

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110518\  
 Data File : VN052155.D  
 Acq On : 5 Nov 2018 19:00  
 Operator : MD\SY  
 Sample : VN1105WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 15 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1105WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 11/6/2018 10:00:20 AM

Quant Time: Nov 06 06:00:14 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  | 382870   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.59   | 114  | 667621   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 11.41  | 117  | 593859   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.34  | 152  | 260744   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |        |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 8.03   | 65   | 236362   | 52.06   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 104.12% |          |
| 35) Dibromofluoromethane      | 7.59   | 113  | 206616   | 49.85   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 99.70%  |          |
| 50) Toluene-d8                | 10.09  | 98   | 811054   | 50.61   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 101.22% |          |
| 62) 4-Bromofluorobenzene      | 12.40  | 95   | 265493   | 50.47   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 100.94% |          |
| Target Compounds              |        |      |          |         |         |          |
|                               |        |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 1.85   | 85   | 68042    | 20.380  | ug/l    | 97       |
| 3) Chloromethane              | 2.06   | 50   | 90969    | 20.187  | ug/l    | 96       |
| 4) Vinyl Chloride             | 2.19   | 62   | 87276    | 20.222  | ug/l    | 98       |
| 5) Bromomethane               | 2.57   | 94   | 61938    | 19.196  | ug/l    | 98       |
| 6) Chloroethane               | 2.71   | 64   | 55596    | 20.146  | ug/l    | 100      |
| 7) Trichlorofluoromethane     | 3.02   | 101  | 122817   | 19.590  | ug/l    | 100      |
| 8) Diethyl Ether              | 3.42   | 74   | 43766    | 19.982  | ug/l    | 91       |
| 9) 1,1,2-Trichlorotrifluoroet | 3.77   | 101  | 75093    | 20.044  | ug/l    | 98       |
| 10) Methyl Iodide             | 3.96   | 142  | 100984   | 19.092  | ug/l    | 100      |
| 11) Tert butyl alcohol        | 4.79   | 59   | 20618m   | 104.468 | ug/l    |          |
| 12) 1,1-Dichloroethene        | 3.74   | 96   | 71107    | 20.160  | ug/l    | 94       |
| 13) Acrolein                  | 3.61   | 56   | 21108    | 124.720 | ug/l    | 96       |
| 14) Allyl chloride            | 4.33   | 41   | 117647   | 19.985  | ug/l    | 98       |
| 15) Acrylonitrile             | 4.99   | 53   | 131767   | 101.982 | ug/l    | 99       |
| 16) Acetone                   | 3.82   | 43   | 88587    | 86.124  | ug/l    | 100      |
| 17) Carbon Disulfide          | 4.06   | 76   | 191532   | 19.029  | ug/l    | 100      |
| 18) Methyl Acetate            | 4.33   | 43   | 64520    | 19.739  | ug/l    | 96       |
| 19) Methyl tert-butyl Ether   | 5.05   | 73   | 200001   | 20.604  | ug/l    | 98       |
| 20) Methylene Chloride        | 4.56   | 84   | 82062    | 19.201  | ug/l    | 98       |
| 21) trans-1,2-Dichloroethene  | 5.05   | 96   | 76781    | 19.635  | ug/l    | 91       |
| 22) Diisopropyl ether         | 5.96   | 45   | 265471   | 20.557  | ug/l    | 97       |
| 23) Vinyl Acetate             | 5.90   | 43   | 892771   | 104.589 | ug/l    | 100      |
| 24) 1,1-Dichloroethane        | 5.85   | 63   | 148615   | 20.256  | ug/l    | 100      |
| 25) 2-Butanone                | 6.84   | 43   | 151767   | 95.153  | ug/l    | 95       |
| 26) 2,2-Dichloropropane       | 6.83   | 77   | 108264   | 18.855  | ug/l    | 98       |
| 27) cis-1,2-Dichloroethene    | 6.83   | 96   | 92087    | 20.695  | ug/l    | 95       |
| 28) Bromochloromethane        | 7.19   | 49   | 73270    | 21.107  | ug/l    | 98       |
| 29) Tetrahydrofuran           | 7.22   | 42   | 106880   | 108.304 | ug/l    | 98       |
| 30) Chloroform                | 7.37   | 83   | 149700   | 20.476  | ug/l    | 96       |
| 31) Cyclohexane               | 7.66   | 56   | 138688   | 19.219  | ug/l #  | 93       |
| 32) 1,1,1-Trichloroethane     | 7.57   | 97   | 126720   | 19.675  | ug/l    | 98       |
| 36) 1,1-Dichloropropene       | 7.80   | 75   | 113450   | 19.209  | ug/l    | 99       |
| 37) Ethyl Acetate             | 6.93   | 43   | 70440    | 19.322  | ug/l #  | 93       |
| 38) Carbon Tetrachloride      | 7.78   | 117  | 110425   | 18.701  | ug/l    | 99       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110518\  
 Data File : VN052155.D  
 Acq On : 5 Nov 2018 19:00  
 Operator : MD\SY  
 Sample : VN1105WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 15 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1105WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 11/6/2018 10:00:20 AM

