

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041819\  
 Data File : VW010042.D  
 Acq On : 18 Apr 2019 13:50  
 Operator : SY/VA  
 Sample : VW0418SBS01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0418SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 4/19/2019 12:52:59 PM

Quant Time: Apr 18 15:53:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W041719S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 18 02:23:40 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 438941   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 710785   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 648176   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 330432   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 291849   | 53.88 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.76% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 238966   | 52.88 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.76% |      |
| 50) Toluene-d8            | 10.32  | 98  | 932681   | 55.08 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.16% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 338565   | 55.00 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.00% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 61201  | 18.286  | ug/l   | 99     |
| 3) Chloromethane              | 2.21 | 50  | 56850  | 16.986  | ug/l   | 91     |
| 4) Vinyl Chloride             | 2.36 | 62  | 72909  | 18.740  | ug/l   | 94     |
| 5) Bromomethane               | 2.77 | 94  | 47687  | 18.239  | ug/l   | 96     |
| 6) Chloroethane               | 2.92 | 64  | 50258  | 19.771  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 44685  | 16.612  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.67 | 74  | 44351  | 19.822  | ug/l   | 92     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.04 | 101 | 87442  | 19.319  | ug/l   | 98     |
| 10) Methyl Iodide             | 4.26 | 142 | 116722 | 18.661  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.18 | 59  | 30333  | 98.310  | ug/l # | 86     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 82526  | 19.018  | ug/l   | 98     |
| 13) Acrolein                  | 3.89 | 56  | 27060  | 83.364  | ug/l   | 99     |
| 14) Allyl chloride            | 4.65 | 41  | 137074 | 17.768  | ug/l   | 100    |
| 15) Acrylonitrile             | 5.36 | 53  | 109885 | 95.429  | ug/l   | 100    |
| 16) Acetone                   | 4.12 | 43  | 117672 | 93.628  | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.38 | 76  | 214705 | 17.323  | ug/l   | 97     |
| 18) Methyl Acetate            | 4.67 | 43  | 55572  | 19.105  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 111288 | 19.745  | ug/l   | 96     |
| 20) Methylene Chloride        | 4.92 | 84  | 109013 | 19.699  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene  | 5.41 | 96  | 89732  | 19.096  | ug/l   | 99     |
| 22) Diisopropyl ether         | 6.31 | 45  | 311950 | 19.935  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 997888 | 101.298 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 179710 | 19.211  | ug/l   | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 168592 | 102.118 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 98729  | 19.076  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 99128  | 19.182  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 72814  | 19.046  | ug/l   | 96     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 107037 | 102.320 | ug/l   | 98     |
| 30) Chloroform                | 7.67 | 83  | 179518 | 19.151  | ug/l   | 96     |
| 31) Cyclohexane               | 7.95 | 56  | 166265 | 18.980  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 139007 | 18.890  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 143086 | 19.707  | ug/l   | 98     |
| 37) Ethyl Acetate             | 7.25 | 43  | 77432  | 20.988  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 8.06 | 117 | 134979 | 19.049  | ug/l   | 99     |

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 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VW0418SBS01

Manual Integrations  
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 4/19/2019 12:52:59 PM

Quant Time: Apr 18 15:53:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W041719S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 18 02:23:40 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 155980   | 18.429  | ug/l   | 100      |
| 40) Benzene                    | 8.32  | 78   | 390887   | 19.690  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 43501    | 20.688  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 131600   | 19.289  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.42  | 43   | 140054   | 20.258  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 96519    | 19.142  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 100100   | 19.183  | ug/l   | 96       |
| 46) Dibromomethane             | 9.45  | 93   | 51926    | 19.199  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.64  | 83   | 132601   | 18.993  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.43  | 41   | 64691    | 19.223  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 15547    | 376.210 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 378595   | 104.555 | ug/l   | 99       |
| 52) Toluene                    | 10.38 | 92   | 243870   | 19.720  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 132951   | 19.207  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 150753   | 19.073  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 72896    | 19.311  | ug/l   | 95       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 94005    | 19.628  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 133390   | 19.715  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 264851   | 117.418 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 256431   | 101.733 | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 83836    | 19.215  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 69848    | 19.451  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 81086    | 19.271  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.66 | 112  | 260837   | 19.661  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 93022    | 19.608  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.73 | 91   | 462739   | 19.550  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 356466   | 40.289  | ug/l   | 100      |
| 69) o-Xylene                   | 12.16 | 106  | 160633   | 19.939  | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 270720   | 19.490  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 49219    | 19.620  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.46 | 105  | 454004   | 19.742  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 128281   | 20.143  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 90815    | 19.988  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 64948m   | 19.639  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 103195   | 19.511  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.80 | 91   | 578181   | 20.285  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 326848   | 19.939  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 383411   | 19.663  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 27905    | 19.896  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 345145   | 20.006  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 320788   | 19.866  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 399870   | 20.227  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 481917   | 19.971  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 421101   | 19.799  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 213551   | 19.974  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 210687   | 19.742  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 416166   | 19.750  | ug/l   | 100      |
| 90) Hexachloroethane           | 14.10 | 117  | 78948    | 19.380  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 193004   | 20.133  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 16240    | 19.973  | ug/l   | 95       |

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Acq On : 18 Apr 2019 13:50  
Operator : SY/VA  
Sample : VW0418SBSD01  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VW0418SBSD01

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W041719S.M  
Quant Title : SW846 8260  
QLast Update : Thu Apr 18 02:23:40 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 122839   | 19.423 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 74506    | 19.400 | ug/l  | 99       |
| 95) Naphthalene            | 15.37 | 128  | 227589   | 19.808 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 111986   | 20.409 | ug/l  | 99       |

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

