

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU080618\  
 Data File : VU025910.D  
 Acq On : 07 Aug 2018 01:30  
 Operator : MD/SY  
 Sample : VN0806WBSD02  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU0806WBSD02

Manual Integrations  
 APPROVED

MMDadoda  
 8/20/2018 5:45:34 PM

Quant Time: Aug 07 04:54:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 00:49:55 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 165104   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 252892   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 243815   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 152833   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 136578   | 53.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.18% |      |
| 35) Dibromofluoromethane  | 4.89   | 113 | 112201   | 51.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.02% |      |
| 50) Toluene-d8            | 7.57   | 98  | 394067   | 51.20 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.40% |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 148150   | 49.59 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.18%  |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85  | 38335  | 15.36  | ug/l | 98     |
| 3) Chloromethane              | 1.33 | 50  | 38848  | 16.29  | ug/l | 100    |
| 4) Vinyl Chloride             | 1.40 | 62  | 42317  | 18.85  | ug/l | 96     |
| 5) Bromomethane               | 1.63 | 94  | 22400  | 20.43  | ug/l | 99     |
| 6) Chloroethane               | 1.70 | 64  | 25382  | 19.34  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.89 | 101 | 62857  | 19.37  | ug/l | 99     |
| 8) Diethyl Ether              | 2.10 | 74  | 22549  | 19.20  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.28 | 101 | 36765  | 19.58  | ug/l | 97     |
| 10) Methyl Iodide             | 2.41 | 142 | 23081  | 19.51  | ug/l | 98     |
| 11) Tert butyl alcohol        | 2.83 | 59  | 58888  | 104.56 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 35681  | 20.13  | ug/l | 92     |
| 13) Acrolein                  | 2.19 | 56  | 32835  | 160.25 | ug/l | 100    |
| 14) Allyl chloride            | 2.59 | 41  | 59313  | 18.62  | ug/l | 100    |
| 15) Acrylonitrile             | 2.94 | 53  | 116166 | 103.30 | ug/l | 98     |
| 16) Acetone                   | 2.32 | 43  | 138110 | 110.12 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.48 | 76  | 112843 | 19.67  | ug/l | 100    |
| 18) Methyl Acetate            | 2.62 | 43  | 58103  | 19.25  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 131685 | 20.50  | ug/l | 98     |
| 20) Methylene Chloride        | 2.70 | 84  | 44282  | 19.92  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 2.99 | 96  | 41802  | 20.40  | ug/l | 98     |
| 22) Diisopropyl ether         | 3.58 | 45  | 132755 | 21.15  | ug/l | 95     |
| 23) Vinyl Acetate             | 3.53 | 43  | 573937 | 104.91 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 76685  | 20.35  | ug/l | 99     |
| 25) 2-Butanone                | 4.27 | 43  | 213993 | 125.34 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 49228  | 14.37  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 46933  | 20.31  | ug/l | 94     |
| 28) Bromochloromethane        | 4.55 | 49  | 35807  | 21.25  | ug/l | 98     |
| 29) Tetrahydrofuran           | 4.64 | 42  | 109349 | 106.90 | ug/l | 98     |
| 30) Chloroform                | 4.68 | 83  | 80873  | 20.33  | ug/l | 99     |
| 31) Cyclohexane               | 5.00 | 56  | 68028  | 19.94  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 74046  | 20.68  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 59309  | 20.07  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.38 | 43  | 64497  | 21.05  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 64999  | 19.42  | ug/l | 97     |

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 Sample : VN0806WBSD02  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU0806WBSD02

Manual Integrations  
 APPROVED

MMDadoda  
 8/20/2018 5:45:34 PM

Quant Time: Aug 07 04:54:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 00:49:55 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 62567    | 18.48  | ug/l   | 93       |
| 40) Benzene                    | 5.39  | 78   | 171076   | 19.80  | ug/l   | 97       |
| 41) Methacrylonitrile          | 4.55  | 41   | 35024    | 20.58  | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 68433    | 20.57  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 5.55  | 43   | 102718   | 20.28  | ug/l   | 99       |
| 44) Trichloroethene            | 6.19  | 130  | 47346    | 19.68  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 6.44  | 63   | 44075    | 19.56  | ug/l   | 96       |
| 46) Dibromomethane             | 6.56  | 93   | 32762    | 20.07  | ug/l   | 99       |
| 47) Bromodichloromethane       | 6.76  | 83   | 62305    | 20.01  | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.63  | 41   | 50575    | 20.38  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 6.62  | 88   | 25249    | 418.05 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 407307   | 128.47 | ug/l   | 100      |
| 52) Toluene                    | 7.64  | 92   | 108900   | 20.29  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 65681    | 18.78  | ug/l   | 92       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 69818    | 19.44  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 45253    | 20.29  | ug/l   | 95       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 62991    | 19.77  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 8.25  | 76   | 74729    | 19.92  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 124973   | 91.23  | ug/l   | 98       |
| 59) 2-Hexanone                 | 8.36  | 43   | 311322   | 125.27 | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 52035    | 19.78  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 49681    | 20.03  | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.23  | 164  | 46301    | 21.57  | ug/l   | 99       |
| 65) Chlorobenzene              | 9.12  | 112  | 125269   | 19.93  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 46332    | 20.37  | ug/l   | 98       |
| 67) Ethyl Benzene              | 9.25  | 91   | 204783   | 19.67  | ug/l   | 99       |
| 68) m/p-Xylenes                | 9.38  | 106  | 162268   | 40.59  | ug/l   | 97       |
| 69) o-Xylene                   | 9.78  | 106  | 78996    | 20.22  | ug/l   | 100      |
| 70) Styrene                    | 9.80  | 104  | 129942   | 20.59  | ug/l   | 98       |
| 71) Bromoform                  | 9.96  | 173  | 40221    | 20.40  | ug/l # | 98       |
| 73) Isopropylbenzene           | 10.17 | 105  | 213361   | 20.45  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.01 | 43   | 87387    | 20.52  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 72982    | 20.23  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 10.50 | 75   | 65478m   | 19.44  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 57923    | 20.13  | ug/l   | 99       |
| 78) n-propylbenzene            | 10.59 | 91   | 243585   | 20.01  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 146829   | 20.59  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 10.78 | 105  | 178623   | 20.16  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 21466m   | 15.98  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.78 | 91   | 172585   | 20.53  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 172725   | 19.62  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 183498   | 20.44  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 11.33 | 105  | 209485   | 19.49  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 189891   | 19.73  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 105504   | 19.76  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 106858   | 19.19  | ug/l   | 99       |
| 89) n-Butylbenzene             | 11.89 | 91   | 165050   | 18.59  | ug/l   | 97       |
| 90) Hexachloroethane           | 12.15 | 117  | 32746    | 19.14  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 102492   | 19.58  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 17785    | 20.80  | ug/l   | 96       |

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Sample : VN0806WBSD02  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 35 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VU0806WBSD02

Manual Integrations  
APPROVED

MMDadoda  
8/20/2018 5:45:34 PM

Quant Time: Aug 07 04:54:55 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 07 00:49:55 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.51 | 180  | 69414    | 19.65 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.70 | 225  | 30836    | 16.56 | ug/l  | 100      |
| 95) Naphthalene            | 13.75 | 128  | 201843   | 18.59 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 68508    | 19.44 | ug/l  | 100      |

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

