

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF092618\  
 Data File : VF060347.D  
 Acq On : 26 Sep 2018 12:21  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00/5mL/MSVOA F/SOIL  
 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 9/27/2018 9:56:11 AM

Quant Time: Sep 26 17:06:38 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F091918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 20 02:58:42 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 1) Pentafluorobenzene         | 5.03   | 168  | 297966   | 50.00   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 5.75   | 114  | 489713   | 50.00   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 9.91   | 117  | 436921   | 50.00   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.63  | 152  | 235114   | 50.00   | ug/l   | 0.00     |
| System Monitoring Compounds   |        |      |          |         |        |          |
| 33) 1,2-Dichloroethane-d4     | 5.00   | 65   | 194562   | 48.49   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 96.98% |          |
| 35) Dibromofluoromethane      | 4.28   | 113  | 207591   | 47.55   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 95.10% |          |
| 50) Toluene-d8                | 7.69   | 98   | 526647   | 46.32   | ug/l   | -0.01    |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 92.64% |          |
| 62) 4-Bromofluorobenzene      | 11.51  | 95   | 242061   | 49.26   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 98.52% |          |
| Target Compounds              |        |      |          |         |        |          |
|                               |        |      |          |         | Qvalue |          |
| 2) Dichlorodifluoromethane    | 0.99   | 85   | 217472   | 48.508  | ug/l   | 94       |
| 3) Chloromethane              | 1.13   | 50   | 168144   | 41.410  | ug/l   | 98       |
| 4) Vinyl Chloride             | 1.18   | 62   | 181045   | 43.750  | ug/l   | 97       |
| 5) Bromomethane               | 1.36   | 94   | 120993   | 52.135  | ug/l   | 94       |
| 6) Chloroethane               | 1.42   | 64   | 88340    | 44.824  | ug/l   | 99       |
| 7) Trichlorofluoromethane     | 1.54   | 101  | 362032   | 46.959  | ug/l   | 96       |
| 8) Diethyl Ether              | 1.70   | 74   | 58265    | 45.425  | ug/l   | 87       |
| 9) 1,1,2-Trichlorotrifluoroet | 1.90   | 101  | 188624   | 46.005  | ug/l   | 97       |
| 10) Methyl Iodide             | 1.97   | 142  | 298401   | 45.132  | ug/l   | 93       |
| 11) Tert butyl alcohol        | 2.68   | 59   | 68117    | 308.087 | ug/l   | 97       |
| 12) 1,1-Dichloroethene        | 1.85   | 96   | 150878   | 44.496  | ug/l   | 97       |
| 13) Acrolein                  | 2.08   | 56   | 16545    | 220.634 | ug/l   | 93       |
| 14) Allyl chloride            | 2.18   | 41   | 267730   | 45.247  | ug/l   | 99       |
| 15) Acrylonitrile             | 3.06   | 53   | 135577   | 239.256 | ug/l   | 99       |
| 16) Acetone                   | 2.33   | 43   | 333223   | 294.907 | ug/l   | 98       |
| 17) Carbon Disulfide          | 1.90   | 76   | 401666   | 46.655  | ug/l   | 97       |
| 18) Methyl Acetate            | 2.44   | 43   | 96659    | 51.350  | ug/l   | 95       |
| 19) Methyl tert-butyl Ether   | 2.53   | 73   | 426238   | 50.424  | ug/l   | 98       |
| 20) Methylene Chloride        | 2.27   | 84   | 157224m  | 51.782  | ug/l   |          |
| 21) trans-1,2-Dichloroethene  | 2.41   | 96   | 154448   | 44.101  | ug/l   | 98       |
| 22) Diisopropyl ether         | 2.91   | 45   | 540157   | 48.383  | ug/l   | 98       |
| 23) Vinyl Acetate             | 3.33   | 43   | 1107235  | 252.522 | ug/l   | 97       |
| 24) 1,1-Dichloroethane        | 2.99   | 63   | 335316   | 46.312  | ug/l   | 99       |
| 25) 2-Butanone                | 4.49   | 43   | 429813   | 282.610 | ug/l   | 98       |
| 26) 2,2-Dichloropropane       | 3.75   | 77   | 189414   | 45.850  | ug/l   | 100      |
| 27) cis-1,2-Dichloroethene    | 3.62   | 96   | 213642   | 46.435  | ug/l   | 93       |
| 28) Bromochloromethane        | 3.88   | 49   | 136909   | 48.568  | ug/l   | 89       |
| 29) Tetrahydrofuran           | 4.23   | 42   | 150515   | 270.249 | ug/l   | 97       |
| 30) Chloroform                | 4.03   | 83   | 420943   | 48.184  | ug/l   | 100      |
| 31) Cyclohexane               | 3.86   | 56   | 261508   | 42.760  | ug/l   | 98       |
| 32) 1,1,1-Trichloroethane     | 4.26   | 97   | 327587   | 47.522  | ug/l   | 97       |
| 36) 1,1-Dichloropropene       | 4.45   | 75   | 301029   | 49.281  | ug/l   | 95       |
| 37) Ethyl Acetate             | 4.28   | 43   | 122372   | 47.345  | ug/l # | 86       |
| 38) Carbon Tetrachloride      | 4.16   | 117  | 311359m  | 47.455  | ug/l   |          |

