

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW111219\  
 Data File : VW013975.D  
 Acq On : 12 Nov 2019 15:11  
 Operator : SY/VA  
 Sample : VW1112SBS01  
 Misc : 5.00G/5.0ML/MSVOA W/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 VW1112SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 11/13/2019 9:33:21 AM

Quant Time: Nov 13 07:07:34 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W102319S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 23 14:11:46 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 259902   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 374030   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 321884   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.55 | 152  | 163886   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 99813    | 51.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.38% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 100531   | 48.37 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.74%  |      |
| 50) Toluene-d8            | 10.32  | 98  | 415651   | 49.08 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.16%  |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 140959   | 49.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.32%  |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 32902  | 24.029  | ug/l | 94     |
| 3) Chloromethane              | 2.21 | 50  | 30446  | 20.690  | ug/l | 95     |
| 4) Vinyl Chloride             | 2.36 | 62  | 50571  | 22.756  | ug/l | 97     |
| 5) Bromomethane               | 2.77 | 94  | 32349  | 22.133  | ug/l | 100    |
| 6) Chloroethane               | 2.92 | 64  | 28988  | 21.557  | ug/l | 91     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 26215  | 18.886  | ug/l | 93     |
| 8) Diethyl Ether              | 3.67 | 74  | 24149  | 21.534  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 50231  | 22.260  | ug/l | 97     |
| 10) Methyl Iodide             | 4.27 | 142 | 79882  | 21.724  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.16 | 59  | 17062  | 146.591 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 50267  | 21.565  | ug/l | 96     |
| 13) Acrolein                  | 3.89 | 56  | 11095  | 83.204  | ug/l | 91     |
| 14) Allyl chloride            | 4.66 | 41  | 75757  | 21.136  | ug/l | 100    |
| 15) Acrylonitrile             | 5.35 | 53  | 49806  | 109.222 | ug/l | 97     |
| 16) Acetone                   | 4.12 | 43  | 44510  | 107.669 | ug/l | 95     |
| 17) Carbon Disulfide          | 4.38 | 76  | 145312 | 21.707  | ug/l | 100    |
| 18) Methyl Acetate            | 4.67 | 43  | 28746  | 25.367  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 59373  | 21.226  | ug/l | 97     |
| 20) Methylene Chloride        | 4.92 | 84  | 56996  | 22.442  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 54559  | 21.747  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.31 | 45  | 141326 | 21.616  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 401473 | 105.830 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 87956  | 21.242  | ug/l | 99     |
| 25) 2-Butanone                | 7.16 | 43  | 68292  | 114.905 | ug/l | 94     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 53141  | 22.195  | ug/l | 95     |
| 27) cis-1,2-Dichloroethene    | 7.16 | 96  | 57706  | 21.656  | ug/l | 97     |
| 28) Bromochloromethane        | 7.51 | 49  | 23560  | 16.883  | ug/l | # 95   |
| 29) Tetrahydrofuran           | 7.52 | 42  | 43153  | 117.278 | ug/l | 98     |
| 30) Chloroform                | 7.67 | 83  | 90416  | 22.089  | ug/l | 97     |
| 31) Cyclohexane               | 7.95 | 56  | 88244  | 20.365  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 70377  | 21.910  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 74035  | 21.254  | ug/l | 98     |
| 37) Ethyl Acetate             | 7.25 | 43  | 28979  | 21.733  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 66603  | 21.233  | ug/l | 96     |

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 Quant Title : SW846 8260  
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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 90583    | 20.137  | ug/l   | 97       |
| 40) Benzene                    | 8.32  | 78   | 212456   | 21.552  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 15717    | 18.902  | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 53303    | 21.457  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 55808    | 21.865  | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 59974    | 21.239  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 50068    | 21.264  | ug/l   | 93       |
| 46) Dibromomethane             | 9.46  | 93   | 24699    | 21.612  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.64  | 83   | 63140    | 21.353  | ug/l   | 94       |
| 48) Methyl methacrylate        | 9.43  | 41   | 27667    | 21.859  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.44  | 88   | 9306     | 551.049 | ug/l # | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 139318   | 109.845 | ug/l   | 100      |
| 52) Toluene                    | 10.38 | 92   | 133497   | 20.994  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 62693    | 20.943  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 77389    | 20.954  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 36775    | 21.591  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 45665    | 21.429  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 61441    | 21.021  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 98027    | 99.952  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.96 | 43   | 94006    | 107.513 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 42733    | 21.131  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 34370    | 21.330  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 51262    | 20.844  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 137982   | 20.861  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 47838    | 20.723  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 251663   | 21.100  | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.84 | 106  | 196767   | 42.701  | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 89689    | 21.175  | ug/l   | 100      |
| 70) Styrene                    | 12.18 | 104  | 152512   | 20.957  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 24534    | 20.252  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.46 | 105  | 250963   | 21.324  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 49318    | 21.662  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 40070    | 21.575  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.76 | 75   | 30279m   | 25.727  | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 59055    | 21.005  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.80 | 91   | 290855   | 21.352  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 164187   | 21.448  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 211824   | 21.321  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 12959    | 20.809  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 173179   | 21.548  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 184674   | 20.941  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 208321   | 21.256  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 254635   | 21.115  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 238095   | 21.195  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 115583   | 21.218  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 114149   | 21.093  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.82 | 91   | 208170   | 20.530  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.09 | 117  | 39916    | 20.443  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 100530   | 21.284  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 5824     | 20.738  | ug/l   | 96       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 65562    | 19.073 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 47024    | 20.264 | ug/l  | 98       |
| 95) Naphthalene            | 15.36 | 128  | 99481    | 18.459 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 55328    | 18.680 | ug/l  | 98       |

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

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