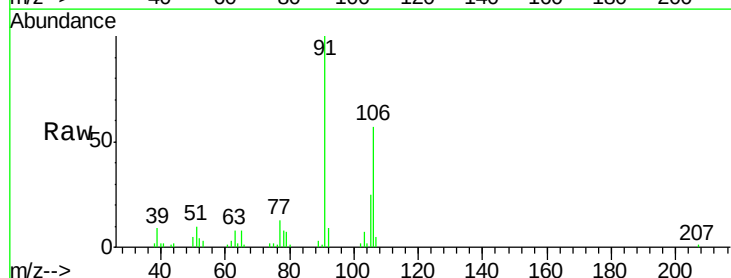
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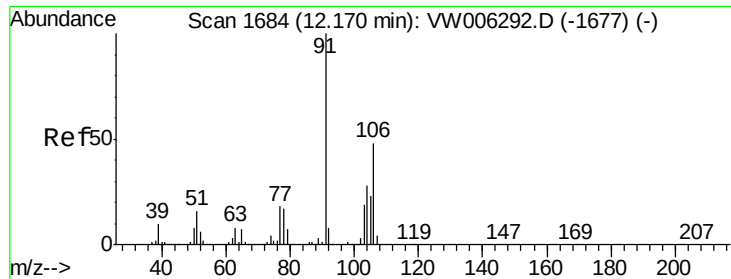
MMDadoda  
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#54  
m,p-Xylene  
Concen: 1.066 ug/L  
RT: 11.84 min Scan# 1630  
Delta R.T. -0.01 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Tgt Ion: 106 Resp: 8721  
Ion Ratio Lower Upper  
106 100  
91 176.7 138.4 257.0





#55

o-xylene

Concen: 0.983 ug/L

RT: 12.17 min Scan# 1684

Delta R.T. 0.00 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

ClientSampled :

MDL

Tgt Ion:106 Resp: 7679

Ion Ratio Lower Upper

106 100

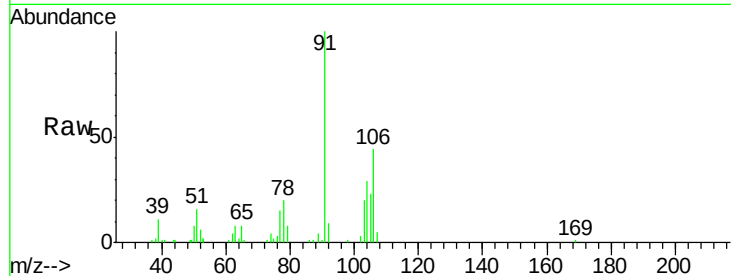
91 227.4 148.7 276.1

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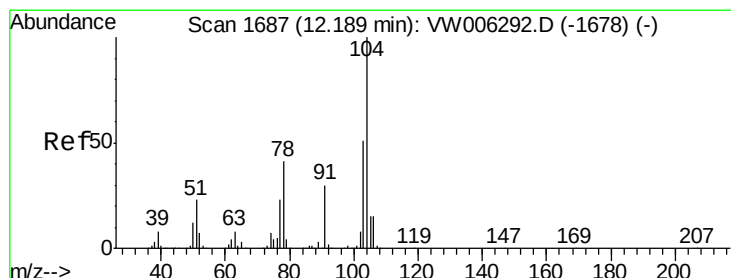
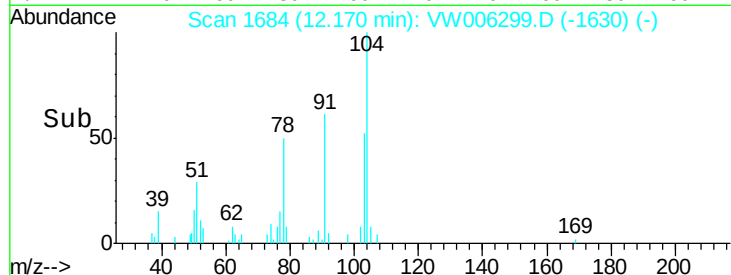
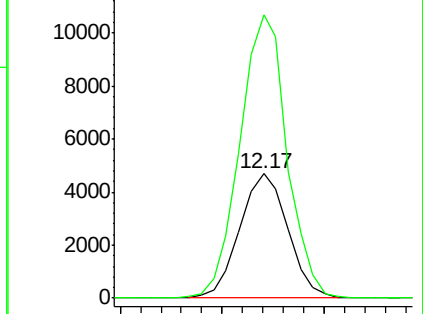
MMDadoda

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Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#56

