

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091018\  
 Data File : VN051068.D  
 Acq On : 10 Sep 2018 9:47  
 Operator : MD\SY  
 Sample : VSTDICC100  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

MMDadoda  
 9/11/2018 9:40:24 AM

Quant Time: Sep 11 02:13:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091018W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 11 01:47:53 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 743889   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1061993  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 979303   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 521332   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 815590   | 98.52  | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 197.04% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 796313   | 99.79  | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 199.58% |      |
| 50) Toluene-d8            | 10.09  | 98  | 3072216  | 101.45 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 202.90% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 1056812  | 105.50 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 211.00% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 657944  | 91.72  | ug/l | 99     |
| 3) Chloromethane              | 2.06 | 50  | 920535  | 90.15  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.18 | 62  | 927441  | 94.18  | ug/l | 98     |
| 5) Bromomethane               | 2.55 | 94  | 568112  | 86.10  | ug/l | 97     |
| 6) Chloroethane               | 2.70 | 64  | 560723  | 92.26  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.01 | 101 | 1226929 | 94.03  | ug/l | 100    |
| 8) Diethyl Ether              | 3.41 | 74  | 478619  | 99.74  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 785424  | 93.38  | ug/l | 99     |
| 10) Methyl Iodide             | 3.95 | 142 | 819804  | 114.09 | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.79 | 59  | 307011  | 485.53 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 759145  | 95.67  | ug/l | 99     |
| 13) Acrolein                  | 3.61 | 56  | 393562  | 545.63 | ug/l | 97     |
| 14) Allyl chloride            | 4.32 | 41  | 1215304 | 100.52 | ug/l | 100    |
| 15) Acrylonitrile             | 4.99 | 53  | 1398912 | 499.28 | ug/l | 100    |
| 16) Acetone                   | 3.82 | 43  | 996257  | 433.17 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.05 | 76  | 2327608 | 89.15  | ug/l | 99     |
| 18) Methyl Acetate            | 4.33 | 43  | 609024  | 91.87  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 2101019 | 110.24 | ug/l | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 855634  | 93.57  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 822816  | 95.60  | ug/l | 99     |
| 22) Diisopropyl ether         | 5.95 | 45  | 2419232 | 100.81 | ug/l | 95     |
| 23) Vinyl Acetate             | 5.90 | 43  | 8514535 | 524.30 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 1467295 | 96.37  | ug/l | 99     |
| 25) 2-Butanone                | 6.84 | 43  | 1563907 | 480.50 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 1199279 | 96.24  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 935562  | 99.09  | ug/l | 99     |
| 28) Bromochloromethane        | 7.19 | 49  | 654333  | 96.56  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 1012123 | 497.96 | ug/l | 99     |
| 30) Chloroform                | 7.37 | 83  | 1458962 | 96.32  | ug/l | 100    |
| 31) Cyclohexane               | 7.65 | 56  | 1346960 | 87.48  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 1262191 | 97.80  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 1170355 | 100.38 | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 680433  | 100.76 | ug/l | 100    |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 1133485 | 98.77  | ug/l | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091018\  
 Data File : VN051068.D  
 Acq On : 10 Sep 2018 9:47  
 Operator : MD\SY  
 Sample : VSTDICC100  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VSTDICC100

Manual Integrations  
 APPROVED

MMDadoda  
 9/11/2018 9:40:24 AM

Quant Time: Sep 11 02:13:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091018W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 11 01:47:53 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 1351212  | 105.03  | ug/l   | 98       |
| 40) Benzene                    | 8.04  | 78   | 3489055  | 99.30   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.18  | 41   | 342639   | 98.34   | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 1011110  | 98.73   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 1216156  | 102.07  | ug/l   | 100      |
| 44) Trichloroethene            | 8.83  | 130  | 935696   | 97.37   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 904531   | 99.63   | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 535389   | 96.65   | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.40  | 83   | 1138328  | 101.07  | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.20  | 41   | 609407   | 104.95  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.20  | 88   | 192676   | 2116.05 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 3330968  | 505.52  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 2195760  | 102.49  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 1203925  | 106.80  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 1387876  | 105.01  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 764345   | 98.21   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 1033059  | 110.91  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 1300052  | 100.76  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 2160776  | 567.60  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 2279428  | 510.09  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 904286   | 103.09  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 779625   | 102.48  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 838297   | 93.81   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 2427656  | 98.34   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 880099   | 99.03   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 4167495  | 104.25  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 3225750  | 210.01  | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 1567006  | 105.35  | ug/l   | 100      |
| 70) Styrene                    | 11.96 | 104  | 2558073  | 110.87  | ug/l   | 100      |
| 71) Bromoform                  | 12.13 | 173  | 651067   | 104.05  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 4096858  | 93.71   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 1075595  | 97.76   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 964822   | 82.88   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 817298m  | 94.27   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 1069183  | 91.05   | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 4647233  | 96.70   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 2737172  | 91.13   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 3362491  | 95.13   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 277654   | 101.15  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 2780173  | 93.24   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 2917902  | 93.51   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 3438194  | 98.93   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 3848495  | 96.16   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 3436319  | 101.27  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 1848273  | 92.77   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 1809693  | 92.16   | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.61 | 91   | 2772007  | 104.96  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 606461   | 87.44   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 1758916  | 90.60   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 141369   | 83.21   | ug/l   | 98       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091018\  
Data File : VN051068.D  
Acq On : 10 Sep 2018 9:47  
Operator : MD\SY  
Sample : VSTDICC100  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

Manual Integrations  
APPROVED

MMDadoda  
9/11/2018 9:40:24 AM

Quant Time: Sep 11 02:13:01 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091018W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 11 01:47:53 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 938972   | 112.35 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 550503   | 80.48  | ug/l  | 100      |
| 95) Naphthalene            | 15.13 | 128  | 1944466  | 109.78 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 894266   | 103.24 | ug/l  | 100      |

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

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091018\  
Data File : VN051068.D  
Acq On : 10 Sep 2018 9:47  
Operator : MD\SY  
Sample : VSTDICC100  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

Manual Integrations  
APPROVED

MMDadoda  
9/11/2018 9:40:24 AM

Quant Time: Sep 11 02:13:01 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091018W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 11 01:47:53 2018  
Response via : Initial Calibration

