

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF102518\  
 Data File : VF060508.D  
 Acq On : 25 Oct 2018 15:33  
 Operator : VA/AP  
 Sample : VSTDICCC050  
 Misc : 5.00/5mL/MSVOA F/SOIL  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

apatel  
 10/26/2018 10:27:51 AM

Quant Time: Oct 26 00:48:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F102518S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 26 00:30:37 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 5.05  | 168  | 158182   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 5.77  | 114  | 232136   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 9.92  | 117  | 227176   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.63 | 152  | 154124   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 5.02  | 65   | 157858   | 65.80   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 131.60% |          |
| 35) Dibromofluoromethane      | 4.29  | 113  | 136487   | 63.87   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 127.74% |          |
| 50) Toluene-d8                | 7.71  | 98   | 276252   | 53.79   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 107.58% |          |
| 62) 4-Bromofluorobenzene      | 11.51 | 95   | 153894   | 68.29   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 136.58% |          |
| Target Compounds              |       |      |          |         |         |          |
|                               |       |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 0.99  | 85   | 189252   | 60.887  | ug/l    | 100      |
| 3) Chloromethane              | 1.14  | 50   | 88868    | 46.214  | ug/l    | 100      |
| 4) Vinyl Chloride             | 1.18  | 62   | 107579   | 51.576  | ug/l    | 100      |
| 5) Bromomethane               | 1.35  | 94   | 110056   | 67.092  | ug/l    | 100      |
| 6) Chloroethane               | 1.43  | 64   | 67641    | 61.346  | ug/l    | 100      |
| 7) Trichlorofluoromethane     | 1.55  | 101  | 367906   | 78.692  | ug/l    | 100      |
| 8) Diethyl Ether              | 1.70  | 74   | 32987    | 49.310  | ug/l    | 100      |
| 9) 1,1,2-Trichlorotrifluoroet | 1.89  | 101  | 145398   | 62.170  | ug/l    | 100      |
| 10) Methyl Iodide             | 1.97  | 142  | 208452m  | 56.218  | ug/l    |          |
| 11) Tert butyl alcohol        | 2.68  | 59   | 34288    | 272.779 | ug/l    | 100      |
| 12) 1,1-Dichloroethene        | 1.85  | 96   | 106162   | 54.343  | ug/l    | 100      |
| 13) Acrolein                  | 2.09  | 56   | 33387    | 428.655 | ug/l    | 100      |
| 14) Allyl chloride            | 2.19  | 41   | 170754   | 59.298  | ug/l    | 100      |
| 15) Acrylonitrile             | 3.07  | 53   | 54915    | 207.517 | ug/l    | 100      |
| 16) Acetone                   | 2.34  | 43   | 156968   | 298.611 | ug/l    | 100      |
| 17) Carbon Disulfide          | 1.87  | 76   | 272254m  | 50.114  | ug/l    |          |
| 18) Methyl Acetate            | 2.45  | 43   | 49786    | 49.972  | ug/l    | 100      |
| 19) Methyl tert-butyl Ether   | 2.53  | 73   | 278540   | 63.340  | ug/l    | 100      |
| 20) Methylene Chloride        | 2.28  | 84   | 96009m   | 52.614  | ug/l    |          |
| 21) trans-1,2-Dichloroethene  | 2.41  | 96   | 97915    | 53.700  | ug/l    | 100      |
| 22) Diisopropyl ether         | 2.93  | 45   | 312669   | 52.822  | ug/l    | 100      |
| 23) Vinyl Acetate             | 3.33  | 43   | 488383   | 235.692 | ug/l    | 100      |
| 24) 1,1-Dichloroethane        | 3.00  | 63   | 236343   | 59.497  | ug/l    | 100      |
| 25) 2-Butanone                | 4.50  | 43   | 125195   | 218.793 | ug/l    | 100      |
| 26) 2,2-Dichloropropane       | 3.75  | 77   | 158012   | 76.290  | ug/l    | 100      |
| 27) cis-1,2-Dichloroethene    | 3.63  | 96   | 102065   | 47.954  | ug/l    | 100      |
| 28) Bromochloromethane        | 3.88  | 49   | 66987    | 48.550  | ug/l    | 100      |
| 29) Tetrahydrofuran           | 4.27  | 42   | 47510    | 196.964 | ug/l    | 100      |
| 30) Chloroform                | 4.03  | 83   | 270796   | 58.908  | ug/l    | 100      |
| 31) Cyclohexane               | 3.87  | 56   | 108389   | 42.652  | ug/l    | 100      |
| 32) 1,1,1-Trichloroethane     | 4.27  | 97   | 254732   | 70.340  | ug/l    | 100      |
| 36) 1,1-Dichloropropene       | 4.45  | 75   | 160269   | 59.356  | ug/l    | 100      |
| 37) Ethyl Acetate             | 4.29  | 43   | 50955    | 53.425  | ug/l    | 100      |
| 38) Carbon Tetrachloride      | 4.17  | 117  | 256876m  | 94.708  | ug/l    |          |