Styrene

Concen: 0.962 ug/L

RT: 12.18 min Scan# 1686

Delta R.T. -0.01 min

Lab File: VW006299.D

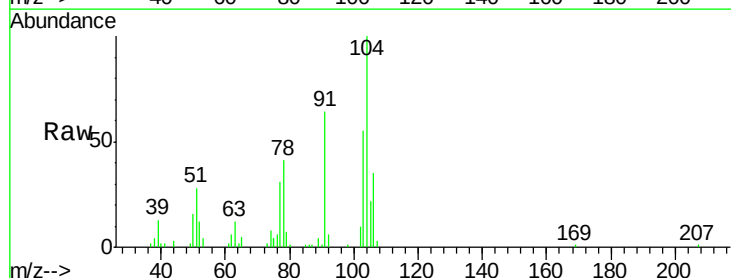
Acq: 23 Oct 2018 16:50

Tgt Ion:104 Resp: 12941

Ion Ratio Lower Upper

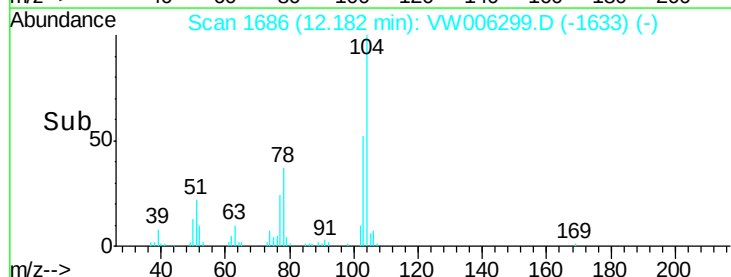
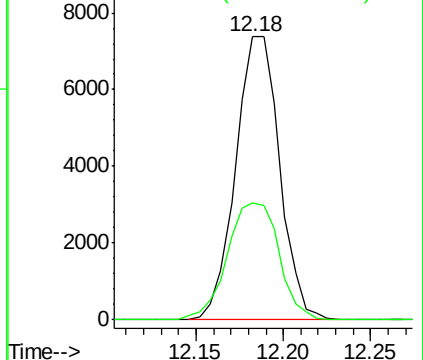
104 100

78 41.3 31.2 58.0

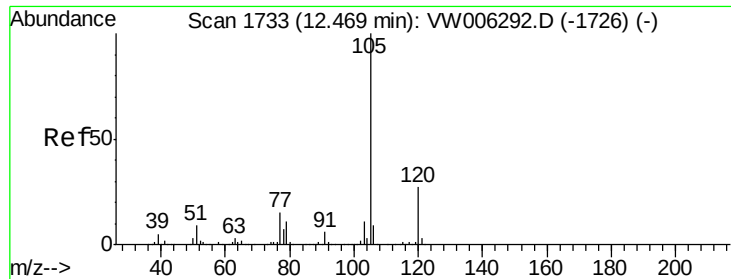


Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VW







#57

Isopropylbenzene

Concen: 1.001 ug/L

RT: 12.47 min Scan# 1733

Delta R.T. 0.00 min

Lab File: VW006299.D

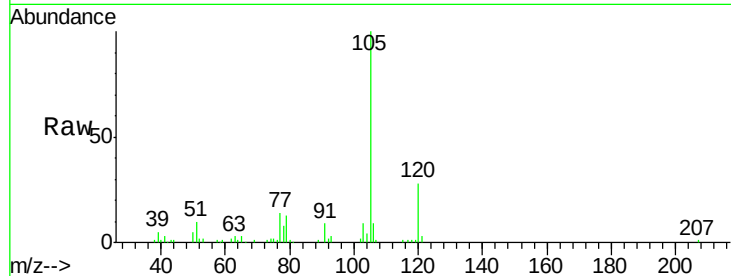
Acq: 23 Oct 2018 16:50

Instrument :

MSVOA\_W

ClientSampled :

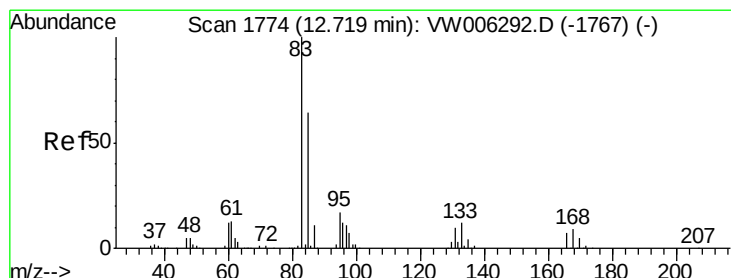
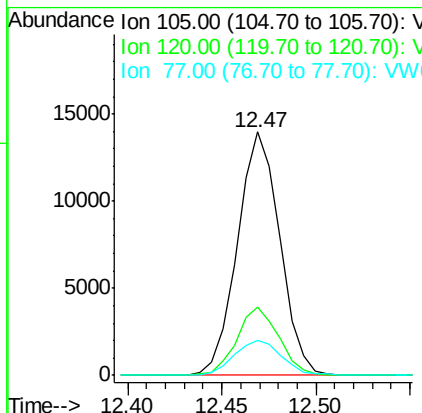
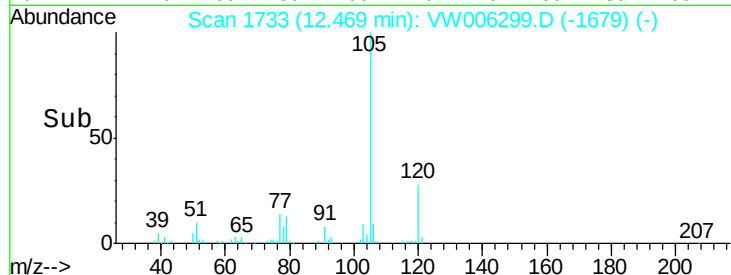
MDL



