

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110618\  
 Data File : VN052184.D  
 Acq On : 6 Nov 2018 11:41  
 Operator : MD\SY  
 Sample : VN1106WBSD02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1106WBSD02

Manual Integrations  
 APPROVED

MMDadoda  
 11/6/2018 5:58:44 PM

Quant Time: Nov 06 16:26:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110518W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Nov 05 15:24:48 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.   | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|--------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 7.67   | 168  | 357092   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.59   | 114  | 625212   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 11.41  | 117  | 562246   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.34  | 152  | 239919   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |        |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 8.03   | 65   | 227562   | 53.74   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 107.48% |          |
| 35) Dibromofluoromethane      | 7.59   | 113  | 193463   | 49.84   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 99.68%  |          |
| 50) Toluene-d8                | 10.09  | 98   | 742741   | 49.49   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 98.98%  |          |
| 62) 4-Bromofluorobenzene      | 12.40  | 95   | 241787   | 49.08   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 98.16%  |          |
| Target Compounds              |        |      |          |         |         |          |
|                               |        |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 1.85   | 85   | 65130    | 20.916  | ug/l    | 100      |
| 3) Chloromethane              | 2.06   | 50   | 86110    | 20.488  | ug/l    | 97       |
| 4) Vinyl Chloride             | 2.19   | 62   | 85756    | 21.304  | ug/l    | 95       |
| 5) Bromomethane               | 2.57   | 94   | 60396    | 20.069  | ug/l    | 99       |
| 6) Chloroethane               | 2.71   | 64   | 55062    | 21.393  | ug/l #  | 87       |
| 7) Trichlorofluoromethane     | 3.03   | 101  | 123908   | 21.191  | ug/l    | 98       |
| 8) Diethyl Ether              | 3.42   | 74   | 44915    | 21.987  | ug/l    | 86       |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76   | 101  | 73432    | 21.016  | ug/l    | 92       |
| 10) Methyl Iodide             | 3.96   | 142  | 96598    | 19.581  | ug/l    | 98       |
| 11) Tert butyl alcohol        | 4.79   | 59   | 17767    | 96.174  | ug/l #  | 92       |
| 12) 1,1-Dichloroethene        | 3.74   | 96   | 69034    | 20.985  | ug/l    | 92       |
| 13) Acrolein                  | 3.61   | 56   | 20879    | 130.650 | ug/l    | 90       |
| 14) Allyl chloride            | 4.33   | 41   | 110542   | 20.134  | ug/l    | 96       |
| 15) Acrylonitrile             | 4.99   | 53   | 130110   | 107.342 | ug/l #  | 66       |
| 16) Acetone                   | 3.82   | 43   | 95754    | 99.812  | ug/l    | 93       |
| 17) Carbon Disulfide          | 4.06   | 76   | 186857   | 19.905  | ug/l    | 99       |
| 18) Methyl Acetate            | 4.33   | 43   | 65049    | 21.910  | ug/l    | 99       |
| 19) Methyl tert-butyl Ether   | 5.05   | 73   | 199315   | 21.995  | ug/l    | 97       |
| 20) Methylene Chloride        | 4.56   | 84   | 81521    | 20.451  | ug/l    | 95       |
| 21) trans-1,2-Dichloroethene  | 5.05   | 96   | 76012    | 22.219  | ug/l    | 95       |
| 22) Diisopropyl ether         | 5.96   | 45   | 259394   | 21.431  | ug/l    | 98       |
| 23) Vinyl Acetate             | 5.90   | 43   | 889740   | 111.759 | ug/l    | 98       |
| 24) 1,1-Dichloroethane        | 5.85   | 63   | 148959   | 21.755  | ug/l    | 99       |
| 25) 2-Butanone                | 6.84   | 43   | 157434   | 105.832 | ug/l    | 97       |
| 26) 2,2-Dichloropropane       | 6.83   | 77   | 107189   | 20.015  | ug/l    | 92       |
| 27) cis-1,2-Dichloroethene    | 6.83   | 96   | 88215    | 21.256  | ug/l    | 95       |
| 28) Bromochloromethane        | 7.20   | 49   | 68919    | 21.261  | ug/l    | 89       |
| 29) Tetrahydrofuran           | 7.21   | 42   | 100600   | 109.299 | ug/l    | 97       |
| 30) Chloroform                | 7.37   | 83   | 148862   | 21.831  | ug/l    | 97       |
| 31) Cyclohexane               | 7.66   | 56   | 137616   | 20.618  | ug/l    | 91       |
| 32) 1,1,1-Trichloroethane     | 7.57   | 97   | 128807   | 21.296  | ug/l    | 94       |
| 36) 1,1-Dichloropropene       | 7.80   | 75   | 111581   | 20.174  | ug/l    | 96       |
| 37) Ethyl Acetate             | 6.93   | 43   | 74825    | 21.485  | ug/l #  | 90       |
| 38) Carbon Tetrachloride      | 7.78   | 117  | 108073   | 19.558  | ug/l    | 95       |

