

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061219\  
 Data File : VN056267.D  
 Acq On : 12 Jun 2019 22:35  
 Operator : JC/SP  
 Sample : K3315-03MS  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 RE104D2-20190607MS

Manual Integrations  
 APPROVED

MMDadoda  
 6/13/2019 11:08:54 AM

Quant Time: Jun 13 06:05:08 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  | 292355   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 400784   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 368255   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 177450   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 134651   | 46.39  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 92.78%  |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 128990   | 52.46  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 104.92% |          |
| 50) Toluene-d8              | 10.09 | 98   | 461741   | 48.80  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 97.60%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 161289   | 50.12  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 100.24% |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85   | 132261   | 41.242  | ug/l  | 99     |
| 3) Chloromethane              | 2.06 | 50   | 139146   | 43.906  | ug/l  | 99     |
| 4) Vinyl Chloride             | 2.18 | 62   | 140609   | 44.231  | ug/l  | 100    |
| 5) Bromomethane               | 2.52 | 94   | 84499    | 42.079  | ug/l  | 99     |
| 6) Chloroethane               | 2.68 | 64   | 81025    | 43.960  | ug/l  | 98     |
| 7) Trichlorofluoromethane     | 3.00 | 101  | 188459   | 46.438  | ug/l  | 99     |
| 8) Diethyl Ether              | 3.40 | 74   | 73989    | 44.334  | ug/l  | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101  | 115947   | 47.033  | ug/l  | 95     |
| 10) Methyl Iodide             | 3.94 | 142  | 177581   | 45.329  | ug/l  | 100    |
| 11) Tert butyl alcohol        | 4.82 | 59   | 120497   | 238.534 | ug/l  | 99     |
| 12) 1,1-Dichloroethene        | 3.72 | 96   | 113220   | 46.132  | ug/l  | 95     |
| 13) Acrolein                  | 3.60 | 56   | 31245    | 214.461 | ug/l  | 96     |
| 14) Allyl chloride            | 4.31 | 41   | 177275   | 45.743  | ug/l  | 98     |
| 15) Acrylonitrile             | 4.99 | 53   | 341161   | 277.435 | ug/l  | 99     |
| 16) Acetone                   | 3.82 | 43   | 279730   | 201.486 | ug/l  | 99     |
| 17) Carbon Disulfide          | 4.04 | 76   | 249004   | 42.373  | ug/l  | 99     |
| 18) Methyl Acetate            | 4.33 | 43   | 157150   | 57.715  | ug/l  | 98     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73   | 370864   | 47.406  | ug/l  | 98     |
| 20) Methylene Chloride        | 4.54 | 84   | 135260   | 47.289  | ug/l  | 96     |
| 21) trans-1,2-Dichloroethene  | 5.03 | 96   | 120877   | 45.967  | ug/l  | 97     |
| 22) Diisopropyl ether         | 5.96 | 45   | 378070   | 47.193  | ug/l  | 99     |
| 23) Vinyl Acetate             | 5.90 | 43   | 1536479  | 243.547 | ug/l  | 99     |
| 24) 1,1-Dichloroethane        | 5.84 | 63   | 219963   | 47.600  | ug/l  | 99     |
| 25) 2-Butanone                | 6.84 | 43   | 447042   | 254.853 | ug/l  | 98     |
| 26) 2,2-Dichloropropane       | 6.82 | 77   | 115439   | 32.014  | ug/l  | 94     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96   | 165751   | 53.622  | ug/l  | 93     |
| 28) Bromochloromethane        | 7.19 | 49   | 108823   | 49.797  | ug/l  | 92     |
| 29) Tetrahydrofuran           | 7.22 | 42   | 294259   | 271.384 | ug/l  | 98     |
| 30) Chloroform                | 7.37 | 83   | 232972   | 50.116  | ug/l  | 98     |
| 31) Cyclohexane               | 7.65 | 56   | 188637   | 40.953  | ug/l  | 95     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97   | 189999   | 48.944  | ug/l  | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75   | 158913   | 46.113  | ug/l  | 98     |
| 37) Ethyl Acetate             | 6.93 | 43   | 170303   | 55.541  | ug/l  | 100    |
| 38) Carbon Tetrachloride      | 7.77 | 117  | 167820   | 52.820  | ug/l  | 99     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061219\  
 Data File : VN056267.D  
 Acq On : 12 Jun 2019 22:35  
 Operator : JC/SP  
 Sample : K3315-03MS  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 RE104D2-20190607MS

Manual Integrations  
 APPROVED

MMDadoda  
 6/13/2019 11:08:54 AM

Quant Time: Jun 13 06:05:08 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   | 194601   | 45.330   | ug/l   | 96       |
| 40) Benzene                    | 8.04  | 78   | 517976   | 49.487   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.18  | 41   | 86982    | 61.655   | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 165541   | 49.168   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 257325   | 51.788   | ug/l # | 91       |
| 44) Trichloroethene            | 8.83  | 130  | 276275   | 91.858   | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 136236   | 50.815   | ug/l   | 100      |
| 46) Dibromomethane             | 9.21  | 93   | 91872    | 52.403   | ug/l   | 92       |
| 47) Bromodichloromethane       | 9.40  | 83   | 175158   | 55.125   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.20  | 41   | 131061   | 53.915   | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.21  | 88   | 62829    | 1197.206 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 877058   | 282.263  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 326991   | 50.205   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 161402   | 43.645   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 188630   | 49.388   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 138339   | 53.621   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 199047   | 52.884   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 217765   | 51.922   | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 620609   | 275.575  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 153242   | 53.666   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 145899   | 55.317   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 153754   | 48.234   | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 364168   | 49.689   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 141635   | 55.968   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 616692   | 48.391   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 486760   | 99.985   | ug/l   | 96       |
| 69) o-Xylene                   | 11.95 | 106  | 239212   | 49.952   | ug/l   | 97       |
| 70) Stvrene                    | 11.96 | 104  | 399403   | 52.493   | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 122084   | 57.053   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 621036   | 49.053   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 213160   | 45.064   | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 196192   | 47.627   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 158849m  | 48.650   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 179155   | 47.156   | ug/l   | 92       |
| 78) n-propylbenzene            | 12.59 | 91   | 657280   | 43.783   | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 410147   | 49.220   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 522036   | 43.755   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 42200    | 43.040   | ug/l   | 89       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 393517   | 44.806   | ug/l   | 97       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 463653   | 50.091   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 507869   | 44.888   | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 584480   | 43.964   | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 531555   | 44.675   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 280358   | 47.680   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 268726   | 47.509   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 370162   | 41.997   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 92282    | 51.429   | ug/l   | 92       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 285496   | 48.091   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 31833    | 54.028   | ug/l   | 86       |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 130754   | 40.825   | ug/l   | 99       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061219\  
Data File : VN056267.D  
Acq On : 12 Jun 2019 22:35  
Operator : JC/SP  
Sample : K3315-03MS  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE104D2-20190607MS

Manual Integrations  
APPROVED

MMDadoda  
6/13/2019 11:08:54 AM

Quant Time: Jun 13 06:05:08 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  | 113402   | 55.943 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 329798   | 39.715 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 147449   | 44.576 | ug/l  | 99       |

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

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061219\  
Data File : VN056267.D  
Acq On : 12 Jun 2019 22:35  
Operator : JC/SP  
Sample : K3315-03MS  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE104D2-20190607MS

Manual Integrations  
APPROVED

MMDadoda  
6/13/2019 11:08:54 AM

Quant Time: Jun 13 06:05:08 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

