

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD122419\  
 Data File : VD064584.D  
 Acq On : 24 Dec 2019 11:46  
 Operator : VA/SY  
 Sample : VSTDICCC050  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

apatel  
 12/26/2019 11:13:57 AM

Quant Time: Dec 24 13:10:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 12:06:41 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 426185   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 622428   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 543002   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 272142   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.33   | 65  | 191867   | 49.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.22%  |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 198444   | 50.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.92% |      |
| 50) Toluene-d8            | 10.34  | 98  | 754406   | 50.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.42% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 241506   | 50.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.84% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 167777  | 44.092  | ug/l | 100    |
| 3) Chloromethane              | 2.21 | 50  | 231272  | 47.541  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.35 | 62  | 277622  | 49.410  | ug/l | 100    |
| 5) Bromomethane               | 2.77 | 94  | 197281  | 47.396  | ug/l | 100    |
| 6) Chloroethane               | 2.92 | 64  | 194161  | 51.272  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 3.27 | 101 | 477815  | 50.845  | ug/l | 100    |
| 8) Diethyl Ether              | 3.71 | 74  | 94507   | 48.818  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 4.08 | 101 | 200115  | 49.777  | ug/l | 100    |
| 10) Methyl Iodide             | 4.29 | 142 | 235104  | 55.707  | ug/l | 100    |
| 11) Tert butyl alcohol        | 5.25 | 59  | 58459   | 241.238 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 4.06 | 96  | 189536  | 49.387  | ug/l | 100    |
| 13) Acrolein                  | 3.93 | 56  | 78192   | 234.109 | ug/l | 100    |
| 14) Allyl chloride            | 4.71 | 41  | 296204  | 49.561  | ug/l | 100    |
| 15) Acrylonitrile             | 5.43 | 53  | 202888  | 240.317 | ug/l | 100    |
| 16) Acetone                   | 4.17 | 43  | 195905  | 253.863 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.40 | 76  | 604896  | 49.876  | ug/l | 100    |
| 18) Methyl Acetate            | 4.73 | 43  | 105493  | 46.717  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.48 | 73  | 431518  | 49.309  | ug/l | 100    |
| 20) Methylene Chloride        | 4.96 | 84  | 204711  | 45.842  | ug/l | 100    |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 213074  | 49.208  | ug/l | 100    |
| 22) Diisopropyl ether         | 6.37 | 45  | 598239  | 50.567  | ug/l | 100    |
| 23) Vinyl Acetate             | 6.31 | 43  | 1766195 | 254.335 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.27 | 63  | 354828  | 50.008  | ug/l | 100    |
| 25) 2-Butanone                | 7.22 | 43  | 268650  | 245.728 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 326922  | 52.329  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 234660  | 49.677  | ug/l | 100    |
| 28) Bromochloromethane        | 7.55 | 49  | 148427  | 59.517  | ug/l | 100    |
| 29) Tetrahydrofuran           | 7.57 | 42  | 167536  | 240.179 | ug/l | 100    |
| 30) Chloroform                | 7.71 | 83  | 369040  | 50.154  | ug/l | 100    |
| 31) Cyclohexane               | 7.98 | 56  | 336698  | 48.125  | ug/l | 100    |
| 32) 1,1,1-Trichloroethane     | 7.91 | 97  | 346737  | 50.640  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 300931  | 50.748  | ug/l | 100    |
| 37) Ethyl Acetate             | 7.30 | 43  | 123311  | 49.541  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 326476  | 52.251  | ug/l | 100    |

