

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U070218\  
 Data File : VU025179.D  
 Acq On : 03 Jul 2018 07:05  
 Operator : MD/SY  
 Sample : J3809-16MSD  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MW-1-062818MSD

Manual Integrations  
 APPROVED

sam  
 7/3/2018 3:53:11 PM

Quant Time: Jul 03 08:18:21 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 13 13:55:26 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 172318   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 267444   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 257870   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 160506   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 5.31   | 65  | 130510   | 46.39 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 92.78% |      |
| 35) Dibromofluoromethane    | 4.89   | 113 | 110453   | 49.76 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 99.52% |      |
| 50) Toluene-d8              | 7.57   | 98  | 355389   | 43.90 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 87.80% |      |
| 62) 4-Bromofluorobenzene    | 10.31  | 95  | 152093   | 47.31 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 94.62% |      |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|-------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85   | 90345    | 41.89  | ug/l   | 99     |
| 3) Chloromethane              | 1.33 | 50   | 105565   | 47.91  | ug/l   | 98     |
| 4) Vinyl Chloride             | 1.40 | 62   | 111588   | 49.10  | ug/l   | 98     |
| 5) Bromomethane               | 1.62 | 94   | 62636    | 57.02  | ug/l   | 99     |
| 6) Chloroethane               | 1.69 | 64   | 72193    | 57.00  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 1.88 | 101  | 169119   | 48.76  | ug/l   | 99     |
| 8) Diethyl Ether              | 2.10 | 74   | 67198    | 57.21  | ug/l   | 88     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.28 | 101  | 102176   | 47.49  | ug/l   | 97     |
| 10) Methyl Iodide             | 2.41 | 142  | 125370   | 66.86  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 2.83 | 59   | 213771   | 312.45 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 2.28 | 96   | 102013   | 51.99  | ug/l   | 95     |
| 13) Acrolein                  | 2.19 | 56   | 25453    | 70.84  | ug/l # | 1      |
| 14) Allyl chloride            | 2.59 | 41   | 159666   | 43.83  | ug/l   | 99     |
| 15) Acrylonitrile             | 2.93 | 53   | 370253   | 278.15 | ug/l   | 99     |
| 16) Acetone                   | 2.32 | 43   | 399351   | 264.21 | ug/l   | 98     |
| 17) Carbon Disulfide          | 2.48 | 76   | 271887   | 43.28  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.62 | 43   | 200045   | 61.74  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 3.00 | 73   | 486431   | 65.95  | ug/l # | 81     |
| 20) Methylene Chloride        | 2.70 | 84   | 120404   | 50.77  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 2.98 | 96   | 111779   | 51.72  | ug/l   | 98     |
| 22) Diisopropyl ether         | 3.57 | 45   | 388271   | 53.76  | ug/l   | 98     |
| 23) Vinyl Acetate             | 3.53 | 43   | 1433516  | 221.59 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 3.45 | 63   | 219418   | 52.81  | ug/l   | 98     |
| 25) 2-Butanone                | 4.26 | 43   | 568136   | 279.83 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 4.23 | 77   | 98657    | 25.01  | ug/l   | 94     |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96   | 132072   | 53.16  | ug/l   | 92     |
| 28) Bromochloromethane        | 4.55 | 49   | 77398    | 42.30  | ug/l # | 83     |
| 29) Tetrahydrofuran           | 4.64 | 42   | 341922   | 271.95 | ug/l   | 97     |
| 30) Chloroform                | 4.68 | 83   | 234972   | 55.88  | ug/l   | 99     |
| 31) Cyclohexane               | 5.00 | 56   | 261399   | 71.71  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97   | 207088   | 53.26  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 5.14 | 75   | 164335   | 52.29  | ug/l   | 98     |
| 37) Ethyl Acetate             | 4.38 | 43   | 174336   | 50.90  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 5.14 | 117  | 182802   | 52.90  | ug/l   | 97     |

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 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MW-1-062818MSD