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 105   | Resp: | 21776 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 120       | 27.6  | 21.8  | 32.6  |
| 77        | 16.0  | 12.2  | 18.2  |

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#58

1,1,2,2-Tetrachloroethane

Concen: 1.232 ug/L

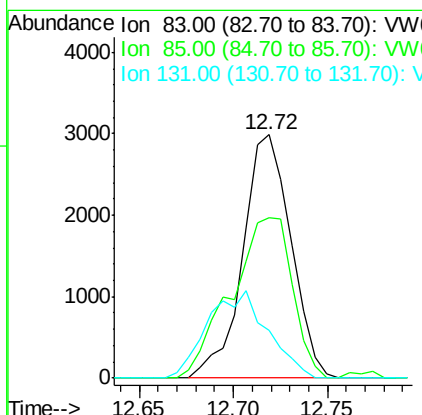
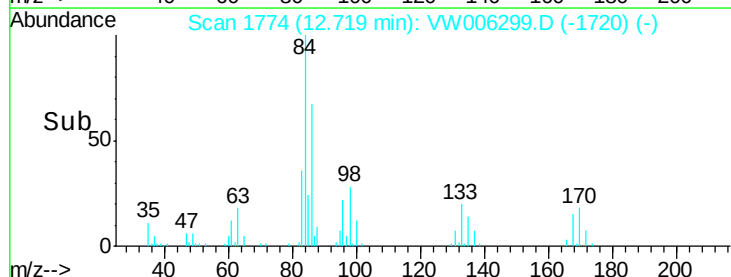
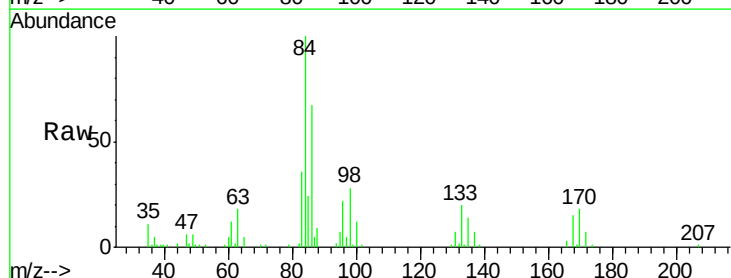
RT: 12.72 min Scan# 1774

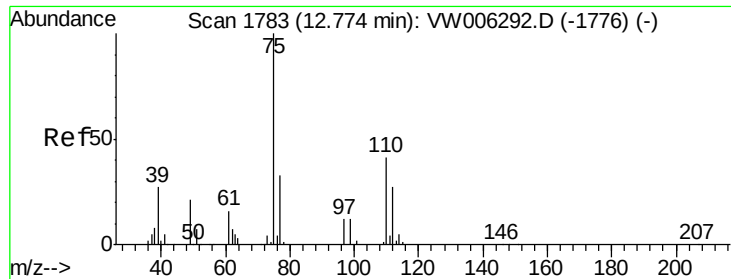
Delta R.T. 0.00 min

Lab File: VW006299.D

Acq: 23 Oct 2018 16:50

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 5281  |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 85        | 65.9  | 44.8  | 83.2  |
| 131       | 19.4  | 9.0   | 13.4# |





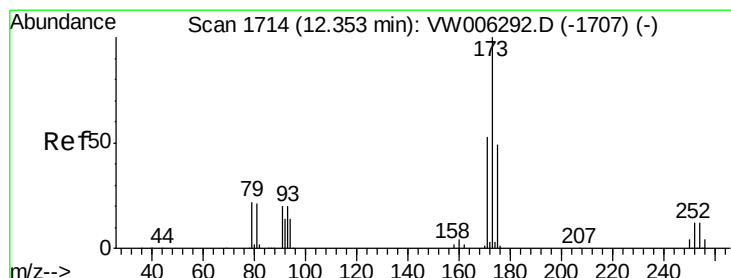
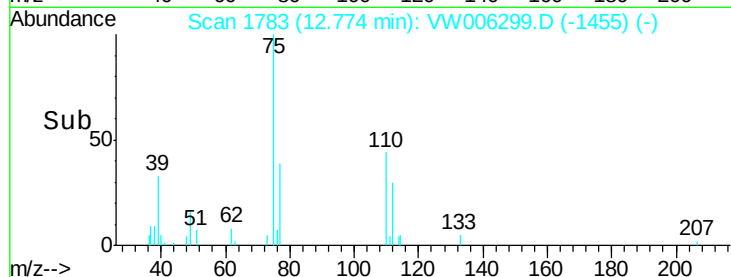
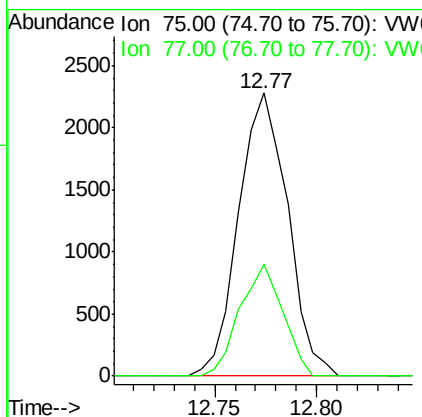
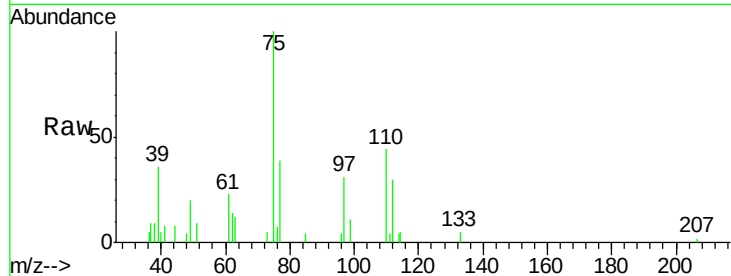
#59  
 1,2,3-Trichloropropane  
 Concen: 1.190 ug/L  
 RT: 12.77 min Scan# 1783  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

