

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN012820\  
 Data File : VN059895.D  
 Acq On : 28 Jan 2020 14:19  
 Operator : JC/MD  
 Sample : VN0128WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0128WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 1/29/2020 11:04:18 AM

Quant Time: Jan 28 22:40:00 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 18 03:09:32 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 241248   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.56  | 114  | 377933   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 337394   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 162076   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 127387   | 47.55 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.10% |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 110715   | 49.12 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.24% |      |
| 50) Toluene-d8            | 10.08  | 98  | 411119   | 47.08 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.16% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 145786   | 46.31 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.62% |      |

## Target Compounds

|                               |      |     |        |        |        | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 47746  | 16.435 | ug/l   | 97     |
| 3) Chloromethane              | 2.04 | 50  | 43849  | 15.876 | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.17 | 62  | 57217  | 18.106 | ug/l   | 97     |
| 5) Bromomethane               | 2.54 | 94  | 35548  | 18.432 | ug/l   | 96     |
| 6) Chloroethane               | 2.68 | 64  | 26127  | 17.475 | ug/l   | 95     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 69455  | 18.301 | ug/l   | 100    |
| 8) Diethyl Ether              | 3.38 | 74  | 23963  | 17.992 | ug/l   | 86     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 40243  | 19.052 | ug/l   | 92     |
| 10) Methyl Iodide             | 3.93 | 142 | 60058  | 17.590 | ug/l   | 95     |
| 11) Tert butyl alcohol        | 4.73 | 59  | 40693  | 90.225 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 38739  | 17.552 | ug/l   | 86     |
| 13) Acrolein                  | 3.58 | 56  | 19547  | 61.225 | ug/l   | 97     |
| 14) Allyl chloride            | 4.30 | 41  | 52537  | 17.660 | ug/l # | 86     |
| 15) Acrylonitrile             | 4.94 | 53  | 95066  | 92.405 | ug/l   | 99     |
| 16) Acetone                   | 3.78 | 43  | 90068  | 92.251 | ug/l   | 96     |
| 17) Carbon Disulfide          | 4.03 | 76  | 95459  | 15.182 | ug/l   | 99     |
| 18) Methyl Acetate            | 4.28 | 43  | 57181  | 18.272 | ug/l   | 91     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 134021 | 18.624 | ug/l   | 96     |
| 20) Methylene Chloride        | 4.53 | 84  | 44137  | 17.365 | ug/l   | 87     |
| 21) trans-1,2-Dichloroethene  | 5.00 | 96  | 41241  | 17.578 | ug/l   | 84     |
| 22) Diisopropyl ether         | 5.91 | 45  | 120880 | 17.930 | ug/l # | 93     |
| 23) Vinyl Acetate             | 5.86 | 43  | 469284 | 89.903 | ug/l # | 92     |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 73653  | 17.879 | ug/l   | 96     |
| 25) 2-Butanone                | 6.80 | 43  | 126154 | 83.151 | ug/l # | 88     |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 71548  | 18.066 | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 49554  | 18.363 | ug/l   | 88     |
| 28) Bromochloromethane        | 7.17 | 49  | 30236  | 18.364 | ug/l # | 69     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 81252  | 86.558 | ug/l # | 86     |
| 30) Chloroform                | 7.35 | 83  | 79604  | 18.650 | ug/l   | 100    |
| 31) Cyclohexane               | 7.63 | 56  | 65183  | 16.444 | ug/l # | 84     |
| 32) 1,1,1-Trichloroethane     | 7.54 | 97  | 72227  | 18.302 | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 56709  | 17.231 | ug/l   | 96     |
| 37) Ethyl Acetate             | 6.89 | 43  | 53401  | 17.300 | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 65626  | 18.331 | ug/l   | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN012820\  
 Data File : VN059895.D  
 Acq On : 28 Jan 2020 14:19  
 Operator : JC/MD  
 Sample : VN0128WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0128WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 1/29/2020 11:04:18 AM

Quant Time: Jan 28 22:40:00 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 18 03:09:32 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.06  | 83   | 67549    | 16.645  | ug/l   | 91       |
| 40) Benzene                    | 8.02  | 78   | 170362   | 17.356  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.15  | 41   | 26025m   | 17.117  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 61207    | 18.392  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 91041    | 17.147  | ug/l # | 93       |
| 44) Trichloroethene            | 8.82  | 130  | 50569    | 18.872  | ug/l   | 91       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 43698    | 17.991  | ug/l   | 99       |
| 46) Dibromomethane             | 9.19  | 93   | 31914    | 18.627  | ug/l   | 92       |
| 47) Bromodichloromethane       | 9.39  | 83   | 61711    | 17.874  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.18  | 41   | 38959    | 16.404  | ug/l   | 88       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 16607    | 381.979 | ug/l   | 87       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 266793   | 86.924  | ug/l   | 95       |
| 52) Toluene                    | 10.14 | 92   | 110486   | 17.821  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 68587    | 17.791  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 73567    | 18.136  | ug/l   | 92       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 44804    | 18.246  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 64771    | 17.263  | ug/l   | 89       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 72916    | 18.704  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 96658    | 85.528  | ug/l # | 89       |
| 59) 2-Hexanone                 | 10.74 | 43   | 193999   | 85.797  | ug/l   | 94       |
| 60) Dibromochloromethane       | 10.89 | 129  | 52144    | 18.648  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 10.99 | 107  | 47376    | 18.408  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.62 | 164  | 51380    | 18.685  | ug/l   | 95       |
| 65) Chlorobenzene              | 11.43 | 112  | 122379   | 18.454  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 48084    | 18.765  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.50 | 91   | 216342   | 17.971  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.61 | 106  | 163293   | 35.909  | ug/l   | 95       |
| 69) o-Xylene                   | 11.94 | 106  | 80534    | 18.090  | ug/l   | 94       |
| 70) Styrene                    | 11.96 | 104  | 129226   | 17.347  | ug/l   | 96       |
| 71) Bromoform                  | 12.12 | 173  | 38333    | 18.676  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.24 | 105  | 214648   | 18.058  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.06 | 43   | 75418    | 16.351  | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 61109    | 17.734  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 57087m   | 20.930  | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 74226    | 24.659  | ug/l   | 54       |
| 78) n-propylbenzene            | 12.59 | 91   | 239066   | 17.919  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 143141   | 18.035  | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 180193   | 18.025  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 22116    | 17.413  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 142182   | 17.860  | ug/l   | 95       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 157103   | 18.171  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene     | 13.03 | 105  | 178858   | 18.085  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 202054   | 17.788  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 185028   | 17.604  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 96090    | 18.377  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 93108    | 17.850  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.61 | 91   | 158718   | 17.710  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.87 | 117  | 34638    | 17.614  | ug/l   | 90       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 94509    | 18.283  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 12918    | 16.047  | ug/l   | 79       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN012820\  
Data File : VN059895.D  
Acq On : 28 Jan 2020 14:19  
Operator : JC/MD  
Sample : VN0128WBSD01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0128WBSD01

Manual Integrations  
APPROVED

MMDadoda  
1/29/2020 11:04:18 AM

Quant Time: Jan 28 22:40:00 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jan 18 03:09:32 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.90 | 180  | 57009    | 18.354 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 31462    | 18.381 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 189548   | 21.455 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 55470    | 18.347 | ug/l  | 99       |

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

