

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN031619\  
 Data File : VN054355.D  
 Acq On : 17 Mar 2019 00:03  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/18/2019 11:28:39 AM

Quant Time: Mar 18 07:55:01 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031219W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 13 03:33:31 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 1197010  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1856508  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1647736  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 785160   | 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   | 663087   | 52.16 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.32% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 615648   | 51.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.84% |          |
| 50) Toluene-d8              | 10.09 | 98   | 2206483  | 49.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.80%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 772161   | 49.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.80%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85   | 576618   | 50.827  | ug/l  | 98     |
| 3) Chloromethane              | 2.06 | 50   | 563362   | 51.123  | ug/l  | 99     |
| 4) Vinyl Chloride             | 2.18 | 62   | 622206   | 49.400  | ug/l  | 98     |
| 5) Bromomethane               | 2.57 | 94   | 399352   | 45.779  | ug/l  | 99     |
| 6) Chloroethane               | 2.71 | 64   | 380202   | 49.890  | ug/l  | 99     |
| 7) Trichlorofluoromethane     | 3.02 | 101  | 822193   | 49.098  | ug/l  | 99     |
| 8) Diethyl Ether              | 3.41 | 74   | 422800   | 55.405  | ug/l  | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101  | 653748   | 52.097  | ug/l  | 100    |
| 10) Methyl Iodide             | 3.94 | 142  | 1029481  | 57.535  | ug/l  | 99     |
| 11) Tert butyl alcohol        | 4.82 | 59   | 206902   | 237.414 | ug/l  | 98     |
| 12) 1,1-Dichloroethene        | 3.73 | 96   | 655784   | 52.734  | ug/l  | 99     |
| 13) Acrolein                  | 3.61 | 56   | 172335   | 208.687 | ug/l  | 98     |
| 14) Allyl chloride            | 4.31 | 41   | 803408   | 50.354  | ug/l  | 100    |
| 15) Acrylonitrile             | 4.99 | 53   | 1033838  | 288.799 | ug/l  | 99     |
| 16) Acetone                   | 3.82 | 43   | 749470   | 205.909 | ug/l  | 100    |
| 17) Carbon Disulfide          | 4.04 | 76   | 1334528  | 42.809  | ug/l  | 100    |
| 18) Methyl Acetate            | 4.33 | 43   | 475617   | 64.587  | ug/l  | 99     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73   | 1683734  | 54.624  | ug/l  | 99     |
| 20) Methylene Chloride        | 4.55 | 84   | 640689   | 53.607  | ug/l  | 99     |
| 21) trans-1,2-Dichloroethene  | 5.03 | 96   | 622267   | 52.226  | ug/l  | 98     |
| 22) Diisopropyl ether         | 5.96 | 45   | 1788932  | 56.178  | ug/l  | 97     |
| 23) Vinyl Acetate             | 5.90 | 43   | 6357516  | 270.777 | ug/l  | 100    |
| 24) 1,1-Dichloroethane        | 5.84 | 63   | 1115625  | 54.563  | ug/l  | 100    |
| 25) 2-Butanone                | 6.84 | 43   | 1189160  | 278.360 | ug/l  | 99     |
| 26) 2,2-Dichloropropane       | 6.82 | 77   | 681323   | 37.892  | ug/l  | 98     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96   | 734139   | 55.230  | ug/l  | 97     |
| 28) Bromochloromethane        | 7.19 | 49   | 445746   | 53.327  | ug/l  | 99     |
| 29) Tetrahydrofuran           | 7.22 | 42   | 779519   | 283.796 | ug/l  | 99     |
| 30) Chloroform                | 7.37 | 83   | 1203812  | 56.422  | ug/l  | 100    |
| 31) Cyclohexane               | 7.65 | 56   | 953108   | 49.856  | ug/l  | 99     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97   | 1016279  | 52.742  | ug/l  | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75   | 861720   | 50.402  | ug/l  | 99     |
| 37) Ethyl Acetate             | 6.94 | 43   | 526840   | 53.630  | ug/l  | 99     |
| 38) Carbon Tetrachloride      | 7.77 | 117  | 879084   | 49.031  | ug/l  | 99     |

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 VSTDCCC050

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Quant Time: Mar 18 07:55:01 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031219W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 13 03:33:31 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 994326   | 47.269   | ug/l  | 99       |
| 40) Benzene                    | 8.04  | 78   | 2593454  | 53.009   | ug/l  | 99       |
| 41) Methacrylonitrile          | 7.18  | 41   | 297559   | 53.050   | ug/l  | 97       |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 876944   | 53.091   | ug/l  | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 890458   | 51.641   | ug/l  | 99       |
| 44) Trichloroethene            | 8.83  | 130  | 790907   | 52.039   | ug/l  | 98       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 668595   | 55.036   | ug/l  | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 433369   | 52.797   | ug/l  | 100      |
| 47) Bromodichloromethane       | 9.40  | 83   | 878578   | 53.392   | ug/l  | 98       |
| 48) Methyl methacrylate        | 9.20  | 41   | 481476   | 55.022   | ug/l  | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 139270   | 1125.171 | ug/l  | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 2623147  | 287.461  | ug/l  | 100      |
| 52) Toluene                    | 10.16 | 92   | 1654373  | 53.330   | ug/l  | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 798701   | 42.738   | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 960234   | 50.076   | ug/l  | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 625935   | 55.260   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 744202   | 55.101   | ug/l  | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 1014177  | 54.757   | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 1397989  | 239.353  | ug/l  | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 1636632  | 269.542  | ug/l  | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 673935   | 52.861   | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 622962   | 54.120   | ug/l  | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 813176   | 51.043   | ug/l  | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 1918741  | 53.033   | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 705108   | 53.648   | ug/l  | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 3131656  | 52.217   | ug/l  | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 2474429  | 105.561  | ug/l  | 99       |
| 69) o-Xylene                   | 11.95 | 106  | 1220342  | 53.405   | ug/l  | 99       |
| 70) Styrene                    | 11.96 | 104  | 1944517  | 54.259   | ug/l  | 99       |
| 71) Bromoform                  | 12.13 | 173  | 444617   | 44.642   | ug/l  | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 3190019  | 50.782   | ug/l  | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 736289   | 52.805   | ug/l  | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 720876   | 53.862   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 641161m  | 55.530   | ug/l  |          |
| 77) Bromobenzene               | 12.53 | 156  | 861535   | 51.829   | ug/l  | 98       |
| 78) n-propylbenzene            | 12.59 | 91   | 3455877  | 50.701   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 2113604  | 51.572   | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 2651974  | 50.754   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 131336   | 38.884   | ug/l  | 89       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 2107566  | 51.501   | ug/l  | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 2433922  | 50.607   | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 2675832  | 52.200   | ug/l  | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 3057667  | 49.024   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 2689332  | 49.148   | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 1475637  | 52.683   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 1431013  | 52.007   | ug/l  | 100      |
| 89) n-Butylbenzene             | 13.62 | 91   | 2034614  | 48.938   | ug/l  | 100      |
| 90) Hexachloroethane           | 13.88 | 117  | 410480   | 45.304   | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 1478452  | 53.994   | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 107657   | 51.982   | ug/l  | 97       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 759278   | 46.135 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 457414   | 43.857 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 1625597  | 47.399 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 766755   | 52.703 | ug/l  | 99       |

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

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