

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN030419\  
 Data File : VN054064.D  
 Acq On : 4 Mar 2019 14:27  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/6/2019 9:59:10 AM

Quant Time: Mar 05 00:04:37 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  | 696403   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 1065307  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 941021   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 433605   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.02  | 65   | 408201   | 50.00 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.00% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 350734   | 50.91 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.82% |          |
| 50) Toluene-d8              | 10.09 | 98   | 1317843  | 51.39 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.78% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 441694   | 51.70 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.40% |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units  | Qvalue |
|-------------------------------|------|------|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85   | 298784   | 46.618  | ug/l   | 98     |
| 3) Chloromethane              | 2.06 | 50   | 418627   | 47.089  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.19 | 62   | 412131   | 46.268  | ug/l   | 99     |
| 5) Bromomethane               | 2.57 | 94   | 247018   | 41.873  | ug/l   | 97     |
| 6) Chloroethane               | 2.71 | 64   | 249161   | 44.977  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.02 | 101  | 528697   | 46.461  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74   | 203077   | 47.633  | ug/l   | 88     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101  | 343700   | 47.823  | ug/l   | 94     |
| 10) Methyl Iodide             | 3.95 | 142  | 443960   | 47.012  | ug/l   | 97     |
| 11) Tert butyl alcohol        | 4.77 | 59   | 117971   | 227.959 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 3.74 | 96   | 317975   | 46.254  | ug/l   | 92     |
| 13) Acrolein                  | 3.61 | 56   | 79002    | 147.447 | ug/l   | 99     |
| 14) Allyl chloride            | 4.32 | 41   | 594914   | 49.340  | ug/l   | 94     |
| 15) Acrylonitrile             | 4.98 | 53   | 677908   | 248.543 | ug/l   | 99     |
| 16) Acetone                   | 3.81 | 43   | 639901   | 298.479 | ug/l   | 94     |
| 17) Carbon Disulfide          | 4.05 | 76   | 968898   | 43.688  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.32 | 43   | 302405   | 52.978  | ug/l   | 94     |
| 19) Methyl tert-butyl Ether   | 5.04 | 73   | 896519   | 48.614  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.55 | 84   | 370664   | 45.877  | ug/l   | 89     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96   | 346807   | 46.610  | ug/l   | 92     |
| 22) Diisopropyl ether         | 5.95 | 45   | 1201821  | 51.666  | ug/l   | 96     |
| 23) Vinyl Acetate             | 5.89 | 43   | 4216337  | 251.967 | ug/l   | 95     |
| 24) 1,1-Dichloroethane        | 5.85 | 63   | 673288   | 47.199  | ug/l   | 98     |
| 25) 2-Butanone                | 6.83 | 43   | 835121   | 260.539 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 6.82 | 77   | 505865   | 49.915  | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96   | 395509   | 47.797  | ug/l   | 92     |
| 28) Bromochloromethane        | 7.19 | 49   | 335776   | 51.426  | ug/l # | 80     |
| 29) Tetrahydrofuran           | 7.21 | 42   | 525773   | 246.316 | ug/l   | 90     |
| 30) Chloroform                | 7.37 | 83   | 658627   | 47.617  | ug/l   | 100    |
| 31) Cyclohexane               | 7.65 | 56   | 627637   | 48.063  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97   | 541635   | 47.492  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 7.79 | 75   | 516521   | 52.137  | ug/l   | 96     |
| 37) Ethyl Acetate             | 6.93 | 43   | 341785   | 48.316  | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 7.77 | 117  | 479987   | 46.585  | ug/l   | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN030419\  
 Data File : VN054064.D  
 Acq On : 4 Mar 2019 14:27  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/6/2019 9:59:10 AM

Quant Time: Mar 05 00:04:37 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) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| -----                          |       |      |          |          |        |          |
| 39) Methylcyclohexane          | 9.08  | 83   | 613587   | 51.385   | ug/l   | 94       |
| 40) Benzene                    | 8.04  | 78   | 1524553  | 50.093   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.17  | 41   | 177002   | 38.859   | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 482729   | 51.232   | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 583219   | 48.830   | ug/l # | 90       |
| 44) Trichloroethene            | 8.83  | 130  | 394682   | 48.916   | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 415144   | 50.559   | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 234987   | 49.295   | ug/l   | 92       |
| 47) Bromodichloromethane       | 9.40  | 83   | 506825   | 50.450   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.20  | 41   | 290049   | 52.796   | ug/l   | 93       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 76231    | 1024.476 | ug/l # | 90       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 1669245  | 271.973  | ug/l   | 95       |
| 52) Toluene                    | 10.16 | 92   | 909958   | 50.776   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 512624   | 52.443   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 600850   | 52.142   | ug/l # | 92       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 335089   | 50.067   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 416396   | 47.549   | ug/l   | 89       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 577969   | 51.110   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 992190   | 243.236  | ug/l   | 95       |
| 59) 2-Hexanone                 | 10.75 | 43   | 1096320  | 274.647  | ug/l   | 93       |
| 60) Dibromochloromethane       | 10.90 | 129  | 370234   | 49.775   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 315673   | 48.895   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 390004   | 48.944   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.43 | 112  | 970225   | 48.853   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 356091   | 49.750   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1703975  | 51.180   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 1308154  | 104.104  | ug/l   | 97       |
| 69) o-Xylene                   | 11.95 | 106  | 628868   | 50.933   | ug/l   | 98       |
| 70) Styrene                    | 11.96 | 104  | 1008468  | 53.103   | ug/l   | 98       |
| 71) Bromoform                  | 12.13 | 173  | 245256   | 49.254   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 1651228  | 48.921   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 463056   | 52.343   | ug/l   | 94       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 397993   | 47.152   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 329859m  | 47.422   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 405022   | 47.262   | ug/l   | 90       |
| 78) n-propylbenzene            | 12.59 | 91   | 1977474  | 51.515   | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 1140983  | 49.480   | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1414180  | 51.178   | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 106934   | 48.589   | ug/l   | 90       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 1163162  | 51.037   | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 1217419  | 49.814   | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 1431263  | 51.882   | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1683124  | 50.423   | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1448035  | 51.315   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 734325   | 49.534   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 714988   | 49.712   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 1277718  | 53.727   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 254602   | 46.560   | ug/l   | 92       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 706689   | 49.245   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 58239    | 48.826   | ug/l   | 86       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN030419\  
Data File : VN054064.D  
Acq On : 4 Mar 2019 14:27  
Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
3/6/2019 9:59:10 AM

Quant Time: Mar 05 00:04:37 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) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 359568   | 45.333 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 241992   | 46.682 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 710036   | 41.912 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 338535   | 44.462 | ug/l  | 97       |

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

