

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF073118\  
 Data File : VF059727.D  
 Acq On : 1 Aug 2018 1:22  
 Operator : VA/AP  
 Sample : VF0731SBS03  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 100 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0731SBS03

Manual Integrations  
 APPROVED

apatel  
 8/1/2018 4:29:56 PM

Quant Time: Aug 01 08:03:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F073018S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 31 15:23:22 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.   | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|--------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 5.05   | 168  | 160514   | 50.00   | ug/l    | 0.01     |
| 34) 1,4-Difluorobenzene       | 5.77   | 114  | 225512   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 9.93   | 117  | 224336   | 50.00   | ug/l    | 0.01     |
| 72) 1,4-Dichlorobenzene-d4    | 12.64  | 152  | 149716   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |        |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 5.03   | 65   | 152140   | 52.74   | ug/l    | 0.01     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 105.48% |          |
| 35) Dibromofluoromethane      | 4.29   | 113  | 124727   | 53.25   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 106.50% |          |
| 50) Toluene-d8                | 7.71   | 98   | 265278   | 48.57   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 97.14%  |          |
| 62) 4-Bromofluorobenzene      | 11.51  | 95   | 147187   | 48.68   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 97.36%  |          |
| Target Compounds              |        |      |          |         |         |          |
|                               |        |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 0.99   | 85   | 57663    | 29.659  | ug/l    | 97       |
| 3) Chloromethane              | 1.08   | 50   | 23700    | 22.743  | ug/l    | 98       |
| 4) Vinyl Chloride             | 1.15   | 62   | 26942    | 25.257  | ug/l    | 96       |
| 5) Bromomethane               | 1.34   | 94   | 23529    | 26.855  | ug/l    | 89       |
| 6) Chloroethane               | 1.42   | 64   | 17759    | 27.373  | ug/l #  | 83       |
| 7) Trichlorofluoromethane     | 1.53   | 101  | 78704m   | 26.256  | ug/l    |          |
| 8) Diethyl Ether              | 1.70   | 74   | 10049    | 19.606  | ug/l    | 87       |
| 9) 1,1,2-Trichlorotrifluoroet | 1.89   | 101  | 43369    | 27.624  | ug/l    | 95       |
| 10) Methyl Iodide             | 1.96   | 142  | 62401    | 26.440  | ug/l    | 99       |
| 11) Tert butyl alcohol        | 2.70   | 59   | 11435    | 97.420  | ug/l    | 100      |
| 12) 1,1-Dichloroethene        | 1.84   | 96   | 29237    | 23.520  | ug/l    | 87       |
| 13) Acrolein                  | 2.18   | 56   | 612      | 25.464  | ug/l    | 85       |
| 14) Allyl chloride            | 2.19   | 41   | 45252    | 22.801  | ug/l    | 94       |
| 15) Acrylonitrile             | 3.08   | 53   | 20444    | 109.719 | ug/l    | 96       |
| 16) Acetone                   | 2.34   | 43   | 49463    | 95.326  | ug/l #  | 93       |
| 17) Carbon Disulfide          | 1.89   | 76   | 79294m   | 28.852  | ug/l    |          |
| 18) Methyl Acetate            | 2.45   | 43   | 23775    | 27.262  | ug/l    | 98       |
| 19) Methyl tert-butyl Ether   | 2.54   | 73   | 84596    | 22.316  | ug/l    | 100      |
| 20) Methylene Chloride        | 2.28   | 84   | 30923m   | 23.577  | ug/l    |          |
| 21) trans-1,2-Dichloroethene  | 2.41   | 96   | 28974    | 25.371  | ug/l    | 95       |
| 22) Diisopropyl ether         | 2.93   | 45   | 93081    | 22.178  | ug/l    | 99       |
| 23) Vinyl Acetate             | 3.33   | 43   | 209546   | 97.112  | ug/l #  | 96       |
| 24) 1,1-Dichloroethane        | 3.00   | 63   | 71552    | 24.539  | ug/l    | 98       |
| 25) 2-Butanone                | 4.51   | 43   | 50784    | 87.699  | ug/l #  | 81       |
| 26) 2,2-Dichloropropane       | 3.77   | 77   | 48185    | 23.181  | ug/l    | 95       |
| 27) cis-1,2-Dichloroethene    | 3.63   | 96   | 33908    | 21.716  | ug/l    | 97       |
| 28) Bromochloromethane        | 3.89   | 49   | 25359    | 22.448  | ug/l    | 95       |
| 29) Tetrahydrofuran           | 4.25   | 42   | 22545    | 101.297 | ug/l    | 97       |
| 30) Chloroform                | 4.04   | 83   | 98557    | 23.949  | ug/l    | 95       |
| 31) Cyclohexane               | 3.86   | 56   | 36257    | 23.468  | ug/l    | 98       |
| 32) 1,1,1-Trichloroethane     | 4.28   | 97   | 81583    | 25.557  | ug/l    | 93       |
| 36) 1,1-Dichloropropene       | 4.46   | 75   | 57507    | 23.060  | ug/l    | 97       |
| 37) Ethyl Acetate             | 4.31   | 43   | 25163    | 19.534  | ug/l #  | 93       |
| 38) Carbon Tetrachloride      | 4.17   | 117  | 89381m   | 24.928  | ug/l    |          |

