

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VW071423\  
 Data File : VW031704.D  
 Acq On : 14 Jul 2023 11:21  
 Operator : SY/MD  
 Sample : 03573-01  
 Misc : 25.0mL/MSVOA\_V/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-WATER-QT3-2023-05

Quant Time: Jul 15 05:35:46 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVTR071323WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Sat Jul 15 05:25:11 2023  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : John Carlone 07/17/2023  
 Supervised By : Mahesh Dadoda 07/17/2023

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) 1,4-Difluorobenzene        | 5.539  | 114   | 174136   | 5.000    | ug/L   | 0.00     |
| 28) Chlorobenzene-d5          | 8.789  | 117   | 193903   | 5.000    | ug/L   | 0.00     |
| 58) 1,4-Dichlorobenzene-d4    | 11.191 | 152   | 79793    | 5.000    | ug/L   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 4) Vinyl Chloride-d3          | 1.278  | 65    | 79780    | 5.173    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 40 - 130 | Recovery | =      | 103.400% |
| 7) Chloroethane-d5            | 1.532  | 69    | 74708    | 5.344    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 130 | Recovery | =      | 106.800% |
| 11) 1,1-Dichloroethene-d2     | 2.060  | 65    | 40922    | 5.171    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 125 | Recovery | =      | 103.400% |
| 20) 2-Butanone-d5             | 3.822  | 46    | 173006   | 43.913   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 40 - 130 | Recovery | =      | 87.820%  |
| 24) Chloroform-d              | 4.252  | 84    | 173460   | 5.280    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 105.600% |
| 26) 1,2-Dichloroethane-d4     | 4.947  | 65    | 84275    | 5.022    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 100.400% |
| 32) Benzene-d6                | 4.963  | 84    | 266768   | 4.819    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 125 | Recovery | =      | 96.400%  |
| 36) 1,2-Dichloropropane-d6    | 5.992  | 67    | 104291   | 5.083    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 60 - 140 | Recovery | =      | 101.600% |
| 41) Toluene-d8                | 7.249  | 98    | 201894   | 3.971    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 70 - 130 | Recovery | =      | 79.400%  |
| 43) trans-1,3-Dichloroprop... | 7.561  | 79    | 28666    | 4.424    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 55 - 130 | Recovery | =      | 88.400%  |
| 46) 2-Hexanone-d5             | 8.034  | 63    | 120121   | 39.915   | ug/L   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 45 - 130 | Recovery | =      | 79.820%  |
| 56) 1,1,2,2-Tetrachloroeth... | 10.159 | 84    | 71582    | 4.755    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 65 - 120 | Recovery | =      | 95.200%  |
| 66) 1,2-Dichlorobenzene-d4    | 11.567 | 152   | 73508    | 5.290    | ug/L   | 0.00     |
| Spiked Amount                 | 5.000  | Range | 80 - 120 | Recovery | =      | 105.800% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 1.108  | 85    | 4967     | 0.263    | ug/L   | 94       |
| 3) Chloromethane              | 1.214  | 50    | 5472     | 0.279    | ug/L   | 94       |
| 5) Vinyl chloride             | 1.281  | 62    | 6105     | 0.326    | ug/L # | 35       |
| 6) Bromomethane               | 1.487  | 94    | 3218     | 0.281    | ug/L   | 84       |
| 8) Chloroethane               | 1.548  | 64    | 3475m    | 0.320    | ug/L   |          |
| 9) Trichlorofluoromethane     | 1.712  | 101   | 7521     | 0.278    | ug/L   | 98       |
| 10) 1,1,2-Trichloro-1,2,2-... | 2.066  | 101   | 5684     | 0.383    | ug/L # | 80       |
| 12) 1,1-Dichloroethene        | 2.069  | 96    | 5027     | 0.370    | ug/L # | 1        |
| 13) Acetone                   | 2.150  | 43    | 9488m    | 3.785    | ug/L   |          |
| 14) Carbon disulfide          | 2.236  | 76    | 11395    | 0.270    | ug/L   | 98       |
| 15) Methyl Acetate            | 2.394  | 43    | 1199     | 0.224    | ug/L # | 84       |
| 16) Methylene chloride        | 2.449  | 84    | 7373     | 0.408    | ug/L   | 89       |
| 17) Methyl tert-butyl Ether   | 2.719  | 73    | 6384     | 0.256    | ug/L # | 81       |
| 18) trans-1,2-Dichloroethene  | 2.696  | 96    | 3612     | 0.307    | ug/L   | 81       |
| 19) 1,1-Dichloroethane        | 3.121  | 63    | 6190     | 0.241    | ug/L # | 81       |
| 22) cis-1,2-Dichloroethene    | 3.818  | 96    | 2996     | 0.258    | ug/L   | 93       |
| 23) Bromochloromethane        | 4.156  | 128   | 1586m    | 0.271    | ug/L   |          |
| 27) 1,2-Dichloroethane        | 5.063  | 62    | 4320     | 0.272    | ug/L # | 89       |
| 29) 1,1,1-Trichloroethane     | 4.516  | 97    | 5965     | 0.255    | ug/L # | 85       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV071423\  
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 Sample : 03573-01  
 Misc : 25.0mL/MSVOA\_V/WATER  
 ALS Vial : 5 Sample Multiplier: 1

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 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_V\Method\SFAMVTR071323WMA.M  
 Quant Title : TRACE VOA SFAM1.0  
 QLast Update : Sat Jul 15 05:25:11 2023  
 Response via : Initial Calibration

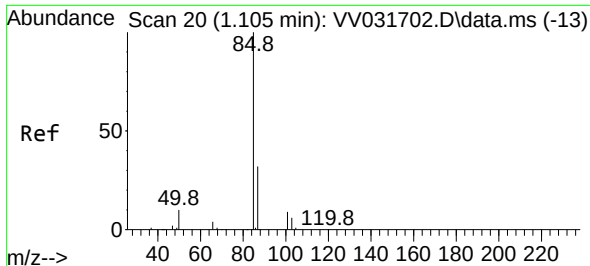
Manual Integrations  
 APPROVED

Reviewed By :John Carlone 07/17/2023  
 Supervised By :Mahesh Dadoda 07/17/2023

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 30) Cyclohexane               | 4.587  | 56   | 3932     | 0.231 | ug/L # | 84       |
| 31) Carbon tetrachloride      | 4.741  | 117  | 5527     | 0.267 | ug/L   | 93       |
| 33) Benzene                   | 5.014  | 78   | 12000    | 0.244 | ug/L   | 100      |
| 34) Trichloroethene           | 5.844  | 95   | 3359     | 0.240 | ug/L   | 90       |
| 35) Methylcyclohexane         | 6.050  | 83   | 3322     | 0.192 | ug/L # | 82       |
| 37) 1,2-Dichloropropane       | 6.104  | 63   | 4433     | 0.314 | ug/L # | 97       |
| 38) Bromodichloromethane      | 6.442  | 83   | 4831     | 0.257 | ug/L # | 87       |
| 39) cis-1,3-Dichloropropene   | 6.969  | 75   | 1997     | 0.113 | ug/L   | 84       |
| 40) 4-Methyl-2-pentanone      | 7.175  | 43   | 13019m   | 1.723 | ug/L   |          |
| 42) Toluene                   | 7.326  | 91   | 12159    | 0.256 | ug/L   | 96       |
| 44) trans-1,3-Dichloropropene | 7.593  | 75   | 3874     | 0.252 | ug/L # | 69       |
| 45) 1,1,2-Trichloroethane     | 7.783  | 97   | 2635     | 0.251 | ug/L # | 87       |
| 47) Tetrachloroethene         | 7.908  | 164  | 2462     | 0.255 | ug/L # | 55       |
| 48) 2-Hexanone                | 8.091  | 43   | 23793m   | 4.297 | ug/L   |          |
| 49) Dibromochloromethane      | 8.185  | 129  | 2579     | 0.229 | ug/L   | 93       |
| 50) 1,2-Dibromoethane         | 8.300  | 107  | 2707     | 0.276 | ug/L # | 90       |
| 51) Chlorobenzene             | 8.821  | 112  | 8464     | 0.270 | ug/L # | 79       |
| 52) Ethylbenzene              | 8.956  | 91   | 8511     | 0.180 | ug/L   | 95       |
| 53) m,p-Xylene                | 9.082  | 106  | 3331     | 0.191 | ug/L   | 99       |
| 54) o-Xylene                  | 9.490  | 106  | 2538     | 0.157 | ug/L   | 61       |
| 55) Styrene                   | 9.506  | 104  | 3935     | 0.129 | ug/L   | 88       |
| 57) 1,1,2,2-Tetrachloroethane | 10.185 | 83   | 3094     | 0.278 | ug/L # | 96       |
| 59) Bromoform                 | 9.670  | 173  | 1533     | 0.288 | ug/L # | 46       |
| 60) Isopropylbenzene          | 9.876  | 105  | 7975     | 0.226 | ug/L # | 87       |
| 61) 1,2,3-Trichloropropane    | 10.214 | 75   | 2458     | 0.347 | ug/L # | 87       |
| 62) 1,3,5-Trimethylbenzene    | 10.484 | 105  | 6923     | 0.243 | ug/L   | 96       |
| 63) 1,2,4-Trimethylbenzene    | 10.863 | 105  | 6653     | 0.234 | ug/L   | 93       |
| 64) 1,3-Dichlorobenzene       | 11.127 | 146  | 4838     | 0.254 | ug/L   | 89       |
| 65) 1,4-Dichlorobenzene       | 11.214 | 146  | 5443     | 0.270 | ug/L # | 88       |
| 67) 1,2-Dichlorobenzene       | 11.583 | 146  | 5200     | 0.285 | ug/L   | 98       |
| 68) 1,2-Dibromo-3-chloropr... | 12.371 | 75   | 347      | 0.238 | ug/L # | 64       |
| 69) 1,3,5-Trichlorobenzene    | 12.590 | 180  | 3826     | 0.275 | ug/L # | 89       |
| 70) 1,2,4-trichlorobenzene    | 13.204 | 180  | 2859     | 0.259 | ug/L # | 17       |
| 71) Naphthalene               | 13.455 | 128  | 4388     | 0.246 | ug/L   | 97       |
| 72) 1,2,3-Trichlorobenzene    | 13.686 | 180  | 2554     | 0.251 | ug/L   | 93       |

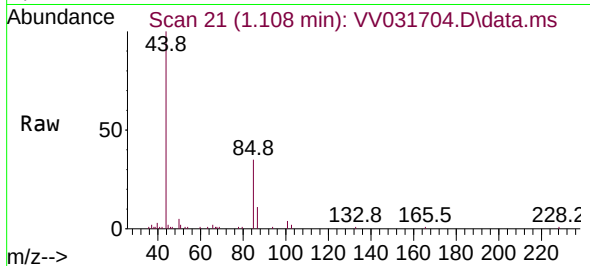
(#) = qualifier out of range (m) = manual integration (+) = signals summed





#2  
Dichlorodifluoromethane  
Concen: 0.263 ug/L  
RT: 1.108 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

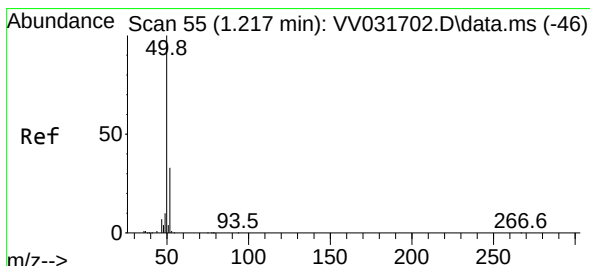
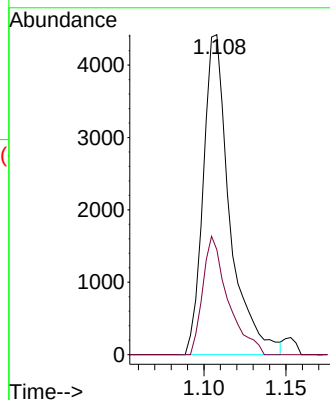
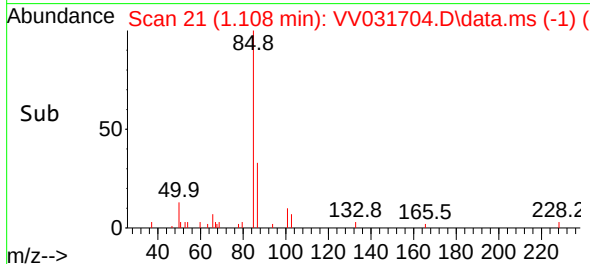
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion: 85 Resp: 496  
Ion Ratio Lower Upper  
85 100  
87 35.1 25.5 38.3

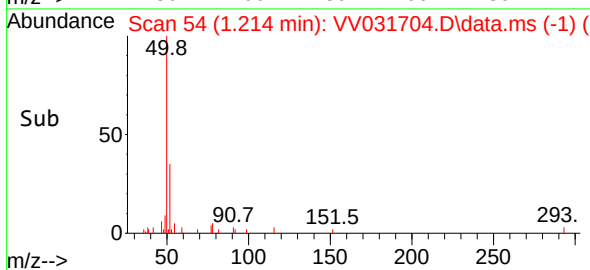
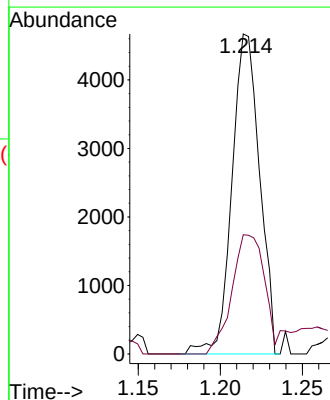
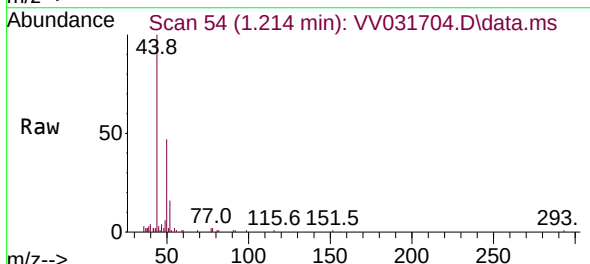
Manual Integrations  
APPROVED

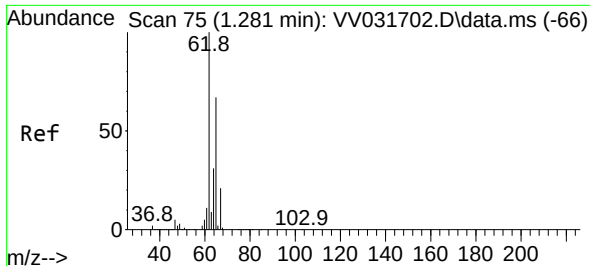
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#3  
Chloromethane  
Concen: 0.279 ug/L  
RT: 1.214 min Scan# 54  
Delta R.T. -0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

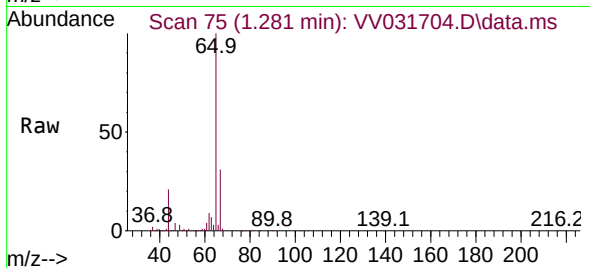
Tgt Ion: 50 Resp: 5472  
Ion Ratio Lower Upper  
50 100  
52 37.3 23.5 43.7





#5  
 Vinyl chloride  
 Concen: 0.326 ug/L  
 RT: 1.281 min Scan# 75  
 Delta R.T. 0.000 min  
 Lab File: VV031704.D  
 Acq: 14 Jul 2023 11:21

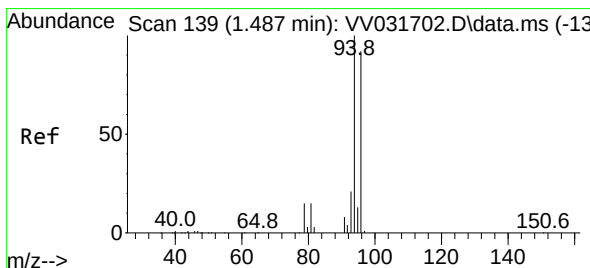
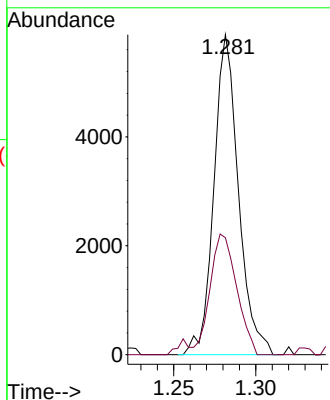
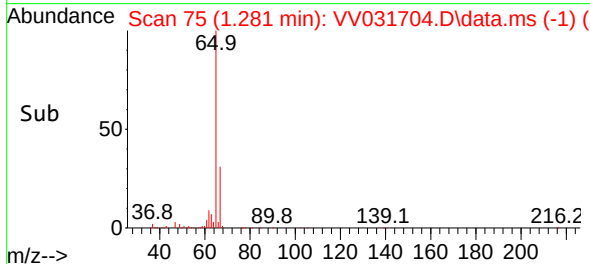
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-WATER-QT3-2023-05