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 Quant Title : SW846 8260  
 QLast Update : Fri Oct 26 00:30:37 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 5.63  | 83   | 131117   | 51.574  | ug/l  | 100      |
| 40) Benzene                    | 4.81  | 78   | 262588   | 47.365  | ug/l  | 100      |
| 41) Methacrylonitrile          | 4.93  | 41   | 27673    | 51.066  | ug/l  | 100      |
| 42) 1,2-Dichloroethane         | 5.12  | 62   | 183231   | 72.853  | ug/l  | 100      |
| 43) Isopropyl Acetate          | 7.11  | 43   | 56248    | 47.318  | ug/l  | 100      |
| 44) Trichloroethene            | 5.68  | 130  | 92056    | 53.303  | ug/l  | 100      |
| 45) 1,2-Dichloropropane        | 6.40  | 63   | 68319    | 50.341  | ug/l  | 100      |
| 46) Dibromomethane             | 6.25  | 93   | 65198    | 59.891  | ug/l  | 100      |
| 47) Bromodichloromethane       | 6.54  | 83   | 187641   | 68.249  | ug/l  | 100      |
| 48) Methyl methacrylate        | 6.87  | 41   | 45325    | 56.288  | ug/l  | 100      |
| 49) 1,4-Dioxane                | 6.87  | 88   | 6521     | 941.989 | ug/l  | 100      |
| 51) 4-Methyl-2-Pentanone       | 8.41  | 43   | 231165   | 278.772 | ug/l  | 100      |
| 52) Toluene                    | 7.78  | 92   | 173661   | 49.738  | ug/l  | 100      |
| 53) t-1,3-Dichloropropene      | 8.43  | 75   | 139143   | 65.163  | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 7.45  | 75   | 145243   | 58.402  | ug/l  | 100      |
| 55) 1,1,2-Trichloroethane      | 8.63  | 97   | 61251    | 57.080  | ug/l  | 100      |
| 56) Ethyl methacrylate         | 8.76  | 69   | 61820    | 49.792  | ug/l  | 100      |
| 57) 1,3-Dichloropropane        | 9.00  | 76   | 100561   | 54.424  | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 7.78  | 63   | 44552    | 353.124 | ug/l  | 100      |
| 59) 2-Hexanone                 | 9.63  | 43   | 161498   | 269.248 | ug/l  | 100      |
| 60) Dibromochloromethane       | 8.86  | 129  | 114101   | 67.740  | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 9.14  | 107  | 71757    | 59.184  | ug/l  | 100      |
| 64) Tetrachloroethene          | 8.30  | 164  | 87170    | 48.412  | ug/l  | 100      |
| 65) Chlorobenzene              | 9.94  | 112  | 225347   | 51.077  | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.07 | 131  | 123110   | 61.948  | ug/l  | 100      |
| 67) Ethyl Benzene              | 10.03 | 91   | 469612   | 56.418  | ug/l  | 100      |
| 68) m/p-Xylenes                | 10.27 | 106  | 298475   | 105.043 | ug/l  | 100      |
| 69) o-Xylene                   | 10.82 | 106  | 162152   | 52.475  | ug/l  | 100      |
| 70) Styrene                    | 10.90 | 104  | 222426   | 50.006  | ug/l  | 100      |
| 71) Bromoform                  | 10.89 | 173  | 62193    | 61.728  | ug/l  | 100      |
| 73) Isopropylbenzene           | 11.23 | 105  | 574904   | 50.182  | ug/l  | 100      |
| 74) N-amyl acetate             | 11.46 | 43   | 100121   | 40.151  | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.79 | 83   | 86697    | 45.023  | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.89 | 75   | 72519    | 48.716  | ug/l  | 100      |
| 77) Bromobenzene               | 11.59 | 156  | 119414   | 46.903  | ug/l  | 100      |
| 78) n-propylbenzene            | 11.69 | 91   | 680677   | 49.886  | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 11.81 | 91   | 415379   | 52.001  | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.91 | 105  | 505749   | 52.622  | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.96 | 75   | 33708m   | 51.936  | ug/l  |          |
| 82) 4-Chlorotoluene            | 11.99 | 91   | 417310   | 50.636  | ug/l  | 100      |
| 83) tert-Butylbenzene          | 12.21 | 119  | 530734   | 54.931  | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene     | 12.28 | 105  | 502739   | 51.521  | ug/l  | 100      |
| 85) sec-Butylbenzene           | 12.39 | 105  | 680339   | 51.919  | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.54 | 119  | 582350   | 54.135  | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.56 | 146  | 234891   | 48.437  | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 12.65 | 146  | 238220   | 50.653  | ug/l  | 100      |
| 89) n-Butylbenzene             | 12.91 | 91   | 609664   | 54.161  | ug/l  | 100      |
| 90) Hexachloroethane           | 12.99 | 117  | 156229   | 60.735  | ug/l  | 100      |
| 91) 1,2-Dichlorobenzene        | 13.02 | 146  | 233108   | 49.934  | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.71 | 75   | 23343    | 57.114  | ug/l  | 100      |

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Instrument :  
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VSTDICCC050

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Quant Title : SW846 8260  
QLast Update : Fri Oct 26 00:30:37 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.26 | 180  | 191234   | 53.045 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 14.25 | 225  | 150143   | 61.258 | ug/l  | 100      |
| 95) Naphthalene            | 14.52 | 128  | 320209   | 51.669 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.67 | 180  | 185562   | 55.248 | ug/l  | 100      |

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

