

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN103118\  
 Data File : VN052066.D  
 Acq On : 31 Oct 2018 11:12  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 11/2/2018 1:11:01 PM

Quant Time: Oct 31 14:19:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N103018W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 31 02:45:22 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 344648   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 605344   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 546893   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 245308   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 8.03   | 65  | 215919   | 39.04 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 78.08% |      |
| 35) Dibromofluoromethane    | 7.59   | 113 | 186362   | 49.21 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.42% |      |
| 50) Toluene-d8              | 10.09  | 98  | 711793   | 47.03 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 94.06% |      |
| 62) 4-Bromofluorobenzene    | 12.40  | 95  | 256466   | 46.16 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 92.32% |      |

| Target Compounds              |      |     |         |        |        | Qvalue |
|-------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 234475  | 55.97  | ug/l   | 100    |
| 3) Chloromethane              | 2.06 | 50  | 239528  | 45.37  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.19 | 62  | 244943  | 43.10  | ug/l   | 98     |
| 5) Bromomethane               | 2.57 | 94  | 166506  | 39.06  | ug/l   | 99     |
| 6) Chloroethane               | 2.71 | 64  | 149383  | 40.71  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 326664  | 50.34  | ug/l   | 96     |
| 8) Diethyl Ether              | 3.41 | 74  | 112416  | 46.44  | ug/l   | 87     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.77 | 101 | 200086  | 52.26  | ug/l   | 96     |
| 10) Methyl Iodide             | 3.96 | 142 | 262277  | 52.27  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.78 | 59  | 69849   | 252.21 | ug/l # | 76     |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 176951  | 48.94  | ug/l   | 98     |
| 13) Acrolein                  | 3.61 | 56  | 53027   | 196.10 | ug/l   | 94     |
| 14) Allyl chloride            | 4.33 | 41  | 326541  | 45.13  | ug/l   | 95     |
| 15) Acrylonitrile             | 4.99 | 53  | 356572  | 225.21 | ug/l   | 99     |
| 16) Acetone                   | 3.82 | 43  | 272557  | 230.88 | ug/l   | 97     |
| 17) Carbon Disulfide          | 4.06 | 76  | 531375  | 46.64  | ug/l   | 98     |
| 18) Methyl Acetate            | 4.32 | 43  | 158527  | 42.18  | ug/l   | 97     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 529579  | 44.59  | ug/l   | 97     |
| 20) Methylene Chloride        | 4.55 | 84  | 210917  | 46.89  | ug/l   | 93     |
| 21) trans-1,2-Dichloroethene  | 5.05 | 96  | 202594  | 49.14  | ug/l   | 93     |
| 22) Diisopropyl ether         | 5.95 | 45  | 673877  | 43.09  | ug/l   | 98     |
| 23) Vinyl Acetate             | 5.90 | 43  | 2439292 | 225.10 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 382303  | 43.72  | ug/l   | 98     |
| 25) 2-Butanone                | 6.83 | 43  | 427628  | 230.95 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 320377  | 46.13  | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 230023  | 46.72  | ug/l   | 95     |
| 28) Bromochloromethane        | 7.20 | 49  | 171460  | 39.56  | ug/l   | 88     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 281345  | 228.07 | ug/l   | 98     |
| 30) Chloroform                | 7.37 | 83  | 394573  | 45.20  | ug/l   | 95     |
| 31) Cyclohexane               | 7.65 | 56  | 363343  | 44.51  | ug/l   | 94     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 343280  | 48.90  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 7.80 | 75  | 306594  | 49.81  | ug/l   | 97     |
| 37) Ethyl Acetate             | 6.93 | 43  | 198903  | 48.28  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 7.78 | 117 | 303802  | 57.24  | ug/l   | 97     |

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 ALS Vial : 2 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
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MMDadoda  
 11/2/2018 1:11:01 PM

Quant Time: Oct 31 14:19:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N103018W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 31 02:45:22 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 380027   | 52.03   | ug/l   | 96       |
| 40) Benzene                    | 8.04  | 78   | 878759   | 49.36   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.17  | 41   | 88485    | 41.64   | ug/l # | 73       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 288627   | 43.93   | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 352988   | 48.17   | ug/l # | 88       |
| 44) Trichloroethene            | 8.84  | 130  | 228190   | 57.31   | ug/l   | 88       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 231580   | 45.66   | ug/l   | 97       |
| 46) Dibromomethane             | 9.21  | 93   | 146968   | 51.85   | ug/l   | 92       |
| 47) Bromodichloromethane       | 9.40  | 83   | 295810   | 50.04   | ug/l   | 95       |
| 48) Methyl methacrylate        | 9.20  | 41   | 175053   | 47.12   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 40108    | 1280.32 | ug/l   | 91       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 986104   | 247.59  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 551833   | 51.35   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 309278   | 49.48   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 350265   | 50.46   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 192535   | 50.30   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 267900   | 48.93   | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 339428   | 48.19   | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 690300   | 237.01  | ug/l   | 94       |
| 59) 2-Hexanone                 | 10.75 | 43   | 702034   | 247.35  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 222247   | 58.98   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 200373   | 52.66   | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.63 | 164  | 189922   | 57.32   | ug/l   | 95       |
| 65) Chlorobenzene              | 11.43 | 112  | 616233   | 53.50   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 212283   | 58.69   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1075844  | 52.37   | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.62 | 106  | 827838   | 112.59  | ug/l   | 94       |
| 69) o-Xylene                   | 11.95 | 106  | 392961   | 54.01   | ug/l   | 98       |
| 70) Styrene                    | 11.96 | 104  | 651002   | 55.30   | ug/l   | 97       |
| 71) Bromoform                  | 12.13 | 173  | 128958   | 55.24   | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1066489  | 50.84   | ug/l   | 97       |
| 74) N-amyl acetate             | 12.07 | 43   | 325755   | 44.50   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 234912   | 46.70   | ug/l   | 96       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 223405m  | 49.75   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 239150   | 54.49   | ug/l   | 83       |
| 78) n-propylbenzene            | 12.59 | 91   | 1233875  | 48.54   | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 711643   | 48.03   | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 864494   | 50.64   | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 68146    | 50.37   | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 734768   | 48.63   | ug/l   | 95       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 745848   | 52.01   | ug/l   | 93       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 867217   | 51.04   | ug/l   | 97       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1036577  | 50.60   | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 894740   | 53.63   | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 432241   | 54.00   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 429925   | 53.59   | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.61 | 91   | 786601   | 49.44   | ug/l   | 98       |
| 90) Hexachloroethane           | 13.88 | 117  | 150328   | 52.58   | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 405289   | 53.86   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 35146    | 48.50   | ug/l   | 82       |

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Quant Title : SW846 8260  
QLast Update : Wed Oct 31 02:45:22 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 179400   | 64.02 | ug/l  | 96       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 91809    | 58.54 | ug/l  | 95       |
| 95) Naphthalene            | 15.13 | 128  | 443260   | 63.06 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 154728   | 63.98 | ug/l  | 99       |

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

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