

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU091219\  
 Data File : VU034545.D  
 Acq On : 13 Sep 2019 00:58  
 Operator : JC/SP  
 Sample : K4756-02MS  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 41 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 CPA-CPMW09D-M27W1-090319MS

Manual Integrations  
 APPROVED

MMDadoda  
 9/16/2019 11:15:36 AM

Quant Time: Sep 13 08:30:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U090619W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 06 05:10:13 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.96  | 168  | 231466   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.86  | 114  | 336820   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.07  | 117  | 333882   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.46 | 152  | 234113   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.29  | 65   | 181942   | 51.95  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 103.90% |          |
| 35) Dibromofluoromethane    | 4.86  | 113  | 162598   | 51.88  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 103.76% |          |
| 50) Toluene-d8              | 7.54  | 98   | 603286   | 51.23  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 102.46% |          |
| 62) 4-Bromofluorobenzene    | 10.29 | 95   | 233986   | 51.47  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 102.94% |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85   | 115364   | 47.655  | ug/l  | 98     |
| 3) Chloromethane              | 1.32 | 50   | 138884   | 53.108  | ug/l  | 98     |
| 4) Vinyl Chloride             | 1.40 | 62   | 147074   | 48.755  | ug/l  | 99     |
| 5) Bromomethane               | 1.61 | 94   | 91886    | 60.949  | ug/l  | 100    |
| 6) Chloroethane               | 1.68 | 64   | 95681    | 54.665  | ug/l  | 99     |
| 7) Trichlorofluoromethane     | 1.87 | 101  | 211760   | 52.354  | ug/l  | 98     |
| 8) Diethyl Ether              | 2.09 | 74   | 97697    | 54.912  | ug/l  | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.27 | 101  | 136262   | 50.864  | ug/l  | 99     |
| 10) Methyl Iodide             | 2.40 | 142  | 117089   | 47.944  | ug/l  | 99     |
| 11) Tert butyl alcohol        | 2.81 | 59   | 236431   | 319.554 | ug/l  | 100    |
| 12) 1,1-Dichloroethene        | 2.27 | 96   | 131189   | 52.093  | ug/l  | 97     |
| 13) Acrolein                  | 2.18 | 56   | 132584   | 213.206 | ug/l  | 100    |
| 14) Allyl chloride            | 2.58 | 41   | 246694m  | 51.239  | ug/l  |        |
| 15) Acrylonitrile             | 2.92 | 53   | 557173   | 302.406 | ug/l  | 98     |
| 16) Acetone                   | 2.31 | 43   | 450558   | 248.605 | ug/l  | 100    |
| 17) Carbon Disulfide          | 2.46 | 76   | 243001   | 42.933  | ug/l  | 99     |
| 18) Methyl Acetate            | 2.60 | 43   | 235759   | 53.461  | ug/l  | 97     |
| 19) Methyl tert-butyl Ether   | 2.98 | 73   | 536472   | 58.444  | ug/l  | 99     |
| 20) Methylene Chloride        | 2.68 | 84   | 173100   | 58.380  | ug/l  | 100    |
| 21) trans-1,2-Dichloroethene  | 2.96 | 96   | 138646   | 52.243  | ug/l  | 98     |
| 22) Diisopropyl ether         | 3.55 | 45   | 543682   | 57.905  | ug/l  | 97     |
| 23) Vinyl Acetate             | 3.50 | 43   | 2086193  | 272.773 | ug/l  | 99     |
| 24) 1,1-Dichloroethane        | 3.43 | 63   | 306079   | 54.587  | ug/l  | 99     |
| 25) 2-Butanone                | 4.24 | 43   | 720252   | 297.718 | ug/l  | 98     |
| 26) 2,2-Dichloropropane       | 4.20 | 77   | 195443   | 43.338  | ug/l  | 97     |
| 27) cis-1,2-Dichloroethene    | 4.20 | 96   | 181799   | 56.404  | ug/l  | 95     |
| 28) Bromochloromethane        | 4.52 | 49   | 149886   | 58.116  | ug/l  | 97     |
| 29) Tetrahydrofuran           | 4.61 | 42   | 452240   | 307.202 | ug/l  | 100    |
| 30) Chloroform                | 4.65 | 83   | 317255   | 55.664  | ug/l  | 100    |
| 31) Cyclohexane               | 4.97 | 56   | 196217   | 47.833  | ug/l  | 99     |
| 32) 1,1,1-Trichloroethane     | 4.89 | 97   | 252405   | 55.390  | ug/l  | 99     |
| 36) 1,1-Dichloropropene       | 5.12 | 75   | 192272   | 52.636  | ug/l  | 99     |
| 37) Ethyl Acetate             | 4.36 | 43   | 237645   | 55.025  | ug/l  | 99     |
| 38) Carbon Tetrachloride      | 5.11 | 117  | 213565   | 54.757  | ug/l  | 99     |

