

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW102318\  
 Data File : VW006298.D  
 Acq On : 23 Oct 2018 15:58  
 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 2:07:20 PM

Quant Time: Oct 24 03:04:37 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  | 376300   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 360301   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 189476   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 2.36   | 65    | 85507    | 20.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 80.60%  |
| 7) Chloroethane-d5             | 2.90   | 69    | 81695    | 22.37    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 89.48%  |
| 10) 1,1-Dichloroethene-d2      | 4.01   | 63    | 138004   | 16.93    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 67.72%  |
| 20) 2-Butanone-d5              | 7.08   | 46    | 60679    | 43.14    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 86.28%  |
| 24) Chloroform-d               | 7.65   | 84    | 196678   | 24.13    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 96.52%  |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 114952   | 25.49    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 101.96% |
| 29) Benzene-d6                 | 8.28   | 84    | 401203   | 24.53    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 98.12%  |
| 33) 1,2-Dichloropropane-d6     | 9.28   | 67    | 116835   | 23.67    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 94.68%  |
| 37) Toluene-d8                 | 10.33  | 98    | 395032   | 24.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 96.60%  |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 48104    | 20.05    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 80.20%  |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 50316    | 42.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 84.36%  |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 110146   | 22.94    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 91.76%  |
| 61) 1,2-Dichlorobenzene-d4     | 13.86  | 152   | 167741   | 25.83    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 103.32% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 2.01 | 85   | 4934m    | 1.387 | ug/L   |        |
| 3) Chloromethane               | 2.21 | 50   | 5048     | 1.445 | ug/L   | 90     |
| 5) Vinyl chloride              | 2.37 | 62   | 6632     | 1.178 | ug/L # | 67     |
| 6) Bromomethane                | 2.78 | 94   | 5012     | 1.143 | ug/L   | 100    |
| 8) Chloroethane                | 2.93 | 64   | 4132m    | 1.198 | ug/L   |        |
| 9) Trichlorofluoromethane      | 3.27 | 101  | 5290m    | 1.175 | ug/L   |        |
| 11) 1,1,2-Trichloro-1,2,2-trif | 4.07 | 101  | 7205m    | 1.600 | ug/L   |        |
| 12) 1,1-Dichloroethene         | 4.03 | 96   | 6018m    | 1.393 | ug/L   |        |
| 13) Acetone                    | 4.12 | 43   | 4209m    | 2.962 | ug/L   |        |
| 14) Carbon disulfide           | 4.38 | 76   | 13774    | 0.975 | ug/L   | 97     |
| 15) Methyl Acetate             | 4.67 | 43   | 2642m    | 1.148 | ug/L   |        |
| 16) Methylene chloride         | 4.92 | 84   | 13398m   | 2.758 | ug/L   |        |
| 17) Methyl tert-butyl Ether    | 5.43 | 73   | 8151     | 1.159 | ug/L # | 82     |
| 18) trans-1,2-Dichloroethene   | 5.43 | 96   | 5572     | 1.165 | ug/L   | 90     |
| 19) 1,1-Dichloroethane         | 6.21 | 63   | 8754     | 1.131 | ug/L   | 97     |
| 21) 2-Butanone                 | 7.18 | 43   | 4890m    | 2.590 | ug/L   |        |
| 22) cis-1,2-Dichloroethene     | 7.17 | 96   | 6225     | 1.193 | ug/L   | 89     |

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 Sample : MDL  
 Misc : 5.00G/10ML/MSVOA\_W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

Manual Integrations  
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 10/24/2018 2:07:20 PM

Quant Time: Oct 24 03:04:37 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         | 7.51  | 128  | 2823     | 1.150 | ug/L   | 96       |
| 25) Chloroform                 | 7.68  | 83   | 10987    | 1.319 | ug/L   | 81       |
| 27) 1,2-Dichloroethane         | 8.41  | 62   | 7224     | 1.272 | ug/L # | 91       |
| 30) Cyclohexane                | 7.96  | 56   | 8151     | 1.029 | ug/L   | 96       |
| 31) 1,1,1-Trichloroethane      | 7.87  | 97   | 8230     | 1.092 | ug/L   | 98       |
| 32) Carbon tetrachloride       | 8.07  | 117  | 7836     | 1.060 | ug/L   | 98       |
| 34) Benzene                    | 8.32  | 78   | 21925    | 1.185 | ug/L   | 100      |
| 35) Trichloroethene            | 9.09  | 95   | 5941     | 1.142 | ug/L   | 97       |
| 36) Methylcyclohexane          | 9.34  | 83   | 10114    | 1.061 | ug/L   | 98       |
| 40) 1,2-Dichloropropane        | 9.38  | 63   | 5276     | 1.150 | ug/L   | 99       |
| 41) Bromodichloromethane       | 9.65  | 83   | 6226     | 1.005 | ug/L   | 93       |
| 42) cis-1,3-Dichloropropene    | 10.07 | 75   | 7158     | 0.955 | ug/L   | 95       |
| 43) 4-Methyl-2-pentanone       | 10.21 | 43   | 7382     | 2.008 | ug/L   | 98       |
| 44) Toluene                    | 10.39 | 91   | 25446    | 1.225 | ug/L   | 100      |
| 45) trans-1,3-Dichloropropene  | 10.61 | 75   | 8460     | 1.292 | ug/L   | 94       |
| 46) 1,1,2-Trichloroethane      | 10.79 | 97   | 4631     | 1.212 | ug/L   | 93       |
| 47) Tetrachloroethene          | 10.87 | 164  | 5430     | 1.127 | ug/L   | 88       |
| 49) 2-Hexanone                 | 10.98 | 43   | 5202     | 1.920 | ug/L   | 98       |
| 50) Dibromochloromethane       | 11.13 | 129  | 4567     | 0.933 | ug/L   | 98       |
| 51) 1,2-Dibromoethane          | 11.24 | 107  | 4323     | 1.087 | ug/L   | 99       |
| 52) Chlorobenzene              | 11.66 | 112  | 16391    | 1.166 | ug/L   | 93       |
| 53) Ethylbenzene               | 11.74 | 91   | 26681    | 1.103 | ug/L   | 97       |
| 54) m,p-Xylene                 | 11.85 | 106  | 10184    | 1.075 | ug/L   | 96       |
| 55) o-xylene                   | 12.17 | 106  | 9391     | 1.038 | ug/L   | 98       |
| 56) Styrene                    | 12.19 | 104  | 15648    | 1.004 | ug/L   | 90       |
| 57) Isopropylbenzene           | 12.47 | 105  | 25740    | 1.022 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 5852     | 1.179 | ug/L   | 95       |
| 59) 1,2,3-Trichloropropane     | 12.77 | 75   | 4134     | 1.116 | ug/L   | 98       |
| 62) Bromoform                  | 12.35 | 173  | 2676     | 0.843 | ug/L # | 98       |
| 63) 1,3-Dichlorobenzene        | 13.51 | 146  | 13333    | 1.146 | ug/L   | 92       |
| 64) 1,4-Dichlorobenzene        | 13.58 | 146  | 14032    | 1.198 | ug/L   | 100      |
| 65) 1,2-Dichlorobenzene        | 13.88 | 146  | 12991    | 1.214 | ug/L   | 96       |
| 66) 1,2-Dibromo-3-chloropropan | 14.49 | 75   | 839m     | 0.974 | ug/L   |          |
| 67) 1,3,5-Trichlorobenzene     | 14.64 | 180  | 10705    | 1.141 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 15.14 | 180  | 9066     | 1.134 | ug/L   | 99       |
| 69) Naphthalene                | 15.38 | 128  | 15351    | 0.948 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 15.57 | 180  | 8194     | 1.140 | ug/L   | 100      |
| -----                          |       |      |          |       |        |          |

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

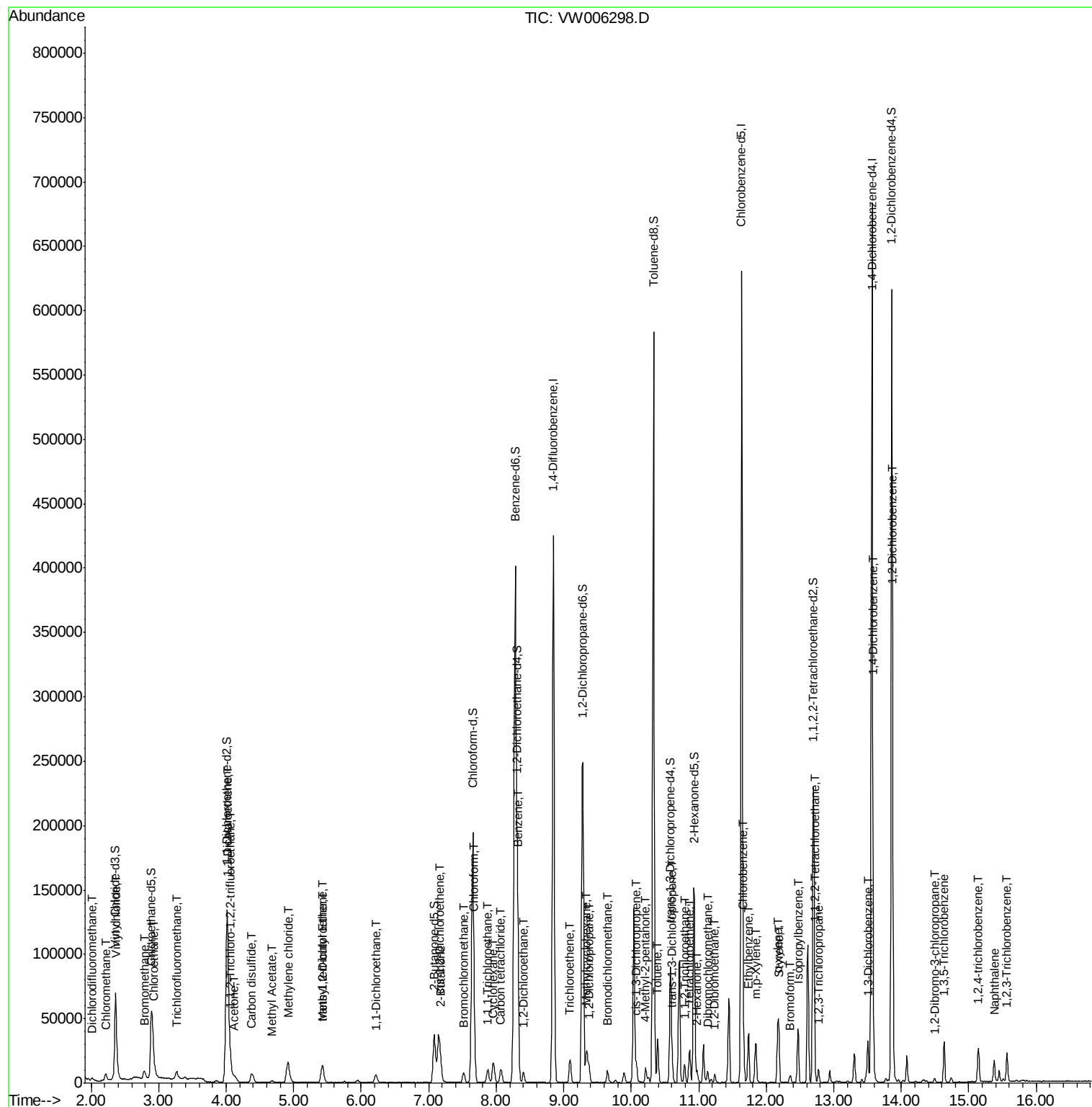
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_W\DATA\VW102318\  
Data File : VW006298.D  
Acq On : 23 Oct 2018 15:58  
Operator : SY/AP  
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Misc : 5.00G/10ML/MSVOA\_W/SOIL  
ALS Vial : 1 Sample Multiplier: 1

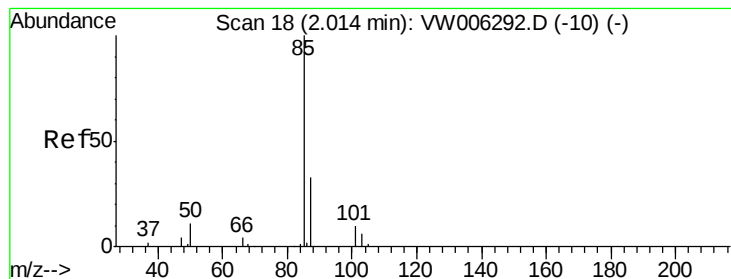
Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

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Quant Time: Oct 24 03:04:37 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM100918S.M  
Quant Title : VOC Analysis  
QLast Update : Wed Oct 24 01:59:01 2018  
Response via : Initial Calibration





#2

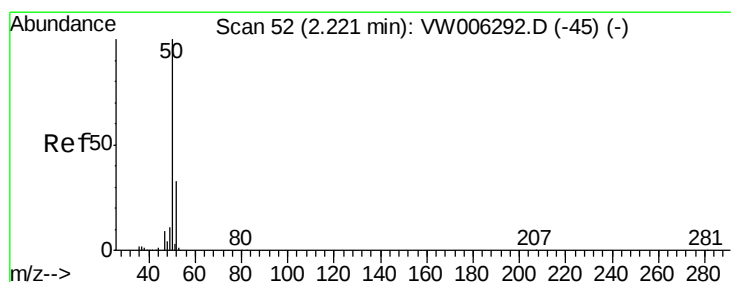
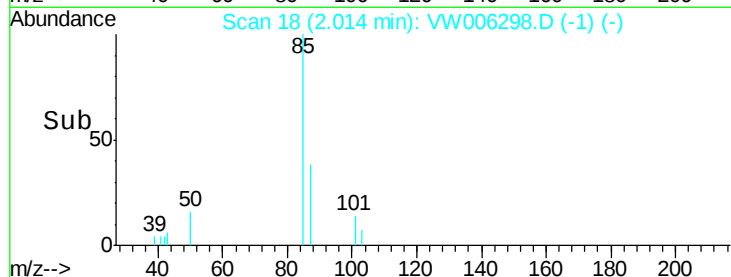
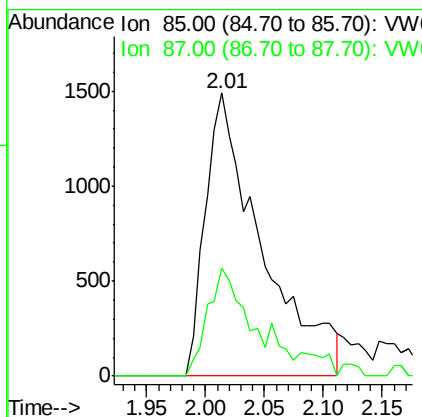
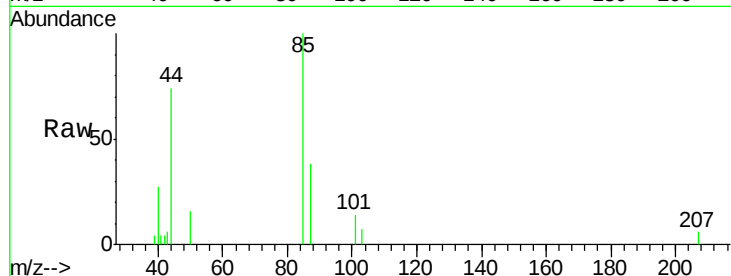
Dichlorodifluoromethane  
Concen: 1.387 ug/L m  
RT: 2.01 min Scan# 18  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 85      | 100   |       |       |
| 87      | 25.8  | 19.2  | 35.6  |

Manual Integrations  
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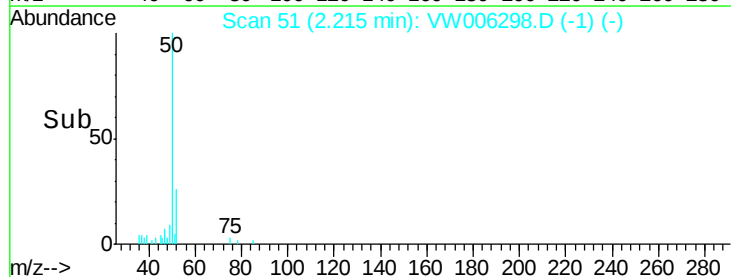
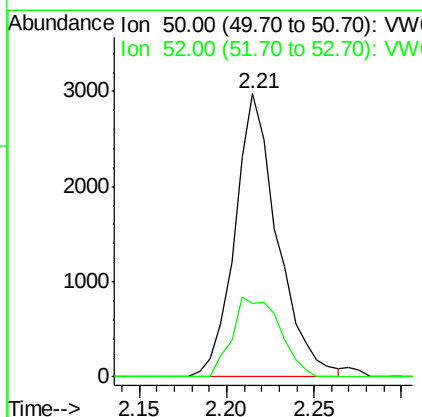
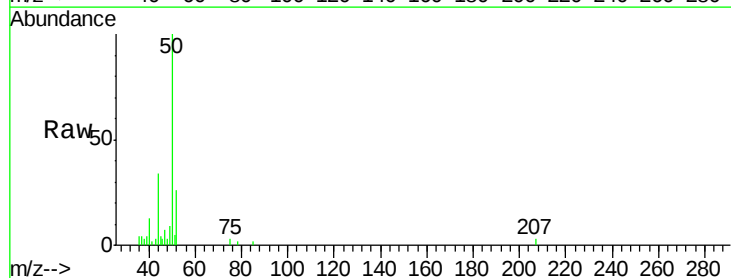
MMDadoda  
10/24/2018 2:07:20 PM

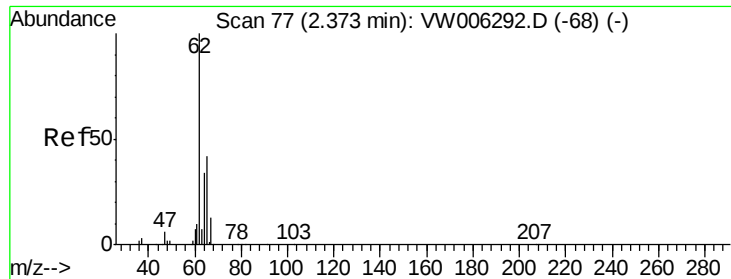


#3

Chloromethane  
Concen: 1.445 ug/L  
RT: 2.21 min Scan# 51  
Delta R.T. -0.01 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 50      | 100   |       |       |
| 52      | 26.1  | 22.3  | 41.3  |





#5

Vinyl chloride

Concen: 1.178 ug/L

RT: 2.37 min Scan# 77

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampled :

MDL

Tgt Ion: 62 Resp: 6632

Ion Ratio Lower Upper

62 100

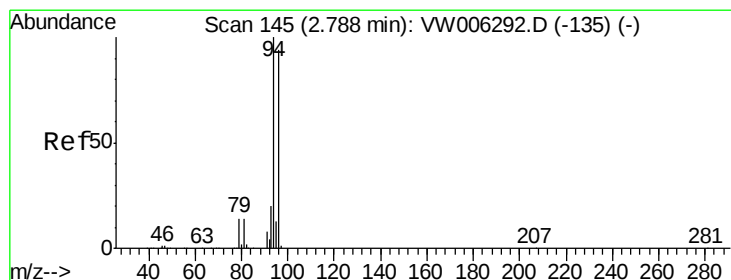
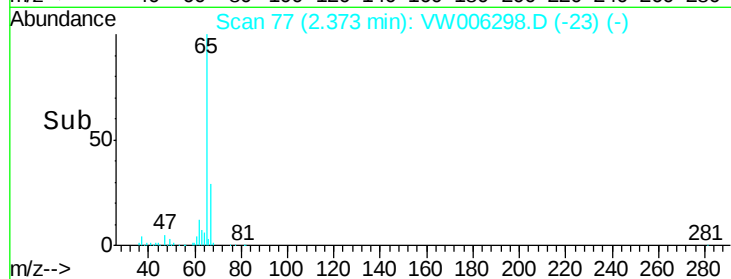
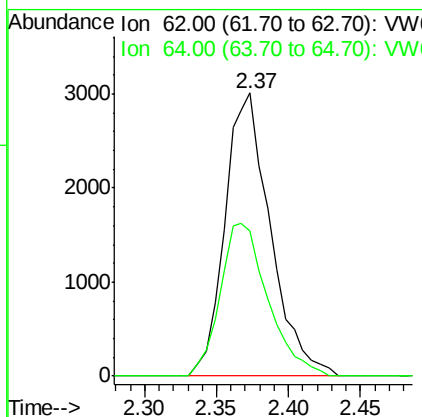
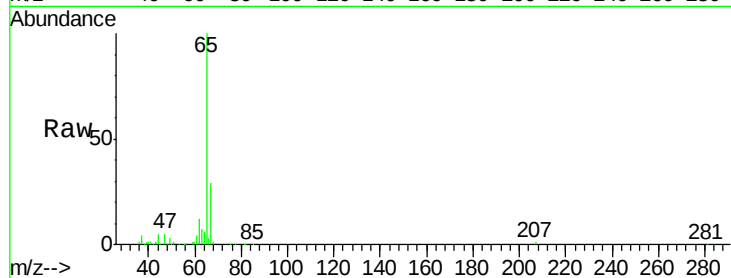
64 51.1 22.7 42.3#

