

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN033119\  
 Data File : VN054862.D  
 Acq On : 31 Mar 2019 20:24  
 Operator : JC/SP  
 Sample : VN0331WBSD02  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0331WBSD02

Manual Integrations  
 APPROVED

MMDadoda  
 4/1/2019 12:50:10 PM

Quant Time: Apr 01 04:30:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 30 00:48:18 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 385521   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 666870   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 569518   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 229398   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.03   | 65  | 280882   | 54.05 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 108.10% |      |
| 35) Dibromofluoromethane    | 7.59   | 113 | 223116   | 50.18 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.36% |      |
| 50) Toluene-d8              | 10.09  | 98  | 814320   | 49.27 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.54%  |      |
| 62) 4-Bromofluorobenzene    | 12.40  | 95  | 264152   | 48.05 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 96.10%  |      |

| Target Compounds              |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 78796   | 20.206  | ug/l   | 99     |
| 3) Chloromethane              | 2.06 | 50  | 114180  | 21.176  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.19 | 62  | 103008  | 21.274  | ug/l   | 99     |
| 5) Bromomethane               | 2.58 | 94  | 51908   | 19.057  | ug/l   | 98     |
| 6) Chloroethane               | 2.71 | 64  | 57410   | 21.233  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 130951  | 21.998  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 43904   | 22.904  | ug/l   | 76     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101 | 65577   | 20.926  | ug/l   | 94     |
| 10) Methyl Iodide             | 3.94 | 142 | 80398   | 18.741  | ug/l # | 88     |
| 11) Tert butyl alcohol        | 4.82 | 59  | 33118   | 122.311 | ug/l   | 100    |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 67522   | 22.281  | ug/l # | 76     |
| 13) Acrolein                  | 3.61 | 56  | 25459   | 105.175 | ug/l   | 96     |
| 14) Allyl chloride            | 4.32 | 41  | 156417  | 20.955  | ug/l # | 91     |
| 15) Acrylonitrile             | 5.00 | 53  | 175161  | 116.384 | ug/l   | 100    |
| 16) Acetone                   | 3.82 | 43  | 125758  | 101.476 | ug/l # | 83     |
| 17) Carbon Disulfide          | 4.04 | 76  | 190351  | 19.366  | ug/l   | 97     |
| 18) Methyl Acetate            | 4.34 | 43  | 84107   | 25.608  | ug/l # | 88     |
| 19) Methyl tert-butyl Ether   | 5.06 | 73  | 240747  | 22.711  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 102729  | 23.500  | ug/l # | 83     |
| 21) trans-1,2-Dichloroethene  | 5.03 | 96  | 86560   | 21.746  | ug/l   | 90     |
| 22) Diisopropyl ether         | 5.96 | 45  | 335463  | 22.723  | ug/l # | 94     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1171118 | 113.991 | ug/l # | 93     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 178277  | 22.638  | ug/l   | 98     |
| 25) 2-Butanone                | 6.85 | 43  | 214245  | 116.952 | ug/l # | 87     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 95048   | 17.220  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 99396   | 22.105  | ug/l   | 89     |
| 28) Bromochloromethane        | 7.19 | 49  | 88715   | 22.528  | ug/l # | 74     |
| 29) Tetrahydrofuran           | 7.22 | 42  | 149931  | 117.839 | ug/l # | 83     |
| 30) Chloroform                | 7.37 | 83  | 172089  | 22.916  | ug/l   | 99     |
| 31) Cyclohexane               | 7.65 | 56  | 161984  | 21.395  | ug/l   | 91     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 139801  | 22.465  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 121509  | 19.554  | ug/l   | 95     |
| 37) Ethyl Acetate             | 6.94 | 43  | 96266   | 21.126  | ug/l # | 97     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 120160  | 19.909  | ug/l   | 97     |

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 Sample : VN0331WBSD02  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0331WBSD02

Manual Integrations  
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MMDadoda  
 4/1/2019 12:50:10 PM

Quant Time: Apr 01 04:30:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 30 00:48:18 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 130313   | 19.075  | ug/l   | 89       |
| 40) Benzene                    | 8.04  | 78   | 375817   | 21.137  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.18  | 41   | 56689    | 22.146  | ug/l   | 90       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 133819   | 21.078  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 169868   | 22.942  | ug/l # | 91       |
| 44) Trichloroethene            | 8.84  | 130  | 95624    | 20.718  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 107844   | 21.271  | ug/l   | 98       |
| 46) Dibromomethane             | 9.21  | 93   | 59958    | 21.023  | ug/l   | 89       |
| 47) Bromodichloromethane       | 9.40  | 83   | 127383   | 21.491  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.20  | 41   | 83229    | 20.737  | ug/l   | 88       |
| 49) 1,4-Dioxane                | 9.21  | 88   | 19348    | 485.834 | ug/l # | 85       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 469376   | 112.754 | ug/l   | 92       |
| 52) Toluene                    | 10.16 | 92   | 223234   | 21.099  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 110911   | 19.892  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 138083   | 20.732  | ug/l # | 90       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 83504    | 21.226  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 107292   | 20.790  | ug/l # | 81       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 143371   | 21.198  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 204106   | 98.367  | ug/l # | 88       |
| 59) 2-Hexanone                 | 10.75 | 43   | 284959   | 106.931 | ug/l   | 91       |
| 60) Dibromochloromethane       | 10.90 | 129  | 85118    | 21.359  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 82202    | 21.865  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 90692    | 20.752  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 230590   | 20.680  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 88527    | 21.211  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.51 | 91   | 416624   | 20.705  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.62 | 106  | 304661   | 40.914  | ug/l   | 94       |
| 69) o-Xylene                   | 11.95 | 106  | 149139   | 20.425  | ug/l   | 94       |
| 70) Styrene                    | 11.96 | 104  | 244233   | 20.919  | ug/l   | 97       |
| 71) Bromoform                  | 12.13 | 173  | 50500    | 20.654  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.25 | 105  | 397875   | 21.220  | ug/l   | 96       |
| 74) N-amyl acetate             | 12.07 | 43   | 126692   | 21.689  | ug/l   | 92       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 102507   | 23.906  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 84704m   | 21.255  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 94966    | 20.986  | ug/l   | 83       |
| 78) n-propylbenzene            | 12.59 | 91   | 427830   | 20.760  | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 270300   | 21.200  | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 325251   | 21.141  | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 18638    | 18.192  | ug/l # | 76       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 255542   | 20.635  | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 272401   | 21.669  | ug/l   | 93       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 313727   | 21.404  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 343548   | 20.556  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 297170   | 20.160  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 154205   | 20.353  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 151516   | 20.390  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.62 | 91   | 226910   | 18.867  | ug/l   | 97       |
| 90) Hexachloroethane           | 13.87 | 117  | 50309    | 20.102  | ug/l   | 87       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 159105   | 20.808  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 13866    | 21.632  | ug/l   | 84       |

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Sample : VN0331WBSD02  
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ALS Vial : 23 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0331WBSD02

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MMDadoda  
4/1/2019 12:50:10 PM

Quant Time: Apr 01 04:30:32 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
Quant Title : SW846 8260  
QLast Update : Sat Mar 30 00:48:18 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 63866    | 17.325 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 45372    | 19.500 | ug/l  | 96       |
| 95) Naphthalene            | 15.13 | 128  | 147970   | 17.897 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 68634    | 18.436 | ug/l  | 99       |

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

