

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN082318\  
 Data File : VN050840.D  
 Acq On : 23 Aug 2018 9:51  
 Operator : MD\SY  
 Sample : VN0823WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0823WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 8/24/2018 10:40:42 AM

Quant Time: Aug 24 01:45:23 2018  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 22 05:38:12 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 647707   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 931992   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 837911   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 391247   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.03   | 65  | 386433   | 49.56 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 99.12%  |      |
| 35) Dibromofluoromethane    | 7.59   | 113 | 372334   | 50.22 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.44% |      |
| 50) Toluene-d8              | 10.09  | 98  | 1376803  | 49.67 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 99.34%  |      |
| 62) 4-Bromofluorobenzene    | 12.40  | 95  | 434433   | 47.16 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 94.32%  |      |

| Target Compounds              |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 191443  | 22.09  | ug/l | 99     |
| 3) Chloromethane              | 2.06 | 50  | 203865  | 19.07  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.19 | 62  | 207085  | 20.45  | ug/l | 98     |
| 5) Bromomethane               | 2.57 | 94  | 111851  | 18.76  | ug/l | 100    |
| 6) Chloroethane               | 2.70 | 64  | 116075  | 19.84  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.01 | 101 | 261807  | 20.19  | ug/l | 100    |
| 8) Diethyl Ether              | 3.41 | 74  | 89741   | 20.35  | ug/l | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 164028  | 20.24  | ug/l | 99     |
| 10) Methyl Iodide             | 3.95 | 142 | 106704  | 19.44  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.79 | 59  | 47955   | 96.58  | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 148924  | 20.47  | ug/l | 97     |
| 13) Acrolein                  | 3.61 | 56  | 22428   | 89.72  | ug/l | 99     |
| 14) Allyl chloride            | 4.32 | 41  | 223401  | 19.71  | ug/l | 99     |
| 15) Acrylonitrile             | 4.99 | 53  | 247438  | 98.06  | ug/l | 99     |
| 16) Acetone                   | 3.82 | 43  | 184326  | 95.46  | ug/l | 99     |
| 17) Carbon Disulfide          | 4.05 | 76  | 448792  | 18.40  | ug/l | 99     |
| 18) Methyl Acetate            | 4.33 | 43  | 140465  | 19.08  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 375270  | 20.51  | ug/l | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 170982  | 19.46  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.05 | 96  | 154035  | 19.58  | ug/l | 95     |
| 22) Diisopropyl ether         | 5.96 | 45  | 479481  | 21.22  | ug/l | 97     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1474922 | 101.38 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 292134  | 20.14  | ug/l | 99     |
| 25) 2-Butanone                | 6.84 | 43  | 277573  | 88.33  | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 6.83 | 77  | 235813  | 20.23  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 173293  | 20.43  | ug/l | 99     |
| 28) Bromochloromethane        | 7.19 | 49  | 112746  | 18.29  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.22 | 42  | 183703  | 101.96 | ug/l | 100    |
| 30) Chloroform                | 7.37 | 83  | 288724  | 20.10  | ug/l | 99     |
| 31) Cyclohexane               | 7.66 | 56  | 258229  | 19.87  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 246362  | 19.97  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 220930  | 20.09  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 122874  | 19.45  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.78 | 117 | 218931  | 19.69  | ug/l | 98     |

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 Sample : VN0823WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
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 VN0823WBS01

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 8/24/2018 10:40:42 AM

Quant Time: Aug 24 01:45:23 2018  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 22 05:38:12 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 230441   | 19.37  | ug/l   | 99       |
| 40) Benzene                    | 8.04  | 78   | 676645   | 20.40  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.18  | 41   | 67535    | 19.75  | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 198267   | 20.00  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 221356   | 20.38  | ug/l # | 88       |
| 44) Trichloroethene            | 8.84  | 130  | 175458   | 20.06  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 175825   | 20.17  | ug/l   | 98       |
| 46) Dibromomethane             | 9.21  | 93   | 101009   | 19.72  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.40  | 83   | 217362   | 20.26  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.20  | 41   | 111385   | 20.12  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 29553    | 391.61 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 611955   | 94.41  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 410150   | 20.88  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 206323   | 19.32  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 247508   | 20.24  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 146560   | 20.10  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 165218   | 18.95  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 243965   | 20.27  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 350900   | 92.85  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 387413   | 89.78  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 163595   | 20.04  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 139701   | 19.81  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 163546   | 20.55  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.43 | 112  | 436770   | 19.94  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 163488   | 20.40  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 721270   | 20.26  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 566208   | 41.90  | ug/l   | 99       |
| 69) o-Xylene                   | 11.95 | 106  | 270419   | 20.81  | ug/l   | 100      |
| 70) Styrene                    | 11.96 | 104  | 417298   | 19.03  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 107815   | 19.56  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 711193   | 21.95  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 161206   | 19.80  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 177792   | 22.11  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 148561m  | 21.68  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 178492   | 20.27  | ug/l   | 100      |
| 78) n-propylbenzene            | 12.59 | 91   | 784029   | 21.66  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 480498   | 21.32  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 583903   | 22.34  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 39702    | 19.59  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 475017   | 21.34  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 488639   | 21.58  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 584338   | 22.22  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 643710   | 21.70  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 551055   | 21.80  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 297568   | 19.92  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 285781   | 19.43  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 400137   | 19.79  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 99035    | 20.67  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 293681   | 20.37  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 22971    | 19.74  | ug/l   | 97       |

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Sample : VN0823WBS01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0823WBS01

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8/24/2018 10:40:42 AM

Quant Time: Aug 24 01:45:23 2018  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082118W.M  
Quant Title : SW846 8260  
QLast Update : Wed Aug 22 05:38:12 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 109805   | 17.53 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 90789    | 20.59 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 201177   | 16.88 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 112645   | 18.26 | ug/l  | 97       |

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