Manual Integrations

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#6

Bromomethane

Concen: 1.143 ug/L

RT: 2.78 min Scan# 144

Delta R.T. -0.01 min

Lab File: VW006298.D

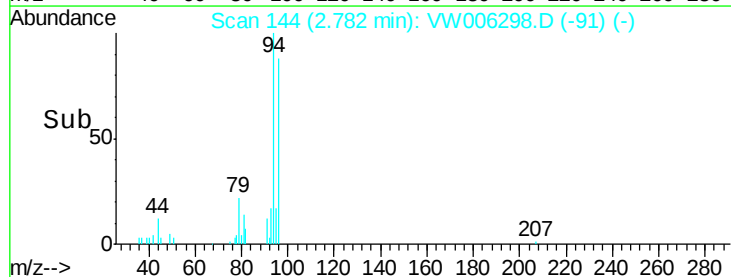
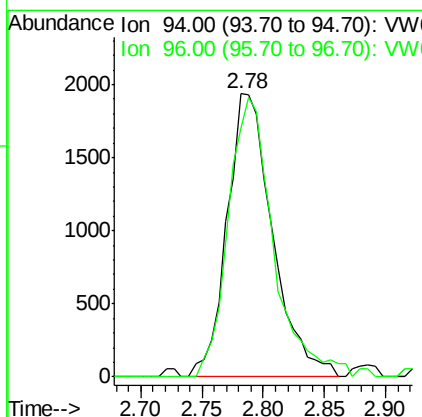
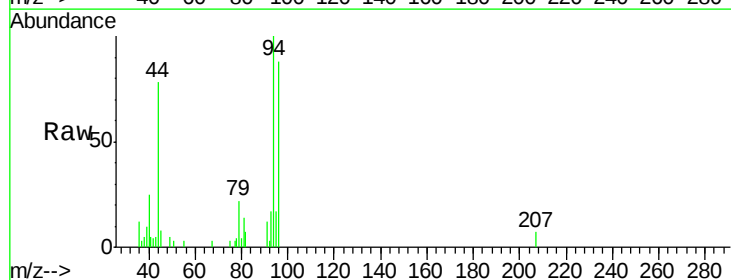
Acq: 23 Oct 2018 15:58

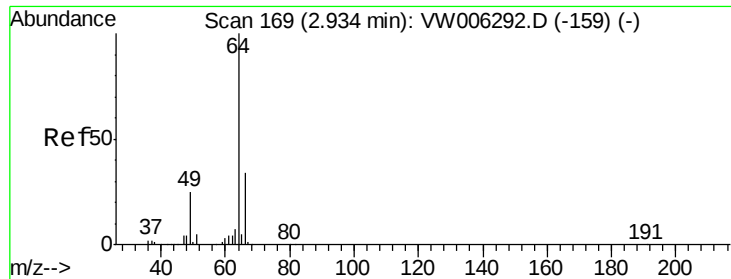
Tgt Ion: 94 Resp: 5012

Ion Ratio Lower Upper

94 100

96 95.8 9.5 181.3





#8

Chloroethane

Concen: 1.198 ug/L m

RT: 2.93 min Scan# 168

Delta R.T. -0.01 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampleId :

MDL

Tgt Ion: 64 Resp: 4132

Ion Ratio Lower Upper

64 100

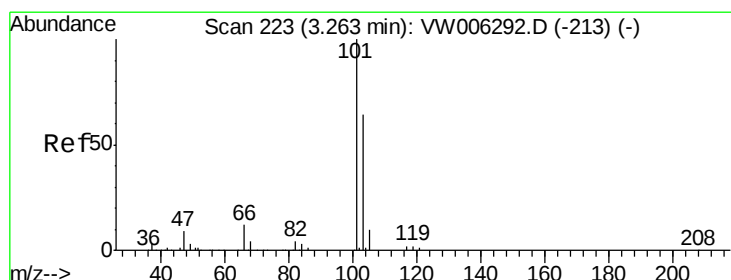
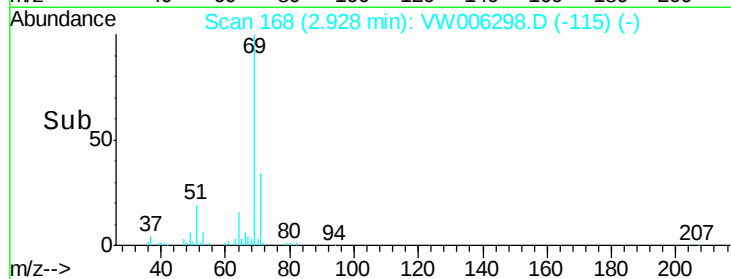
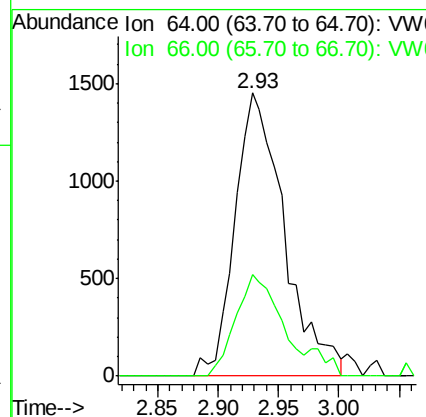
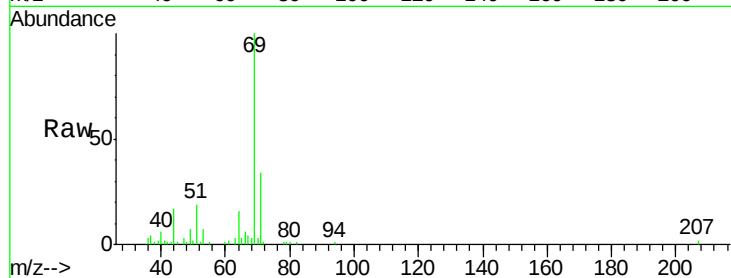
66 36.0 22.7 42.1

Manual Integrations

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#9

Trichlorofluoromethane

Concen: 1.175 ug/L m

RT: 3.27 min Scan# 224

Delta R.T. 0.01 min

Lab File: VW006298.D

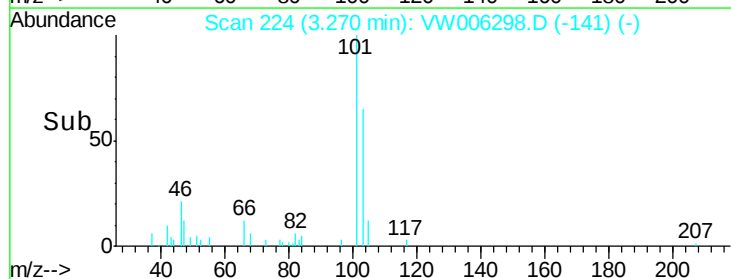
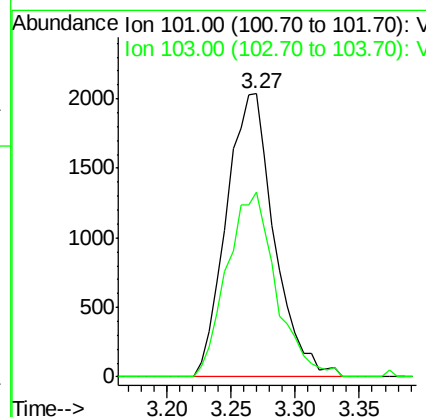
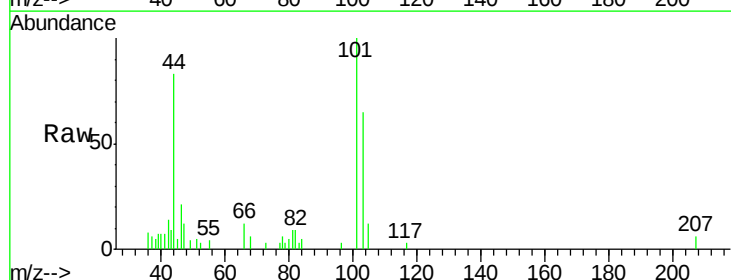
Acq: 23 Oct 2018 15:58

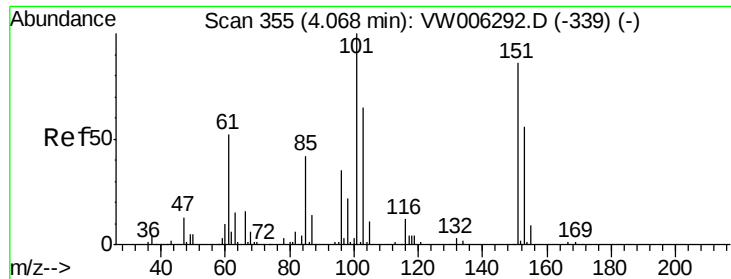
Tgt Ion: 101 Resp: 5290

Ion Ratio Lower Upper

101 100

103 66.3 45.6 84.6





#11

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

Concen: 1.600 ug/L m

RT: 4.07 min Scan# 355

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

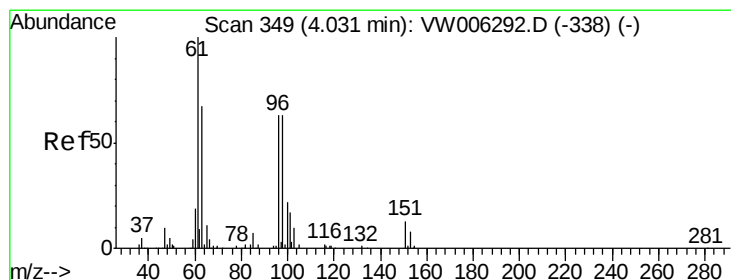
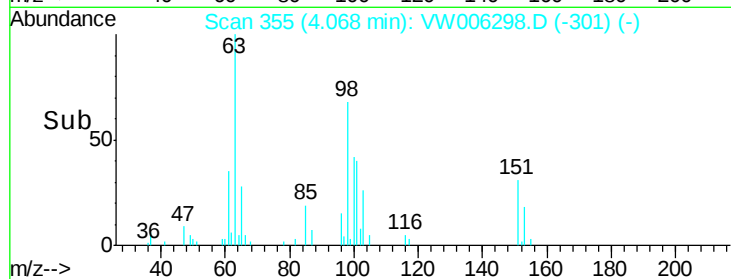
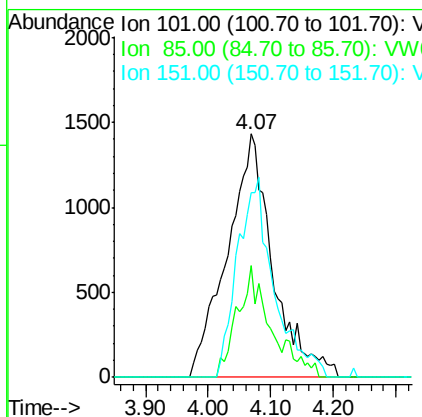
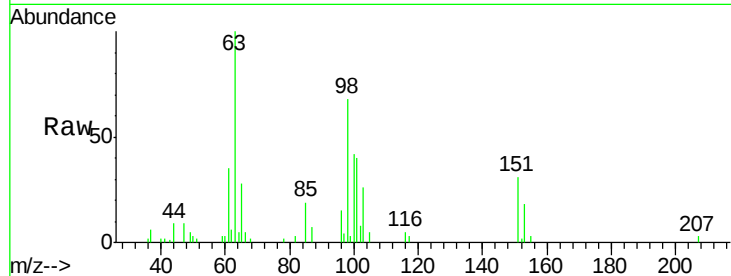
ClientSampleId :

MDL

| Tgt Ion | Ratio | Resp | Lower  | Upper |
|---------|-------|------|--------|-------|
| 101     | 100   | 7205 |        |       |
| 85      | 3.6   | 33.4 | 50.2#  |       |
| 151     | 58.1  | 68.7 | 103.1# |       |

Manual Integrations  
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#12

1,1-Dichloroethene

Concen: 1.393 ug/L m

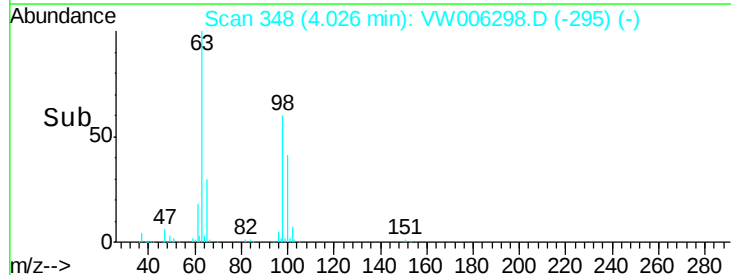
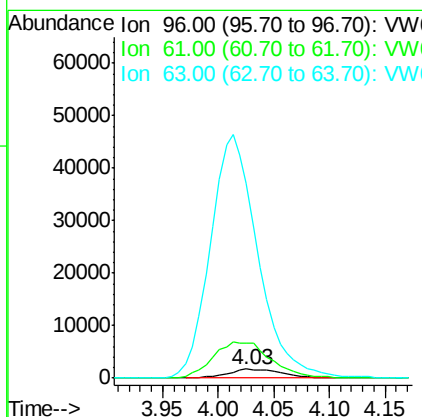
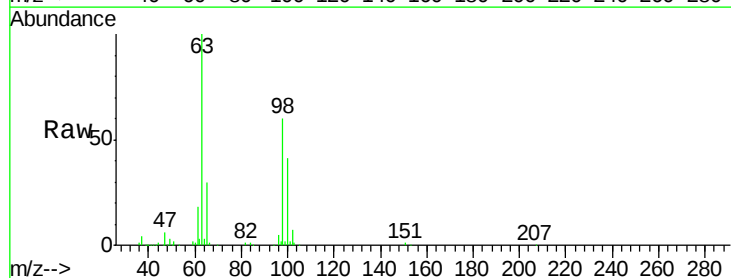
RT: 4.03 min Scan# 348

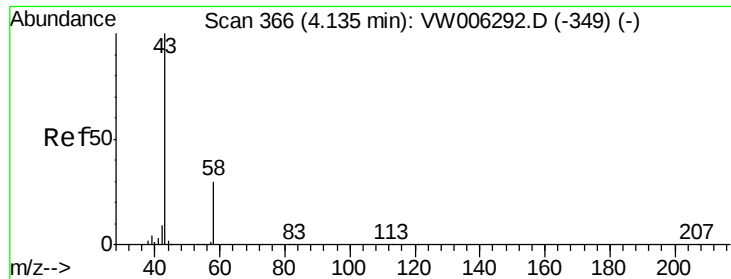
Delta R.T. -0.01 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio  | Resp  | Lower  | Upper |
|---------|--------|-------|--------|-------|
| 96      | 100    | 6018  |        |       |
| 61      | 391.3  | 112.3 | 208.7# |       |
| 63      | 2211.1 | 102.6 | 190.6# |       |





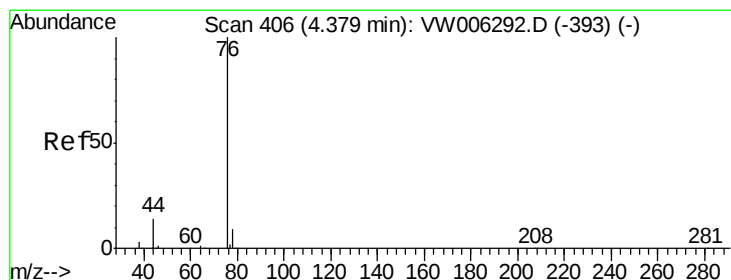
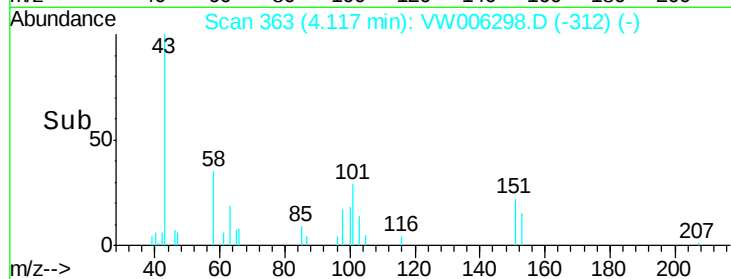
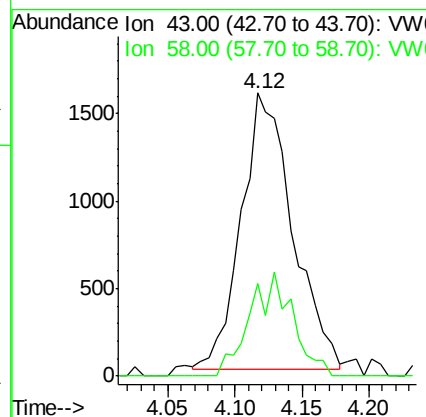
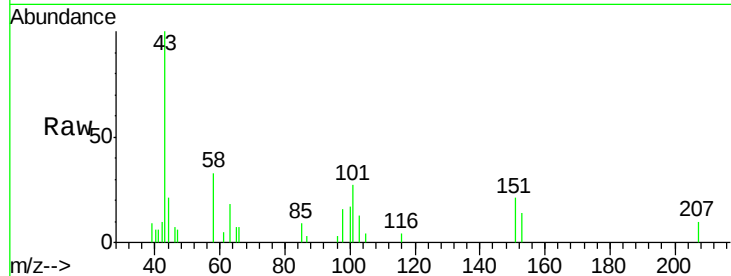
#13  
Acetone  
Concen: 2.962 ug/L m  
RT: 4.12 min Scan# 363  
Delta R.T. -0.02 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

Tgt Ion: 43 Resp: 4209  
Ion Ratio Lower Upper  
43 100  
58 14.5 0.0 61.2

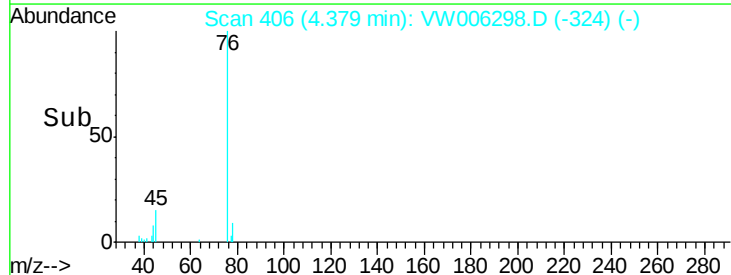
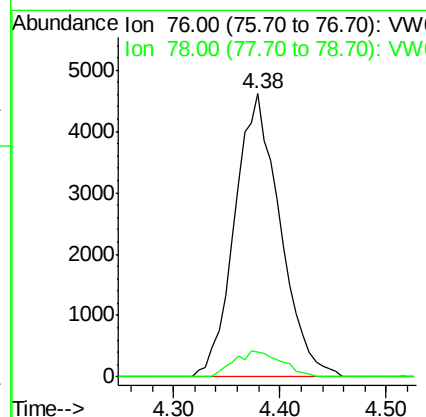
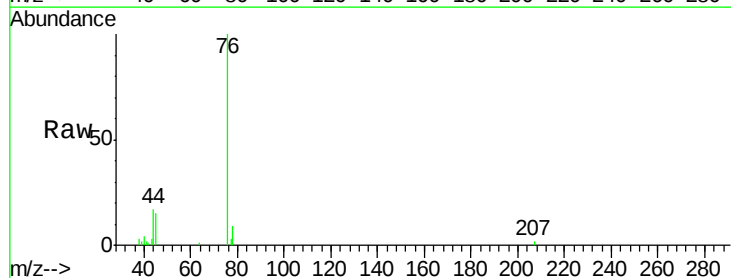
Manual Integrations  
APPROVED

