

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN021720\  
 Data File : VN060110.D  
 Acq On : 17 Feb 2020 11:27  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 2/18/2020 9:26:45 AM

Quant Time: Feb 17 14:20:04 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 12 14:12:21 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 204089   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 327254   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 307873   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 155195   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 136622   | 55.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.02% |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 104315   | 51.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.72% |      |
| 50) Toluene-d8            | 10.08  | 98  | 408677   | 51.59 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.18% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 153063   | 52.58 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.16% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 103611  | 50.790  | ug/l | 99     |
| 3) Chloromethane              | 2.04 | 50  | 128270  | 52.837  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.17 | 62  | 142280  | 51.418  | ug/l | 100    |
| 5) Bromomethane               | 2.54 | 94  | 82561   | 48.659  | ug/l | 97     |
| 6) Chloroethane               | 2.68 | 64  | 72092   | 51.509  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 170997  | 47.930  | ug/l | 98     |
| 8) Diethyl Ether              | 3.38 | 74  | 64380   | 54.210  | ug/l | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 98316   | 49.636  | ug/l | 97     |
| 10) Methyl Iodide             | 3.93 | 142 | 132714  | 49.863  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.73 | 59  | 114746  | 308.764 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 95848   | 49.673  | ug/l | 97     |
| 13) Acrolein                  | 3.58 | 56  | 63012   | 171.539 | ug/l | 96     |
| 14) Allyl chloride            | 4.29 | 41  | 154188  | 54.291  | ug/l | 95     |
| 15) Acrylonitrile             | 4.94 | 53  | 276290  | 304.428 | ug/l | 99     |
| 16) Acetone                   | 3.78 | 43  | 366712  | 338.528 | ug/l | 98     |
| 17) Carbon Disulfide          | 4.03 | 76  | 282365  | 48.549  | ug/l | 99     |
| 18) Methyl Acetate            | 4.29 | 43  | 125741  | 61.792  | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 348358  | 53.684  | ug/l | 99     |
| 20) Methylene Chloride        | 4.52 | 84  | 109964  | 50.882  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 104441  | 49.654  | ug/l | 98     |
| 22) Diisopropyl ether         | 5.91 | 45  | 353894  | 56.857  | ug/l | 95     |
| 23) Vinyl Acetate             | 5.86 | 43  | 1547612 | 296.084 | ug/l | 97     |
| 24) 1,1-Dichloroethane        | 5.81 | 63  | 195384  | 51.818  | ug/l | 99     |
| 25) 2-Butanone                | 6.80 | 43  | 455992  | 334.702 | ug/l | 96     |
| 26) 2,2-Dichloropropane       | 6.79 | 77  | 180799  | 50.483  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 124828  | 50.710  | ug/l | 97     |
| 28) Bromochloromethane        | 7.17 | 49  | 82418   | 55.600  | ug/l | 93     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 256794  | 307.245 | ug/l | 95     |
| 30) Chloroform                | 7.35 | 83  | 203330  | 51.479  | ug/l | 99     |
| 31) Cyclohexane               | 7.63 | 56  | 180174  | 51.297  | ug/l | 94     |
| 32) 1,1,1-Trichloroethane     | 7.54 | 97  | 181599  | 50.313  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 152817  | 50.415  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.90 | 43  | 160917  | 58.740  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 157128  | 47.731  | ug/l | 99     |

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 12 14:12:21 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.06  | 83   | 192312   | 51.111   | ug/l   | 98       |
| 40) Benzene                    | 8.02  | 78   | 452230   | 50.295   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.14  | 41   | 63143m   | 54.962   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 165318   | 52.458   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 271351   | 57.945   | ug/l   | 98       |
| 44) Trichloroethene            | 8.82  | 130  | 119630   | 48.050   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 118516   | 53.240   | ug/l   | 99       |
| 46) Dibromomethane             | 9.19  | 93   | 81904    | 52.065   | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.38  | 83   | 165052   | 51.607   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.18  | 41   | 121876   | 58.007   | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 44039    | 1226.759 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 814667   | 300.555  | ug/l   | 98       |
| 52) Toluene                    | 10.14 | 92   | 290397   | 50.364   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 193992   | 53.736   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 199878   | 52.580   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 114358   | 50.838   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 182780   | 57.440   | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 194299   | 52.347   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 434377   | 293.011  | ug/l   | 97       |
| 59) 2-Hexanone                 | 10.74 | 43   | 670708   | 320.327  | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.89 | 129  | 131340   | 50.880   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 10.99 | 107  | 122979   | 52.152   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.62 | 164  | 107664   | 46.002   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 308747   | 49.223   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 116642   | 49.157   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.50 | 91   | 569399   | 50.332   | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.62 | 106  | 425690   | 100.260  | ug/l   | 98       |
| 69) o-Xylene                   | 11.94 | 106  | 204677   | 50.067   | ug/l   | 98       |
| 70) Styrene                    | 11.96 | 104  | 344013   | 52.183   | ug/l   | 99       |
| 71) Bromoform                  | 12.12 | 173  | 99617    | 52.197   | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.25 | 105  | 561987   | 48.492   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 246168   | 58.906   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 174582   | 52.337   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 158918m  | 53.522   | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 137600   | 47.843   | ug/l   | 93       |
| 78) n-propylbenzene            | 12.59 | 91   | 656205   | 49.698   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 381824   | 49.199   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 479072   | 49.718   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 67631    | 55.771   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 395940   | 49.727   | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 405181   | 47.534   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 475137   | 49.952   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 549978   | 48.719   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 503960   | 49.272   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 249613   | 49.030   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 251462   | 49.403   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 464488   | 51.631   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 92987    | 48.664   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 241567   | 48.485   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 38522    | 54.380   | ug/l   | 94       |

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Quant Title : SW846 8260  
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Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.90 | 180  | 153228   | 52.342 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 80325    | 46.870 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 429006   | 54.251 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 147118   | 50.465 | ug/l  | 100      |

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

