

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092719\  
 Data File : VN058412.D  
 Acq On : 27 Sep 2019 16:51  
 Operator : JC/SP  
 Sample : VN0927WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0927WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 9/30/2019 10:18:52 AM

Quant Time: Sep 30 08:24:22 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  | 445620   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 755445   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 677496   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 311374   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 331162   | 50.85 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.70% |      |
| 35) Dibromofluoromethane  | 7.58   | 113 | 236362   | 51.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.10% |      |
| 50) Toluene-d8            | 10.09  | 98  | 935381   | 51.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.14% |      |
| 62) 4-Bromofluorobenzene  | 12.41  | 95  | 329905   | 50.30 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.60% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 99453   | 20.354  | ug/l   | 99     |
| 3) Chloromethane              | 2.04 | 50  | 110118  | 20.499  | ug/l   | 100    |
| 4) Vinyl Chloride             | 2.17 | 62  | 107350  | 20.400  | ug/l   | 99     |
| 5) Bromomethane               | 2.55 | 94  | 58555   | 20.949  | ug/l   | 98     |
| 6) Chloroethane               | 2.69 | 64  | 65391   | 20.739  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 128442  | 20.226  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.39 | 74  | 54751   | 19.983  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 89434   | 20.737  | ug/l   | 98     |
| 10) Methyl Iodide             | 3.93 | 142 | 99630   | 20.834  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 4.75 | 59  | 83320   | 115.173 | ug/l # | 86     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 85240   | 20.277  | ug/l   | 100    |
| 13) Acrolein                  | 3.59 | 56  | 33568   | 145.888 | ug/l   | 98     |
| 14) Allyl chloride            | 4.30 | 41  | 152878  | 19.984  | ug/l   | 98     |
| 15) Acrylonitrile             | 4.96 | 53  | 226542  | 107.447 | ug/l   | 99     |
| 16) Acetone                   | 3.80 | 43  | 231655  | 104.355 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.03 | 76  | 220297  | 19.880  | ug/l   | 100    |
| 18) Methyl Acetate            | 4.30 | 43  | 110524  | 19.796  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.02 | 73  | 298366  | 20.116  | ug/l   | 98     |
| 20) Methylene Chloride        | 4.53 | 84  | 100715  | 19.660  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.02 | 96  | 93208   | 19.939  | ug/l   | 99     |
| 22) Diisopropyl ether         | 5.93 | 45  | 332274  | 20.184  | ug/l   | 96     |
| 23) Vinyl Acetate             | 5.87 | 43  | 1354249 | 109.100 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 5.83 | 63  | 187131  | 20.198  | ug/l   | 99     |
| 25) 2-Butanone                | 6.82 | 43  | 327292  | 107.385 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 6.81 | 77  | 150597  | 19.771  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.81 | 96  | 111090  | 20.333  | ug/l   | 98     |
| 28) Bromochloromethane        | 7.18 | 49  | 76662   | 20.700  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 7.19 | 42  | 205724  | 106.349 | ug/l   | 99     |
| 30) Chloroform                | 7.36 | 83  | 187624  | 19.984  | ug/l   | 99     |
| 31) Cyclohexane               | 7.64 | 56  | 181259  | 20.112  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 157860  | 20.475  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.78 | 75  | 144547  | 20.011  | ug/l   | 100    |
| 37) Ethyl Acetate             | 6.91 | 43  | 130002  | 21.227  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.76 | 117 | 132866  | 20.377  | ug/l   | 97     |

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 ALS Vial : 17 Sample Multiplier: 1

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 ClientSampleID :  
 VN0927WBS01

Manual Integrations  
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 9/30/2019 10:18:52 AM

Quant Time: Sep 30 08:24:22 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) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 171480   | 20.328  | ug/l   | 98       |
| 40) Benzene                    | 8.03  | 78   | 424270   | 20.433  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.16  | 41   | 54935m   | 19.498  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 163095   | 20.189  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.15  | 43   | 223211   | 19.382  | ug/l # | 90       |
| 44) Trichloroethene            | 8.82  | 130  | 103937   | 20.273  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 113875   | 20.449  | ug/l   | 97       |
| 46) Dibromomethane             | 9.20  | 93   | 71822    | 20.366  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.39  | 83   | 138004   | 20.654  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.19  | 41   | 108494   | 20.689  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 37433    | 533.845 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 669888   | 113.240 | ug/l   | 99       |
| 52) Toluene                    | 10.15 | 92   | 258270   | 19.762  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 148951   | 20.481  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 166005   | 20.563  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 99507    | 20.910  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 151856   | 21.030  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 177152   | 20.870  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 300055   | 104.210 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 489096   | 113.545 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 94637    | 18.860  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 100420   | 20.652  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 84803    | 19.702  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.44 | 112  | 274554   | 20.387  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 94737    | 20.879  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 507102   | 20.789  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 368970   | 40.204  | ug/l   | 97       |
| 69) o-Xylene                   | 11.95 | 106  | 176669   | 19.997  | ug/l   | 97       |
| 70) Styrene                    | 11.97 | 104  | 295300   | 20.575  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 59165    | 19.301  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.25 | 105  | 487584   | 21.189  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 194233   | 21.217  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 143213   | 21.047  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 117928m  | 20.735  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 109909   | 20.370  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.60 | 91   | 561118   | 21.644  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 332912   | 20.805  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 409060   | 21.236  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 36039    | 19.246  | ug/l   | 88       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 335593   | 20.553  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.00 | 119  | 342896   | 21.096  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.05 | 105  | 404269   | 20.947  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.18 | 105  | 461328   | 21.564  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 410622   | 21.805  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 200940   | 20.538  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 194268   | 19.957  | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.62 | 91   | 356912   | 20.923  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.88 | 117  | 61465    | 21.723  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 196544   | 20.908  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 25936    | 21.615  | ug/l   | 97       |

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QLast Update : Mon Sep 30 08:07:38 2019  
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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.92 | 180  | 109103   | 21.003 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.02 | 225  | 52913    | 19.818 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 293648   | 19.285 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 101046   | 19.386 | ug/l  | 99       |

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

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