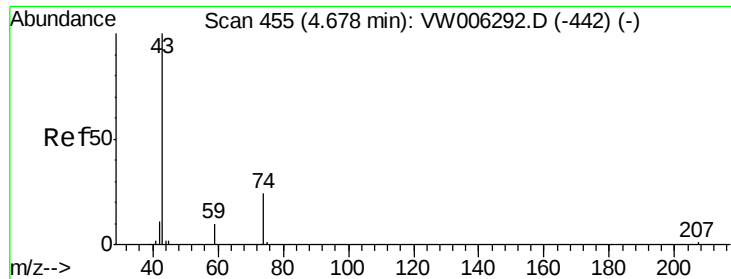
MMDadoda  
10/24/2018 2:07:20 PM



#14  
Carbon disulfide  
Concen: 0.975 ug/L  
RT: 4.38 min Scan# 406  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Tgt Ion: 76 Resp: 13774  
Ion Ratio Lower Upper  
76 100  
78 8.6 7.6 11.4





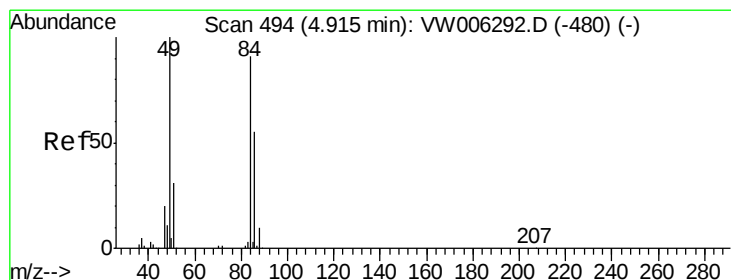
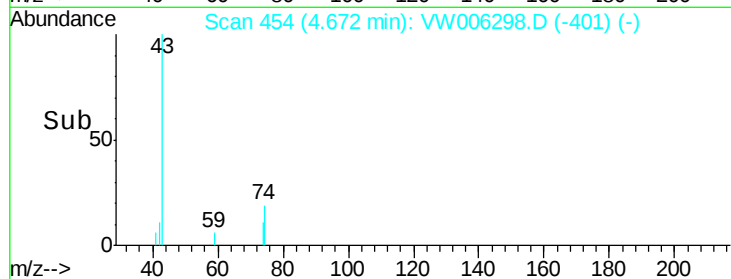
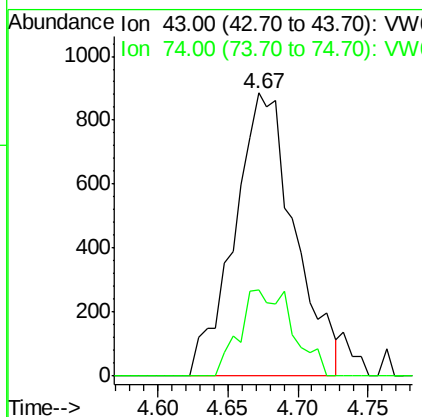
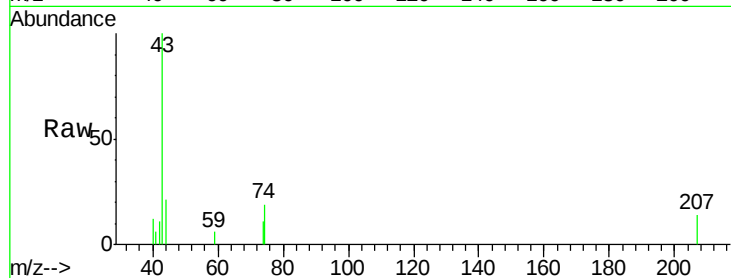
#15  
Methyl Acetate  
Concen: 1.148 ug/L m  
RT: 4.67 min Scan# 454  
Delta R.T. -0.01 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

Tgt Ion: 43 Resp: 2642  
Ion Ratio Lower Upper  
43 100  
74 13.7 19.4 29.2#

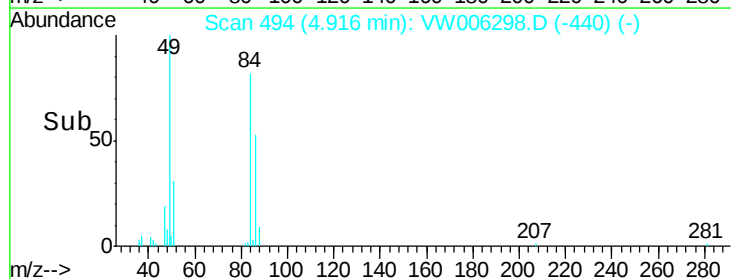
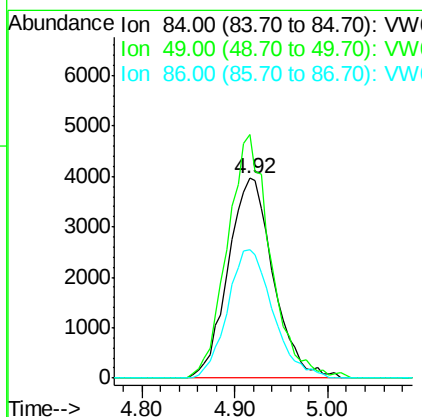
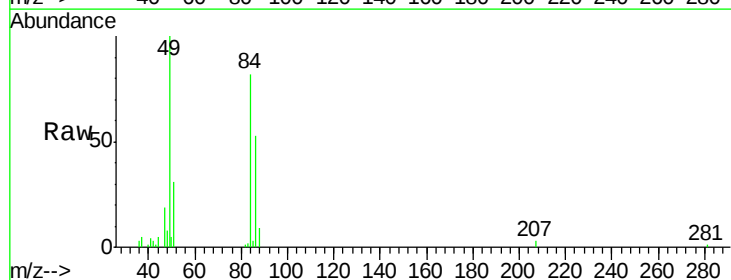
Manual Integrations  
APPROVED

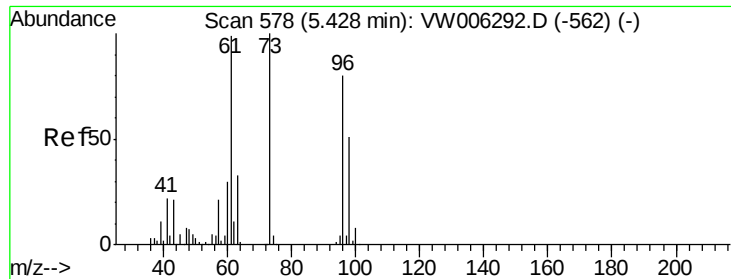
MMDadoda  
10/24/2018 2:07:20 PM



#16  
Methylene chloride  
Concen: 2.758 ug/L m  
RT: 4.92 min Scan# 494  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Tgt Ion: 84 Resp: 13398  
Ion Ratio Lower Upper  
84 100  
49 121.9 83.5 155.1  
86 64.4 44.9 83.5





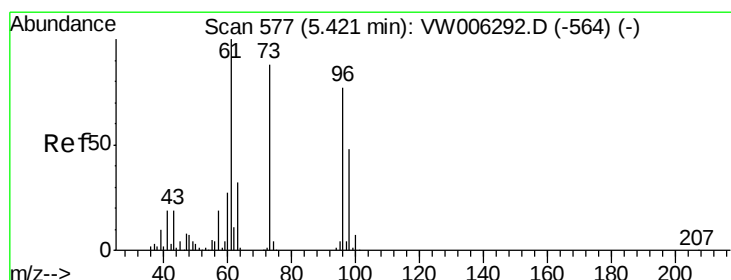
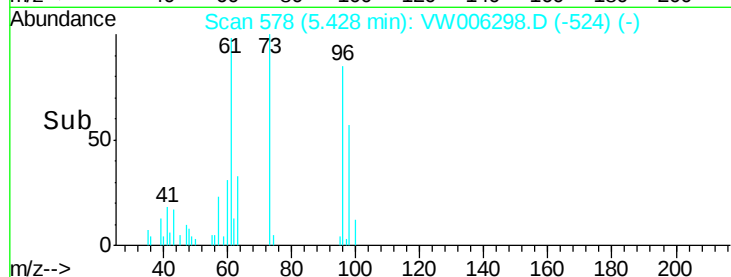
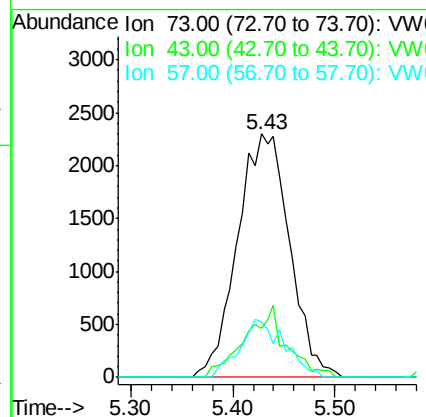
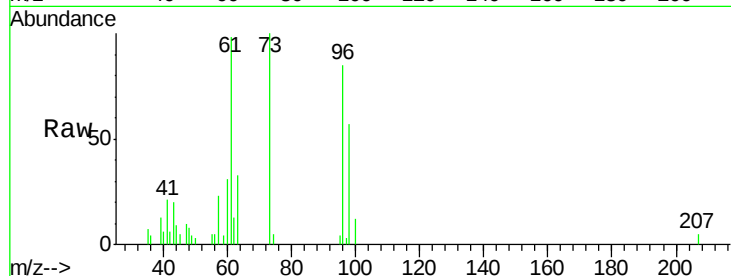
#17  
Methyl tert-butyl Ether  
Concen: 1.159 ug/L  
RT: 5.43 min Scan# 578  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 43      | 11.5  | 17.0  | 25.4# |
| 57      | 14.4  | 17.1  | 25.7# |

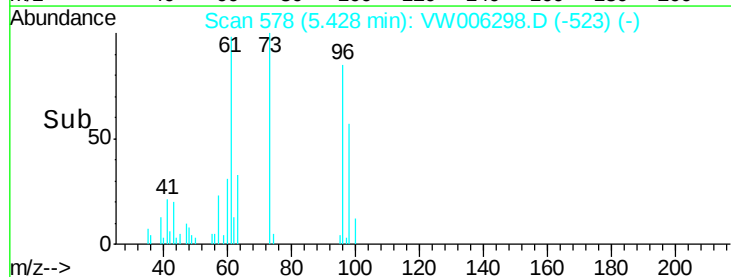
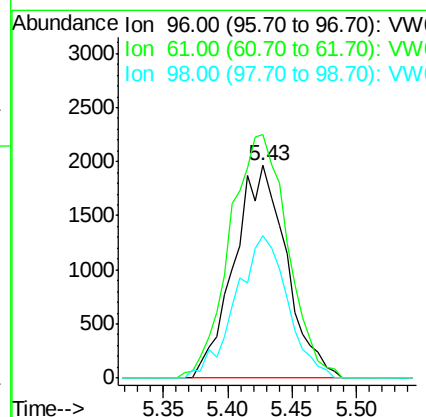
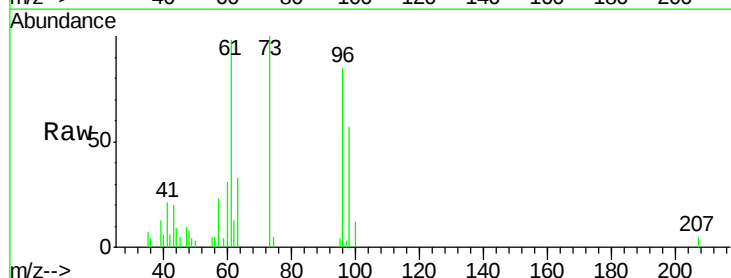
Manual Integrations  
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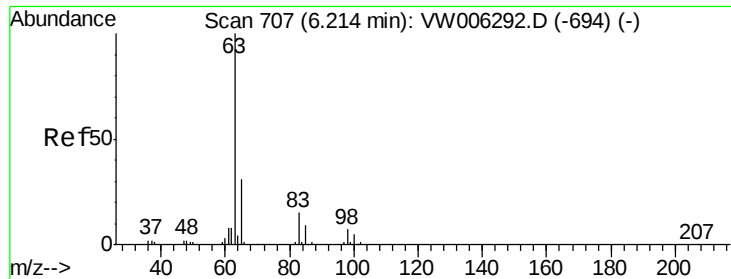
MMDadoda  
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#18  
trans-1,2-Dichloroethene  
Concen: 1.165 ug/L  
RT: 5.43 min Scan# 578  
Delta R.T. 0.01 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 114.4 | 89.0  | 165.2 |
| 98      | 67.1  | 42.4  | 78.6  |





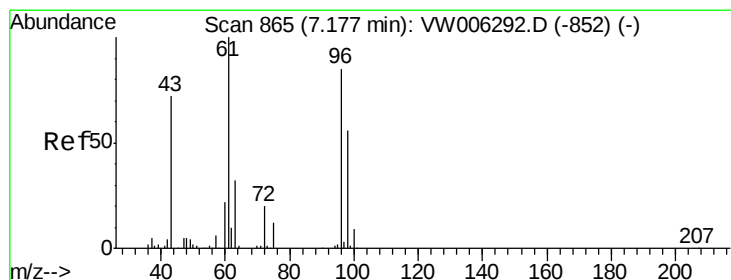
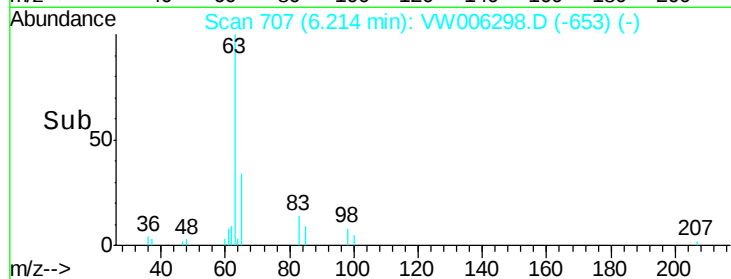
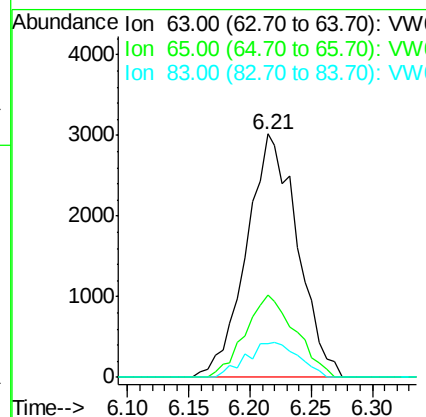
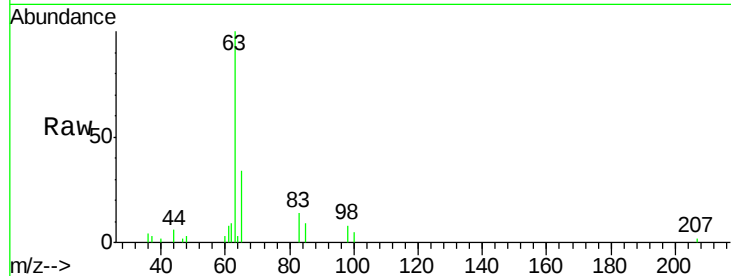
#19  
 1,1-Dichloroethane  
 Concen: 1.131 ug/L  
 RT: 6.21 min Scan# 707  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 33.9  | 22.3  | 41.5  |
| 83      | 13.6  | 9.7   | 18.1  |

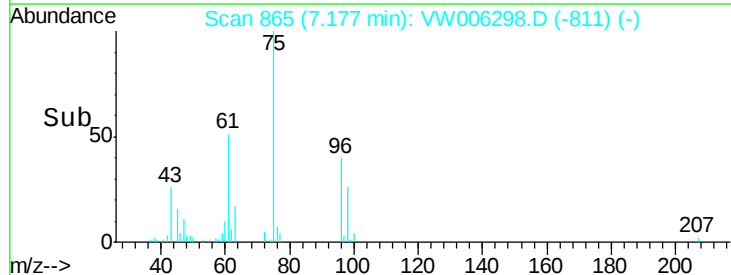
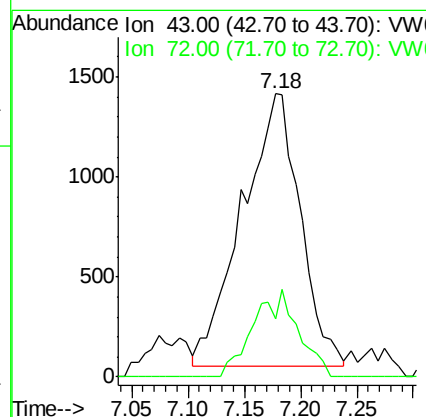
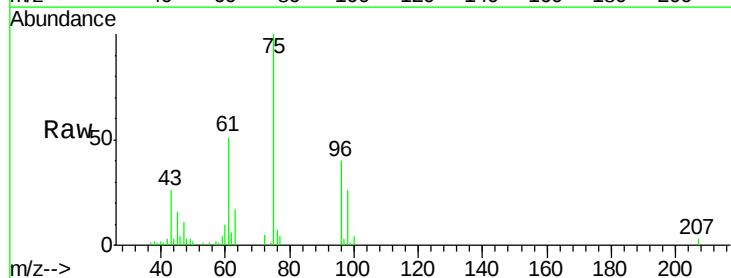
Manual Integrations  
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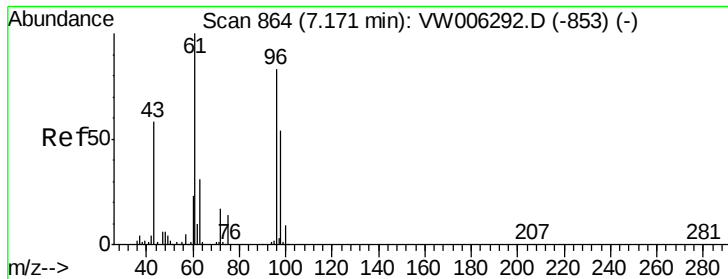
MMDadoda  
 10/24/2018 2:07:20 PM



#21  
 2-Butanone  
 Concen: 2.590 ug/L m  
 RT: 7.18 min Scan# 865  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 11.5  | 13.8  | 41.4# |





#22

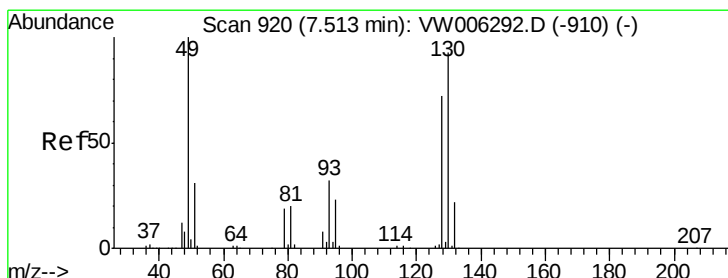
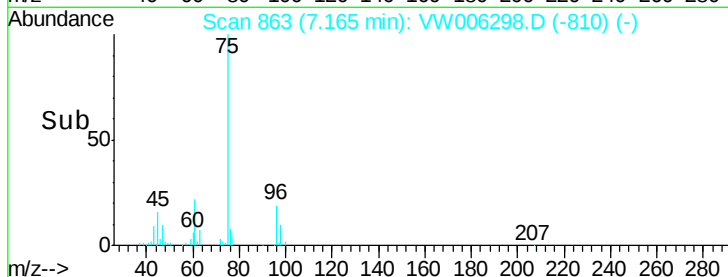
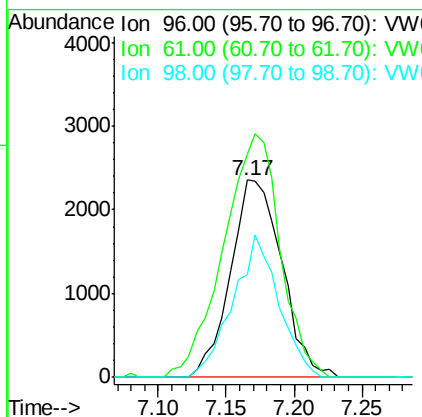
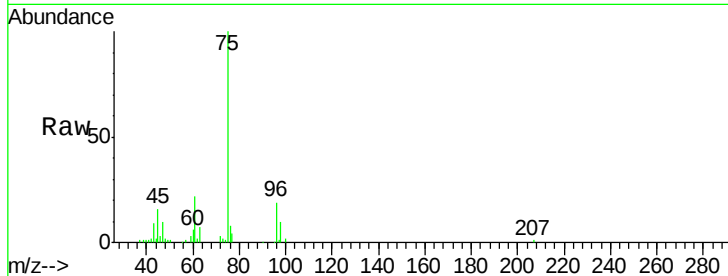
cis-1,2-Dichloroethene  
 Concen: 1.193 ug/L  
 RT: 7.17 min Scan# 863  
 Delta R.T. -0.01 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 113.3 | 85.1  | 158.1 |
| 98      | 52.1  | 46.3  | 86.1  |

