

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF060319\  
 Data File : VF062834.D  
 Acq On : 3 Jun 2019 17:51  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00µl/5mL/MSVOA F/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 6/4/2019 12:15:54 PM

Quant Time: Jun 04 09:16:56 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F053019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 31 04:18:30 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 5.06  | 168  | 886057   | 50.00   | ug/l    | -0.02    |
| 34) 1,4-Difluorobenzene       | 5.78  | 114  | 1390583  | 50.00   | ug/l    | -0.03    |
| 63) Chlorobenzene-d5          | 9.92  | 117  | 1153670  | 50.00   | ug/l    | -0.02    |
| 72) 1,4-Dichlorobenzene-d4    | 12.61 | 152  | 607708   | 50.00   | ug/l    | -0.02    |
| System Monitoring Compounds   |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 5.04  | 65   | 328243   | 53.57   | ug/l    | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 107.14% |          |
| 35) Dibromofluoromethane      | 4.32  | 113  | 583701   | 55.55   | ug/l    | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 111.10% |          |
| 50) Toluene-d8                | 7.72  | 98   | 1470241  | 55.33   | ug/l    | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 110.66% |          |
| 62) 4-Bromofluorobenzene      | 11.49 | 95   | 556219   | 58.19   | ug/l    | -0.02    |
| Spiked Amount 50.000          |       |      | Recovery | =       | 116.38% |          |
| Target Compounds              |       |      |          |         |         |          |
|                               |       |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 1.01  | 85   | 484496   | 48.168  | ug/l    | 97       |
| 3) Chloromethane              | 1.15  | 50   | 446864   | 48.741  | ug/l    | 98       |
| 4) Vinyl Chloride             | 1.19  | 62   | 433423   | 47.573  | ug/l    | 98       |
| 5) Bromomethane               | 1.40  | 94   | 248987   | 47.921  | ug/l    | 95       |
| 6) Chloroethane               | 1.45  | 64   | 167930   | 49.299  | ug/l #  | 84       |
| 7) Trichlorofluoromethane     | 1.57  | 101  | 668645   | 51.842  | ug/l    | 95       |
| 8) Diethyl Ether              | 1.72  | 74   | 118570   | 46.727  | ug/l    | 91       |
| 9) 1,1,2-Trichlorotrifluoroet | 1.91  | 101  | 405049   | 49.952  | ug/l    | 99       |
| 10) Methyl Iodide             | 1.99  | 142  | 843793   | 51.898  | ug/l    | 96       |
| 11) Tert butyl alcohol        | 2.70  | 59   | 99629    | 268.414 | ug/l #  | 93       |
| 12) 1,1-Dichloroethene        | 1.87  | 96   | 372999   | 50.657  | ug/l    | 88       |
| 13) Acrolein                  | 2.10  | 56   | 39346    | 265.865 | ug/l    | 97       |
| 14) Allyl chloride            | 2.20  | 41   | 396483   | 69.408  | ug/l    | 98       |
| 15) Acrylonitrile             | 3.09  | 53   | 309208   | 221.698 | ug/l #  | 95       |
| 16) Acetone                   | 2.36  | 43   | 365310   | 260.496 | ug/l    | 99       |
| 17) Carbon Disulfide          | 1.91  | 76   | 1078376  | 50.109  | ug/l    | 99       |
| 18) Methyl Acetate            | 2.46  | 43   | 103387   | 42.188  | ug/l    | 97       |
| 19) Methyl tert-butyl Ether   | 2.55  | 73   | 706449   | 52.957  | ug/l    | 98       |
| 20) Methylene Chloride        | 2.29  | 84   | 374229m  | 53.499  | ug/l    |          |
| 21) trans-1,2-Dichloroethene  | 2.43  | 96   | 382131   | 51.760  | ug/l    | 98       |
| 22) Diisopropyl ether         | 2.94  | 45   | 800002   | 49.294  | ug/l    | 94       |
| 23) Vinyl Acetate             | 3.34  | 43   | 2824377  | 254.205 | ug/l    | 98       |
| 24) 1,1-Dichloroethane        | 3.02  | 63   | 599061   | 49.438  | ug/l    | 99       |
| 25) 2-Butanone                | 4.52  | 43   | 835746   | 255.909 | ug/l    | 99       |
| 26) 2,2-Dichloropropane       | 3.79  | 77   | 418850   | 60.877  | ug/l    | 98       |
| 27) cis-1,2-Dichloroethene    | 3.66  | 96   | 674122   | 54.321  | ug/l    | 96       |
| 28) Bromochloromethane        | 3.91  | 49   | 337563   | 51.214  | ug/l    | 96       |
| 29) Tetrahydrofuran           | 4.27  | 42   | 346590   | 277.478 | ug/l    | 96       |
| 30) Chloroform                | 4.06  | 83   | 916778   | 53.682  | ug/l    | 98       |
| 31) Cyclohexane               | 3.88  | 56   | 806736   | 49.175  | ug/l    | 96       |
| 32) 1,1,1-Trichloroethane     | 4.30  | 97   | 599692   | 60.312  | ug/l    | 97       |
| 36) 1,1-Dichloropropene       | 4.49  | 75   | 718719   | 56.143  | ug/l    | 99       |
| 37) Ethyl Acetate             | 4.31  | 43   | 284792   | 58.197  | ug/l #  | 84       |
| 38) Carbon Tetrachloride      | 4.19  | 117  | 532924   | 61.597  | ug/l    | 93       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF060319\  
 Data File : VF062834.D  
 Acq On : 3 Jun 2019 17:51  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 6/4/2019 12:15:54 PM

