

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU110718\  
 Data File : VU027993.D  
 Acq On : 07 Nov 2018 10:06  
 Operator : MD/SY  
 Sample : VU1107WBS01  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU1107WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 11/8/2018 9:11:02 AM

Quant Time: Nov 07 14:28:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U110218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 02 02:28:20 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.98  | 168  | 210153   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 351504   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 322698   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 152448   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.31  | 65   | 144100   | 46.12 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.24%  |          |
| 35) Dibromofluoromethane    | 4.88  | 113  | 111465   | 50.29 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.58% |          |
| 50) Toluene-d8              | 7.57  | 98   | 417045   | 48.71 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.42%  |          |
| 62) 4-Bromofluorobenzene    | 10.31 | 95   | 156936   | 49.70 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.40%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units | Qvalue |
|-------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85   | 41482    | 15.534 | ug/l  | 98     |
| 3) Chloromethane              | 1.33 | 50   | 56810    | 17.591 | ug/l  | 97     |
| 4) Vinyl Chloride             | 1.40 | 62   | 55885    | 17.435 | ug/l  | 98     |
| 5) Bromomethane               | 1.62 | 94   | 26122    | 22.141 | ug/l  | 97     |
| 6) Chloroethane               | 1.70 | 64   | 34480    | 18.666 | ug/l  | 99     |
| 7) Trichlorofluoromethane     | 1.89 | 101  | 69806    | 18.846 | ug/l  | 100    |
| 8) Diethyl Ether              | 2.11 | 74   | 30377    | 19.154 | ug/l  | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101  | 41668    | 18.937 | ug/l  | 98     |
| 10) Methyl Iodide             | 2.41 | 142  | 28818    | 19.807 | ug/l  | 99     |
| 11) Tert butyl alcohol        | 2.82 | 59   | 69158    | 83.610 | ug/l  | 99     |
| 12) 1,1-Dichloroethene        | 2.29 | 96   | 37773    | 17.150 | ug/l  | 96     |
| 13) Acrolein                  | 2.20 | 56   | 31126    | 98.175 | ug/l  | 98     |
| 14) Allyl chloride            | 2.59 | 41   | 92209    | 17.130 | ug/l  | 97     |
| 15) Acrylonitrile             | 2.94 | 53   | 186505   | 91.792 | ug/l  | 99     |
| 16) Acetone                   | 2.32 | 43   | 179407   | 92.548 | ug/l  | 99     |
| 17) Carbon Disulfide          | 2.48 | 76   | 118353   | 16.440 | ug/l  | 99     |
| 18) Methyl Acetate            | 2.62 | 43   | 94287    | 17.681 | ug/l  | 99     |
| 19) Methyl tert-butyl Ether   | 3.00 | 73   | 165202   | 18.599 | ug/l  | 98     |
| 20) Methylene Chloride        | 2.70 | 84   | 51693    | 18.264 | ug/l  | 98     |
| 21) trans-1,2-Dichloroethene  | 2.98 | 96   | 44314    | 17.434 | ug/l  | 97     |
| 22) Diisopropyl ether         | 3.57 | 45   | 206181   | 18.552 | ug/l  | 96     |
| 23) Vinyl Acetate             | 3.53 | 43   | 880147   | 92.150 | ug/l  | 100    |
| 24) 1,1-Dichloroethane        | 3.45 | 63   | 99851    | 18.038 | ug/l  | 99     |
| 25) 2-Butanone                | 4.26 | 43   | 279943   | 90.772 | ug/l  | 99     |
| 26) 2,2-Dichloropropane       | 4.23 | 77   | 78511    | 18.899 | ug/l  | 100    |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96   | 55092    | 19.328 | ug/l  | 97     |
| 28) Bromochloromethane        | 4.55 | 49   | 51755    | 19.943 | ug/l  | 100    |
| 29) Tetrahydrofuran           | 4.64 | 42   | 176296   | 85.609 | ug/l  | 98     |
| 30) Chloroform                | 4.67 | 83   | 93212    | 18.365 | ug/l  | 98     |
| 31) Cyclohexane               | 5.00 | 56   | 99421    | 17.193 | ug/l  | 97     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97   | 75686    | 18.733 | ug/l  | 99     |
| 36) 1,1-Dichloropropene       | 5.14 | 75   | 69019    | 18.748 | ug/l  | 100    |
| 37) Ethyl Acetate             | 4.38 | 43   | 96687    | 17.925 | ug/l  | 98     |
| 38) Carbon Tetrachloride      | 5.14 | 117  | 60438    | 18.525 | ug/l  | 96     |

