

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF050719\  
 Data File : VF062349.D  
 Acq On : 7 May 2019 10:03  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 5/8/2019 11:10:30 AM

Quant Time: May 07 15:57:02 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F050619S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 07 04:34:57 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.05  | 168  | 350820   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 455407   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 399311   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.61 | 152  | 229170   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.03   | 65  | 171420   | 51.70 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.40% |      |
| 35) Dibromofluoromethane  | 4.30   | 113 | 185510   | 51.13 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.26% |      |
| 50) Toluene-d8            | 7.70   | 98  | 480695   | 54.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.46% |      |
| 62) 4-Bromofluorobenzene  | 11.49  | 95  | 197588   | 49.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.74%  |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.00 | 85  | 160740  | 39.590  | ug/l   | 97     |
| 3) Chloromethane              | 1.15 | 50  | 109933  | 41.054  | ug/l   | 94     |
| 4) Vinyl Chloride             | 1.20 | 62  | 110493  | 41.368  | ug/l   | 95     |
| 5) Bromomethane               | 1.39 | 94  | 90967   | 44.879  | ug/l   | 86     |
| 6) Chloroethane               | 1.43 | 64  | 58034   | 43.217  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 1.55 | 101 | 238461  | 43.030  | ug/l   | 93     |
| 8) Diethyl Ether              | 1.71 | 74  | 35900   | 42.813  | ug/l   | 91     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.91 | 101 | 131519  | 41.569  | ug/l   | 98     |
| 10) Methyl Iodide             | 1.97 | 142 | 233541  | 44.792  | ug/l   | 97     |
| 11) Tert butyl alcohol        | 2.68 | 59  | 39529   | 210.960 | ug/l   | 95     |
| 12) 1,1-Dichloroethene        | 1.87 | 96  | 111700  | 41.529  | ug/l   | 87     |
| 13) Acrolein                  | 2.09 | 56  | 35993   | 316.367 | ug/l   | 98     |
| 14) Allyl chloride            | 2.20 | 41  | 170532  | 71.774  | ug/l   | 92     |
| 15) Acrylonitrile             | 3.09 | 53  | 83202   | 234.411 | ug/l   | 97     |
| 16) Acetone                   | 2.34 | 43  | 203762  | 303.814 | ug/l   | 98     |
| 17) Carbon Disulfide          | 1.92 | 76  | 250248  | 42.670  | ug/l   | 96     |
| 18) Methyl Acetate            | 2.46 | 43  | 52077   | 42.082  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 2.55 | 73  | 250972  | 45.202  | ug/l   | 94     |
| 20) Methylene Chloride        | 2.32 | 84  | 101874  | 41.984  | ug/l   | 90     |
| 21) trans-1,2-Dichloroethene  | 2.42 | 96  | 105760  | 41.270  | ug/l   | 97     |
| 22) Diisopropyl ether         | 2.93 | 45  | 334628  | 45.062  | ug/l   | 97     |
| 23) Vinyl Acetate             | 3.34 | 43  | 773898  | 233.831 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 3.01 | 63  | 211503  | 47.126  | ug/l   | 98     |
| 25) 2-Butanone                | 4.52 | 43  | 219775  | 260.832 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 3.77 | 77  | 115578  | 46.114  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 3.64 | 96  | 140923  | 43.993  | ug/l   | 97     |
| 28) Bromochloromethane        | 3.90 | 49  | 102989  | 50.598  | ug/l   | 97     |
| 29) Tetrahydrofuran           | 4.26 | 42  | 84147   | 217.292 | ug/l   | 99     |
| 30) Chloroform                | 4.04 | 83  | 265165  | 43.732  | ug/l   | 100    |
| 31) Cyclohexane               | 3.88 | 56  | 155479  | 43.402  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 4.29 | 97  | 233921  | 45.014  | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 4.47 | 75  | 179727  | 45.941  | ug/l   | 98     |
| 37) Ethyl Acetate             | 4.30 | 43  | 73999   | 48.407  | ug/l # | 99     |
| 38) Carbon Tetrachloride      | 4.19 | 117 | 208953m | 51.582  | ug/l   |        |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF050719\  
 Data File : VF062349.D  
 Acq On : 7 May 2019 10:03  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 5/8/2019 11:10:30 AM

