

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW121318\  
 Data File : VW007413.D  
 Acq On : 12 Dec 2018 00:55  
 Operator : SY/AP  
 Sample : VW1213SBS01  
 Misc : 5.00G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW1213SBS01

Manual Integrations  
 APPROVED

apatel  
 12/19/2018 8:42:07 AM

Quant Time: Dec 12 06:00:16 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  | 83292    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 138150   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 124226   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 62917    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.31   | 65  | 45474    | 49.21 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.42%  |      |
| 35) Dibromofluoromethane    | 7.88   | 113 | 42671    | 51.02 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 102.04% |      |
| 50) Toluene-d8              | 10.32  | 98  | 163592   | 52.17 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 104.34% |      |
| 62) 4-Bromofluorobenzene    | 12.62  | 95  | 62744    | 54.42 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 108.84% |      |

| Target Compounds              |      |     |        |         | Qvalue    |
|-------------------------------|------|-----|--------|---------|-----------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 11916  | 20.472  | ug/l 91   |
| 3) Chloromethane              | 2.21 | 50  | 9980   | 20.473  | ug/l 99   |
| 4) Vinyl Chloride             | 2.37 | 62  | 12126  | 21.197  | ug/l 96   |
| 5) Bromomethane               | 2.78 | 94  | 7910   | 20.580  | ug/l 97   |
| 6) Chloroethane               | 2.93 | 64  | 6139   | 19.495  | ug/l # 78 |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 9918   | 19.284  | ug/l 99   |
| 8) Diethyl Ether              | 3.67 | 74  | 7775   | 19.315  | ug/l 100  |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 17201  | 20.269  | ug/l 97   |
| 10) Methyl Iodide             | 4.26 | 142 | 28663  | 20.393  | ug/l 97   |
| 11) Tert butyl alcohol        | 5.17 | 59  | 7482   | 117.895 | ug/l 99   |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 16348  | 20.008  | ug/l 98   |
| 13) Acrolein                  | 3.89 | 56  | 4461   | 106.232 | ug/l 96   |
| 14) Allyl chloride            | 4.67 | 41  | 24068  | 19.984  | ug/l 98   |
| 15) Acrylonitrile             | 5.37 | 53  | 16548  | 97.517  | ug/l 97   |
| 16) Acetone                   | 4.12 | 43  | 15307  | 94.836  | ug/l 93   |
| 17) Carbon Disulfide          | 4.38 | 76  | 50924  | 20.555  | ug/l 98   |
| 18) Methyl Acetate            | 4.67 | 43  | 8867   | 20.241  | ug/l 98   |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 24576  | 19.938  | ug/l 97   |
| 20) Methylene Chloride        | 4.91 | 84  | 19695  | 19.960  | ug/l 98   |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 18495  | 20.235  | ug/l 94   |
| 22) Diisopropyl ether         | 6.31 | 45  | 46989  | 20.298  | ug/l 95   |
| 23) Vinyl Acetate             | 6.26 | 43  | 125615 | 97.011  | ug/l 96   |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 31861  | 20.364  | ug/l 99   |
| 25) 2-Butanone                | 7.17 | 43  | 19806  | 93.994  | ug/l 97   |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 20834  | 20.120  | ug/l 100  |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 20924  | 20.907  | ug/l 99   |
| 28) Bromochloromethane        | 7.51 | 49  | 11560  | 19.643  | ug/l 99   |
| 29) Tetrahydrofuran           | 7.53 | 42  | 12903  | 96.726  | ug/l 98   |
| 30) Chloroform                | 7.68 | 83  | 34805  | 20.441  | ug/l 96   |
| 31) Cyclohexane               | 7.95 | 56  | 28172  | 19.625  | ug/l 95   |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 30564  | 20.470  | ug/l 99   |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 26392  | 20.942  | ug/l 99   |
| 37) Ethyl Acetate             | 7.25 | 43  | 9013   | 19.228  | ug/l 97   |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 28748  | 20.965  | ug/l 98   |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW121318\  
 Data File : VW007413.D  
 Acq On : 12 Dec 2018 00:55  
 Operator : SY/AP  
 Sample : VW1213SBSD01  
 Misc : 5.00G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VW1213SBSD01

Manual Integrations  
 APPROVED

apatel  
 12/19/2018 8:42:07 AM

Quant Time: Dec 12 06:00:16 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) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 32071    | 21.016  | ug/l   | 89       |
| 40) Benzene                    | 8.32  | 78   | 73478    | 21.009  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 6050     | 22.666  | ug/l # | 90       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 22705    | 20.666  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 18215    | 19.673  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 21141    | 21.168  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 17242    | 21.304  | ug/l   | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 9496     | 20.661  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.65  | 83   | 25456    | 21.115  | ug/l   | 96       |
| 48) Methyl methacrylate        | 9.44  | 41   | 8863     | 18.639  | ug/l   | 91       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 3323     | 445.588 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 45016    | 102.898 | ug/l   | 98       |
| 52) Toluene                    | 10.39 | 92   | 49759    | 21.985  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 24940    | 21.309  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 27993    | 20.689  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 13619    | 21.772  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 15995    | 21.274  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 22503    | 21.917  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 30401    | 87.681  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 29559    | 101.329 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 17444    | 22.097  | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 13166    | 21.298  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 18766    | 21.006  | ug/l   | 93       |
| 65) Chlorobenzene              | 11.66 | 112  | 54773    | 21.154  | ug/l   | 93       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 19171    | 21.022  | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.73 | 91   | 95505    | 21.454  | ug/l   | 92       |
| 68) m/p-Xylenes                | 11.84 | 106  | 74789    | 43.215  | ug/l   | 98       |
| 69) o-Xylene                   | 12.17 | 106  | 35417    | 21.913  | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 57190    | 21.907  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 9561     | 20.483  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.47 | 105  | 97297    | 20.182  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 17369    | 19.824  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 14377    | 20.135  | ug/l   | 95       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 8763m    | 16.892  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 21530    | 20.148  | ug/l   | 95       |
| 78) n-propylbenzene            | 12.81 | 91   | 113758   | 20.967  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 66353    | 20.212  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 84777    | 20.929  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 4289     | 18.263  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 71135    | 20.556  | ug/l   | 96       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 72869    | 20.416  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 85087    | 20.412  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 101022   | 20.733  | ug/l   | 95       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 91049    | 20.800  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 43434    | 20.386  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 43633    | 20.371  | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.83 | 91   | 84469    | 20.815  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 15680    | 20.132  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 39212    | 20.548  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 2788     | 19.457  | ug/l   | 96       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW121318\  
Data File : VW007413.D  
Acq On : 12 Dec 2018 00:55  
Operator : SY/AP  
Sample : VW1213SBSD01  
Misc : 5.00G/5ML/MSVOA\_W/SOIL  
ALS Vial : 32 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VW1213SBSD01

Manual Integrations  
APPROVED

apatel  
12/19/2018 8:42:07 AM

Quant Time: Dec 12 06:00:16 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) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 26039    | 19.828 | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 13253    | 19.020 | ug/l  | 100      |
| 95) Naphthalene            | 15.38 | 128  | 48256    | 19.208 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 22401    | 19.636 | ug/l  | 97       |

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