Tgt Ion: 75 Resp: 3806  
 Ion Ratio Lower Upper  
 75 100  
 77 34.8 25.9 38.9

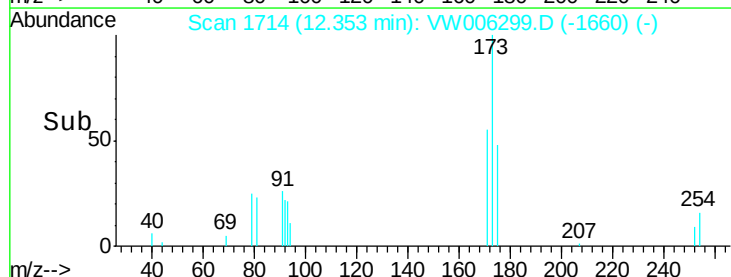
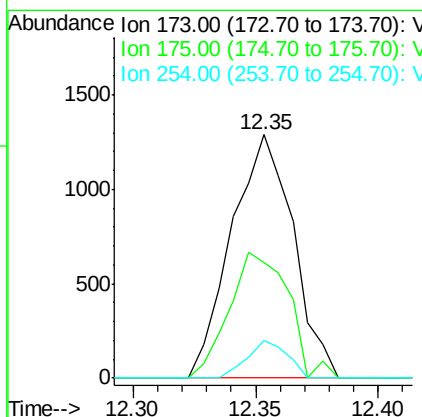
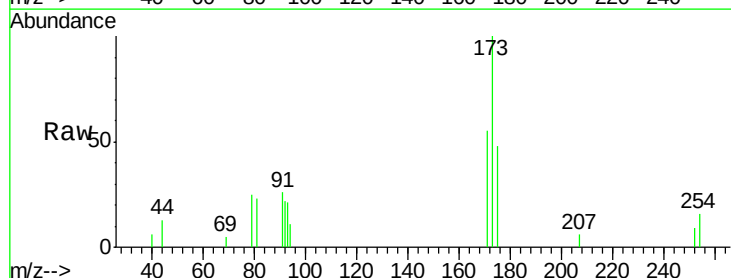
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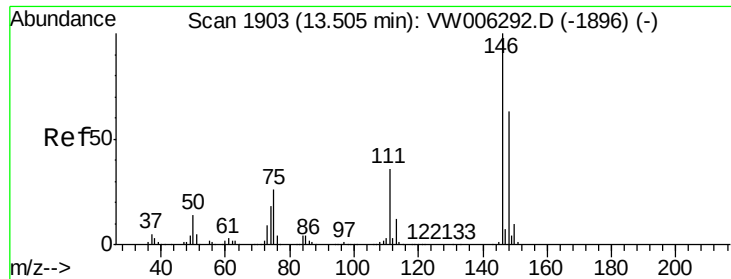
MMDadoda  
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#62  
 Bromoform  
 Concen: 0.816 ug/L  
 RT: 12.35 min Scan# 1714  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Tgt Ion: 173 Resp: 2270  
 Ion Ratio Lower Upper  
 173 100  
 175 47.9 39.1 58.7  
 254 10.2 9.2 13.8





