

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF082918\  
 Data File : VF060173.D  
 Acq On : 29 Aug 2018 3:43  
 Operator : VA/AP  
 Sample : VSTDICV050  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 ICSVF082918

Manual Integrations  
 APPROVED

apatel  
 8/29/2018 2:02:15 PM

Quant Time: Aug 29 04:06:19 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F082918S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 29 03:22:03 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.03  | 168  | 84266    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.75  | 114  | 91261    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 72321    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152  | 36003    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 5.00   | 65  | 23406    | 44.47 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 88.94%  |      |
| 35) Dibromofluoromethane    | 4.27   | 113 | 29274    | 49.86 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 99.72%  |      |
| 50) Toluene-d8              | 7.70   | 98  | 110532   | 55.04 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 110.08% |      |
| 62) 4-Bromofluorobenzene    | 11.51  | 95  | 38412    | 51.87 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 103.74% |      |

| Target Compounds              |      |     |        |        |        | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 0.96 | 85  | 84851  | 48.93  | ug/l   | 97     |
| 3) Chloromethane              | 1.08 | 50  | 34854  | 53.92  | ug/l   | 93     |
| 4) Vinyl Chloride             | 1.13 | 62  | 35968  | 55.53  | ug/l   | 97     |
| 5) Bromomethane               | 1.32 | 94  | 15847  | 48.95  | ug/l   | 96     |
| 6) Chloroethane               | 1.40 | 64  | 20502  | 52.94  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 1.49 | 101 | 149789 | 50.53  | ug/l   | 98     |
| 8) Diethyl Ether              | 1.69 | 74  | 5722   | 51.67  | ug/l   | 94     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.86 | 101 | 67311  | 51.61  | ug/l   | 99     |
| 10) Methyl Iodide             | 1.93 | 142 | 31785  | 50.85  | ug/l   | 93     |
| 11) Tert butyl alcohol        | 2.61 | 59  | 2559   | 255.40 | ug/l   | 97     |
| 12) 1,1-Dichloroethene        | 1.83 | 96  | 43796  | 53.87  | ug/l   | 81     |
| 13) Acrolein                  | 2.07 | 56  | 2736   | 245.90 | ug/l # | 76     |
| 14) Allyl chloride            | 2.18 | 41  | 39188  | 58.03  | ug/l   | 94     |
| 15) Acrylonitrile             | 3.05 | 53  | 6440   | 251.73 | ug/l # | 86     |
| 16) Acetone                   | 2.31 | 43  | 14452  | 239.71 | ug/l # | 91     |
| 17) Carbon Disulfide          | 1.85 | 76  | 133419 | 55.87  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.43 | 43  | 6123m  | 61.60  | ug/l   |        |
| 19) Methyl tert-butyl Ether   | 2.51 | 73  | 30427  | 50.79  | ug/l   | 95     |
| 20) Methylene Chloride        | 2.28 | 84  | 19532  | 47.85  | ug/l   | 88     |
| 21) trans-1,2-Dichloroethene  | 2.41 | 96  | 35075  | 51.10  | ug/l   | 87     |
| 22) Diisopropyl ether         | 2.90 | 45  | 60648  | 54.57  | ug/l # | 87     |
| 23) Vinyl Acetate             | 3.30 | 43  | 76766  | 234.70 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 2.99 | 63  | 59053  | 51.05  | ug/l # | 98     |
| 25) 2-Butanone                | 4.47 | 43  | 14502  | 233.92 | ug/l   | 91     |
| 26) 2,2-Dichloropropane       | 3.74 | 77  | 42763  | 46.56  | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 3.62 | 96  | 24772  | 51.30  | ug/l   | 93     |
| 28) Bromochloromethane        | 3.88 | 49  | 12828  | 51.51  | ug/l # | 67     |
| 29) Tetrahydrofuran           | 4.21 | 42  | 8248   | 258.59 | ug/l # | 87     |
| 30) Chloroform                | 4.01 | 83  | 63060  | 48.60  | ug/l   | 93     |
| 31) Cyclohexane               | 3.86 | 56  | 67854  | 61.21  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 4.26 | 97  | 95822  | 51.67  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 4.46 | 75  | 70345  | 55.85  | ug/l   | 91     |
| 37) Ethyl Acetate             | 4.25 | 43  | 8078   | 48.18  | ug/l # | 66     |
| 38) Carbon Tetrachloride      | 4.16 | 117 | 90080  | 51.94  | ug/l   | 98     |

