

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD050119\  
 Data File : VD062106.D  
 Acq On : 1 May 2019 18:24  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00µ/5mL/MSVOA D/SOIL  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050EC

Quant Time: May 02 01:24:56 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D042319S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 01 08:37:17 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.03  | 168  | 554062   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 8.21  | 114  | 895092   | 50.00 | ug/l  | -0.01    |
| 63) Chlorobenzene-d5       | 12.35 | 117  | 735208   | 50.00 | ug/l  | -0.01    |
| 72) 1,4-Dichlorobenzene-d4 | 14.51 | 152  | 344220   | 50.00 | ug/l  | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.43  | 65   | 225460   | 51.99 | ug/l    | -0.02    |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 103.98% |          |
| 35) Dibromofluoromethane    | 6.90  | 113  | 339388   | 54.82 | ug/l    | -0.03    |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 109.64% |          |
| 50) Toluene-d8              | 10.39 | 98   | 730400   | 49.59 | ug/l    | -0.02    |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 99.18%  |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 294553   | 49.86 | ug/l    | -0.01    |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 99.72%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.57 | 85   | 209332   | 42.312  | ug/l  | 100    |
| 3) Chloromethane              | 1.75 | 50   | 170027   | 40.436  | ug/l  | 96     |
| 4) Vinyl Chloride             | 1.84 | 62   | 170629   | 44.771  | ug/l  | 96     |
| 5) Bromomethane               | 2.15 | 94   | 56085    | 57.839  | ug/l  | 97     |
| 6) Chloroethane               | 2.26 | 64   | 72500    | 52.625  | ug/l  | 90     |
| 7) Trichlorofluoromethane     | 2.52 | 101  | 280435   | 48.666  | ug/l  | 95     |
| 8) Diethyl Ether              | 2.86 | 74   | 80263    | 51.969  | ug/l  | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.14 | 101  | 261888   | 49.336  | ug/l  | 99     |
| 10) Methyl Iodide             | 3.30 | 142  | 380591   | 47.380  | ug/l  | 98     |
| 11) Tert butyl alcohol        | 4.04 | 59   | 58802    | 239.999 | ug/l  | 100    |
| 12) 1,1-Dichloroethene        | 3.12 | 96   | 214730   | 47.547  | ug/l  | 96     |
| 13) Acrolein                  | 3.02 | 56   | 67484    | 265.463 | ug/l  | 97     |
| 14) Allyl chloride            | 3.60 | 41   | 274389   | 44.494  | ug/l  | 93     |
| 15) Acrylonitrile             | 4.17 | 53   | 191827   | 252.843 | ug/l  | 87     |
| 16) Acetone                   | 3.21 | 43   | 257107   | 248.316 | ug/l  | 95     |
| 17) Carbon Disulfide          | 3.37 | 76   | 601081   | 46.058  | ug/l  | 98     |
| 18) Methyl Acetate            | 3.62 | 43   | 92202    | 49.061  | ug/l  | 98     |
| 19) Methyl tert-butyl Ether   | 4.22 | 73   | 431970   | 48.207  | ug/l  | 96     |
| 20) Methylene Chloride        | 3.80 | 84   | 242794   | 48.043  | ug/l  | 98     |
| 21) trans-1,2-Dichloroethene  | 4.20 | 96   | 236088   | 45.569  | ug/l  | 95     |
| 22) Diisopropyl ether         | 5.10 | 45   | 670681   | 46.582  | ug/l  | 97     |
| 23) Vinyl Acetate             | 5.03 | 43   | 1870413  | 249.456 | ug/l  | 100    |
| 24) 1,1-Dichloroethane        | 4.96 | 63   | 403388   | 46.354  | ug/l  | 99     |
| 25) 2-Butanone                | 6.04 | 43   | 297160   | 236.715 | ug/l  | 95     |
| 26) 2,2-Dichloropropane       | 6.00 | 77   | 379603   | 50.002  | ug/l  | 99     |
| 27) cis-1,2-Dichloroethene    | 6.01 | 96   | 283311   | 48.069  | ug/l  | 97     |
| 28) Bromochloromethane        | 6.42 | 49   | 167663   | 50.354  | ug/l  | 93     |
| 29) Tetrahydrofuran           | 6.44 | 42   | 135959   | 219.805 | ug/l  | 99     |
| 30) Chloroform                | 6.64 | 83   | 465141   | 47.059  | ug/l  | 100    |
| 31) Cyclohexane               | 6.94 | 56   | 281437   | 43.571  | ug/l  | 96     |
| 32) 1,1,1-Trichloroethane     | 6.85 | 97   | 415415   | 48.303  | ug/l  | 98     |
| 36) 1,1-Dichloropropene       | 7.13 | 75   | 314613   | 45.114  | ug/l  | 95     |
| 37) Ethyl Acetate             | 6.15 | 43   | 132836   | 44.700  | ug/l  | 97     |
| 38) Carbon Tetrachloride      | 7.10 | 117  | 400459m  | 45.317  | ug/l  |        |