Quant Time: Nov 06 06:00:14 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) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 134620   | 19.246  | ug/l   | 100      |
| 40) Benzene                    | 8.04  | 78   | 339330   | 19.545  | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.18  | 41   | 37716    | 19.366  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 107438   | 19.250  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 130691   | 19.394  | ug/l # | 90       |
| 44) Trichloroethene            | 8.83  | 130  | 88184    | 19.184  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 90024    | 19.579  | ug/l   | 96       |
| 46) Dibromomethane             | 9.21  | 93   | 54914    | 18.780  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.40  | 83   | 108880   | 19.092  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.20  | 41   | 65672    | 20.248  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 12203    | 433.789 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 358406   | 100.673 | ug/l   | 100      |
| 52) Toluene                    | 10.16 | 92   | 210052   | 20.063  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 106272   | 18.996  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 128822   | 19.678  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 73667    | 19.957  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 96192    | 19.993  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 125481   | 19.296  | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 272286   | 105.156 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 241070   | 97.273  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 79232    | 18.875  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 74840    | 19.973  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 75494    | 19.622  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 236377   | 19.528  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 82636    | 20.329  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 399097   | 19.851  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 308215   | 39.732  | ug/l   | 98       |
| 69) o-Xylene                   | 11.95 | 106  | 149124   | 19.822  | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 233688   | 19.622  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 44976    | 18.461  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 392616   | 19.915  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 116163   | 19.856  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 88072    | 20.409  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 85835m   | 20.918  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 93402    | 19.868  | ug/l   | 97       |
| 78) n-propylbenzene            | 12.59 | 91   | 442665   | 19.647  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 257023   | 19.453  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 312860   | 19.605  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 20178    | 17.607  | ug/l   | 88       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 260701   | 19.632  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 274355   | 19.470  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 316054   | 19.896  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 373628   | 19.609  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 319199   | 19.904  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 162354   | 19.542  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 160517   | 19.330  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 259294   | 18.672  | ug/l   | 97       |
| 90) Hexachloroethane           | 13.88 | 117  | 51373    | 19.007  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 152327   | 19.537  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 11998    | 21.062  | ug/l   | 87       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110518\  
Data File : VN052155.D  
Acq On : 5 Nov 2018 19:00  
Operator : MD\SY  
Sample : VN1105WBSD01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 15 Sample Multiplier: 28

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1105WBSD01

Manual Integrations  
APPROVED

MMDadoda  
11/6/2018 10:00:20 AM

Quant Time: Nov 06 06:00:14 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) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 63672    | 18.778 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 35471    | 19.149 | ug/l  | 97       |
| 95) Naphthalene            | 15.13 | 128  | 145588   | 18.234 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 55766    | 18.731 | ug/l  | 97       |

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

