

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN082218\  
 Data File : VN050813.D  
 Acq On : 22 Aug 2018 12:34  
 Operator : MD\SY  
 Sample : VN0822WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0822WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 8/23/2018 12:26:40 PM

Quant Time: Aug 23 01:22:13 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  | 622934   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 894376   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 808729   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 384924   | 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   | 385896   | 51.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.92% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 363006   | 51.02 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.04% |          |
| 50) Toluene-d8              | 10.09 | 98   | 1367600  | 51.41 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.82% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 428373   | 48.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.92%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|-------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85   | 187466   | 22.49  | ug/l   | 100    |
| 3) Chloromethane              | 2.06 | 50   | 203914   | 19.83  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.18 | 62   | 201008   | 20.64  | ug/l   | 99     |
| 5) Bromomethane               | 2.56 | 94   | 113449   | 19.85  | ug/l   | 98     |
| 6) Chloroethane               | 2.70 | 64   | 114344   | 20.32  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.01 | 101  | 257282   | 20.63  | ug/l   | 98     |
| 8) Diethyl Ether              | 3.41 | 74   | 85468    | 20.15  | ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101  | 160649   | 20.62  | ug/l   | 99     |
| 10) Methyl Iodide             | 3.95 | 142  | 111992   | 20.64  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 4.80 | 59   | 50704    | 106.18 | ug/l # | 89     |
| 12) 1,1-Dichloroethene        | 3.74 | 96   | 143228   | 20.47  | ug/l   | 98     |
| 13) Acrolein                  | 3.61 | 56   | 26089    | 104.77 | ug/l   | 99     |
| 14) Allyl chloride            | 4.32 | 41   | 215297   | 19.75  | ug/l   | 97     |
| 15) Acrylonitrile             | 4.99 | 53   | 260857   | 107.49 | ug/l   | 97     |
| 16) Acetone                   | 3.82 | 43   | 181656   | 98.00  | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.05 | 76   | 447271   | 19.07  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.33 | 43   | 144262   | 20.37  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.05 | 73   | 369886   | 21.02  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.55 | 84   | 165361   | 19.56  | ug/l   | 99     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96   | 152039   | 20.09  | ug/l   | 99     |
| 22) Diisopropyl ether         | 5.95 | 45   | 468375   | 21.56  | ug/l   | 95     |
| 23) Vinyl Acetate             | 5.90 | 43   | 1478999  | 105.70 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63   | 283354   | 20.31  | ug/l   | 99     |
| 25) 2-Butanone                | 6.84 | 43   | 278336   | 92.10  | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 6.83 | 77   | 223206   | 19.91  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96   | 166539   | 20.41  | ug/l   | 100    |
| 28) Bromochloromethane        | 7.20 | 49   | 123301   | 20.80  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 7.21 | 42   | 188737   | 108.92 | ug/l   | 99     |
| 30) Chloroform                | 7.37 | 83   | 283543   | 20.53  | ug/l   | 99     |
| 31) Cyclohexane               | 7.66 | 56   | 245599   | 19.66  | ug/l   | 92     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97   | 240913   | 20.31  | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 7.80 | 75   | 211168   | 20.01  | ug/l   | 99     |
| 37) Ethyl Acetate             | 6.93 | 43   | 126761   | 20.91  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.78 | 117  | 214971   | 20.15  | ug/l   | 100    |

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 Sample : VN0822WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0822WBS01

Manual Integrations  
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 8/23/2018 12:26:40 PM

Quant Time: Aug 23 01:22:13 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   | 222158   | 19.46  | ug/l   | 99       |
| 40) Benzene                    | 8.04  | 78   | 658002   | 20.68  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.18  | 41   | 62245    | 18.97  | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 198616   | 20.87  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 225355   | 21.62  | ug/l # | 90       |
| 44) Trichloroethene            | 8.84  | 130  | 169335   | 20.17  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 172188   | 20.59  | ug/l   | 100      |
| 46) Dibromomethane             | 9.21  | 93   | 101778   | 20.71  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.40  | 83   | 211599   | 20.56  | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.20  | 41   | 113203   | 21.31  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 31765    | 438.62 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 642229   | 103.24 | ug/l   | 100      |
| 52) Toluene                    | 10.16 | 92   | 400893   | 21.26  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 202757   | 19.79  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 240489   | 20.50  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 144305   | 20.62  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 164795   | 19.60  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 241029   | 20.87  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 359209   | 98.24  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 404372   | 97.65  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 161291   | 20.59  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 140951   | 20.83  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 154804   | 20.15  | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 427198   | 20.21  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 160364   | 20.73  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 694254   | 20.20  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 547184   | 41.95  | ug/l   | 99       |
| 69) o-Xylene                   | 11.95 | 106  | 256830   | 20.48  | ug/l   | 99       |
| 70) Styrene                    | 11.97 | 104  | 410401   | 19.37  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 110375   | 20.75  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 681647   | 21.39  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 170175   | 21.25  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 180226   | 22.83  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 144018m  | 21.36  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 176401   | 20.36  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 770128   | 21.63  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 468828   | 21.14  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 562883   | 21.89  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 40602    | 20.36  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 470155   | 21.47  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 471049   | 21.15  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 570652   | 22.06  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 626278   | 21.46  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 529833   | 21.31  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 297622   | 20.25  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 285803   | 19.76  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 388482   | 19.53  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 98731    | 20.94  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 291554   | 20.56  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 24215    | 21.15  | ug/l   | 98       |

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Sample : VN0822WBS01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0822WBS01

Manual Integrations  
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8/23/2018 12:26:40 PM

Quant Time: Aug 23 01:22:13 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  | 115989   | 18.52 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 88499    | 20.39 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 224148   | 18.40 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.32 | 180  | 118209   | 19.26 | ug/l  | 98       |

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

