

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF083018\  
 Data File : VF060194.D  
 Acq On : 29 Aug 2018 17:25  
 Operator : VA/AP  
 Sample : VSTDICC100  
 Misc : 5.00g/5mL/MSVOA F/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

apatel  
 8/30/2018 3:31:33 PM

Quant Time: Aug 30 04:06:12 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F083018S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 30 02:37:52 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.04  | 168  | 162037   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 249173   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.92  | 117  | 263878   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152  | 163529   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.02   | 65  | 288218   | 213.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 427.42% |      |
| 35) Dibromofluoromethane  | 4.30   | 113 | 223787   | 128.94 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 257.88% |      |
| 50) Toluene-d8            | 7.72   | 98  | 555349   | 99.89  | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 199.78% |      |
| 62) 4-Bromofluorobenzene  | 11.51  | 95  | 314586   | 138.03 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 276.06% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 0.95 | 85  | 291675  | 89.72   | ug/l | 98     |
| 3) Chloromethane              | 1.07 | 50  | 166652  | 125.68  | ug/l | 92     |
| 4) Vinyl Chloride             | 1.12 | 62  | 134761  | 107.52  | ug/l | 95     |
| 5) Bromomethane               | 1.32 | 94  | 103125  | 144.73  | ug/l | 99     |
| 6) Chloroethane               | 1.39 | 64  | 68791   | 92.91   | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.48 | 101 | 354676  | 65.80   | ug/l | 98     |
| 8) Diethyl Ether              | 1.70 | 74  | 53975   | 204.67  | ug/l | 86     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.86 | 101 | 166951  | 70.37   | ug/l | 97     |
| 10) Methyl Iodide             | 1.93 | 142 | 139705  | 110.26  | ug/l | 95     |
| 11) Tert butyl alcohol        | 2.69 | 59  | 72729   | 1967.87 | ug/l | 97     |
| 12) 1,1-Dichloroethene        | 1.83 | 96  | 110775  | 73.92   | ug/l | 98     |
| 13) Acrolein                  | 2.10 | 56  | 41115   | 1291.63 | ug/l | 87     |
| 14) Allyl chloride            | 2.20 | 41  | 152939  | 112.32  | ug/l | 97     |
| 15) Acrylonitrile             | 3.08 | 53  | 106692  | 1404.90 | ug/l | 94     |
| 16) Acetone                   | 2.34 | 43  | 303813  | 1378.28 | ug/l | 98     |
| 17) Carbon Disulfide          | 1.84 | 76  | 365173  | 82.89   | ug/l | 100    |
| 18) Methyl Acetate            | 2.45 | 43  | 95666   | 216.29  | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 2.54 | 73  | 394159  | 245.62  | ug/l | 98     |
| 20) Methylene Chloride        | 2.28 | 84  | 126077  | 129.18  | ug/l | # 90   |
| 21) trans-1,2-Dichloroethene  | 2.41 | 96  | 122526  | 94.71   | ug/l | 99     |
| 22) Diisopropyl ether         | 2.93 | 45  | 438108  | 177.42  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.34 | 43  | 1382524 | 1585.78 | ug/l | # 95   |
| 24) 1,1-Dichloroethane        | 3.00 | 63  | 272211  | 117.34  | ug/l | 99     |
| 25) 2-Butanone                | 4.51 | 43  | 390488  | 1646.81 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 3.76 | 77  | 349297  | 187.01  | ug/l | 97     |
| 27) cis-1,2-Dichloroethene    | 3.63 | 96  | 174271  | 166.66  | ug/l | 93     |
| 28) Bromochloromethane        | 3.89 | 49  | 87411   | 151.00  | ug/l | 90     |
| 29) Tetrahydrofuran           | 4.26 | 42  | 146896  | 1523.08 | ug/l | 98     |
| 30) Chloroform                | 4.04 | 83  | 430060  | 152.11  | ug/l | 95     |
| 31) Cyclohexane               | 3.86 | 56  | 194454  | 93.34   | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 4.28 | 97  | 406561  | 111.66  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 4.46 | 75  | 273410  | 81.94   | ug/l | 99     |
| 37) Ethyl Acetate             | 4.30 | 43  | 157104  | 246.33  | ug/l | # 84   |
| 38) Carbon Tetrachloride      | 4.17 | 117 | 370545  | 81.90   | ug/l | 96     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF083018\  
 Data File : VF060194.D  
 Acq On : 29 Aug 2018 17:25  
 Operator : VA/AP  
 Sample : VSTDICC100  
 Misc : 5.00g/5mL/MSVOA F/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