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 Sample : K4756-02MS  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 41 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 CPA-CPMW09D-M27W1-090319MS

Manual Integrations  
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 9/16/2019 11:15:36 AM

Quant Time: Sep 13 08:30:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U090619W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 06 05:10:13 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 6.40  | 83   | 189005   | 48.402   | ug/l   | 98       |
| 40) Benzene                    | 5.37  | 78   | 651034   | 55.234   | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.52  | 41   | 140697   | 61.160   | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 5.38  | 62   | 229700   | 56.130   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 5.53  | 43   | 374409   | 55.572   | ug/l   | 99       |
| 44) Trichloroethene            | 6.16  | 130  | 178261   | 54.653   | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 6.41  | 63   | 193534   | 56.165   | ug/l   | 97       |
| 46) Dibromomethane             | 6.54  | 93   | 122684   | 56.721   | ug/l   | 98       |
| 47) Bromodichloromethane       | 6.74  | 83   | 250780   | 56.327   | ug/l   | 98       |
| 48) Methyl methacrylate        | 6.60  | 41   | 182710   | 57.098   | ug/l   | 98       |
| 49) 1,4-Dioxane                | 6.59  | 88   | 84628    | 1211.120 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 7.44  | 43   | 1422235  | 304.966  | ug/l   | 100      |
| 52) Toluene                    | 7.62  | 92   | 416232   | 56.294   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 7.86  | 75   | 250293   | 54.231   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 7.25  | 75   | 268288   | 52.965   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 8.04  | 97   | 194692   | 57.989   | ug/l   | 100      |
| 56) Ethyl methacrylate         | 8.00  | 69   | 275270   | 53.721   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 8.22  | 76   | 314258   | 57.482   | ug/l   | 100      |
| 59) 2-Hexanone                 | 8.34  | 43   | 1074869  | 308.521  | ug/l   | 100      |
| 60) Dibromochloromethane       | 8.46  | 129  | 210830   | 58.545   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 8.57  | 107  | 189367   | 57.626   | ug/l   | 100      |
| 64) Tetrachloroethene          | 8.21  | 164  | 253278   | 87.439   | ug/l   | 98       |
| 65) Chlorobenzene              | 9.10  | 112  | 483645   | 57.096   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.19  | 131  | 187446   | 57.984   | ug/l   | 100      |
| 67) Ethyl Benzene              | 9.23  | 91   | 797875   | 57.608   | ug/l   | 99       |
| 68) m/p-Xylenes                | 9.35  | 106  | 625403   | 119.914  | ug/l   | 100      |
| 69) o-Xylene                   | 9.76  | 106  | 306477   | 60.088   | ug/l   | 99       |
| 70) Styrene                    | 9.77  | 104  | 557720   | 62.367   | ug/l   | 99       |
| 71) Bromoform                  | 9.94  | 173  | 168161   | 60.021   | ug/l # | 99       |
| 73) Isopropylbenzene           | 10.14 | 105  | 837432   | 54.966   | ug/l   | 100      |
| 74) N-amyl acetate             | 9.99  | 43   | 331209   | 54.007   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.43 | 83   | 340340   | 55.187   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 10.47 | 75   | 293151m  | 57.365   | ug/l   |          |
| 77) Bromobenzene               | 10.43 | 156  | 232699   | 54.624   | ug/l   | 99       |
| 78) n-propylbenzene            | 10.57 | 91   | 959167   | 54.512   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 10.64 | 91   | 594011   | 55.328   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.75 | 105  | 729951   | 57.287   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 10.49 | 75   | 67580m   | 44.473   | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.75 | 91   | 674255   | 54.573   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.08 | 119  | 714234   | 56.032   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.12 | 105  | 733426   | 57.181   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.30 | 105  | 836569   | 55.591   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 11.45 | 119  | 768973   | 55.363   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.39 | 146  | 412621   | 53.080   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 11.48 | 146  | 421564   | 51.993   | ug/l   | 99       |
| 89) n-Butylbenzene             | 11.87 | 91   | 644818   | 53.421   | ug/l   | 100      |
| 90) Hexachloroethane           | 12.12 | 117  | 116677   | 52.505   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 11.85 | 146  | 417517   | 54.650   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.63 | 75   | 67832    | 59.857   | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene     | 13.48 | 180  | 263604   | 47.742   | ug/l   | 100      |

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Sample : K4756-02MS  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 41 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
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9/16/2019 11:15:36 AM

Quant Time: Sep 13 08:30:24 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U090619W.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 06 05:10:13 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 94) Hexachlorobutadiene    | 13.67 | 225  | 119772   | 44.819 | ug/l  | 100      |
| 95) Naphthalene            | 13.72 | 128  | 755544   | 48.548 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 13.97 | 180  | 270948   | 50.594 | ug/l  | 99       |

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

