

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW122018\  
 Data File : VW007655.D  
 Acq On : 18 Dec 2018 13:51  
 Operator : SY/AP  
 Sample : J6391-08MSD  
 Misc : 4.32G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 P001-SS016-0006-01MSD

Manual Integrations  
 APPROVED

apatel  
 12/19/2018 12:15:15 PM

Quant Time: Dec 19 04:40:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W121118S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 11 02:58:16 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 33100    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 51550    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 39020    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 14343    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.31   | 65  | 18898    | 51.46 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 102.92% |      |
| 35) Dibromofluoromethane    | 7.88   | 113 | 16372    | 52.47 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 104.94% |      |
| 50) Toluene-d8              | 10.32  | 98  | 55657    | 47.57 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 95.14%  |      |
| 62) 4-Bromofluorobenzene    | 12.62  | 95  | 15741    | 36.59 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 73.18%  |      |

| Target Compounds              |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 13264  | 57.344  | ug/l   | 98     |
| 3) Chloromethane              | 2.21 | 50  | 8437   | 43.553  | ug/l   | 100    |
| 4) Vinyl Chloride             | 2.36 | 62  | 12435  | 54.699  | ug/l   | 100    |
| 5) Bromomethane               | 2.78 | 94  | 7333   | 48.009  | ug/l   | 93     |
| 6) Chloroethane               | 2.92 | 64  | 6992   | 55.873  | ug/l   | 95     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 15981  | 78.191  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.68 | 74  | 9474   | 59.225  | ug/l   | 93     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 17015  | 50.453  | ug/l   | 98     |
| 10) Methyl Iodide             | 4.26 | 142 | 26420  | 47.302  | ug/l   | 96     |
| 11) Tert butyl alcohol        | 5.16 | 59  | 7470   | 296.193 | ug/l   | 97     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 17235  | 53.079  | ug/l   | 96     |
| 13) Acrolein                  | 3.90 | 56  | 1760   | 105.465 | ug/l   | 99     |
| 14) Allyl chloride            | 4.66 | 41  | 22892  | 47.830  | ug/l   | 96     |
| 15) Acrylonitrile             | 5.37 | 53  | 16727  | 248.044 | ug/l   | 99     |
| 16) Acetone                   | 4.12 | 43  | 16367  | 255.168 | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.37 | 76  | 49465  | 50.243  | ug/l # | 94     |
| 18) Methyl Acetate            | 4.67 | 43  | 28383  | 163.038 | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 35705  | 72.892  | ug/l   | 94     |
| 20) Methylene Chloride        | 4.90 | 84  | 18566  | 53.179  | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 18977  | 52.245  | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.31 | 45  | 47326  | 51.443  | ug/l   | 95     |
| 23) Vinyl Acetate             | 6.31 | 43  | 36861m | 71.635  | ug/l   |        |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 32544  | 52.341  | ug/l   | 98     |
| 25) 2-Butanone                | 7.17 | 43  | 22938  | 273.927 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 28598  | 69.497  | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 19884  | 49.995  | ug/l   | 96     |
| 28) Bromochloromethane        | 7.51 | 49  | 12113  | 51.792  | ug/l   | 96     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 15187  | 286.485 | ug/l   | 92     |
| 30) Chloroform                | 7.68 | 83  | 35357  | 52.254  | ug/l   | 99     |
| 31) Cyclohexane               | 7.95 | 56  | 22431  | 39.320  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 33643  | 56.699  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 25039  | 53.245  | ug/l   | 98     |
| 37) Ethyl Acetate             | 7.26 | 43  | 4129   | 23.607  | ug/l # | 80     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 29717  | 58.078  | ug/l   | 96     |

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 Quant Title : SW846 8260  
 QLast Update : Tue Dec 11 02:58:16 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 21868    | 38.403   | ug/l   | 95       |
| 40) Benzene                    | 8.32  | 78   | 71457    | 54.754   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.49  | 41   | 4735m    | 47.540   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 25241    | 61.571   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 10144    | 29.361   | ug/l # | 82       |
| 44) Trichloroethene            | 9.09  | 130  | 20125    | 54.003   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 16598    | 54.960   | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 10312    | 60.127   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 25358    | 56.369   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.44  | 41   | 11532    | 64.992   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 3441     | 1236.546 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 49648    | 304.132  | ug/l   | 98       |
| 52) Toluene                    | 10.39 | 92   | 43553    | 51.569   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 22326    | 51.121   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 24013    | 47.563   | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 13832    | 59.259   | ug/l   | 95       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 7416     | 26.433   | ug/l # | 74       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 22996    | 60.023   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 34253    | 264.751  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.97 | 43   | 30452    | 279.757  | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 16840    | 57.168   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 13415    | 58.157   | ug/l   | 95       |
| 64) Tetrachloroethene          | 10.86 | 164  | 13997    | 49.882   | ug/l   | 93       |
| 65) Chlorobenzene              | 11.66 | 112  | 42917    | 52.769   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 16614    | 58.001   | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.73 | 91   | 75701    | 54.138   | ug/l # | 86       |
| 68) m/p-Xylenes                | 11.84 | 106  | 57558    | 105.884  | ug/l   | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 27565    | 54.296   | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 42866    | 52.275   | ug/l   | 97       |
| 71) Bromoform                  | 12.35 | 173  | 9075     | 61.897   | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.47 | 105  | 71365    | 64.935   | ug/l   | 98       |
| 74) N-amyl acetate             | 12.27 | 43   | 4558     | 22.820   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 13170    | 80.908   | ug/l   | 91       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 10894m   | 92.117   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 15887    | 65.215   | ug/l   | 95       |
| 78) n-propylbenzene            | 12.80 | 91   | 74814    | 60.488   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 43760    | 58.473   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 55766    | 60.389   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 4116     | 76.882   | ug/l   | 91       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 45789    | 58.043   | ug/l   | 96       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 49000    | 60.220   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 56111    | 59.047   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 60621    | 54.575   | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 53636    | 53.749   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 25683    | 52.878   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 26062    | 53.373   | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.83 | 91   | 41833    | 45.220   | ug/l   | 100      |
| 90) Hexachloroethane           | 14.10 | 117  | 9705     | 54.659   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 22529    | 51.787   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 2623     | 80.298   | ug/l   | 97       |

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Quant Title : SW846 8260  
QLast Update : Tue Dec 11 02:58:16 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 9448     | 31.558 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 4635     | 29.179 | ug/l  | 98       |
| 95) Naphthalene            | 15.38 | 128  | 24957    | 43.576 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 8072     | 31.038 | ug/l  | 98       |

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

