

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD110119\  
 Data File : VD064152.D  
 Acq On : 01 Nov 2019 17:57  
 Operator : VA/SY  
 Sample : VSTDCCC050  
 Misc : 5.00G/5.00ml/MSVOA\_D/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 11/4/2019 11:51:07 AM

Quant Time: Nov 01 17:30:57 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D102919S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 30 08:00:10 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 221957   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 337018   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 339187   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 190247   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 8.34   | 65  | 86875    | 49.21 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.42% |      |
| 35) Dibromofluoromethane    | 7.93   | 113 | 98290    | 47.40 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 94.80% |      |
| 50) Toluene-d8              | 10.34  | 98  | 393710   | 47.48 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 94.96% |      |
| 62) 4-Bromofluorobenzene    | 12.63  | 95  | 134990   | 49.10 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.20% |      |

| Target Compounds              |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 103994 | 45.884  | ug/l   | 100    |
| 3) Chloromethane              | 2.21 | 50  | 171354 | 45.314  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.35 | 62  | 191661 | 46.738  | ug/l   | 96     |
| 5) Bromomethane               | 2.77 | 94  | 130783 | 48.937  | ug/l   | 97     |
| 6) Chloroethane               | 2.93 | 64  | 124771 | 48.987  | ug/l   | 95     |
| 7) Trichlorofluoromethane     | 3.28 | 101 | 266198 | 47.155  | ug/l   | 96     |
| 8) Diethyl Ether              | 3.71 | 74  | 46980  | 47.878  | ug/l   | 94     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.08 | 101 | 97237  | 47.797  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.30 | 142 | 130553 | 51.797  | ug/l   | 100    |
| 11) Tert butyl alcohol        | 5.24 | 59  | 22681  | 223.957 | ug/l # | 71     |
| 12) 1,1-Dichloroethene        | 4.07 | 96  | 93361  | 48.490  | ug/l   | 90     |
| 13) Acrolein                  | 3.93 | 56  | 18743  | 166.523 | ug/l   | 94     |
| 14) Allyl chloride            | 4.71 | 41  | 113638 | 50.427  | ug/l   | 98     |
| 15) Acrylonitrile             | 5.43 | 53  | 87800  | 242.235 | ug/l   | 98     |
| 16) Acetone                   | 4.17 | 43  | 88779  | 264.325 | ug/l   | 92     |
| 17) Carbon Disulfide          | 4.40 | 76  | 289978 | 49.010  | ug/l   | 96     |
| 18) Methyl Acetate            | 4.72 | 43  | 42454  | 47.519  | ug/l   | 96     |
| 19) Methyl tert-butyl Ether   | 5.49 | 73  | 195488 | 50.036  | ug/l   | 97     |
| 20) Methylene Chloride        | 4.96 | 84  | 118539 | 55.715  | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 111460 | 51.570  | ug/l   | 93     |
| 22) Diisopropyl ether         | 6.37 | 45  | 259644 | 52.024  | ug/l   | 98     |
| 23) Vinyl Acetate             | 6.31 | 43  | 721657 | 263.792 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.27 | 63  | 167549 | 49.715  | ug/l   | 99     |
| 25) 2-Butanone                | 7.23 | 43  | 114738 | 247.105 | ug/l   | 95     |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 153975 | 48.137  | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 124672 | 51.550  | ug/l   | 97     |
| 28) Bromochloromethane        | 7.55 | 49  | 65672  | 49.991  | ug/l   | 95     |
| 29) Tetrahydrofuran           | 7.57 | 42  | 71502  | 263.854 | ug/l   | 98     |
| 30) Chloroform                | 7.71 | 83  | 195341 | 50.653  | ug/l   | 98     |
| 31) Cyclohexane               | 7.98 | 56  | 146855 | 44.727  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.90 | 97  | 178281 | 49.663  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 150848 | 47.767  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.30 | 43  | 48402  | 49.795  | ug/l # | 94     |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 171383 | 49.741  | ug/l   | 94     |

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D102919S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 30 08:00:10 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 186263   | 48.048   | ug/l   | 96       |
| 40) Benzene                    | 8.36  | 78   | 430024   | 49.935   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.53  | 41   | 17826    | 31.778   | ug/l # | 53       |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 116702   | 51.303   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.46  | 43   | 96257    | 49.000   | ug/l   | 98       |
| 44) Trichloroethene            | 9.11  | 130  | 131422   | 50.351   | ug/l   | 93       |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 99828    | 50.020   | ug/l   | 99       |
| 46) Dibromomethane             | 9.48  | 93   | 59522    | 49.520   | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.67  | 83   | 151679   | 50.021   | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.46  | 41   | 45348    | 49.920   | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.47  | 88   | 14877    | 1081.287 | ug/l # | 94       |
| 51) 4-Methyl-2-Pentanone       | 10.24 | 43   | 259795   | 242.930  | ug/l   | 98       |
| 52) Toluene                    | 10.41 | 92   | 306333   | 50.759   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.63 | 75   | 145178   | 51.290   | ug/l   | 93       |
| 54) cis-1,3-Dichloropropene    | 10.09 | 75   | 170565   | 51.218   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 10.80 | 97   | 82023    | 48.131   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.67 | 69   | 98719    | 47.802   | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 136784   | 48.533   | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 9.95  | 63   | 193653   | 259.381  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.99 | 43   | 193688   | 231.728  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.14 | 129  | 116601   | 50.411   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 85074    | 49.914   | ug/l   | 95       |
| 64) Tetrachloroethene          | 10.88 | 164  | 118572   | 48.660   | ug/l   | 95       |
| 65) Chlorobenzene              | 11.67 | 112  | 359585   | 51.308   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 133208   | 50.796   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.75 | 91   | 616577   | 49.463   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.86 | 106  | 513048   | 102.324  | ug/l   | 96       |
| 69) o-Xylene                   | 12.18 | 106  | 236285   | 51.637   | ug/l   | 99       |
| 70) Styrene                    | 12.20 | 104  | 412755   | 52.301   | ug/l   | 98       |
| 71) Bromoform                  | 12.37 | 173  | 69928    | 49.929   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.48 | 105  | 637932   | 48.254   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.29 | 43   | 104049   | 47.375   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 95569    | 45.863   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.78 | 75   | 68040m   | 53.225   | ug/l   |          |
| 77) Bromobenzene               | 12.77 | 156  | 158620   | 49.694   | ug/l   | 98       |
| 78) n-propylbenzene            | 12.83 | 91   | 756228   | 48.812   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 403019   | 48.528   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.96 | 105  | 548447   | 49.569   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 29230    | 46.697   | ug/l   | 90       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 442113   | 49.821   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.23 | 119  | 489422   | 49.249   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 569564   | 51.244   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.41 | 105  | 672992   | 49.313   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.52 | 119  | 651663   | 50.821   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.52 | 146  | 326771   | 51.085   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 314658   | 49.901   | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.85 | 91   | 589423   | 49.837   | ug/l   | 98       |
| 90) Hexachloroethane           | 14.11 | 117  | 119899   | 49.943   | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 278461   | 50.583   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.51 | 75   | 14819    | 48.694   | ug/l   | 96       |

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Quant Title : SW846 8260  
QLast Update : Wed Oct 30 08:00:10 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.17 | 180  | 201382   | 50.892 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.28 | 225  | 115728   | 50.040 | ug/l  | 97       |
| 95) Naphthalene            | 15.41 | 128  | 324848   | 50.336 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.60 | 180  | 172208   | 50.243 | ug/l  | 98       |

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

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