

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101918\  
 Data File : VN051937.D  
 Acq On : 19 Oct 2018 10:27  
 Operator : MD\SY  
 Sample : VN1019WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 4 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1019WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 10/22/2018 11:35:21 AM

Quant Time: Oct 19 23:37:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101718W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 19 05:11:28 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 1080370  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 1572580  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1383202  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 608429   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 489659   | 48.89 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.78% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 493537   | 49.38 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.76% |      |
| 50) Toluene-d8            | 10.09  | 98  | 1786366  | 49.10 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.20% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 560244   | 46.13 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.26% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 119645  | 18.303 | ug/l | 98     |
| 3) Chloromethane              | 2.06 | 50  | 118052  | 18.483 | ug/l | 96     |
| 4) Vinyl Chloride             | 2.19 | 62  | 179494  | 18.606 | ug/l | 99     |
| 5) Bromomethane               | 2.57 | 94  | 164595  | 19.641 | ug/l | 98     |
| 6) Chloroethane               | 2.71 | 64  | 139825  | 19.972 | ug/l | 100    |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 299594  | 20.153 | ug/l | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 89335   | 20.512 | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 176959  | 20.746 | ug/l | 98     |
| 10) Methyl Iodide             | 3.96 | 142 | 205523  | 20.381 | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.79 | 59  | 46933m  | 80.194 | ug/l |        |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 154921  | 19.925 | ug/l | 99     |
| 13) Acrolein                  | 3.61 | 56  | 31391   | 60.139 | ug/l | 93     |
| 14) Allyl chloride            | 4.32 | 41  | 160302  | 19.036 | ug/l | 91     |
| 15) Acrylonitrile             | 4.99 | 53  | 200387  | 93.774 | ug/l | 99     |
| 16) Acetone                   | 3.82 | 43  | 165284  | 93.196 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.05 | 76  | 343725  | 17.731 | ug/l | 99     |
| 18) Methyl Acetate            | 4.33 | 43  | 103287  | 17.789 | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 428131  | 19.107 | ug/l | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 175378  | 19.453 | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 173584  | 19.426 | ug/l | 98     |
| 22) Diisopropyl ether         | 5.95 | 45  | 394271  | 20.089 | ug/l | 92     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1292734 | 95.674 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 285779  | 20.107 | ug/l | 99     |
| 25) 2-Butanone                | 6.84 | 43  | 237546  | 93.719 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 6.83 | 77  | 268415  | 19.968 | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 207854  | 20.016 | ug/l | 99     |
| 28) Bromochloromethane        | 7.19 | 49  | 115198  | 19.960 | ug/l | 95     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 142006  | 91.728 | ug/l | 97     |
| 30) Chloroform                | 7.37 | 83  | 346827  | 20.398 | ug/l | 98     |
| 31) Cyclohexane               | 7.65 | 56  | 246079  | 19.698 | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 317532  | 20.022 | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 7.80 | 75  | 244365  | 20.021 | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 101771  | 17.264 | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 286941  | 19.963 | ug/l | 97     |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 307310   | 20.333  | ug/l   | 100      |
| 40) Benzene                    | 8.04  | 78   | 729568   | 20.461  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.19  | 41   | 62001m   | 22.364  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 230401   | 20.170  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 205210   | 17.625  | ug/l # | 88       |
| 44) Trichloroethene            | 8.83  | 130  | 225702   | 20.171  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 171296   | 20.776  | ug/l   | 97       |
| 46) Dibromomethane             | 9.21  | 93   | 124547   | 19.818  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.40  | 83   | 250874   | 19.917  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.20  | 41   | 94712    | 19.223  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 31805    | 339.851 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 527691   | 92.872  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 484731   | 20.322  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 219557   | 18.394  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 261768   | 19.667  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 175836   | 20.119  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 178199   | 18.238  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 262639   | 19.737  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 382276   | 86.807  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 336311   | 88.273  | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.90 | 129  | 196087   | 18.103  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 174324   | 19.017  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 234610   | 21.131  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 555190   | 20.076  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 208913   | 20.295  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 917526   | 20.253  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 736518   | 40.489  | ug/l   | 98       |
| 69) o-Xylene                   | 11.95 | 106  | 365108   | 20.596  | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 539818   | 19.796  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 117278   | 17.398  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 956356   | 20.305  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 142174   | 17.556  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 188034   | 19.754  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 156162m  | 21.117  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 236835   | 19.761  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 1024952  | 20.904  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 606110   | 21.818  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 793934   | 20.854  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 35630    | 15.991  | ug/l   | 86       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 587828   | 20.516  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 731191   | 20.438  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 785917   | 20.996  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 955730   | 21.013  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 838978   | 21.283  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 405822   | 20.090  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 383121   | 19.298  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.61 | 91   | 619863   | 21.677  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 134771   | 20.441  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 402055   | 20.552  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 22520    | 17.660  | ug/l   | 95       |

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Quant Title : SW846 8260  
QLast Update : Fri Oct 19 05:11:28 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 144640   | 17.536 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 134011   | 21.633 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 256828   | 15.907 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 149252   | 17.733 | ug/l  | 99       |

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