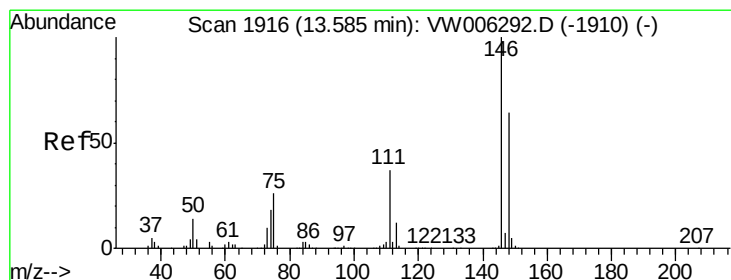
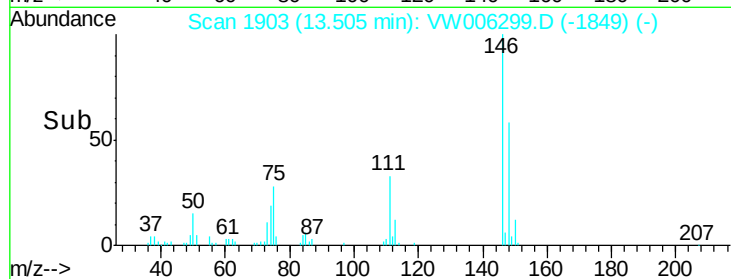
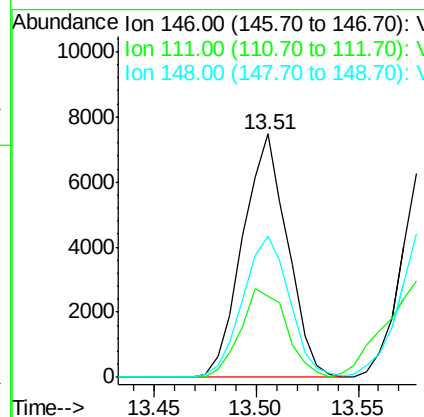
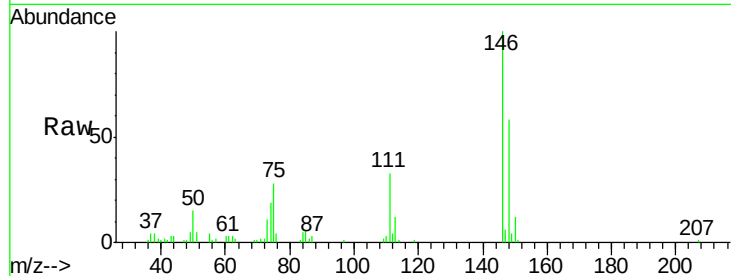
#63  
 1,3-Dichlorobenzene  
 Concen: 1.119 ug/L  
 RT: 13.51 min Scan# 1903  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 33.2  | 26.3  | 48.9  |
| 148     | 58.3  | 44.7  | 82.9  |

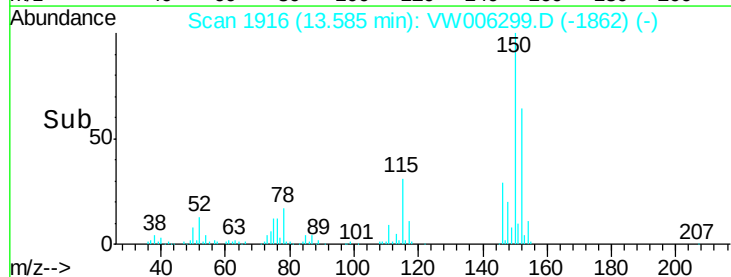
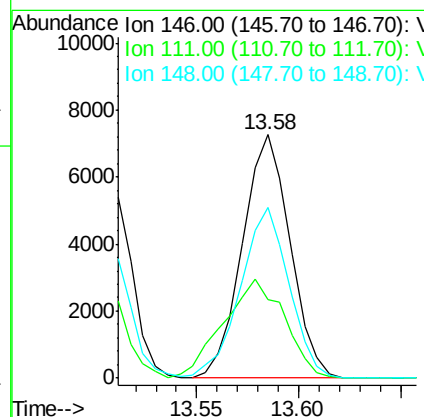
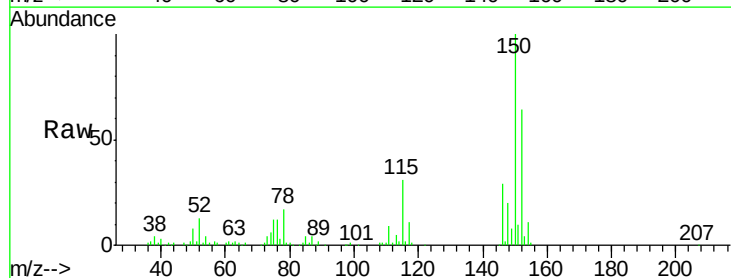
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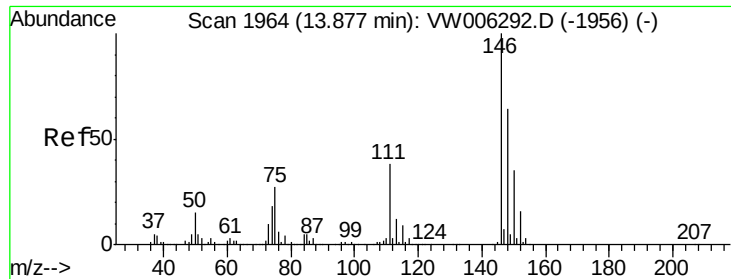
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#64  
 1,4-Dichlorobenzene  
 Concen: 1.149 ug/L  
 RT: 13.58 min Scan# 1916  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 32.5  | 24.7  | 45.9  |
| 148     | 69.9  | 44.9  | 83.5  |