Tgt Ion: 62 Resp: 610  
 Ion Ratio Lower Upper  
 62 100  
 64 36.5 71.7 133.1

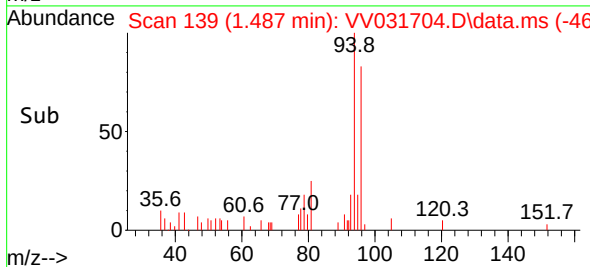
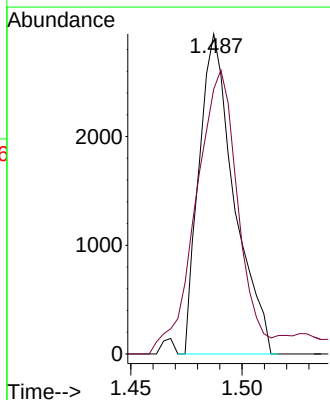
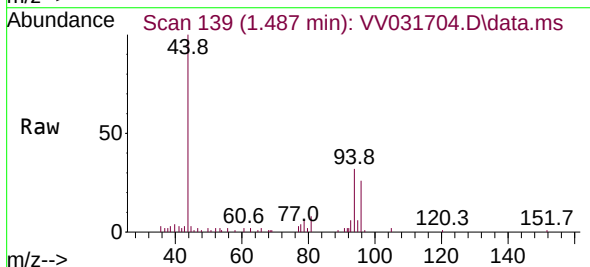
Manual Integrations  
 APPROVED

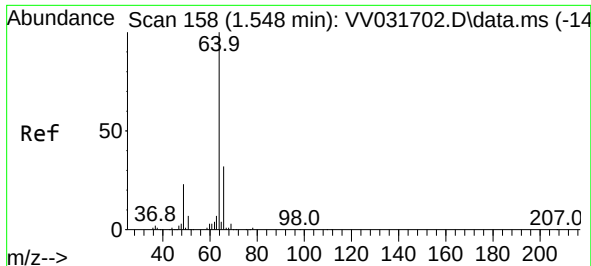
Reviewed By :John Carlone 07/17/2023  
 Supervised By :Mahesh Dadoda 07/17/2023



#6  
 Bromomethane  
 Concen: 0.281 ug/L  
 RT: 1.487 min Scan# 139  
 Delta R.T. 0.000 min  
 Lab File: VV031704.D  
 Acq: 14 Jul 2023 11:21

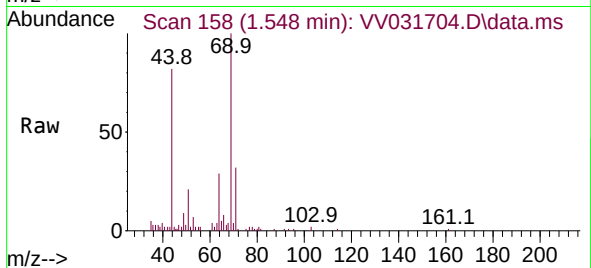
Tgt Ion: 94 Resp: 3218  
 Ion Ratio Lower Upper  
 94 100  
 96 82.7 69.4 128.8





#8  
Chloroethane  
Concen: 0.320 ug/L m  
RT: 1.548 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

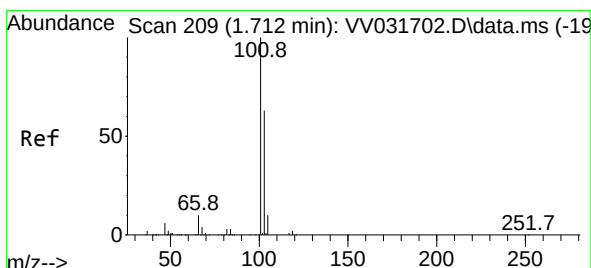
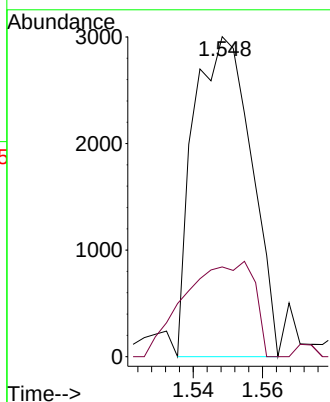
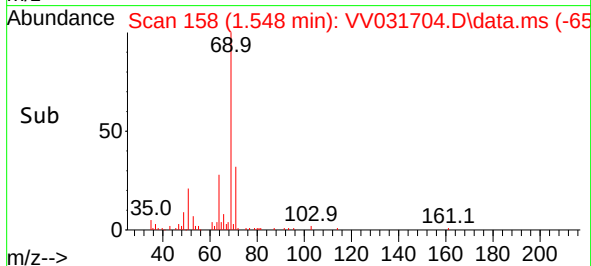
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion: 64 Resp: 347  
Ion Ratio Lower Upper  
64 100  
66 161.0 23.0 42.6

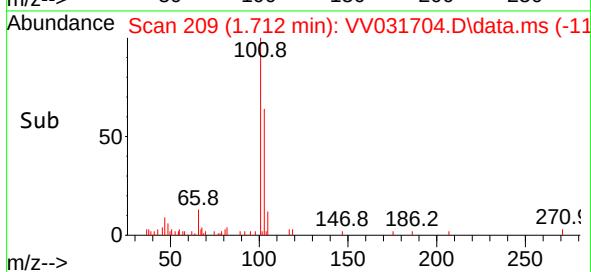
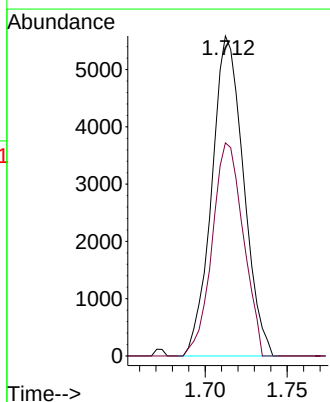
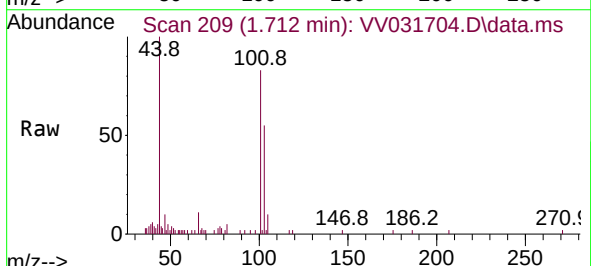
Manual Integrations  
APPROVED

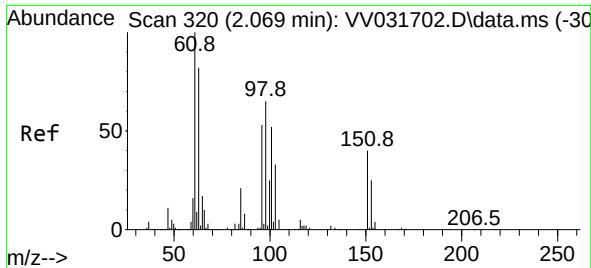
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#9  
Trichlorofluoromethane  
Concen: 0.278 ug/L  
RT: 1.712 min Scan# 209  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion:101 Resp: 7521  
Ion Ratio Lower Upper  
101 100  
103 65.0 51.0 76.6





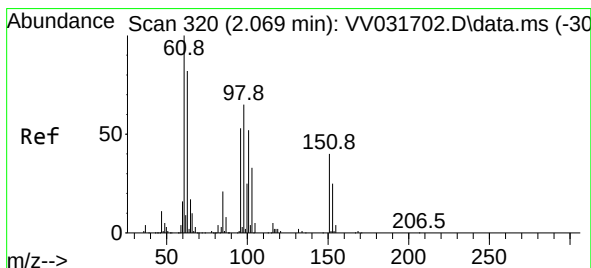
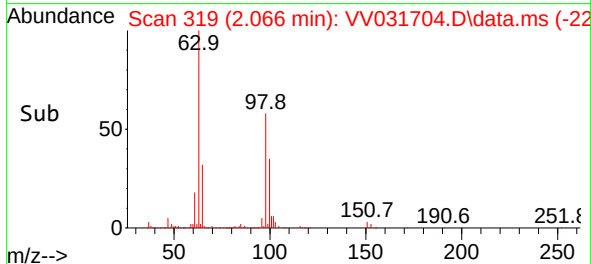
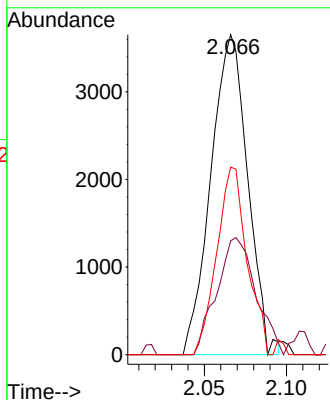
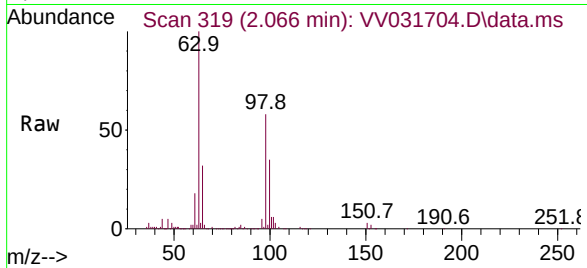
#10  
 1,1,2-Trichloro-1,2,2-trifluoroethane  
 Concen: 0.383 ug/L  
 RT: 2.066 min Scan# 31  
 Delta R.T. -0.003 min  
 Lab File: VV031704.D  
 Acq: 14 Jul 2023 11:21

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-WATER-QT3-2023-05

Tgt Ion:101 Resp: 5684  
 Ion Ratio Lower Upper  
 101 100  
 85 38.9 36.2 54.2  
 151 48.3 56.6 84.8

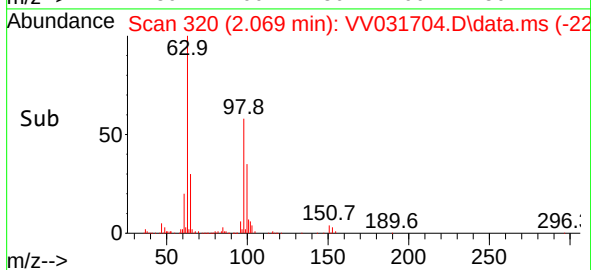
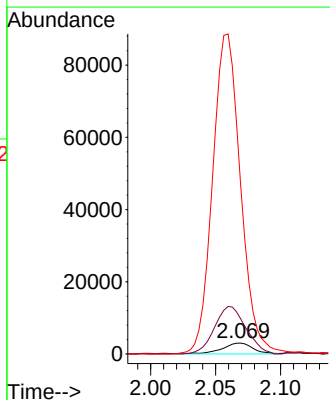
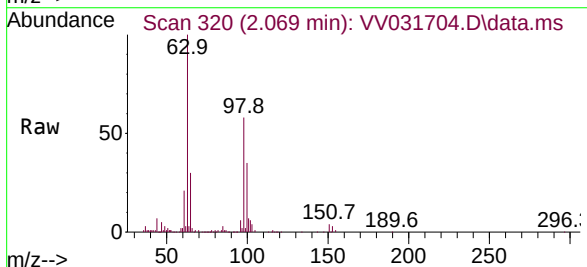
Manual Integrations  
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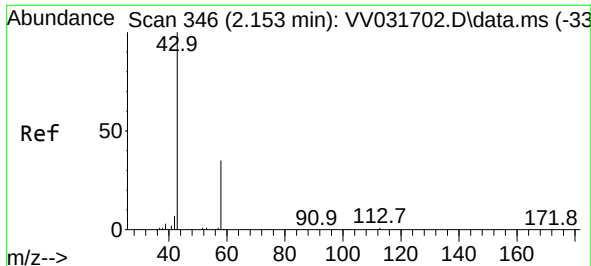
Reviewed By :John Carlone 07/17/2023  
 Supervised By :Mahesh Dadoda 07/17/2023



#12  
 1,1-Dichloroethene  
 Concen: 0.370 ug/L  
 RT: 2.069 min Scan# 320  
 Delta R.T. 0.000 min  
 Lab File: VV031704.D  
 Acq: 14 Jul 2023 11:21

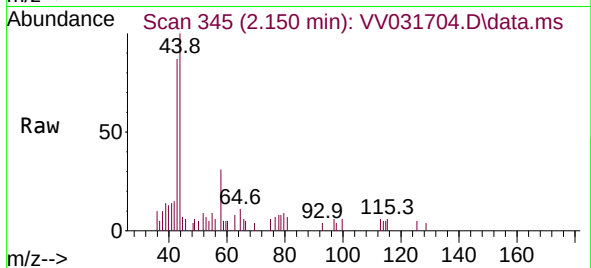
Tgt Ion: 96 Resp: 5027  
 Ion Ratio Lower Upper  
 96 100  
 61 252.4 131.3 243.9#  
 63 1216.5 112.6 209.2#





#13  
Acetone  
Concen: 3.785 ug/L m  
RT: 2.150 min Scan# 346  
Delta R.T. -0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

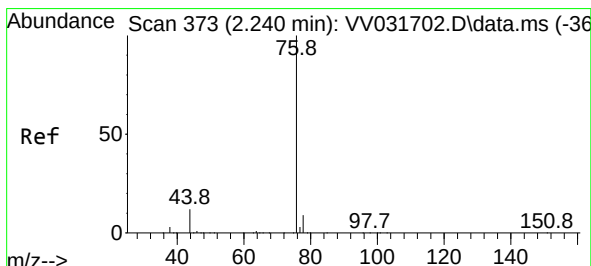
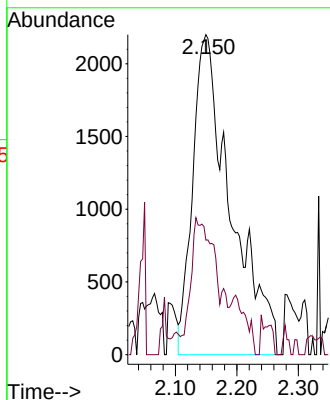
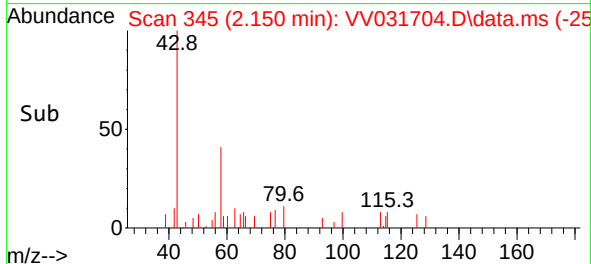
Instrument : MSVOA\_V  
ClientSampleId : MDL-WATER-QT3-2023-05



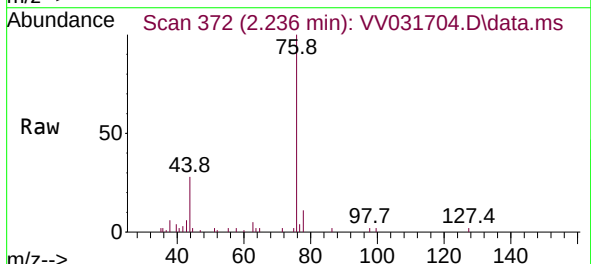
Tgt Ion: 43 Resp: 948  
Ion Ratio Lower Upper  
43 100  
58 20.5 0.0 64.6

Manual Integrations  
APPROVED

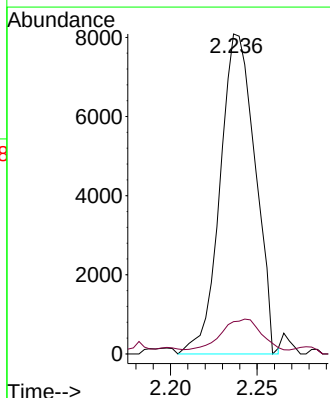
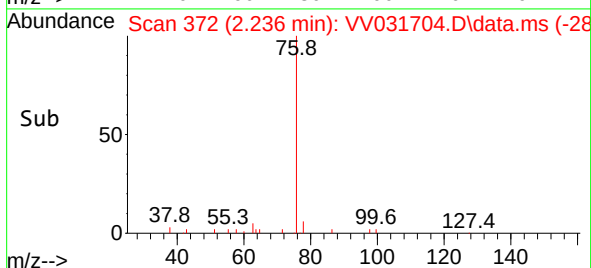
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



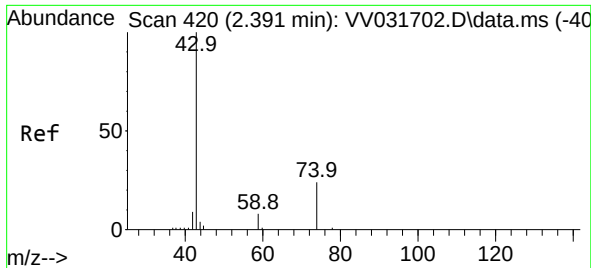
#14  
Carbon disulfide  
Concen: 0.270 ug/L  
RT: 2.236 min Scan# 372  
Delta R.T. -0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21