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| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 134798   | 20.579  | ug/l   | 96       |
| 40) Benzene                    | 8.04  | 78   | 340212   | 20.925  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.17  | 41   | 41325    | 23.085  | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 105763   | 20.235  | ug/l   | 94       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 136410   | 21.616  | ug/l   | 97       |
| 44) Trichloroethene            | 8.84  | 130  | 87593    | 20.349  | ug/l   | 82       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 90494    | 21.016  | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 56672    | 20.695  | ug/l   | 90       |
| 47) Bromodichloromethane       | 9.40  | 83   | 109875   | 20.574  | ug/l # | 96       |
| 48) Methyl methacrylate        | 9.20  | 41   | 66396    | 21.860  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 9934     | 374.218 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 355693   | 106.688 | ug/l   | 100      |
| 52) Toluene                    | 10.16 | 92   | 203167   | 20.722  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 106219   | 20.274  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 125733   | 20.509  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 74463    | 21.541  | ug/l   | 93       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 94577    | 20.990  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 127487   | 20.935  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 255463   | 105.351 | ug/l   | 95       |
| 59) 2-Hexanone                 | 10.75 | 43   | 241125   | 103.895 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 78507    | 19.971  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 76965    | 21.934  | ug/l   | 97       |
| 64) Tetrachloroethene          | 10.63 | 164  | 74963    | 20.580  | ug/l   | 94       |
| 65) Chlorobenzene              | 11.43 | 112  | 229139   | 19.995  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 81123    | 21.079  | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.51 | 91   | 380799   | 20.006  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.62 | 106  | 292570   | 39.835  | ug/l   | 93       |
| 69) o-Xylene                   | 11.95 | 106  | 147075   | 20.649  | ug/l   | 93       |
| 70) Styrene                    | 11.96 | 104  | 224913   | 19.947  | ug/l   | 98       |
| 71) Bromoform                  | 12.13 | 173  | 43676    | 18.863  | ug/l # | 93       |
| 73) Isopropylbenzene           | 12.25 | 105  | 380798   | 20.992  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 115018   | 20.984  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 86905    | 21.886  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 75515m   | 23.813  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 89793    | 20.758  | ug/l   | 79       |
| 78) n-propylbenzene            | 12.59 | 91   | 422091   | 20.360  | ug/l   | 95       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 247564   | 20.364  | ug/l   | 92       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 301846   | 20.557  | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 19905    | 18.877  | ug/l   | 92       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 250228   | 20.479  | ug/l   | 95       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 260738   | 20.110  | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 303387   | 20.756  | ug/l   | 96       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 352406   | 20.101  | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 307220   | 20.819  | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 153151   | 20.034  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 152106   | 19.907  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.62 | 91   | 249535   | 19.529  | ug/l   | 97       |
| 90) Hexachloroethane           | 13.87 | 117  | 49240    | 19.800  | ug/l   | 87       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 147673   | 20.584  | ug/l   | 96       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 11913    | 22.728  | ug/l   | 83       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 56392    | 18.158 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 34234    | 20.102 | ug/l  | 97       |
| 95) Naphthalene            | 15.13 | 128  | 135200   | 18.402 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 54017    | 19.627 | ug/l  | 99       |

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

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