

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091219\  
 Data File : VN057925.D  
 Acq On : 11 Sep 2019 15:59  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 9/13/2019 11:07:19 AM

Quant Time: Sep 12 03:06:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091019W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 10 03:02:13 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 360759   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 584177   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 563881   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 338570   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 364898   | 49.94 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.88%  |      |
| 35) Dibromofluoromethane  | 7.57   | 113 | 262613   | 48.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.42%  |      |
| 50) Toluene-d8            | 10.09  | 98  | 1080210  | 51.60 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.20% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 393912   | 49.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.76%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 251863  | 50.482  | ug/l | 99     |
| 3) Chloromethane              | 2.03 | 50  | 225538  | 44.354  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.16 | 62  | 238858  | 44.383  | ug/l | 99     |
| 5) Bromomethane               | 2.53 | 94  | 137665  | 46.440  | ug/l | 96     |
| 6) Chloroethane               | 2.67 | 64  | 151771  | 44.256  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 2.99 | 101 | 297871  | 43.981  | ug/l | 100    |
| 8) Diethyl Ether              | 3.39 | 74  | 132449  | 46.888  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 205019  | 47.986  | ug/l | 99     |
| 10) Methyl Iodide             | 3.93 | 142 | 199985  | 42.063  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.77 | 59  | 235833  | 266.669 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.71 | 96  | 170680  | 44.431  | ug/l | 95     |
| 13) Acrolein                  | 3.58 | 56  | 167620  | 223.406 | ug/l | 98     |
| 14) Allyl chloride            | 4.29 | 41  | 348277  | 46.328  | ug/l | 99     |
| 15) Acrylonitrile             | 4.96 | 53  | 637362  | 262.206 | ug/l | 100    |
| 16) Acetone                   | 3.79 | 43  | 648223  | 270.619 | ug/l | 98     |
| 17) Carbon Disulfide          | 4.02 | 76  | 260942  | 43.665  | ug/l | 99     |
| 18) Methyl Acetate            | 4.30 | 43  | 343883  | 53.844  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.02 | 73  | 811118  | 50.737  | ug/l | 98     |
| 20) Methylene Chloride        | 4.52 | 84  | 231688  | 50.829  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 187614  | 45.180  | ug/l | 96     |
| 22) Diisopropyl ether         | 5.93 | 45  | 873098  | 49.524  | ug/l | 99     |
| 23) Vinyl Acetate             | 5.87 | 43  | 3341397 | 267.435 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 463634  | 48.119  | ug/l | 100    |
| 25) 2-Butanone                | 6.82 | 43  | 949729  | 273.943 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 380379  | 49.885  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 267937  | 48.147  | ug/l | 99     |
| 28) Bromochloromethane        | 7.18 | 49  | 238464  | 49.540  | ug/l | 97     |
| 29) Tetrahydrofuran           | 7.19 | 42  | 572919  | 268.181 | ug/l | 99     |
| 30) Chloroform                | 7.35 | 83  | 483350  | 47.978  | ug/l | 100    |
| 31) Cyclohexane               | 7.63 | 56  | 329613  | 50.210  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 382812  | 47.911  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.78 | 75  | 308586  | 45.548  | ug/l | 100    |
| 37) Ethyl Acetate             | 6.91 | 43  | 364545  | 52.080  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 7.76 | 117 | 302796  | 48.953  | ug/l | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091219\  
 Data File : VN057925.D  
 Acq On : 11 Sep 2019 15:59  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 9/13/2019 11:07:19 AM

Quant Time: Sep 12 03:06:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091019W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 10 03:02:13 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 335722   | 47.139  | ug/l   | 100      |
| 40) Benzene                    | 8.03  | 78   | 983186   | 48.203  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.16  | 41   | 159918m  | 50.330  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 401482   | 49.217  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.15  | 43   | 621777   | 52.822  | ug/l   | 100      |
| 44) Trichloroethene            | 8.82  | 130  | 236127   | 47.199  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 292386   | 49.263  | ug/l   | 100      |
| 46) Dibromomethane             | 9.20  | 93   | 178212   | 49.689  | ug/l   | 100      |
| 47) Bromodichloromethane       | 9.40  | 83   | 370414   | 51.720  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.19  | 41   | 305197   | 51.112  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 99379    | 984.168 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 1987130  | 285.266 | ug/l   | 99       |
| 52) Toluene                    | 10.15 | 92   | 635122   | 49.439  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 403643   | 53.520  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 433632   | 52.077  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 278494   | 51.177  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 436539   | 53.271  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 475442   | 50.697  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 1027792  | 266.293 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 1526156  | 292.300 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 266974   | 52.833  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 265051   | 51.520  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 192129   | 46.147  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 711201   | 48.194  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 258998   | 50.579  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1293811  | 50.027  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 947092   | 99.973  | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 469536   | 49.855  | ug/l   | 98       |
| 70) Styrene                    | 11.97 | 104  | 833530   | 51.426  | ug/l   | 100      |
| 71) Bromoform                  | 12.13 | 173  | 173135   | 54.231  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1319688  | 50.232  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 607008   | 53.090  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 439137   | 49.644  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 372549m  | 48.642  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 305440   | 46.631  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 1562553  | 51.795  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 918205   | 48.156  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 1145810  | 51.617  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 117295   | 53.892  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 965526   | 49.310  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.00 | 119  | 975697   | 49.447  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.05 | 105  | 1164794  | 51.628  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.18 | 105  | 1352409  | 51.710  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1223457  | 53.092  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 590806   | 49.140  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 593173   | 48.605  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.62 | 91   | 1153490  | 53.005  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.88 | 117  | 180798   | 52.755  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 591367   | 49.234  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 81898    | 56.063  | ug/l   | 99       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091219\  
Data File : VN057925.D  
Acq On : 11 Sep 2019 15:59  
Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
9/13/2019 11:07:19 AM

Quant Time: Sep 12 03:06:45 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091019W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 10 03:02:13 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.92 | 180  | 372912   | 47.500 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.02 | 225  | 166237   | 49.951 | ug/l  | 97       |
| 95) Naphthalene            | 15.13 | 128  | 1109571  | 56.177 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 355295   | 51.802 | ug/l  | 99       |

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