Tgt Ion: 76 Resp: 11395  
Ion Ratio Lower Upper  
76 100  
78 10.1 7.4 11.2

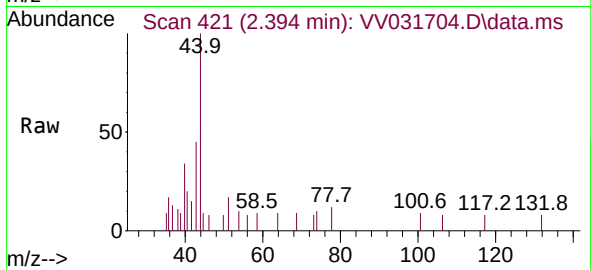






#15  
Methyl Acetate  
Concen: 0.224 ug/L  
RT: 2.394 min Scan# 420  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

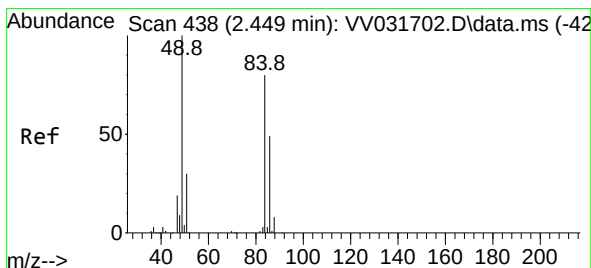
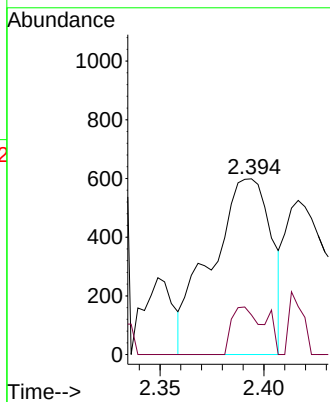
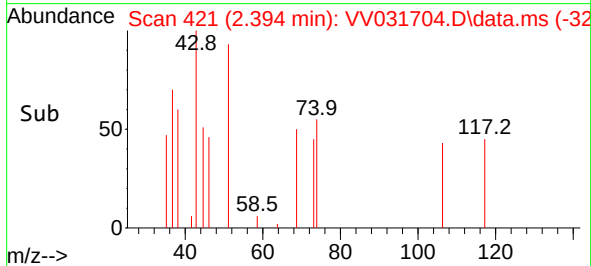
Instrument : MSVOA\_V  
Client Sample Id : MDL-WATER-QT3-2023-05



Tgt Ion: 43 Resp: 1199  
Ion Ratio Lower Upper  
43 100  
74 15.0 18.0 27.0

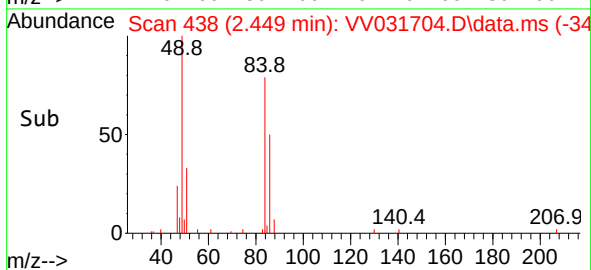
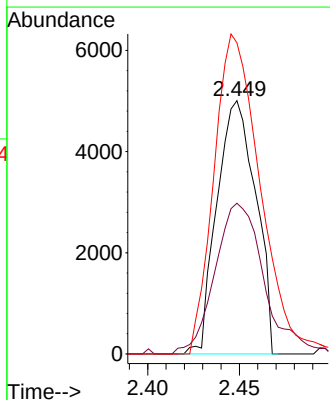
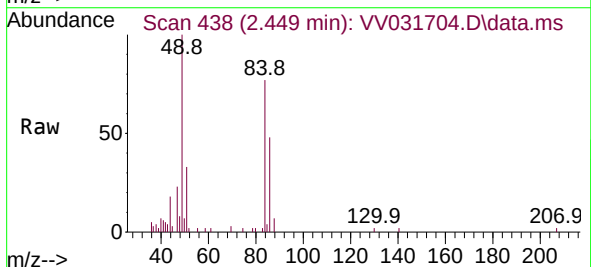
Manual Integrations  
APPROVED

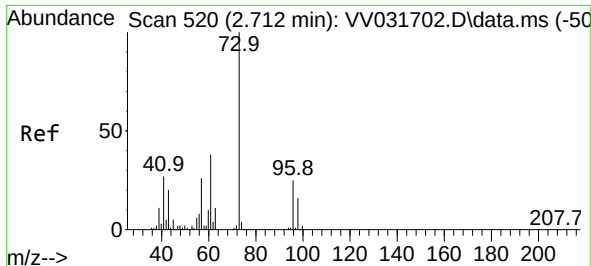
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#16  
Methylene chloride  
Concen: 0.408 ug/L  
RT: 2.449 min Scan# 438  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

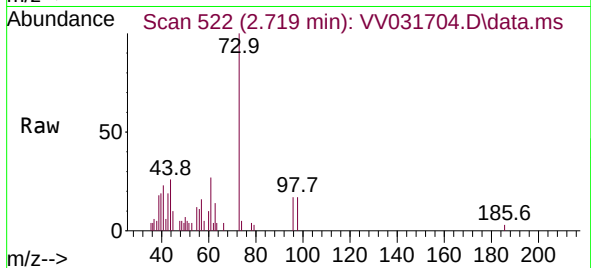
Tgt Ion: 84 Resp: 7373  
Ion Ratio Lower Upper  
84 100  
86 59.5 46.3 86.1  
49 130.9 101.8 189.0





#17  
Methyl tert-butyl Ether  
Concen: 0.256 ug/L  
RT: 2.719 min Scan# 517  
Delta R.T. 0.007 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

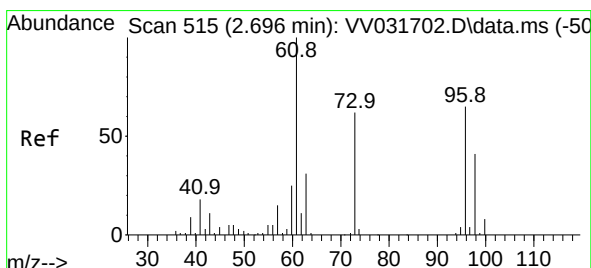
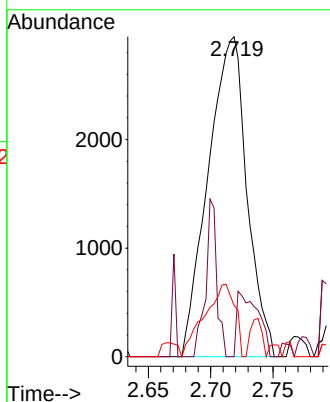
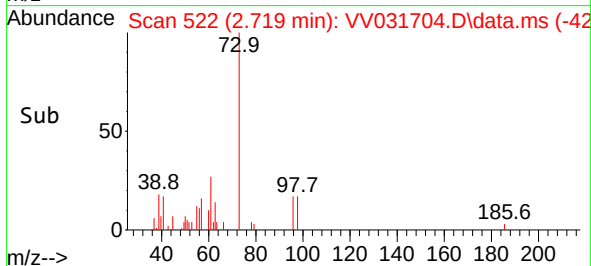
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion: 73 Resp: 6384  
Ion Ratio Lower Upper  
73 100  
43 11.0 18.1 27.1  
57 17.8 19.6 29.4

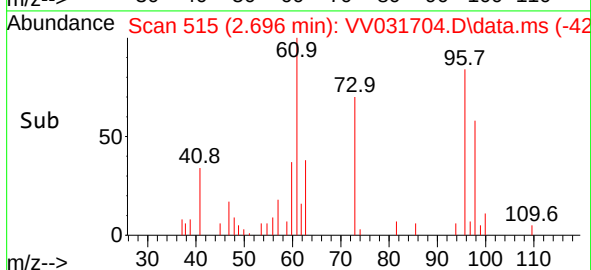
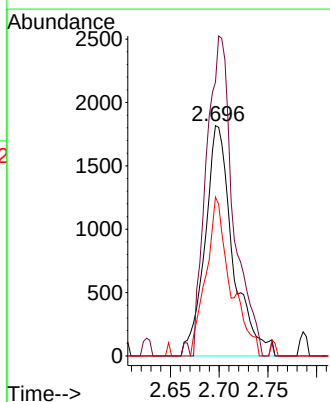
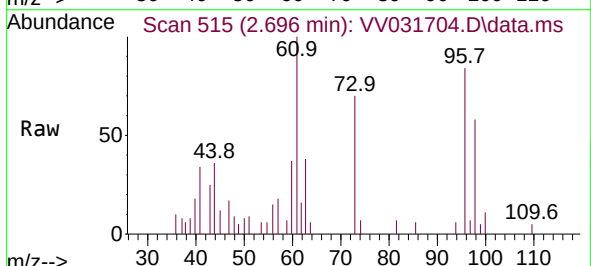
Manual Integrations  
APPROVED

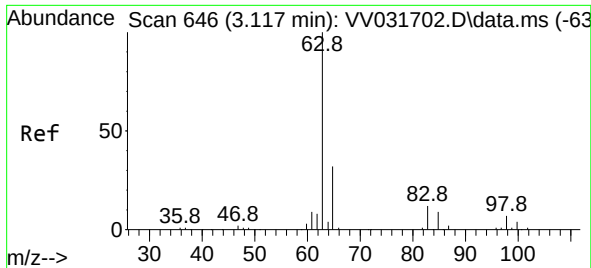
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#18  
trans-1,2-Dichloroethene  
Concen: 0.307 ug/L  
RT: 2.696 min Scan# 515  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion: 96 Resp: 3612  
Ion Ratio Lower Upper  
96 100  
61 118.9 105.5 195.9  
98 69.0 45.4 84.2





#19

1,1-Dichloroethane

Concen: 0.241 ug/L

RT: 3.121 min Scan# 64

Delta R.T. 0.003 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

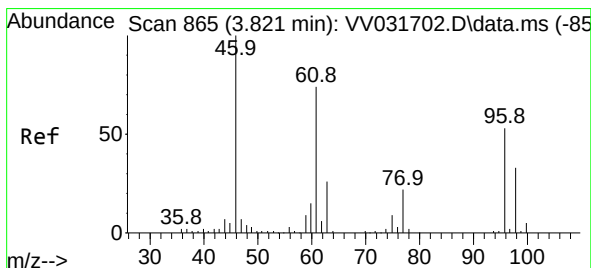
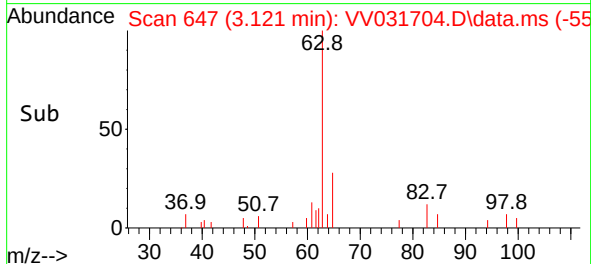
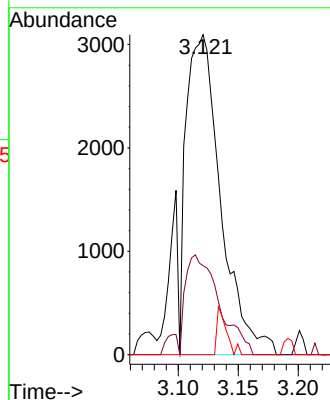
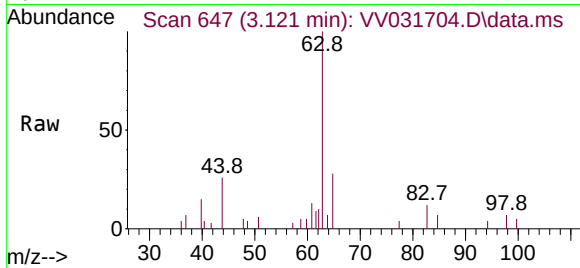
|             |             |
|-------------|-------------|
| Tgt Ion: 63 | Resp: 6190  |
| Ion Ratio   | Lower Upper |
| 63 100      |             |
| 65 26.0     | 23.4 43.6   |
| 83 0.0      | 9.4 17.4    |

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#22

cis-1,2-Dichloroethene

Concen: 0.258 ug/L

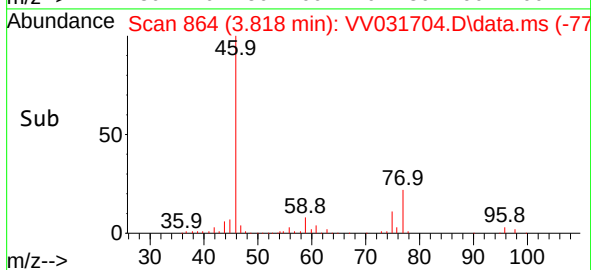
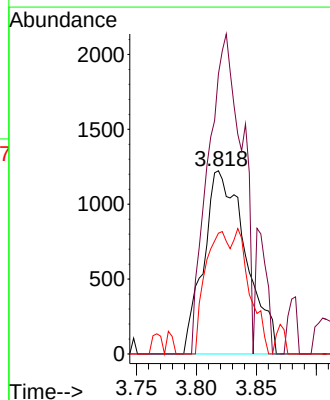
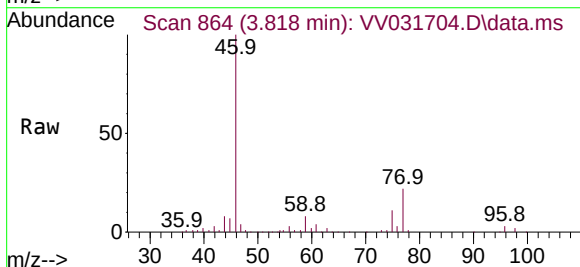
RT: 3.818 min Scan# 864

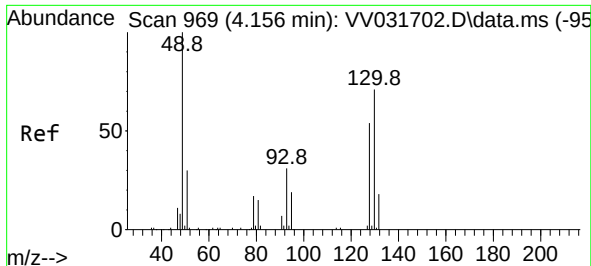
Delta R.T. -0.003 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

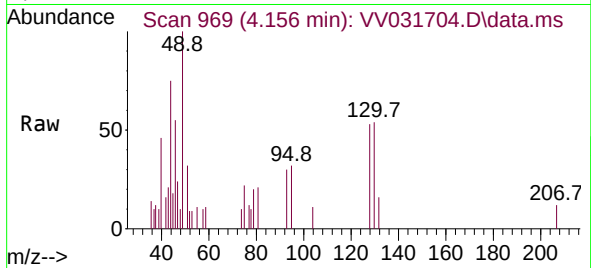
|             |             |
|-------------|-------------|
| Tgt Ion: 96 | Resp: 2996  |
| Ion Ratio   | Lower Upper |
| 96 100      |             |
| 61 152.9    | 99.4 184.6  |
| 98 66.0     | 45.1 83.7   |





#23  
Bromochloromethane  
Concen: 0.271 ug/L m  
RT: 4.156 min Scan# 969  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

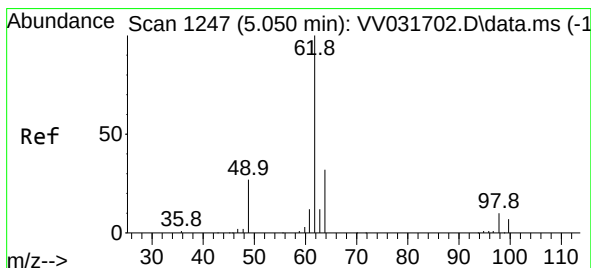
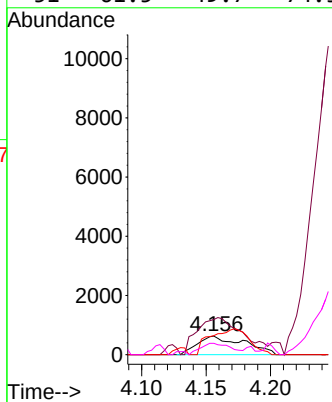
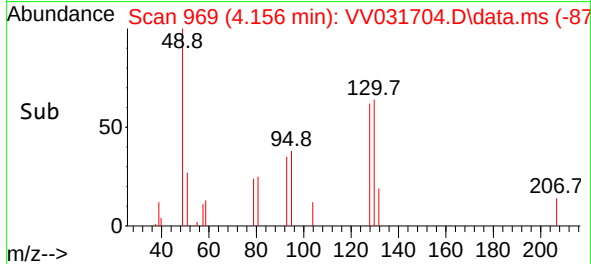
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion:128 Resp: 1580  
Ion Ratio Lower Upper  
128 100  
49 189.3 136.1 252.7  
130 102.5 91.3 169.5  
51 61.5 49.7 74.5

