

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD040819\  
 Data File : VD061647.D  
 Acq On : 8 Apr 2019 13:04  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050

Quant Time: Apr 09 06:58:06 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D040619S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Apr 08 10:04:03 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.06  | 168  | 651814   | 50.00 | ug/l  | 0.02     |
| 34) 1,4-Difluorobenzene    | 8.23  | 114  | 1120420  | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 12.38 | 117  | 827414   | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 407266   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.47   | 65  | 254909   | 51.59 | ug/l    | 0.01 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.18% |      |
| 35) Dibromofluoromethane  | 6.93   | 113 | 395783   | 50.99 | ug/l    | 0.01 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.98% |      |
| 50) Toluene-d8            | 10.43  | 98  | 857463   | 43.97 | ug/l    | 0.02 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 87.94%  |      |
| 62) 4-Bromofluorobenzene  | 13.56  | 95  | 342771   | 50.00 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.00% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.58 | 85  | 329660  | 46.880  | ug/l   | 100    |
| 3) Chloromethane              | 1.76 | 50  | 255119  | 44.895  | ug/l   | 96     |
| 4) Vinyl Chloride             | 1.85 | 62  | 242775  | 45.721  | ug/l   | 98     |
| 5) Bromomethane               | 2.15 | 94  | 51381   | 41.806  | ug/l   | 100    |
| 6) Chloroethane               | 2.27 | 64  | 89615   | 53.883  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 2.53 | 101 | 370339  | 46.192  | ug/l   | 99     |
| 8) Diethyl Ether              | 2.88 | 74  | 113147  | 50.287  | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.16 | 101 | 399472  | 50.680  | ug/l   | 96     |
| 10) Methyl Iodide             | 3.31 | 142 | 514494  | 44.225  | ug/l   | 96     |
| 11) Tert butyl alcohol        | 4.07 | 59  | 86238   | 260.443 | ug/l # | 92     |
| 12) 1,1-Dichloroethene        | 3.13 | 96  | 343294  | 50.521  | ug/l   | 97     |
| 13) Acrolein                  | 3.04 | 56  | 116227  | 287.899 | ug/l   | 99     |
| 14) Allyl chloride            | 3.63 | 41  | 441048  | 47.589  | ug/l   | 98     |
| 15) Acrylonitrile             | 4.21 | 53  | 276966  | 242.989 | ug/l   | 95     |
| 16) Acetone                   | 3.23 | 43  | 388501  | 263.044 | ug/l   | 100    |
| 17) Carbon Disulfide          | 3.39 | 76  | 1020802 | 46.233  | ug/l   | 99     |
| 18) Methyl Acetate            | 3.65 | 43  | 133721  | 48.122  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 4.25 | 73  | 617157  | 52.454  | ug/l   | 99     |
| 20) Methylene Chloride        | 3.82 | 84  | 361527  | 43.137  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 4.24 | 96  | 363271  | 49.223  | ug/l   | 94     |
| 22) Diisopropyl ether         | 5.13 | 45  | 972374  | 50.042  | ug/l   | 97     |
| 23) Vinyl Acetate             | 5.07 | 43  | 2858878 | 266.643 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 4.99 | 63  | 566795  | 47.601  | ug/l   | 99     |
| 25) 2-Butanone                | 6.09 | 43  | 411322  | 241.575 | ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 6.04 | 77  | 468953  | 48.368  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 6.05 | 96  | 370920  | 47.111  | ug/l   | 96     |
| 28) Bromochloromethane        | 6.45 | 49  | 219572  | 49.989  | ug/l   | 93     |
| 29) Tetrahydrofuran           | 6.47 | 42  | 222371  | 270.545 | ug/l   | 99     |
| 30) Chloroform                | 6.68 | 83  | 589913  | 47.292  | ug/l   | 99     |
| 31) Cyclohexane               | 6.97 | 56  | 495027  | 53.216  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 6.88 | 97  | 555116  | 50.783  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.16 | 75  | 447923  | 45.680  | ug/l   | 100    |
| 37) Ethyl Acetate             | 6.20 | 43  | 217369  | 54.424  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.13 | 117 | 547482m | 47.639  | ug/l   |        |

