

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN022119\  
 Data File : VN053878.D  
 Acq On : 21 Feb 2019 8:34  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 2/22/2019 10:30:36 AM

Quant Time: Feb 22 03:45:00 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N022019W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Feb 21 03:36:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 694270   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 1002451  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 882026   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 476855   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.02   | 65  | 331152   | 46.67 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.34%  |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 322434   | 49.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.02%  |      |
| 50) Toluene-d8            | 10.09  | 98  | 1215984  | 51.17 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.34% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 416856   | 53.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.28% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 283703  | 47.034  | ug/l   | 99     |
| 3) Chloromethane              | 2.06 | 50  | 342727  | 45.704  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.18 | 62  | 384712  | 47.792  | ug/l   | 99     |
| 5) Bromomethane               | 2.57 | 94  | 282478  | 47.919  | ug/l   | 99     |
| 6) Chloroethane               | 2.71 | 64  | 249189  | 47.898  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 547197  | 47.871  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 178933  | 44.530  | ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 321754  | 46.706  | ug/l   | 99     |
| 10) Methyl Iodide             | 3.95 | 142 | 470308  | 46.038  | ug/l   | 100    |
| 11) Tert butyl alcohol        | 4.78 | 59  | 94710   | 213.824 | ug/l # | 86     |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 299319  | 46.458  | ug/l   | 100    |
| 13) Acrolein                  | 3.61 | 56  | 35096   | 110.858 | ug/l   | 99     |
| 14) Allyl chloride            | 4.32 | 41  | 466849  | 47.878  | ug/l   | 100    |
| 15) Acrylonitrile             | 4.98 | 53  | 517030  | 231.709 | ug/l   | 100    |
| 16) Acetone                   | 3.82 | 43  | 508644  | 260.661 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.05 | 76  | 927949  | 46.502  | ug/l   | 100    |
| 18) Methyl Acetate            | 4.32 | 43  | 193425  | 41.999  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.04 | 73  | 768612  | 47.020  | ug/l   | 100    |
| 20) Methylene Chloride        | 4.55 | 84  | 331981  | 45.442  | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 325008  | 48.063  | ug/l   | 98     |
| 22) Diisopropyl ether         | 5.95 | 45  | 902383  | 49.645  | ug/l   | 99     |
| 23) Vinyl Acetate             | 5.89 | 43  | 3191496 | 244.236 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 577411  | 46.919  | ug/l   | 99     |
| 25) 2-Butanone                | 6.83 | 43  | 602548  | 239.297 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 450992  | 48.293  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 362540  | 47.859  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.19 | 49  | 260122  | 48.430  | ug/l   | 97     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 371742  | 228.281 | ug/l   | 99     |
| 30) Chloroform                | 7.37 | 83  | 576691  | 46.636  | ug/l   | 99     |
| 31) Cyclohexane               | 7.65 | 56  | 551790  | 48.955  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 499335  | 47.196  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 459532  | 50.011  | ug/l   | 98     |
| 37) Ethyl Acetate             | 6.92 | 43  | 247490  | 44.771  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 449729  | 49.026  | ug/l   | 98     |

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 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 2/22/2019 10:30:36 AM

Quant Time: Feb 22 03:45:00 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N022019W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Feb 21 03:36:07 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 566767   | 53.529  | ug/l   | 99       |
| 40) Benzene                    | 8.04  | 78   | 1361471  | 50.120  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.17  | 41   | 114177   | 37.788  | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 396604   | 48.975  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 419951   | 42.847  | ug/l # | 87       |
| 44) Trichloroethene            | 8.83  | 130  | 391271   | 51.454  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 349639   | 50.416  | ug/l   | 98       |
| 46) Dibromomethane             | 9.21  | 93   | 208374   | 49.901  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.40  | 83   | 441528   | 50.122  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.20  | 41   | 208272   | 49.562  | ug/l   | 93       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 65644    | 965.365 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 1145128  | 227.992 | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 829610   | 51.536  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 447683   | 52.336  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 524735   | 52.046  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 289406   | 49.180  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 336651   | 44.753  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 492619   | 49.718  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 764854   | 226.297 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 762837   | 248.078 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 346060   | 50.381  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 284533   | 48.669  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 388748   | 49.289  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.43 | 112  | 914088   | 49.512  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 339975   | 50.463  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1533318  | 51.318  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 1209310  | 104.531 | ug/l   | 99       |
| 69) o-Xylene                   | 11.95 | 106  | 595450   | 53.463  | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 972935   | 55.668  | ug/l   | 100      |
| 71) Bromoform                  | 12.13 | 173  | 243250   | 50.876  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1563976  | 46.556  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 344117   | 44.607  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 340362   | 42.854  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 281203m  | 40.170  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 413324   | 45.865  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 1850269  | 49.253  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 1153681  | 50.933  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1466496  | 52.591  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 95920    | 45.235  | ug/l   | 100      |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 1179020  | 52.248  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 1265745  | 50.552  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 1487661  | 53.193  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1745384  | 51.772  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1551658  | 53.032  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 797847   | 50.736  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 784636   | 49.589  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 1325327  | 55.083  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 257191   | 46.013  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 769105   | 49.851  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 53341    | 46.025  | ug/l   | 99       |

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Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
2/22/2019 10:30:36 AM

Quant Time: Feb 22 03:45:00 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N022019W.M  
Quant Title : SW846 8260  
QLast Update : Thu Feb 21 03:36:07 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 422158   | 45.451 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 287892   | 44.745 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 751832   | 40.683 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.32 | 180  | 396606   | 44.996 | ug/l  | 100      |

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

