

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF031219\  
 Data File : VF061904.D  
 Acq On : 12 Mar 2019 13:47  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/13/2019 4:41:02 PM

Quant Time: Mar 13 02:14:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F030419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 05 04:50:44 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 4.85  | 168  | 312637   | 50.00   | ug/l    | -0.03    |
| 34) 1,4-Difluorobenzene       | 5.58  | 114  | 453031   | 50.00   | ug/l    | -0.03    |
| 63) Chlorobenzene-d5          | 9.76  | 117  | 400123   | 50.00   | ug/l    | -0.02    |
| 72) 1,4-Dichlorobenzene-d4    | 12.54 | 152  | 212939   | 50.00   | ug/l    | -0.01    |
| System Monitoring Compounds   |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 4.83  | 65   | 124501   | 54.68   | ug/l    | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 109.36% |          |
| 35) Dibromofluoromethane      | 4.09  | 113  | 170575   | 53.95   | ug/l    | -0.03    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 107.90% |          |
| 50) Toluene-d8                | 7.54  | 98   | 498983   | 53.10   | ug/l    | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 106.20% |          |
| 62) 4-Bromofluorobenzene      | 11.40 | 95   | 195184   | 53.02   | ug/l    | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 106.04% |          |
| Target Compounds              |       |      |          |         |         |          |
|                               |       |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 0.96  | 85   | 170941   | 44.536  | ug/l    | 92       |
| 3) Chloromethane              | 1.09  | 50   | 169207   | 45.488  | ug/l    | 100      |
| 4) Vinyl Chloride             | 1.14  | 62   | 165136   | 46.765  | ug/l    | 94       |
| 5) Bromomethane               | 1.32  | 94   | 115657   | 48.059  | ug/l    | 99       |
| 6) Chloroethane               | 1.39  | 64   | 82427    | 49.106  | ug/l    | 100      |
| 7) Trichlorofluoromethane     | 1.48  | 101  | 215580   | 49.986  | ug/l    | 96       |
| 8) Diethyl Ether              | 1.62  | 74   | 48024    | 48.967  | ug/l    | 96       |
| 9) 1,1,2-Trichlorotrifluoroet | 1.83  | 101  | 146094   | 49.883  | ug/l    | 99       |
| 10) Methyl Iodide             | 1.90  | 142  | 272857m  | 48.957  | ug/l    |          |
| 11) Tert butyl alcohol        | 2.56  | 59   | 31751    | 245.699 | ug/l #  | 91       |
| 12) 1,1-Dichloroethene        | 1.79  | 96   | 129729   | 48.518  | ug/l    | 92       |
| 13) Acrolein                  | 1.99  | 56   | 41440    | 253.076 | ug/l    | 93       |
| 14) Allyl chloride            | 2.09  | 41   | 163135   | 55.382  | ug/l    | 95       |
| 15) Acrylonitrile             | 2.94  | 53   | 99178    | 241.020 | ug/l    | 97       |
| 16) Acetone                   | 2.23  | 43   | 149344   | 313.145 | ug/l    | 93       |
| 17) Carbon Disulfide          | 1.80  | 76   | 397043m  | 47.704  | ug/l    |          |
| 18) Methyl Acetate            | 2.33  | 43   | 63299m   | 66.662  | ug/l    |          |
| 19) Methyl tert-butyl Ether   | 2.41  | 73   | 225724   | 49.904  | ug/l    | 100      |
| 20) Methylene Chloride        | 2.17  | 84   | 133763m  | 50.552  | ug/l    |          |
| 21) trans-1,2-Dichloroethene  | 2.30  | 96   | 137156   | 54.503  | ug/l    | 98       |
| 22) Diisopropyl ether         | 2.79  | 45   | 398758   | 52.041  | ug/l    | 98       |
| 23) Vinyl Acetate             | 3.17  | 43   | 829960   | 242.463 | ug/l    | 100      |
| 24) 1,1-Dichloroethane        | 2.86  | 63   | 237048   | 51.759  | ug/l    | 100      |
| 25) 2-Butanone                | 4.31  | 43   | 232031   | 239.185 | ug/l    | 92       |
| 26) 2,2-Dichloropropane       | 3.58  | 77   | 104558   | 51.141  | ug/l    | 98       |
| 27) cis-1,2-Dichloroethene    | 3.46  | 96   | 170592   | 48.930  | ug/l    | 97       |
| 28) Bromochloromethane        | 3.69  | 49   | 101509   | 50.846  | ug/l #  | 90       |
| 29) Tetrahydrofuran           | 4.05  | 42   | 96696    | 231.125 | ug/l    | 97       |
| 30) Chloroform                | 3.84  | 83   | 264373   | 50.538  | ug/l    | 96       |
| 31) Cyclohexane               | 3.68  | 56   | 222282m  | 46.338  | ug/l    |          |
| 32) 1,1,1-Trichloroethane     | 4.08  | 97   | 150095   | 46.549  | ug/l    | 99       |
| 36) 1,1-Dichloropropene       | 4.26  | 75   | 219601   | 51.316  | ug/l    | 96       |
| 37) Ethyl Acetate             | 4.09  | 43   | 82663    | 46.021  | ug/l    | 90       |
| 38) Carbon Tetrachloride      | 3.97  | 117  | 156755   | 51.745  | ug/l    | 98       |

