

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN060819\  
 Data File : VN056150.D  
 Acq On : 8 Jun 2019 13:42  
 Operator : JC/SP  
 Sample : K3225-03MS  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 SP19-MMW-3414MS

Manual Integrations  
 APPROVED

MMDadoda  
 6/10/2019 11:25:41 AM

Quant Time: Jun 10 03:10:13 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N060419W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 04 11:02:09 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 276678   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 415213   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 375588   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 168772   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.02   | 65  | 154288   | 56.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 112.32% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 139725   | 54.85 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.70% |      |
| 50) Toluene-d8            | 10.09  | 98  | 524745   | 53.53 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.06% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 180805   | 54.24 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.48% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 148589  | 48.893  | ug/l | 100    |
| 3) Chloromethane              | 2.06 | 50  | 166487  | 55.510  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.18 | 62  | 160879  | 53.475  | ug/l | 100    |
| 5) Bromomethane               | 2.53 | 94  | 91875   | 48.344  | ug/l | 99     |
| 6) Chloroethane               | 2.68 | 64  | 92324   | 52.929  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 193313  | 50.333  | ug/l | 100    |
| 8) Diethyl Ether              | 3.40 | 74  | 79790   | 50.519  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 116479  | 49.926  | ug/l | 99     |
| 10) Methyl Iodide             | 3.94 | 142 | 177303  | 47.823  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.82 | 59  | 111786  | 233.828 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 120687  | 51.960  | ug/l | 98     |
| 13) Acrolein                  | 3.60 | 56  | 32636   | 236.701 | ug/l | 98     |
| 14) Allyl chloride            | 4.31 | 41  | 175675  | 47.899  | ug/l | 97     |
| 15) Acrylonitrile             | 4.99 | 53  | 342933  | 294.678 | ug/l | 99     |
| 16) Acetone                   | 3.82 | 43  | 277542  | 211.237 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.04 | 76  | 259519  | 46.665  | ug/l | 99     |
| 18) Methyl Acetate            | 4.33 | 43  | 115703  | 44.771  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 393406  | 53.137  | ug/l | 100    |
| 20) Methylene Chloride        | 4.54 | 84  | 144882  | 53.523  | ug/l | 95     |
| 21) trans-1,2-Dichloroethene  | 5.03 | 96  | 131328  | 52.771  | ug/l | 96     |
| 22) Diisopropyl ether         | 5.95 | 45  | 408556  | 53.888  | ug/l | 97     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1057437 | 177.112 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.84 | 63  | 235792  | 53.916  | ug/l | 99     |
| 25) 2-Butanone                | 6.84 | 43  | 435066  | 262.079 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 68797   | 20.160  | ug/l | 88     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 158689  | 54.246  | ug/l | 92     |
| 28) Bromochloromethane        | 7.19 | 49  | 115615  | 55.903  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.22 | 42  | 294261  | 286.763 | ug/l | 100    |
| 30) Chloroform                | 7.37 | 83  | 238321  | 54.171  | ug/l | 99     |
| 31) Cyclohexane               | 7.65 | 56  | 208198  | 47.761  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 191972  | 52.255  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 171278  | 47.974  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 130471  | 41.072  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 161398  | 49.034  | ug/l | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN060819\  
 Data File : VN056150.D  
 Acq On : 8 Jun 2019 13:42  
 Operator : JC/SP  
 Sample : K3225-03MS  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 SP19-MMW-3414MS

Manual Integrations  
 APPROVED

MMDadoda  
 6/10/2019 11:25:41 AM

Quant Time: Jun 10 03:10:13 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N060419W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 04 11:02:09 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 198040   | 44.528   | ug/l   | 98       |
| 40) Benzene                    | 8.04  | 78   | 558404   | 51.496   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.17  | 41   | 85004    | 58.160   | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 177698   | 50.945   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 216558   | 42.069   | ug/l # | 93       |
| 44) Trichloroethene            | 8.83  | 130  | 157990   | 50.704   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 147808   | 53.216   | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 95117    | 52.369   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.40  | 83   | 169170   | 51.390   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.20  | 41   | 137719   | 54.685   | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 55516    | 1021.096 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 891169   | 276.838  | ug/l   | 100      |
| 52) Toluene                    | 10.15 | 92   | 352589   | 52.254   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 154900   | 40.608   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 183200   | 46.299   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 143355   | 53.634   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 212854   | 54.587   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 231500   | 53.279   | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.75 | 43   | 620881   | 266.115  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 138323   | 47.074   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 147261   | 53.894   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 147990   | 45.519   | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 378145   | 50.588   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 134135   | 51.970   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 647479   | 49.815   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 501824   | 101.067  | ug/l   | 98       |
| 69) o-Xylene                   | 11.95 | 106  | 248499   | 50.879   | ug/l   | 98       |
| 70) Styrene                    | 11.96 | 104  | 411510   | 53.028   | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 98812    | 45.842   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 645674   | 53.858   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 153413   | 34.100   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 200625   | 51.207   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 158721m  | 51.110   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 176408   | 48.821   | ug/l   | 95       |
| 78) n-propylbenzene            | 12.59 | 91   | 683096   | 47.843   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 424613   | 53.792   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 525115   | 46.276   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 33299    | 35.709   | ug/l # | 87       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 405718   | 48.570   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 472534   | 53.882   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 521392   | 48.452   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 596871   | 47.204   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 533870   | 47.177   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 280061   | 50.078   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 267042   | 49.639   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 388090   | 46.295   | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 81185    | 47.571   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 279135   | 49.438   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 29370    | 52.411   | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 126645   | 41.497   | ug/l   | 99       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN060819\  
Data File : VN056150.D  
Acq On : 8 Jun 2019 13:42  
Operator : JC/SP  
Sample : K3225-03MS  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 69 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
SP19-MMW-3414MS

Manual Integrations  
APPROVED

MMDadoda  
6/10/2019 11:25:41 AM

Quant Time: Jun 10 03:10:13 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N060419W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jun 04 11:02:09 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 94) Hexachlorobutadiene    | 15.01 | 225  | 94942    | 48.985 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 342071   | 42.963 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 142382   | 45.212 | ug/l  | 99       |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN060819\  
 Data File : VN056150.D  
 Acq On : 8 Jun 2019 13:42  
 Operator : JC/SP  
 Sample : K3225-03MS  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 SP19-MMW-3414MS

Manual Integrations  
 APPROVED

MMDadoda  
 6/10/2019 11:25:41 AM

Quant Time: Jun 10 03:10:13 2019  
 Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N060419W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 04 11:02:09 2019  
 Response via : Initial Calibration

