

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW083018\  
 Data File : VW005010.D  
 Acq On : 30 Aug 2018 11:23  
 Operator : SY/AP  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 8/31/2018 11:39:09 AM

Quant Time: Aug 30 14:31:16 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 30 01:51:13 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.96  | 168  | 534558   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 775279   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 748448   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 400855   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 182529   | 49.92 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.84% |      |
| 35) Dibromofluoromethane  | 7.89   | 113 | 181709   | 47.30 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.60% |      |
| 50) Toluene-d8            | 10.33  | 98  | 1029960  | 48.83 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.66% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 365864   | 47.58 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.16% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 211279  | 45.75  | ug/l | 99     |
| 3) Chloromethane              | 2.22 | 50  | 337062  | 51.39  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.36 | 62  | 312388  | 47.72  | ug/l | 97     |
| 5) Bromomethane               | 2.78 | 94  | 190733  | 44.57  | ug/l | 100    |
| 6) Chloroethane               | 2.92 | 64  | 183325  | 47.36  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 329419  | 48.67  | ug/l | 97     |
| 8) Diethyl Ether              | 3.69 | 74  | 99083   | 51.48  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.07 | 101 | 209104  | 50.05  | ug/l | 100    |
| 10) Methyl Iodide             | 4.28 | 142 | 237167m | 37.59  | ug/l |        |
| 11) Tert butyl alcohol        | 5.21 | 59  | 58002   | 218.92 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 196495  | 50.34  | ug/l | 96     |
| 13) Acrolein                  | 3.91 | 56  | 73728   | 236.46 | ug/l | 98     |
| 14) Allyl chloride            | 4.68 | 41  | 304097  | 50.59  | ug/l | 98     |
| 15) Acrylonitrile             | 5.38 | 53  | 248237  | 252.91 | ug/l | 99     |
| 16) Acetone                   | 4.15 | 43  | 201539  | 244.41 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.39 | 76  | 787228  | 47.98  | ug/l | 100    |
| 18) Methyl Acetate            | 4.68 | 43  | 106677  | 53.41  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 452239  | 53.91  | ug/l | 96     |
| 20) Methylene Chloride        | 4.92 | 84  | 283530  | 48.40  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 212875  | 50.23  | ug/l | 98     |
| 22) Diisopropyl ether         | 6.32 | 45  | 661592  | 53.92  | ug/l | 99     |
| 23) Vinyl Acetate             | 6.26 | 43  | 1706521 | 272.03 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 372613  | 50.19  | ug/l | 99     |
| 25) 2-Butanone                | 7.18 | 43  | 336565  | 261.73 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 273698  | 42.00  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 232438  | 50.41  | ug/l | 98     |
| 28) Bromochloromethane        | 7.52 | 49  | 161505  | 49.47  | ug/l | 100    |
| 29) Tetrahydrofuran           | 7.54 | 42  | 174896  | 269.24 | ug/l | 98     |
| 30) Chloroform                | 7.68 | 83  | 362325  | 49.62  | ug/l | 99     |
| 31) Cyclohexane               | 7.96 | 56  | 432672  | 54.99  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.88 | 97  | 352528  | 52.47  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 349541  | 53.21  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.26 | 43  | 129385  | 54.64  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 316852  | 49.84  | ug/l | 98     |

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 ALS Vial : 2 Sample Multiplier: 1

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Manual Integrations  
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apatel  
 8/31/2018 11:39:09 AM

Quant Time: Aug 30 14:31:16 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 30 01:51:13 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 472391   | 52.17   | ug/l   | 98       |
| 40) Benzene                    | 8.33  | 78   | 1046468  | 49.77   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.49  | 41   | 76239    | 55.25   | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 8.41  | 62   | 222402   | 47.53   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 243033   | 51.58   | ug/l   | 99       |
| 44) Trichloroethene            | 9.10  | 130  | 266365   | 49.60   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 245363   | 51.00   | ug/l   | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 109087   | 47.91   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.65  | 83   | 277340   | 49.29   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.44  | 41   | 138543   | 49.84   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.48  | 88   | 47940    | 1014.57 | ug/l # | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 906659   | 256.94  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 744792   | 47.74   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 290510   | 48.35   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 339884   | 48.51   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 176472   | 47.35   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 255781   | 52.32   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.94 | 76   | 305919   | 49.88   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 545774   | 259.14  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.98 | 43   | 641715   | 251.17  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 199190   | 48.70   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 173809   | 49.74   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.87 | 164  | 302967   | 55.52   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.66 | 112  | 809161   | 49.21   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 229103   | 50.73   | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.74 | 91   | 1448848  | 51.46   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.85 | 106  | 1155756  | 100.64  | ug/l   | 99       |
| 69) o-Xylene                   | 12.17 | 106  | 546932   | 52.12   | ug/l   | 100      |
| 70) Styrene                    | 12.19 | 104  | 889774   | 51.11   | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 126277   | 50.28   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.47 | 105  | 1465939  | 54.86   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.28 | 43   | 287105   | 56.93   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 219429   | 54.23   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 155776m  | 54.87   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 332489   | 50.71   | ug/l   | 97       |
| 78) n-propylbenzene            | 12.81 | 91   | 1776817  | 53.91   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 1000375  | 52.55   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 1249056  | 52.91   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 61530    | 48.98   | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 1053091  | 51.92   | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 1086755  | 54.81   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 1265065  | 52.81   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 1576544  | 54.16   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 1385992  | 53.15   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 683052   | 49.14   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.59 | 146  | 667746   | 48.50   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.84 | 91   | 1283949  | 52.45   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 212363   | 51.81   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 610353   | 49.89   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 38683    | 55.36   | ug/l   | 97       |

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ALS Vial : 2 Sample Multiplier: 1

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Quant Title : SW846 8260  
QLast Update : Thu Aug 30 01:51:13 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.15 | 180  | 424425   | 49.52 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 259201   | 48.31 | ug/l  | 99       |
| 95) Naphthalene            | 15.38 | 128  | 800895   | 50.02 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 376673   | 49.74 | ug/l  | 99       |

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