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 Misc : 5.00µl/5mL/MSVOA D/SOIL  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleID :  
 VSTDCCC050EC

Quant Time: May 02 01:24:56 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D042319S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 01 08:37:17 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 8.85  | 83   | 308527   | 44.841  | ug/l   | 97       |
| 40) Benzene                    | 7.44  | 78   | 729895   | 42.277  | ug/l   | 99       |
| 41) Methacrylonitrile          | 6.42  | 41   | 165294   | 47.671  | ug/l # | 91       |
| 42) 1,2-Dichloroethane         | 7.56  | 62   | 280529   | 47.856  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 9.22  | 43   | 203666   | 46.905  | ug/l # | 97       |
| 44) Trichloroethene            | 8.52  | 130  | 293711   | 43.882  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 8.92  | 63   | 200343   | 45.742  | ug/l   | 100      |
| 46) Dibromomethane             | 9.05  | 93   | 144628   | 45.891  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.36  | 83   | 345149   | 46.350  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.11  | 41   | 114353   | 46.158  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.07  | 88   | 24601    | 921.050 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 10.29 | 43   | 619680   | 233.359 | ug/l   | 100      |
| 52) Toluene                    | 10.49 | 92   | 448057   | 40.702  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.90 | 75   | 297951   | 47.668  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.02 | 75   | 353866   | 46.547  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 11.17 | 97   | 160186   | 43.344  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 11.02 | 69   | 181824   | 44.422  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 11.40 | 76   | 257887   | 45.181  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.84  | 63   | 439975   | 231.201 | ug/l   | 99       |
| 59) 2-Hexanone                 | 11.52 | 43   | 435325   | 218.538 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.67 | 129  | 317002   | 51.840  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.79 | 107  | 200876   | 45.820  | ug/l   | 96       |
| 64) Tetrachloroethene          | 11.24 | 164  | 228170   | 43.505  | ug/l   | 97       |
| 65) Chlorobenzene              | 12.39 | 112  | 577232   | 41.549  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 12.50 | 131  | 263556   | 44.723  | ug/l   | 98       |
| 67) Ethyl Benzene              | 12.51 | 91   | 951560   | 41.964  | ug/l   | 99       |
| 68) m/p-Xylenes                | 12.66 | 106  | 689892   | 84.178  | ug/l   | 98       |
| 69) o-Xylene                   | 13.04 | 106  | 329828   | 43.985  | ug/l   | 100      |
| 70) Styrene                    | 13.06 | 104  | 539735   | 41.685  | ug/l   | 98       |
| 71) Bromoform                  | 13.23 | 173  | 158856   | 47.283  | ug/l # | 99       |
| 73) Isopropylbenzene           | 13.40 | 105  | 938086   | 40.854  | ug/l   | 98       |
| 74) N-amyl acetate             | 13.26 | 43   | 260900   | 44.119  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 13.69 | 83   | 187761   | 41.728  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 13.72 | 75   | 195550   | 44.737  | ug/l   | 96       |
| 77) Bromobenzene               | 13.66 | 156  | 252639   | 38.354  | ug/l   | 92       |
| 78) n-propylbenzene            | 13.77 | 91   | 1170748  | 44.539  | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 13.83 | 91   | 672795   | 42.256  | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 13.93 | 105  | 790746   | 43.189  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 13.47 | 75   | 59081    | 44.603  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 13.94 | 91   | 764886   | 43.622  | ug/l   | 91       |
| 83) tert-Butylbenzene          | 14.19 | 119  | 949892   | 44.786  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 14.23 | 105  | 815150   | 46.628  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 14.36 | 105  | 1041324  | 45.438  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 14.48 | 119  | 921973   | 44.951  | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 14.45 | 146  | 517492   | 44.862  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 14.53 | 146  | 500922   | 46.435  | ug/l   | 98       |
| 89) n-Butylbenzene             | 14.80 | 91   | 720468   | 39.126  | ug/l   | 98       |
| 90) Hexachloroethane           | 15.00 | 117  | 253216   | 45.656  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 14.81 | 146  | 386680   | 40.638  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 15.38 | 75   | 29160    | 44.186  | ug/l   | 97       |

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Quant Title : SW846 8260  
QLast Update : Wed May 01 08:37:17 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.94 | 180  | 214449   | 41.771 | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 16.04 | 225  | 162000   | 42.639 | ug/l  | 97       |
| 95) Naphthalene            | 16.11 | 128  | 368977   | 44.512 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 16.26 | 180  | 121308   | 41.644 | ug/l  | 98       |

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

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