

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062419\  
 Data File : VN056441.D  
 Acq On : 24 Jun 2019 9:21  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 6/26/2019 8:14:22 AM

Quant Time: Jun 25 01:30:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061919W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jun 21 03:45:40 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 402789   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 604993   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 538820   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 231061   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.02   | 65  | 224923   | 50.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.76% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 199860   | 52.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.90% |      |
| 50) Toluene-d8            | 10.09  | 98  | 747258   | 50.88 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.76% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 259922   | 53.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.18% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 170076  | 49.867  | ug/l | 99     |
| 3) Chloromethane              | 2.06 | 50  | 206526  | 44.472  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.18 | 62  | 213011  | 47.491  | ug/l | 100    |
| 5) Bromomethane               | 2.52 | 94  | 117575m | 44.714  | ug/l |        |
| 6) Chloroethane               | 2.67 | 64  | 123271  | 47.458  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 288052  | 49.647  | ug/l | 100    |
| 8) Diethyl Ether              | 3.40 | 74  | 118554  | 48.281  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101 | 184826  | 49.953  | ug/l | 99     |
| 10) Methyl Iodide             | 3.94 | 142 | 245968  | 49.186  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.80 | 59  | 179273  | 238.434 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 176782  | 49.683  | ug/l | 98     |
| 13) Acrolein                  | 3.60 | 56  | 157988  | 249.313 | ug/l | 99     |
| 14) Allyl chloride            | 4.32 | 41  | 298659  | 50.423  | ug/l | 98     |
| 15) Acrylonitrile             | 4.99 | 53  | 496089  | 238.497 | ug/l | 100    |
| 16) Acetone                   | 3.82 | 43  | 591252  | 264.353 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.05 | 76  | 393126  | 48.576  | ug/l | 99     |
| 18) Methyl Acetate            | 4.32 | 43  | 210406  | 47.997  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.04 | 73  | 587153  | 49.869  | ug/l | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 203400  | 48.209  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.03 | 96  | 187669  | 48.920  | ug/l | 98     |
| 22) Diisopropyl ether         | 5.95 | 45  | 623797  | 50.147  | ug/l | 96     |
| 23) Vinyl Acetate             | 5.89 | 43  | 2588878 | 263.869 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.84 | 63  | 356084  | 49.868  | ug/l | 100    |
| 25) 2-Butanone                | 6.83 | 43  | 740129  | 250.031 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 270834  | 54.535  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 6.82 | 96  | 224582  | 50.038  | ug/l | 99     |
| 28) Bromochloromethane        | 7.19 | 49  | 176232  | 49.897  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 430260  | 237.849 | ug/l | 99     |
| 30) Chloroform                | 7.37 | 83  | 351341  | 49.864  | ug/l | 99     |
| 31) Cyclohexane               | 7.65 | 56  | 319796  | 46.391  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 290476  | 52.010  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 262838  | 49.359  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 262623  | 50.185  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 245202  | 52.656  | ug/l | 99     |

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 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
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MMDadoda  
 6/26/2019 8:14:22 AM

Quant Time: Jun 25 01:30:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061919W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jun 21 03:45:40 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 330061   | 50.233  | ug/l   | 98       |
| 40) Benzene                    | 8.04  | 78   | 811627   | 49.551  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.17  | 41   | 109651   | 47.451  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 263880   | 48.815  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 417343   | 51.720  | ug/l   | 100      |
| 44) Trichloroethene            | 8.83  | 130  | 223249   | 50.597  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 220914   | 50.431  | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 140067   | 51.107  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.40  | 83   | 267308   | 54.994  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.20  | 41   | 199628   | 49.368  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.20  | 88   | 80382    | 957.889 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 1278161  | 245.411 | ug/l   | 100      |
| 52) Toluene                    | 10.15 | 92   | 507128   | 50.641  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 286114   | 50.507  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 328753   | 56.164  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 205943   | 51.162  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 308298   | 52.408  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 343125   | 50.741  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 527105   | 249.416 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 934032   | 244.007 | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 210668   | 50.873  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 211844   | 51.528  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 211130   | 49.479  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.43 | 112  | 544696   | 50.310  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 201553   | 55.081  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 959714   | 50.484  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 721874   | 103.615 | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 358212   | 51.971  | ug/l   | 97       |
| 70) Styrene                    | 11.96 | 104  | 593158   | 53.839  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 147975   | 50.119  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.25 | 105  | 946081   | 54.770  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 344121   | 46.795  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 281327   | 52.516  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 221573m  | 46.247  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 243128   | 47.058  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 1035507  | 48.938  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 626163   | 54.179  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 781120   | 53.892  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 74247    | 55.078  | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 600842   | 48.092  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 690064   | 54.720  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 750509   | 48.249  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 899154   | 48.347  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 799921   | 50.117  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 398166   | 50.854  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 375912   | 49.574  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 617703   | 51.122  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 131893   | 53.004  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 385138   | 49.579  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 43394    | 50.756  | ug/l   | 99       |

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Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
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MMDadoda  
6/26/2019 8:14:22 AM

Quant Time: Jun 25 01:30:28 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061919W.M  
Quant Title : SW846 8260  
QLast Update : Fri Jun 21 03:45:40 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 173536   | 43.695 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 142160   | 54.157 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 463967   | 44.526 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 190941   | 45.951 | ug/l  | 99       |

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