Quant Time: May 07 15:57:02 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F050619S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 07 04:34:57 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 5.63  | 83   | 177976   | 45.362   | ug/l   | 94       |
| 40) Benzene                    | 4.82  | 78   | 397463   | 46.138   | ug/l   | 96       |
| 41) Methacrylonitrile          | 4.93  | 41   | 40615    | 43.297   | ug/l   | 90       |
| 42) 1,2-Dichloroethane         | 5.13  | 62   | 167384   | 46.457   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 7.11  | 43   | 81711    | 45.920   | ug/l   | 97       |
| 44) Trichloroethene            | 5.68  | 130  | 140798   | 44.492   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 6.40  | 63   | 94739    | 48.553   | ug/l   | 99       |
| 46) Dibromomethane             | 6.25  | 93   | 74946    | 46.325   | ug/l   | 98       |
| 47) Bromodichloromethane       | 6.55  | 83   | 187245   | 46.292   | ug/l   | 96       |
| 48) Methyl methacrylate        | 6.87  | 41   | 61025    | 48.529   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 6.87  | 88   | 13353    | 1032.895 | ug/l # | 81       |
| 51) 4-Methyl-2-Pentanone       | 8.39  | 43   | 314340   | 233.130  | ug/l   | 98       |
| 52) Toluene                    | 7.77  | 92   | 245698   | 46.232   | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 8.42  | 75   | 143252   | 46.826   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.46  | 75   | 170711   | 47.947   | ug/l   | 94       |
| 55) 1,1,2-Trichloroethane      | 8.63  | 97   | 76963    | 45.619   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 8.75  | 69   | 78354    | 43.997   | ug/l   | 95       |
| 57) 1,3-Dichloropropane        | 8.99  | 76   | 122214   | 47.958   | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 7.45  | 63   | 115086   | 214.947  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.61  | 43   | 246900   | 264.767  | ug/l   | 97       |
| 60) Dibromochloromethane       | 8.86  | 129  | 131674   | 47.721   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.12  | 107  | 88878    | 44.823   | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.30  | 164  | 133312   | 41.124   | ug/l   | 98       |
| 65) Chlorobenzene              | 9.93  | 112  | 300712   | 45.515   | ug/l   | 94       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.06 | 131  | 151329   | 45.404   | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.03 | 91   | 526523   | 45.511   | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.25 | 106  | 381102   | 89.280   | ug/l   | 99       |
| 69) o-Xylene                   | 10.82 | 106  | 215539   | 46.729   | ug/l   | 99       |
| 70) Styrene                    | 10.89 | 104  | 307541   | 44.488   | ug/l   | 97       |
| 71) Bromoform                  | 10.88 | 173  | 82727    | 45.306   | ug/l # | 96       |
| 73) Isopropylbenzene           | 11.21 | 105  | 631587   | 46.488   | ug/l   | 98       |
| 74) N-amyl acetate             | 11.45 | 43   | 129162   | 44.283   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.76 | 83   | 103812   | 48.801   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.86 | 75   | 72891    | 44.913   | ug/l # | 100      |
| 77) Bromobenzene               | 11.58 | 156  | 160967   | 45.144   | ug/l   | 99       |
| 78) n-propylbenzene            | 11.66 | 91   | 670056   | 46.324   | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 11.79 | 91   | 409255   | 45.502   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.89 | 105  | 554011   | 46.524   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.94 | 75   | 27263m   | 44.690   | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.97 | 91   | 420324   | 47.316   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.20 | 119  | 577425   | 46.140   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 12.27 | 105  | 547152   | 46.952   | ug/l   | 97       |
| 85) sec-Butylbenzene           | 12.36 | 105  | 708694   | 46.524   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.51 | 119  | 668439   | 47.231   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.53 | 146  | 292389   | 44.900   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.62 | 146  | 278469   | 44.306   | ug/l   | 96       |
| 89) n-Butylbenzene             | 12.90 | 91   | 598360   | 47.521   | ug/l   | 100      |
| 90) Hexachloroethane           | 12.97 | 117  | 167866   | 47.504   | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.00 | 146  | 281058   | 44.590   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.69 | 75   | 22445    | 47.097   | ug/l   | 99       |

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF050719\  
Data File : VF062349.D  
Acq On : 7 May 2019 10:03  
Operator : FY/SY  
Sample : VSTDCCC050  
Misc : 5.00g/5mL/MSVOA F/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
5/8/2019 11:10:30 AM

Quant Time: May 07 15:57:02 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82F050619S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 07 04:34:57 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.24 | 180  | 261189   | 46.199 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 14.23 | 225  | 200205   | 47.512 | ug/l  | 98       |
| 95) Naphthalene            | 14.48 | 128  | 386558   | 45.479 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.63 | 180  | 259916   | 47.454 | ug/l  | 100      |

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