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 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
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 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
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apatel  
 9/27/2018 9:56:11 AM

Quant Time: Sep 26 17:06:38 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F091918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 20 02:58:42 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 5.61  | 83   | 296006   | 44.711   | ug/l   | 95       |
| 40) Benzene                    | 4.81  | 78   | 680234   | 49.111   | ug/l   | 100      |
| 41) Methacrylonitrile          | 4.91  | 41   | 75112    | 53.556   | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 5.10  | 62   | 275245   | 53.989   | ug/l   | 97       |
| 43) Isopropyl Acetate          | 7.10  | 43   | 174423   | 56.056   | ug/l # | 91       |
| 44) Trichloroethene            | 5.66  | 130  | 195498   | 47.426   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 6.39  | 63   | 177094   | 49.403   | ug/l   | 90       |
| 46) Dibromomethane             | 6.24  | 93   | 124678   | 48.658   | ug/l   | 96       |
| 47) Bromodichloromethane       | 6.54  | 83   | 298291   | 48.442   | ug/l   | 98       |
| 48) Methyl methacrylate        | 6.87  | 41   | 110906   | 50.775   | ug/l   | 91       |
| 49) 1,4-Dioxane                | 6.85  | 88   | 22952    | 1176.185 | ug/l # | 81       |
| 51) 4-Methyl-2-Pentanone       | 8.39  | 43   | 778229   | 324.502  | ug/l   | 99       |
| 52) Toluene                    | 7.77  | 92   | 432080   | 49.310   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 8.41  | 75   | 257585   | 51.860   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 7.45  | 75   | 317642   | 50.764   | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane      | 8.63  | 97   | 149271   | 56.128   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 8.75  | 69   | 192139   | 59.820   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 8.99  | 76   | 253344   | 57.532   | ug/l   | 94       |
| 58) 2-Chloroethyl Vinyl ether  | 7.76  | 63   | 68319    | 240.607  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.63  | 43   | 580965   | 340.232  | ug/l   | 98       |
| 60) Dibromochloromethane       | 8.86  | 129  | 211766   | 53.424   | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 9.13  | 107  | 151846   | 51.273   | ug/l   | 89       |
| 64) Tetrachloroethene          | 8.29  | 164  | 183115   | 46.232   | ug/l   | 95       |
| 65) Chlorobenzene              | 9.93  | 112  | 498325   | 50.323   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.06 | 131  | 206736   | 50.306   | ug/l   | 96       |
| 67) Ethyl Benzene              | 10.03 | 91   | 898296   | 49.062   | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.27 | 106  | 616149   | 97.405   | ug/l   | 89       |
| 69) o-Xylene                   | 10.82 | 106  | 352080   | 49.623   | ug/l   | 97       |
| 70) Styrene                    | 10.90 | 104  | 481330   | 48.105   | ug/l   | 98       |
| 71) Bromoform                  | 10.88 | 173  | 116888   | 51.790   | ug/l # | 97       |
| 73) Isopropylbenzene           | 11.22 | 105  | 1022821  | 48.459   | ug/l   | 98       |
| 74) N-amyl acetate             | 11.46 | 43   | 256661   | 57.024   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.78 | 83   | 202989   | 54.266   | ug/l   | 91       |
| 76) 1,2,3-Trichloropropane     | 11.88 | 75   | 143018   | 53.398   | ug/l   | 89       |
| 77) Bromobenzene               | 11.59 | 156  | 220176   | 48.404   | ug/l   | 90       |
| 78) n-propylbenzene            | 11.69 | 91   | 1180929  | 58.130   | ug/l   | 94       |
| 79) 2-Chlorotoluene            | 11.80 | 91   | 696455   | 48.916   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 11.91 | 105  | 840311   | 49.458   | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 11.95 | 75   | 72458m   | 51.192   | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.98 | 91   | 677395   | 47.336   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.21 | 119  | 826103   | 47.964   | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 12.29 | 105  | 781468   | 45.296   | ug/l   | 96       |
| 85) sec-Butylbenzene           | 12.39 | 105  | 1078135  | 54.515   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.53 | 119  | 877565   | 55.664   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.55 | 146  | 395173   | 46.491   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.64 | 146  | 410917   | 48.910   | ug/l   | 95       |
| 89) n-Butylbenzene             | 12.92 | 91   | 961140   | 54.431   | ug/l   | 96       |
| 90) Hexachloroethane           | 12.99 | 117  | 231900   | 48.117   | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 13.02 | 146  | 389073   | 47.983   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.71 | 75   | 37024    | 52.718   | ug/l   | 85       |

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Sample : VSTDCCC050  
Misc : 5.00/5mL/MSVOA F/SOIL  
ALS Vial : 30 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
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apatel  
9/27/2018 9:56:11 AM

Quant Time: Sep 26 17:06:38 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F091918S.M  
Quant Title : SW846 8260  
QLast Update : Thu Sep 20 02:58:42 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.27 | 180  | 288611   | 48.970 | ug/l  | 96       |
| 94) Hexachlorobutadiene    | 14.25 | 225  | 187704   | 47.113 | ug/l  | 100      |
| 95) Naphthalene            | 14.52 | 128  | 581253   | 56.252 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 14.66 | 180  | 282226   | 51.824 | ug/l  | 96       |

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

