

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX011519\  
 Data File : VX007059.D  
 Acq On : 15 Jan 2019 15:33  
 Operator : JC/SP  
 Sample : VX0115WBS02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0115WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 1/16/2019 9:19:55 AM

Quant Time: Jan 16 00:41:07 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010819W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 08 14:06:59 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 502972   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 754639   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 692654   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 352219   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 266907   | 50.78 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.56% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 237858   | 49.22 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.44%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 887114   | 50.15 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.30% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 314387   | 50.98 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.96% |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85   | 86792    | 21.013  | ug/l  | 97     |
| 3) Chloromethane              | 1.33 | 50   | 98039    | 20.389  | ug/l  | 98     |
| 4) Vinyl Chloride             | 1.41 | 62   | 105269   | 20.352  | ug/l  | 98     |
| 5) Bromomethane               | 1.64 | 94   | 106558   | 19.283  | ug/l  | 96     |
| 6) Chloroethane               | 1.72 | 64   | 68683    | 19.018  | ug/l  | 95     |
| 7) Trichlorofluoromethane     | 1.93 | 101  | 166958   | 19.978  | ug/l  | 94     |
| 8) Diethyl Ether              | 2.19 | 74   | 65017    | 19.555  | ug/l  | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101  | 95779    | 19.143  | ug/l  | 99     |
| 10) Methyl Iodide             | 2.51 | 142  | 143731   | 21.296  | ug/l  | 99     |
| 11) Tert butyl alcohol        | 3.07 | 59   | 132252   | 106.657 | ug/l  | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96   | 89235    | 19.304  | ug/l  | 99     |
| 13) Acrolein                  | 2.30 | 56   | 73746    | 139.283 | ug/l  | 97     |
| 14) Allyl chloride            | 2.73 | 41   | 155362   | 19.610  | ug/l  | 98     |
| 15) Acrylonitrile             | 3.15 | 53   | 301393   | 105.881 | ug/l  | 99     |
| 16) Acetone                   | 2.45 | 43   | 259234   | 99.758  | ug/l  | 99     |
| 17) Carbon Disulfide          | 2.57 | 76   | 201650   | 16.943  | ug/l  | 99     |
| 18) Methyl Acetate            | 2.78 | 43   | 157880   | 20.979  | ug/l  | 97     |
| 19) Methyl tert-butyl Ether   | 3.21 | 73   | 321023   | 20.008  | ug/l  | 98     |
| 20) Methylene Chloride        | 2.86 | 84   | 103822   | 20.673  | ug/l  | 96     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96   | 95978    | 18.631  | ug/l  | 98     |
| 22) Diisopropyl ether         | 3.87 | 45   | 294126   | 19.748  | ug/l  | 96     |
| 23) Vinyl Acetate             | 3.82 | 43   | 1212809  | 96.557  | ug/l  | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63   | 163376   | 19.617  | ug/l  | 99     |
| 25) 2-Butanone                | 4.70 | 43   | 384728   | 103.469 | ug/l  | 96     |
| 26) 2,2-Dichloropropane       | 4.59 | 77   | 110818   | 17.304  | ug/l  | 98     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96   | 109388   | 19.251  | ug/l  | 99     |
| 28) Bromochloromethane        | 5.02 | 49   | 72495    | 19.868  | ug/l  | 95     |
| 29) Tetrahydrofuran           | 5.15 | 42   | 246718   | 102.101 | ug/l  | 98     |
| 30) Chloroform                | 5.21 | 83   | 174854   | 20.053  | ug/l  | 98     |
| 31) Cyclohexane               | 5.58 | 56   | 142980   | 19.289  | ug/l  | 92     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97   | 143947   | 19.476  | ug/l  | 98     |
| 36) 1,1-Dichloropropene       | 5.80 | 75   | 124678   | 19.003  | ug/l  | 98     |
| 37) Ethyl Acetate             | 4.85 | 43   | 144470   | 20.539  | ug/l  | 98     |
| 38) Carbon Tetrachloride      | 5.78 | 117  | 122452   | 18.550  | ug/l  | 96     |

