

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF073118\  
 Data File : VF059702.D  
 Acq On : 31 Jul 2018 11:56  
 Operator : VA/AP  
 Sample : VF0731SBS01  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 83 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0731SBS01

Manual Integrations  
 APPROVED

apatel  
 8/1/2018 2:08:25 PM

Quant Time: Jul 31 13:17:34 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F073018S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 31 05:19:18 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc      | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-----------|--------|----------|
| 1) Pentafluorobenzene         | 5.05  | 168  | 203658   | 50.00     | ug/l   | 0.01     |
| 34) 1,4-Difluorobenzene       | 5.77  | 114  | 290352   | 50.00     | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 9.91  | 117  | 323224   | 50.00     | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.63 | 152  | 178176   | 50.00     | ug/l   | 0.00     |
| System Monitoring Compounds   |       |      |          |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 5.02  | 65   | 179752   | 49.11     | ug/l   | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 98.22% |          |
| 35) Dibromofluoromethane      | 4.29  | 113  | 148075   | 49.10     | ug/l   | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 98.20% |          |
| 50) Toluene-d8                | 7.71  | 98   | 332727   | 47.31     | ug/l   | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 94.62% |          |
| 62) 4-Bromofluorobenzene      | 11.51 | 95   | 176880   | 45.43     | ug/l   | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =         | 90.86% |          |
| Target Compounds              |       |      |          |           |        |          |
|                               |       |      |          |           | Qvalue |          |
| 2) Dichlorodifluoromethane    | 0.98  | 85   | 2666     | Below Cal | #      | 59       |
| 3) Chloromethane              | 1.08  | 50   | 8054     | 2.094     | ug/l # | 79       |
| 4) Vinyl Chloride             | 1.15  | 62   | 10506    | 5.027     | ug/l   | 93       |
| 5) Bromomethane               | 1.33  | 94   | 13977    | 10.140    | ug/l   | 93       |
| 6) Chloroethane               | 1.42  | 64   | 12268    | 12.742    | ug/l # | 82       |
| 7) Trichlorofluoromethane     | 1.54  | 101  | 61141m   | 16.076    | ug/l   |          |
| 8) Diethyl Ether              | 1.69  | 74   | 10452    | 16.072    | ug/l   | 94       |
| 9) 1,1,2-Trichlorotrifluoroet | 1.90  | 101  | 40697    | 20.431    | ug/l   | 93       |
| 10) Methyl Iodide             | 1.96  | 142  | 58825    | 18.597    | ug/l   | 94       |
| 11) Tert butyl alcohol        | 2.67  | 59   | 14270    | 95.794    | ug/l # | 75       |
| 12) 1,1-Dichloroethene        | 1.84  | 96   | 30125    | 19.101    | ug/l   | 97       |
| 13) Acrolein                  | 2.09  | 56   | 4568     | 71.361    | ug/l   | 95       |
| 14) Allyl chloride            | 2.19  | 41   | 52792    | 20.965    | ug/l   | 97       |
| 15) Acrylonitrile             | 3.06  | 53   | 25161    | 106.430   | ug/l   | 98       |
| 16) Acetone                   | 2.34  | 43   | 71272    | 108.258   | ug/l   | 96       |
| 17) Carbon Disulfide          | 1.83  | 76   | 61477m   | 15.214    | ug/l   |          |
| 18) Methyl Acetate            | 2.44  | 43   | 19929    | 16.140    | ug/l   | 99       |
| 19) Methyl tert-butyl Ether   | 2.53  | 73   | 94267    | 19.600    | ug/l   | 99       |
| 20) Methylene Chloride        | 2.28  | 84   | 34061    | 19.377    | ug/l # | 80       |
| 21) trans-1,2-Dichloroethene  | 2.41  | 96   | 33532    | 22.906    | ug/l   | 92       |
| 22) Diisopropyl ether         | 2.92  | 45   | 113495   | 21.313    | ug/l   | 97       |
| 23) Vinyl Acetate             | 3.33  | 43   | 297269   | 108.581   | ug/l   | 98       |
| 24) 1,1-Dichloroethane        | 3.01  | 63   | 78566    | 21.236    | ug/l   | 99       |
| 25) 2-Butanone                | 4.51  | 43   | 73631    | 100.216   | ug/l # | 72       |
| 26) 2,2-Dichloropropane       | 3.75  | 77   | 60675    | 23.006    | ug/l   | 99       |
| 27) cis-1,2-Dichloroethene    | 3.63  | 96   | 41532    | 20.964    | ug/l   | 93       |
| 28) Bromochloromethane        | 3.88  | 49   | 31636    | 21.987    | ug/l # | 81       |
| 29) Tetrahydrofuran           | 4.25  | 42   | 29120    | 103.122   | ug/l   | 98       |
| 30) Chloroform                | 4.03  | 83   | 114832   | 21.992    | ug/l   | 98       |
| 31) Cyclohexane               | 3.85  | 56   | 41982    | 21.025    | ug/l # | 89       |
| 32) 1,1,1-Trichloroethane     | 4.27  | 97   | 87831    | 21.686    | ug/l   | 98       |
| 36) 1,1-Dichloropropene       | 4.45  | 75   | 71151    | 21.992    | ug/l   | 97       |
| 37) Ethyl Acetate             | 4.29  | 43   | 33667    | 20.500    | ug/l # | 60       |
| 38) Carbon Tetrachloride      | 4.17  | 117  | 108438   | 23.490    | ug/l   | 95       |