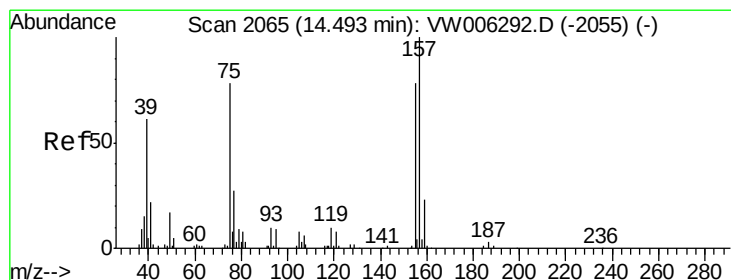
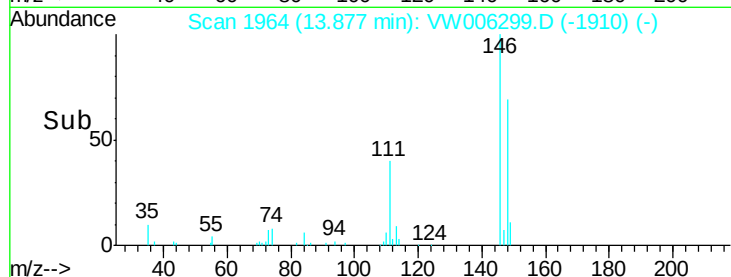
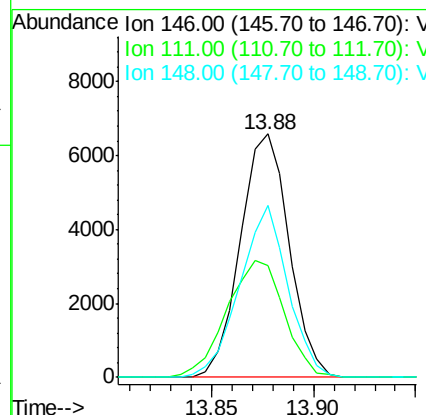
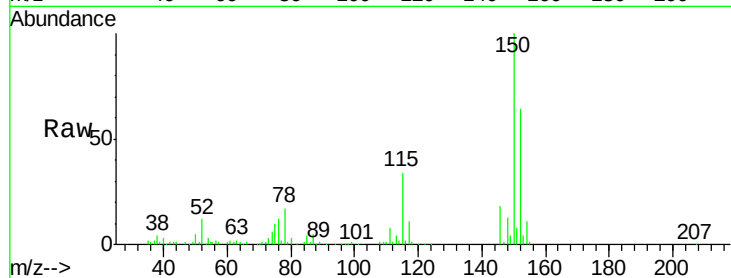
#65  
 1,2-Dichlorobenzene  
 Concen: 1.164 ug/L  
 RT: 13.88 min Scan# 1964  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

Tgt Ion: 146 Resp: 10910  
 Ion Ratio Lower Upper  
 146 100  
 111 45.7 31.1 46.7  
 148 70.4 51.2 76.8

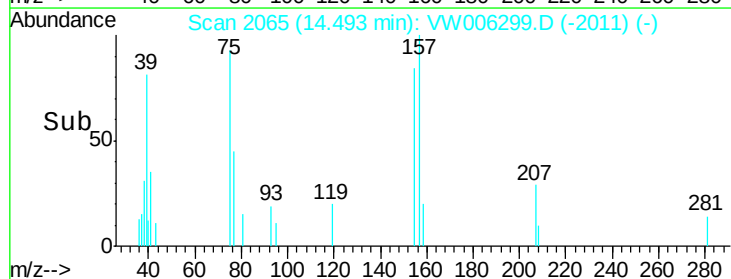
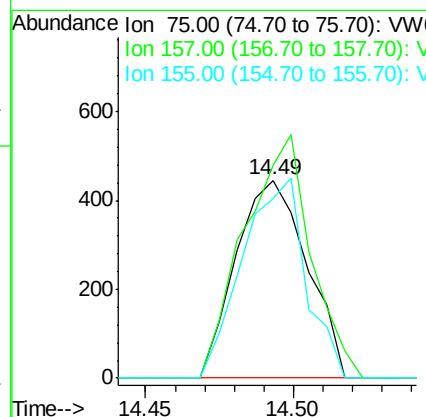
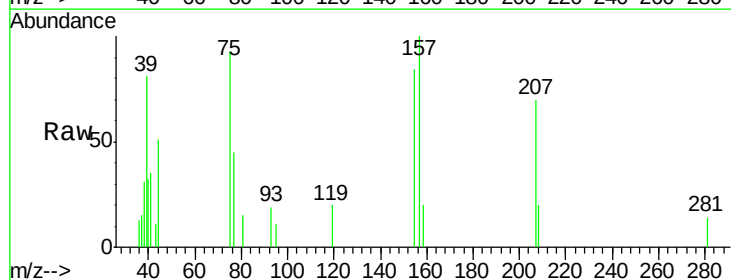
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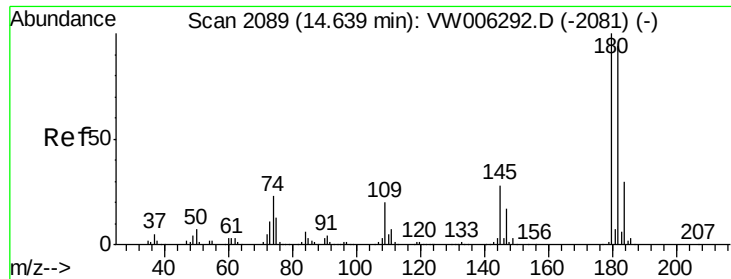
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#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 0.991 ug/L m  
 RT: 14.49 min Scan# 2065  
 Delta R.T. 0.00 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Tgt Ion: 75 Resp: 748  
 Ion Ratio Lower Upper  
 75 100  
 157 107.6 106.8 160.2  
 155 90.8 79.2 118.8





