

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX080919\  
 Data File : VX011413.D  
 Acq On : 09 Aug 2019 16:29  
 Operator : JC/SP  
 Sample : K4279-06MS  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0668MS

Manual Integrations  
 APPROVED

MMDadoda  
 8/12/2019 12:50:38 PM

Quant Time: Aug 11 00:49:03 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080119W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 02 01:55:00 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 168194   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 251626   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 236805   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 129146   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 89098    | 52.60 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.20% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 78511    | 47.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.58%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 293043   | 47.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.52%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 112550   | 50.84 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.68% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 56884   | 43.789  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 62135   | 42.594  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 68805   | 42.879  | ug/l | 99     |
| 5) Bromomethane               | 1.63 | 94  | 46913   | 40.993  | ug/l | 98     |
| 6) Chloroethane               | 1.71 | 64  | 45379   | 45.441  | ug/l | 95     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 126000  | 44.162  | ug/l | 97     |
| 8) Diethyl Ether              | 2.18 | 74  | 44579   | 43.757  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 69954   | 45.314  | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 90812   | 46.659  | ug/l | 97     |
| 11) Tert butyl alcohol        | 3.04 | 59  | 82184   | 243.323 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 70339   | 45.964  | ug/l | 91     |
| 13) Acrolein                  | 2.29 | 56  | 51745   | 246.513 | ug/l | 97     |
| 14) Allyl chloride            | 2.72 | 41  | 106805  | 52.353  | ug/l | 96     |
| 15) Acrylonitrile             | 3.14 | 53  | 210601  | 261.291 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 177027  | 219.577 | ug/l | 95     |
| 17) Carbon Disulfide          | 2.56 | 76  | 159462  | 44.405  | ug/l | 99     |
| 18) Methyl Acetate            | 2.76 | 43  | 98248   | 53.325  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 241003  | 53.441  | ug/l | # 72   |
| 20) Methylene Chloride        | 2.85 | 84  | 80372   | 45.520  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 76737   | 47.404  | ug/l | 91     |
| 22) Diisopropyl ether         | 3.85 | 45  | 231491  | 51.629  | ug/l | 99     |
| 23) Vinyl Acetate             | 3.81 | 43  | 1012338 | 272.217 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 133489  | 50.489  | ug/l | 98     |
| 25) 2-Butanone                | 4.67 | 43  | 287954  | 251.084 | ug/l | 97     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 101044  | 49.164  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 91441   | 49.042  | ug/l | 98     |
| 28) Bromochloromethane        | 5.01 | 49  | 65012   | 53.938  | ug/l | 96     |
| 29) Tetrahydrofuran           | 5.12 | 42  | 182912  | 260.119 | ug/l | 99     |
| 30) Chloroform                | 5.20 | 83  | 147827  | 51.444  | ug/l | 94     |
| 31) Cyclohexane               | 5.57 | 56  | 292744  | 134.208 | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 129071  | 52.434  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 103669  | 47.188  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.82 | 43  | 112037  | 50.841  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 113083  | 51.163  | ug/l | 96     |

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 ClientSampleID :  
 Z3-0668MS

Manual Integrations  
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MMDadoda  
 8/12/2019 12:50:38 PM

Quant Time: Aug 11 00:49:03 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080119W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 02 01:55:00 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 192951   | 74.095  | ug/l   | 98       |
| 40) Benzene                    | 6.13  | 78   | 362676   | 55.321  | ug/l   | 97       |
| 41) Methacrylonitrile          | 5.04  | 41   | 62312    | 51.776  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 118240   | 53.337  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.44  | 43   | 182863   | 51.903  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 92806    | 46.769  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 81848    | 48.207  | ug/l   | 94       |
| 46) Dibromomethane             | 7.66  | 93   | 59964    | 48.380  | ug/l   | 97       |
| 47) Bromodichloromethane       | 7.90  | 83   | 110184   | 52.506  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.76  | 41   | 91907    | 55.431  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 40298    | 838.345 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 601055   | 264.348 | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 210421   | 48.546  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 119209   | 48.848  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 128551   | 52.442  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 89344    | 50.133  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 136138   | 53.605  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 141661   | 50.262  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 316479   | 253.440 | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 460716   | 261.600 | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.58  | 129  | 97597    | 53.490  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 96657    | 50.200  | ug/l   | 98       |
| 64) Tetrachloroethene          | 9.34  | 164  | 90979    | 45.240  | ug/l   | 97       |
| 65) Chlorobenzene              | 10.13 | 112  | 238743   | 47.020  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 90643    | 52.145  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 2042503  | 240.199 | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.36 | 106  | 361285   | 109.843 | ug/l   | 97       |
| 69) o-Xylene                   | 10.69 | 106  | 163765   | 50.675  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 272468   | 50.955  | ug/l   | 98       |
| 71) Bromoform                  | 10.85 | 173  | 73086    | 47.192  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 607097   | 68.733  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.90 | 43   | 168972   | 52.944  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 140629   | 47.776  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 120055m  | 51.046  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 117152   | 47.832  | ug/l   | 96       |
| 78) n-propylbenzene            | 11.36 | 91   | 703008   | 71.571  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 289749   | 49.492  | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 364903   | 49.352  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 39962    | 45.791  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 333214   | 48.837  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 359999   | 49.643  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 1549853  | 210.534 | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 446048   | 51.195  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 404818   | 50.505  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 207052   | 47.844  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 209204   | 46.881  | ug/l   | 98       |
| 89) n-Butylbenzene             | 12.38 | 91   | 353572   | 51.202  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.59 | 117  | 68455    | 57.767  | ug/l   | 92       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 208191   | 47.879  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 31671    | 55.536  | ug/l   | 92       |

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ALS Vial : 17 Sample Multiplier: 1

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8/12/2019 12:50:38 PM

Quant Time: Aug 11 00:49:03 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080119W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 02 01:55:00 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|-------|------|----------|---------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 140636   | 48.769  | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 68902    | 47.095  | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 1008998  | 119.649 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 145190   | 49.525  | ug/l  | 98       |

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