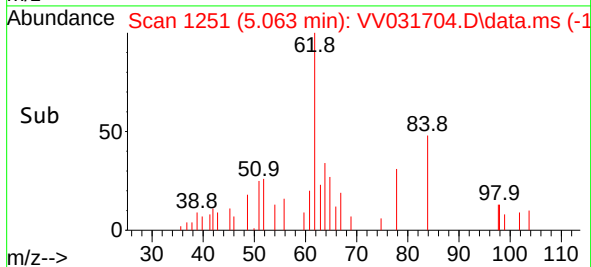
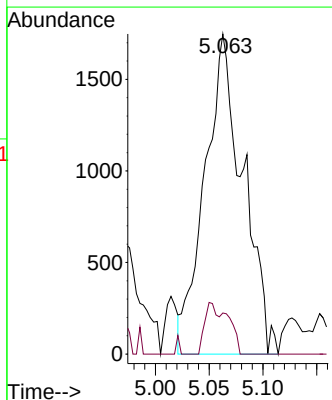
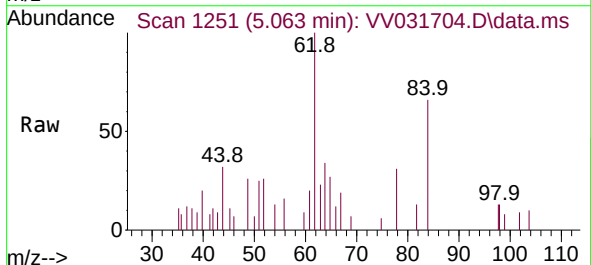
Manual Integrations  
APPROVED

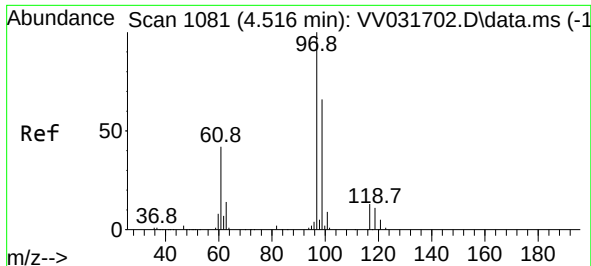
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#27  
1,2-Dichloroethane  
Concen: 0.272 ug/L  
RT: 5.063 min Scan# 1251  
Delta R.T. 0.013 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion: 62 Resp: 4320  
Ion Ratio Lower Upper  
62 100  
98 12.8 7.0 10.4#





#29

1,1,1-Trichloroethane

Concen: 0.255 ug/L

RT: 4.516 min Scan# 1081

Delta R.T. 0.000 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

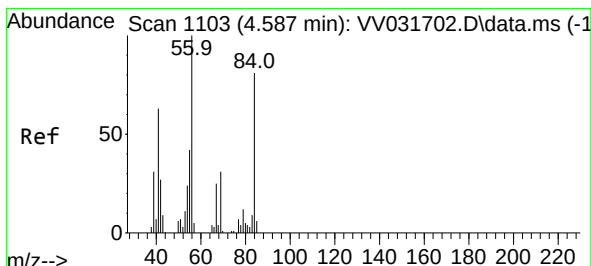
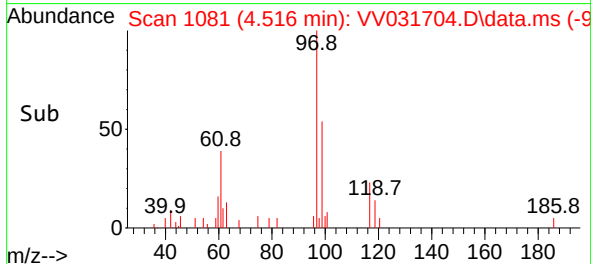
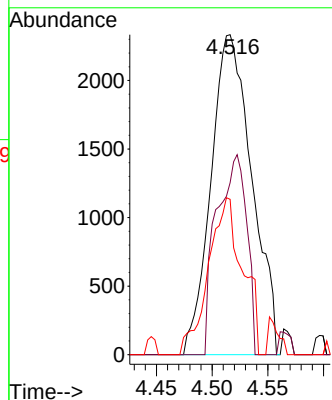
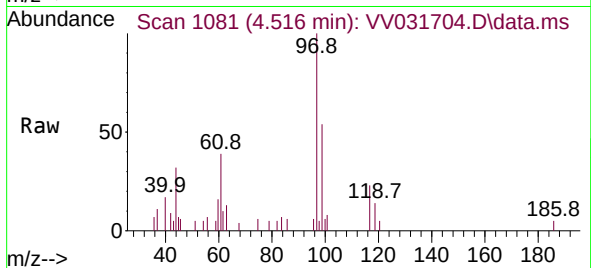
|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 596   |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 99 45.9     | 50.4 75.6   |
| 61 40.9     | 35.6 53.4   |

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#30

Cyclohexane

Concen: 0.231 ug/L

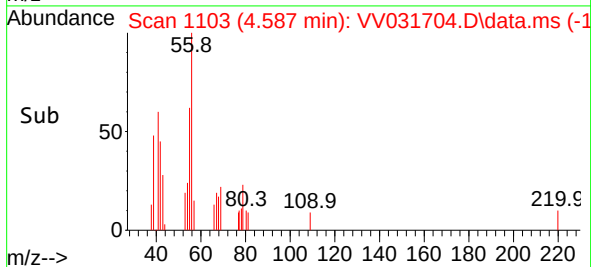
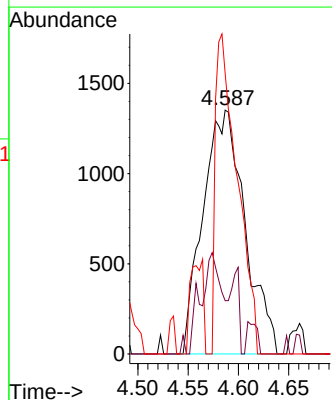
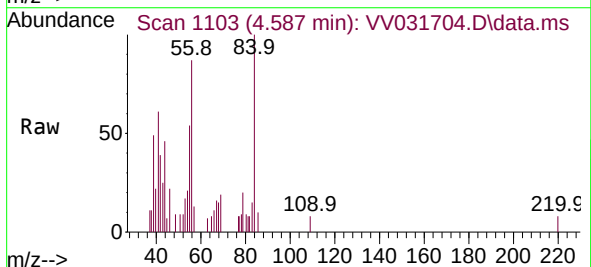
RT: 4.587 min Scan# 1103

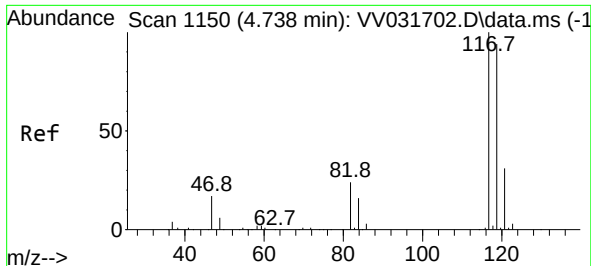
Delta R.T. 0.000 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

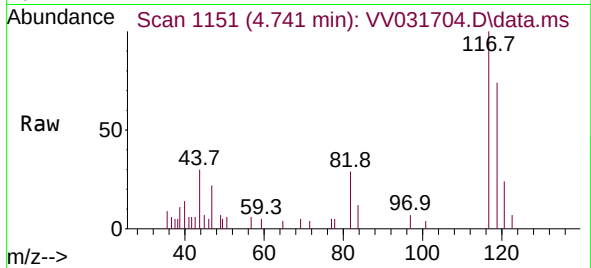
|             |             |
|-------------|-------------|
| Tgt Ion: 56 | Resp: 3932  |
| Ion Ratio   | Lower Upper |
| 56 100      |             |
| 69 14.6     | 22.9 34.3   |
| 84 67.7     | 62.7 94.1   |





#31  
Carbon tetrachloride  
Concen: 0.267 ug/L  
RT: 4.741 min Scan# 1150  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

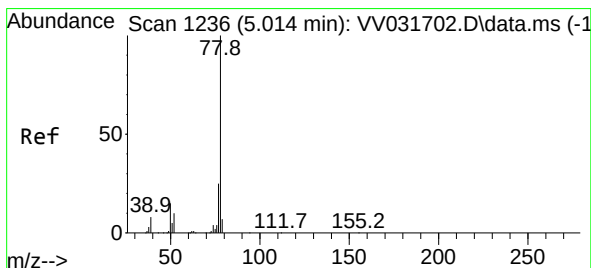
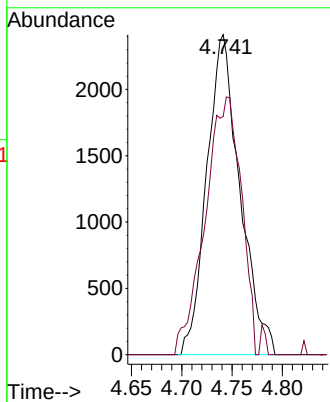
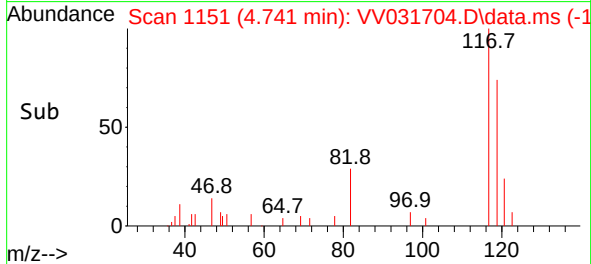
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion:117 Resp: 552  
Ion Ratio Lower Upper  
117 100  
119 87.9 76.1 114.1

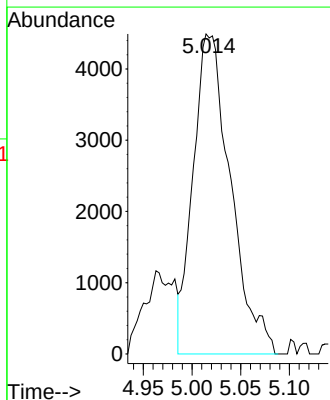
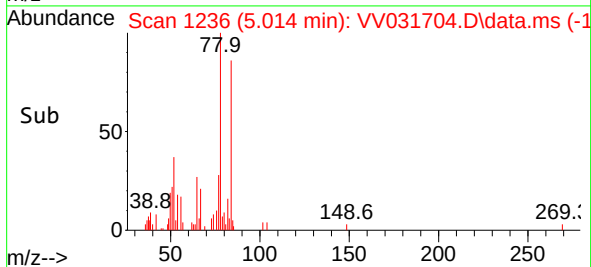
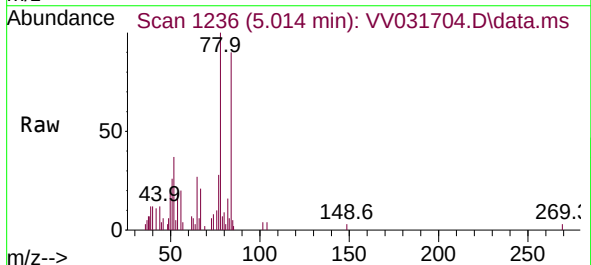
Manual Integrations  
APPROVED

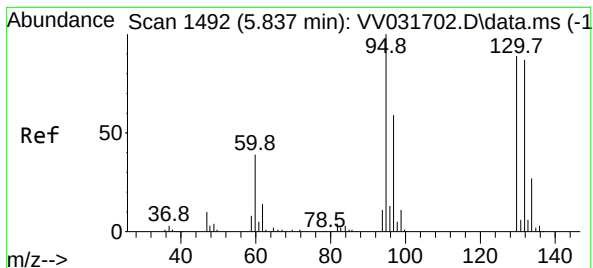
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#33  
Benzene  
Concen: 0.244 ug/L  
RT: 5.014 min Scan# 1236  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion: 78 Resp: 12000





#34

Trichloroethene

Concen: 0.240 ug/L

RT: 5.844 min Scan# 1492

Delta R.T. 0.006 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

Tgt Ion: 95 Resp: 3358

Ion Ratio Lower Upper

95 100

97 55.5 43.3 80.5

132 81.3 58.3 108.3

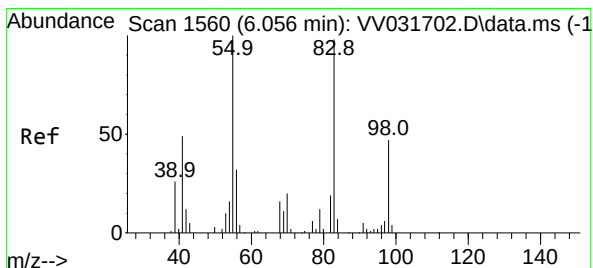
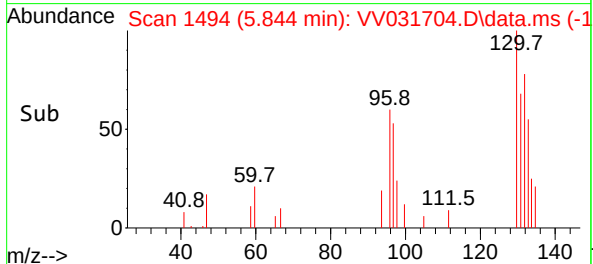
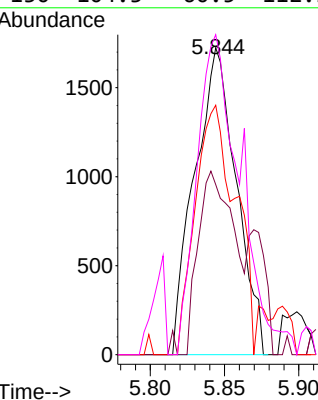
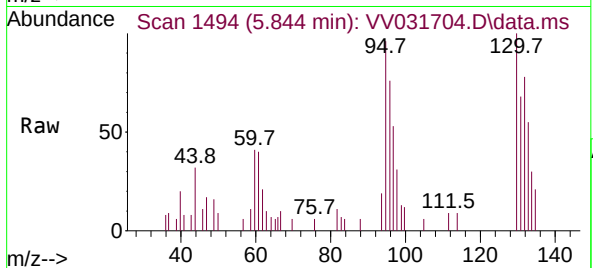
130 104.3 60.5 112.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#35

Methylcyclohexane

Concen: 0.192 ug/L

RT: 6.050 min Scan# 1558

Delta R.T. -0.006 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

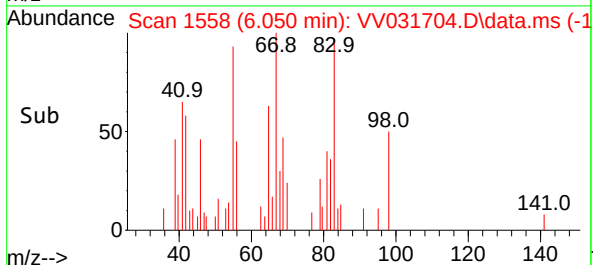
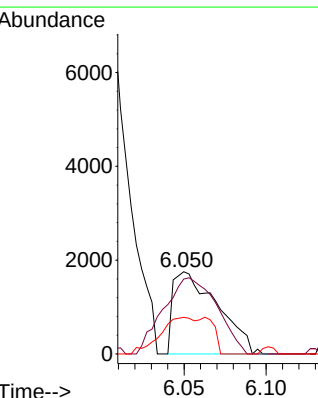
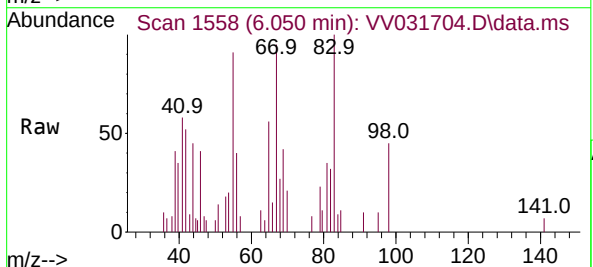
Tgt Ion: 83 Resp: 3322

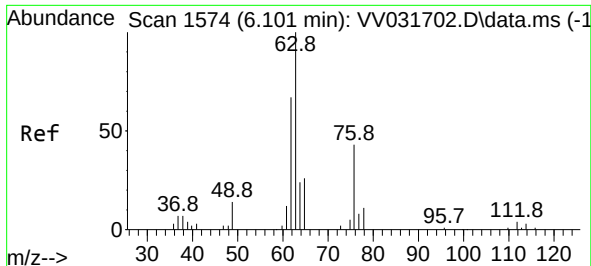
Ion Ratio Lower Upper

83 100

55 110.7 73.8 110.6#

98 34.0 35.1 52.7#





#37

1,2-Dichloropropane

Concen: 0.314 ug/L

RT: 6.104 min Scan# 1574

Delta R.T. 0.003 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

Tgt Ion: 63 Resp: 443

Ion Ratio Lower Upper

63 100

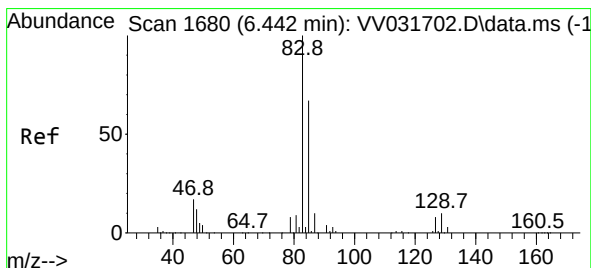
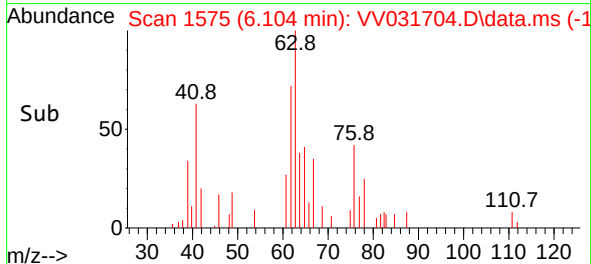
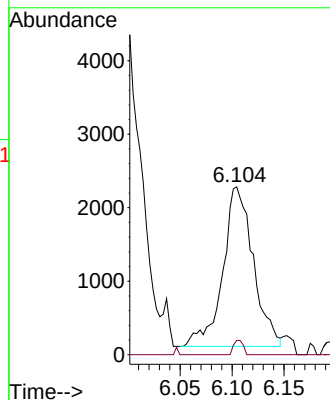
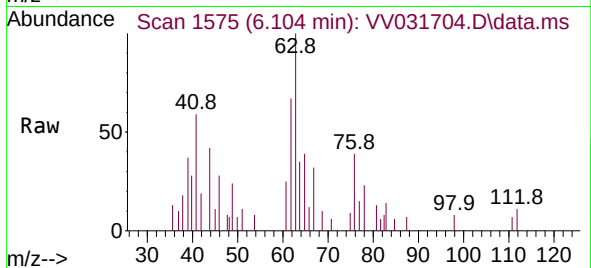
112 2.8 1.4 2.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#38