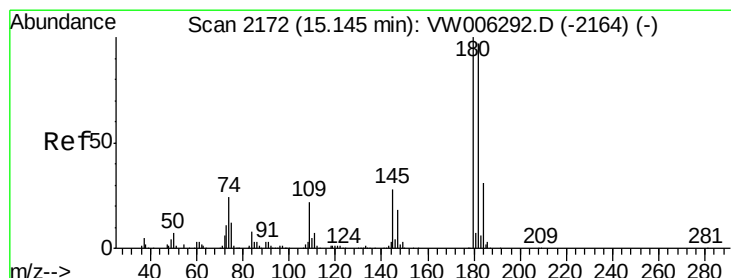
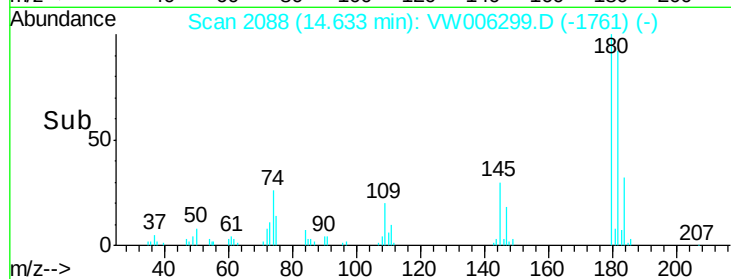
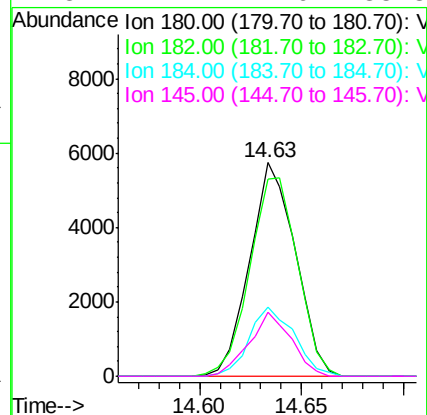
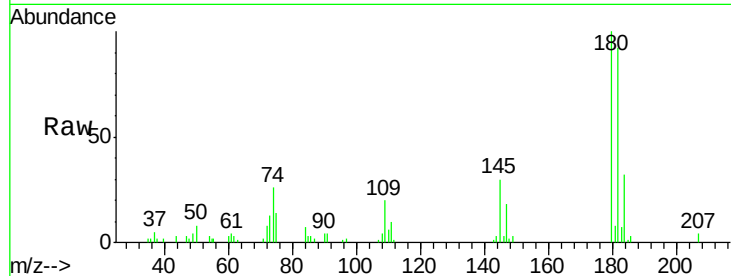
#67  
 1,3,5-Trichlorobenzene  
 Concen: 1.091 ug/L  
 RT: 14.63 min Scan# 2088  
 Delta R.T. -0.01 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 180     | 100   | 8958 |       |       |
| 182     | 97.4  | 76.0 | 114.0 |       |
| 184     | 31.8  | 24.3 | 36.5  |       |
| 145     | 27.7  | 22.6 | 33.8  |       |

