

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU061418\  
 Data File : VU024580.D  
 Acq On : 15 Jun 2018 07:31  
 Operator : MD/SY  
 Sample : J3478-04MSD  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 58 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 SS050MW047-180610MSD

Manual Integrations  
 APPROVED

apatel  
 6/15/2018 3:16:17 PM

Quant Time: Jun 15 08:40:52 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  | 162252   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 263078   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 251325   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 152238   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 5.31   | 65  | 126915   | 47.91 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 95.82%  |      |
| 35) Dibromofluoromethane    | 4.89   | 113 | 112037   | 51.31 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 102.62% |      |
| 50) Toluene-d8              | 7.57   | 98  | 400857   | 50.33 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.66% |      |
| 62) 4-Bromofluorobenzene    | 10.31  | 95  | 158981   | 50.28 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.56% |      |

| Target Compounds              |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85  | 88359   | 43.508  | ug/l   | 99     |
| 3) Chloromethane              | 1.33 | 50  | 94261   | 45.430  | ug/l   | 99     |
| 4) Vinyl Chloride             | 1.41 | 62  | 113651  | 53.114  | ug/l   | 98     |
| 5) Bromomethane               | 1.63 | 94  | 57711   | 55.792  | ug/l   | 98     |
| 6) Chloroethane               | 1.70 | 64  | 63679   | 53.328  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 1.89 | 101 | 157244  | 48.154  | ug/l   | 99     |
| 8) Diethyl Ether              | 2.10 | 74  | 60062   | 54.206  | ug/l   | 88     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 89285   | 44.072  | ug/l   | 97     |
| 10) Methyl Iodide             | 2.41 | 142 | 61519   | 37.375  | ug/l   | 96     |
| 11) Tert butyl alcohol        | 2.82 | 59  | 118591  | 184.087 | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 2.29 | 96  | 87078   | 47.133  | ug/l   | 92     |
| 13) Acrolein                  | 2.19 | 56  | 69671   | 205.949 | ug/l   | 100    |
| 14) Allyl chloride            | 2.60 | 41  | 139682  | 40.720  | ug/l   | 93     |
| 15) Acrylonitrile             | 2.94 | 53  | 299998  | 239.350 | ug/l   | 98     |
| 16) Acetone                   | 2.32 | 43  | 240695  | 169.123 | ug/l   | 96     |
| 17) Carbon Disulfide          | 2.48 | 76  | 271639  | 45.918  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.62 | 43  | 127732  | 41.865  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 321986  | 46.365  | ug/l   | 97     |
| 20) Methylene Chloride        | 2.71 | 84  | 102159  | 45.748  | ug/l   | 95     |
| 21) trans-1,2-Dichloroethene  | 2.99 | 96  | 97685   | 48.007  | ug/l   | 94     |
| 22) Diisopropyl ether         | 3.57 | 45  | 323509  | 47.575  | ug/l   | 97     |
| 23) Vinyl Acetate             | 3.53 | 43  | 1296184 | 212.789 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 182246  | 46.588  | ug/l   | 99     |
| 25) 2-Butanone                | 4.26 | 43  | 417722  | 218.511 | ug/l   | 95     |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 98621   | 26.550  | ug/l   | 91     |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 152444  | 65.165  | ug/l   | 89     |
| 28) Bromochloromethane        | 4.55 | 49  | 90744   | 52.665  | ug/l   | 87     |
| 29) Tetrahydrofuran           | 4.64 | 42  | 275308  | 232.555 | ug/l   | 96     |
| 30) Chloroform                | 4.68 | 83  | 187478  | 47.350  | ug/l   | 99     |
| 31) Cyclohexane               | 5.00 | 56  | 169013  | 48.598  | ug/l   | 100    |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 165866  | 45.301  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 138632  | 44.845  | ug/l   | 97     |
| 37) Ethyl Acetate             | 4.38 | 43  | 146135  | 43.372  | ug/l # | 96     |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 153826  | 45.250  | ug/l   | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU061418\  
 Data File : VU024580.D  
 Acq On : 15 Jun 2018 07:31  
 Operator : MD/SY  
 Sample : J3478-04MSD  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 58 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 SS050MW047-180610MSD

