

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091919\  
 Data File : VN058202.D  
 Acq On : 19 Sep 2019 13:51  
 Operator : JC/SP  
 Sample : VN0919WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0919WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 9/20/2019 3:37:23 PM

Quant Time: Sep 20 07:58:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091819W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 19 09:27:53 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 494169   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 833376   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 759922   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 358725   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 368509   | 53.54 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.08% |      |
| 35) Dibromofluoromethane  | 7.57   | 113 | 258762   | 51.08 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.16% |      |
| 50) Toluene-d8            | 10.08  | 98  | 1037603  | 52.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.14% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 364511   | 49.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.42%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 78229   | 19.271  | ug/l | 99     |
| 3) Chloromethane              | 2.04 | 50  | 64263   | 19.915  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.17 | 62  | 69670   | 19.814  | ug/l | 100    |
| 5) Bromomethane               | 2.55 | 94  | 34663   | 19.583  | ug/l | 99     |
| 6) Chloroethane               | 2.69 | 64  | 44559   | 19.252  | ug/l | 95     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 103834  | 18.739  | ug/l | 96     |
| 8) Diethyl Ether              | 3.39 | 74  | 48576   | 19.133  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 76177   | 19.068  | ug/l | 99     |
| 10) Methyl Iodide             | 3.93 | 142 | 58506   | 17.477  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.75 | 59  | 79387   | 96.964  | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 61052   | 19.923  | ug/l | 99     |
| 13) Acrolein                  | 3.59 | 56  | 18546   | 152.853 | ug/l | 100    |
| 14) Allyl chloride            | 4.30 | 41  | 122897  | 18.800  | ug/l | 98     |
| 15) Acrylonitrile             | 4.96 | 53  | 222954  | 102.211 | ug/l | 99     |
| 16) Acetone                   | 3.80 | 43  | 194472  | 83.239  | ug/l | 99     |
| 17) Carbon Disulfide          | 4.03 | 76  | 74185   | 17.560  | ug/l | 99     |
| 18) Methyl Acetate            | 4.30 | 43  | 117689  | 19.144  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.02 | 73  | 297240  | 19.727  | ug/l | 98     |
| 20) Methylene Chloride        | 4.53 | 84  | 84267   | 20.470  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.02 | 96  | 65828   | 19.681  | ug/l | 96     |
| 22) Diisopropyl ether         | 5.93 | 45  | 324472  | 19.540  | ug/l | 92     |
| 23) Vinyl Acetate             | 5.87 | 43  | 1151138 | 101.310 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.83 | 63  | 170813  | 19.273  | ug/l | 99     |
| 25) 2-Butanone                | 6.81 | 43  | 299288  | 94.029  | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.81 | 77  | 129254  | 17.191  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 6.81 | 96  | 96328   | 19.222  | ug/l | 98     |
| 28) Bromochloromethane        | 7.18 | 49  | 87734   | 20.926  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.19 | 42  | 189312  | 96.558  | ug/l | 99     |
| 30) Chloroform                | 7.36 | 83  | 185249  | 19.418  | ug/l | 98     |
| 31) Cyclohexane               | 7.64 | 56  | 117409  | 18.997  | ug/l | 92     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 142684  | 19.647  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 7.78 | 75  | 104752  | 17.430  | ug/l | 98     |
| 37) Ethyl Acetate             | 6.91 | 43  | 122570  | 19.652  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.76 | 117 | 112022  | 18.543  | ug/l | 96     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091919\  
 Data File : VN058202.D  
 Acq On : 19 Sep 2019 13:51  
 Operator : JC/SP  
 Sample : VN0919WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0919WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 9/20/2019 3:37:23 PM

Quant Time: Sep 20 07:58:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091819W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 19 09:27:53 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 107761   | 18.590  | ug/l   | 97       |
| 40) Benzene                    | 8.03  | 78   | 346494   | 18.876  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.15  | 41   | 60683    | 19.873  | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 143811   | 18.671  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.15  | 43   | 220517   | 18.931  | ug/l   | 99       |
| 44) Trichloroethene            | 8.82  | 130  | 91184    | 20.299  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 110021   | 20.070  | ug/l   | 99       |
| 46) Dibromomethane             | 9.20  | 93   | 64390    | 19.320  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.39  | 83   | 135225   | 19.367  | ug/l   | 96       |
| 48) Methyl methacrylate        | 9.19  | 41   | 101972   | 19.281  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 34061    | 392.266 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 673727   | 108.894 | ug/l   | 98       |
| 52) Toluene                    | 10.15 | 92   | 219242   | 19.058  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 133505   | 18.666  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 148333   | 18.784  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 101700   | 19.921  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 143594   | 19.494  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 173507   | 19.770  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 356559   | 101.624 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 472752   | 102.884 | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 95485    | 19.441  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 91755    | 19.394  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 68492    | 18.489  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.43 | 112  | 255028   | 19.080  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 96152    | 19.839  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 451472   | 19.712  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 325072   | 37.685  | ug/l   | 96       |
| 69) o-Xylene                   | 11.95 | 106  | 165647   | 19.529  | ug/l   | 98       |
| 70) Styrene                    | 11.97 | 104  | 286461   | 19.601  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 56837    | 18.275  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 469008   | 20.888  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 187563   | 19.968  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 155467   | 20.676  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 137884m  | 21.477  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 109774   | 19.436  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.60 | 91   | 537892   | 21.081  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 322364   | 20.216  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 397194   | 20.919  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 33951    | 19.700  | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 332164   | 19.816  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.00 | 119  | 347434   | 20.519  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 399744   | 21.155  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.18 | 105  | 469291   | 21.194  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 411949   | 20.927  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 202532   | 19.632  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 207066   | 19.661  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 366310   | 19.628  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 60474    | 19.353  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 213275   | 20.610  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 25720    | 19.000  | ug/l   | 96       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091919\  
Data File : VN058202.D  
Acq On : 19 Sep 2019 13:51  
Operator : JC/SP  
Sample : VN0919WBSD01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0919WBSD01

Manual Integrations  
APPROVED

MMDadoda  
9/20/2019 3:37:23 PM

Quant Time: Sep 20 07:58:15 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091819W.M  
Quant Title : SW846 8260  
QLast Update : Thu Sep 19 09:27:53 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.92 | 180  | 124424   | 18.819 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 61506    | 19.247 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 328738   | 19.185 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 118059   | 18.892 | ug/l  | 99       |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN091919\  
Data File : VN058202.D  
Acq On : 19 Sep 2019 13:51  
Operator : JC/SP  
Sample : VN0919WBSD01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
Client Sample Id :  
VN0919WBSD01

Manual Integrations  
APPROVED

MMDadoda  
9/20/2019 3:37:23 PM

Quant Time: Sep 20 07:58:15 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N091819W.M  
Quant Title : SW846 8260  
QLast Update : Thu Sep 19 09:27:53 2019  
Response via : Initial Calibration

