

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101419\  
 Data File : VN058750.D  
 Acq On : 14 Oct 2019 15:27  
 Operator : JC/SP  
 Sample : VN1014WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1014WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 10/16/2019 12:57:00 AM

Quant Time: Oct 15 04:05:08 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 12 00:00:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 400894   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 642797   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 595093   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 284106   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 290106   | 51.69 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.38% |      |
| 35) Dibromofluoromethane  | 7.57   | 113 | 205693   | 51.81 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.62% |      |
| 50) Toluene-d8            | 10.08  | 98  | 811432   | 51.11 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.22% |      |
| 62) 4-Bromofluorobenzene  | 12.41  | 95  | 290998   | 48.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.84%  |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.84 | 85  | 108358  | 21.702  | ug/l   | 96     |
| 3) Chloromethane              | 2.04 | 50  | 122754  | 20.675  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.17 | 62  | 122299  | 20.682  | ug/l   | 98     |
| 5) Bromomethane               | 2.55 | 94  | 76547   | 21.279  | ug/l   | 99     |
| 6) Chloroethane               | 2.68 | 64  | 77286   | 21.189  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 152169  | 21.502  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.39 | 74  | 52645   | 20.134  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 85775   | 21.257  | ug/l   | 96     |
| 10) Methyl Iodide             | 3.93 | 142 | 107056  | 19.442  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.76 | 59  | 97463   | 107.226 | ug/l # | 85     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 78673   | 20.434  | ug/l   | 95     |
| 13) Acrolein                  | 3.58 | 56  | 61717   | 84.426  | ug/l   | 96     |
| 14) Allyl chloride            | 4.30 | 41  | 154706  | 19.912  | ug/l   | 98     |
| 15) Acrylonitrile             | 4.96 | 53  | 244426  | 106.633 | ug/l   | 98     |
| 16) Acetone                   | 3.80 | 43  | 262307  | 112.892 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.03 | 76  | 244676  | 19.881  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.30 | 43  | 122185  | 20.731  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 5.02 | 73  | 282478  | 20.547  | ug/l   | 98     |
| 20) Methylene Chloride        | 4.53 | 84  | 95303   | 19.626  | ug/l   | 100    |
| 21) trans-1,2-Dichloroethene  | 5.02 | 96  | 87163   | 20.240  | ug/l   | 97     |
| 22) Diisopropyl ether         | 5.93 | 45  | 313627  | 20.761  | ug/l   | 97     |
| 23) Vinyl Acetate             | 5.87 | 43  | 1334622 | 109.489 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 177620  | 20.644  | ug/l   | 100    |
| 25) 2-Butanone                | 6.81 | 43  | 356097  | 106.032 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 156222  | 19.891  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.81 | 96  | 100435  | 19.999  | ug/l   | 100    |
| 28) Bromochloromethane        | 7.18 | 49  | 62885   | 21.009  | ug/l   | 97     |
| 29) Tetrahydrofuran           | 7.19 | 42  | 225234  | 103.780 | ug/l   | 99     |
| 30) Chloroform                | 7.35 | 83  | 174952  | 20.239  | ug/l   | 100    |
| 31) Cyclohexane               | 7.64 | 56  | 163880  | 19.907  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 155322  | 21.069  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.78 | 75  | 131498  | 20.233  | ug/l   | 99     |
| 37) Ethyl Acetate             | 6.91 | 43  | 143907  | 21.894  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 7.76 | 117 | 136123  | 21.491  | ug/l   | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101419\  
 Data File : VN058750.D  
 Acq On : 14 Oct 2019 15:27  
 Operator : JC/SP  
 Sample : VN1014WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1014WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 10/16/2019 12:57:00 AM

Quant Time: Oct 15 04:05:08 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 12 00:00:30 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 149815   | 19.865  | ug/l   | 98       |
| 40) Benzene                    | 8.02  | 78   | 388852   | 20.833  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.15  | 41   | 58529    | 19.023  | ug/l # | 29       |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 151554   | 21.134  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.15  | 43   | 229594   | 20.505  | ug/l # | 92       |
| 44) Trichloroethene            | 8.82  | 130  | 95480    | 20.599  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 104857   | 20.985  | ug/l   | 97       |
| 46) Dibromomethane             | 9.20  | 93   | 68266    | 21.549  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.39  | 83   | 136978   | 21.233  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.19  | 41   | 103465   | 20.385  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 34793    | 443.106 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 713739   | 113.501 | ug/l   | 99       |
| 52) Toluene                    | 10.15 | 92   | 236802   | 20.743  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 151668   | 20.498  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 163624   | 20.828  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 96208    | 20.590  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 139391   | 20.420  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 164978   | 20.720  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 332103   | 100.952 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 535022   | 110.094 | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 101882   | 21.137  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 97648    | 20.860  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 83064    | 19.945  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.43 | 112  | 245182   | 20.288  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 93384    | 20.897  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 447634   | 20.779  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 332609   | 41.142  | ug/l   | 99       |
| 69) o-Xylene                   | 11.95 | 106  | 157807   | 20.175  | ug/l   | 99       |
| 70) Styrene                    | 11.97 | 104  | 258254   | 20.145  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 68776    | 20.997  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 433222   | 21.055  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 192508   | 20.831  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 147517   | 21.763  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 143874m  | 23.084  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 101467   | 20.274  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.60 | 91   | 511783   | 21.346  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 303940   | 20.424  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 365729   | 20.820  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 48100    | 20.673  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 313235   | 20.512  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.00 | 119  | 307608   | 20.441  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.05 | 105  | 367046   | 21.048  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.18 | 105  | 420509   | 21.207  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 373301   | 20.714  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 186932   | 20.253  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 180743   | 19.261  | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.62 | 91   | 336582   | 20.198  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 68380    | 21.205  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 184481   | 20.508  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 31672    | 20.001  | ug/l   | 96       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101419\  
Data File : VN058750.D  
Acq On : 14 Oct 2019 15:27  
Operator : JC/SP  
Sample : VN1014WBS01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1014WBS01

Manual Integrations  
APPROVED

MMDadoda  
10/16/2019 12:57:00 AM

Quant Time: Oct 15 04:05:08 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
Quant Title : SW846 8260  
QLast Update : Sat Oct 12 00:00:30 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.92 | 180  | 106172   | 19.348 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 58435    | 20.222 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 296094   | 18.775 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 103875   | 19.389 | ug/l  | 99       |

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

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101419\  
Data File : VN058750.D  
Acq On : 14 Oct 2019 15:27  
Operator : JC/SP  
Sample : VN1014WBS01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1014WBS01

Manual Integrations  
APPROVED

MMDadoda  
10/16/2019 12:57:00 AM

Quant Time: Oct 15 04:05:08 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
Quant Title : SW846 8260  
QLast Update : Sat Oct 12 00:00:30 2019  
Response via : Initial Calibration