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 Quant Title : SW846 8260  
 QLast Update : Wed Aug 29 03:22:03 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 5.62  | 83   | 75762    | 62.11   | ug/l   | 96       |
| 40) Benzene                    | 4.79  | 78   | 92066    | 53.69   | ug/l   | 97       |
| 41) Methacrylonitrile          | 4.89  | 41   | 4738     | 53.82   | ug/l # | 92       |
| 42) 1,2-Dichloroethane         | 5.10  | 62   | 28706    | 46.49   | ug/l   | 98       |
| 43) Isopropyl Acetate          | 7.09  | 43   | 10753    | 54.96   | ug/l # | 88       |
| 44) Trichloroethene            | 5.66  | 130  | 39019    | 53.04   | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 6.39  | 63   | 17266    | 47.58   | ug/l   | 90       |
| 46) Dibromomethane             | 6.24  | 93   | 9472     | 45.53   | ug/l # | 86       |
| 47) Bromodichloromethane       | 6.54  | 83   | 34489    | 48.26   | ug/l   | 97       |
| 48) Methyl methacrylate        | 6.85  | 41   | 6850     | 45.75   | ug/l # | 71       |
| 49) 1,4-Dioxane                | 6.84  | 88   | 1186     | 1134.11 | ug/l # | 66       |
| 51) 4-Methyl-2-Pentanone       | 8.39  | 43   | 46791    | 273.77  | ug/l   | 93       |
| 52) Toluene                    | 7.77  | 92   | 71001    | 53.60   | ug/l   | 93       |
| 53) t-1,3-Dichloropropene      | 8.41  | 75   | 21668    | 47.18   | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene    | 7.44  | 75   | 28003    | 46.46   | ug/l # | 93       |
| 55) 1,1,2-Trichloroethane      | 8.63  | 97   | 11413    | 50.31   | ug/l   | 94       |
| 56) Ethyl methacrylate         | 8.75  | 69   | 11496    | 51.83   | ug/l # | 86       |
| 57) 1,3-Dichloropropane        | 8.99  | 76   | 19216    | 48.89   | ug/l   | 90       |
| 58) 2-Chloroethyl Vinyl ether  | 7.77  | 63   | 13860    | 253.33  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.61  | 43   | 33280    | 277.41  | ug/l   | 93       |
| 60) Dibromochloromethane       | 8.85  | 129  | 19093    | 50.77   | ug/l   | 90       |
| 61) 1,2-Dibromoethane          | 9.13  | 107  | 10839    | 46.63   | ug/l   | 97       |
| 64) Tetrachloroethene          | 8.30  | 164  | 49685    | 55.81   | ug/l   | 97       |
| 65) Chlorobenzene              | 9.93  | 112  | 80251    | 55.31   | ug/l   | 94       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.07 | 131  | 27015    | 55.45   | ug/l   | 91       |
| 67) Ethyl Benzene              | 10.04 | 91   | 187222   | 56.68   | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.26 | 106  | 123244   | 108.84  | ug/l   | 75       |
| 69) o-Xylene                   | 10.83 | 106  | 56666    | 58.50   | ug/l   | 96       |
| 70) Styrene                    | 10.89 | 104  | 71205    | 59.48   | ug/l   | 96       |
| 71) Bromoform                  | 10.88 | 173  | 9474     | 49.54   | ug/l   | 100      |
| 73) Isopropylbenzene           | 11.22 | 105  | 224851   | 57.01   | ug/l   | 100      |
| 74) N-amyl acetate             | 11.46 | 43   | 15517    | 52.56   | ug/l # | 92       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.78 | 83   | 13576    | 51.34   | ug/l   | 93       |
| 76) 1,2,3-Trichloropropane     | 11.88 | 75   | 11723    | 51.69   | ug/l   | 80       |
| 77) Bromobenzene               | 11.58 | 156  | 31954    | 55.66   | ug/l   | 89       |
| 78) n-propylbenzene            | 11.68 | 91   | 268888   | 56.67   | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 11.81 | 91   | 121127   | 54.92   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 11.91 | 105  | 166747   | 55.81   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.95 | 75   | 2442     | 40.08   | ug/l # | 72       |
| 82) 4-Chlorotoluene            | 11.99 | 91   | 115856   | 53.55   | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.22 | 119  | 175842   | 56.16   | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 12.28 | 105  | 145338   | 57.15   | ug/l   | 97       |
| 85) sec-Butylbenzene           | 12.38 | 105  | 263317   | 56.18   | ug/l   | 95       |
| 86) p-Isopropyltoluene         | 12.53 | 119  | 194284   | 55.86   | ug/l   | 95       |
| 87) 1,3-Dichlorobenzene        | 12.55 | 146  | 65045    | 52.99   | ug/l   | 94       |
| 88) 1,4-Dichlorobenzene        | 12.64 | 146  | 61182    | 55.27   | ug/l   | 96       |
| 89) n-Butylbenzene             | 12.92 | 91   | 166602   | 49.37   | ug/l   | 94       |
| 90) Hexachloroethane           | 12.99 | 117  | 41383    | 55.47   | ug/l   | 88       |
| 91) 1,2-Dichlorobenzene        | 13.01 | 146  | 50756    | 53.50   | ug/l   | 95       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.70 | 75   | 2247     | 49.60   | ug/l   | 76       |

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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 | 14.27 | 180  | 23456    | 48.43 | ug/l   | 91       |
| 94) Hexachlorobutadiene    | 14.26 | 225  | 45961    | 54.75 | ug/l   | 96       |
| 95) Naphthalene            | 14.52 | 128  | 16866    | 43.53 | ug/l # | 92       |
| 96) 1,2,3-Trichlorobenzene | 14.66 | 180  | 18608    | 47.21 | ug/l   | 89       |

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

