

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF080218\  
 Data File : VF059819.D  
 Acq On : 2 Aug 2018 23:48  
 Operator : VA/AP  
 Sample : VF0802SBSD01  
 Misc : 5.00µg/5mL/MSVOA F/SOIL  
 ALS Vial : 100 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VF0802SBSD01

Manual Integrations  
 APPROVED

apatel  
 8/3/2018 4:02:20 PM

Quant Time: Aug 03 08:02:41 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      | 5.03  | 168  | 199767   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.75  | 114  | 301316   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 281663   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.62 | 152  | 171737   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 5.00   | 65  | 169976   | 47.34 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.68% |      |
| 35) Dibromofluoromethane  | 4.29   | 113 | 146850   | 46.92 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.84% |      |
| 50) Toluene-d8            | 7.70   | 98  | 347116   | 47.56 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.12% |      |
| 62) 4-Bromofluorobenzene  | 11.50  | 95  | 186852   | 46.25 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.50% |      |

## Target Compounds

|                               |      |     |        |        |        | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 0.98 | 85  | 56152  | 21.83  | ug/l   | 93     |
| 3) Chloromethane              | 1.08 | 50  | 30612  | 23.81  | ug/l   | 98     |
| 4) Vinyl Chloride             | 1.15 | 62  | 31679  | 23.64  | ug/l # | 85     |
| 5) Bromomethane               | 1.33 | 94  | 26324  | 23.68  | ug/l   | 91     |
| 6) Chloroethane               | 1.41 | 64  | 18722  | 22.46  | ug/l # | 78     |
| 7) Trichlorofluoromethane     | 1.53 | 101 | 70477m | 18.89  | ug/l   |        |
| 8) Diethyl Ether              | 1.70 | 74  | 12892  | 20.21  | ug/l   | 71     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.89 | 101 | 45910  | 23.50  | ug/l   | 96     |
| 10) Methyl Iodide             | 1.95 | 142 | 68188  | 22.72  | ug/l   | 94     |
| 11) Tert butyl alcohol        | 2.70 | 59  | 18039  | 123.88 | ug/l # | 91     |
| 12) 1,1-Dichloroethene        | 1.85 | 96  | 33427  | 21.61  | ug/l   | 90     |
| 13) Acrolein                  | 2.09 | 56  | 3166   | 55.14  | ug/l   | 91     |
| 14) Allyl chloride            | 2.19 | 41  | 56999  | 23.08  | ug/l # | 77     |
| 15) Acrylonitrile             | 3.07 | 53  | 31922  | 137.64 | ug/l # | 88     |
| 16) Acetone                   | 2.33 | 43  | 55078  | 85.29  | ug/l # | 92     |
| 17) Carbon Disulfide          | 1.88 | 76  | 82618  | 23.14  | ug/l # | 92     |
| 18) Methyl Acetate            | 2.45 | 43  | 34050  | 32.20  | ug/l   | 94     |
| 19) Methyl tert-butyl Ether   | 2.54 | 73  | 100426 | 21.29  | ug/l   | 97     |
| 20) Methylene Chloride        | 2.27 | 84  | 36178m | 21.67  | ug/l   |        |
| 21) trans-1,2-Dichloroethene  | 2.40 | 96  | 34455  | 24.12  | ug/l   | 97     |
| 22) Diisopropyl ether         | 2.92 | 45  | 123410 | 23.63  | ug/l   | 98     |
| 23) Vinyl Acetate             | 3.33 | 43  | 274252 | 102.13 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 2.99 | 63  | 79213  | 21.83  | ug/l   | 99     |
| 25) 2-Butanone                | 4.50 | 43  | 76255  | 105.81 | ug/l # | 82     |
| 26) 2,2-Dichloropropane       | 3.74 | 77  | 52184  | 20.17  | ug/l   | 94     |
| 27) cis-1,2-Dichloroethene    | 3.62 | 96  | 41407  | 21.31  | ug/l   | 94     |
| 28) Bromochloromethane        | 3.88 | 49  | 29522  | 20.67  | ug/l   | 86     |
| 29) Tetrahydrofuran           | 4.26 | 42  | 31718  | 114.51 | ug/l   | 95     |
| 30) Chloroform                | 4.03 | 83  | 108185 | 21.12  | ug/l   | 97     |
| 31) Cyclohexane               | 3.86 | 56  | 45482  | 23.69  | ug/l   | 93     |
| 32) 1,1,1-Trichloroethane     | 4.27 | 97  | 83782  | 21.09  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 4.45 | 75  | 70067  | 20.65  | ug/l   | 96     |
| 37) Ethyl Acetate             | 4.29 | 43  | 39492  | 23.84  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 4.17 | 117 | 92417  | 19.29  | ug/l   | 98     |