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 Quant Title : SW846 8260  
 QLast Update : Mon Apr 08 10:04:03 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 8.88  | 83   | 502607   | 49.926   | ug/l   | 97       |
| 40) Benzene                    | 7.47  | 78   | 1154752  | 48.814   | ug/l   | 98       |
| 41) Methacrylonitrile          | 6.46  | 41   | 249570   | 53.528   | ug/l # | 92       |
| 42) 1,2-Dichloroethane         | 7.59  | 62   | 371829   | 49.979   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 9.25  | 43   | 292698   | 50.496   | ug/l   | 98       |
| 44) Trichloroethene            | 8.56  | 130  | 436195   | 48.097   | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 8.95  | 63   | 290943   | 49.593   | ug/l   | 100      |
| 46) Dibromomethane             | 9.08  | 93   | 214453   | 51.147   | ug/l   | 94       |
| 47) Bromodichloromethane       | 9.39  | 83   | 466995   | 50.712   | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.13  | 41   | 165087   | 49.408   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.09  | 88   | 42543    | 1153.524 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 10.31 | 43   | 878434   | 256.252  | ug/l   | 100      |
| 52) Toluene                    | 10.53 | 92   | 745409   | 50.461   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.93 | 75   | 397743   | 49.274   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.05 | 75   | 512122   | 51.466   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 11.21 | 97   | 241444   | 48.462   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 11.06 | 69   | 259536   | 49.381   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 11.42 | 76   | 371059   | 50.857   | ug/l   | 96       |
| 58) 2-Chloroethyl Vinyl ether  | 9.88  | 63   | 658341   | 265.468  | ug/l   | 98       |
| 59) 2-Hexanone                 | 11.54 | 43   | 698434   | 262.528  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.70 | 129  | 398671   | 50.648   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.82 | 107  | 303149   | 52.030   | ug/l   | 97       |
| 64) Tetrachloroethene          | 11.28 | 164  | 333495   | 51.925   | ug/l   | 98       |
| 65) Chlorobenzene              | 12.41 | 112  | 838736   | 51.116   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 12.53 | 131  | 338851   | 53.666   | ug/l   | 98       |
| 67) Ethyl Benzene              | 12.54 | 91   | 1351283  | 54.080   | ug/l   | 100      |
| 68) m/p-Xylenes                | 12.67 | 106  | 972554   | 100.961  | ug/l   | 97       |
| 69) o-Xylene                   | 13.06 | 106  | 518813   | 55.794   | ug/l   | 96       |
| 70) Styrene                    | 13.09 | 104  | 815798   | 51.372   | ug/l   | 99       |
| 71) Bromoform                  | 13.24 | 173  | 227849   | 58.160   | ug/l   | 97       |
| 73) Isopropylbenzene           | 13.41 | 105  | 1384207  | 51.009   | ug/l   | 100      |
| 74) N-amyl acetate             | 13.27 | 43   | 392577   | 53.244   | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 13.71 | 83   | 278572   | 49.648   | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 13.74 | 75   | 292930   | 52.867   | ug/l   | 98       |
| 77) Bromobenzene               | 13.68 | 156  | 401851   | 51.017   | ug/l   | 91       |
| 78) n-propylbenzene            | 13.79 | 91   | 1568225  | 48.311   | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 13.85 | 91   | 819279   | 44.135   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 13.94 | 105  | 1146181  | 53.215   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 13.48 | 75   | 89444    | 53.196   | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 13.95 | 91   | 1077254  | 52.960   | ug/l   | 92       |
| 83) tert-Butylbenzene          | 14.20 | 119  | 1276337  | 49.148   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 14.25 | 105  | 1109008  | 51.017   | ug/l   | 98       |
| 85) sec-Butylbenzene           | 14.38 | 105  | 1346576  | 47.993   | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 14.49 | 119  | 1183663  | 48.630   | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 14.46 | 146  | 709630   | 52.348   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 14.54 | 146  | 691199   | 50.534   | ug/l   | 96       |
| 89) n-Butylbenzene             | 14.81 | 91   | 1086206  | 51.342   | ug/l   | 96       |
| 90) Hexachloroethane           | 15.02 | 117  | 348300   | 52.737   | ug/l   | 88       |
| 91) 1,2-Dichlorobenzene        | 14.82 | 146  | 558552   | 49.994   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 15.39 | 75   | 39891    | 58.915   | ug/l   | 79       |

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QLast Update : Mon Apr 08 10:04:03 2019  
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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.95 | 180  | 349391   | 61.382 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 16.05 | 225  | 232820   | 52.971 | ug/l  | 98       |
| 95) Naphthalene            | 16.13 | 128  | 551869   | 61.275 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 16.28 | 180  | 205237   | 72.246 | ug/l  | 98       |

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

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