Bromodichloromethane

Concen: 0.257 ug/L

RT: 6.442 min Scan# 1680

Delta R.T. 0.000 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

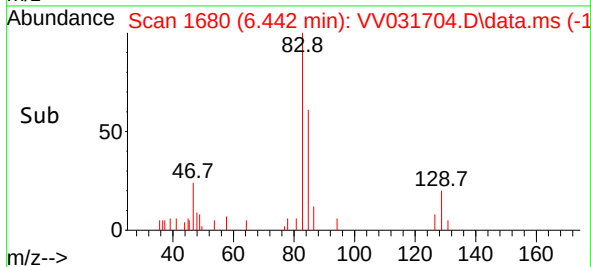
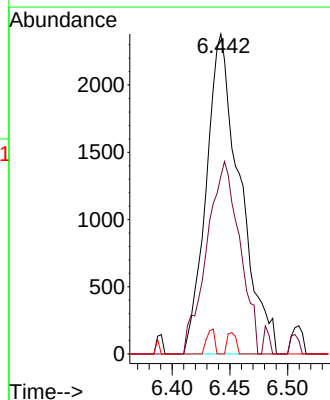
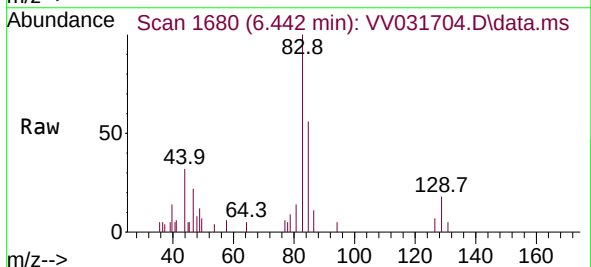
Tgt Ion: 83 Resp: 4831

Ion Ratio Lower Upper

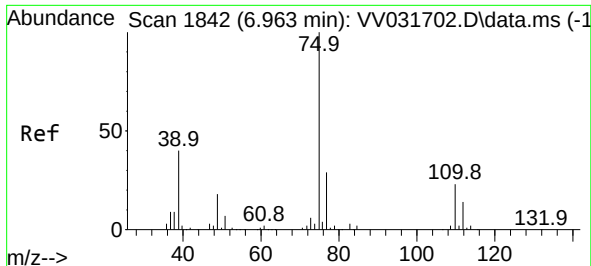
83 100

85 55.5 45.5 84.5

127 0.0 6.9 10.3







#39

cis-1,3-Dichloropropene

Concen: 0.113 ug/L

RT: 6.969 min Scan# 1842

Delta R.T. 0.007 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

Tgt Ion: 75 Resp: 199

Ion Ratio Lower Upper

75 100

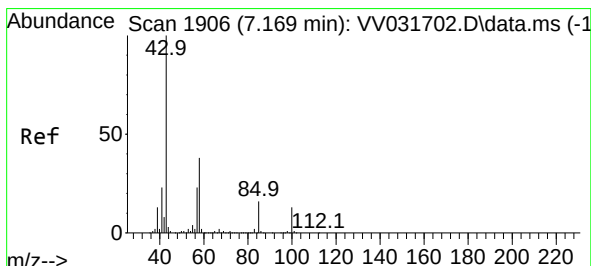
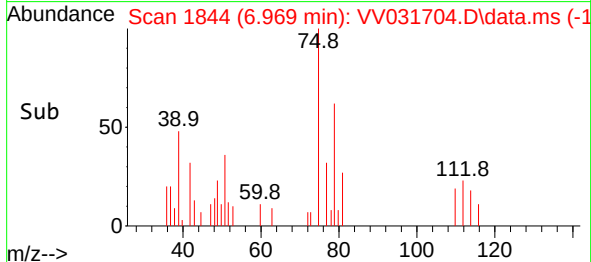
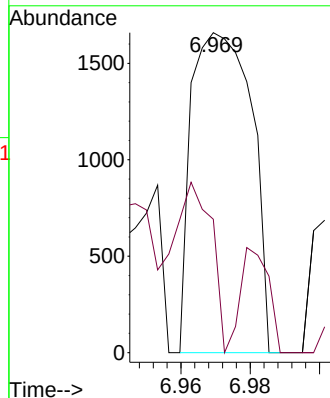
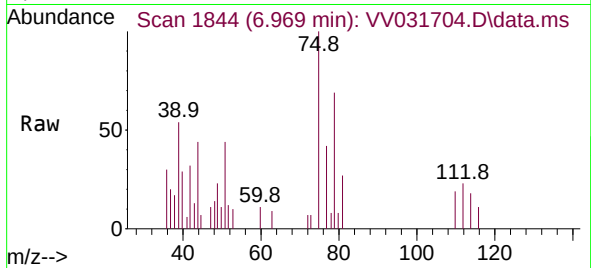
77 41.7 23.0 42.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#40

4-Methyl-2-pentanone

Concen: 1.723 ug/L m

RT: 7.175 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

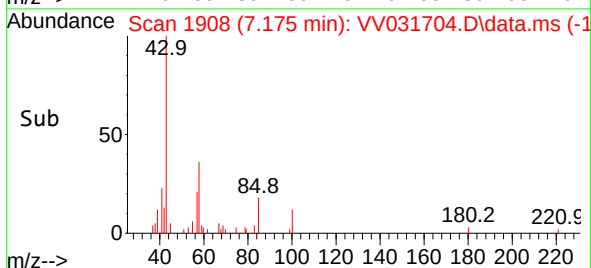
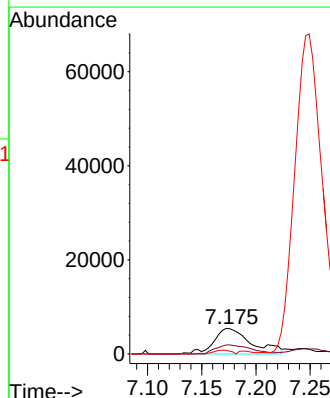
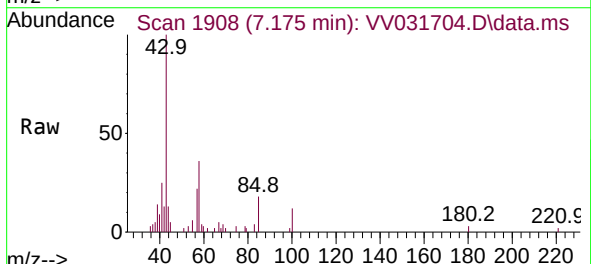
Tgt Ion: 43 Resp: 13019

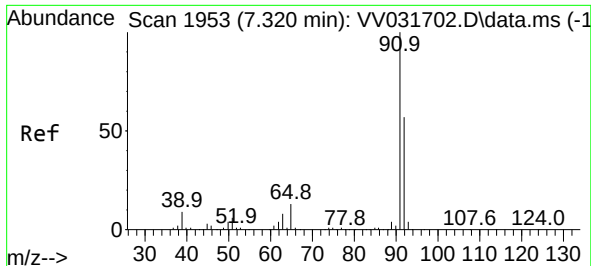
Ion Ratio Lower Upper

43 100

58 33.4 30.3 45.5

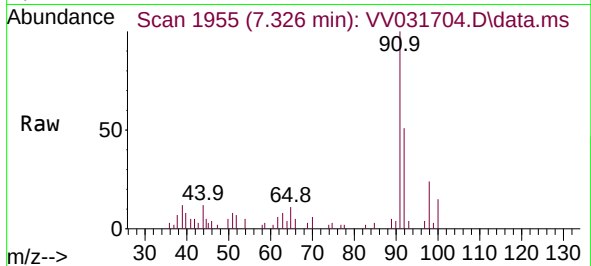
100 0.0 9.7 14.5#





#42  
Toluene  
Concen: 0.256 ug/L  
RT: 7.326 min Scan# 1953  
Delta R.T. 0.007 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

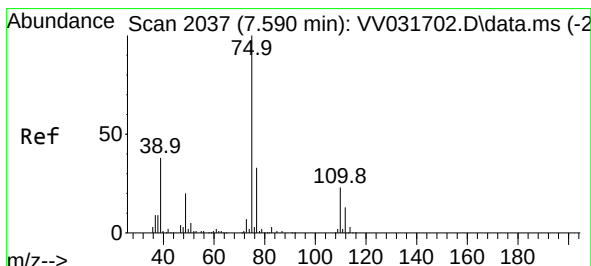
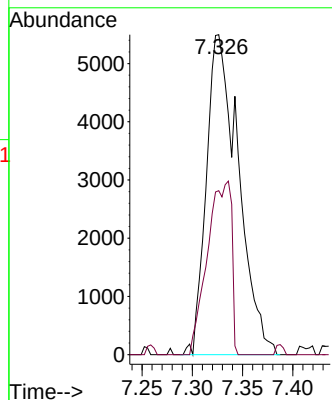
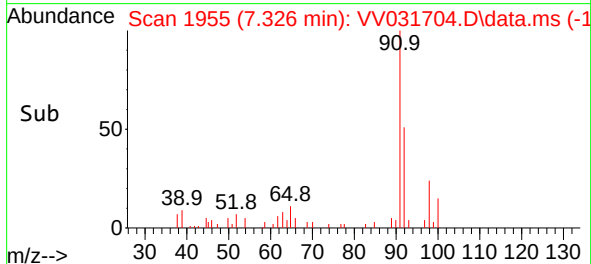
Instrument : MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion: 91 Resp: 1215  
Ion Ratio Lower Upper  
91 100  
92 51.3 38.1 70.7

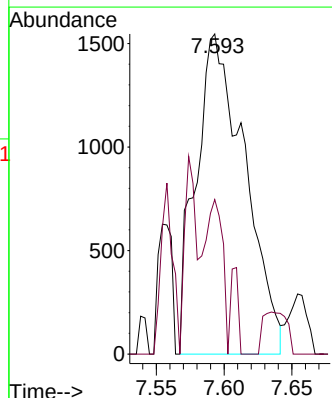
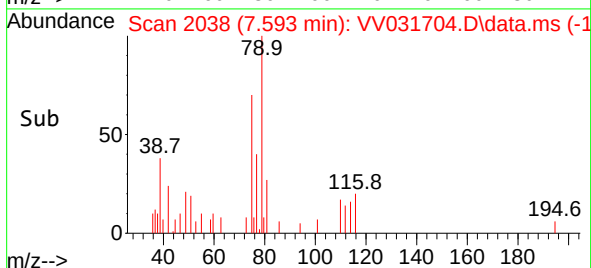
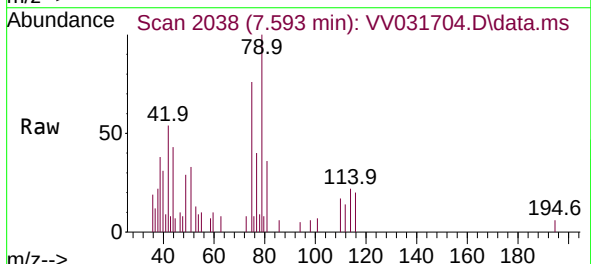
Manual Integrations  
APPROVED

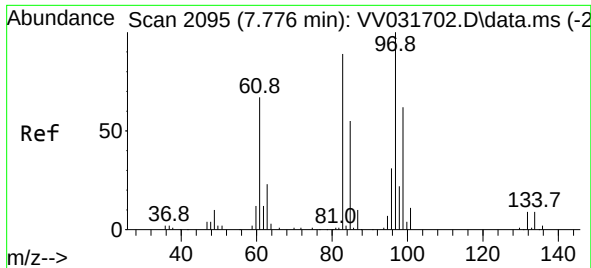
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#44  
trans-1,3-Dichloropropene  
Concen: 0.252 ug/L  
RT: 7.593 min Scan# 2038  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

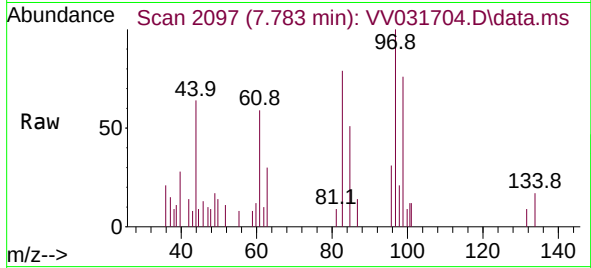
Tgt Ion: 75 Resp: 3874  
Ion Ratio Lower Upper  
75 100  
77 48.3 21.7 40.3#





#45  
1,1,2-Trichloroethane  
Concen: 0.251 ug/L  
RT: 7.783 min Scan# 2095  
Delta R.T. 0.007 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

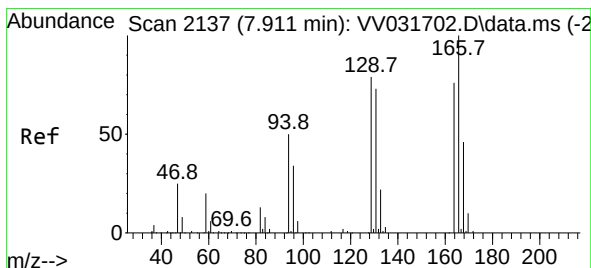
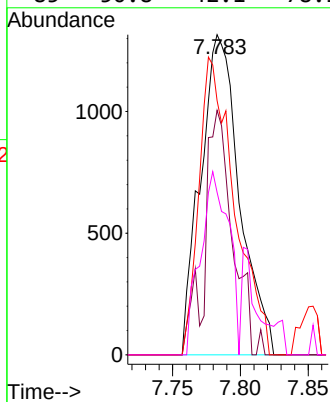
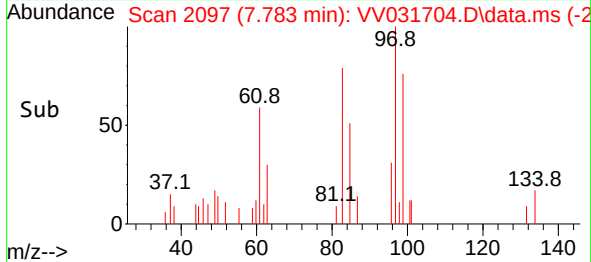
Instrument : MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



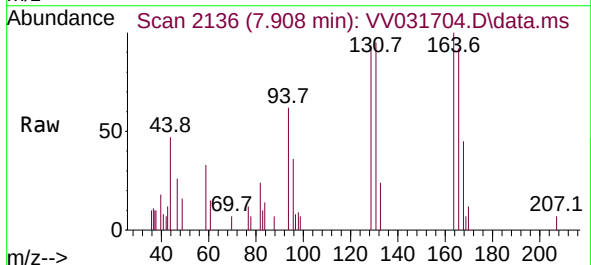
| Tgt Ion: | 97    | Resp: | 263   |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 76.4  | 40.9  | 76.0  |
| 83       | 79.4  | 59.7  | 110.9 |
| 85       | 50.8  | 42.1  | 78.1  |

Manual Integrations  
APPROVED

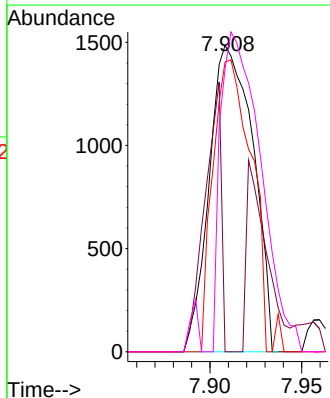
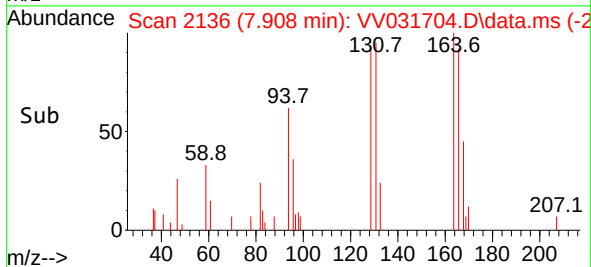
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023