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 Operator : JC/SP  
 Sample : VX0115WBS02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VX0115WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 1/16/2019 9:19:55 AM

Quant Time: Jan 16 00:41:07 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010819W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 08 14:06:59 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 152998   | 18.292  | ug/l  | 97       |
| 40) Benzene                    | 6.14  | 78   | 390060   | 19.484  | ug/l  | 97       |
| 41) Methacrylonitrile          | 5.06  | 41   | 77275    | 19.070  | ug/l  | 97       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 130717   | 18.895  | ug/l  | 100      |
| 43) Isopropyl Acetate          | 6.46  | 43   | 213783   | 19.268  | ug/l  | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 113397   | 18.902  | ug/l  | 100      |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 95999    | 19.074  | ug/l  | 98       |
| 46) Dibromomethane             | 7.66  | 93   | 67540    | 19.094  | ug/l  | 96       |
| 47) Bromodichloromethane       | 7.90  | 83   | 114659   | 19.044  | ug/l  | 96       |
| 48) Methyl methacrylate        | 7.77  | 41   | 113312   | 19.887  | ug/l  | 98       |
| 49) 1,4-Dioxane                | 7.75  | 88   | 54172    | 411.274 | ug/l  | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 748945   | 105.036 | ug/l  | 99       |
| 52) Toluene                    | 8.79  | 92   | 248475   | 19.311  | ug/l  | 96       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 121266   | 18.164  | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 137808   | 18.691  | ug/l  | 95       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 106454   | 20.670  | ug/l  | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 153018   | 20.352  | ug/l  | 96       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 166731   | 19.761  | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 403592   | 104.401 | ug/l  | 98       |
| 59) 2-Hexanone                 | 9.49  | 43   | 567656   | 104.468 | ug/l  | 98       |
| 60) Dibromochloromethane       | 9.59  | 129  | 98388    | 19.673  | ug/l  | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 112660   | 19.870  | ug/l  | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 115612   | 19.279  | ug/l  | 97       |
| 65) Chlorobenzene              | 10.14 | 112  | 292419   | 19.356  | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 97910    | 19.266  | ug/l  | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 473190   | 18.973  | ug/l  | 100      |
| 68) m/p-Xylenes                | 10.36 | 106  | 378154   | 38.485  | ug/l  | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 182598   | 19.055  | ug/l  | 96       |
| 70) Styrene                    | 10.71 | 104  | 297130   | 19.577  | ug/l  | 100      |
| 71) Bromoform                  | 10.86 | 173  | 70109    | 18.689  | ug/l  | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 487749   | 19.639  | ug/l  | 99       |
| 74) N-amyl acetate             | 10.90 | 43   | 192480   | 19.249  | ug/l  | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 158724   | 20.131  | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 146130m  | 20.473  | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 131331   | 19.191  | ug/l  | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 537564   | 19.716  | ug/l  | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 321368   | 19.581  | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 406416   | 19.584  | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 34776    | 17.374  | ug/l  | 91       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 371676   | 19.559  | ug/l  | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 405639   | 19.591  | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 415183   | 19.895  | ug/l  | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 486620   | 19.679  | ug/l  | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 437734   | 19.790  | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 235108   | 19.007  | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 235515   | 20.182  | ug/l  | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 359664   | 19.075  | ug/l  | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 60796    | 19.124  | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 235319   | 19.278  | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 30600    | 19.623  | ug/l  | 96       |

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Acq On : 15 Jan 2019 15:33  
Operator : JC/SP  
Sample : VX0115WBS02  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0115WBS02

Manual Integrations  
APPROVED

MMDadoda  
1/16/2019 9:19:55 AM

Quant Time: Jan 16 00:41:07 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010819W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jan 08 14:06:59 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 153979   | 18.386 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 72082    | 19.396 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 499824   | 19.696 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 156335   | 18.792 | ug/l  | 99       |

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