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 Quant Title : SW846 8260  
 QLast Update : Tue Jul 31 15:23:22 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 5.63  | 83   | 43669    | 22.719  | ug/l   | 95       |
| 40) Benzene                    | 4.81  | 78   | 102458   | 22.498  | ug/l   | 100      |
| 41) Methacrylonitrile          | 4.93  | 41   | 12359    | 20.090  | ug/l # | 94       |
| 42) 1,2-Dichloroethane         | 5.12  | 62   | 80104    | 25.133  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 7.12  | 43   | 22685    | 16.823  | ug/l # | 95       |
| 44) Trichloroethene            | 5.68  | 130  | 41544    | 24.516  | ug/l   | 80       |
| 45) 1,2-Dichloropropane        | 6.41  | 63   | 27118    | 22.548  | ug/l   | 91       |
| 46) Dibromomethane             | 6.26  | 93   | 26396    | 23.117  | ug/l   | 97       |
| 47) Bromodichloromethane       | 6.55  | 83   | 70554    | 22.690  | ug/l # | 86       |
| 48) Methyl methacrylate        | 6.88  | 41   | 17031    | 16.791  | ug/l   | 91       |
| 49) 1,4-Dioxane                | 6.88  | 88   | 2485     | 348.265 | ug/l # | 87       |
| 51) 4-Methyl-2-Pentanone       | 8.41  | 43   | 99670    | 97.166  | ug/l   | 92       |
| 52) Toluene                    | 7.79  | 92   | 73272    | 22.729  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 8.43  | 75   | 54521    | 20.207  | ug/l   | 90       |
| 54) cis-1,3-Dichloropropene    | 7.46  | 75   | 52834    | 20.217  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 8.64  | 97   | 26603    | 21.569  | ug/l   | 95       |
| 56) Ethyl methacrylate         | 8.76  | 69   | 23327    | 18.135  | ug/l   | 93       |
| 57) 1,3-Dichloropropane        | 9.00  | 76   | 45192    | 21.358  | ug/l   | 93       |
| 58) 2-Chloroethyl Vinyl ether  | 7.79  | 63   | 17805    | 119.888 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.64  | 43   | 66818    | 81.287  | ug/l   | 97       |
| 60) Dibromochloromethane       | 8.87  | 129  | 46511    | 21.370  | ug/l   | 95       |
| 61) 1,2-Dibromoethane          | 9.14  | 107  | 31821    | 22.094  | ug/l   | 93       |
| 64) Tetrachloroethene          | 8.31  | 164  | 44158    | 27.138  | ug/l   | 94       |
| 65) Chlorobenzene              | 9.95  | 112  | 102716   | 22.889  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.07 | 131  | 49841    | 23.789  | ug/l   | 96       |
| 67) Ethyl Benzene              | 10.04 | 91   | 179153   | 23.073  | ug/l   | 94       |
| 68) m/p-Xylenes                | 10.27 | 106  | 122727   | 46.360  | ug/l   | 89       |
| 69) o-Xylene                   | 10.83 | 106  | 67551    | 23.611  | ug/l   | 99       |
| 70) Styrene                    | 10.90 | 104  | 99903    | 23.050  | ug/l   | 93       |
| 71) Bromoform                  | 10.89 | 173  | 31025    | 22.725  | ug/l   | 96       |
| 73) Isopropylbenzene           | 11.23 | 105  | 226951   | 23.103  | ug/l   | 96       |
| 74) N-amyl acetate             | 11.46 | 43   | 43898    | 17.712  | ug/l   | 92       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.79 | 83   | 39184    | 21.190  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.89 | 75   | 32812    | 20.867  | ug/l   | 97       |
| 77) Bromobenzene               | 11.59 | 156  | 57403    | 22.377  | ug/l   | 94       |
| 78) n-propylbenzene            | 11.69 | 91   | 264801   | 23.658  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.82 | 91   | 164966   | 23.724  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.92 | 105  | 208203   | 24.212  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.96 | 75   | 12894m   | 19.800  | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.99 | 91   | 173682   | 23.532  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 12.21 | 119  | 203948   | 23.127  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 12.29 | 105  | 210029   | 24.228  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 12.39 | 105  | 266417   | 23.719  | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 12.54 | 119  | 232759   | 23.662  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.56 | 146  | 114925   | 24.443  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.65 | 146  | 111028   | 24.062  | ug/l   | 95       |
| 89) n-Butylbenzene             | 12.92 | 91   | 221208   | 23.611  | ug/l   | 92       |
| 90) Hexachloroethane           | 13.00 | 117  | 60463    | 24.402  | ug/l   | 76       |
| 91) 1,2-Dichlorobenzene        | 13.02 | 146  | 109411   | 24.473  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.71 | 75   | 9427     | 20.854  | ug/l   | 96       |

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Quant Title : SW846 8260  
QLast Update : Tue Jul 31 15:23:22 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.27 | 180  | 79308    | 21.601 | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 14.25 | 225  | 56786    | 23.124 | ug/l  | 97       |
| 95) Naphthalene            | 14.52 | 128  | 128012   | 19.832 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.67 | 180  | 78826    | 22.094 | ug/l  | 97       |

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

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