

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN090719\  
 Data File : VN057771.D  
 Acq On : 7 Sep 2019 21:43  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/10/2019 3:03:25 PM

Quant Time: Sep 08 07:23:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N090619W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 06 03:46:54 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 197112   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 316929   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 302383   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 174074   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 224005   | 46.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.44%  |      |
| 35) Dibromofluoromethane  | 7.57   | 113 | 145757   | 50.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.98% |      |
| 50) Toluene-d8            | 10.09  | 98  | 535259   | 50.12 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.24% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 212967   | 48.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.02%  |      |

## Target Compounds

|                               |      |     |         |         | Qvalue |     |
|-------------------------------|------|-----|---------|---------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 145059  | 46.341  | ug/l   | 97  |
| 3) Chloromethane              | 2.03 | 50  | 141900  | 38.250  | ug/l   | 100 |
| 4) Vinyl Chloride             | 2.16 | 62  | 122354  | 45.135  | ug/l   | 100 |
| 5) Bromomethane               | 2.53 | 94  | 63997   | 51.403  | ug/l   | 99  |
| 6) Chloroethane               | 2.68 | 64  | 71370   | 44.596  | ug/l   | 93  |
| 7) Trichlorofluoromethane     | 2.99 | 101 | 179771  | 41.322  | ug/l   | 98  |
| 8) Diethyl Ether              | 3.39 | 74  | 82079   | 47.217  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 125055  | 46.059  | ug/l   | 94  |
| 10) Methyl Iodide             | 3.93 | 142 | 157121  | 58.407  | ug/l   | 99  |
| 11) Tert butyl alcohol        | 4.77 | 59  | 123462  | 226.613 | ug/l   | 100 |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 113054  | 46.279  | ug/l   | 94  |
| 13) Acrolein                  | 3.59 | 56  | 54299   | 209.567 | ug/l   | 97  |
| 14) Allyl chloride            | 4.30 | 41  | 245896  | 44.049  | ug/l   | 98  |
| 15) Acrylonitrile             | 4.96 | 53  | 350216  | 250.029 | ug/l   | 99  |
| 16) Acetone                   | 3.80 | 43  | 339177  | 229.850 | ug/l   | 99  |
| 17) Carbon Disulfide          | 4.03 | 76  | 238024  | 43.006  | ug/l   | 99  |
| 18) Methyl Acetate            | 4.30 | 43  | 193169  | 48.138  | ug/l   | 99  |
| 19) Methyl tert-butyl Ether   | 5.02 | 73  | 470831  | 45.909  | ug/l   | 98  |
| 20) Methylene Chloride        | 4.53 | 84  | 143134  | 44.860  | ug/l   | 96  |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 120488  | 46.873  | ug/l   | 97  |
| 22) Diisopropyl ether         | 5.93 | 45  | 559079  | 47.343  | ug/l   | 98  |
| 23) Vinyl Acetate             | 5.87 | 43  | 2295086 | 240.115 | ug/l   | 99  |
| 24) 1,1-Dichloroethane        | 5.83 | 63  | 281587  | 46.505  | ug/l   | 99  |
| 25) 2-Butanone                | 6.81 | 43  | 523722  | 247.830 | ug/l   | 99  |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 172287  | 34.107  | ug/l   | 97  |
| 27) cis-1,2-Dichloroethene    | 6.81 | 96  | 157926  | 48.946  | ug/l   | 91  |
| 28) Bromochloromethane        | 7.18 | 49  | 146251  | 46.163  | ug/l   | 92  |
| 29) Tetrahydrofuran           | 7.19 | 42  | 336472  | 246.894 | ug/l   | 99  |
| 30) Chloroform                | 7.36 | 83  | 300673  | 47.654  | ug/l   | 99  |
| 31) Cyclohexane               | 7.64 | 56  | 229733  | 42.685  | ug/l   | 99  |
| 32) 1,1,1-Trichloroethane     | 7.56 | 97  | 255924  | 48.697  | ug/l   | 98  |
| 36) 1,1-Dichloropropene       | 7.78 | 75  | 198951  | 47.187  | ug/l   | 97  |
| 37) Ethyl Acetate             | 6.91 | 43  | 221128  | 52.828  | ug/l   | 100 |
| 38) Carbon Tetrachloride      | 7.76 | 117 | 202051  | 50.048  | ug/l   | 98  |

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 Quant Title : SW846 8260  
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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 209756   | 47.034   | ug/l   | 99       |
| 40) Benzene                    | 8.03  | 78   | 598380   | 50.176   | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.15  | 41   | 117542   | 57.447   | ug/l # | 87       |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 270866   | 48.456   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.15  | 43   | 401737   | 50.002   | ug/l   | 99       |
| 44) Trichloroethene            | 8.83  | 130  | 140945   | 52.586   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 164749   | 49.395   | ug/l   | 98       |
| 46) Dibromomethane             | 9.20  | 93   | 110821   | 51.798   | ug/l   | 94       |
| 47) Bromodichloromethane       | 9.40  | 83   | 228333   | 50.218   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.19  | 41   | 198103   | 47.943   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 51671    | 1074.752 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 1181431  | 264.779  | ug/l   | 100      |
| 52) Toluene                    | 10.15 | 92   | 370823   | 51.303   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 219080   | 48.027   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 239306   | 48.556   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 150019   | 51.574   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 237575   | 51.170   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 259051   | 49.578   | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 597600   | 253.706  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.75 | 43   | 854170   | 271.477  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 155893   | 49.713   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 149979   | 53.708   | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.63 | 164  | 125515   | 53.241   | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 393143   | 49.841   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 147100   | 53.595   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 753627   | 49.519   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 526692   | 100.478  | ug/l   | 98       |
| 69) o-Xylene                   | 11.95 | 106  | 262725   | 50.617   | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 462614   | 51.510   | ug/l   | 97       |
| 71) Bromoform                  | 12.13 | 173  | 102379   | 49.924   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 746832   | 48.528   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 356109   | 46.321   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 222930   | 48.308   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 204197m  | 51.083   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 176172   | 52.692   | ug/l   | 88       |
| 78) n-propylbenzene            | 12.59 | 91   | 872659   | 47.727   | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 521485   | 46.850   | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 638057   | 48.806   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 53087    | 41.302   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 542695   | 47.340   | ug/l   | 96       |
| 83) tert-Butylbenzene          | 13.00 | 119  | 540955   | 49.084   | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 635191   | 49.050   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.18 | 105  | 726520   | 47.849   | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 646638   | 50.252   | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 315364   | 50.455   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 317236   | 50.737   | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.62 | 91   | 593523   | 46.639   | ug/l   | 98       |
| 90) Hexachloroethane           | 13.88 | 117  | 99511    | 49.355   | ug/l   | 91       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 316854   | 51.490   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 44704    | 49.172   | ug/l   | 88       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 205035   | 55.694 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 99955    | 55.704 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 560813   | 52.509 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 196868   | 55.789 | ug/l  | 98       |

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

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