

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN030519\  
 Data File : VN054101.D  
 Acq On : 5 Mar 2019 16:08  
 Operator : JC/SP  
 Sample : VN0305WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0305WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 3/6/2019 9:16:27 AM

Quant Time: Mar 06 03:17:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N022519W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Feb 28 04:05:45 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 622710   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1050868  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 903189   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 394748   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.03   | 65  | 393571   | 53.92 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 107.84% |      |
| 35) Dibromofluoromethane    | 7.59   | 113 | 345452   | 50.84 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 101.68% |      |
| 50) Toluene-d8              | 10.09  | 98  | 1268055  | 50.13 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.26% |      |
| 62) 4-Bromofluorobenzene    | 12.40  | 95  | 410755   | 48.74 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.48%  |      |

|                               |      |     |         |         |      |     |
|-------------------------------|------|-----|---------|---------|------|-----|
| Target Compounds              |      |     |         | Qvalue  |      |     |
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 110496  | 19.281  | ug/l | 98  |
| 3) Chloromethane              | 2.06 | 50  | 160949  | 20.247  | ug/l | 99  |
| 4) Vinyl Chloride             | 2.18 | 62  | 165699  | 20.804  | ug/l | 100 |
| 5) Bromomethane               | 2.57 | 94  | 73722   | 13.976  | ug/l | 100 |
| 6) Chloroethane               | 2.71 | 64  | 97999   | 19.784  | ug/l | 100 |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 207602  | 20.403  | ug/l | 100 |
| 8) Diethyl Ether              | 3.41 | 74  | 80066   | 21.003  | ug/l | 90  |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 128226  | 19.953  | ug/l | 93  |
| 10) Methyl Iodide             | 3.95 | 142 | 103858  | 12.299  | ug/l | 98  |
| 11) Tert butyl alcohol        | 4.78 | 59  | 51097   | 110.421 | ug/l | 99  |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 123971  | 20.167  | ug/l | 94  |
| 13) Acrolein                  | 3.61 | 56  | 25883   | 54.024  | ug/l | 94  |
| 14) Allyl chloride            | 4.33 | 41  | 223629  | 20.742  | ug/l | 96  |
| 15) Acrylonitrile             | 4.99 | 53  | 267294  | 109.596 | ug/l | 99  |
| 16) Acetone                   | 3.81 | 43  | 184256  | 87.452  | ug/l | 100 |
| 17) Carbon Disulfide          | 4.05 | 76  | 359793  | 18.143  | ug/l | 97  |
| 18) Methyl Acetate            | 4.32 | 43  | 122835  | 24.066  | ug/l | 95  |
| 19) Methyl tert-butyl Ether   | 5.04 | 73  | 358663  | 21.750  | ug/l | 98  |
| 20) Methylene Chloride        | 4.55 | 84  | 147656  | 20.438  | ug/l | 92  |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 134551  | 20.223  | ug/l | 93  |
| 22) Diisopropyl ether         | 5.95 | 45  | 456745  | 21.959  | ug/l | 94  |
| 23) Vinyl Acetate             | 5.90 | 43  | 1567943 | 104.788 | ug/l | 96  |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 268971  | 21.087  | ug/l | 99  |
| 25) 2-Butanone                | 6.83 | 43  | 296830  | 103.563 | ug/l | 96  |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 171039  | 18.874  | ug/l | 99  |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 156279  | 21.121  | ug/l | 96  |
| 28) Bromochloromethane        | 7.19 | 49  | 125718  | 21.533  | ug/l | 82  |
| 29) Tetrahydrofuran           | 7.21 | 42  | 210246  | 110.153 | ug/l | 93  |
| 30) Chloroform                | 7.37 | 83  | 259161  | 20.954  | ug/l | 99  |
| 31) Cyclohexane               | 7.65 | 56  | 242616  | 20.543  | ug/l | 96  |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 212132  | 20.801  | ug/l | 97  |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 187370  | 19.173  | ug/l | 99  |
| 37) Ethyl Acetate             | 6.93 | 43  | 133913  | 19.191  | ug/l | 98  |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 184119  | 18.115  | ug/l | 100 |

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 Quant Title : SW846 8260  
 QLast Update : Thu Feb 28 04:05:45 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| -----                          |       |      |          |         |        |          |
| 39) Methylcyclohexane          | 9.08  | 83   | 213990   | 18.167  | ug/l   | 96       |
| 40) Benzene                    | 8.04  | 78   | 601167   | 20.024  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.17  | 41   | 63889    | 14.219  | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 190128   | 20.455  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 234231   | 19.881  | ug/l # | 91       |
| 44) Trichloroethene            | 8.83  | 130  | 155917   | 19.590  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 163762   | 20.218  | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 92984    | 19.774  | ug/l   | 94       |
| 47) Bromodichloromethane       | 9.40  | 83   | 198547   | 20.035  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.20  | 41   | 116229   | 21.447  | ug/l   | 90       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 31374    | 427.432 | ug/l # | 92       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 636520   | 105.134 | ug/l   | 95       |
| 52) Toluene                    | 10.16 | 92   | 351580   | 19.888  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 187416   | 19.437  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 222174   | 19.545  | ug/l   | 93       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 132276   | 20.036  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 153844   | 19.032  | ug/l   | 90       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 227009   | 20.350  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 345277   | 94.623  | ug/l   | 96       |
| 59) 2-Hexanone                 | 10.75 | 43   | 396596   | 100.719 | ug/l   | 94       |
| 60) Dibromochloromethane       | 10.90 | 129  | 142011   | 19.355  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 126021   | 19.788  | ug/l   | 97       |
| 64) Tetrachloroethene          | 10.63 | 164  | 154841   | 20.246  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.43 | 112  | 379304   | 19.899  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 136666   | 19.894  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 633604   | 19.828  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 484512   | 40.173  | ug/l   | 97       |
| 69) o-Xylene                   | 11.95 | 106  | 237188   | 20.015  | ug/l   | 98       |
| 70) Styrene                    | 11.96 | 104  | 376250   | 20.642  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 93006    | 19.460  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 616731   | 20.070  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 171741   | 21.324  | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 155559   | 20.244  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 129819m  | 20.501  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 154806   | 19.843  | ug/l   | 90       |
| 78) n-propylbenzene            | 12.59 | 91   | 702374   | 20.099  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 424917   | 20.241  | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 514478   | 20.451  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 36668    | 18.302  | ug/l   | 88       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 420591   | 20.271  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 457432   | 20.559  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 522272   | 20.796  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 608956   | 20.039  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 517266   | 20.135  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 267847   | 19.846  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 258186   | 19.718  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.62 | 91   | 414250   | 19.134  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.87 | 117  | 91114    | 18.303  | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 265990   | 20.360  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 22016    | 20.274  | ug/l   | 90       |

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QLast Update : Thu Feb 28 04:05:45 2019  
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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 117048   | 17.637 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 84909    | 17.992 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 234002   | 17.222 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 116035   | 17.711 | ug/l  | 96       |

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

