

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN100219\  
 Data File : VN058480.D  
 Acq On : 2 Oct 2019 17:23  
 Operator : JC/SP  
 Sample : VN1002WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1002WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 10/3/2019 1:35:48 PM

Quant Time: Oct 03 05:35:29 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N092719W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Sep 30 08:07:38 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 333391   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 584849   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 520571   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 233225   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 268268   | 55.06 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.12% |      |
| 35) Dibromofluoromethane  | 7.58   | 113 | 187371   | 52.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.54% |      |
| 50) Toluene-d8            | 10.09  | 98  | 717692   | 51.11 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.22% |      |
| 62) 4-Bromofluorobenzene  | 12.41  | 95  | 252053   | 49.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.28%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 78377   | 21.440  | ug/l | 98     |
| 3) Chloromethane              | 2.03 | 50  | 87960   | 21.886  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.17 | 62  | 88421   | 22.459  | ug/l | 98     |
| 5) Bromomethane               | 2.55 | 94  | 47896   | 22.904  | ug/l | 93     |
| 6) Chloroethane               | 2.69 | 64  | 53326   | 22.606  | ug/l | 94     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 104465  | 21.988  | ug/l | 98     |
| 8) Diethyl Ether              | 3.39 | 74  | 44455   | 21.687  | ug/l | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 70146   | 21.740  | ug/l | 98     |
| 10) Methyl Iodide             | 3.93 | 142 | 71789   | 20.066  | ug/l | 98     |
| 11) Tert butyl alcohol        | 4.77 | 59  | 71598   | 132.286 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 66395   | 21.111  | ug/l | 97     |
| 13) Acrolein                  | 3.59 | 56  | 26993   | 156.803 | ug/l | 99     |
| 14) Allyl chloride            | 4.30 | 41  | 122583  | 21.418  | ug/l | 99     |
| 15) Acrylonitrile             | 4.97 | 53  | 200957  | 127.397 | ug/l | 99     |
| 16) Acetone                   | 3.80 | 43  | 188479  | 113.486 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.03 | 76  | 168589  | 20.335  | ug/l | 97     |
| 18) Methyl Acetate            | 4.31 | 43  | 96450   | 23.090  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.02 | 73  | 243827  | 21.973  | ug/l | 99     |
| 20) Methylene Chloride        | 4.53 | 84  | 81762   | 21.333  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.02 | 96  | 72261   | 20.662  | ug/l | 97     |
| 22) Diisopropyl ether         | 5.93 | 45  | 271968  | 22.082  | ug/l | 92     |
| 23) Vinyl Acetate             | 5.88 | 43  | 1115039 | 120.067 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 155586  | 22.446  | ug/l | 99     |
| 25) 2-Butanone                | 6.82 | 43  | 282441  | 123.865 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.81 | 77  | 116705  | 20.480  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.81 | 96  | 87334   | 21.366  | ug/l | 100    |
| 28) Bromochloromethane        | 7.18 | 49  | 65988   | 23.816  | ug/l | 95     |
| 29) Tetrahydrofuran           | 7.19 | 42  | 180772  | 124.908 | ug/l | 99     |
| 30) Chloroform                | 7.36 | 83  | 154644  | 22.016  | ug/l | 99     |
| 31) Cyclohexane               | 7.64 | 56  | 140501  | 20.838  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 127646  | 22.130  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 7.78 | 75  | 113232  | 20.248  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.91 | 43  | 114456  | 24.140  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.76 | 117 | 107416  | 21.280  | ug/l | 99     |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 132682   | 20.317  | ug/l   | 96       |
| 40) Benzene                    | 8.03  | 78   | 340493   | 21.182  | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.16  | 41   | 45281m   | 20.759  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 132057   | 21.116  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.15  | 43   | 186278   | 20.893  | ug/l   | 100      |
| 44) Trichloroethene            | 8.82  | 130  | 81114    | 20.436  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 92230    | 21.393  | ug/l   | 99       |
| 46) Dibromomethane             | 9.20  | 93   | 58018    | 21.250  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.40  | 83   | 116782   | 22.576  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.19  | 41   | 90593    | 22.315  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 34426    | 634.170 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 582704   | 127.234 | ug/l   | 99       |
| 52) Toluene                    | 10.15 | 92   | 205858   | 20.346  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 117417   | 20.854  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 133219   | 21.315  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 83261    | 22.600  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 121908   | 21.807  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 144724   | 22.023  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 238828   | 107.140 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 421739   | 126.467 | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 78026    | 20.122  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 80202    | 21.305  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.63 | 164  | 66993    | 20.256  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.44 | 112  | 212213   | 20.508  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 76261    | 21.874  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 395034   | 21.077  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.63 | 106  | 285194   | 40.443  | ug/l   | 97       |
| 69) o-Xylene                   | 11.95 | 106  | 139302   | 20.521  | ug/l   | 97       |
| 70) Styrene                    | 11.97 | 104  | 229255   | 20.788  | ug/l   | 98       |
| 71) Bromoform                  | 12.13 | 173  | 47956    | 20.322  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.26 | 105  | 377761   | 21.917  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.08 | 43   | 157975   | 23.039  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 124110   | 24.351  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 107466m  | 25.228  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 86409    | 21.381  | ug/l   | 97       |
| 78) n-propylbenzene            | 12.60 | 91   | 442317   | 22.779  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 262037   | 21.863  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 316570   | 21.941  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.31 | 75   | 29606    | 21.108  | ug/l   | 89       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 264416   | 21.620  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.00 | 119  | 267014   | 21.932  | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 13.05 | 105  | 317333   | 21.952  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.18 | 105  | 366675   | 22.882  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.30 | 119  | 321551   | 22.796  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 153041   | 20.884  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 150580   | 20.653  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.62 | 91   | 284981   | 22.304  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.88 | 117  | 51523    | 24.311  | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 153866   | 21.852  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 21625    | 24.061  | ug/l   | 96       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.92 | 180  | 79932    | 20.543 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.02 | 225  | 44380    | 22.191 | ug/l  | 99       |
| 95) Naphthalene            | 15.14 | 128  | 226418   | 19.853 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 80628    | 20.654 | ug/l  | 99       |

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

