

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW100119\  
 Data File : VW013373.D  
 Acq On : 01 Oct 2019 17:45  
 Operator : SY/VA  
 Sample : VSTDICV050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 ICSVW100119

Manual Integrations  
 APPROVED

MMDadoda  
 10/7/2019 8:22:56 AM

Quant Time: Oct 02 12:04:02 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W100119S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 02 11:49:57 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 367011   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 520779   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 446058   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 221130   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 150110   | 54.78 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.56% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 152584   | 55.84 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.68% |      |
| 50) Toluene-d8            | 10.32  | 98  | 641699   | 56.59 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 113.18% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 220365   | 58.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 116.38% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 71942   | 50.680  | ug/l | 95     |
| 3) Chloromethane              | 2.21 | 50  | 113840  | 48.598  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.35 | 62  | 162151  | 48.775  | ug/l | 98     |
| 5) Bromomethane               | 2.76 | 94  | 101732  | 49.808  | ug/l | 89     |
| 6) Chloroethane               | 2.92 | 64  | 91829   | 47.836  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 76304   | 52.904  | ug/l | 98     |
| 8) Diethyl Ether              | 3.68 | 74  | 84552   | 50.649  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 160668  | 50.245  | ug/l | 99     |
| 10) Methyl Iodide             | 4.27 | 142 | 256233  | 49.618  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.15 | 59  | 76269   | 339.689 | ug/l | 95     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 168786  | 49.959  | ug/l | 97     |
| 13) Acrolein                  | 3.89 | 56  | 70950   | 255.816 | ug/l | 100    |
| 14) Allyl chloride            | 4.66 | 41  | 254194  | 50.860  | ug/l | 98     |
| 15) Acrylonitrile             | 5.37 | 53  | 196736  | 260.696 | ug/l | 98     |
| 16) Acetone                   | 4.11 | 43  | 205043  | 244.106 | ug/l | 95     |
| 17) Carbon Disulfide          | 4.38 | 76  | 482406  | 51.183  | ug/l | 98     |
| 18) Methyl Acetate            | 4.66 | 43  | 92802   | 47.203  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 255014  | 51.285  | ug/l | 99     |
| 20) Methylene Chloride        | 4.92 | 84  | 176361  | 50.304  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 179642  | 49.930  | ug/l | 99     |
| 22) Diisopropyl ether         | 6.31 | 45  | 495555  | 51.343  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 1549896 | 267.613 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 298156  | 50.717  | ug/l | 98     |
| 25) 2-Butanone                | 7.17 | 43  | 267280  | 248.676 | ug/l | 95     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 176969  | 52.098  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 190740  | 50.647  | ug/l | 98     |
| 28) Bromochloromethane        | 7.51 | 49  | 115865  | 54.511  | ug/l | 95     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 166772  | 266.119 | ug/l | 99     |
| 30) Chloroform                | 7.67 | 83  | 283543  | 49.187  | ug/l | 99     |
| 31) Cyclohexane               | 7.95 | 56  | 303851  | 48.465  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 228458  | 50.587  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 247055  | 51.076  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 115987  | 54.318  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 219170  | 52.307  | ug/l | 95     |

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 ALS Vial : 10 Sample Multiplier: 1

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 10/7/2019 8:22:56 AM

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W100119S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 02 11:49:57 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.33  | 83   | 329341   | 51.700   | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 695042   | 50.760   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.48  | 41   | 63602    | 49.413   | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 180944   | 51.416   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 209904   | 52.243   | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 198204   | 51.403   | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 167339   | 50.900   | ug/l   | 100      |
| 46) Dibromomethane             | 9.46  | 93   | 85217    | 52.041   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.64  | 83   | 209257   | 51.910   | ug/l   | 95       |
| 48) Methyl methacrylate        | 9.43  | 41   | 98368    | 50.953   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 29487    | 1171.263 | ug/l # | 85       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 546694   | 258.977  | ug/l   | 98       |
| 52) Toluene                    | 10.38 | 92   | 450210   | 50.976   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 223315   | 53.259   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 268274   | 52.771   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 124463   | 50.951   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 177838   | 54.087   | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 216809   | 51.054   | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 370205   | 274.098  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.96 | 43   | 395765   | 270.483  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 148507   | 53.141   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 123098   | 52.149   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.86 | 164  | 172666   | 50.880   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.66 | 112  | 458494   | 50.172   | ug/l   | 95       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 162101   | 52.081   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.73 | 91   | 858753   | 52.433   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 648176   | 102.530  | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 296966   | 50.806   | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 525388   | 52.582   | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 91758    | 54.375   | ug/l   | 98       |
| 73) Isopropylbenzene           | 12.46 | 105  | 811959   | 50.198   | ug/l   | 98       |
| 74) N-amyl acetate             | 12.27 | 43   | 190719   | 55.403   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 141639   | 51.735   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 109049m  | 55.486   | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 203247   | 52.330   | ug/l   | 98       |
| 78) n-propylbenzene            | 12.80 | 91   | 992395   | 53.337   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 542599   | 52.505   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 712660   | 53.039   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 47214    | 50.995   | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 553080   | 51.091   | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 623383   | 53.116   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 689186   | 51.595   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 837846   | 51.779   | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.49 | 119  | 786640   | 52.456   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 372033   | 50.914   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 383341   | 52.395   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 706436   | 52.252   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.09 | 117  | 129239   | 52.164   | ug/l   | 94       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 338396   | 52.387   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 22938    | 56.014   | ug/l   | 95       |

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Quant Title : SW846 8260  
QLast Update : Wed Oct 02 11:49:57 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 252518   | 54.472 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 164483   | 54.621 | ug/l  | 98       |
| 95) Naphthalene            | 15.36 | 128  | 444856   | 56.887 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 218424   | 53.966 | ug/l  | 99       |

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

