

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW031219\  
 Data File : VW009137.D  
 Acq On : 13 Mar 2019 05:47  
 Operator : SY/VA  
 Sample : VW0312SBS03  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0312SBS03

Manual Integrations  
 APPROVED

MMDadoda  
 3/14/2019 3:13:00 PM

Quant Time: Mar 13 07:12:04 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W030719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 08 05:22:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 238639   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 372719   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 355588   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 194181   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 144252   | 60.08 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 120.16% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 121446   | 54.12 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.24% |      |
| 50) Toluene-d8            | 10.32  | 98  | 483777   | 52.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.98% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 178368   | 49.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.32%  |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 54720  | 22.753  | ug/l   | 97     |
| 3) Chloromethane              | 2.21 | 50  | 73286  | 23.987  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.36 | 62  | 68669  | 22.147  | ug/l   | 99     |
| 5) Bromomethane               | 2.77 | 94  | 72329  | 27.635  | ug/l   | 96     |
| 6) Chloroethane               | 2.91 | 64  | 53110  | 24.061  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 85462  | 21.408  | ug/l   | 100    |
| 8) Diethyl Ether              | 3.68 | 74  | 27971  | 22.915  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 51948  | 20.893  | ug/l   | 98     |
| 10) Methyl Iodide             | 4.27 | 142 | 42488  | 17.937  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 5.21 | 59  | 19539  | 106.199 | ug/l # | 82     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 45709  | 21.312  | ug/l   | 97     |
| 13) Acrolein                  | 3.90 | 56  | 16842  | 83.188  | ug/l   | 97     |
| 14) Allyl chloride            | 4.67 | 41  | 79895  | 21.119  | ug/l   | 96     |
| 15) Acrylonitrile             | 5.38 | 53  | 61183  | 114.842 | ug/l   | 98     |
| 16) Acetone                   | 4.14 | 43  | 53278  | 98.337  | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.38 | 76  | 154687 | 21.436  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.68 | 43  | 28502  | 22.877  | ug/l   | 93     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 135431 | 23.871  | ug/l   | 100    |
| 20) Methylene Chloride        | 4.92 | 84  | 62756  | 21.534  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 55643  | 22.469  | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.31 | 45  | 178911 | 23.797  | ug/l   | 98     |
| 23) Vinyl Acetate             | 6.26 | 43  | 519555 | 111.051 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 99133  | 22.733  | ug/l   | 99     |
| 25) 2-Butanone                | 7.18 | 43  | 79226  | 105.808 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 73336  | 18.502  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 59122  | 22.229  | ug/l   | 98     |
| 28) Bromochloromethane        | 7.51 | 49  | 43098  | 23.761  | ug/l   | 95     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 54195  | 114.855 | ug/l   | 98     |
| 30) Chloroform                | 7.67 | 83  | 102218 | 22.768  | ug/l   | 93     |
| 31) Cyclohexane               | 7.95 | 56  | 92143  | 20.579  | ug/l # | 93     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 91042  | 21.974  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 81579  | 20.933  | ug/l   | 97     |
| 37) Ethyl Acetate             | 7.26 | 43  | 38168  | 20.850  | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 81785  | 20.320  | ug/l   | 96     |

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 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
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Manual Integrations  
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 3/14/2019 3:13:00 PM

Quant Time: Mar 13 07:12:04 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W030719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 08 05:22:30 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.33  | 83   | 86802    | 18.700  | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 220684   | 21.213  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.49  | 41   | 22370    | 22.006  | ug/l   | 91       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 72641    | 21.628  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 72120    | 21.153  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 61504    | 21.093  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 56483    | 21.678  | ug/l   | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 30542    | 21.463  | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.64  | 83   | 76284    | 21.177  | ug/l   | 94       |
| 48) Methyl methacrylate        | 9.44  | 41   | 33236    | 20.936  | ug/l   | 92       |
| 49) 1,4-Dioxane                | 9.48  | 88   | 8546     | 419.387 | ug/l # | 76       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 185750   | 107.318 | ug/l   | 99       |
| 52) Toluene                    | 10.38 | 92   | 144211   | 20.440  | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 70322    | 19.738  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 84268    | 20.583  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 41638    | 21.588  | ug/l   | 91       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 48300    | 20.178  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 75475    | 22.090  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 135010   | 108.798 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 122187   | 100.407 | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 51817    | 21.709  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 39677    | 20.984  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 59664    | 23.267  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.66 | 112  | 156324   | 20.197  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 54563    | 21.113  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 275901   | 19.732  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.84 | 106  | 220468   | 39.947  | ug/l   | 100      |
| 69) o-Xylene                   | 12.16 | 106  | 103750   | 20.204  | ug/l   | 97       |
| 70) Styrene                    | 12.18 | 104  | 167007   | 20.101  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 30193    | 21.759  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.46 | 105  | 275766   | 19.831  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 66773    | 20.284  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 48362    | 22.048  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 34206m   | 22.296  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 65416    | 20.589  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.80 | 91   | 335492   | 19.587  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 193481   | 20.105  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 236002   | 19.689  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 12883    | 18.782  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 202822   | 19.772  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 208680   | 20.643  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 241438   | 19.912  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 289369   | 19.320  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 252317   | 18.831  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 132265   | 19.808  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 131045   | 19.859  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.83 | 91   | 229389   | 18.009  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 47167    | 20.411  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 118286   | 20.078  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 8386     | 21.466  | ug/l   | 94       |

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ALS Vial : 29 Sample Multiplier: 1

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MMDadoda  
3/14/2019 3:13:00 PM

Quant Time: Mar 13 07:12:04 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W030719S.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 08 05:22:30 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 74419    | 18.705 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 45940    | 18.435 | ug/l  | 98       |
| 95) Naphthalene            | 15.37 | 128  | 126163   | 19.372 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 66915    | 19.127 | ug/l  | 99       |

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