Manual Integrations  
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Quant Time: Jul 03 08:18:21 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 13 13:55:26 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response  | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|-----------|---------|-------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 324239    | 82.68   | ug/l  | 95       |
| 40) Benzene                    | 5.39  | 78   | 1449996   | 161.92  | ug/l  | 100      |
| 41) Methacrylonitrile          | 4.54  | 41   | 107534    | 58.23   | ug/l  | 97       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 200909    | 58.91   | ug/l  | 98       |
| 43) Isopropyl Acetate          | 5.55  | 43   | 331480    | 55.99   | ug/l  | 98       |
| 44) Trichloroethene            | 6.19  | 130  | 136711    | 53.64   | ug/l  | 92       |
| 45) 1,2-Dichloropropane        | 6.44  | 63   | 130791    | 54.74   | ug/l  | 98       |
| 46) Dibromomethane             | 6.56  | 93   | 94910     | 56.55   | ug/l  | 94       |
| 47) Bromodichloromethane       | 6.76  | 83   | 179500    | 53.71   | ug/l  | 99       |
| 48) Methyl methacrylate        | 6.63  | 41   | 186193    | 64.58   | ug/l  | 93       |
| 49) 1,4-Dioxane                | 6.62  | 88   | 75218     | 1334.08 | ug/l  | 95       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 1044907   | 280.91  | ug/l  | 98       |
| 52) Toluene                    | 7.64  | 92   | 637474    | 110.65  | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 179423    | 47.81   | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 186805    | 46.71   | ug/l  | 96       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 203009    | 86.69   | ug/l  | 87       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 226630    | 57.82   | ug/l  | 96       |
| 57) 1,3-Dichloropropane        | 8.25  | 76   | 220134    | 55.72   | ug/l  | 99       |
| 59) 2-Hexanone                 | 8.36  | 43   | 851034    | 280.24  | ug/l  | 100      |
| 60) Dibromochloromethane       | 8.48  | 129  | 148760    | 50.94   | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 145334    | 55.76   | ug/l  | 99       |
| 64) Tetrachloroethene          | 8.23  | 164  | 119382    | 48.70   | ug/l  | 98       |
| 65) Chlorobenzene              | 9.12  | 112  | 358188    | 54.37   | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 133297    | 53.26   | ug/l  | 97       |
| 67) Ethyl Benzene              | 9.26  | 91   | 12584125  | 1089.66 | ug/l  | 95       |
| 68) m/p-Xylenes                | 9.39  | 106  | 5158376   | 1163.19 | ug/l  | 94       |
| 69) o-Xylene                   | 9.78  | 106  | 373994    | 85.21   | ug/l  | 94       |
| 70) Styrene                    | 9.80  | 104  | 398785    | 55.29   | ug/l  | 96       |
| 71) Bromoform                  | 9.96  | 173  | 116081    | 48.80   | ug/l  | # 99     |
| 73) Isopropylbenzene           | 10.17 | 105  | 1406058   | 114.10  | ug/l  | 99       |
| 74) N-amyl acetate             | 10.01 | 43   | 263795    | 45.01   | ug/l  | # 94     |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 220016    | 53.28   | ug/l  | 98       |
| 76) 1,2,3-Trichloropropane     | 10.50 | 75   | 193946m   | 54.88   | ug/l  |          |
| 77) Bromobenzene               | 10.46 | 156  | 170972    | 54.80   | ug/l  | 93       |
| 78) n-propylbenzene            | 10.59 | 91   | 3024578   | 208.36  | ug/l  | 97       |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 485169    | 56.68   | ug/l  | 96       |
| 80) 1,3,5-Trimethylbenzene     | 10.78 | 105  | 629107    | 58.90   | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 65801m    | 43.10   | ug/l  |          |
| 82) 4-Chlorotoluene            | 10.78 | 91   | 517183    | 51.91   | ug/l  | 100      |
| 83) tert-Butylbenzene          | 11.11 | 119  | 529907    | 51.58   | ug/l  | 97       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 17433239m | 1601.61 | ug/l  |          |
| 85) sec-Butylbenzene           | 11.33 | 105  | 802199    | 62.38   | ug/l  | 96       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 704627    | 61.18   | ug/l  | 98       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 310418    | 53.86   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 313032    | 53.96   | ug/l  | 99       |
| 89) n-Butylbenzene             | 11.89 | 91   | 700807m   | 68.53   | ug/l  |          |
| 90) Hexachloroethane           | 12.15 | 117  | 252910    | 112.56  | ug/l  | # 44     |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 320384    | 55.50   | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 72631     | 63.74   | ug/l  | 94       |
| 93) 1,2,4-Trichlorobenzene     | 13.51 | 180  | 225433    | 63.23   | ug/l  | 96       |

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Sample : J3809-16MSD  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 51 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
MW-1-062818MSD

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Quant Time: Jul 03 08:18:21 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jun 13 13:55:26 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 94) Hexachlorobutadiene    | 13.70 | 225  | 86959    | 43.34  | ug/l  | 99       |
| 95) Naphthalene            | 13.75 | 128  | 2835318  | 237.66 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 233634   | 65.77  | ug/l  | 94       |

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