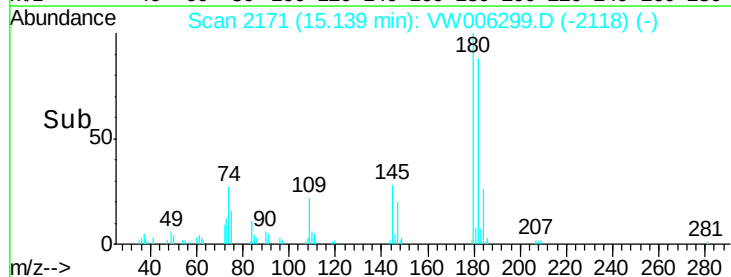
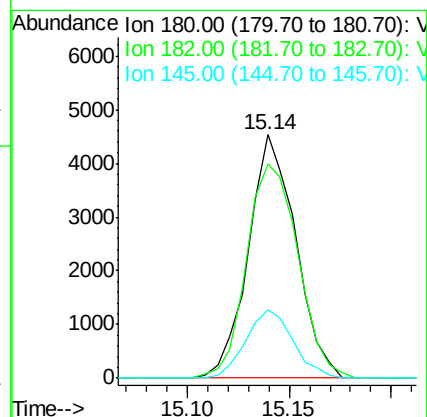
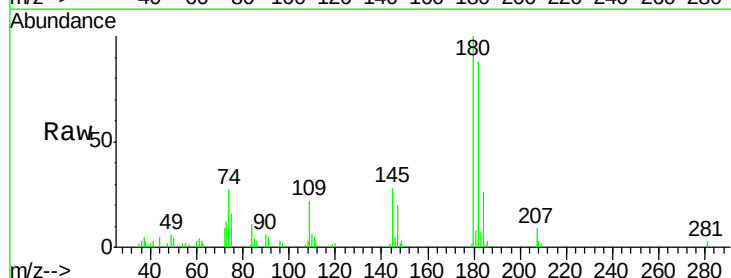
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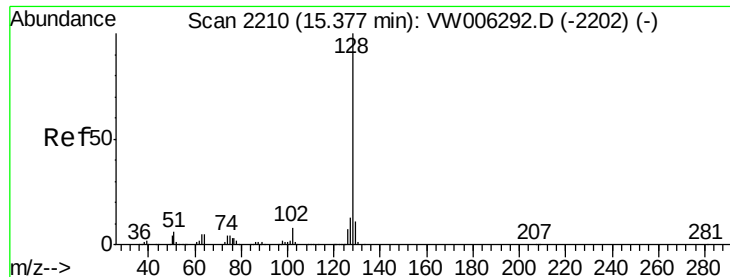
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#68  
 1,2,4-trichlorobenzene  
 Concen: 1.043 ug/L  
 RT: 15.14 min Scan# 2171  
 Delta R.T. -0.01 min  
 Lab File: VW006299.D  
 Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 180     | 100   | 7309 |       |       |
| 182     | 95.7  | 76.2 | 114.2 |       |
| 145     | 28.0  | 23.0 | 34.6  |       |





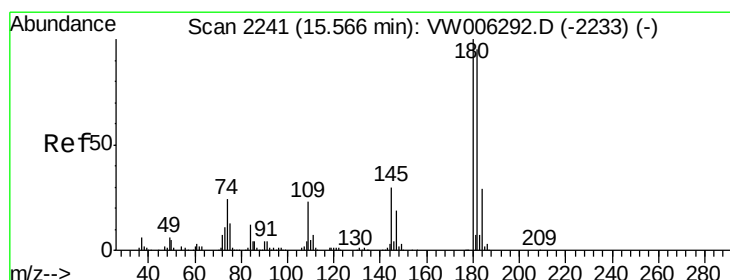
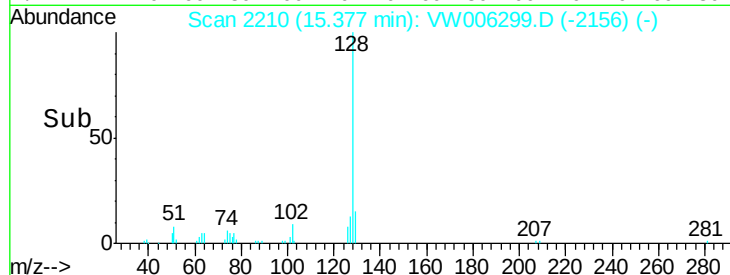
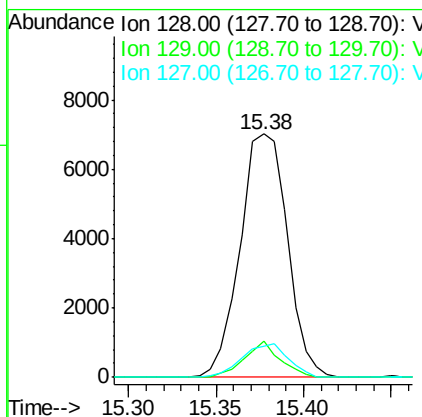
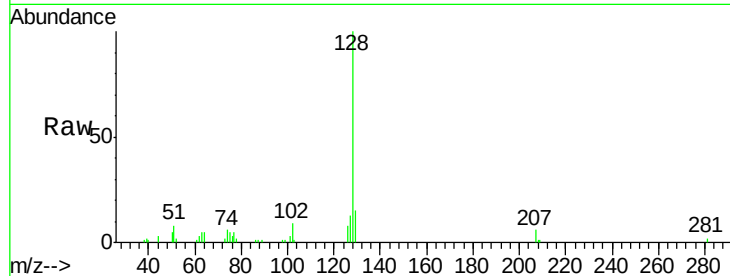
#69  
Naphthalene  
Concen: 0.932 ug/L  
RT: 15.38 min Scan# 2210  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 128     | 100   | 13217 |       |       |
| 129     | 11.4  | 8.9   | 13.3  |       |
| 127     | 13.6  | 10.5  | 15.7  |       |

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#70  
1,2,3-Trichlorobenzene  
Concen: 1.020 ug/L  
RT: 15.57 min Scan# 2241  
Delta R.T. 0.00 min  
Lab File: VW006299.D  
Acq: 23 Oct 2018 16:50

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 180     | 100   | 6420 |       |       |
| 182     | 101.8 | 75.5 | 113.3 |       |
| 145     | 31.8  | 24.5 | 36.7  |       |

