

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX010920\  
 Data File : VX014519.D  
 Acq On : 09 Jan 2020 23:58  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

apatel  
 1/10/2020 8:35:17 AM

Quant Time: Jan 10 08:20:33 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010720W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 07 15:54:41 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 472010   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 737403   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 662225   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 334724   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 271698   | 51.56 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.12% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 221611   | 49.65 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.30%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 879064   | 50.75 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.50% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 310757   | 48.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.74%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 293790  | 50.133  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 306679  | 50.971  | ug/l | 100    |
| 4) Vinyl Chloride             | 1.40 | 62  | 358394  | 53.456  | ug/l | 99     |
| 5) Bromomethane               | 1.63 | 94  | 192876  | 43.400  | ug/l | 100    |
| 6) Chloroethane               | 1.72 | 64  | 192526  | 52.769  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 380646  | 50.050  | ug/l | 100    |
| 8) Diethyl Ether              | 2.18 | 74  | 170579  | 49.162  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 223581  | 48.321  | ug/l | 100    |
| 10) Methyl Iodide             | 2.50 | 142 | 298525  | 53.881  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 274308  | 249.324 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 227216  | 48.740  | ug/l | 99     |
| 13) Acrolein                  | 2.28 | 56  | 210380  | 238.568 | ug/l | 100    |
| 14) Allyl chloride            | 2.72 | 41  | 399248  | 48.780  | ug/l | 99     |
| 15) Acrylonitrile             | 3.13 | 53  | 687962  | 259.082 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 577134  | 217.910 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.56 | 76  | 611441  | 47.006  | ug/l | 99     |
| 18) Methyl Acetate            | 2.76 | 43  | 437221  | 57.732  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 769805  | 51.440  | ug/l | 99     |
| 20) Methylene Chloride        | 2.85 | 84  | 261642  | 49.359  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 243425  | 47.830  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.84 | 45  | 826343  | 52.244  | ug/l | 92     |
| 23) Vinyl Acetate             | 3.80 | 43  | 1902354 | 155.347 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 448252  | 52.096  | ug/l | 99     |
| 25) 2-Butanone                | 4.65 | 43  | 944252  | 239.902 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 311825  | 42.781  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 283840  | 49.889  | ug/l | 99     |
| 28) Bromochloromethane        | 5.00 | 49  | 176549  | 48.694  | ug/l | 97     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 615810  | 264.624 | ug/l | 99     |
| 30) Chloroform                | 5.20 | 83  | 435567  | 51.804  | ug/l | 99     |
| 31) Cyclohexane               | 5.58 | 56  | 412443  | 51.211  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 370213  | 51.439  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 327878  | 47.282  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.82 | 43  | 361864  | 48.041  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 318236  | 49.869  | ug/l | 95     |

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 ALS Vial : 34 Sample Multiplier: 1

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010720W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 07 15:54:41 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 416084   | 47.759  | ug/l   | 99       |
| 40) Benzene                    | 6.14  | 78   | 1027227  | 49.910  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.03  | 41   | 211215   | 52.582  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 349542   | 48.573  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 616045   | 50.628  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 300652   | 50.831  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 265258   | 50.551  | ug/l   | 98       |
| 46) Dibromomethane             | 7.65  | 93   | 172371   | 47.065  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.89  | 83   | 341980   | 51.316  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.76  | 41   | 304065   | 52.174  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 7.73  | 88   | 112315   | 909.533 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1902985  | 256.644 | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 648896   | 49.251  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 375848   | 48.443  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 415132   | 49.532  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 259875   | 49.107  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 421373   | 51.973  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 441613   | 49.910  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 715466   | 259.370 | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.48  | 43   | 1428796  | 243.532 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.57  | 129  | 273684   | 51.453  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 273251   | 48.745  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.33  | 164  | 414592   | 62.467  | ug/l   | 97       |
| 65) Chlorobenzene              | 10.14 | 112  | 689162   | 47.954  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 258191   | 50.342  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 1215186  | 49.609  | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.35 | 106  | 932990   | 98.728  | ug/l   | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 454057   | 50.358  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 778620   | 50.039  | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 212924   | 50.742  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.01 | 105  | 1195771  | 50.873  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 547710   | 52.817  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 350898   | 46.551  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 327520m  | 47.292  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 314818   | 48.297  | ug/l   | 99       |
| 78) n-propylbenzene            | 11.35 | 91   | 1363870  | 50.666  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 796658   | 49.656  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 992026   | 50.835  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 128162   | 48.926  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 919698   | 48.837  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 845127   | 45.835  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 1007805  | 51.109  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1160279  | 50.619  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 1065041  | 50.071  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 552210   | 47.204  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 554311   | 50.442  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 924257   | 47.524  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 189434   | 50.702  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 560312   | 48.887  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 84948    | 50.100  | ug/l   | 99       |

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ALS Vial : 34 Sample Multiplier: 1

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ClientSampleId :  
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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010720W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jan 07 15:54:41 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 380431   | 47.288 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 180812   | 47.995 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 1158411  | 46.397 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 385624   | 48.840 | ug/l  | 99       |

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

