

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092218\  
 Data File : VU026969.D  
 Acq On : 21 Sep 2018 15:38  
 Operator : MD/SY  
 Sample : VSTDICCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

MMDadoda  
 9/24/2018 2:14:05 PM

Quant Time: Sep 22 01:06:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 22 00:44:52 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 85803    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 142460   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 143267   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 79412    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 86160    | 62.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 124.18% |      |
| 35) Dibromofluoromethane  | 4.88   | 113 | 62482    | 52.83 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.66% |      |
| 50) Toluene-d8            | 7.57   | 98  | 243494   | 55.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.36% |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 83533    | 52.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.58% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85  | 54810   | 57.288  | ug/l | 100    |
| 3) Chloromethane              | 1.33 | 50  | 90548   | 65.151  | ug/l | 100    |
| 4) Vinyl Chloride             | 1.40 | 62  | 87692   | 62.233  | ug/l | 100    |
| 5) Bromomethane               | 1.62 | 94  | 46316   | 53.579  | ug/l | 100    |
| 6) Chloroethane               | 1.69 | 64  | 56063   | 62.269  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.88 | 101 | 99966   | 55.702  | ug/l | 100    |
| 8) Diethyl Ether              | 2.11 | 74  | 48681   | 60.484  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 60095   | 56.139  | ug/l | 100    |
| 10) Methyl Iodide             | 2.41 | 142 | 78364   | 83.871  | ug/l | 100    |
| 11) Tert butyl alcohol        | 2.83 | 59  | 96490   | 288.751 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 57503   | 56.664  | ug/l | 100    |
| 13) Acrolein                  | 2.20 | 56  | 56348   | 259.180 | ug/l | 100    |
| 14) Allyl chloride            | 2.59 | 41  | 120447  | 63.682  | ug/l | 100    |
| 15) Acrylonitrile             | 2.94 | 53  | 252957  | 345.803 | ug/l | 100    |
| 16) Acetone                   | 2.32 | 43  | 238248  | 305.408 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.48 | 76  | 186207  | 57.289  | ug/l | 100    |
| 18) Methyl Acetate            | 2.62 | 43  | 123215  | 71.160  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 221144  | 62.105  | ug/l | 100    |
| 20) Methylene Chloride        | 2.70 | 84  | 72540   | 58.435  | ug/l | 100    |
| 21) trans-1,2-Dichloroethene  | 2.98 | 96  | 64128   | 59.528  | ug/l | 100    |
| 22) Diisopropyl ether         | 3.58 | 45  | 270646  | 68.333  | ug/l | 100    |
| 23) Vinyl Acetate             | 3.53 | 43  | 1156044 | 343.829 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 141022  | 63.935  | ug/l | 100    |
| 25) 2-Butanone                | 4.26 | 43  | 360522  | 338.682 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 108751  | 60.703  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 72194   | 58.527  | ug/l | 100    |
| 28) Bromochloromethane        | 4.55 | 49  | 70501   | 66.348  | ug/l | 100    |
| 29) Tetrahydrofuran           | 4.64 | 42  | 228832  | 353.129 | ug/l | 100    |
| 30) Chloroform                | 4.67 | 83  | 129391  | 60.330  | ug/l | 100    |
| 31) Cyclohexane               | 5.00 | 56  | 129195  | 56.799  | ug/l | 100    |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 105528  | 59.918  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 95893   | 58.293  | ug/l | 100    |
| 37) Ethyl Acetate             | 4.38 | 43  | 129488  | 63.736  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 91370   | 53.393  | ug/l | 100    |

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Quant Time: Sep 22 01:06:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 22 00:44:52 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 111639   | 57.618   | ug/l   | 100      |
| 40) Benzene                    | 5.39  | 78   | 291055   | 57.204   | ug/l   | 100      |
| 41) Methacrylonitrile          | 4.55  | 41   | 71555    | 67.586   | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 111808   | 60.619   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 5.55  | 43   | 195700   | 63.761   | ug/l   | 100      |
| 44) Trichloroethene            | 6.19  | 130  | 62480    | 50.792   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 6.43  | 63   | 83735    | 59.984   | ug/l   | 100      |
| 46) Dibromomethane             | 6.56  | 93   | 50138    | 56.596   | ug/l   | 100      |
| 47) Bromodichloromethane       | 6.76  | 83   | 100343   | 57.190   | ug/l   | 100      |
| 48) Methyl methacrylate        | 6.62  | 41   | 100478   | 66.067   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 6.62  | 88   | 40737    | 1192.023 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 675472   | 326.260  | ug/l   | 100      |
| 52) Toluene                    | 7.64  | 92   | 179309   | 58.982   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 115719   | 59.148   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 126339   | 59.896   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 72448    | 56.027   | ug/l   | 100      |
| 56) Ethyl methacrylate         | 8.02  | 69   | 115844   | 60.800   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 8.24  | 76   | 136188   | 60.700   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 344665   | 352.934  | ug/l   | 100      |
| 59) 2-Hexanone                 | 8.36  | 43   | 520758   | 321.388  | ug/l   | 100      |
| 60) Dibromochloromethane       | 8.48  | 129  | 71084    | 51.838   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 75485    | 54.024   | ug/l   | 100      |
| 64) Tetrachloroethene          | 8.23  | 164  | 53432    | 47.440   | ug/l   | 100      |
| 65) Chlorobenzene              | 9.12  | 112  | 182386   | 51.172   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 65348    | 50.043   | ug/l   | 100      |
| 67) Ethyl Benzene              | 9.25  | 91   | 329384   | 55.548   | ug/l   | 100      |
| 68) m/p-Xylenes                | 9.38  | 106  | 250132   | 111.553  | ug/l   | 100      |
| 69) o-Xylene                   | 9.78  | 106  | 118570   | 54.520   | ug/l   | 100      |
| 70) Styrene                    | 9.79  | 104  | 199001   | 55.826   | ug/l   | 100      |
| 71) Bromoform                  | 9.96  | 173  | 50891    | 45.783   | ug/l # | 100      |
| 73) Isopropylbenzene           | 10.17 | 105  | 321854   | 58.057   | ug/l   | 100      |
| 74) N-amyl acetate             | 10.02 | 43   | 178869   | 66.162   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 128523   | 56.244   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 10.49 | 75   | 117022m  | 62.940   | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 74168    | 50.235   | ug/l   | 100      |
| 78) n-propylbenzene            | 10.59 | 91   | 394202   | 60.783   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 230902   | 57.540   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 272099   | 58.503   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 35890m   | 56.414   | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.77 | 91   | 266008   | 59.023   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.10 | 119  | 258040   | 55.174   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 278460   | 59.241   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.32 | 105  | 327187   | 58.463   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 281296   | 57.977   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 136381   | 49.484   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 140471   | 48.979   | ug/l   | 100      |
| 89) n-Butylbenzene             | 11.89 | 91   | 262469   | 61.195   | ug/l   | 100      |
| 90) Hexachloroethane           | 12.15 | 117  | 51960    | 53.042   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 138051   | 49.842   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 27689    | 60.450   | ug/l   | 100      |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.50 | 180  | 88882    | 49.083 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.69 | 225  | 44398    | 47.683 | ug/l  | 100      |
| 95) Naphthalene            | 13.74 | 128  | 323263   | 57.702 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 95529    | 50.260 | ug/l  | 100      |

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

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