

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN081418\  
 Data File : VN050587.D  
 Acq On : 14 Aug 2018 1:00  
 Operator : MD\SY  
 Sample : VSTDICCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

MMDadoda  
 8/15/2018 3:21:11 PM

Quant Time: Aug 14 07:43:25 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N081418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 14 07:26:24 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 668486   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 965586   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 893322   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 468608   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 414148   | 46.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.46%  |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 389299   | 50.18 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.36% |          |
| 50) Toluene-d8              | 10.09 | 98   | 1472734  | 50.50 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.00% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 491135   | 49.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.32%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units | Qvalue |
|-------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85   | 363706   | 48.97  | ug/l  | 100    |
| 3) Chloromethane              | 2.06 | 50   | 449077   | 45.29  | ug/l  | 100    |
| 4) Vinyl Chloride             | 2.18 | 62   | 473105   | 49.15  | ug/l  | 100    |
| 5) Bromomethane               | 2.56 | 94   | 273966   | 46.44  | ug/l  | 100    |
| 6) Chloroethane               | 2.70 | 64   | 281400   | 47.67  | ug/l  | 100    |
| 7) Trichlorofluoromethane     | 3.01 | 101  | 606886   | 48.91  | ug/l  | 100    |
| 8) Diethyl Ether              | 3.41 | 74   | 210349   | 46.64  | ug/l  | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101  | 372470   | 48.53  | ug/l  | 100    |
| 10) Methyl Iodide             | 3.95 | 142  | 244454   | 65.94  | ug/l  | 100    |
| 11) Tert butyl alcohol        | 4.79 | 59   | 110960   | 166.65 | ug/l  | 100    |
| 12) 1,1-Dichloroethene        | 3.73 | 96   | 344717   | 47.74  | ug/l  | 100    |
| 13) Acrolein                  | 3.61 | 56   | 41776    | 58.64  | ug/l  | 100    |
| 14) Allyl chloride            | 4.32 | 41   | 541732   | 47.10  | ug/l  | 100    |
| 15) Acrylonitrile             | 4.99 | 53   | 623077   | 213.01 | ug/l  | 100    |
| 16) Acetone                   | 3.82 | 43   | 514835   | 184.45 | ug/l  | 100    |
| 17) Carbon Disulfide          | 4.05 | 76   | 1072331  | 45.66  | ug/l  | 100    |
| 18) Methyl Acetate            | 4.33 | 43   | 288390   | 36.24  | ug/l  | 100    |
| 19) Methyl tert-butyl Ether   | 5.05 | 73   | 926738   | 46.02  | ug/l  | 100    |
| 20) Methylene Chloride        | 4.55 | 84   | 404126   | 40.67  | ug/l  | 100    |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96   | 377135   | 48.30  | ug/l  | 100    |
| 22) Diisopropyl ether         | 5.96 | 45   | 1187127  | 50.30  | ug/l  | 100    |
| 23) Vinyl Acetate             | 5.90 | 43   | 3927236  | 236.95 | ug/l  | 100    |
| 24) 1,1-Dichloroethane        | 5.85 | 63   | 699630   | 48.16  | ug/l  | 100    |
| 25) 2-Butanone                | 6.84 | 43   | 842957   | 198.41 | ug/l  | 100    |
| 26) 2,2-Dichloropropane       | 6.83 | 77   | 458277   | 39.46  | ug/l  | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96   | 420151   | 48.62  | ug/l  | 100    |
| 28) Bromochloromethane        | 7.20 | 49   | 329992   | 49.28  | ug/l  | 100    |
| 29) Tetrahydrofuran           | 7.21 | 42   | 455998   | 200.08 | ug/l  | 100    |
| 30) Chloroform                | 7.37 | 83   | 704619   | 48.53  | ug/l  | 100    |
| 31) Cyclohexane               | 7.65 | 56   | 635662   | 43.70  | ug/l  | 100    |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97   | 605461   | 48.56  | ug/l  | 100    |
| 36) 1,1-Dichloropropene       | 7.79 | 75   | 544336   | 51.38  | ug/l  | 100    |
| 37) Ethyl Acetate             | 6.93 | 43   | 313200   | 42.72  | ug/l  | 100    |
| 38) Carbon Tetrachloride      | 7.78 | 117  | 536933   | 48.59  | ug/l  | 100    |

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 VSTDICCC050

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Quant Time: Aug 14 07:43:25 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N081418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 14 07:26:24 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 592507   | 51.26  | ug/l   | 100      |
| 40) Benzene                    | 8.04  | 78   | 1640352  | 50.29  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.18  | 41   | 174455   | 44.07  | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 491363   | 47.90  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 553478   | 43.25  | ug/l   | 100      |
| 44) Trichloroethene            | 8.84  | 130  | 430685   | 49.10  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 427945   | 49.93  | ug/l   | 100      |
| 46) Dibromomethane             | 9.21  | 93   | 245828   | 46.96  | ug/l   | 100      |
| 47) Bromodichloromethane       | 9.40  | 83   | 538426   | 49.17  | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.20  | 41   | 278647   | 43.62  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.20  | 88   | 74392    | 766.12 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 1948296  | 213.24 | ug/l   | 100      |
| 52) Toluene                    | 10.16 | 92   | 1009074  | 51.57  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 522887   | 48.09  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 611874   | 50.16  | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 359193   | 47.44  | ug/l   | 100      |
| 56) Ethyl methacrylate         | 10.43 | 69   | 448443   | 47.59  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 600655   | 48.28  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 1083201  | 246.06 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 1286714  | 203.09 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 405262   | 48.52  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 352028   | 47.37  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 410147   | 49.21  | ug/l   | 100      |
| 65) Chlorobenzene              | 11.44 | 112  | 1097230  | 48.97  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 407622   | 49.86  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 1897710  | 52.39  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 1477026  | 107.03 | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 700354   | 52.78  | ug/l   | 100      |
| 70) Styrene                    | 11.96 | 104  | 1150339  | 53.46  | ug/l   | 100      |
| 71) Bromoform                  | 12.13 | 173  | 275821   | 47.02  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 1850997  | 52.25  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 476573   | 43.01  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 436513   | 43.64  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 360007m  | 42.51  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 475020   | 50.11  | ug/l   | 100      |
| 78) n-propylbenzene            | 12.59 | 91   | 2122325  | 52.97  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 1266302  | 51.14  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1530910  | 53.34  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 102893   | 43.97  | ug/l   | 100      |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 1287201  | 52.16  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 1276470  | 51.12  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 1561831  | 53.75  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1722820  | 51.66  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1507496  | 52.82  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 830291   | 49.38  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 808976   | 48.22  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.62 | 91   | 1196890  | 49.61  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.88 | 117  | 256592   | 50.10  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 793342   | 47.26  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 62390    | 37.41  | ug/l   | 100      |

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|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 399481   | 47.35 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 232250   | 37.79 | ug/l  | 100      |
| 95) Naphthalene            | 15.13 | 128  | 826660   | 43.33 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.32 | 180  | 382458   | 44.86 | ug/l  | 100      |

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

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