apatel  
 8/30/2018 3:31:33 PM

Quant Time: Aug 30 04:06:12 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F083018S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 30 02:37:52 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 5.63  | 83   | 224301   | 71.96   | ug/l   | 99       |
| 40) Benzene                    | 4.81  | 78   | 508763   | 105.72  | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.93  | 41   | 75329    | 229.73  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 5.12  | 62   | 370114   | 181.20  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 7.11  | 43   | 197369   | 253.18  | ug/l # | 95       |
| 44) Trichloroethene            | 5.68  | 130  | 177015   | 89.06   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 6.40  | 63   | 151276   | 138.10  | ug/l   | 94       |
| 46) Dibromomethane             | 6.26  | 93   | 138912   | 205.24  | ug/l   | 98       |
| 47) Bromodichloromethane       | 6.55  | 83   | 356120   | 160.11  | ug/l   | 94       |
| 48) Methyl methacrylate        | 6.88  | 41   | 143446   | 231.67  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 6.88  | 88   | 25212    | 5869.31 | ug/l   | 91       |
| 51) 4-Methyl-2-Pentanone       | 8.41  | 43   | 807945   | 1148.13 | ug/l   | 99       |
| 52) Toluene                    | 7.78  | 92   | 352872   | 96.86   | ug/l   | 94       |
| 53) t-1,3-Dichloropropene      | 8.44  | 75   | 307549   | 210.02  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 7.46  | 75   | 320483   | 180.56  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 8.64  | 97   | 156889   | 198.31  | ug/l   | 92       |
| 56) Ethyl methacrylate         | 8.76  | 69   | 191707   | 246.09  | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 9.01  | 76   | 273544   | 199.03  | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether  | 7.78  | 63   | 78240    | 516.76  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.64  | 43   | 655923   | 1239.34 | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.87  | 129  | 263478   | 204.58  | ug/l   | 90       |
| 61) 1,2-Dibromoethane          | 9.14  | 107  | 192174   | 221.20  | ug/l   | 95       |
| 64) Tetrachloroethene          | 8.31  | 164  | 184055   | 60.72   | ug/l   | 97       |
| 65) Chlorobenzene              | 9.94  | 112  | 511898   | 96.27   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.07 | 131  | 219922   | 119.00  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.04 | 91   | 893898   | 77.68   | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.28 | 106  | 613097   | 159.46  | ug/l   | 97       |
| 69) o-Xylene                   | 10.83 | 106  | 332292   | 94.24   | ug/l   | 97       |
| 70) Styrene                    | 10.91 | 104  | 495919   | 109.18  | ug/l   | 100      |
| 71) Bromoform                  | 10.89 | 173  | 160470   | 205.23  | ug/l   | 98       |
| 73) Isopropylbenzene           | 11.23 | 105  | 1016917  | 61.57   | ug/l   | 99       |
| 74) N-amyl acetate             | 11.47 | 43   | 329549   | 193.30  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.79 | 83   | 209535   | 150.82  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.89 | 75   | 174393   | 148.21  | ug/l   | 95       |
| 77) Bromobenzene               | 11.60 | 156  | 269564   | 101.85  | ug/l   | 97       |
| 78) n-propylbenzene            | 11.69 | 91   | 1158408  | 58.12   | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 11.82 | 91   | 733316   | 76.24   | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 11.91 | 105  | 867789   | 68.04   | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 11.96 | 75   | 82006m   | 236.50  | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.99 | 91   | 811526   | 84.63   | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.22 | 119  | 823648   | 61.55   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 12.29 | 105  | 905088   | 81.41   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 12.39 | 105  | 1134977  | 58.01   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.55 | 119  | 962932   | 65.54   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.57 | 146  | 477977   | 86.91   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.65 | 146  | 485995   | 95.84   | ug/l   | 98       |
| 89) n-Butylbenzene             | 12.92 | 91   | 933678   | 73.06   | ug/l   | 96       |
| 90) Hexachloroethane           | 13.00 | 117  | 226621   | 71.40   | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 13.03 | 146  | 467278   | 105.36  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.72 | 75   | 55675    | 206.12  | ug/l   | 86       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF083018\  
Data File : VF060194.D  
Acq On : 29 Aug 2018 17:25  
Operator : VA/AP  
Sample : VSTDICC100  
Misc : 5.00g/5mL/MSVOA F/SOIL  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VSTDICC100

Manual Integrations  
APPROVED

apatel  
8/30/2018 3:31:33 PM

Quant Time: Aug 30 04:06:12 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F083018S.M  
Quant Title : SW846 8260  
QLast Update : Thu Aug 30 02:37:52 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.27 | 180  | 365287   | 164.02 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.26 | 225  | 241484   | 67.55  | ug/l  | 99       |
| 95) Naphthalene            | 14.53 | 128  | 674197   | 292.58 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.67 | 180  | 368124   | 192.21 | ug/l  | 95       |

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

