

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX032619\  
 Data File : VX008468.D  
 Acq On : 26 Mar 2019 20:41  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 3/27/2019 10:42:04 AM

Quant Time: Mar 27 03:43:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 26 07:57:20 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 190800   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 329636   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 295528   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 143444   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 143546   | 49.63 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.26%  |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 107185   | 49.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.74%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 428925   | 49.91 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.82%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 160959   | 50.54 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.08% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 99729   | 44.343  | ug/l | 100    |
| 3) Chloromethane              | 1.32 | 50  | 136581  | 48.098  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 141779  | 45.150  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 67360   | 41.201  | ug/l | 97     |
| 6) Chloroethane               | 1.71 | 64  | 86487   | 46.492  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 160899  | 45.241  | ug/l | 98     |
| 8) Diethyl Ether              | 2.18 | 74  | 77185   | 45.859  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 99868   | 46.464  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 103414  | 49.495  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.05 | 59  | 162972  | 254.297 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 103003  | 46.403  | ug/l | 98     |
| 13) Acrolein                  | 2.29 | 56  | 135101  | 290.292 | ug/l | 100    |
| 14) Allyl chloride            | 2.73 | 41  | 229822  | 46.995  | ug/l | 99     |
| 15) Acrylonitrile             | 3.14 | 53  | 400316  | 238.215 | ug/l | 99     |
| 16) Acetone                   | 2.44 | 43  | 340612  | 225.300 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 300410  | 47.148  | ug/l | 99     |
| 18) Methyl Acetate            | 2.77 | 43  | 172891  | 47.616  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.19 | 73  | 390500  | 48.818  | ug/l | 98     |
| 20) Methylene Chloride        | 2.85 | 84  | 123738  | 50.151  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 109339  | 49.430  | ug/l | 96     |
| 22) Diisopropyl ether         | 3.85 | 45  | 463938  | 48.180  | ug/l | 97     |
| 23) Vinyl Acetate             | 3.81 | 43  | 2066381 | 245.969 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 230546  | 47.424  | ug/l | 99     |
| 25) 2-Butanone                | 4.67 | 43  | 577365  | 238.215 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 149354  | 46.191  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 127868  | 47.108  | ug/l | 100    |
| 28) Bromochloromethane        | 5.01 | 49  | 146027  | 60.800  | ug/l | 100    |
| 29) Tetrahydrofuran           | 5.13 | 42  | 378588  | 237.002 | ug/l | 100    |
| 30) Chloroform                | 5.21 | 83  | 209879  | 47.839  | ug/l | 99     |
| 31) Cyclohexane               | 5.58 | 56  | 216454  | 46.685  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 168920  | 48.169  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 160905  | 45.781  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.83 | 43  | 219502  | 48.209  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 139108  | 47.427  | ug/l | 99     |

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 26 07:57:20 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 196402   | 46.759  | ug/l  | 99       |
| 40) Benzene                    | 6.14  | 78   | 496900   | 47.225  | ug/l  | 100      |
| 41) Methacrylonitrile          | 5.04  | 41   | 126255   | 49.342  | ug/l  | 99       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 176904   | 45.920  | ug/l  | 99       |
| 43) Isopropyl Acetate          | 6.44  | 43   | 354001   | 48.608  | ug/l  | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 113962   | 46.128  | ug/l  | 98       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 142748   | 47.730  | ug/l  | 100      |
| 46) Dibromomethane             | 7.66  | 93   | 80885    | 46.314  | ug/l  | 100      |
| 47) Bromodichloromethane       | 7.90  | 83   | 162638   | 48.653  | ug/l  | 99       |
| 48) Methyl methacrylate        | 7.77  | 41   | 178971   | 49.113  | ug/l  | 99       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 71445    | 986.051 | ug/l  | 100      |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1169802  | 247.303 | ug/l  | 100      |
| 52) Toluene                    | 8.78  | 92   | 301567   | 47.933  | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 180563   | 49.315  | ug/l  | 98       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 202878   | 48.728  | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 122038   | 47.652  | ug/l  | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 229457   | 49.635  | ug/l  | 100      |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 217007   | 47.261  | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 590817   | 247.241 | ug/l  | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 915399   | 249.750 | ug/l  | 100      |
| 60) Dibromochloromethane       | 9.58  | 129  | 119333   | 48.996  | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 125754   | 48.116  | ug/l  | 100      |
| 64) Tetrachloroethene          | 9.34  | 164  | 94051    | 47.009  | ug/l  | 97       |
| 65) Chlorobenzene              | 10.13 | 112  | 303967   | 47.296  | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 108942   | 49.132  | ug/l  | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 575658   | 47.460  | ug/l  | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 419103   | 94.979  | ug/l  | 99       |
| 69) o-Xylene                   | 10.69 | 106  | 204410   | 47.736  | ug/l  | 100      |
| 70) Styrene                    | 10.71 | 104  | 363325   | 49.120  | ug/l  | 99       |
| 71) Bromoform                  | 10.85 | 173  | 87335    | 49.875  | ug/l  | 100      |
| 73) Isopropylbenzene           | 11.02 | 105  | 542013   | 46.445  | ug/l  | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 339306   | 50.233  | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 212914   | 47.023  | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 176824m  | 41.464  | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 128765   | 45.463  | ug/l  | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 637675   | 46.646  | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 380623   | 45.776  | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 462999   | 46.929  | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 65873    | 49.474  | ug/l  | 98       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 443796   | 46.271  | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 455404   | 47.843  | ug/l  | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 462867   | 46.384  | ug/l  | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 531340   | 46.874  | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 473817   | 47.371  | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 233398   | 46.122  | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 233878   | 45.794  | ug/l  | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 448715   | 47.357  | ug/l  | 100      |
| 90) Hexachloroethane           | 12.60 | 117  | 78844    | 47.316  | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 238030   | 46.971  | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 46572    | 47.172  | ug/l  | 99       |

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ALS Vial : 24 Sample Multiplier: 1

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ClientSampleId :  
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Quant Title : SW846 8260  
QLast Update : Tue Mar 26 07:57:20 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 162832   | 47.726 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 77368    | 47.757 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 563588   | 48.181 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 162280   | 47.334 | ug/l  | 100      |

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