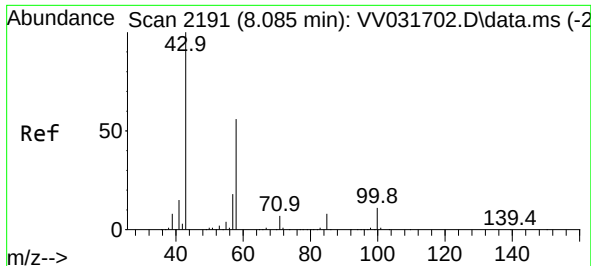


#47  
Tetrachloroethene  
Concen: 0.255 ug/L  
RT: 7.908 min Scan# 2136  
Delta R.T. -0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21



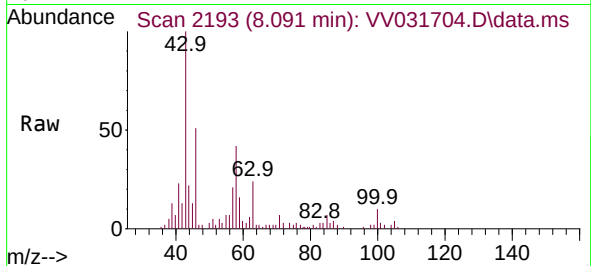
| Tgt Ion: | 164   | Resp: | 2462  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 0.0   | 70.5  | 130.9 |
| 131      | 94.5  | 64.0  | 118.8 |
| 166      | 92.5  | 89.9  | 166.9 |





#48  
2-Hexanone  
Concen: 4.297 ug/L m  
RT: 8.091 min Scan# 2191  
Delta R.T. 0.006 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

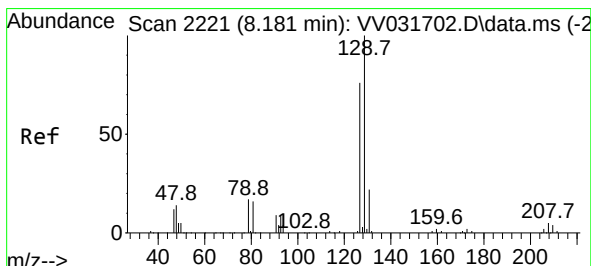
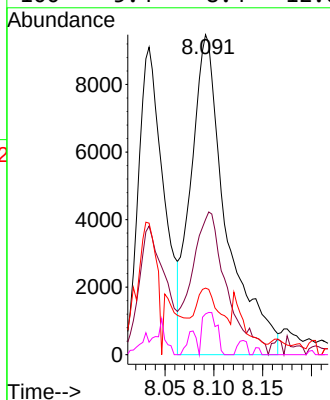
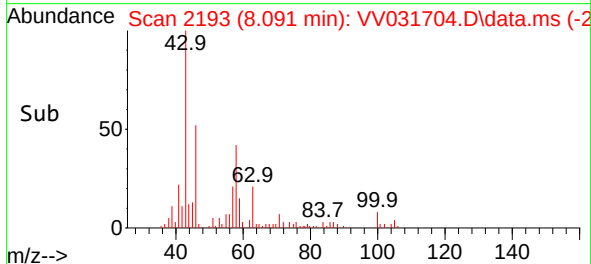
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion: 43 Resp: 2379  
Ion Ratio Lower Upper  
43 100  
58 44.3 42.6 64.0  
57 14.0 14.6 21.8  
100 5.4 8.4 12.6#

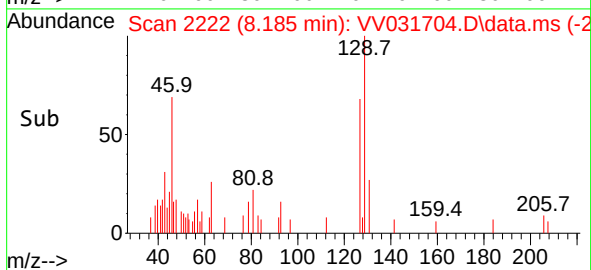
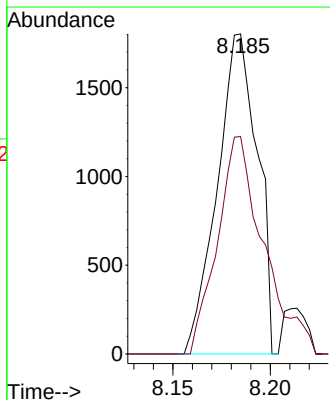
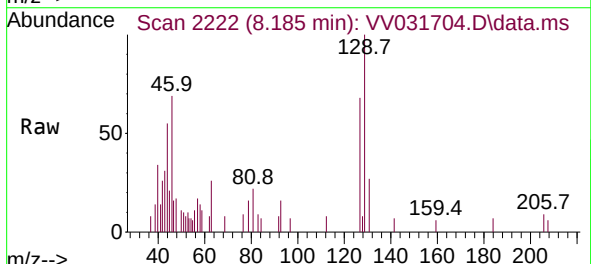
Manual Integrations  
APPROVED

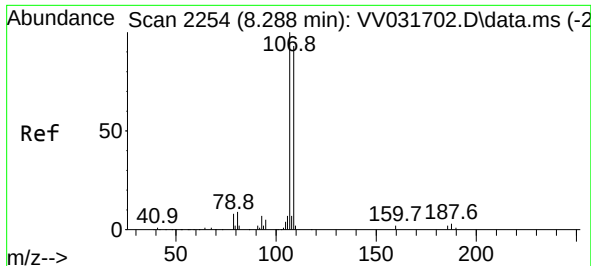
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#49  
Dibromochloromethane  
Concen: 0.229 ug/L  
RT: 8.185 min Scan# 2222  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

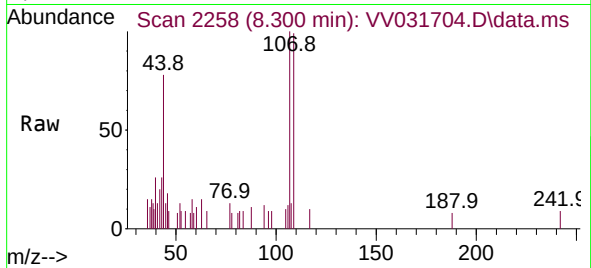
Tgt Ion:129 Resp: 2579  
Ion Ratio Lower Upper  
129 100  
127 67.9 51.7 96.1





#50  
1,2-Dibromoethane  
Concen: 0.276 ug/L  
RT: 8.300 min Scan# 21  
Delta R.T. 0.013 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

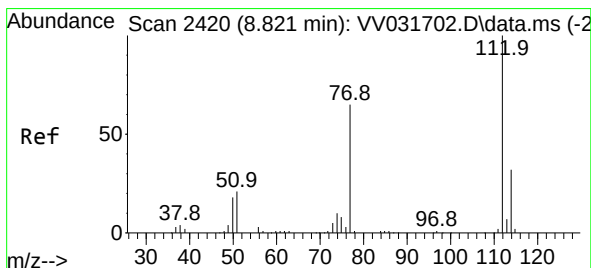
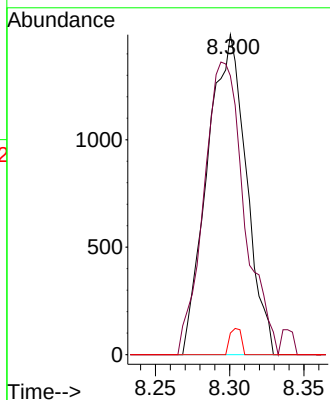
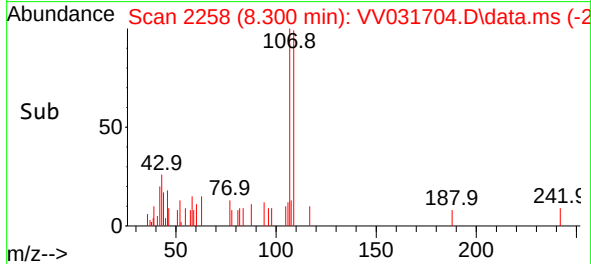
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion:107 Resp: 270  
Ion Ratio Lower Upper  
107 100  
109 87.2 67.6 125.6  
188 6.7 3.0 4.6

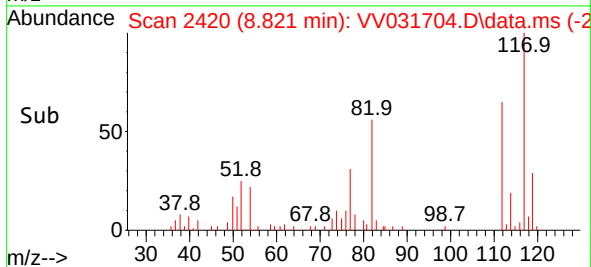
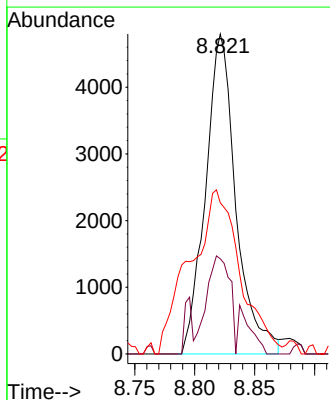
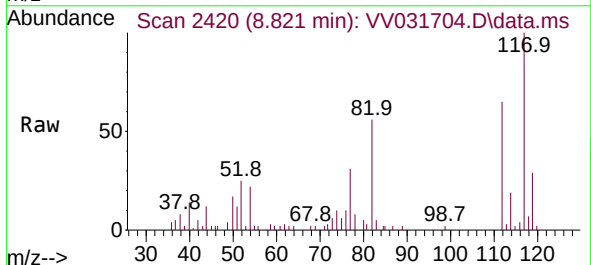
Manual Integrations  
APPROVED

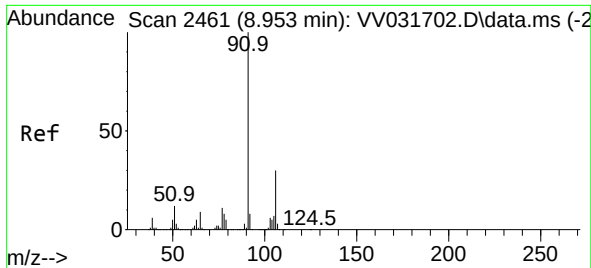
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#51  
Chlorobenzene  
Concen: 0.270 ug/L  
RT: 8.821 min Scan# 2420  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion:112 Resp: 8464  
Ion Ratio Lower Upper  
112 100  
114 28.3 21.6 40.2  
77 45.0 54.2 81.4





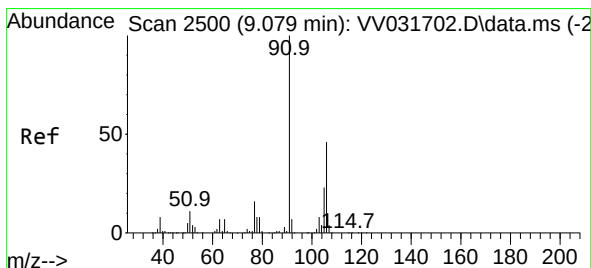
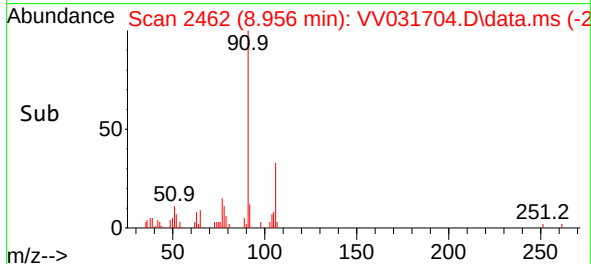
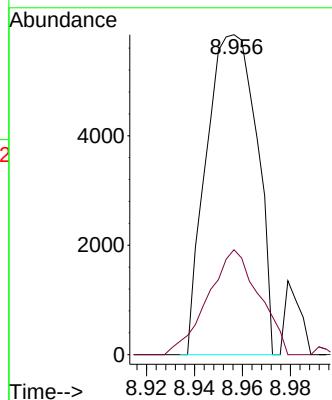
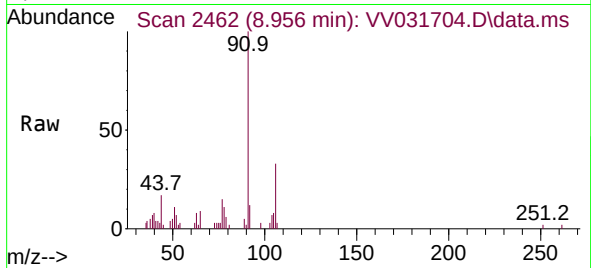
#52  
Ethylbenzene  
Concen: 0.180 ug/L  
RT: 8.956 min Scan# 2461  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05

Tgt Ion: 91 Resp: 851  
Ion Ratio Lower Upper  
91 100  
106 32.8 21.2 39.4

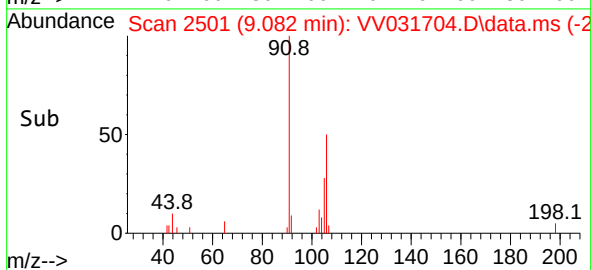
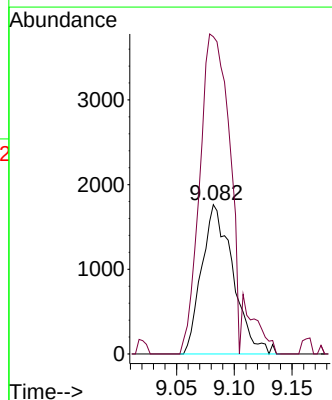
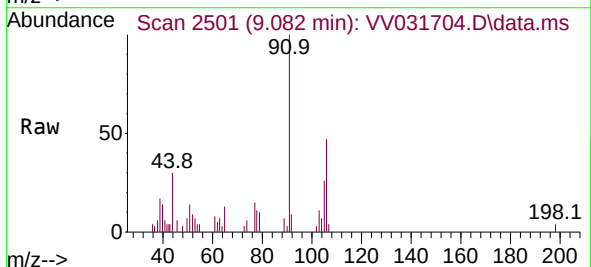
Manual Integrations  
APPROVED

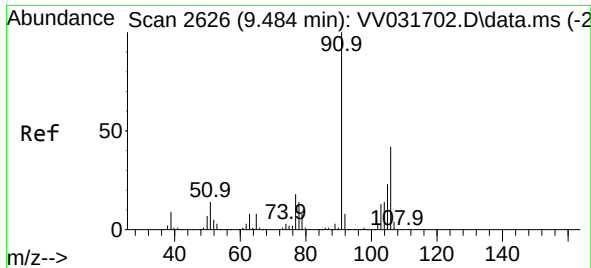
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#53  
m,p-Xylene  
Concen: 0.191 ug/L  
RT: 9.082 min Scan# 2501  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion:106 Resp: 3331  
Ion Ratio Lower Upper  
106 100  
91 212.5 149.9 278.3





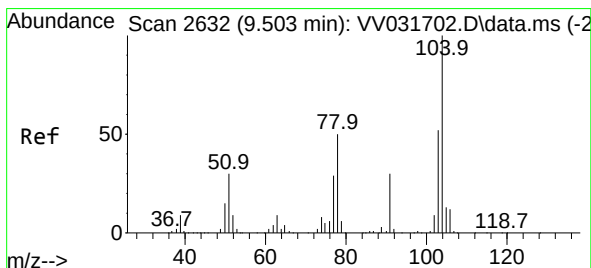
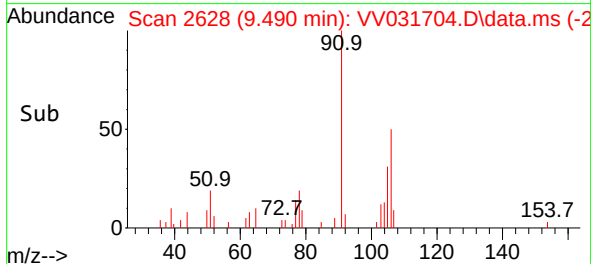
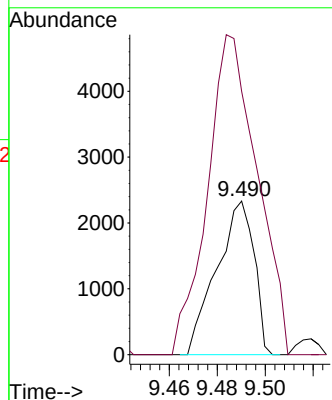
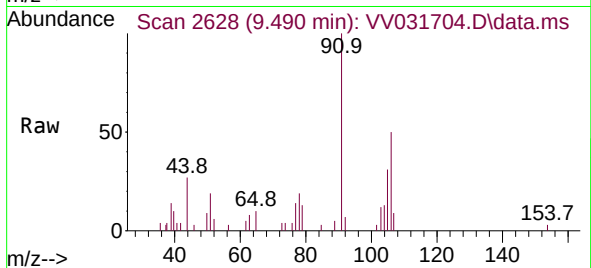
#54  
o-Xylene  
Concen: 0.157 ug/L  
RT: 9.490 min Scan# 2628  
Delta R.T. 0.007 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05