Manual Integrations  
 APPROVED

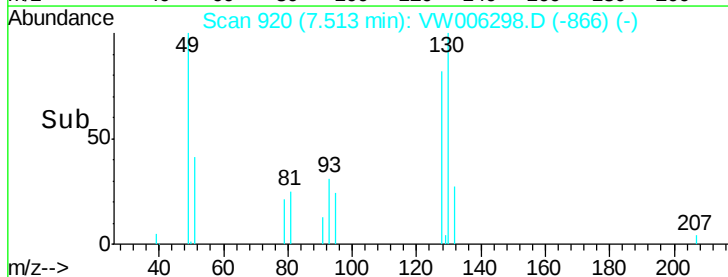
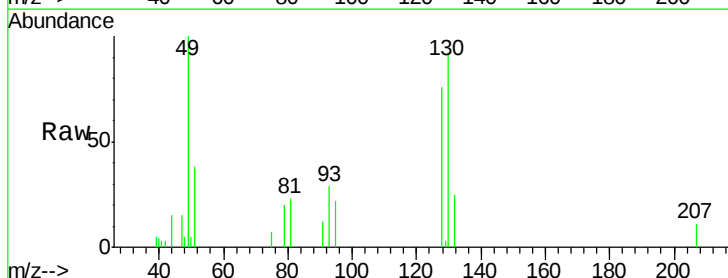
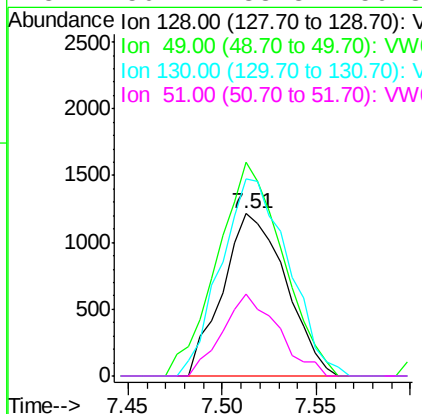
MMDadoda  
 10/24/2018 2:07:20 PM

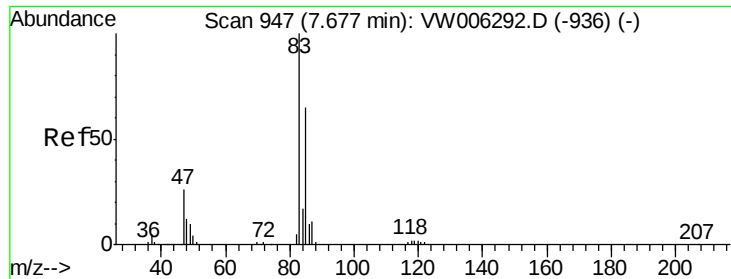


#23

Bromochloromethane  
 Concen: 1.150 ug/L  
 RT: 7.51 min Scan# 920  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 49      | 131.7 | 95.2  | 176.8 |
| 130     | 121.4 | 86.3  | 160.3 |
| 51      | 50.4  | 33.8  | 50.8  |





#25

Chloroform

Concen: 1.319 ug/L

RT: 7.68 min Scan# 947

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampleId :

MDL

Tgt Ion: 83 Resp: 10987

Ion Ratio Lower Upper

83 100

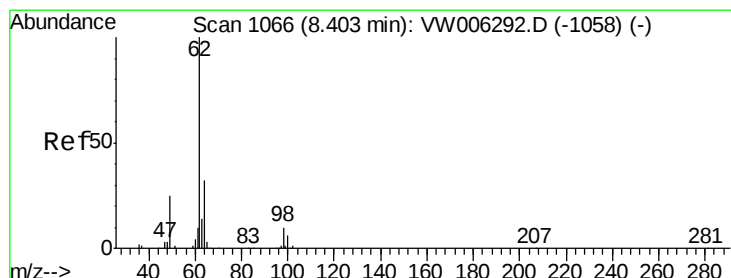
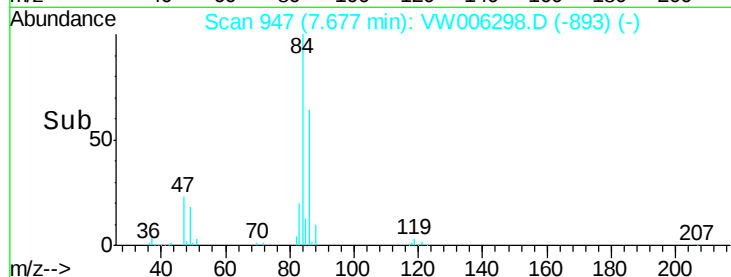
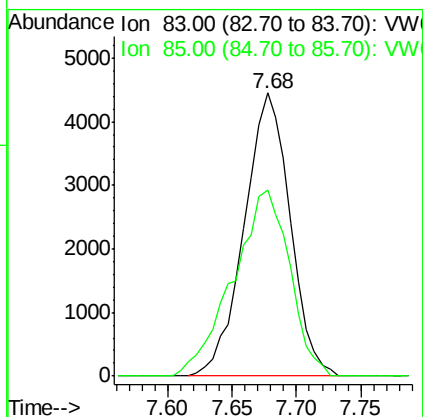
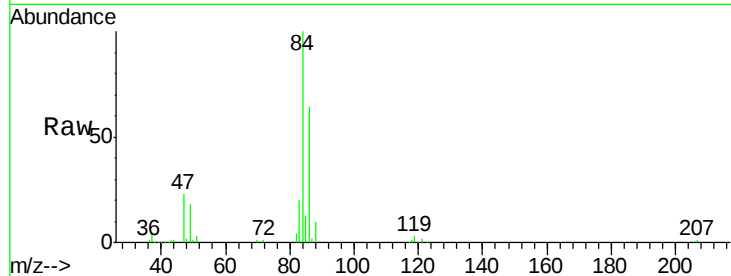
85 81.3 46.3 85.9

Manual Integrations

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MMDadoda

10/24/2018 2:07:20 PM



#27

1,2-Dichloroethane

Concen: 1.272 ug/L

RT: 8.41 min Scan# 1067

Delta R.T. 0.01 min

Lab File: VW006298.D

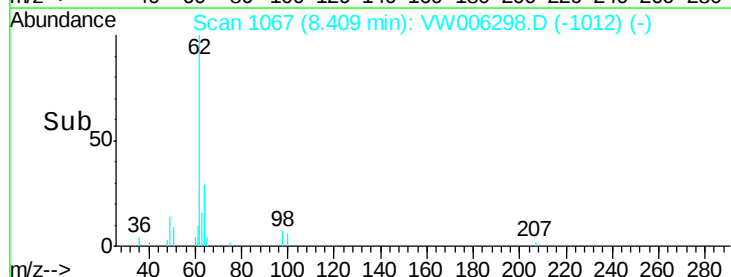
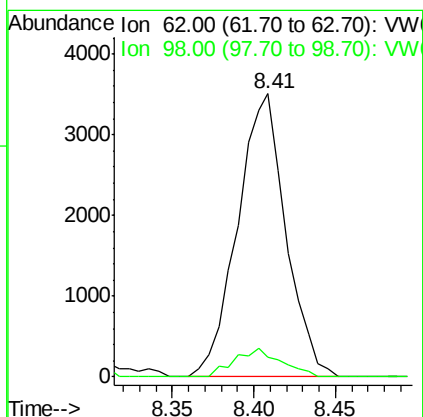
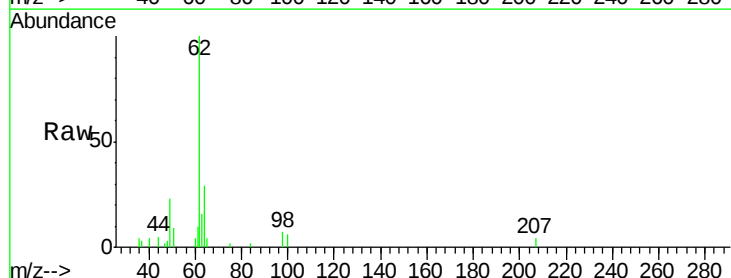
Acq: 23 Oct 2018 15:58

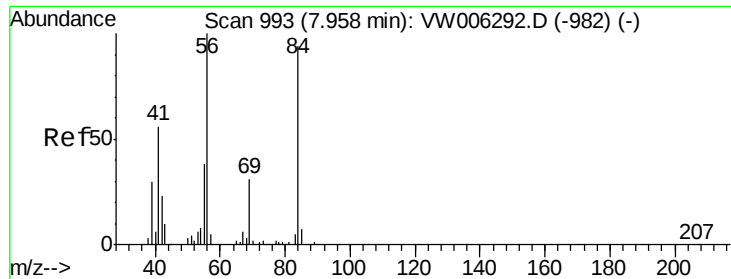
Tgt Ion: 62 Resp: 7224

Ion Ratio Lower Upper

62 100

98 6.8 8.0 12.0#





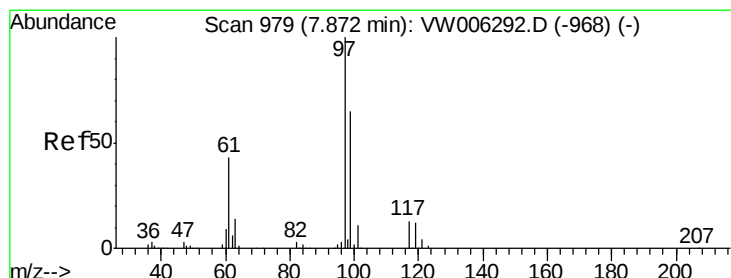
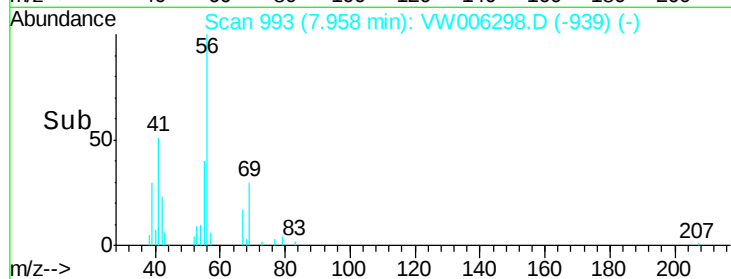
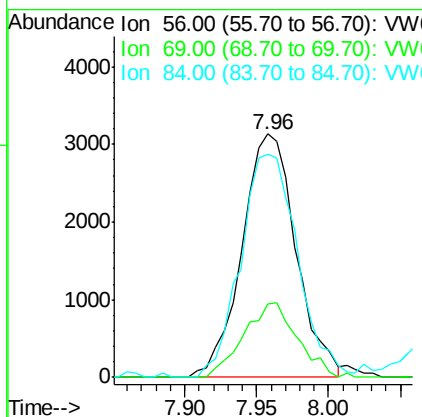
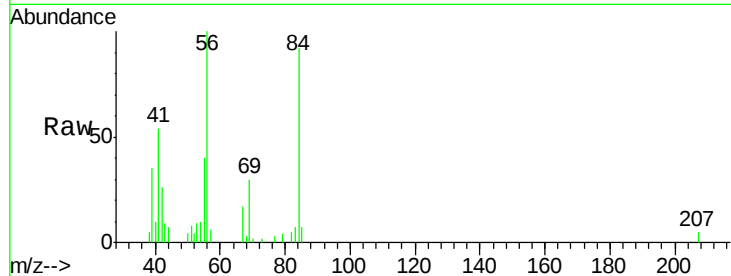
#30  
Cyclohexane  
Concen: 1.029 ug/L  
RT: 7.96 min Scan# 993  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 30.4  | 25.4  | 38.0  |
| 84      | 96.8  | 73.9  | 110.9 |

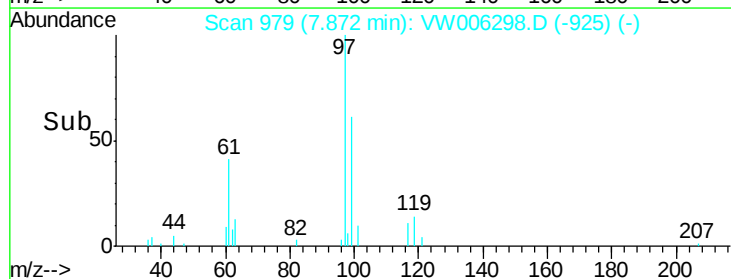
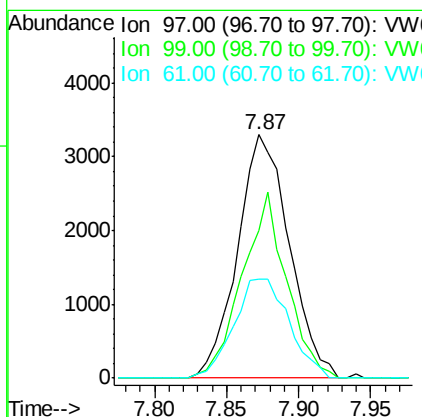
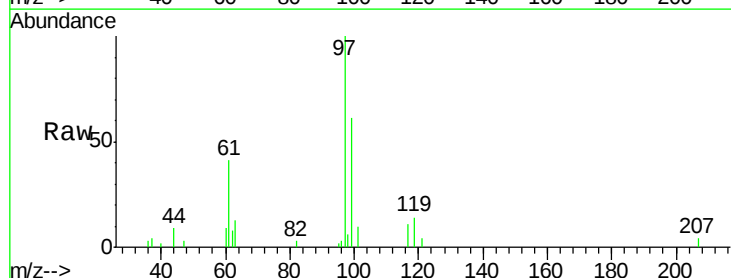
Manual Integrations  
APPROVED

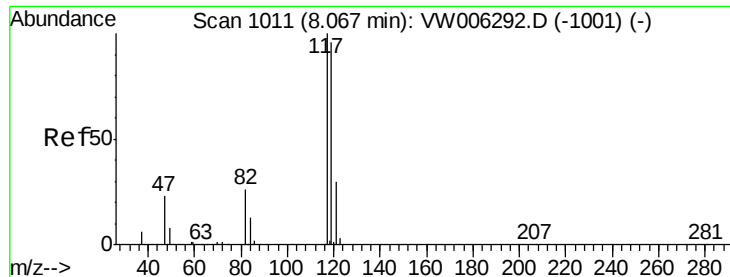
MMDadoda  
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#31  
1,1,1-Trichloroethane  
Concen: 1.092 ug/L  
RT: 7.87 min Scan# 979  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 65.6  | 51.0  | 76.4  |
| 61      | 43.5  | 33.6  | 50.4  |





#32

Carbon tetrachloride

Concen: 1.060 ug/L

RT: 8.07 min Scan# 1011

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampled :

MDL

Tgt Ion: 117 Resp: 7836

Ion Ratio Lower Upper

117 100

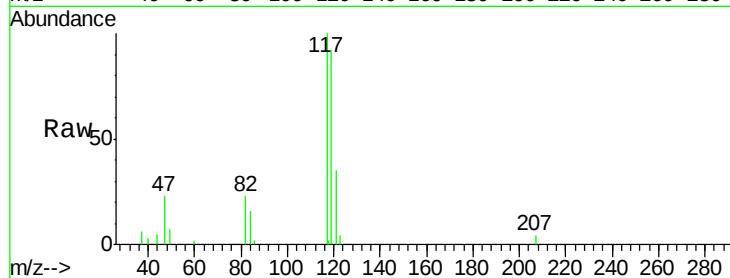
119 93.7 76.9 115.3

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

8.07

3000

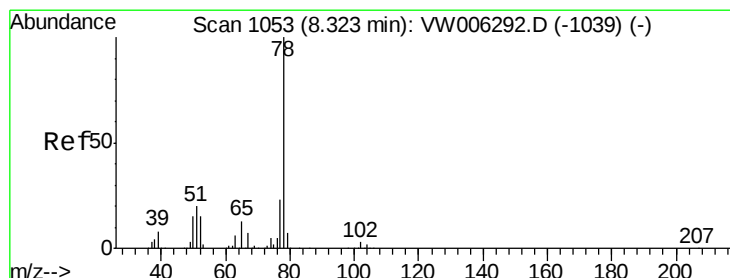
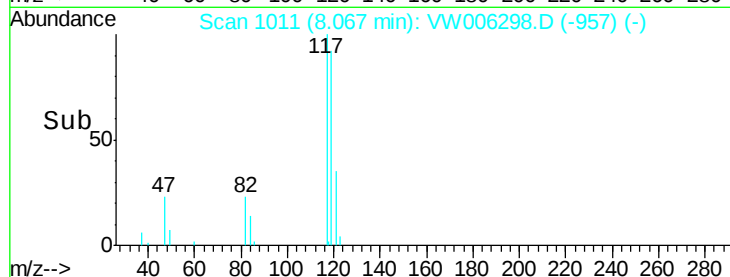
2000

1000

0

8.00 8.05 8.10 8.15

Time-->



#34

Benzene

Concen: 1.185 ug/L

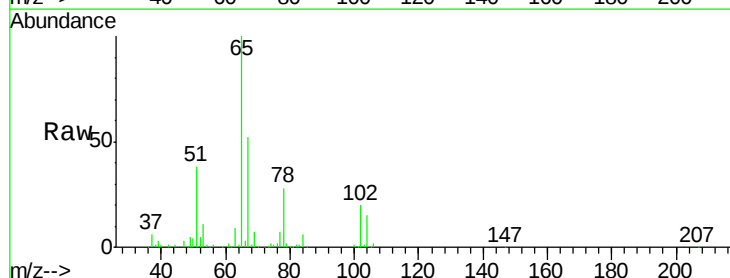
RT: 8.32 min Scan# 1053

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Tgt Ion: 78 Resp: 21925



Abundance Ion 78.00 (77.70 to 78.70): VW

8.32

10000

8000

6000

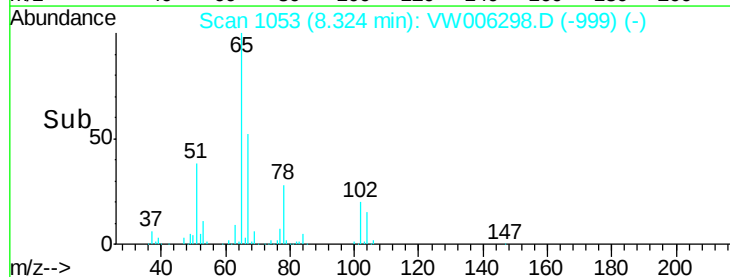
4000

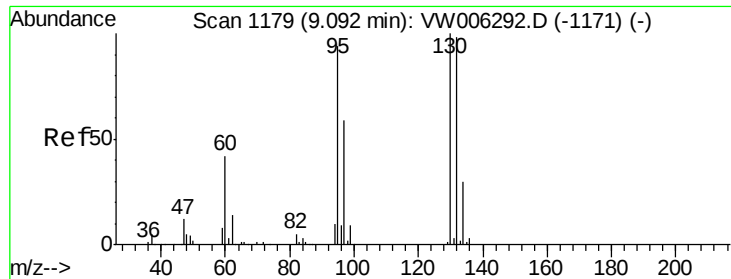
2000

0

8.25 8.30 8.35 8.40

Time-->





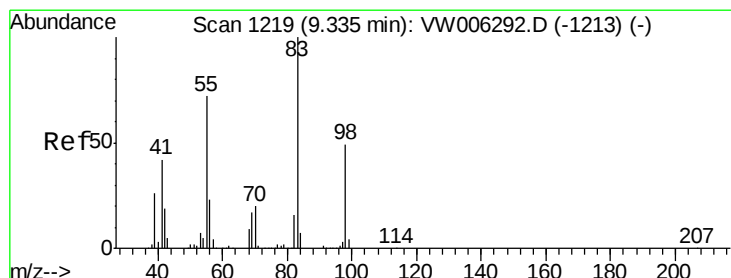
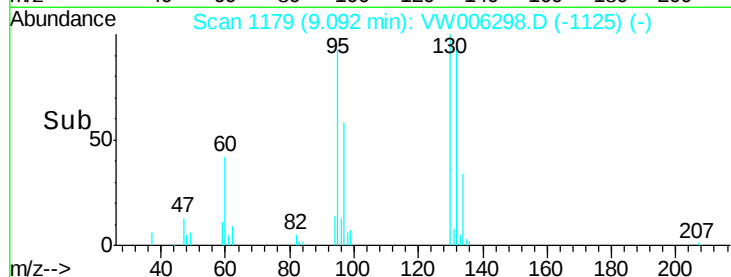
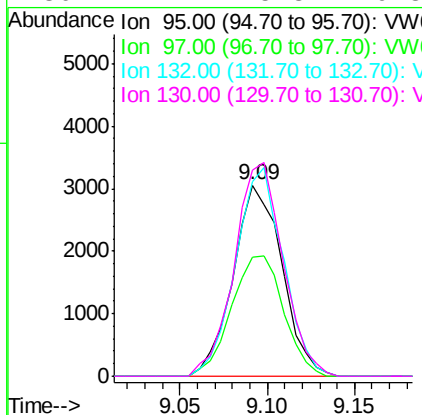
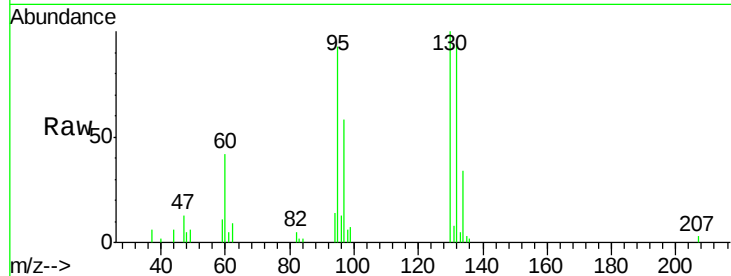
#35  
 Trichloroethene  
 Concen: 1.142 ug/L  
 RT: 9.09 min Scan# 1179  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 97      | 67.2  | 45.8  | 85.0  |
| 132     | 106.3 | 72.9  | 135.3 |
| 130     | 111.7 | 75.8  | 140.8 |