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 Quant Title : SW846 8260  
 QLast Update : Tue Jul 31 05:19:18 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 5.63  | 83   | 55863    | 22.543  | ug/l   | 93       |
| 40) Benzene                    | 4.81  | 78   | 124753   | 21.276  | ug/l   | 97       |
| 41) Methacrylonitrile          | 4.92  | 41   | 16190    | 20.493  | ug/l # | 85       |
| 42) 1,2-Dichloroethane         | 5.11  | 62   | 85399    | 20.811  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 7.12  | 43   | 32959    | 18.984  | ug/l # | 83       |
| 44) Trichloroethene            | 5.68  | 130  | 49966    | 22.514  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 6.40  | 63   | 33395    | 21.566  | ug/l   | 93       |
| 46) Dibromomethane             | 6.25  | 93   | 29027    | 19.744  | ug/l   | 93       |
| 47) Bromodichloromethane       | 6.54  | 83   | 83652    | 20.895  | ug/l   | 97       |
| 48) Methyl methacrylate        | 6.87  | 41   | 24886    | 19.057  | ug/l   | 88       |
| 49) 1,4-Dioxane                | 6.87  | 88   | 3586     | 401.740 | ug/l # | 75       |
| 51) 4-Methyl-2-Pentanone       | 8.41  | 43   | 129232   | 97.851  | ug/l   | 93       |
| 52) Toluene                    | 7.78  | 92   | 94969    | 22.899  | ug/l   | 94       |
| 53) t-1,3-Dichloropropene      | 8.43  | 75   | 72451    | 20.856  | ug/l   | 90       |
| 54) cis-1,3-Dichloropropene    | 7.46  | 75   | 76614    | 22.769  | ug/l   | 94       |
| 55) 1,1,2-Trichloroethane      | 8.63  | 97   | 31796    | 20.022  | ug/l   | 88       |
| 56) Ethyl methacrylate         | 8.76  | 69   | 32961    | 19.902  | ug/l   | 92       |
| 57) 1,3-Dichloropropane        | 9.00  | 76   | 56164    | 20.616  | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether  | 7.78  | 63   | 20759    | 108.564 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.63  | 43   | 104320   | 98.568  | ug/l   | 95       |
| 60) Dibromochloromethane       | 8.86  | 129  | 55770    | 19.902  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.14  | 107  | 38759    | 20.902  | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.31  | 164  | 50411    | 20.496  | ug/l   | 96       |
| 65) Chlorobenzene              | 9.93  | 112  | 129219   | 19.985  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.07 | 131  | 60332    | 19.986  | ug/l   | 91       |
| 67) Ethyl Benzene              | 10.04 | 91   | 234181   | 20.933  | ug/l   | 96       |
| 68) m/p-Xylenes                | 10.27 | 106  | 162792   | 41.995  | ug/l   | 94       |
| 69) o-Xylene                   | 10.83 | 106  | 83050    | 20.148  | ug/l   | 96       |
| 70) Styrene                    | 10.90 | 104  | 124687   | 19.967  | ug/l   | 96       |
| 71) Bromoform                  | 10.89 | 173  | 34897    | 17.741  | ug/l # | 93       |
| 73) Isopropylbenzene           | 11.23 | 105  | 275306   | 23.549  | ug/l   | 95       |
| 74) N-amyl acetate             | 11.46 | 43   | 58487    | 19.829  | ug/l   | 93       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.79 | 83   | 45168    | 20.524  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.89 | 75   | 41696    | 22.281  | ug/l   | 90       |
| 77) Bromobenzene               | 11.59 | 156  | 67626    | 22.152  | ug/l   | 96       |
| 78) n-propylbenzene            | 11.69 | 91   | 322130   | 24.306  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.81 | 91   | 197877   | 23.950  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.91 | 105  | 255440   | 25.122  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.96 | 75   | 21922    | 28.287  | ug/l   | 86       |
| 82) 4-Chlorotoluene            | 11.99 | 91   | 213654   | 24.471  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.21 | 119  | 244218   | 23.270  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 12.29 | 105  | 253245   | 24.613  | ug/l   | 95       |
| 85) sec-Butylbenzene           | 12.39 | 105  | 324806   | 24.445  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 12.54 | 119  | 277277   | 23.692  | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 12.56 | 146  | 128825   | 22.650  | ug/l   | 96       |
| 88) 1,4-Dichlorobenzene        | 12.65 | 146  | 125886   | 22.715  | ug/l   | 95       |
| 89) n-Butylbenzene             | 12.92 | 91   | 265563   | 23.875  | ug/l   | 97       |
| 90) Hexachloroethane           | 12.99 | 117  | 71645    | 24.297  | ug/l   | 94       |
| 91) 1,2-Dichlorobenzene        | 13.02 | 146  | 123912   | 23.059  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.71 | 75   | 10103    | 18.779  | ug/l   | 92       |

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Quant Title : SW846 8260  
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Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.26 | 180  | 97892    | 22.601 | µg/l  | 98       |
| 94) Hexachlorobutadiene    | 14.25 | 225  | 64606    | 22.107 | µg/l  | 99       |
| 95) Naphthalene            | 14.52 | 128  | 159444   | 20.756 | µg/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.67 | 180  | 90107    | 21.221 | µg/l  | 97       |

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

