

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN051719\  
 Data File : VN055656.D  
 Acq On : 18 May 2019 10:24  
 Operator : JC/SP  
 Sample : VN0517WBSD02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 64 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0517WBSD02

Manual Integrations  
 APPROVED

MMDadoda  
 5/20/2019 9:07:58 AM

Quant Time: May 20 04:03:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N051719W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 17 23:54:12 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 317557   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 498070   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 435258   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 196702   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 176409   | 50.68  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 101.36% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 162475   | 51.35  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 102.70% |          |
| 50) Toluene-d8              | 10.09 | 98   | 592911   | 49.56  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 99.12%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 204581   | 49.52  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 99.04%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|-------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85   | 45537    | 18.637 | ug/l   | 96     |
| 3) Chloromethane              | 2.06 | 50   | 62149    | 19.070 | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.18 | 62   | 68983    | 19.548 | ug/l   | 98     |
| 5) Bromomethane               | 2.57 | 94   | 48161    | 21.414 | ug/l   | 97     |
| 6) Chloroethane               | 2.71 | 64   | 39980    | 20.404 | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.03 | 101  | 89403    | 19.770 | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74   | 37703    | 20.754 | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.77 | 101  | 52007    | 18.864 | ug/l   | 98     |
| 10) Methyl Iodide             | 3.96 | 142  | 65282    | 16.425 | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.77 | 59   | 53762    | 82.818 | ug/l # | 90     |
| 12) 1,1-Dichloroethene        | 3.74 | 96   | 56581    | 19.510 | ug/l   | 97     |
| 13) Acrolein                  | 3.61 | 56   | 28078    | 85.695 | ug/l   | 95     |
| 14) Allyl chloride            | 4.33 | 41   | 82743    | 17.673 | ug/l   | 99     |
| 15) Acrylonitrile             | 4.99 | 53   | 143184   | 99.140 | ug/l   | 100    |
| 16) Acetone                   | 3.81 | 43   | 118109   | 83.140 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.06 | 76   | 152708   | 18.941 | ug/l   | 99     |
| 18) Methyl Acetate            | 4.33 | 43   | 58822    | 19.314 | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.04 | 73   | 191750   | 19.986 | ug/l   | 99     |
| 20) Methylene Chloride        | 4.56 | 84   | 64931    | 20.028 | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.05 | 96   | 61410    | 19.878 | ug/l   | 97     |
| 22) Diisopropyl ether         | 5.95 | 45   | 180058   | 19.408 | ug/l   | 99     |
| 23) Vinyl Acetate             | 5.90 | 43   | 754524   | 95.849 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63   | 109647   | 20.157 | ug/l   | 100    |
| 25) 2-Butanone                | 6.83 | 43   | 179566   | 90.402 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 6.83 | 77   | 43268    | 8.962  | ug/l   | 93     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96   | 71623    | 19.909 | ug/l   | 92     |
| 28) Bromochloromethane        | 7.20 | 49   | 48957    | 20.687 | ug/l   | 96     |
| 29) Tetrahydrofuran           | 7.21 | 42   | 125385   | 95.281 | ug/l   | 99     |
| 30) Chloroform                | 7.37 | 83   | 110985   | 19.876 | ug/l   | 100    |
| 31) Cyclohexane               | 7.66 | 56   | 97410    | 18.868 | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97   | 97534    | 19.474 | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.80 | 75   | 83335    | 18.767 | ug/l   | 99     |
| 37) Ethyl Acetate             | 6.93 | 43   | 78525    | 19.596 | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 7.78 | 117  | 89340    | 18.827 | ug/l   | 98     |

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 Quant Title : SW846 8260  
 QLast Update : Fri May 17 23:54:12 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 92944    | 17.363  | ug/l   | 99       |
| 40) Benzene                    | 8.04  | 78   | 253395   | 19.401  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.18  | 41   | 40229m   | 23.482  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 82532    | 19.514  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 174542   | 25.041  | ug/l # | 90       |
| 44) Trichloroethene            | 8.84  | 130  | 73520    | 19.948  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 65708    | 19.097  | ug/l   | 100      |
| 46) Dibromomethane             | 9.21  | 93   | 44427    | 19.728  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.40  | 83   | 90476    | 19.169  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.20  | 41   | 58871    | 18.896  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 19480    | 314.664 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 381508   | 93.309  | ug/l   | 100      |
| 52) Toluene                    | 10.16 | 92   | 158782   | 19.382  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 86462    | 17.020  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 94805    | 17.035  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 64919    | 19.249  | ug/l   | 100      |
| 56) Ethyl methacrylate         | 10.43 | 69   | 99244    | 18.851  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 105003   | 19.658  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 205220   | 91.740  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 259035   | 89.985  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 75917    | 19.861  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 66307    | 19.650  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.63 | 164  | 73198    | 21.322  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 173590   | 19.718  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 68357    | 19.301  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 298597   | 19.040  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 223948   | 37.813  | ug/l   | 98       |
| 69) o-Xylene                   | 11.95 | 106  | 111349   | 19.223  | ug/l   | 97       |
| 70) Styrene                    | 11.96 | 104  | 183776   | 19.081  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 59637    | 19.870  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 292633   | 19.742  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 99737    | 18.057  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 89324    | 19.495  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 72875m   | 18.156  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 78710    | 19.484  | ug/l   | 93       |
| 78) n-propylbenzene            | 12.59 | 91   | 310640   | 17.784  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 190582   | 19.356  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 240477   | 19.133  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 20810    | 13.328  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 187185   | 18.187  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 211134   | 19.403  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 241040   | 19.404  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 269434   | 19.170  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 246979   | 19.092  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 125652   | 18.812  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 122938   | 19.277  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 190742   | 17.672  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 48927    | 19.602  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 128545   | 19.306  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 16751    | 18.765  | ug/l   | 92       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 69852    | 20.610 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 41982    | 18.699 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 191188   | 19.796 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 74492    | 21.021 | ug/l  | 98       |

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

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