Manual Integrations  
 APPROVED

apatel  
 6/15/2018 3:16:17 PM

Quant Time: Jun 15 08:40:52 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   | 165062   | 42.787  | ug/l   | 93       |
| 40) Benzene                    | 5.39  | 78   | 415861   | 47.210  | ug/l   | 100      |
| 41) Methacrylonitrile          | 4.54  | 41   | 88182    | 48.541  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 147383   | 43.930  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 5.55  | 43   | 248934   | 42.742  | ug/l   | 97       |
| 44) Trichloroethene            | 6.19  | 130  | 120260   | 47.971  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 6.44  | 63   | 112520   | 47.873  | ug/l   | 99       |
| 46) Dibromomethane             | 6.56  | 93   | 78556    | 47.583  | ug/l   | 92       |
| 47) Bromodichloromethane       | 6.76  | 83   | 153185   | 46.597  | ug/l   | 99       |
| 48) Methyl methacrylate        | 6.63  | 41   | 128739   | 45.395  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 6.61  | 88   | 41169    | 742.300 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 855193   | 233.723 | ug/l   | 98       |
| 52) Toluene                    | 7.64  | 92   | 265622   | 46.870  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 157549   | 42.675  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 167455   | 42.567  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 108472   | 47.087  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 183150   | 47.501  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 8.25  | 76   | 183224   | 47.149  | ug/l   | 99       |
| 59) 2-Hexanone                 | 8.36  | 43   | 666345   | 223.065 | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 131585   | 45.806  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 122254   | 47.680  | ug/l   | 99       |
| 64) Tetrachloroethene          | 8.23  | 164  | 104914   | 43.916  | ug/l   | 97       |
| 65) Chlorobenzene              | 9.12  | 112  | 303382   | 47.253  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 114234   | 46.831  | ug/l   | 99       |
| 67) Ethyl Benzene              | 9.25  | 91   | 518644   | 46.079  | ug/l   | 98       |
| 68) m/p-Xylenes                | 9.38  | 106  | 404431   | 93.572  | ug/l   | 96       |
| 69) o-Xylene                   | 9.78  | 106  | 199851   | 46.722  | ug/l   | 94       |
| 70) Styrene                    | 9.80  | 104  | 331453   | 47.153  | ug/l   | 99       |
| 71) Bromoform                  | 9.96  | 173  | 110162   | 47.514  | ug/l # | 98       |
| 73) Isopropylbenzene           | 10.17 | 105  | 523258   | 44.768  | ug/l   | 97       |
| 74) N-amyl acetate             | 10.01 | 43   | 226298   | 40.705  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 185182   | 47.279  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 10.50 | 75   | 161313m  | 48.128  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 138985   | 46.970  | ug/l   | 94       |
| 78) n-propylbenzene            | 10.59 | 91   | 615815   | 44.726  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 363631   | 44.785  | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 10.78 | 105  | 450784   | 44.497  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 51220m   | 35.368  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.78 | 91   | 430942   | 45.600  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 445915   | 45.758  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 462599   | 44.808  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 11.33 | 105  | 540358   | 44.298  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 480477   | 43.980  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 254476   | 46.549  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 256335   | 46.586  | ug/l   | 100      |
| 89) n-Butylbenzene             | 11.89 | 91   | 431517   | 44.490  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.15 | 117  | 89829    | 42.150  | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 254175   | 46.419  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 47273    | 43.741  | ug/l   | 90       |
| 93) 1,2,4-Trichlorobenzene     | 13.51 | 180  | 179463   | 53.074  | ug/l   | 98       |

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU061418\  
Data File : VU024580.D  
Acq On : 15 Jun 2018 07:31  
Operator : MD/SY  
Sample : J3478-04MSD  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 58 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
SS050MW047-180610MSD

Manual Integrations  
APPROVED

apatel  
6/15/2018 3:16:17 PM

Quant Time: Jun 15 08:40:52 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  | 80576    | 42.337 | ug/l  | 100      |
| 95) Naphthalene            | 13.74 | 128  | 548383   | 49.002 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 179770   | 53.355 | ug/l  | 99       |

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