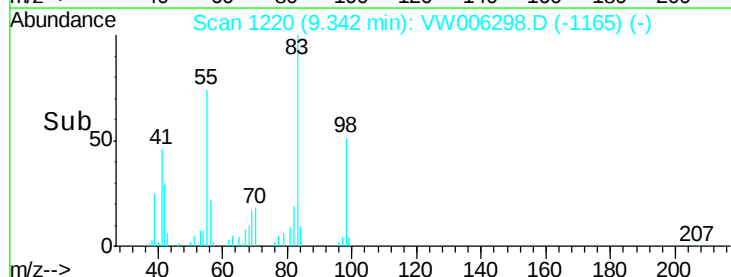
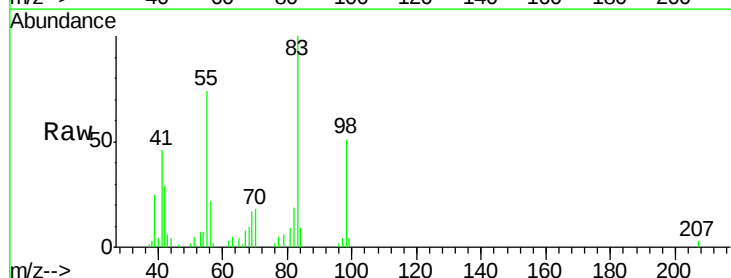
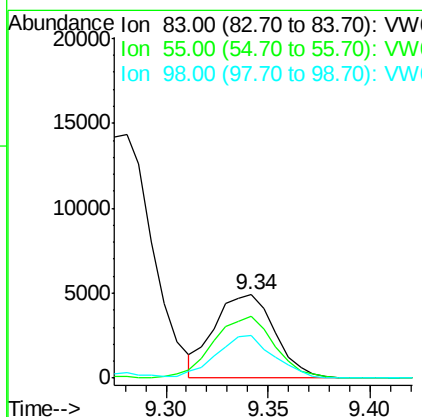
Manual Integrations  
 APPROVED

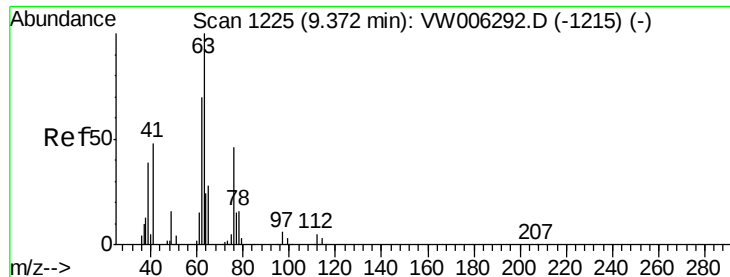
MMDadoda  
 10/24/2018 2:07:20 PM



#36  
 Methylcyclohexane  
 Concen: 1.061 ug/L  
 RT: 9.34 min Scan# 1220  
 Delta R.T. 0.01 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 74.3  | 57.1  | 85.7  |
| 98      | 48.5  | 38.9  | 58.3  |





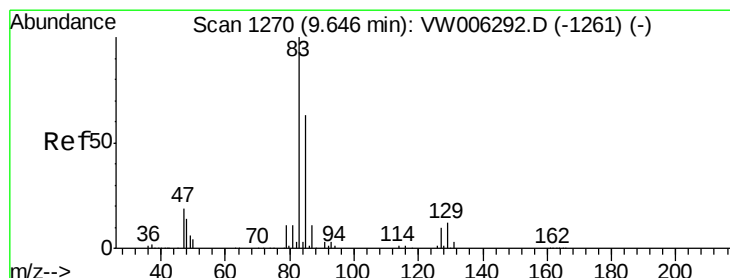
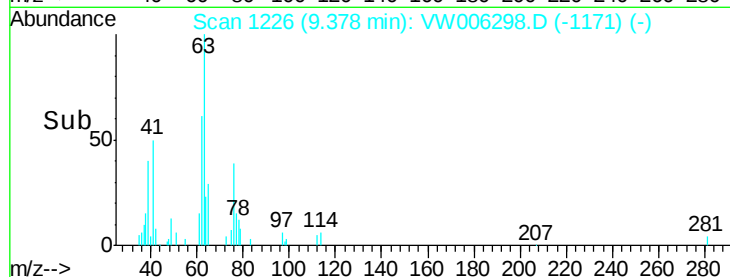
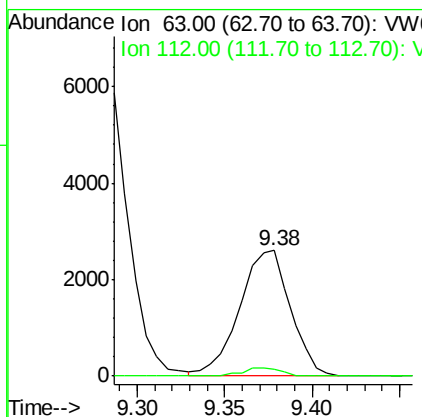
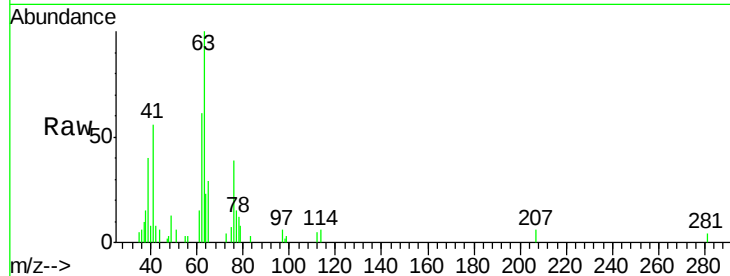
#40  
1,2-Dichloropropane  
Concen: 1.150 ug/L  
RT: 9.38 min Scan# 1226  
Delta R.T. 0.01 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

Tgt Ion: 63 Resp: 5276  
Ion Ratio Lower Upper  
63 100  
112 4.7 3.5 5.3

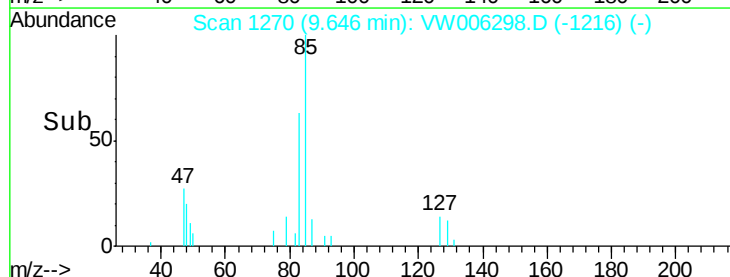
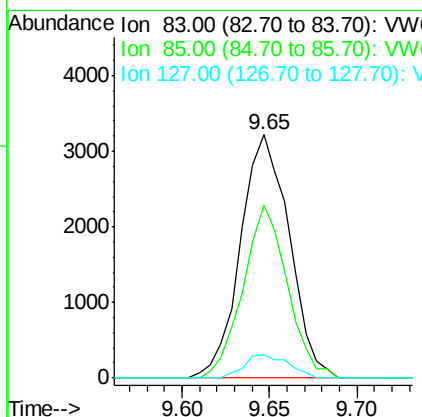
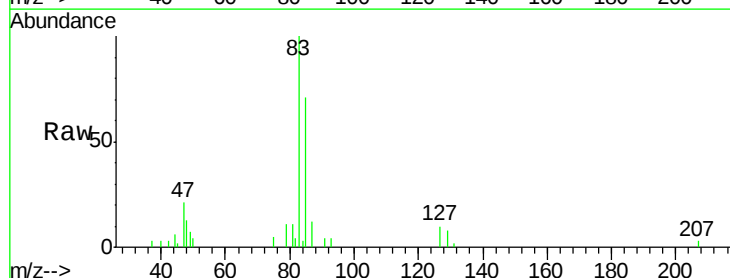
Manual Integrations  
APPROVED

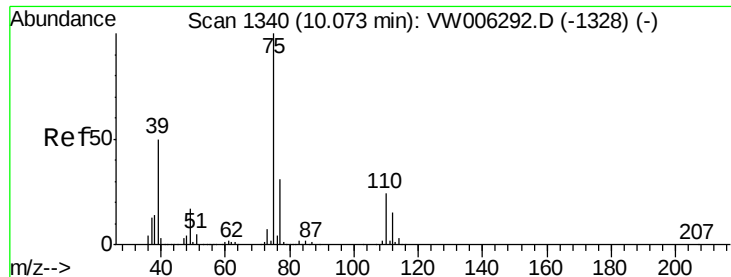
MMDadoda  
10/24/2018 2:07:20 PM



#41  
Bromodichloromethane  
Concen: 1.005 ug/L  
RT: 9.65 min Scan# 1270  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Tgt Ion: 83 Resp: 6226  
Ion Ratio Lower Upper  
83 100  
85 71.2 45.5 84.5  
127 9.7 7.4 11.2





#42

cis-1,3-Dichloropropene

Concen: 0.955 ug/L

RT: 10.07 min Scan# 1340

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampleId :

MDL

Tgt Ion: 75 Resp: 7158

Ion Ratio Lower Upper

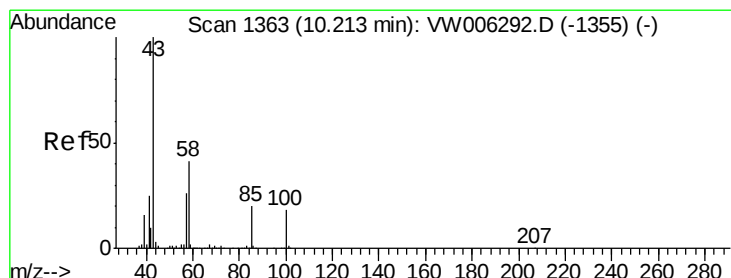
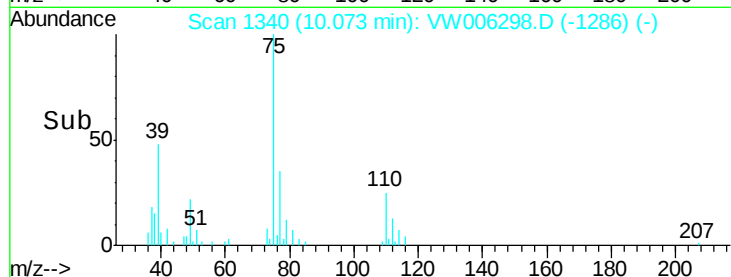
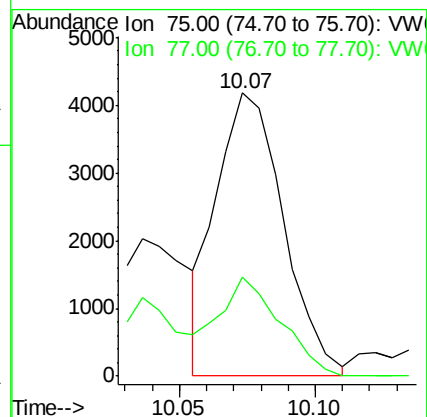
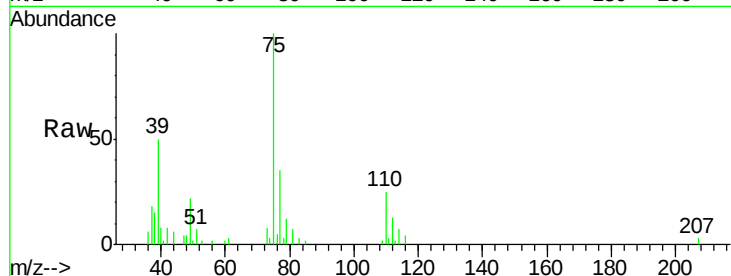
75 100

77 34.9 22.6 42.0

Manual Integrations  
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#43

4-Methyl-2-pentanone

Concen: 2.008 ug/L

RT: 10.21 min Scan# 1363

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

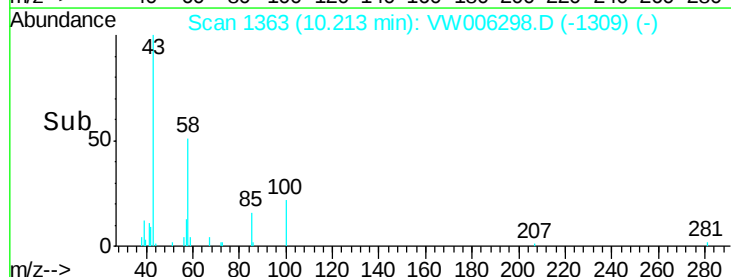
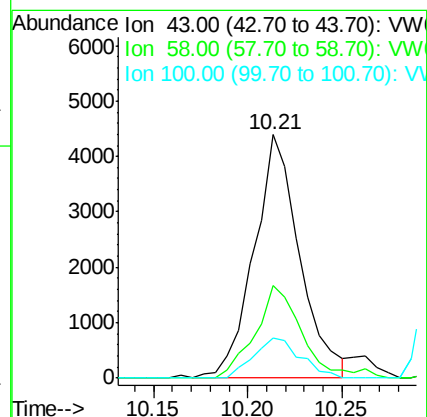
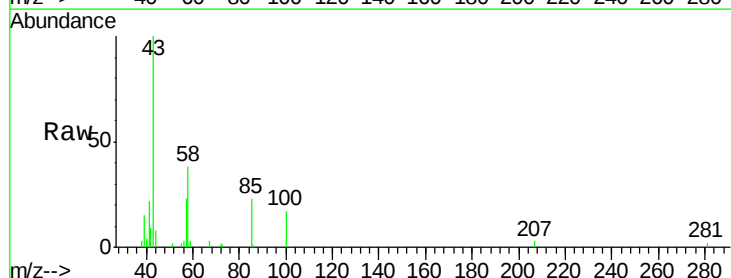
Tgt Ion: 43 Resp: 7382

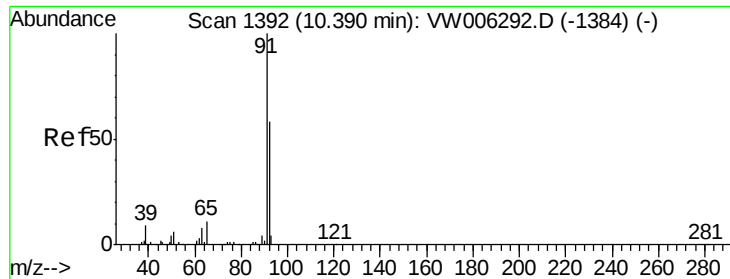
Ion Ratio Lower Upper

43 100

58 38.0 31.4 47.2

100 17.0 13.3 19.9





#44

Toluene

Concen: 1.225 ug/L

RT: 10.39 min Scan# 1392

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampleId :

MDL

Tgt Ion: 91 Resp: 25446

Ion Ratio Lower Upper

91 100

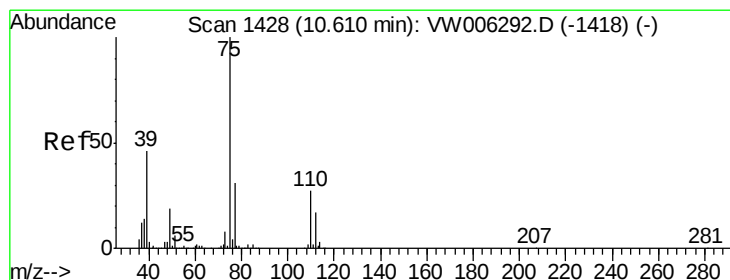
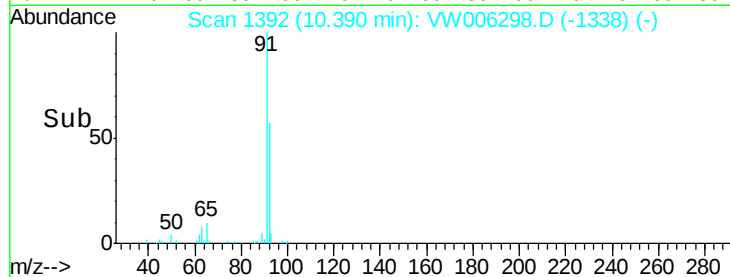
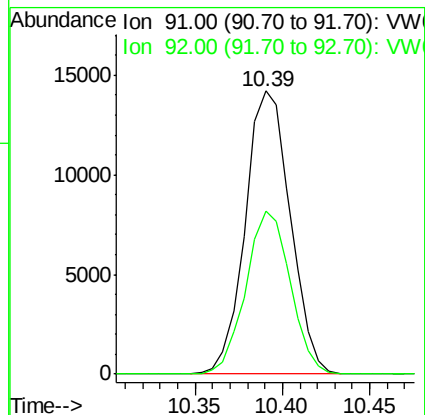
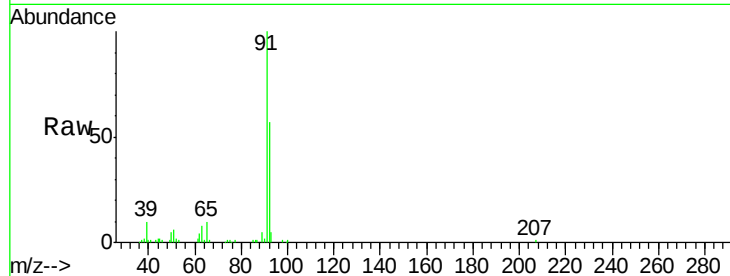
92 57.4 40.4 75.0

Manual Integrations

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#45

trans-1,3-Dichloropropene

Concen: 1.292 ug/L

RT: 10.61 min Scan# 1428

Delta R.T. 0.00 min

Lab File: VW006298.D

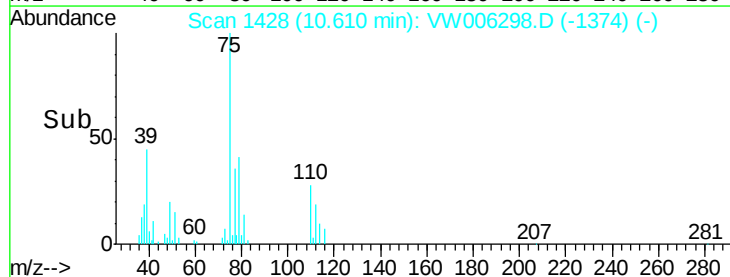
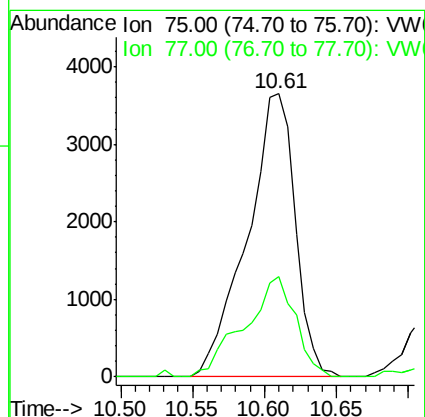
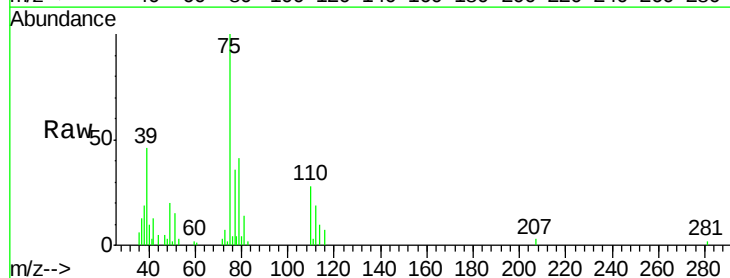
Acq: 23 Oct 2018 15:58