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 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
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 Quant Title : SW846 8260  
 QLast Update : Tue Mar 05 04:50:44 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 5.43  | 83   | 254981   | 50.445  | ug/l   | 97       |
| 40) Benzene                    | 4.61  | 78   | 567208   | 50.708  | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.73  | 41   | 46217    | 46.963  | ug/l # | 87       |
| 42) 1,2-Dichloroethane         | 4.93  | 62   | 137845   | 49.449  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.94  | 43   | 97054    | 43.834  | ug/l # | 95       |
| 44) Trichloroethene            | 5.48  | 130  | 170154   | 48.948  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 6.22  | 63   | 136592   | 51.352  | ug/l   | 94       |
| 46) Dibromomethane             | 6.07  | 93   | 80594    | 48.143  | ug/l   | 98       |
| 47) Bromodichloromethane       | 6.37  | 83   | 186116   | 50.324  | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.70  | 41   | 65797    | 46.956  | ug/l   | 93       |
| 49) 1,4-Dioxane                | 6.69  | 88   | 12523    | 977.628 | ug/l # | 82       |
| 51) 4-Methyl-2-Pentanone       | 8.24  | 43   | 362491   | 236.882 | ug/l   | 95       |
| 52) Toluene                    | 7.61  | 92   | 332722   | 50.281  | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 8.26  | 75   | 149427   | 48.947  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.28  | 75   | 214583   | 50.960  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 8.48  | 97   | 92904    | 48.728  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 8.61  | 69   | 103935   | 48.370  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 8.83  | 76   | 152608   | 48.944  | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 7.27  | 63   | 85066    | 250.261 | ug/l   | 92       |
| 59) 2-Hexanone                 | 9.47  | 43   | 277061   | 250.972 | ug/l   | 98       |
| 60) Dibromochloromethane       | 8.69  | 129  | 130637   | 48.075  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 8.97  | 107  | 100679   | 48.019  | ug/l   | 94       |
| 64) Tetrachloroethene          | 8.13  | 164  | 145649   | 47.373  | ug/l   | 97       |
| 65) Chlorobenzene              | 9.78  | 112  | 369903   | 48.119  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.92  | 131  | 149740   | 50.276  | ug/l   | 99       |
| 67) Ethyl Benzene              | 9.89  | 91   | 634411   | 49.792  | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.11 | 106  | 470509   | 96.396  | ug/l   | 93       |
| 69) o-Xylene                   | 10.70 | 106  | 254760   | 48.471  | ug/l   | 99       |
| 70) Styrene                    | 10.77 | 104  | 339179   | 45.855  | ug/l   | 98       |
| 71) Bromoform                  | 10.76 | 173  | 73962    | 46.986  | ug/l   | 94       |
| 73) Isopropylbenzene           | 11.11 | 105  | 735535   | 50.174  | ug/l   | 98       |
| 74) N-amyl acetate             | 11.36 | 43   | 164254   | 48.670  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.68 | 83   | 117640   | 48.283  | ug/l   | 91       |
| 76) 1,2,3-Trichloropropane     | 11.78 | 75   | 78963    | 47.485  | ug/l   | 97       |
| 77) Bromobenzene               | 11.48 | 156  | 165646   | 46.951  | ug/l   | 90       |
| 78) n-propylbenzene            | 11.58 | 91   | 795468   | 48.050  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 11.71 | 91   | 460886   | 48.695  | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 11.81 | 105  | 560220   | 47.598  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.86 | 75   | 41166m   | 54.138  | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.89 | 91   | 467384   | 48.278  | ug/l   | 95       |
| 83) tert-Butylbenzene          | 12.12 | 119  | 614796   | 49.192  | ug/l   | 91       |
| 84) 1,2,4-Trimethylbenzene     | 12.19 | 105  | 571851   | 49.562  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 12.29 | 105  | 816563   | 50.207  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 12.45 | 119  | 698485   | 50.525  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.46 | 146  | 330379   | 49.316  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.55 | 146  | 317769   | 49.173  | ug/l   | 95       |
| 89) n-Butylbenzene             | 12.84 | 91   | 658933   | 49.874  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.90 | 117  | 170840   | 51.341  | ug/l   | 89       |
| 91) 1,2-Dichlorobenzene        | 12.93 | 146  | 309681   | 48.791  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.63 | 75   | 19845    | 47.138  | ug/l   | 93       |

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ALS Vial : 2 Sample Multiplier: 1

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Quant Title : SW846 8260  
QLast Update : Tue Mar 05 04:50:44 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.19 | 180  | 216784   | 48.718 | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 14.18 | 225  | 142426   | 46.235 | ug/l  | 99       |
| 95) Naphthalene            | 14.44 | 128  | 393318   | 49.628 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.59 | 180  | 206406   | 50.239 | ug/l  | 93       |

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

