

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF080118\  
 Data File : VF059749.D  
 Acq On : 1 Aug 2018 11:53  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 81 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 8/2/2018 12:22:56 PM

Quant Time: Aug 02 10:48:30 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      | 5.04  | 168  | 168199   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 5.76  | 114  | 239998   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 231987   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152  | 161201   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.02   | 65  | 163418   | 54.06 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.12% |      |
| 35) Dibromofluoromethane  | 4.29   | 113 | 134661   | 54.02 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.04% |      |
| 50) Toluene-d8            | 7.71   | 98  | 287502   | 49.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.92%  |      |
| 62) 4-Bromofluorobenzene  | 11.51  | 95  | 166661   | 51.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.58% |      |

## Target Compounds

|                               |      |     |         |        |        | Qvalue |
|-------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 0.98 | 85  | 102922  | 54.97  | ug/l   | 96     |
| 3) Chloromethane              | 1.08 | 50  | 43740   | 44.21  | ug/l   | 91     |
| 4) Vinyl Chloride             | 1.15 | 62  | 51281   | 49.10  | ug/l   | 97     |
| 5) Bromomethane               | 1.34 | 94  | 45075   | 52.89  | ug/l   | 95     |
| 6) Chloroethane               | 1.43 | 64  | 34683   | 55.11  | ug/l   | 88     |
| 7) Trichlorofluoromethane     | 1.54 | 101 | 170134m | 54.16  | ug/l   |        |
| 8) Diethyl Ether              | 1.70 | 74  | 22399   | 41.70  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.90 | 101 | 89732   | 54.54  | ug/l   | 97     |
| 10) Methyl Iodide             | 1.97 | 142 | 125184  | 54.35  | ug/l   | 93     |
| 11) Tert butyl alcohol        | 2.67 | 59  | 25060   | 205.34 | ug/l   | 96     |
| 12) 1,1-Dichloroethene        | 1.86 | 96  | 61106   | 46.91  | ug/l   | 93     |
| 13) Acrolein                  | 2.09 | 56  | 16472   | 257.50 | ug/l   | 91     |
| 14) Allyl chloride            | 2.19 | 41  | 98908   | 47.56  | ug/l   | 95     |
| 15) Acrylonitrile             | 3.07 | 53  | 44842   | 229.59 | ug/l   | 92     |
| 16) Acetone                   | 2.33 | 43  | 152670  | 280.78 | ug/l   | 97     |
| 17) Carbon Disulfide          | 1.89 | 76  | 128552m | 48.04  | ug/l   |        |
| 18) Methyl Acetate            | 2.44 | 43  | 40478   | 47.74  | ug/l # | 90     |
| 19) Methyl tert-butyl Ether   | 2.53 | 73  | 190861  | 48.05  | ug/l   | 99     |
| 20) Methylene Chloride        | 2.27 | 84  | 63513m  | 54.16  | ug/l   |        |
| 21) trans-1,2-Dichloroethene  | 2.40 | 96  | 61384   | 54.04  | ug/l   | 95     |
| 22) Diisopropyl ether         | 2.93 | 45  | 214383  | 48.75  | ug/l   | 100    |
| 23) Vinyl Acetate             | 3.33 | 43  | 555228  | 245.56 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 2.99 | 63  | 164396  | 53.80  | ug/l   | 99     |
| 25) 2-Butanone                | 4.51 | 43  | 129343  | 213.16 | ug/l # | 86     |
| 26) 2,2-Dichloropropane       | 3.76 | 77  | 111093  | 51.00  | ug/l   | 95     |
| 27) cis-1,2-Dichloroethene    | 3.63 | 96  | 72529   | 44.33  | ug/l   | 85     |
| 28) Bromochloromethane        | 3.88 | 49  | 58867   | 55.85  | ug/l   | 85     |
| 29) Tetrahydrofuran           | 4.25 | 42  | 54407   | 233.29 | ug/l   | 98     |
| 30) Chloroform                | 4.03 | 83  | 219558  | 50.91  | ug/l   | 96     |
| 31) Cyclohexane               | 3.85 | 56  | 70681   | 47.53  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 4.27 | 97  | 180427  | 53.94  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 4.45 | 75  | 123098  | 50.72  | ug/l   | 99     |
| 37) Ethyl Acetate             | 4.30 | 43  | 56256   | 46.66  | ug/l   | 93     |
| 38) Carbon Tetrachloride      | 4.17 | 117 | 220096  | 57.68  | ug/l   | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF080118\  
 Data File : VF059749.D  
 Acq On : 1 Aug 2018 11:53  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 81 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 8/2/2018 12:22:56 PM