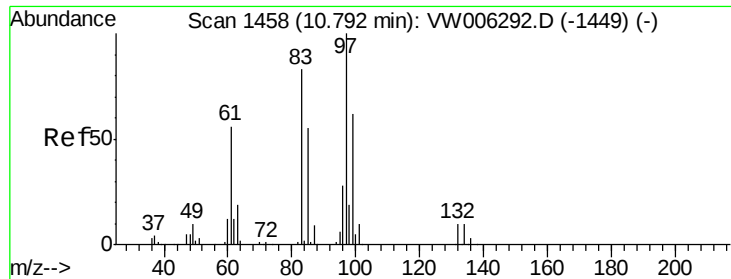
Tgt Ion: 75 Resp: 8460

Ion Ratio Lower Upper

75 100

77 35.6 22.4 41.6





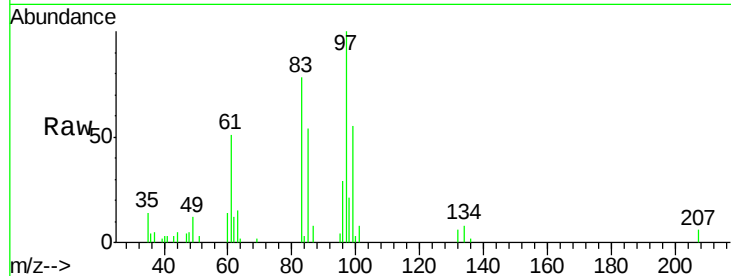
#46  
1,1,2-Trichloroethane  
Concen: 1.212 ug/L  
RT: 10.79 min Scan# 1458  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 4631  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 78.0  | 60.0  | 111.4 |
| 85       | 54.0  | 38.7  | 71.9  |
| 99       | 54.7  | 44.3  | 82.3  |

Manual Integrations  
APPROVED

MMDadoda  
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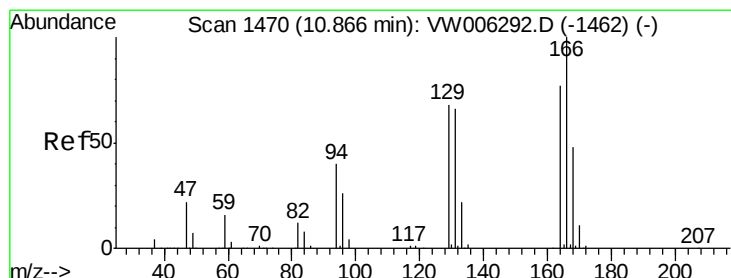
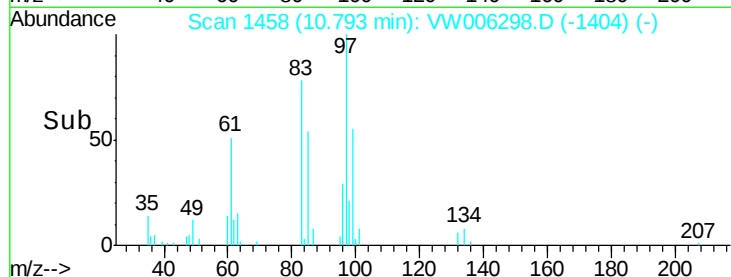
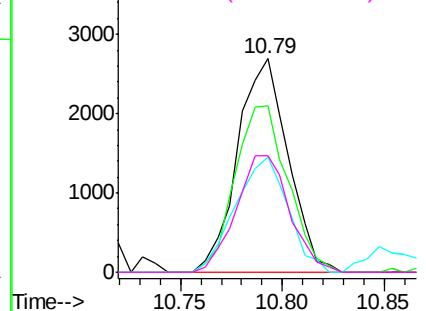
Abundance

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: 1.127 ug/L  
RT: 10.87 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 5430  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 97.2  | 65.4  | 121.4 |
| 131      | 103.2 | 63.8  | 118.4 |
| 166      | 151.4 | 92.3  | 171.3 |

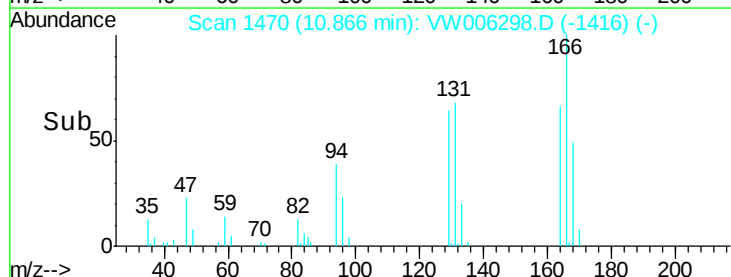
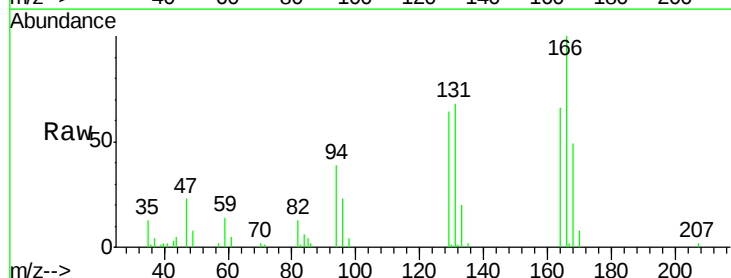
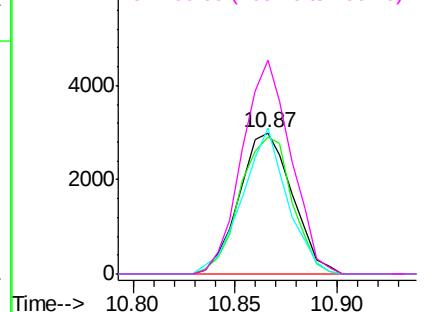
Abundance

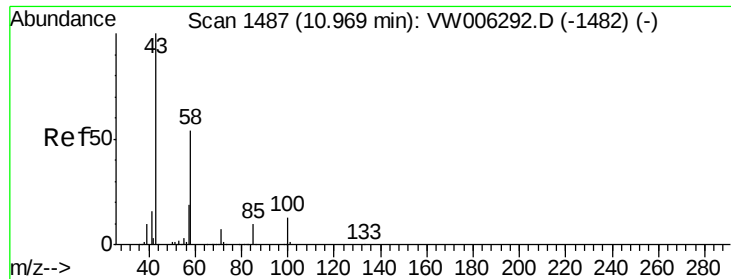
Ion 164.00 (163.70 to 164.70): V

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





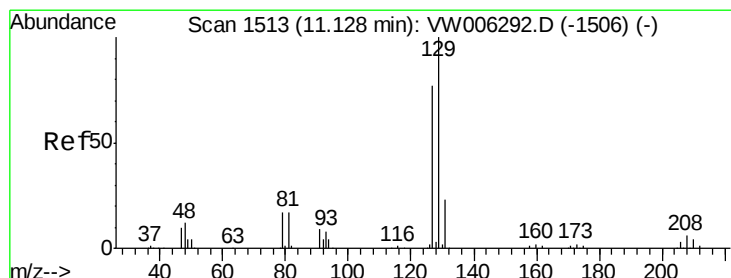
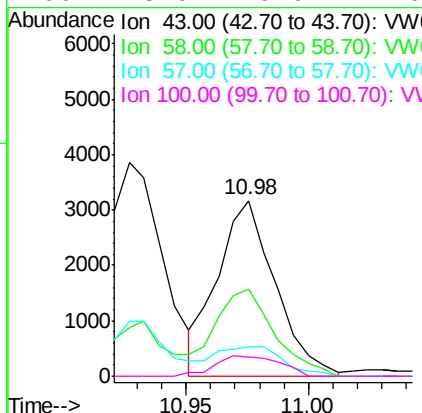
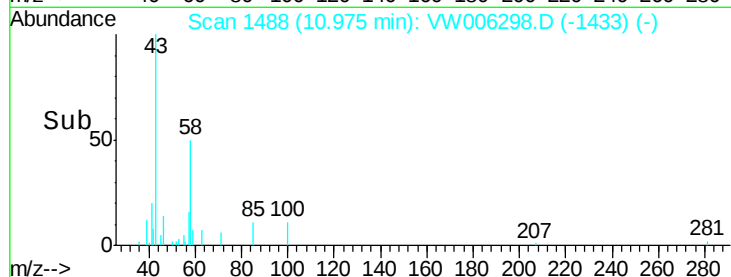
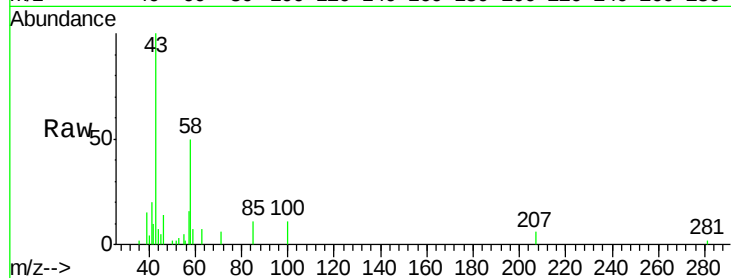
#49  
2-Hexanone  
Concen: 1.920 ug/L  
RT: 10.98 min Scan# 1488  
Delta R.T. 0.01 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

Tgt Ion: 43 Resp: 5202  
Ion Ratio Lower Upper  
43 100  
58 53.2 42.1 63.1  
57 20.9 15.1 22.7  
100 13.0 9.9 14.9

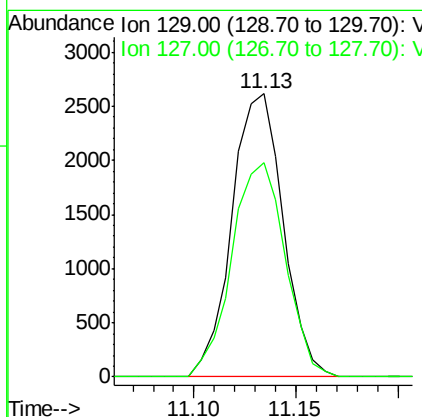
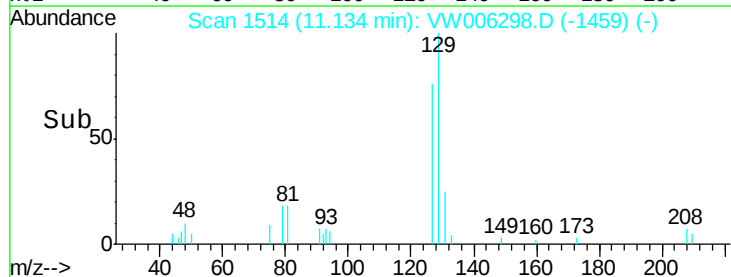
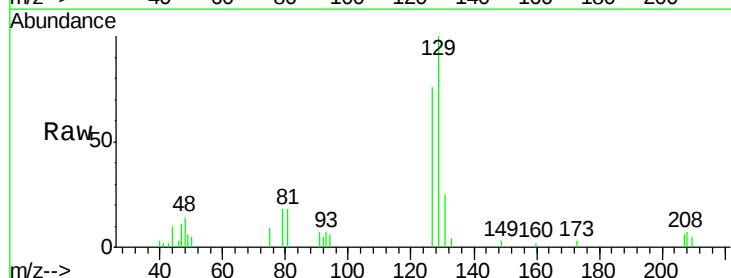
Manual Integrations  
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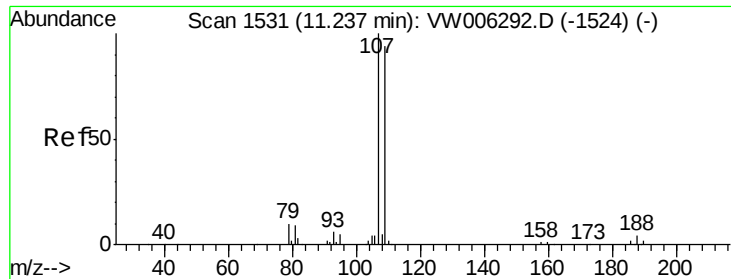
MMDadoda  
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#50  
Dibromochloromethane  
Concen: 0.933 ug/L  
RT: 11.13 min Scan# 1514  
Delta R.T. 0.01 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Tgt Ion: 129 Resp: 4567  
Ion Ratio Lower Upper  
129 100  
127 75.9 54.4 101.0





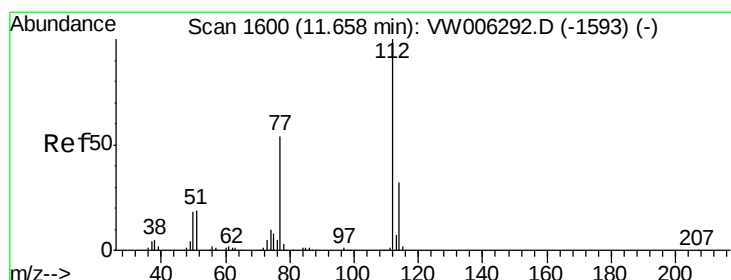
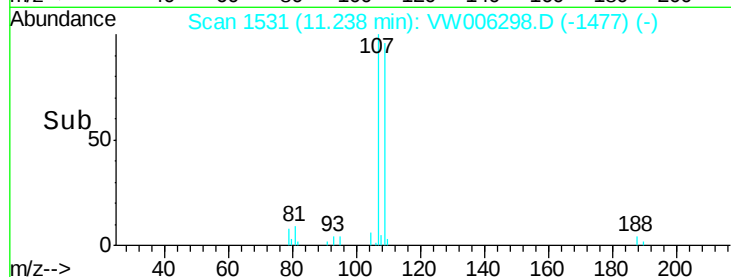
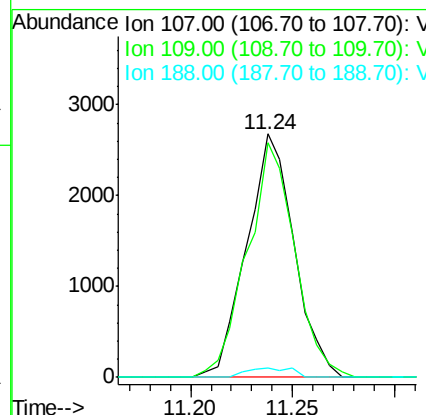
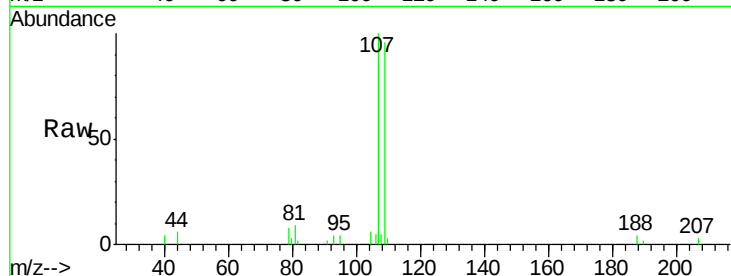
#51  
1,2-Dibromoethane  
Concen: 1.087 ug/L  
RT: 11.24 min Scan# 1531  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampleId :  
MDL

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 107     | 100   | 4323 |       |       |
| 109     | 96.2  | 66.6 | 123.8 |       |
| 188     | 3.7   | 3.4  | 5.0   |       |

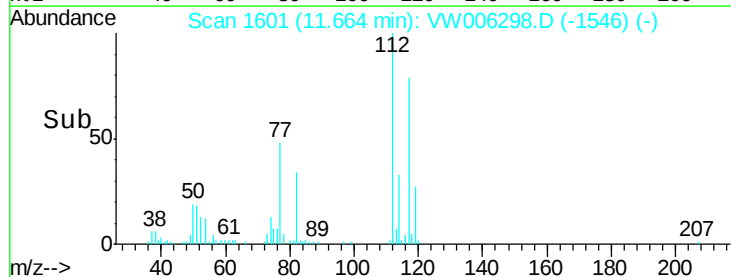
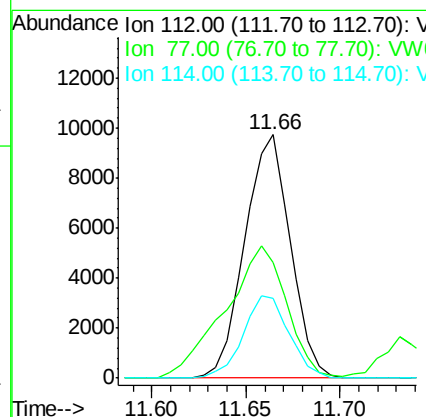
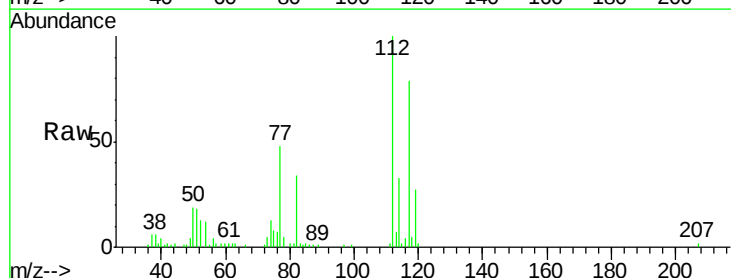
Manual Integrations  
APPROVED

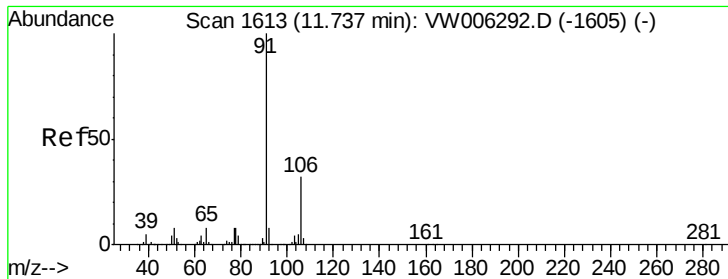
MMDadoda  
10/24/2018 2:07:20 PM



#52  
Chlorobenzene  
Concen: 1.166 ug/L  
RT: 11.66 min Scan# 1601  
Delta R.T. 0.01 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 112     | 100   | 16391 |       |       |
| 77      | 47.7  | 44.2  | 66.2  |       |
| 114     | 32.6  | 22.1  | 41.1  |       |





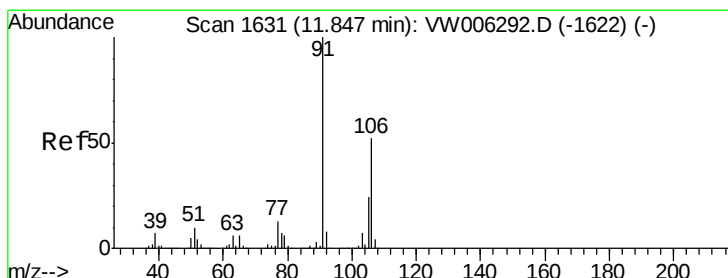
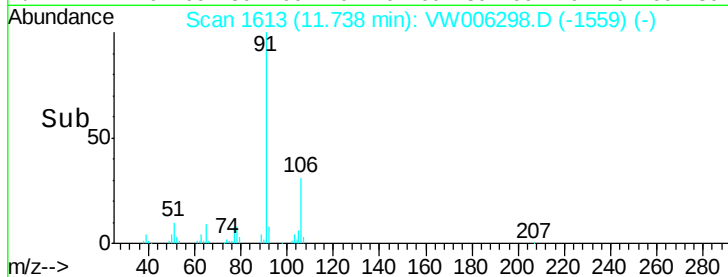
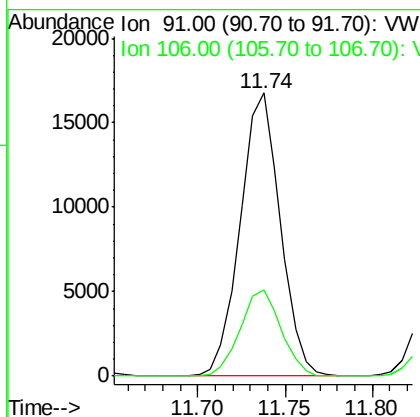
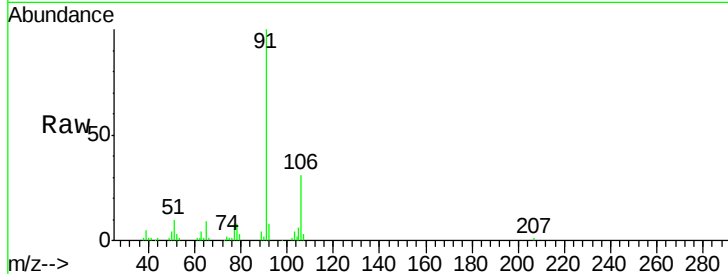
#53  
Ethylbenzene  
Concen: 1.103 ug/L  
RT: 11.74 min Scan# 1613  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