Tgt Ion:106 Resp: 2538  
Ion Ratio Lower Upper  
106 100  
91 171.5 166.7 309.5

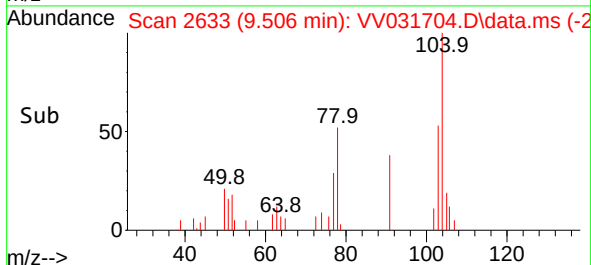
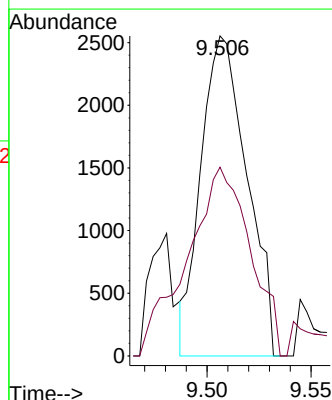
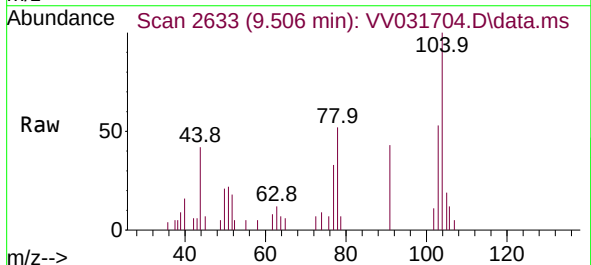
Manual Integrations  
APPROVED

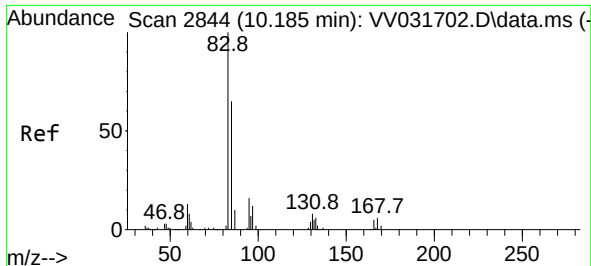
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#55  
Styrene  
Concen: 0.129 ug/L  
RT: 9.506 min Scan# 2633  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion:104 Resp: 3935  
Ion Ratio Lower Upper  
104 100  
78 59.0 35.3 65.5





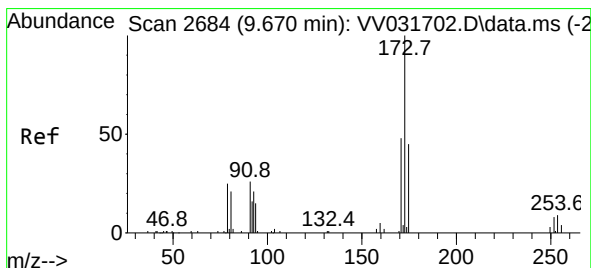
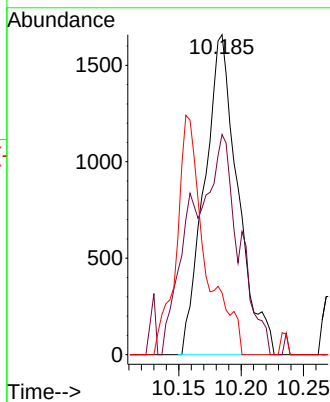
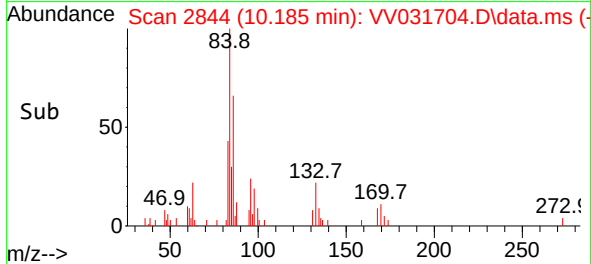
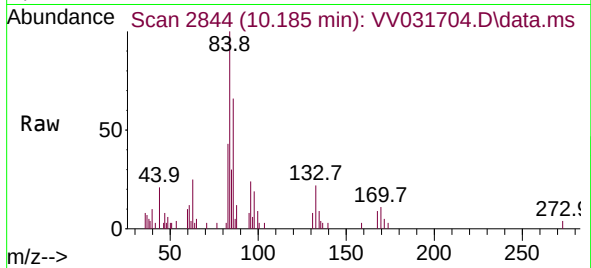
#57  
1,1,2,2-Tetrachloroethane  
Concen: 0.278 ug/L  
RT: 10.185 min Scan# 2844  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Instrument : MSVOA\_V  
ClientSampleId : MDL-WATER-QT3-2023-05

Tgt Ion: 83 Resp: 3094  
Ion Ratio Lower Upper  
83 100  
85 68.8 48.6 90.2  
131 19.3 7.0 10.6

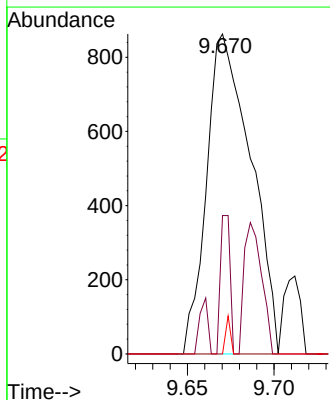
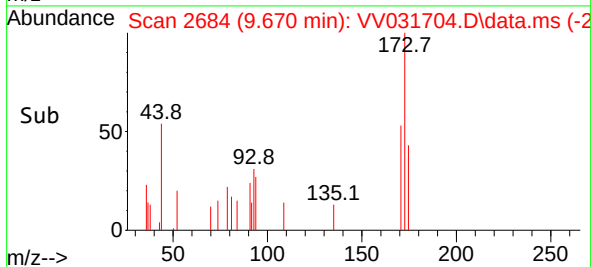
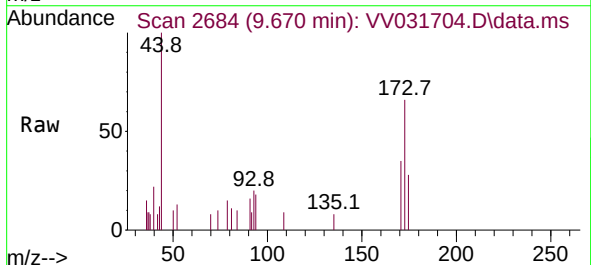
Manual Integrations  
APPROVED

Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023

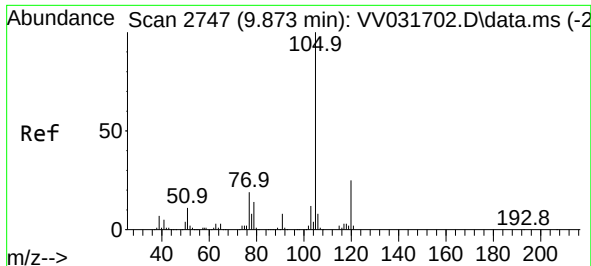


#59  
Bromoform  
Concen: 0.288 ug/L  
RT: 9.670 min Scan# 2684  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion:173 Resp: 1533  
Ion Ratio Lower Upper  
173 100  
175 9.4 40.2 60.4#  
254 1.3 6.4 9.6#

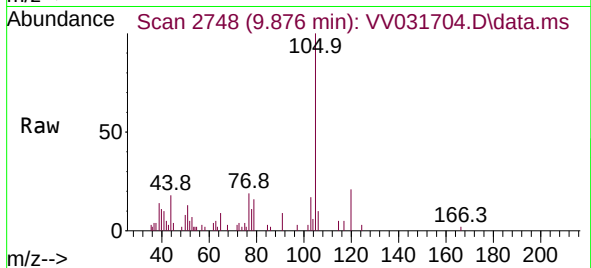






#60  
Isopropylbenzene  
Concen: 0.226 ug/L  
RT: 9.876 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

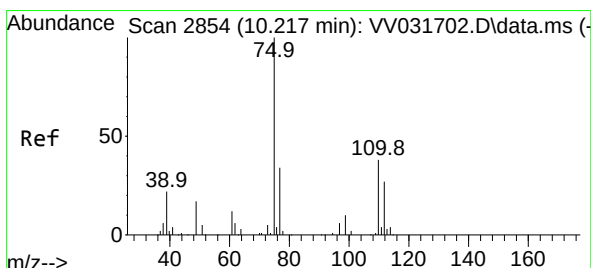
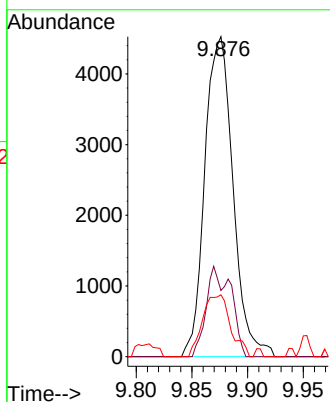
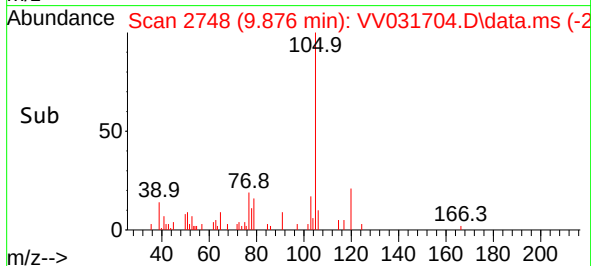
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion:105 Resp: 797  
Ion Ratio Lower Upper  
105 100  
120 14.4 20.0 30.0  
77 19.1 14.2 21.4

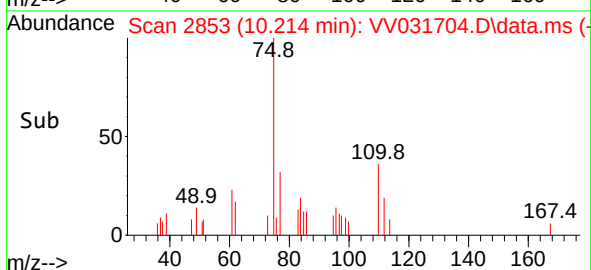
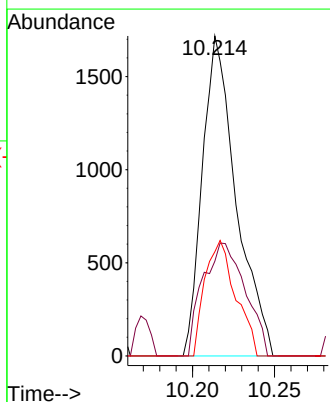
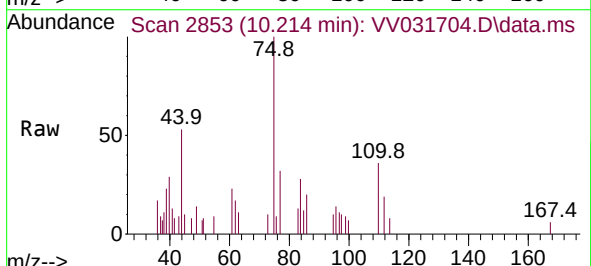
Manual Integrations  
APPROVED

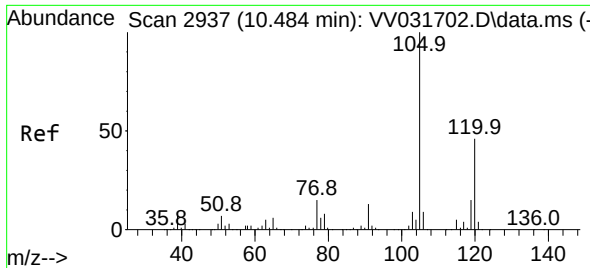
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#61  
1,2,3-Trichloropropane  
Concen: 0.347 ug/L  
RT: 10.214 min Scan# 2853  
Delta R.T. -0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

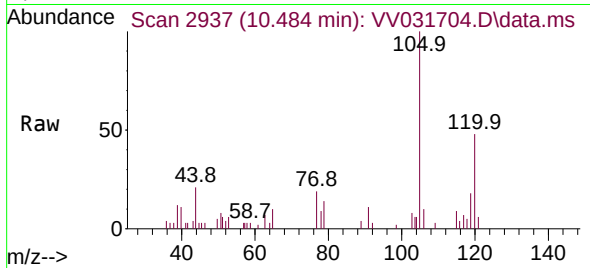
Tgt Ion: 75 Resp: 2458  
Ion Ratio Lower Upper  
75 100  
77 44.2 25.9 38.9#  
110 32.8 28.6 42.8





#62  
1,3,5-Trimethylbenzene  
Concen: 0.243 ug/L  
RT: 10.484 min Scan# 2937  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

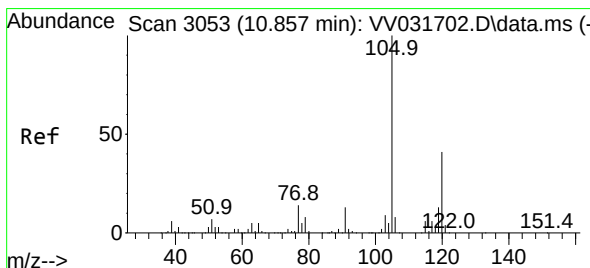
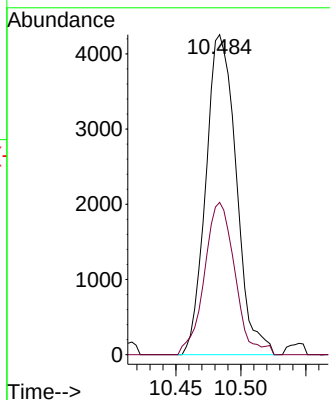
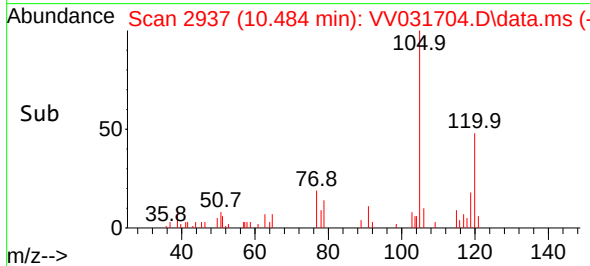
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



Tgt Ion:105 Resp: 692  
Ion Ratio Lower Upper  
105 100  
120 47.7 36.2 54.4

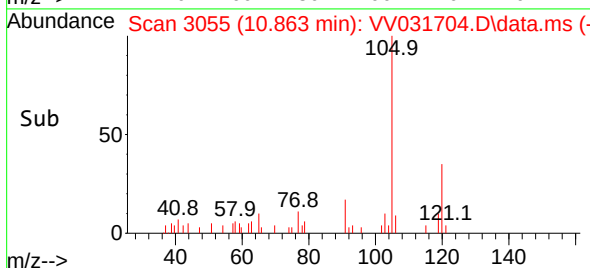
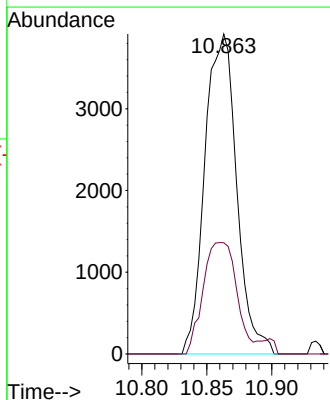
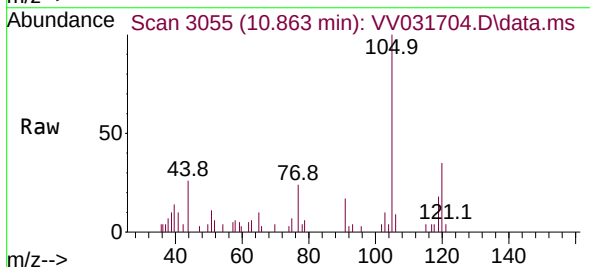
Manual Integrations  
APPROVED

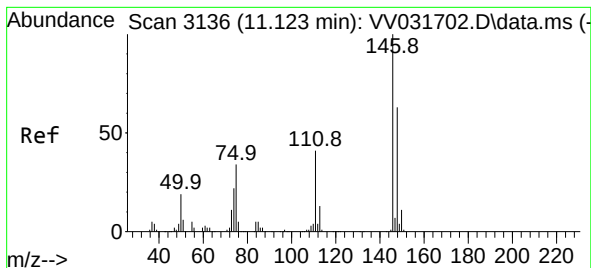
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023



#63  
1,2,4-Trimethylbenzene  
Concen: 0.234 ug/L  
RT: 10.863 min Scan# 3055  
Delta R.T. 0.007 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