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 ALS Vial : 100 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleID :  
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apatel  
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Quant Time: Aug 03 08:02:41 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) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 5.62  | 83   | 55829    | 21.53  | ug/l   | 95       |
| 40) Benzene                    | 4.80  | 78   | 129812   | 21.33  | ug/l   | 97       |
| 41) Methacrylonitrile          | 4.92  | 41   | 16828    | 20.53  | ug/l # | 87       |
| 42) 1,2-Dichloroethane         | 5.10  | 62   | 82680    | 19.41  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 7.10  | 43   | 34590    | 19.20  | ug/l # | 88       |
| 44) Trichloroethene            | 5.67  | 130  | 48024    | 20.42  | ug/l   | 90       |
| 45) 1,2-Dichloropropane        | 6.39  | 63   | 34970    | 21.76  | ug/l   | 89       |
| 46) Dibromomethane             | 6.25  | 93   | 31285    | 20.51  | ug/l   | 84       |
| 47) Bromodichloromethane       | 6.54  | 83   | 84039    | 20.23  | ug/l   | 98       |
| 48) Methyl methacrylate        | 6.87  | 41   | 25693    | 18.96  | ug/l   | 92       |
| 49) 1,4-Dioxane                | 6.87  | 88   | 3948     | 431.52 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.40  | 43   | 154593   | 112.79 | ug/l   | 99       |
| 52) Toluene                    | 7.76  | 92   | 92532    | 21.33  | ug/l   | 88       |
| 53) t-1,3-Dichloropropene      | 8.42  | 75   | 69869    | 19.38  | ug/l   | 90       |
| 54) cis-1,3-Dichloropropene    | 7.45  | 75   | 72900    | 20.88  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 8.63  | 97   | 35127    | 21.31  | ug/l   | 91       |
| 56) Ethyl methacrylate         | 8.75  | 69   | 37732    | 21.95  | ug/l   | 94       |
| 57) 1,3-Dichloropropane        | 8.99  | 76   | 60146    | 21.27  | ug/l   | 94       |
| 58) 2-Chloroethyl Vinyl ether  | 7.77  | 63   | 20120    | 101.39 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.62  | 43   | 109555   | 99.75  | ug/l   | 92       |
| 60) Dibromochloromethane       | 8.85  | 129  | 58968    | 20.28  | ug/l   | 87       |
| 61) 1,2-Dibromoethane          | 9.12  | 107  | 42565    | 22.12  | ug/l   | 100      |
| 64) Tetrachloroethene          | 8.30  | 164  | 52792    | 25.61  | ug/l   | 95       |
| 65) Chlorobenzene              | 9.93  | 112  | 124347   | 22.07  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.06 | 131  | 57104    | 21.71  | ug/l   | 97       |
| 67) Ethyl Benzene              | 10.03 | 91   | 223879   | 22.97  | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.26 | 106  | 155513   | 46.87  | ug/l   | 96       |
| 69) o-Xylene                   | 10.82 | 106  | 85336    | 23.76  | ug/l   | 98       |
| 70) Styrene                    | 10.90 | 104  | 124334   | 22.85  | ug/l   | 96       |
| 71) Bromoform                  | 10.88 | 173  | 38537    | 22.48  | ug/l   | 90       |
| 73) Isopropylbenzene           | 11.22 | 105  | 276532   | 24.54  | ug/l   | 99       |
| 74) N-amyl acetate             | 11.46 | 43   | 67983    | 23.91  | ug/l   | 92       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.78 | 83   | 58153    | 27.42  | ug/l   | 94       |
| 76) 1,2,3-Trichloropropane     | 11.88 | 75   | 42843    | 23.75  | ug/l   | 91       |
| 77) Bromobenzene               | 11.59 | 156  | 72673    | 24.70  | ug/l   | 91       |
| 78) n-propylbenzene            | 11.68 | 91   | 301364   | 23.43  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.81 | 91   | 192002   | 24.14  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.90 | 105  | 237776   | 24.08  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.95 | 75   | 14461m   | 19.36  | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.98 | 91   | 200353   | 23.69  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.21 | 119  | 236474   | 23.38  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 12.28 | 105  | 242119   | 24.37  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 12.38 | 105  | 306691   | 23.82  | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 12.54 | 119  | 266420   | 23.60  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.56 | 146  | 121356   | 21.99  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.64 | 146  | 123302   | 23.15  | ug/l   | 96       |
| 89) n-Butylbenzene             | 12.91 | 91   | 251360   | 23.33  | ug/l   | 94       |
| 90) Hexachloroethane           | 12.99 | 117  | 64026    | 22.53  | ug/l   | 89       |
| 91) 1,2-Dichlorobenzene        | 13.01 | 146  | 126248   | 24.65  | ug/l   | 96       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.71 | 75   | 13296    | 25.64  | ug/l   | 79       |

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ALS Vial : 100 Sample Multiplier: 1

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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 | 14.26 | 180  | 93060    | 22.22 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 14.25 | 225  | 60641    | 21.53 | ug/l  | 96       |
| 95) Naphthalene            | 14.52 | 128  | 185624   | 25.07 | ug/l  | 96       |
| 96) 1,2,3-Trichlorobenzene | 14.66 | 180  | 90350    | 22.08 | ug/l  | 94       |

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

