

Data File : VW003254.D  
Acq On : 13 Jun 2018 19:33  
Operator : VA/AP  
Sample : VSTDICV050  
Misc : 5.00G/5ML/MSVOA\_W/SOIL  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
ICVW061318

Manual Integrations  
APPROVED

apatel  
6/14/2018 10:03:40 AM

Quant Time: Jun 14 08:26:56 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W061318S.M  
Quant Title : SW846 8260  
QLast Update : Thu Jun 14 08:20:43 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 280934   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 445573   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 410814   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 218050   | 50.00 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 166891   | 54.85 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.70% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 147642   | 53.33 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.66% |      |
| 50) Toluene-d8            | 10.33  | 98  | 592349   | 53.96 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.92% |      |
| 62) 4-Bromofluorobenzene  | 12.63  | 95  | 214895   | 55.31 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.62% |      |

#### Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 41628   | 49.013  | ug/l   | 89     |
| 3) Chloromethane              | 2.21 | 50  | 110108  | 51.310  | ug/l   | 96     |
| 4) Vinyl Chloride             | 2.35 | 62  | 148484  | 47.465  | ug/l   | 100    |
| 5) Bromomethane               | 2.78 | 94  | 98662   | 47.451  | ug/l   | 93     |
| 6) Chloroethane               | 2.92 | 64  | 99370   | 45.634  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 85254   | 45.490  | ug/l   | 97     |
| 8) Diethyl Ether              | 3.67 | 74  | 67310   | 48.891  | ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 121196  | 46.571  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.26 | 142 | 190683  | 48.449  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.26 | 59  | 44631   | 273.481 | ug/l # | 84     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 119096  | 46.830  | ug/l   | 98     |
| 13) Acrolein                  | 3.90 | 56  | 58566   | 251.004 | ug/l   | 98     |
| 14) Allyl chloride            | 4.66 | 41  | 219165  | 49.752  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.38 | 53  | 145934  | 257.637 | ug/l   | 99     |
| 16) Acetone                   | 4.15 | 43  | 156087  | 244.575 | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.37 | 76  | 356141  | 47.369  | ug/l   | 100    |
| 18) Methyl Acetate            | 4.68 | 43  | 78156   | 51.622  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 248726  | 52.218  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.91 | 84  | 140130  | 51.823  | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 134293  | 48.521  | ug/l   | 99     |
| 22) Diisopropyl ether         | 6.31 | 45  | 458768  | 51.746  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.26 | 43  | 1347766 | 263.800 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 262020  | 49.783  | ug/l   | 99     |
| 25) 2-Butanone                | 7.18 | 43  | 202524  | 255.202 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 164999  | 46.973  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 152763  | 50.243  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 123749  | 56.501  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 7.54 | 42  | 128114  | 264.147 | ug/l   | 99     |
| 30) Chloroform                | 7.68 | 83  | 265566  | 49.527  | ug/l   | 98     |
| 31) Cyclohexane               | 7.96 | 56  | 223609  | 45.476  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 216196  | 48.847  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 205291  | 47.708  | ug/l   | 100    |
| 37) Ethyl Acetate             | 7.26 | 43  | 88698   | 49.756  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 202100  | 47.881  | ug/l   | 99     |

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W061318S.M  
Quant Title : SW846 8260  
QLast Update : Thu Jun 14 08:20:43 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 241428   | 48.489   | ug/l  | 99       |
| 40) Benzene                    | 8.32  | 78   | 577342   | 48.675   | ug/l  | 100      |
| 41) Methacrylonitrile          | 7.49  | 41   | 56958    | 52.067   | ug/l  | 98       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 183840   | 49.470   | ug/l  | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 180216   | 50.913   | ug/l  | 100      |
| 44) Trichloroethene            | 9.10  | 130  | 151623   | 48.242   | ug/l  | 94       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 150989   | 49.996   | ug/l  | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 77623    | 50.203   | ug/l  | 99       |
| 47) Bromodichloromethane       | 9.65  | 83   | 196800   | 49.656   | ug/l  | 99       |
| 48) Methyl methacrylate        | 9.45  | 41   | 89792    | 53.978   | ug/l  | 96       |
| 49) 1,4-Dioxane                | 9.49  | 88   | 24107    | 1032.613 | ug/l  | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.22 | 43   | 472182   | 261.790  | ug/l  | 99       |
| 52) Toluene                    | 10.39 | 92   | 373233   | 49.070   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 204660   | 50.552   | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 231722   | 50.288   | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 108803   | 49.937   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 141330   | 53.418   | ug/l  | 99       |
| 57) 1,3-Dichloropropane        | 10.94 | 76   | 189093   | 50.321   | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 312816   | 263.748  | ug/l  | 99       |
| 59) 2-Hexanone                 | 10.98 | 43   | 336778   | 267.279  | ug/l  | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 131827   | 50.878   | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 103754   | 50.343   | ug/l  | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 131348   | 47.802   | ug/l  | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 411727   | 48.128   | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 146149   | 48.613   | ug/l  | 99       |
| 67) Ethyl Benzene              | 11.74 | 91   | 744099   | 49.068   | ug/l  | 99       |
| 68) m/p-Xylenes                | 11.85 | 106  | 568783   | 98.668   | ug/l  | 98       |
| 69) o-Xylene                   | 12.17 | 106  | 267306   | 50.034   | ug/l  | 100      |
| 70) Styrene                    | 12.19 | 104  | 454392   | 51.098   | ug/l  | 99       |
| 71) Bromoform                  | 12.35 | 173  | 78886    | 50.630   | ug/l  | 100      |
| 73) Isopropylbenzene           | 12.48 | 105  | 747901   | 49.313   | ug/l  | 100      |
| 74) N-amyl acetate             | 12.28 | 43   | 180262   | 52.219   | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 130594   | 50.898   | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 94024m   | 50.440   | ug/l  |          |
| 77) Bromobenzene               | 12.76 | 156  | 173643   | 49.162   | ug/l  | 98       |
| 78) n-propylbenzene            | 12.81 | 91   | 914957   | 49.268   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 514678   | 49.041   | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 635840   | 49.948   | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 41232    | 50.898   | ug/l  | 100      |
| 82) 4-Chlorotoluene            | 13.00 | 91   | 545043   | 48.957   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 538994   | 49.682   | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 652825   | 49.853   | ug/l  | 100      |
| 85) sec-Butylbenzene           | 13.40 | 105  | 793904   | 49.232   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 701011   | 49.287   | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 351390   | 48.428   | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 348849   | 48.361   | ug/l  | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 683654   | 49.312   | ug/l  | 100      |
| 90) Hexachloroethane           | 14.10 | 117  | 127386   | 49.511   | ug/l  | 100      |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 312821   | 49.217   | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 22399    | 51.875   | ug/l  | 99       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW061318\  
Quantitation Report (QT Reviewed)

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.15 | 180  | 218968   | 49.075 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.25 | 225  | 128244   | 47.781 | ug/l  | 99       |
| 95) Naphthalene            | 15.38 | 128  | 397183   | 52.476 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 191561   | 48.775 | ug/l  | 100      |

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

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ALS Vial     : 12      Sample Multiplier: 1
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