Tgt Ion:105 Resp: 6653  
Ion Ratio Lower Upper  
105 100  
120 37.5 33.4 50.0





#64

1,3-Dichlorobenzene

Concen: 0.254 ug/L

RT: 11.127 min Scan# 3113

Delta R.T. 0.003 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

Tgt Ion:146 Resp: 4838

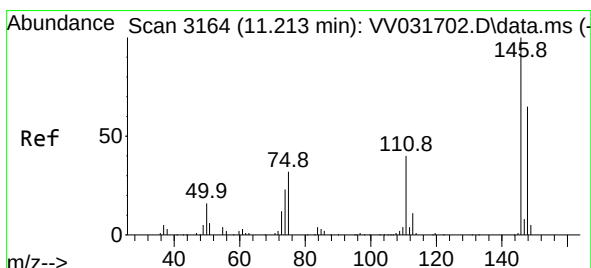
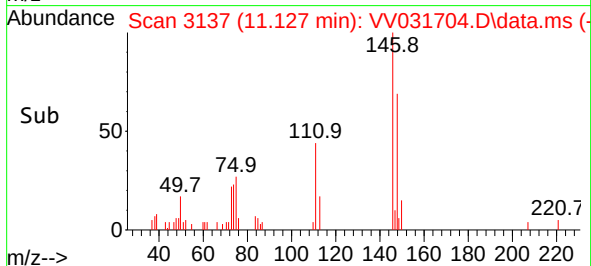
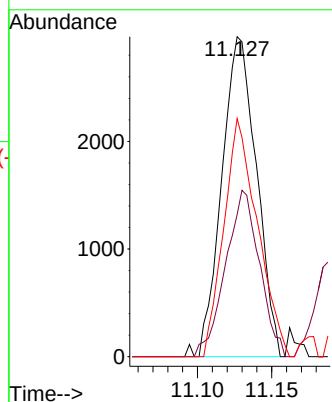
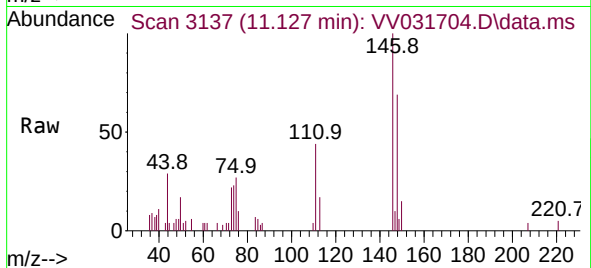
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 44.4  | 28.8  | 53.4  |
| 148 | 74.4  | 43.8  | 81.4  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#65

1,4-Dichlorobenzene

Concen: 0.270 ug/L

RT: 11.214 min Scan# 3164

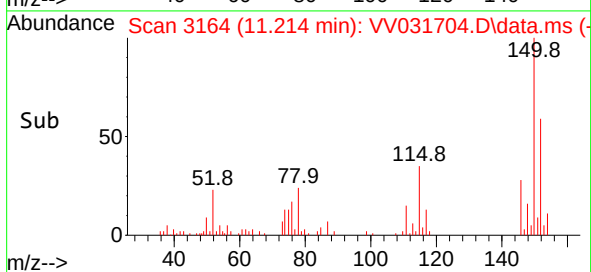
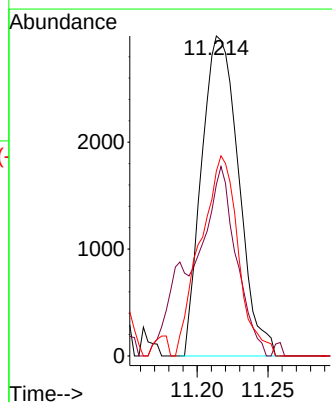
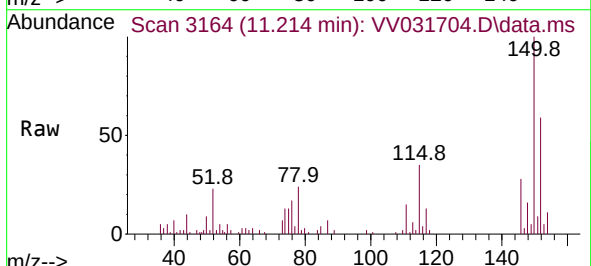
Delta R.T. 0.000 min

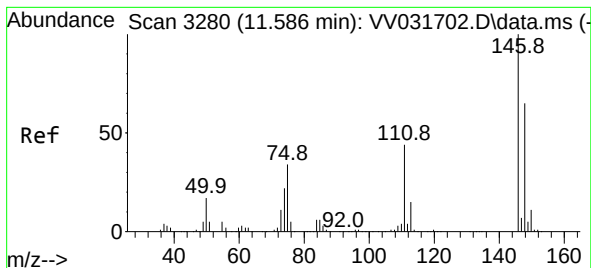
Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Tgt Ion:146 Resp: 5443

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 53.6  | 28.2  | 52.4  |
| 148 | 57.7  | 43.6  | 81.0  |





#67

1,2-Dichlorobenzene

Concen: 0.285 ug/L

RT: 11.583 min Scan# 31

Delta R.T. -0.003 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

Tgt Ion:146 Resp: 5200

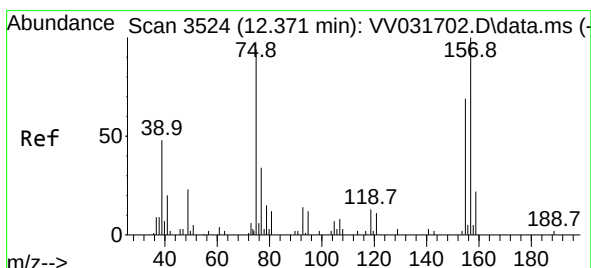
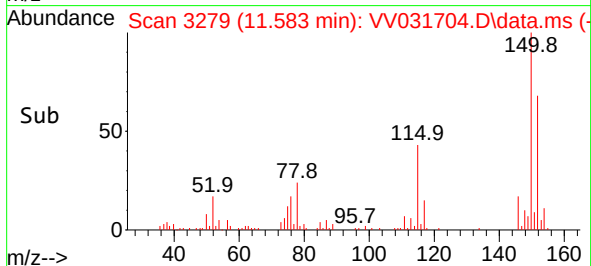
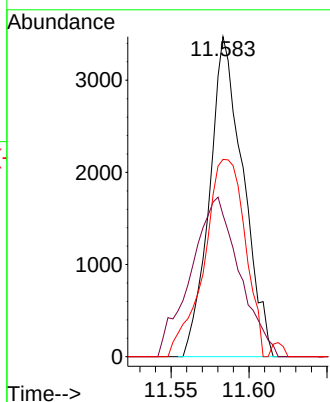
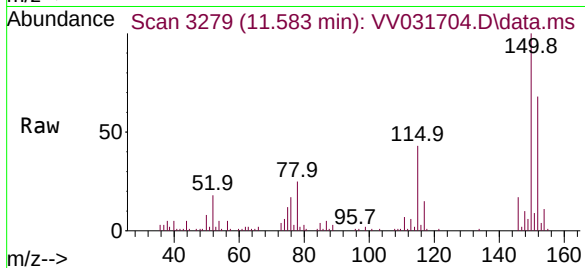
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 44.3  | 34.2  | 51.4  |
| 148 | 61.6  | 48.1  | 72.1  |

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#68

1,2-Dibromo-3-chloropropane

Concen: 0.238 ug/L

RT: 12.371 min Scan# 3524

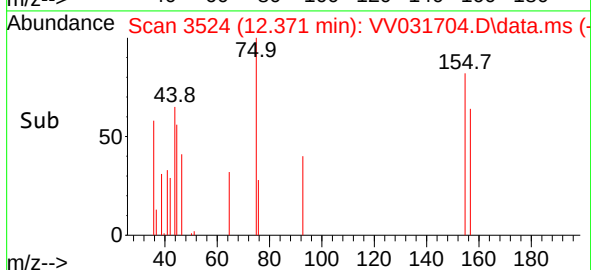
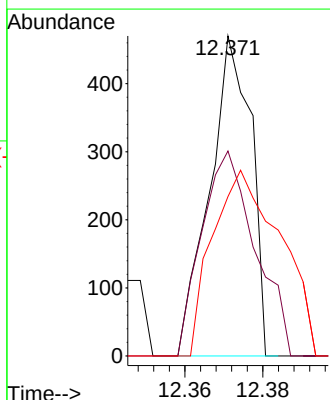
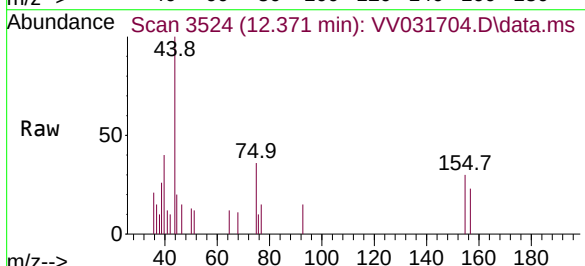
Delta R.T. 0.000 min

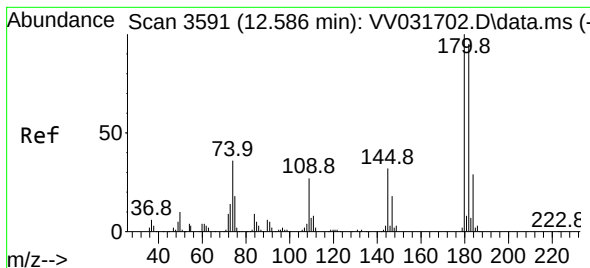
Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Tgt Ion: 75 Resp: 347

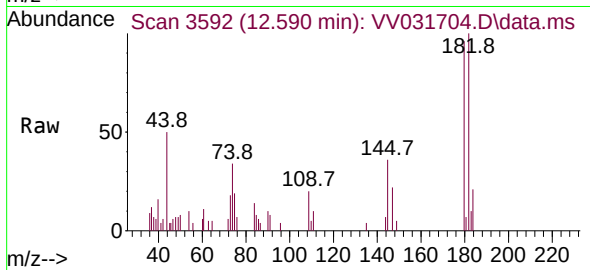
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 75  | 100   |       |       |
| 155 | 64.0  | 61.4  | 92.0  |
| 157 | 49.8  | 82.8  | 124.2 |





#69  
1,3,5-Trichlorobenzene  
Concen: 0.275 ug/L  
RT: 12.590 min Scan# 3592  
Delta R.T. 0.003 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21

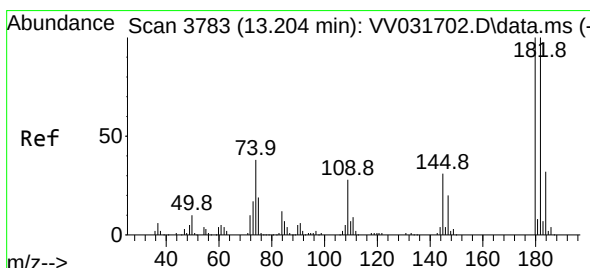
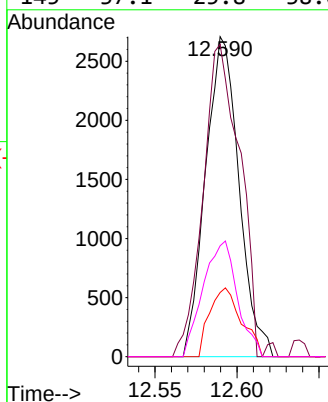
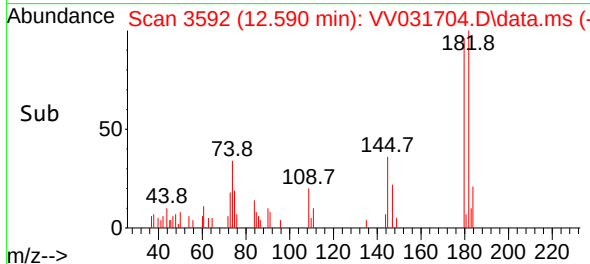
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-WATER-QT3-2023-05



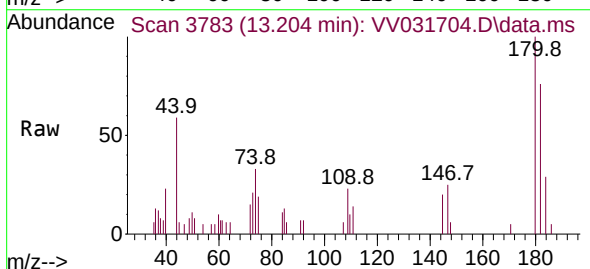
Tgt Ion:180 Resp: 3820  
Ion Ratio Lower Upper  
180 100  
182 106.8 78.3 117.5  
184 20.4 24.5 36.7  
145 37.1 25.8 38.6

Manual Integrations  
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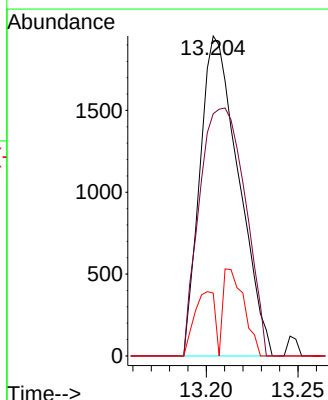
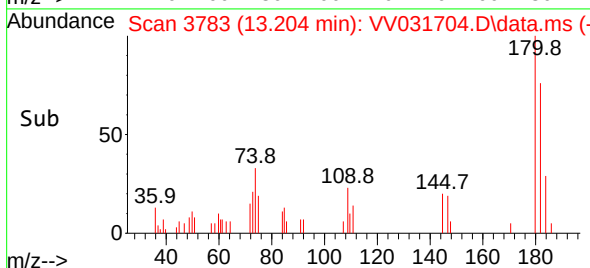
Reviewed By :John Carlone 07/17/2023  
Supervised By :Mahesh Dadoda 07/17/2023

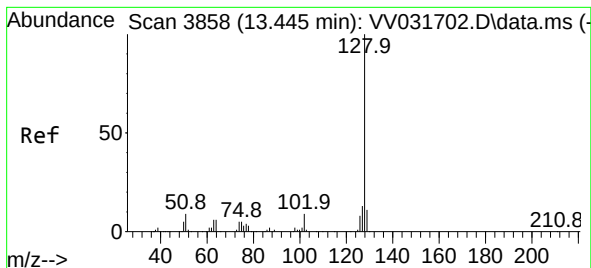


#70  
1,2,4-trichlorobenzene  
Concen: 0.259 ug/L  
RT: 13.204 min Scan# 3783  
Delta R.T. 0.000 min  
Lab File: VV031704.D  
Acq: 14 Jul 2023 11:21



Tgt Ion:180 Resp: 2859  
Ion Ratio Lower Upper  
180 100  
182 0.0 76.0 114.0#  
145 10.6 26.2 39.4#





#71

Naphthalene

Concen: 0.246 ug/L

RT: 13.455 min Scan# 3858

Delta R.T. 0.010 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

Instrument :

MSVOA\_V

ClientSampleId :

MDL-WATER-QT3-2023-05

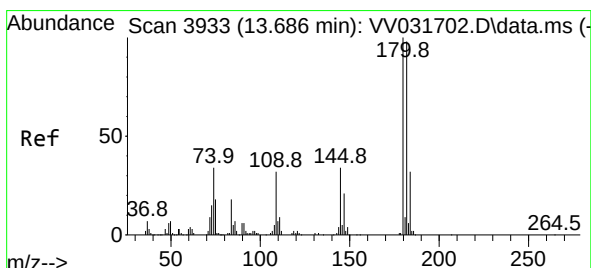
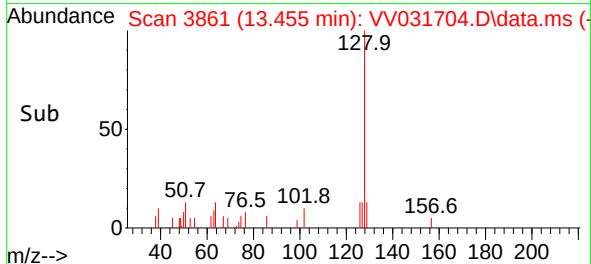
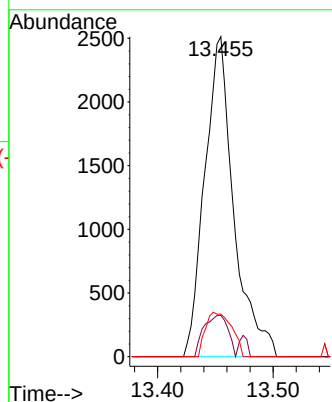
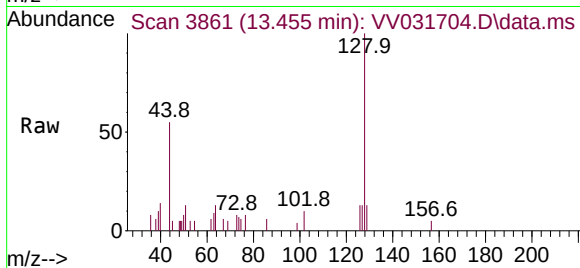
|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 128   | Resp: | 438  |
| Ion Ratio | Lower | Upper |      |
| 128       | 100   |       |      |
| 129       | 10.8  | 9.1   | 13.7 |
| 127       | 12.5  | 11.6  | 17.4 |

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/17/2023

Supervised By :Mahesh Dadoda 07/17/2023



#72

1,2,3-Trichlorobenzene

Concen: 0.251 ug/L

RT: 13.686 min Scan# 3933

Delta R.T. 0.000 min

Lab File: VV031704.D

Acq: 14 Jul 2023 11:21

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 2554  |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 100.9 | 74.6  | 111.8 |
| 145       | 32.6  | 27.4  | 41.0  |