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 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 12:06:41 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 372283   | 50.932  | ug/l  | 100      |
| 40) Benzene                    | 8.36  | 78   | 820055   | 50.214  | ug/l  | 100      |
| 41) Methacrylonitrile          | 7.54  | 41   | 75415    | 53.557  | ug/l  | 100      |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 238161   | 49.960  | ug/l  | 100      |
| 43) Isopropyl Acetate          | 8.46  | 43   | 241962   | 49.595  | ug/l  | 100      |
| 44) Trichloroethene            | 9.11  | 130  | 240718   | 48.928  | ug/l  | 100      |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 197055   | 50.596  | ug/l  | 100      |
| 46) Dibromomethane             | 9.48  | 93   | 111953   | 50.758  | ug/l  | 100      |
| 47) Bromodichloromethane       | 9.67  | 83   | 294136   | 51.817  | ug/l  | 100      |
| 48) Methyl methacrylate        | 9.46  | 41   | 119225   | 52.666  | ug/l  | 100      |
| 49) 1,4-Dioxane                | 9.46  | 88   | 25111    | 927.598 | ug/l  | 100      |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 594837   | 246.207 | ug/l  | 100      |
| 52) Toluene                    | 10.40 | 92   | 542875   | 50.761  | ug/l  | 100      |
| 53) t-1,3-Dichloropropene      | 10.62 | 75   | 278050   | 51.507  | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 10.09 | 75   | 328652   | 51.238  | ug/l  | 100      |
| 55) 1,1,2-Trichloroethane      | 10.80 | 97   | 148011   | 49.121  | ug/l  | 100      |
| 56) Ethyl methacrylate         | 10.66 | 69   | 190641   | 49.825  | ug/l  | 100      |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 256920   | 50.001  | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.94  | 63   | 335232   | 220.910 | ug/l  | 100      |
| 59) 2-Hexanone                 | 10.99 | 43   | 416783   | 248.615 | ug/l  | 100      |
| 60) Dibromochloromethane       | 11.14 | 129  | 206697   | 50.480  | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 147603   | 49.109  | ug/l  | 100      |
| 64) Tetrachloroethene          | 10.88 | 164  | 209368   | 50.584  | ug/l  | 100      |
| 65) Chlorobenzene              | 11.67 | 112  | 580438   | 51.039  | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 216933   | 51.635  | ug/l  | 100      |
| 67) Ethyl Benzene              | 11.75 | 91   | 1048589  | 51.729  | ug/l  | 100      |
| 68) m/p-Xylenes                | 11.85 | 106  | 820674   | 105.887 | ug/l  | 100      |
| 69) o-Xylene                   | 12.18 | 106  | 368439   | 51.728  | ug/l  | 100      |
| 70) Styrene                    | 12.20 | 104  | 646119   | 52.093  | ug/l  | 100      |
| 71) Bromoform                  | 12.36 | 173  | 124881   | 49.794  | ug/l  | 100      |
| 73) Isopropylbenzene           | 12.48 | 105  | 1011215  | 51.516  | ug/l  | 100      |
| 74) N-amyl acetate             | 12.29 | 43   | 219747   | 49.914  | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 156732   | 48.859  | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 12.79 | 75   | 94617m   | 43.138  | ug/l  |          |
| 77) Bromobenzene               | 12.76 | 156  | 244999   | 50.770  | ug/l  | 100      |
| 78) n-propylbenzene            | 12.83 | 91   | 1170274  | 51.635  | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 636744   | 51.155  | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.97 | 105  | 832645   | 51.905  | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 52598    | 51.266  | ug/l  | 100      |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 676396   | 51.237  | ug/l  | 100      |
| 83) tert-Butylbenzene          | 13.23 | 119  | 722051   | 51.745  | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 823830   | 51.085  | ug/l  | 100      |
| 85) sec-Butylbenzene           | 13.41 | 105  | 986702   | 51.599  | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 13.53 | 119  | 950098   | 52.401  | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 13.53 | 146  | 463400   | 50.485  | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 459956   | 50.728  | ug/l  | 100      |
| 89) n-Butylbenzene             | 13.85 | 91   | 852100   | 51.927  | ug/l  | 100      |
| 90) Hexachloroethane           | 14.12 | 117  | 178908   | 52.703  | ug/l  | 100      |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 398149   | 50.889  | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.52 | 75   | 24812    | 45.899  | ug/l  | 100      |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.17 | 180  | 296156   | 49.543 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.28 | 225  | 183704   | 49.909 | ug/l  | 100      |
| 95) Naphthalene            | 15.41 | 128  | 483301   | 48.715 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.61 | 180  | 253453   | 49.806 | ug/l  | 100      |

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

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