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Quant Time: Nov 07 14:28:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U110218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 02 02:28:20 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 6.41  | 83   | 86320    | 19.440  | ug/l   | 99       |
| 40) Benzene                    | 5.39  | 78   | 213977   | 19.011  | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.55  | 41   | 55528    | 19.289  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 74984    | 18.742  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 5.55  | 43   | 157571   | 18.645  | ug/l   | 99       |
| 44) Trichloroethene            | 6.19  | 130  | 46273    | 19.126  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 6.43  | 63   | 62661    | 19.304  | ug/l   | 98       |
| 46) Dibromomethane             | 6.56  | 93   | 35698    | 19.132  | ug/l   | 96       |
| 47) Bromodichloromethane       | 6.76  | 83   | 67646    | 18.813  | ug/l   | 99       |
| 48) Methyl methacrylate        | 6.62  | 41   | 77393    | 18.688  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 6.61  | 88   | 26903    | 398.174 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 509431   | 90.263  | ug/l   | 99       |
| 52) Toluene                    | 7.64  | 92   | 124401   | 18.800  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 79264    | 18.497  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 87814    | 19.811  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 52945    | 19.667  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 91873    | 19.352  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 8.24  | 76   | 94770    | 19.325  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 241713   | 95.063  | ug/l   | 100      |
| 59) 2-Hexanone                 | 8.36  | 43   | 400995   | 91.864  | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 50899    | 19.980  | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 54420    | 19.024  | ug/l   | 97       |
| 64) Tetrachloroethene          | 8.23  | 164  | 38272    | 18.290  | ug/l   | 98       |
| 65) Chlorobenzene              | 9.12  | 112  | 130412   | 19.128  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 45821    | 19.677  | ug/l   | 99       |
| 67) Ethyl Benzene              | 9.25  | 91   | 244520   | 19.485  | ug/l   | 100      |
| 68) m/p-Xylenes                | 9.38  | 106  | 177848   | 39.058  | ug/l   | 100      |
| 69) o-Xylene                   | 9.78  | 106  | 87855    | 19.107  | ug/l   | 99       |
| 70) Styrene                    | 9.79  | 104  | 141473   | 19.257  | ug/l   | 99       |
| 71) Bromoform                  | 9.96  | 173  | 37157    | 19.039  | ug/l # | 99       |
| 73) Isopropylbenzene           | 10.17 | 105  | 235258   | 19.920  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.01 | 43   | 137314   | 19.228  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 92023    | 19.317  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 10.49 | 75   | 91216m   | 21.875  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 54021    | 19.948  | ug/l   | 99       |
| 78) n-propylbenzene            | 10.59 | 91   | 280769   | 19.861  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 165311   | 19.509  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 194878   | 19.919  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 34483m   | 20.802  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.77 | 91   | 187159   | 19.456  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 192462   | 19.678  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 195328   | 19.827  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.32 | 105  | 241456   | 20.300  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 204102   | 20.526  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 97348    | 19.460  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 98945    | 19.297  | ug/l   | 98       |
| 89) n-Butylbenzene             | 11.89 | 91   | 188720   | 19.970  | ug/l   | 100      |
| 90) Hexachloroethane           | 12.15 | 117  | 35471    | 20.036  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 100049   | 19.888  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 19212    | 19.139  | ug/l   | 96       |

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QLast Update : Fri Nov 02 02:28:20 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.50 | 180  | 61760    | 17.950 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.69 | 225  | 32612    | 20.397 | ug/l  | 98       |
| 95) Naphthalene            | 13.74 | 128  | 224632   | 17.847 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 66959    | 19.835 | ug/l  | 100      |

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

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