Tgt Ion: 91 Resp: 26681  
Ion Ratio Lower Upper  
91 100  
106 30.7 22.6 42.0

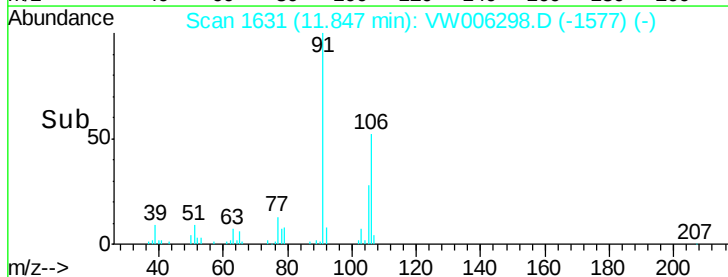
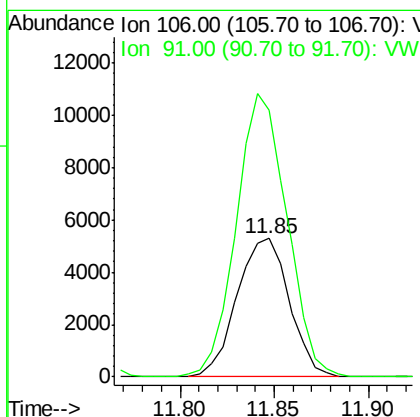
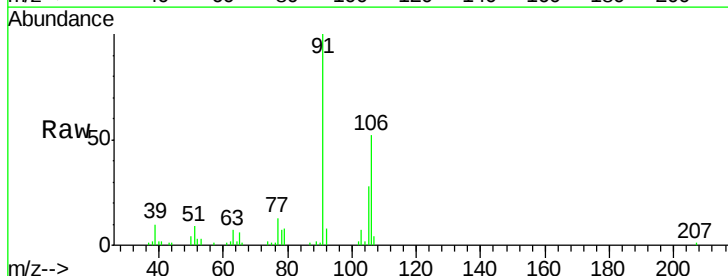
Manual Integrations  
APPROVED

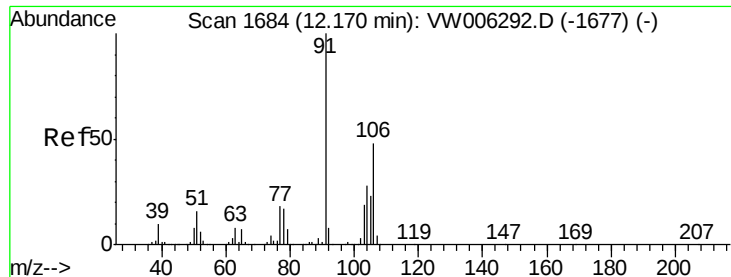
MMDadoda  
10/24/2018 2:07:20 PM



#54  
m,p-Xylene  
Concen: 1.075 ug/L  
RT: 11.85 min Scan# 1631  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Tgt Ion: 106 Resp: 10184  
Ion Ratio Lower Upper  
106 100  
91 192.4 138.4 257.0





#55

o-xylene

Concen: 1.038 ug/L

RT: 12.17 min Scan# 1684

Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampled :

MDL

Tgt Ion:106 Resp: 9391

Ion Ratio Lower Upper

106 100

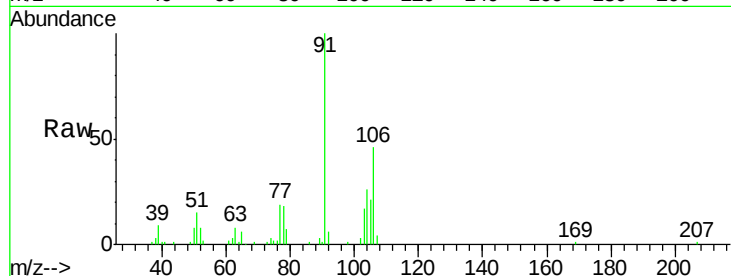
91 215.5 148.7 276.1

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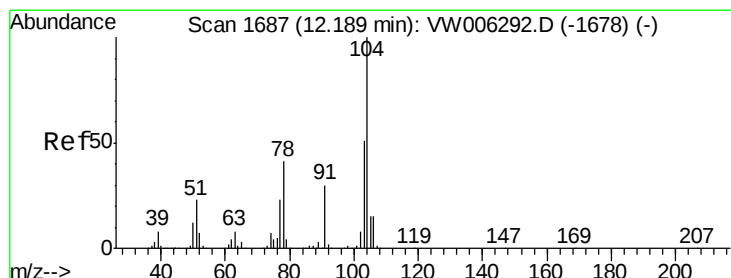
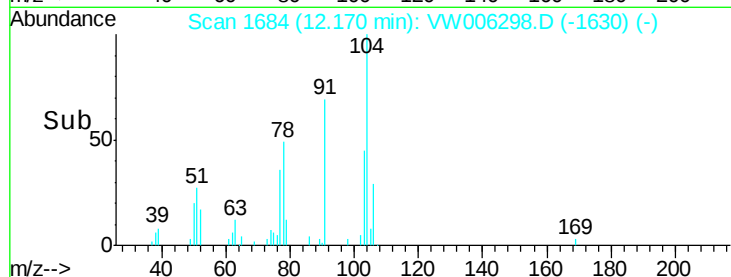
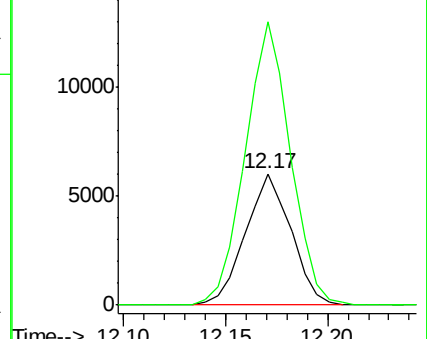
MMDadoda

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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: 1.004 ug/L

RT: 12.19 min Scan# 1687

Delta R.T. 0.00 min

Lab File: VW006298.D

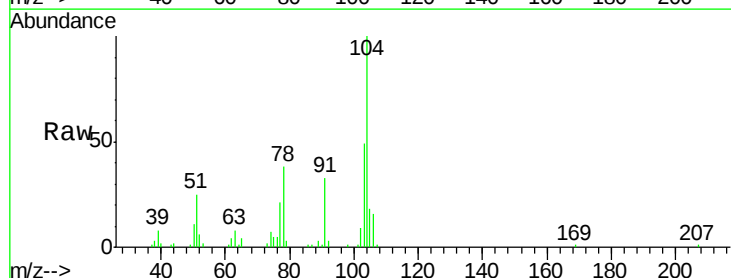
Acq: 23 Oct 2018 15:58

Tgt Ion:104 Resp: 15648

Ion Ratio Lower Upper

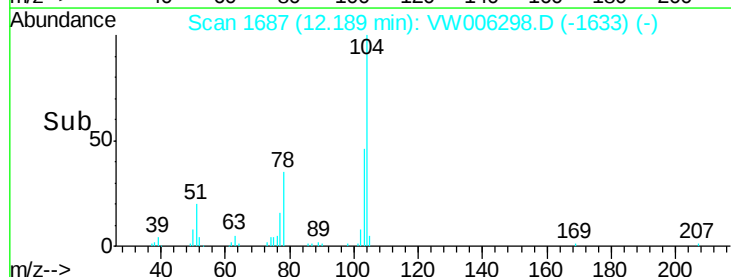
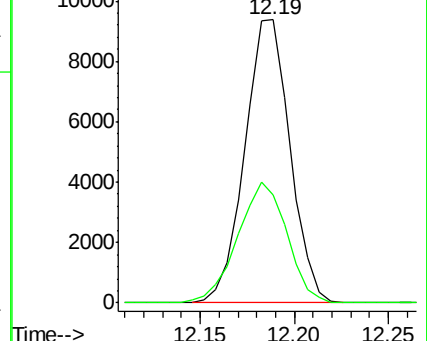
104 100

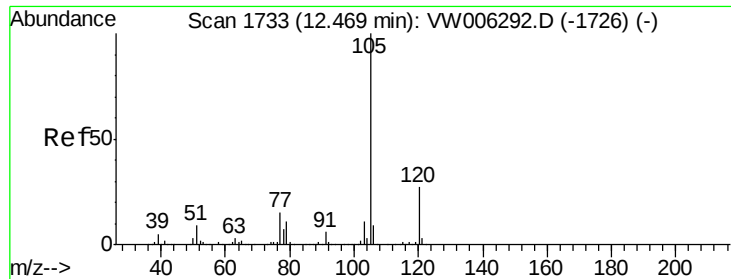
78 38.3 31.2 58.0



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VW





#57

Isopropylbenzene

Concen: 1.022 ug/L

RT: 12.47 min Scan# 1733

Delta R.T. 0.00 min

Lab File: VW006298.D

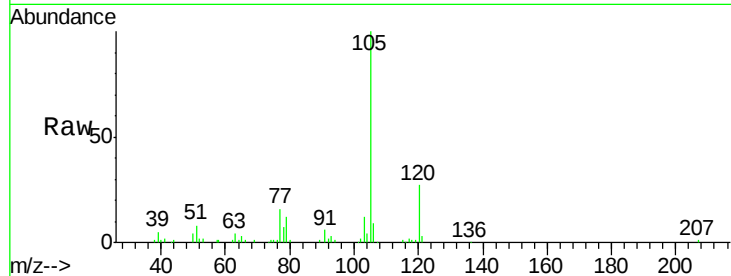
Acq: 23 Oct 2018 15:58

Instrument :

MSVOA\_W

ClientSampled :

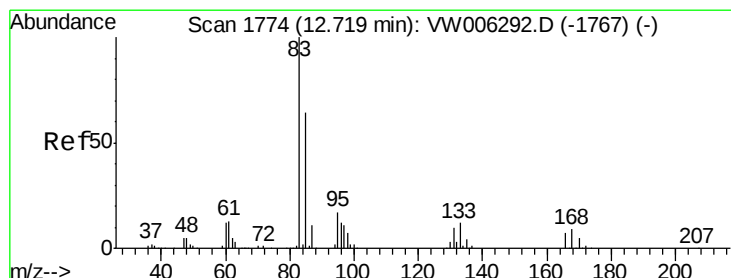
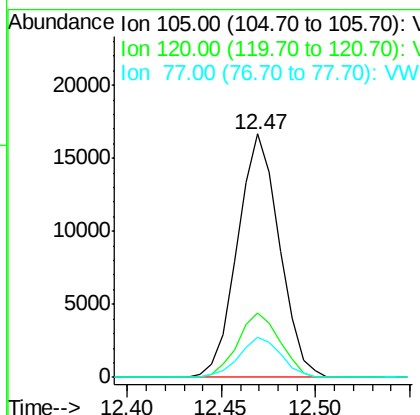
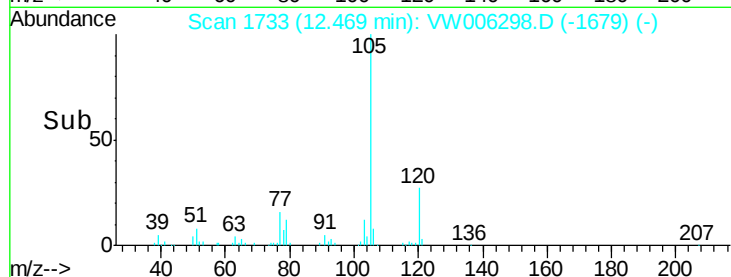
MDL



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 105   | Resp: | 25740 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 120       | 27.0  | 21.8  | 32.6  |
| 77        | 16.3  | 12.2  | 18.2  |

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#58

1,1,2,2-Tetrachloroethane

Concen: 1.179 ug/L

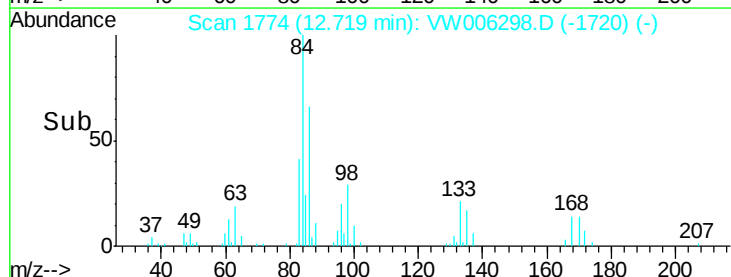
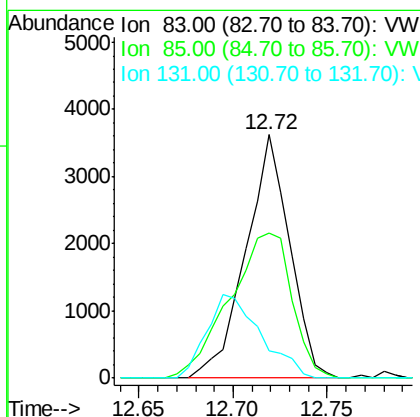
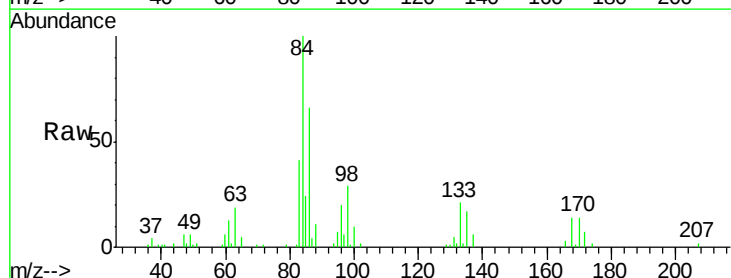
RT: 12.72 min Scan# 1774

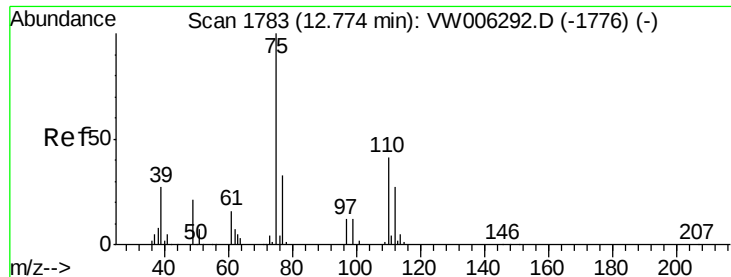
Delta R.T. 0.00 min

Lab File: VW006298.D

Acq: 23 Oct 2018 15:58

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 83    | Resp: | 5852 |
| Ion Ratio | Lower | Upper |      |
| 83        | 100   |       |      |
| 85        | 59.6  | 44.8  | 83.2 |
| 131       | 11.2  | 9.0   | 13.4 |





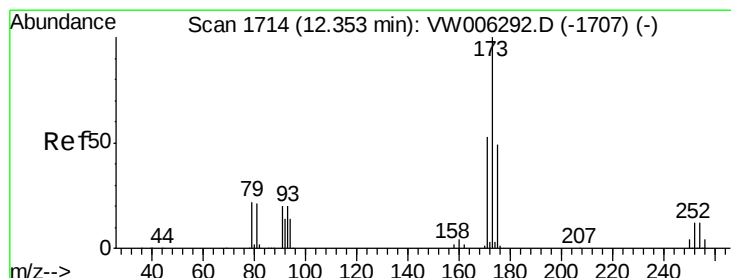
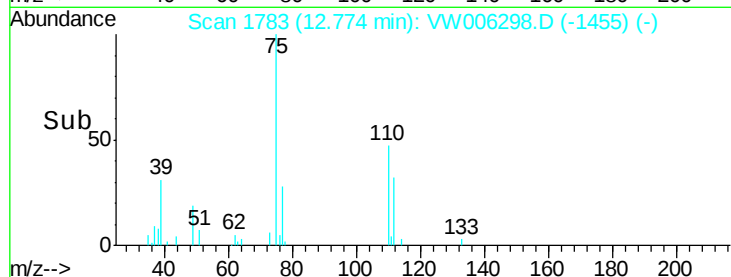
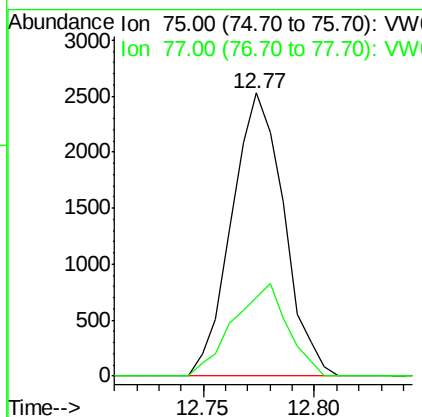
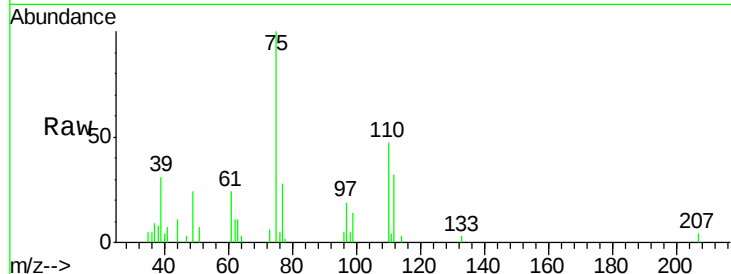
#59  
 1,2,3-Trichloropropane  
 Concen: 1.116 ug/L  
 RT: 12.77 min Scan# 1783  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

Tgt Ion: 75 Resp: 4134  
 Ion Ratio Lower Upper  
 75 100  
 77 33.7 25.9 38.9

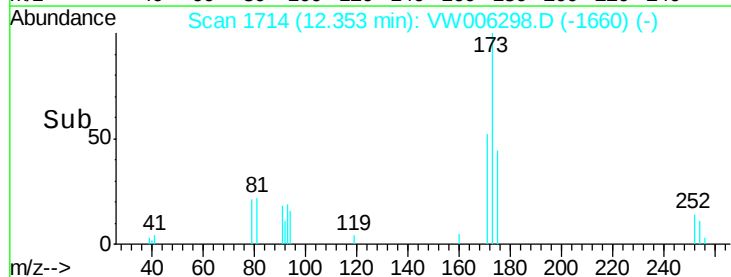
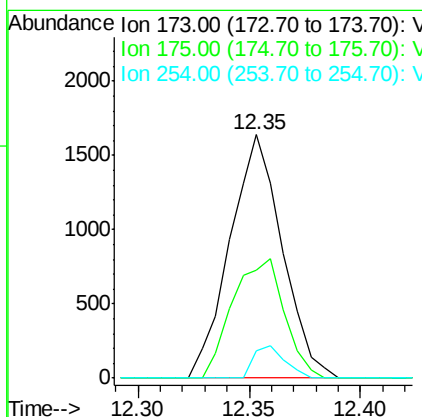
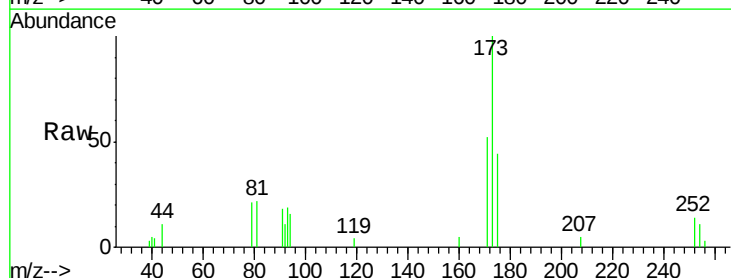
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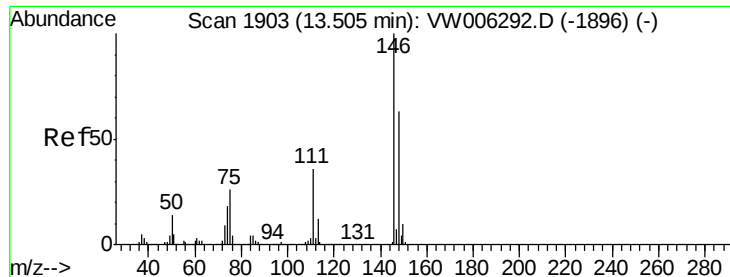
MMDadoda  
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#62  
 Bromoform  
 Concen: 0.843 ug/L  
 RT: 12.35 min Scan# 1714  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Tgt Ion: 173 Resp: 2676  
 Ion Ratio Lower Upper  
 173 100  
 175 48.7 39.1 58.7  
 254 8.0 9.2 13.8#





