

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN020420\  
 Data File : VN059988.D  
 Acq On : 4 Feb 2020 12:29  
 Operator : JC/MD  
 Sample : VN0204WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0204WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 2/5/2020 12:21:02 PM

Quant Time: Feb 05 02:12:38 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 18 03:09:32 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 189648   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 294505   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 269706   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 131847   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 114802   | 54.51 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.02% |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 94932    | 54.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.10% |      |
| 50) Toluene-d8            | 10.08  | 98  | 357612   | 52.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.10% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 132056   | 53.83 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.66% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 37505  | 16.423  | ug/l   | 99     |
| 3) Chloromethane              | 2.04 | 50  | 37739  | 17.381  | ug/l   | 100    |
| 4) Vinyl Chloride             | 2.17 | 62  | 48789  | 19.639  | ug/l   | 100    |
| 5) Bromomethane               | 2.55 | 94  | 30593  | 20.179  | ug/l   | 99     |
| 6) Chloroethane               | 2.69 | 64  | 22923  | 19.504  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 58640  | 19.655  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.38 | 74  | 21123  | 20.174  | ug/l   | 87     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 33638  | 20.258  | ug/l   | 92     |
| 10) Methyl Iodide             | 3.93 | 142 | 40901  | 15.239  | ug/l   | 95     |
| 11) Tert butyl alcohol        | 4.73 | 59  | 35023  | 98.782  | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 32636  | 18.810  | ug/l   | 91     |
| 13) Acrolein                  | 3.58 | 56  | 13191  | 52.558  | ug/l   | 98     |
| 14) Allyl chloride            | 4.29 | 41  | 46079  | 19.703  | ug/l # | 87     |
| 15) Acrylonitrile             | 4.95 | 53  | 82155  | 101.582 | ug/l   | 99     |
| 16) Acetone                   | 3.78 | 43  | 84434  | 112.017 | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.03 | 76  | 77991  | 15.779  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.29 | 43  | 51344  | 20.871  | ug/l   | 91     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 120364 | 21.277  | ug/l   | 95     |
| 20) Methylene Chloride        | 4.52 | 84  | 38071  | 19.183  | ug/l   | 89     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 35044  | 19.001  | ug/l   | 90     |
| 22) Diisopropyl ether         | 5.91 | 45  | 111572 | 21.052  | ug/l   | 87     |
| 23) Vinyl Acetate             | 5.86 | 43  | 420047 | 102.366 | ug/l   | 95     |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 64393  | 19.884  | ug/l   | 97     |
| 25) 2-Butanone                | 6.80 | 43  | 114123 | 95.687  | ug/l   | 92     |
| 26) 2,2-Dichloropropane       | 6.79 | 77  | 62943  | 20.218  | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 42987  | 20.264  | ug/l   | 89     |
| 28) Bromochloromethane        | 7.17 | 49  | 27014  | 20.871  | ug/l # | 75     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 72569  | 98.342  | ug/l # | 87     |
| 30) Chloroform                | 7.35 | 83  | 70536  | 21.022  | ug/l   | 99     |
| 31) Cyclohexane               | 7.63 | 56  | 56943  | 18.274  | ug/l   | 87     |
| 32) 1,1,1-Trichloroethane     | 7.54 | 97  | 64012  | 20.633  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 49501  | 19.301  | ug/l   | 96     |
| 37) Ethyl Acetate             | 6.90 | 43  | 47619  | 19.797  | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 55336  | 19.835  | ug/l   | 98     |

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 Quant Title : SW846 8260  
 QLast Update : Sat Jan 18 03:09:32 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.06  | 83   | 58971    | 18.648  | ug/l   | 92       |
| 40) Benzene                    | 8.02  | 78   | 149257   | 19.514  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.16  | 41   | 24994m   | 21.095  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 54995    | 21.206  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 82084    | 19.839  | ug/l   | 95       |
| 44) Trichloroethene            | 8.82  | 130  | 43354    | 20.763  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 39602    | 20.924  | ug/l   | 99       |
| 46) Dibromomethane             | 9.19  | 93   | 27444    | 20.556  | ug/l   | 94       |
| 47) Bromodichloromethane       | 9.38  | 83   | 55936    | 20.790  | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.18  | 41   | 35341    | 19.096  | ug/l   | 91       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 13878    | 409.635 | ug/l   | 91       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 240214   | 100.436 | ug/l   | 96       |
| 52) Toluene                    | 10.14 | 92   | 97251    | 20.129  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 62949    | 20.954  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 65894    | 20.847  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 39989    | 20.899  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 55806    | 19.087  | ug/l   | 95       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 65137    | 21.442  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 96645    | 109.742 | ug/l   | 93       |
| 59) 2-Hexanone                 | 10.74 | 43   | 174793   | 99.202  | ug/l   | 95       |
| 60) Dibromochloromethane       | 10.89 | 129  | 45033    | 20.667  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 40961    | 20.424  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.62 | 164  | 44298    | 20.153  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.43 | 112  | 107566   | 20.291  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 42515    | 20.756  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.50 | 91   | 191217   | 19.870  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.62 | 106  | 143976   | 39.607  | ug/l   | 95       |
| 69) o-Xylene                   | 11.94 | 106  | 70542    | 19.822  | ug/l   | 94       |
| 70) Styrene                    | 11.96 | 104  | 111417   | 18.709  | ug/l   | 96       |
| 71) Bromoform                  | 12.12 | 173  | 33415    | 20.365  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 190705   | 19.722  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 70671    | 18.835  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 55587    | 19.830  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 48214m   | 21.729  | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 48096    | 19.641  | ug/l   | 84       |
| 78) n-propylbenzene            | 12.59 | 91   | 213672   | 19.688  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 127538   | 19.753  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 157767   | 19.400  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 19818    | 19.181  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 128140   | 19.787  | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 139043   | 19.769  | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 158016   | 19.641  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 182496   | 19.749  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 164648   | 19.256  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 85037    | 19.992  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 83465    | 19.670  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.61 | 91   | 144453   | 19.814  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 30555    | 19.100  | ug/l   | 91       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 84045    | 19.986  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 11688    | 18.093  | ug/l   | 87       |

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QLast Update : Sat Jan 18 03:09:32 2020  
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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 48881    | 19.345 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 27096    | 19.460 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 132062   | 18.375 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 48035    | 19.531 | ug/l  | 99       |

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

