

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN021220\  
 Data File : VN060072.D  
 Acq On : 12 Feb 2020 14:04  
 Operator : JC/MD  
 Sample : VSTDICV050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN021220

Manual Integrations  
 APPROVED

MMDadoda  
 2/13/2020 10:37:24 AM

Quant Time: Feb 13 00:51:05 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  | 218392   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.56  | 114  | 340777   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 323465   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 167842   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 127191   | 47.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.72%  |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 102958   | 49.15 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.30%  |      |
| 50) Toluene-d8            | 10.08  | 98  | 402003   | 48.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.46%  |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 155441   | 51.28 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.56% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 116619  | 53.423  | ug/l   | 100    |
| 3) Chloromethane              | 2.03 | 50  | 134831  | 51.902  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.16 | 62  | 150216  | 50.730  | ug/l   | 100    |
| 5) Bromomethane               | 2.49 | 94  | 102126  | 56.248  | ug/l   | 98     |
| 6) Chloroethane               | 2.65 | 64  | 77931   | 52.034  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 2.99 | 101 | 202542  | 53.054  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.38 | 74  | 69521   | 54.705  | ug/l   | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 112467  | 53.062  | ug/l   | 99     |
| 10) Methyl Iodide             | 3.92 | 142 | 156350  | 54.645  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.74 | 59  | 112895  | 283.888 | ug/l   | 100    |
| 12) 1,1-Dichloroethene        | 3.71 | 96  | 110515  | 53.523  | ug/l   | 99     |
| 13) Acrolein                  | 3.57 | 56  | 112813  | 286.999 | ug/l   | 97     |
| 14) Allyl chloride            | 4.29 | 41  | 177587  | 58.434  | ug/l   | 90     |
| 15) Acrylonitrile             | 4.94 | 53  | 272439  | 280.525 | ug/l   | 99     |
| 16) Acetone                   | 3.78 | 43  | 279673  | 241.270 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.02 | 76  | 330889  | 53.166  | ug/l   | 98     |
| 18) Methyl Acetate            | 4.28 | 43  | 126734  | 58.201  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 369512  | 53.215  | ug/l   | 98     |
| 20) Methylene Chloride        | 4.52 | 84  | 124508  | 53.838  | ug/l   | 99     |
| 21) trans-1,2-Dichloroethene  | 5.00 | 96  | 118636  | 52.708  | ug/l   | 98     |
| 22) Diisopropyl ether         | 5.91 | 45  | 359504  | 53.976  | ug/l   | 95     |
| 23) Vinyl Acetate             | 5.85 | 43  | 1524350 | 272.534 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 5.81 | 63  | 211739  | 52.478  | ug/l   | 99     |
| 25) 2-Butanone                | 6.80 | 43  | 388482  | 266.474 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 6.79 | 77  | 202160  | 52.751  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 6.79 | 96  | 136783  | 51.927  | ug/l   | 100    |
| 28) Bromochloromethane        | 7.17 | 49  | 77994   | 49.169  | ug/l # | 98     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 237461  | 265.507 | ug/l   | 99     |
| 30) Chloroform                | 7.34 | 83  | 219779  | 51.999  | ug/l   | 98     |
| 31) Cyclohexane               | 7.63 | 56  | 192406  | 51.191  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.54 | 97  | 202663  | 52.471  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 166647  | 52.796  | ug/l   | 100    |
| 37) Ethyl Acetate             | 6.89 | 43  | 152758  | 53.549  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 178299  | 52.012  | ug/l   | 99     |

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 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   | 209242   | 53.403   | ug/l   | 99       |
| 40) Benzene                    | 8.01  | 78   | 490197   | 52.354   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.14  | 41   | 63444    | 53.032   | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 175497   | 53.479   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 263018   | 53.937   | ug/l   | 100      |
| 44) Trichloroethene            | 8.81  | 130  | 134837   | 52.009   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 123684   | 53.356   | ug/l   | 100      |
| 46) Dibromomethane             | 9.19  | 93   | 85475    | 52.179   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.38  | 83   | 178421   | 53.573   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.18  | 41   | 119328   | 54.540   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 46545    | 1245.115 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 789493   | 279.709  | ug/l   | 100      |
| 52) Toluene                    | 10.14 | 92   | 321894   | 53.611   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 206976   | 55.058   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 215996   | 54.565   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 125021   | 53.373   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 191737   | 57.863   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 205899   | 53.271   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 396526   | 256.864  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.74 | 43   | 616410   | 282.712  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.89 | 129  | 146764   | 54.599   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 10.99 | 107  | 136176   | 55.457   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.62 | 164  | 124015   | 50.434   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 353839   | 53.693   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 133939   | 53.726   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.50 | 91   | 639964   | 53.843   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 492488   | 110.401  | ug/l   | 99       |
| 69) o-Xylene                   | 11.94 | 106  | 236601   | 55.086   | ug/l   | 100      |
| 70) Styrene                    | 11.96 | 104  | 398485   | 57.533   | ug/l   | 100      |
| 71) Bromoform                  | 12.12 | 173  | 114971   | 57.338   | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.25 | 105  | 649225   | 51.799   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.06 | 43   | 250947   | 55.525   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 188979   | 52.384   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 169826m  | 52.886   | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 163245   | 52.483   | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 748937   | 52.447   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 435738   | 51.915   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 561276   | 53.860   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 72753    | 55.474   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 454823   | 52.818   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 468749   | 50.848   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 563929   | 54.820   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 638374   | 52.288   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 594960   | 53.786   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 297366   | 54.009   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 293001   | 53.227   | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.61 | 91   | 520858   | 53.535   | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 108203   | 52.360   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 284961   | 52.886   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 39913    | 52.065   | ug/l   | 99       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 175915   | 55.564 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 93640    | 50.522 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 482096   | 56.371 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 169367   | 53.719 | ug/l  | 99       |

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

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