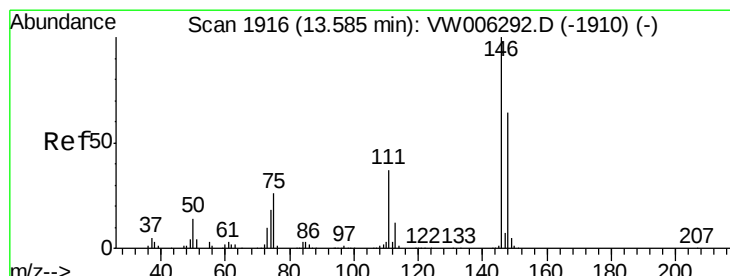
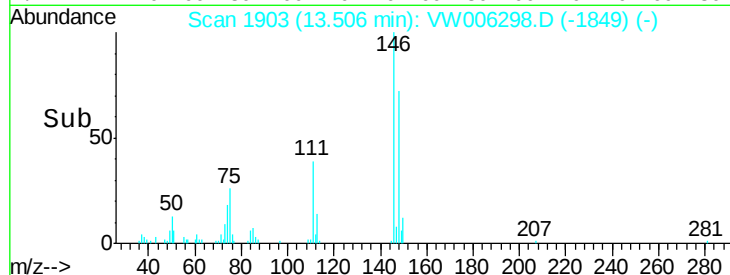
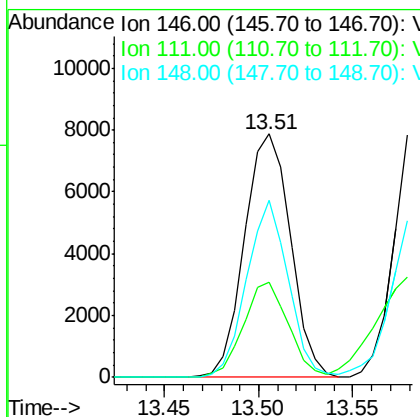
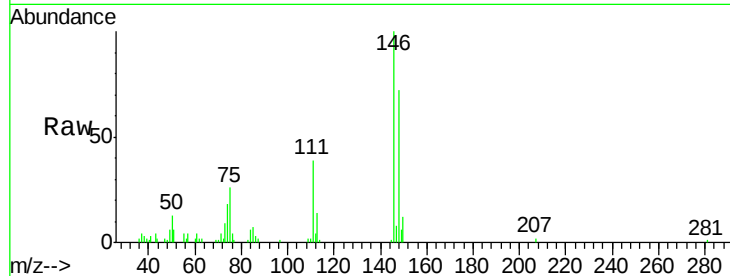
#63  
 1,3-Dichlorobenzene  
 Concen: 1.146 ug/L  
 RT: 13.51 min Scan# 1903  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 39.3  | 26.3  | 48.9  |
| 148     | 72.5  | 44.7  | 82.9  |

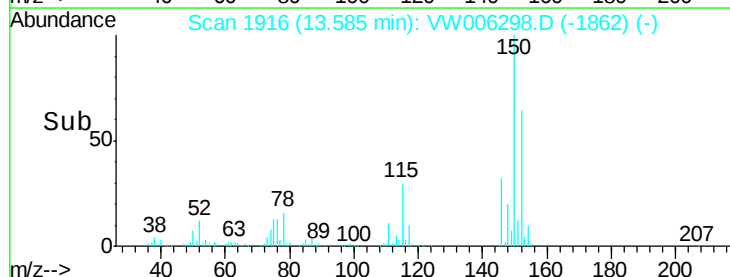
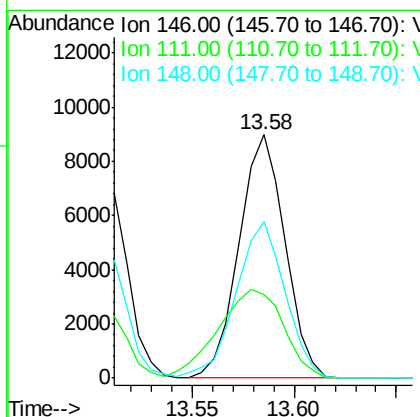
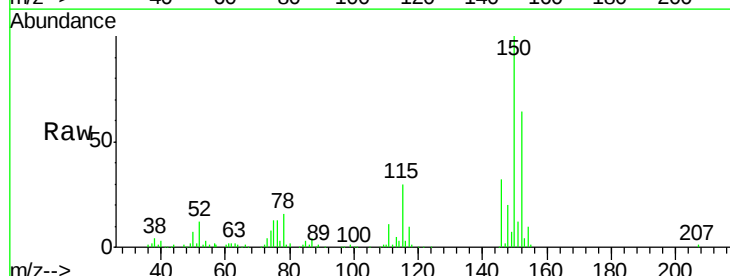
Manual Integrations  
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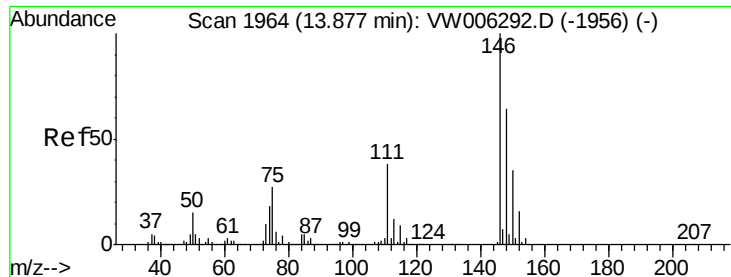
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#64  
 1,4-Dichlorobenzene  
 Concen: 1.198 ug/L  
 RT: 13.58 min Scan# 1916  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 34.5  | 24.7  | 45.9  |
| 148     | 64.2  | 44.9  | 83.5  |





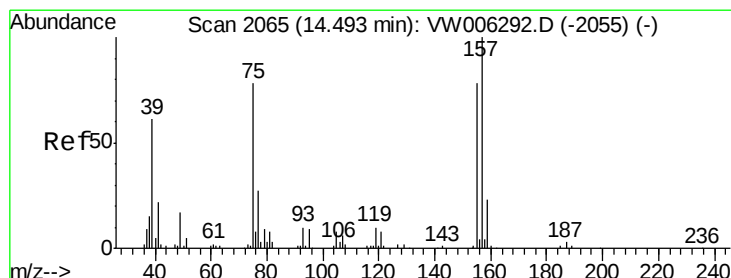
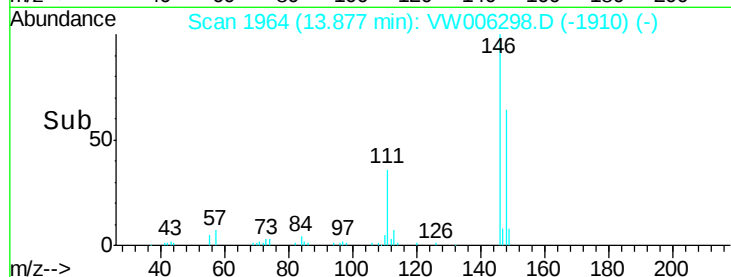
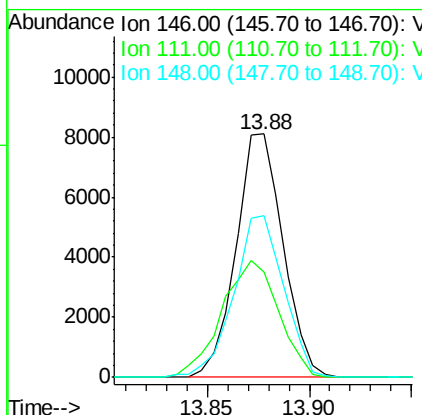
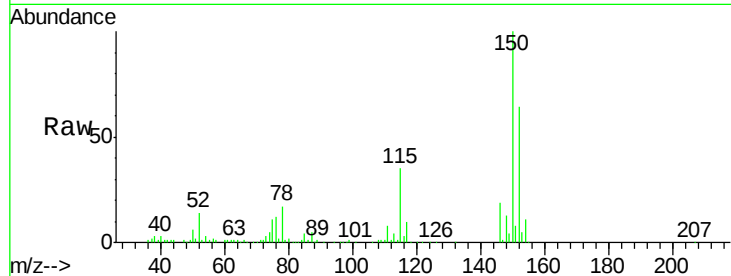
#65  
 1,2-Dichlorobenzene  
 Concen: 1.214 ug/L  
 RT: 13.88 min Scan# 1964  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 43.1  | 31.1  | 46.7  |
| 148     | 66.4  | 51.2  | 76.8  |

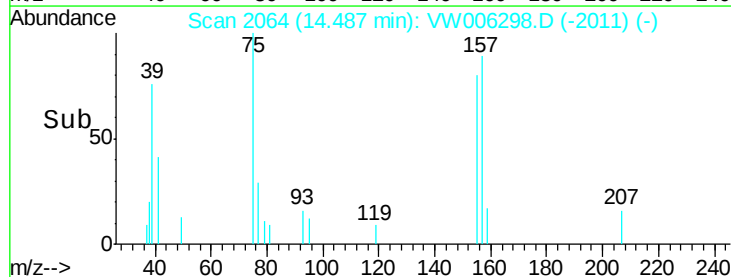
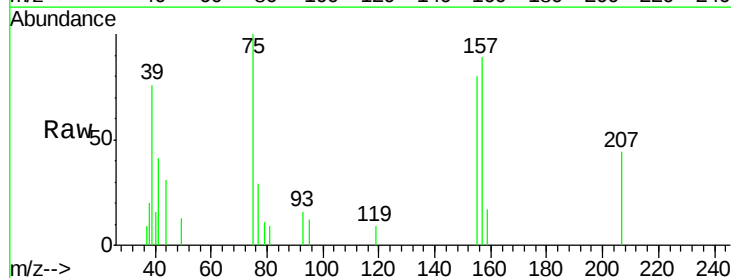
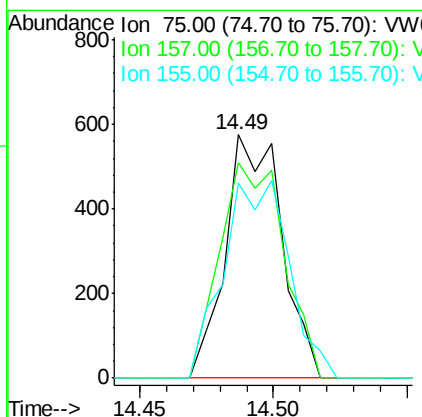
Manual Integrations  
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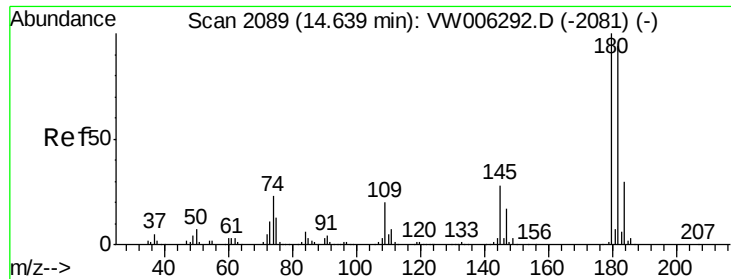
MMDadoda  
 10/24/2018 2:07:20 PM



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 0.974 ug/L m  
 RT: 14.49 min Scan# 2064  
 Delta R.T. -0.01 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 75      | 100   |       |        |
| 157     | 88.7  | 106.8 | 160.2# |
| 155     | 79.9  | 79.2  | 118.8  |





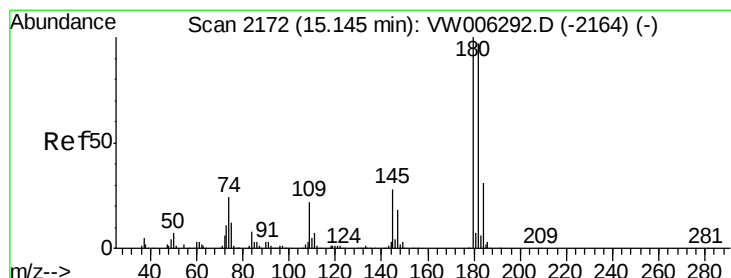
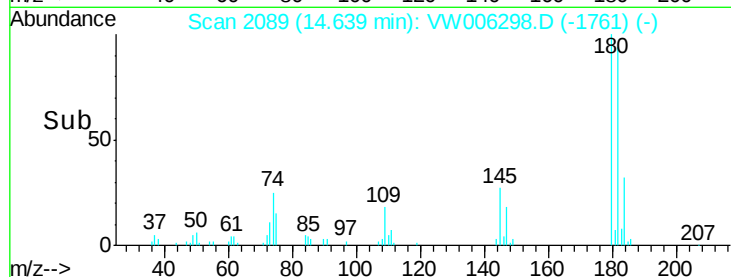
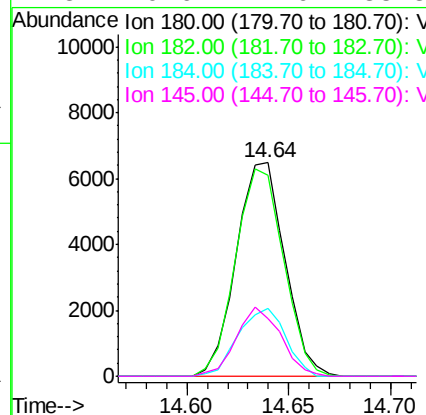
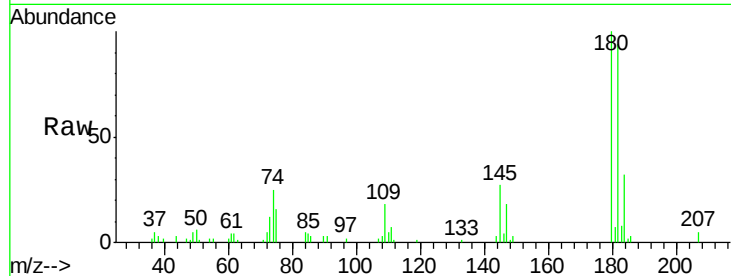
#67  
 1,3,5-Trichlorobenzene  
 Concen: 1.141 ug/L  
 RT: 14.64 min Scan# 2089  
 Delta R.T. 0.00 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 MDL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.3  | 76.0  | 114.0 |
| 184     | 31.1  | 24.3  | 36.5  |
| 145     | 29.6  | 22.6  | 33.8  |

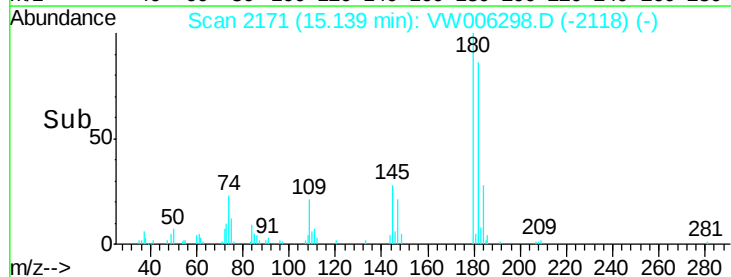
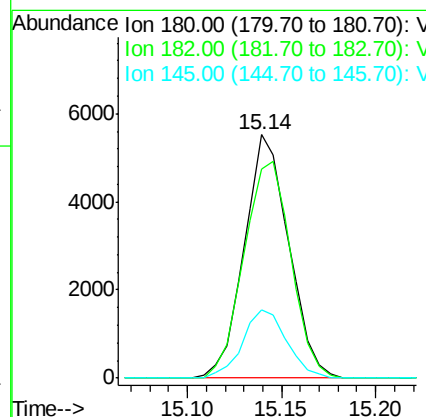
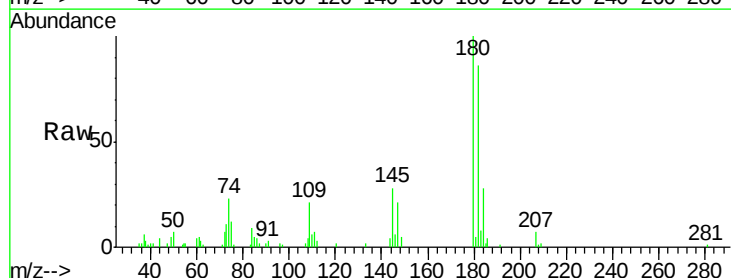
Manual Integrations  
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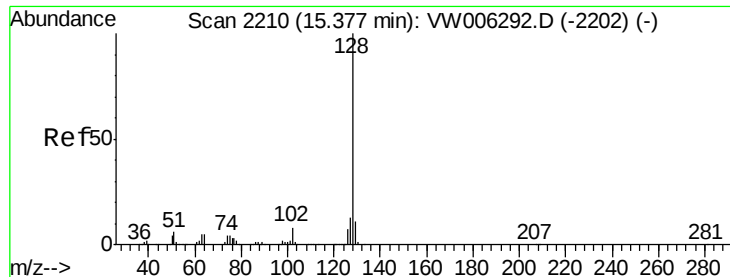
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#68  
 1,2,4-trichlorobenzene  
 Concen: 1.134 ug/L  
 RT: 15.14 min Scan# 2171  
 Delta R.T. -0.01 min  
 Lab File: VW006298.D  
 Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 94.0  | 76.2  | 114.2 |
| 145     | 27.8  | 23.0  | 34.6  |





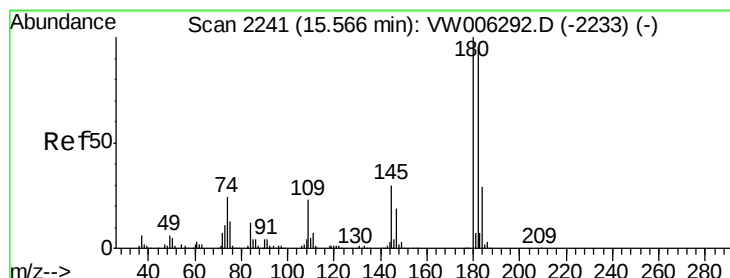
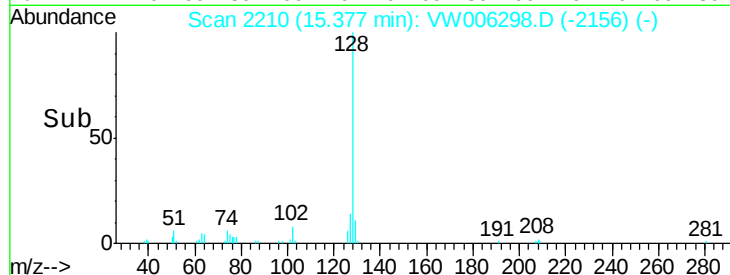
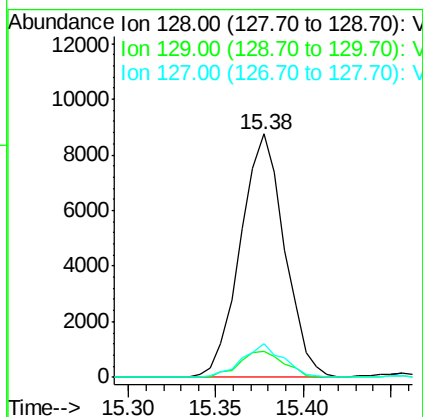
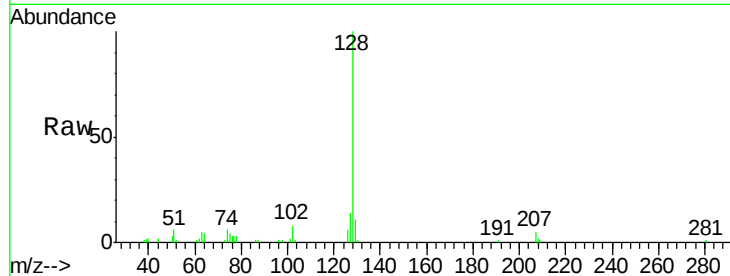
#69  
Naphthalene  
Concen: 0.948 ug/L  
RT: 15.38 min Scan# 2210  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

Instrument :  
MSVOA\_W  
ClientSampled :  
MDL

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 128     | 100   | 15351 |       |       |
| 129     | 10.8  | 8.9   | 13.3  |       |
| 127     | 12.8  | 10.5  | 15.7  |       |

Manual Integrations  
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#70  
1,2,3-Trichlorobenzene  
Concen: 1.140 ug/L  
RT: 15.57 min Scan# 2241  
Delta R.T. 0.00 min  
Lab File: VW006298.D  
Acq: 23 Oct 2018 15:58

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 180     | 100   | 8194 |       |       |
| 182     | 94.8  | 75.5 | 113.3 |       |
| 145     | 30.7  | 24.5 | 36.7  |       |

