

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110518\  
 Data File : VN052149.D  
 Acq On : 5 Nov 2018 15:22  
 Operator : MD\SY  
 Sample : VSTDICV050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN110518

Manual Integrations  
 APPROVED

MMDadoda  
 11/6/2018 10:00:07 AM

Quant Time: Nov 05 22:46:09 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110518W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Nov 05 22:32:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 453153   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 737883   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 673102   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 308701   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 259533   | 48.30 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.60%  |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 238951   | 52.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.32% |      |
| 50) Toluene-d8            | 10.09  | 98  | 910738   | 51.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.84% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 307337   | 52.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.72% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 213368  | 53.996  | ug/l   | 97     |
| 3) Chloromethane              | 2.06 | 50  | 275587  | 51.671  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.19 | 62  | 257698  | 50.447  | ug/l   | 99     |
| 5) Bromomethane               | 2.57 | 94  | 183380  | 48.019  | ug/l   | 96     |
| 6) Chloroethane               | 2.71 | 64  | 160973  | 49.284  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 376228  | 50.703  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 132985  | 51.298  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 234248  | 52.828  | ug/l   | 98     |
| 10) Methyl Iodide             | 3.96 | 142 | 322093  | 51.449  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.79 | 59  | 61543   | 263.463 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 210843  | 50.506  | ug/l   | 98     |
| 13) Acrolein                  | 3.61 | 56  | 63471   | 267.570 | ug/l   | 100    |
| 14) Allyl chloride            | 4.33 | 41  | 348486  | 50.017  | ug/l   | 94     |
| 15) Acrylonitrile             | 4.99 | 53  | 389678  | 254.817 | ug/l   | 99     |
| 16) Acetone                   | 3.82 | 43  | 297424  | 244.308 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.06 | 76  | 621514  | 52.172  | ug/l   | 98     |
| 18) Methyl Acetate            | 4.33 | 43  | 179766  | 46.467  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 5.04 | 73  | 589279  | 51.292  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 239958  | 47.437  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.05 | 96  | 233621  | 50.477  | ug/l   | 99     |
| 22) Diisopropyl ether         | 5.95 | 45  | 765175  | 50.062  | ug/l   | 98     |
| 23) Vinyl Acetate             | 5.90 | 43  | 2691529 | 266.411 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 429183  | 49.424  | ug/l   | 98     |
| 25) 2-Butanone                | 6.84 | 43  | 464497  | 246.056 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 6.83 | 77  | 354222  | 52.121  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 267496  | 50.792  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.19 | 49  | 210919  | 51.337  | ug/l   | 94     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 300035  | 256.877 | ug/l   | 99     |
| 30) Chloroform                | 7.37 | 83  | 432280  | 49.957  | ug/l   | 98     |
| 31) Cyclohexane               | 7.66 | 56  | 401276  | 50.085  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 381065  | 49.990  | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 7.80 | 75  | 336143  | 51.496  | ug/l   | 97     |
| 37) Ethyl Acetate             | 6.93 | 43  | 212211  | 52.780  | ug/l # | 90     |
| 38) Carbon Tetrachloride      | 7.78 | 117 | 346547  | 53.102  | ug/l   | 96     |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 413468   | 53.484   | ug/l   | 98       |
| 40) Benzene                    | 8.04  | 78   | 991498   | 51.670   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.18  | 41   | 126057   | 55.742   | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 309678   | 50.202   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 390011   | 52.365   | ug/l # | 89       |
| 44) Trichloroethene            | 8.84  | 130  | 271964   | 53.532   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 265131   | 52.172   | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 160830   | 49.763   | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.40  | 83   | 329885   | 52.338   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.20  | 41   | 191147   | 53.324   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 35115    | 1156.516 | ug/l   | 94       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 1054047  | 267.879  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 621277   | 53.691   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 346251   | 55.998   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 391570   | 54.118   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 216141   | 52.979   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 287445   | 54.054   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 377438   | 52.515   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 797637   | 278.712  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.75 | 43   | 745437   | 272.148  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 252627   | 54.451   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 222737   | 53.784   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 239684   | 54.964   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 699373   | 50.976   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 247582   | 53.736   | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1199330  | 52.632   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 924970   | 105.199  | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 454255   | 53.273   | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 732278   | 54.248   | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 155052   | 50.444   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1199069  | 51.372   | ug/l   | 98       |
| 74) N-amyl acetate             | 12.07 | 43   | 364643   | 52.647   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 261950   | 51.272   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 229255m  | 47.190   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 294520   | 52.915   | ug/l   | 98       |
| 78) n-propylbenzene            | 12.59 | 91   | 1371438  | 51.413   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 779984   | 49.863   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 962743   | 50.957   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 75474    | 55.628   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 797038   | 50.695   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 858306   | 51.449   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 979783   | 52.097   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1169379  | 51.838   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1012120  | 53.306   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 521872   | 53.058   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 520696   | 52.963   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 882702   | 53.690   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 174221   | 54.446   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 507508   | 54.980   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 39898    | 59.159   | ug/l   | 91       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 268888   | 61.239 | ug/l  | 96       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 133826   | 61.774 | ug/l  | 96       |
| 95) Naphthalene            | 15.13 | 128  | 605913   | 64.097 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 235398   | 62.346 | ug/l  | 97       |

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

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