

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN110419\  
 Data File : VN059081.D  
 Acq On : 4 Nov 2019 14:57  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 11/5/2019 2:00:15 PM

Quant Time: Nov 05 03:14:21 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 02 05:43:23 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 476604   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.56  | 114  | 745084   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 685345   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 336554   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 307332   | 48.69 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.38%  |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 234301   | 48.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.48%  |      |
| 50) Toluene-d8            | 10.08  | 98  | 937780   | 50.11 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.22% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 347953   | 51.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.44% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 249489  | 48.416  | ug/l | 99     |
| 3) Chloromethane              | 2.04 | 50  | 329502  | 47.158  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.17 | 62  | 331744  | 48.913  | ug/l | 99     |
| 5) Bromomethane               | 2.54 | 94  | 192176  | 47.927  | ug/l | 98     |
| 6) Chloroethane               | 2.68 | 64  | 198104  | 47.693  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 399209  | 49.534  | ug/l | 99     |
| 8) Diethyl Ether              | 3.38 | 74  | 158497  | 50.359  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 232418  | 48.927  | ug/l | 99     |
| 10) Methyl Iodide             | 3.92 | 142 | 299268  | 51.832  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.75 | 59  | 273224  | 233.882 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 3.71 | 96  | 228403  | 48.347  | ug/l | 96     |
| 13) Acrolein                  | 3.58 | 56  | 167668  | 227.458 | ug/l | 98     |
| 14) Allyl chloride            | 4.29 | 41  | 465400m | 49.715  | ug/l |        |
| 15) Acrylonitrile             | 4.95 | 53  | 722478  | 246.537 | ug/l | 99     |
| 16) Acetone                   | 3.78 | 43  | 814852  | 254.996 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.02 | 76  | 709060  | 47.210  | ug/l | 99     |
| 18) Methyl Acetate            | 4.29 | 43  | 363688  | 44.925  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.01 | 73  | 808039  | 50.218  | ug/l | 99     |
| 20) Methylene Chloride        | 4.52 | 84  | 269879  | 48.243  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.00 | 96  | 253624  | 50.007  | ug/l | 99     |
| 22) Diisopropyl ether         | 5.92 | 45  | 929072  | 52.104  | ug/l | 100    |
| 23) Vinyl Acetate             | 5.86 | 43  | 3851994 | 271.230 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 500994  | 49.144  | ug/l | 99     |
| 25) 2-Butanone                | 6.80 | 43  | 1058294 | 248.717 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.79 | 77  | 434513  | 49.106  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 291446  | 51.034  | ug/l | 99     |
| 28) Bromochloromethane        | 7.17 | 49  | 152784  | 48.560  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 656040  | 244.303 | ug/l | 100    |
| 30) Chloroform                | 7.34 | 83  | 482435  | 49.489  | ug/l | 99     |
| 31) Cyclohexane               | 7.63 | 56  | 463324  | 47.649  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.54 | 97  | 414018  | 50.198  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 379258  | 51.215  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.90 | 43  | 407586  | 49.537  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 366415  | 50.771  | ug/l | 100    |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN110419\  
 Data File : VN059081.D  
 Acq On : 4 Nov 2019 14:57  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 11/5/2019 2:00:15 PM

Quant Time: Nov 05 03:14:21 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 02 05:43:23 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 9.06  | 83   | 442711   | 51.722   | ug/l  | 99       |
| 40) Benzene                    | 8.02  | 78   | 1116800  | 50.818   | ug/l  | 99       |
| 41) Methacrylonitrile          | 7.14  | 41   | 165235m  | 46.442   | ug/l  |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 389833   | 51.076   | ug/l  | 99       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 648167   | 50.374   | ug/l  | 99       |
| 44) Trichloroethene            | 8.82  | 130  | 273105   | 50.508   | ug/l  | 99       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 306998   | 51.653   | ug/l  | 99       |
| 46) Dibromomethane             | 9.19  | 93   | 187290   | 50.986   | ug/l  | 99       |
| 47) Bromodichloromethane       | 9.39  | 83   | 384957   | 51.747   | ug/l  | 100      |
| 48) Methyl methacrylate        | 9.18  | 41   | 294717   | 50.234   | ug/l  | 99       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 107559   | 1123.896 | ug/l  | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 1991970  | 266.495  | ug/l  | 99       |
| 52) Toluene                    | 10.14 | 92   | 680997   | 52.885   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 447349   | 52.004   | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 484326   | 53.378   | ug/l  | 100      |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 267124   | 50.924   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 431741   | 48.572   | ug/l  | 100      |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 471037   | 51.634   | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 882418   | 255.356  | ug/l  | 100      |
| 59) 2-Hexanone                 | 10.74 | 43   | 1535737  | 270.447  | ug/l  | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 291948   | 51.644   | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 274605   | 51.675   | ug/l  | 100      |
| 64) Tetrachloroethene          | 10.62 | 164  | 246634   | 51.517   | ug/l  | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 723591   | 51.442   | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 264869   | 51.181   | ug/l  | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1323876  | 54.369   | ug/l  | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 986018   | 108.443  | ug/l  | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 465813   | 53.650   | ug/l  | 100      |
| 70) Styrene                    | 11.96 | 104  | 790179   | 56.160   | ug/l  | 99       |
| 71) Bromoform                  | 12.13 | 173  | 211498   | 52.800   | ug/l  | # 99     |
| 73) Isopropylbenzene           | 12.25 | 105  | 1273991  | 51.455   | ug/l  | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 554375   | 50.334   | ug/l  | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 410537   | 46.547   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 367459m  | 46.139   | ug/l  |          |
| 77) Bromobenzene               | 12.53 | 156  | 307871   | 49.730   | ug/l  | 98       |
| 78) n-propylbenzene            | 12.59 | 91   | 1510751  | 52.683   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 883501   | 49.618   | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1089169  | 51.760   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 150736   | 48.519   | ug/l  | 99       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 925989   | 50.956   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 910103   | 50.913   | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 1082324  | 52.934   | ug/l  | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1237879  | 52.838   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1133313  | 53.657   | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 551540   | 50.142   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 549912   | 50.541   | ug/l  | 100      |
| 89) n-Butylbenzene             | 13.62 | 91   | 1022179  | 55.540   | ug/l  | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 204442   | 48.693   | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 536070   | 48.979   | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 81864    | 42.971   | ug/l  | 98       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN110419\  
Data File : VN059081.D  
Acq On : 4 Nov 2019 14:57  
Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
11/5/2019 2:00:15 PM

Quant Time: Nov 05 03:14:21 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110119W.M  
Quant Title : SW846 8260  
QLast Update : Sat Nov 02 05:43:23 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 313605   | 53.124 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 174470   | 49.244 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 856058   | 46.732 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 307790   | 51.230 | ug/l  | 99       |

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