Quant Time: Jun 04 09:16:56 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F053019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 31 04:18:30 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 5.64  | 83   | 914412   | 57.392   | ug/l   | 97       |
| 40) Benzene                    | 4.83  | 78   | 2089743  | 56.089   | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.94  | 41   | 168708   | 62.015   | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 5.14  | 62   | 418992   | 59.129   | ug/l   | 91       |
| 43) Isopropyl Acetate          | 7.12  | 43   | 396621   | 61.354   | ug/l # | 99       |
| 44) Trichloroethene            | 5.69  | 130  | 592684   | 56.366   | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 6.41  | 63   | 526138   | 56.274   | ug/l   | 96       |
| 46) Dibromomethane             | 6.27  | 93   | 301896   | 55.306   | ug/l   | 91       |
| 47) Bromodichloromethane       | 6.56  | 83   | 652215   | 58.668   | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.88  | 41   | 203456   | 61.069   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 6.88  | 88   | 47767    | 1087.744 | ug/l # | 93       |
| 51) 4-Methyl-2-Pentanone       | 8.41  | 43   | 1353833  | 293.339  | ug/l   | 99       |
| 52) Toluene                    | 7.79  | 92   | 1143043  | 56.961   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 8.43  | 75   | 534289   | 57.999   | ug/l   | 94       |
| 54) cis-1,3-Dichloropropene    | 7.46  | 75   | 743085   | 55.726   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 8.64  | 97   | 360859   | 60.193   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 8.75  | 69   | 411953   | 64.042   | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 9.00  | 76   | 586372   | 59.895   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 7.45  | 63   | 594008   | 264.228  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.62  | 43   | 989698   | 300.856  | ug/l   | 97       |
| 60) Dibromochloromethane       | 8.86  | 129  | 461315   | 62.153   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.13  | 107  | 374396   | 60.132   | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.31  | 164  | 439252   | 49.548   | ug/l   | 97       |
| 65) Chlorobenzene              | 9.94  | 112  | 1180715  | 52.996   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.06 | 131  | 462171   | 52.088   | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.04 | 91   | 1984308  | 51.902   | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.26 | 106  | 1531037  | 104.650  | ug/l   | 99       |
| 69) o-Xylene                   | 10.82 | 106  | 799831   | 53.997   | ug/l   | 96       |
| 70) Styrene                    | 10.89 | 104  | 1222163  | 55.979   | ug/l   | 99       |
| 71) Bromoform                  | 10.88 | 173  | 258963   | 60.840   | ug/l # | 97       |
| 73) Isopropylbenzene           | 11.22 | 105  | 2070014  | 48.817   | ug/l   | 99       |
| 74) N-amyl acetate             | 11.44 | 43   | 583389   | 48.815   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.77 | 83   | 467692   | 51.648   | ug/l   | 96       |
| 76) 1,2,3-Trichloropropane     | 11.87 | 75   | 303578   | 50.576   | ug/l   | 94       |
| 77) Bromobenzene               | 11.58 | 156  | 529428   | 49.692   | ug/l   | 94       |
| 78) n-propylbenzene            | 11.67 | 91   | 2418858  | 47.244   | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 11.80 | 91   | 1427759  | 48.736   | ug/l   | 93       |
| 80) 1,3,5-Trimethylbenzene     | 11.90 | 105  | 1610620  | 46.446   | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 11.94 | 75   | 142029m  | 55.890   | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.98 | 91   | 1392465  | 48.366   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.19 | 119  | 1770501  | 51.527   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 12.27 | 105  | 1644742  | 50.025   | ug/l   | 97       |
| 85) sec-Butylbenzene           | 12.37 | 105  | 2245297  | 49.591   | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 12.52 | 119  | 1903781  | 50.516   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.54 | 146  | 957504   | 50.958   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.63 | 146  | 915555   | 52.211   | ug/l   | 95       |
| 89) n-Butylbenzene             | 12.89 | 91   | 1869524  | 49.315   | ug/l   | 97       |
| 90) Hexachloroethane           | 12.97 | 117  | 500890   | 54.494   | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 12.99 | 146  | 856002   | 51.831   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.68 | 75   | 58450    | 59.247   | ug/l   | 85       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF060319\  
Data File : VF062834.D  
Acq On : 3 Jun 2019 17:51  
Operator : FY/SY  
Sample : VSTDCCC050  
Misc : 5.00µ/5mL/MSVOA F/SOIL  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
6/4/2019 12:15:54 PM

Quant Time: Jun 04 09:16:56 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F053019S.M  
Quant Title : SW846 8260  
QLast Update : Fri May 31 04:18:30 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.23 | 180  | 563989   | 49.736 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 14.22 | 225  | 388459   | 49.518 | ug/l  | 98       |
| 95) Naphthalene            | 14.49 | 128  | 991614   | 53.377 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.64 | 180  | 532214   | 51.416 | ug/l  | 97       |

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

