

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061820\  
 Data File : VN061917.D  
 Acq On : 18 Jun 2020 22:52  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 6/19/2020 1:02:27 PM

Quant Time: Jun 19 06:44:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061620W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 17 01:19:44 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 154607   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 264448   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 248608   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 122858   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 103658   | 49.99 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.98%  |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 88487    | 52.30 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.60% |      |
| 50) Toluene-d8            | 10.06  | 98  | 334210   | 50.25 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.50% |      |
| 62) 4-Bromofluorobenzene  | 12.38  | 95  | 116855   | 51.22 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.44% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 98354  | 48.898  | ug/l | 98     |
| 3) Chloromethane              | 2.03 | 50  | 109907 | 51.214  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.16 | 62  | 134376 | 52.525  | ug/l | 100    |
| 5) Bromomethane               | 2.52 | 94  | 96949  | 49.348  | ug/l | 100    |
| 6) Chloroethane               | 2.66 | 64  | 91729  | 52.978  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 2.98 | 101 | 157003 | 51.377  | ug/l | 98     |
| 8) Diethyl Ether              | 3.37 | 74  | 54429  | 52.980  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.72 | 101 | 75913  | 48.421  | ug/l | 99     |
| 10) Methyl Iodide             | 3.91 | 142 | 105003 | 54.911  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.74 | 59  | 70952  | 247.279 | ug/l | 97     |
| 12) 1,1-Dichloroethene        | 3.69 | 96  | 80034  | 50.949  | ug/l | 98     |
| 13) Acrolein                  | 3.56 | 56  | 43829  | 255.575 | ug/l | 100    |
| 14) Allyl chloride            | 4.27 | 41  | 107162 | 51.399  | ug/l | 98     |
| 15) Acrylonitrile             | 4.93 | 53  | 196501 | 276.385 | ug/l | 99     |
| 16) Acetone                   | 3.77 | 43  | 150399 | 245.559 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.01 | 76  | 223015 | 48.520  | ug/l | 100    |
| 18) Methyl Acetate            | 4.28 | 43  | 91354  | 51.808  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 4.99 | 73  | 279960 | 53.526  | ug/l | 100    |
| 20) Methylene Chloride        | 4.50 | 84  | 99967  | 50.098  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 4.99 | 96  | 90807  | 50.327  | ug/l | 97     |
| 22) Diisopropyl ether         | 5.90 | 45  | 248871 | 52.193  | ug/l | 98     |
| 23) Vinyl Acetate             | 5.84 | 43  | 992184 | 264.564 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.80 | 63  | 161222 | 51.651  | ug/l | 99     |
| 25) 2-Butanone                | 6.78 | 43  | 237188 | 265.428 | ug/l | 97     |
| 26) 2,2-Dichloropropane       | 6.78 | 77  | 115068 | 43.817  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 6.78 | 96  | 107149 | 51.466  | ug/l | 99     |
| 28) Bromochloromethane        | 7.15 | 49  | 71055  | 51.126  | ug/l | 97     |
| 29) Tetrahydrofuran           | 7.17 | 42  | 159206 | 270.718 | ug/l | 100    |
| 30) Chloroform                | 7.33 | 83  | 172867 | 51.820  | ug/l | 100    |
| 31) Cyclohexane               | 7.61 | 56  | 119685 | 43.801  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 145007 | 51.041  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.75 | 75  | 120118 | 49.799  | ug/l | 100    |
| 37) Ethyl Acetate             | 6.88 | 43  | 102813 | 54.584  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.73 | 117 | 119675 | 50.102  | ug/l | 97     |

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MMDadoda  
 6/19/2020 1:02:27 PM

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061620W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 17 01:19:44 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.05  | 83   | 124684   | 48.006   | ug/l   | 98       |
| 40) Benzene                    | 8.00  | 78   | 380151   | 52.028   | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.13  | 41   | 37225m   | 46.217   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.09  | 62   | 132697   | 53.263   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.13  | 43   | 171670   | 54.081   | ug/l # | 91       |
| 44) Trichloroethene            | 8.80  | 130  | 97163    | 50.529   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.09  | 63   | 96107    | 53.523   | ug/l   | 99       |
| 46) Dibromomethane             | 9.18  | 93   | 68173    | 53.915   | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.37  | 83   | 138072   | 53.327   | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.17  | 41   | 79747    | 55.244   | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.17  | 88   | 35849    | 1081.674 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 523308   | 278.979  | ug/l   | 99       |
| 52) Toluene                    | 10.12 | 92   | 244782   | 53.343   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.35 | 75   | 146564   | 53.323   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.81  | 75   | 157448   | 52.739   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.53 | 97   | 99977    | 55.375   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.40 | 69   | 137168   | 49.753   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.68 | 76   | 167280   | 54.690   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.66  | 63   | 235434   | 247.081  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.72 | 43   | 381073   | 254.057  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.87 | 129  | 110083   | 54.642   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 10.98 | 107  | 103574   | 54.939   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.60 | 164  | 79491    | 50.166   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.41 | 112  | 262787   | 50.094   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 98159    | 53.652   | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.48 | 91   | 452781   | 51.479   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.60 | 106  | 357488   | 105.407  | ug/l   | 100      |
| 69) o-Xylene                   | 11.92 | 106  | 173978   | 53.763   | ug/l   | 100      |
| 70) Styrene                    | 11.94 | 104  | 299457   | 55.267   | ug/l   | 99       |
| 71) Bromoform                  | 12.10 | 173  | 75191    | 56.364   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.22 | 105  | 440465   | 50.452   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.05 | 43   | 153604   | 48.670   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 147817   | 52.076   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.53 | 75   | 130166m  | 53.966   | ug/l   |          |
| 77) Bromobenzene               | 12.50 | 156  | 114361   | 51.922   | ug/l   | 99       |
| 78) n-propylbenzene            | 12.57 | 91   | 497369   | 49.928   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.65 | 91   | 301425   | 50.380   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 373037   | 51.647   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.27 | 75   | 45245    | 51.162   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.75 | 91   | 314873   | 50.932   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.97 | 119  | 304462   | 49.722   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 381942   | 53.569   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.15 | 105  | 410011   | 51.157   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.26 | 119  | 376650   | 52.739   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.26 | 146  | 203413   | 50.636   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.34 | 146  | 205532   | 49.983   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.59 | 91   | 298495   | 50.046   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.85 | 117  | 69747    | 53.351   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.63 | 146  | 199667   | 51.629   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.24 | 75   | 25250    | 54.795   | ug/l   | 98       |

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Quant Title : SW846 8260  
QLast Update : Wed Jun 17 01:19:44 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.88 | 180  | 92269    | 50.561 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.99 | 225  | 34169    | 47.539 | ug/l  | 94       |
| 95) Naphthalene            | 15.10 | 128  | 275448   | 45.415 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.28 | 180  | 93633    | 51.807 | ug/l  | 100      |

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

