

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN100419\  
 Data File : VN058556.D  
 Acq On : 4 Oct 2019 20:56  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 10/7/2019 12:08:55 PM

Quant Time: Oct 05 05:09:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N092719W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Sep 30 08:07:38 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 7.65  | 168  | 391538   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.57  | 114  | 659961   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 11.41 | 117  | 615230   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.35 | 152  | 303941   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 8.01  | 65   | 281978   | 49.28   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 98.56%  |          |
| 35) Dibromofluoromethane      | 7.57  | 113  | 203906   | 50.41   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 100.82% |          |
| 50) Toluene-d8                | 10.08 | 98   | 798804   | 50.41   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 100.82% |          |
| 62) 4-Bromofluorobenzene      | 12.41 | 95   | 297569   | 51.94   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 103.88% |          |
| Target Compounds              |       |      |          |         |         |          |
|                               |       |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 1.83  | 85   | 207514   | 48.336  | ug/l    | 100      |
| 3) Chloromethane              | 2.04  | 50   | 256305   | 54.303  | ug/l    | 99       |
| 4) Vinyl Chloride             | 2.17  | 62   | 230601   | 49.874  | ug/l    | 100      |
| 5) Bromomethane               | 2.54  | 94   | 112860   | 45.955  | ug/l    | 98       |
| 6) Chloroethane               | 2.68  | 64   | 152672   | 55.109  | ug/l    | 99       |
| 7) Trichlorofluoromethane     | 2.99  | 101  | 339546   | 60.854  | ug/l    | 98       |
| 8) Diethyl Ether              | 3.39  | 74   | 122433   | 50.857  | ug/l    | 99       |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73  | 101  | 189253   | 49.944  | ug/l    | 99       |
| 10) Methyl Iodide             | 3.93  | 142  | 148073   | 35.241  | ug/l    | 99       |
| 11) Tert butyl alcohol        | 4.76  | 59   | 201062   | 316.317 | ug/l    | 98       |
| 12) 1,1-Dichloroethene        | 3.72  | 96   | 180825   | 48.957  | ug/l    | 98       |
| 13) Acrolein                  | 3.58  | 56   | 57772    | 285.760 | ug/l    | 99       |
| 14) Allyl chloride            | 4.30  | 41   | 354815   | 52.787  | ug/l    | 97       |
| 15) Acrylonitrile             | 4.96  | 53   | 518177   | 279.715 | ug/l    | 99       |
| 16) Acetone                   | 3.79  | 43   | 446222   | 228.777 | ug/l    | 98       |
| 17) Carbon Disulfide          | 4.03  | 76   | 475839   | 48.873  | ug/l    | 98       |
| 18) Methyl Acetate            | 4.30  | 43   | 267378   | 54.504  | ug/l    | 99       |
| 19) Methyl tert-butyl Ether   | 5.02  | 73   | 686819   | 52.701  | ug/l    | 98       |
| 20) Methylene Chloride        | 4.53  | 84   | 224928   | 49.971  | ug/l    | 95       |
| 21) trans-1,2-Dichloroethene  | 5.01  | 96   | 199925   | 48.675  | ug/l    | 99       |
| 22) Diisopropyl ether         | 5.93  | 45   | 764752   | 52.870  | ug/l    | 99       |
| 23) Vinyl Acetate             | 5.87  | 43   | 3108189  | 284.985 | ug/l    | 99       |
| 24) 1,1-Dichloroethane        | 5.82  | 63   | 426457   | 52.387  | ug/l    | 99       |
| 25) 2-Butanone                | 6.81  | 43   | 702346   | 262.272 | ug/l    | 100      |
| 26) 2,2-Dichloropropane       | 6.80  | 77   | 334260   | 49.946  | ug/l    | 100      |
| 27) cis-1,2-Dichloroethene    | 6.81  | 96   | 241483   | 50.304  | ug/l    | 100      |
| 28) Bromochloromethane        | 7.18  | 49   | 173496   | 53.317  | ug/l    | 97       |
| 29) Tetrahydrofuran           | 7.19  | 42   | 460761   | 271.090 | ug/l    | 100      |
| 30) Chloroform                | 7.35  | 83   | 429279   | 52.039  | ug/l    | 98       |
| 31) Cyclohexane               | 7.63  | 56   | 363116   | 45.856  | ug/l    | 97       |
| 32) 1,1,1-Trichloroethane     | 7.55  | 97   | 369946   | 54.612  | ug/l    | 100      |
| 36) 1,1-Dichloropropene       | 7.78  | 75   | 314543   | 49.844  | ug/l    | 99       |
| 37) Ethyl Acetate             | 6.91  | 43   | 302614   | 56.561  | ug/l    | 100      |
| 38) Carbon Tetrachloride      | 7.76  | 117  | 311644   | 54.711  | ug/l    | 100      |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 352513   | 47.835   | ug/l   | 100      |
| 40) Benzene                    | 8.02  | 78   | 920857   | 50.766   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.15  | 41   | 137680   | 55.936   | ug/l   | 95       |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 361575   | 51.235   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.15  | 43   | 527217   | 52.402   | ug/l # | 90       |
| 44) Trichloroethene            | 8.82  | 130  | 232415   | 51.890   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 256162   | 52.655   | ug/l   | 100      |
| 46) Dibromomethane             | 9.20  | 93   | 163328   | 53.014   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.39  | 83   | 331913   | 56.861   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.19  | 41   | 241908   | 52.804   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.19  | 88   | 86018    | 1404.217 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 1545946  | 299.140  | ug/l   | 99       |
| 52) Toluene                    | 10.15 | 92   | 584458   | 51.190   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 369876   | 58.217   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 396599   | 56.235   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 232640   | 55.959   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 355691   | 56.384   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 405265   | 54.652   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 873063   | 347.086  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 1093099  | 290.482  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 236336   | 54.952   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 231869   | 54.584   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 210899   | 53.956   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 620412   | 50.731   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 230664   | 55.982   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 1141495  | 51.533   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 841003   | 100.911  | ug/l   | 99       |
| 69) o-Xylene                   | 11.95 | 106  | 401550   | 50.052   | ug/l   | 98       |
| 70) Styrene                    | 11.97 | 104  | 689847   | 52.929   | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 150246   | 52.727   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1108129  | 49.334   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 479537   | 53.663   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 340485   | 51.262   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 302361m  | 54.465   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 257790   | 48.946   | ug/l   | 96       |
| 78) n-propylbenzene            | 12.60 | 91   | 1309778  | 51.758   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 769787   | 49.283   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 953070   | 50.687   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 98929    | 54.122   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 807527   | 50.666   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.00 | 119  | 792510   | 49.949   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.05 | 105  | 946156   | 50.224   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.18 | 105  | 1088739  | 52.135   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 969735   | 52.754   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 476450   | 49.889   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 475181   | 50.010   | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.62 | 91   | 903404   | 54.254   | ug/l   | 100      |
| 90) Hexachloroethane           | 13.88 | 117  | 157181   | 56.911   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 467932   | 50.994   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 64591    | 55.145   | ug/l   | 97       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.92 | 180  | 282122   | 55.638 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.02 | 225  | 135864   | 52.130 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 776017   | 52.260 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 264973   | 52.123 | ug/l  | 98       |

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

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