

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX040119\  
 Data File : VX008573.D  
 Acq On : 01 Apr 2019 16:56  
 Operator : JC/SP  
 Sample : K2189-07MS  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-VPB201R-GW-818-820MS

Manual Integrations  
 APPROVED

MMDadoda  
 4/2/2019 10:06:12 AM

Quant Time: Apr 02 02:06:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 26 07:57:20 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 178446   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 306824   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 277973   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 127429   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 134921   | 49.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.74%  |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 101407   | 50.69 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.38% |      |
| 50) Toluene-d8            | 8.71   | 98  | 394115   | 49.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.54%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 147692   | 49.82 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.64%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 77709   | 36.944  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 118448  | 44.553  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 120115  | 40.899  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 38939   | 26.156  | ug/l | 98     |
| 6) Chloroethane               | 1.71 | 64  | 90988   | 52.298  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 138296  | 41.578  | ug/l | 97     |
| 8) Diethyl Ether              | 2.18 | 74  | 69693   | 44.274  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 83159   | 41.369  | ug/l | 98     |
| 10) Methyl Iodide             | 2.51 | 142 | 45933   | 25.674  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.06 | 59  | 169693  | 283.116 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 92580   | 44.595  | ug/l | 95     |
| 13) Acrolein                  | 2.29 | 56  | 91318   | 209.800 | ug/l | 100    |
| 14) Allyl chloride            | 2.73 | 41  | 220874  | 48.292  | ug/l | 98     |
| 15) Acrylonitrile             | 3.14 | 53  | 397603  | 252.981 | ug/l | 100    |
| 16) Acetone                   | 2.45 | 43  | 339983  | 240.452 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.57 | 76  | 262896  | 44.092  | ug/l | 100    |
| 18) Methyl Acetate            | 2.77 | 43  | 172865  | 50.904  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 371639  | 49.677  | ug/l | 99     |
| 20) Methylene Chloride        | 2.85 | 84  | 116422  | 50.456  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 100269  | 48.463  | ug/l | 95     |
| 22) Diisopropyl ether         | 3.85 | 45  | 442497  | 49.135  | ug/l | 99     |
| 23) Vinyl Acetate             | 3.81 | 43  | 1934229 | 246.178 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 218678  | 48.097  | ug/l | 99     |
| 25) 2-Butanone                | 4.67 | 43  | 587430  | 259.147 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 145758  | 48.200  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 120995  | 47.662  | ug/l | 100    |
| 28) Bromochloromethane        | 5.01 | 49  | 113762  | 50.646  | ug/l | 99     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 385632  | 258.125 | ug/l | 98     |
| 30) Chloroform                | 5.21 | 83  | 198033  | 48.263  | ug/l | 100    |
| 31) Cyclohexane               | 5.58 | 56  | 185591  | 42.800  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 158812  | 48.422  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 146819  | 44.879  | ug/l | 100    |
| 37) Ethyl Acetate             | 4.83 | 43  | 214806  | 50.685  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 129790  | 47.540  | ug/l | 98     |

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 Sample : K2189-07MS  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

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 MSVOA\_X  
 ClientSampleId :  
 BP-VPB201R-GW-818-820MS

Manual Integrations  
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 4/2/2019 10:06:12 AM

Quant Time: Apr 02 02:06:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 26 07:57:20 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 159019   | 40.674   | ug/l   | 98       |
| 40) Benzene                    | 6.14  | 78   | 466166   | 47.598   | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.04  | 41   | 124427   | 52.243   | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 167455   | 46.699   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.45  | 43   | 341553   | 50.385   | ug/l   | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 105382   | 45.827   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 135206   | 48.569   | ug/l   | 100      |
| 46) Dibromomethane             | 7.66  | 93   | 77278    | 47.538   | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 154908   | 49.786   | ug/l   | 97       |
| 48) Methyl methacrylate        | 7.77  | 41   | 174870   | 51.556   | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 67731    | 1004.293 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1170602  | 265.871  | ug/l   | 100      |
| 52) Toluene                    | 8.78  | 92   | 278909   | 47.628   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 175783   | 51.579   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 193783   | 50.004   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 117106   | 49.126   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 221292   | 51.428   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 207680   | 48.592   | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 892737   | 261.676  | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.58  | 129  | 114693   | 50.592   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 118790   | 48.830   | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 85990    | 45.694   | ug/l   | 97       |
| 65) Chlorobenzene              | 10.13 | 112  | 285124   | 47.166   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 102931   | 49.353   | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.25 | 91   | 533873   | 46.795   | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 383895   | 92.494   | ug/l   | 100      |
| 69) o-Xylene                   | 10.69 | 106  | 189236   | 46.983   | ug/l   | 100      |
| 70) Stvrene                    | 10.71 | 104  | 329041   | 47.294   | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 84657    | 51.399   | ug/l # | 100      |
| 73) Isopropylbenzene           | 11.02 | 105  | 499871   | 48.218   | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 305220   | 50.866   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 196306   | 48.804   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 169215m  | 44.667   | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 122188   | 48.563   | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 584993   | 48.170   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 348614   | 47.196   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 420062   | 47.928   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 63111    | 53.357   | ug/l   | 100      |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 404706   | 47.499   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 407974   | 48.247   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 427368   | 48.209   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 483402   | 48.005   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 432233   | 48.645   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 212333   | 47.233   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 212612   | 46.862   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 404735   | 48.084   | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 73645    | 49.750   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 214163   | 47.572   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 44032    | 50.205   | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene     | 13.65 | 180  | 145282   | 47.933   | ug/l   | 99       |

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ALS Vial : 15 Sample Multiplier: 1

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ClientSampleId :  
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Quant Time: Apr 02 02:06:09 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
Quant Title : SW846 8260  
QLast Update : Tue Mar 26 07:57:20 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 94) Hexachlorobutadiene    | 13.78 | 225  | 68945    | 47.906 | ug/l  | 100      |
| 95) Naphthalene            | 13.83 | 128  | 513576   | 49.424 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 145860   | 47.891 | ug/l  | 99       |

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