Quant Time: Aug 02 10:48:30 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   | 91928    | 49.59  | ug/l   | 95       |
| 40) Benzene                    | 4.81  | 78   | 220256   | 45.44  | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.92  | 41   | 29302    | 48.41  | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 5.11  | 62   | 181799   | 53.60  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 7.11  | 43   | 56736    | 39.54  | ug/l   | 97       |
| 44) Trichloroethene            | 5.68  | 130  | 86251    | 53.42  | ug/l   | 83       |
| 45) 1,2-Dichloropropane        | 6.41  | 63   | 61144    | 47.77  | ug/l   | 95       |
| 46) Dibromomethane             | 6.25  | 93   | 59793    | 49.20  | ug/l   | 92       |
| 47) Bromodichloromethane       | 6.54  | 83   | 172452   | 52.11  | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.88  | 41   | 46065    | 42.68  | ug/l   | 88       |
| 49) 1,4-Dioxane                | 6.87  | 88   | 5826     | 843.24 | ug/l # | 70       |
| 51) 4-Methyl-2-Pentanone       | 8.41  | 43   | 249111   | 228.19 | ug/l   | 98       |
| 52) Toluene                    | 7.78  | 92   | 154547   | 47.78  | ug/l   | 94       |
| 53) t-1,3-Dichloropropene      | 8.43  | 75   | 141094   | 49.14  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 7.46  | 75   | 138780   | 49.90  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 8.63  | 97   | 63335    | 48.25  | ug/l   | 92       |
| 56) Ethyl methacrylate         | 8.76  | 69   | 60667    | 44.32  | ug/l   | 94       |
| 57) 1,3-Dichloropropane        | 9.00  | 76   | 109194   | 48.49  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 7.78  | 63   | 38941    | 246.38 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.63  | 43   | 189517   | 216.64 | ug/l   | 96       |
| 60) Dibromochloromethane       | 8.87  | 129  | 120056   | 51.83  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.14  | 107  | 76623    | 49.99  | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.31  | 164  | 82896    | 53.22  | ug/l   | 98       |
| 65) Chlorobenzene              | 9.94  | 112  | 229127   | 49.37  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.07 | 131  | 118536   | 54.71  | ug/l   | 95       |
| 67) Ethyl Benzene              | 10.04 | 91   | 414410   | 51.61  | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.27 | 106  | 279271   | 112.38 | ug/l   | 96       |
| 69) o-Xylene                   | 10.83 | 106  | 155481   | 52.55  | ug/l   | 95       |
| 70) Styrene                    | 10.90 | 104  | 243101   | 54.24  | ug/l   | 98       |
| 71) Bromoform                  | 10.89 | 173  | 77829    | 55.13  | ug/l   | 99       |
| 73) Isopropylbenzene           | 11.23 | 105  | 531742   | 50.27  | ug/l   | 97       |
| 74) N-amyl acetate             | 11.46 | 43   | 110714   | 41.49  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.79 | 83   | 95392    | 47.91  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.89 | 75   | 78819    | 46.55  | ug/l   | 97       |
| 77) Bromobenzene               | 11.60 | 156  | 128503   | 46.53  | ug/l   | 88       |
| 78) n-propylbenzene            | 11.69 | 91   | 603343   | 56.28  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.82 | 91   | 373993   | 55.27  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene     | 11.92 | 105  | 461825   | 55.45  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.95 | 75   | 31611m   | 45.08  | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.99 | 91   | 401800   | 55.57  | ug/l   | 95       |
| 83) tert-Butylbenzene          | 12.21 | 119  | 485228   | 51.10  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene     | 12.29 | 105  | 485825   | 57.77  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 12.39 | 105  | 624074   | 58.70  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 12.54 | 119  | 532338   | 57.34  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.56 | 146  | 256408   | 57.53  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.64 | 146  | 248700   | 54.84  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.92 | 91   | 523619   | 59.69  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.00 | 117  | 142768   | 53.51  | ug/l   | 87       |
| 91) 1,2-Dichlorobenzene        | 13.02 | 146  | 249316   | 57.12  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.72 | 75   | 27084    | 55.64  | ug/l   | 77       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF080118\  
Data File : VF059749.D  
Acq On : 1 Aug 2018 11:53  
Operator : VA/AP  
Sample : VSTDCCC050  
Misc : 5.00µ/5mL/MSVOA F/SOIL  
ALS Vial : 81 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

apatel  
8/2/2018 12:22:56 PM

Quant Time: Aug 02 10:48:30 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) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.27 | 180  | 200272   | 57.78 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 14.26 | 225  | 142248   | 53.80 | ug/l  | 97       |
| 95) Naphthalene            | 14.53 | 128  | 338813   | 48.75 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.68 | 180  | 200261   | 52.13 | ug/l  | 99       |

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

