

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF081718\  
 Data File : VF059981.D  
 Acq On : 17 Aug 2018 18:59  
 Operator : VA/AP  
 Sample : VSTDIC075  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDIC075

Manual Integrations  
 APPROVED

apatel  
 8/20/2018 11:48:30 AM

Quant Time: Aug 18 00:03:39 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F081718S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 17 23:38:00 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.04  | 168  | 124877   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 5.76  | 114  | 178778   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.92  | 117  | 183167   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152  | 126425   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |       |
|-----------------------------|--------|-----|----------|-------|---------|-------|
| System Monitoring Compounds |        |     |          |       |         |       |
| 33) 1,2-Dichloroethane-d4   | 5.02   | 65  | 170091   | 69.95 | ug/l    | 0.00  |
| Spiked Amount               | 50.000 |     | Recovery | =     | 139.90% |       |
| 35) Dibromofluoromethane    | 4.29   | 113 | 128022   | 70.37 | ug/l    | -0.02 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 140.74% |       |
| 50) Toluene-d8              | 7.72   | 98  | 287591   | 71.30 | ug/l    | 0.00  |
| Spiked Amount               | 50.000 |     | Recovery | =     | 142.60% |       |
| 62) 4-Bromofluorobenzene    | 11.52  | 95  | 168213   | 67.98 | ug/l    | 0.00  |
| Spiked Amount               | 50.000 |     | Recovery | =     | 135.96% |       |

|                               |      |     |        |        |        |        |
|-------------------------------|------|-----|--------|--------|--------|--------|
| Target Compounds              |      |     |        |        |        | Qvalue |
| 2) Dichlorodifluoromethane    | 0.94 | 85  | 145265 | 68.69  | ug/l   | 98     |
| 3) Chloromethane              | 1.06 | 50  | 74126  | 68.06  | ug/l   | 91     |
| 4) Vinyl Chloride             | 1.10 | 62  | 85220  | 68.18  | ug/l   | 92     |
| 5) Bromomethane               | 1.30 | 94  | 79477  | 64.98  | ug/l   | 97     |
| 6) Chloroethane               | 1.38 | 64  | 45688  | 69.95  | ug/l   | 92     |
| 7) Trichlorofluoromethane     | 1.47 | 101 | 240401 | 71.14  | ug/l   | 100    |
| 8) Diethyl Ether              | 1.69 | 74  | 37857  | 70.11  | ug/l   | 89     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.85 | 101 | 113785 | 67.09  | ug/l   | 99     |
| 10) Methyl Iodide             | 1.92 | 142 | 141673 | 65.55  | ug/l   | 96     |
| 11) Tert butyl alcohol        | 2.68 | 59  | 48633  | 324.63 | ug/l   | 96     |
| 12) 1,1-Dichloroethene        | 1.81 | 96  | 79449  | 67.65  | ug/l   | 84     |
| 13) Acrolein                  | 2.08 | 56  | 35815  | 452.54 | ug/l   | 96     |
| 14) Allyl chloride            | 2.18 | 41  | 125278 | 62.84  | ug/l   | 94     |
| 15) Acrylonitrile             | 3.06 | 53  | 87695  | 352.34 | ug/l   | 99     |
| 16) Acetone                   | 2.33 | 43  | 237969 | 304.22 | ug/l   | 99     |
| 17) Carbon Disulfide          | 1.83 | 76  | 241289 | 64.52  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.44 | 43  | 84686  | 54.51  | ug/l # | 92     |
| 19) Methyl tert-butyl Ether   | 2.53 | 73  | 269453 | 67.93  | ug/l   | 99     |
| 20) Methylene Chloride        | 2.27 | 84  | 93184  | 56.50  | ug/l   | 95     |
| 21) trans-1,2-Dichloroethene  | 2.40 | 96  | 84180  | 67.23  | ug/l   | 98     |
| 22) Diisopropyl ether         | 2.92 | 45  | 309583 | 71.93  | ug/l   | 98     |
| 23) Vinyl Acetate             | 3.32 | 43  | 664675 | 376.97 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 2.99 | 63  | 202020 | 71.32  | ug/l   | 99     |
| 25) 2-Butanone                | 4.50 | 43  | 197607 | 322.92 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 3.75 | 77  | 179740 | 72.71  | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 3.63 | 96  | 82768  | 72.47  | ug/l   | 99     |
| 28) Bromochloromethane        | 3.88 | 49  | 51631  | 63.90  | ug/l   | 93     |
| 29) Tetrahydrofuran           | 4.25 | 42  | 72092  | 329.86 | ug/l   | 98     |
| 30) Chloroform                | 4.03 | 83  | 223710 | 69.29  | ug/l   | 93     |
| 31) Cyclohexane               | 3.85 | 56  | 84675  | 66.52  | ug/l # | 96     |
| 32) 1,1,1-Trichloroethane     | 4.27 | 97  | 212239 | 67.48  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 4.45 | 75  | 133269 | 66.06  | ug/l   | 96     |
| 37) Ethyl Acetate             | 4.29 | 43  | 81305  | 68.34  | ug/l   | 85     |
| 38) Carbon Tetrachloride      | 4.17 | 117 | 196535 | 67.81  | ug/l   | 99     |

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 ALS Vial : 35 Sample Multiplier: 1

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 ClientSampleID :  
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apatel  
 8/20/2018 11:48:30 AM

Quant Time: Aug 18 00:03:39 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F081718S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 17 23:38:00 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 5.62  | 83   | 102772   | 67.26   | ug/l   | 98       |
| 40) Benzene                    | 4.81  | 78   | 238414   | 69.46   | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.92  | 41   | 35987    | 63.84   | ug/l # | 95       |
| 42) 1,2-Dichloroethane         | 5.11  | 62   | 201037   | 67.62   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 7.11  | 43   | 87842    | 67.75   | ug/l   | 95       |
| 44) Trichloroethene            | 5.68  | 130  | 93424    | 69.71   | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 6.41  | 63   | 67171    | 68.61   | ug/l   | 95       |
| 46) Dibromomethane             | 6.26  | 93   | 68266    | 68.75   | ug/l   | 95       |
| 47) Bromodichloromethane       | 6.55  | 83   | 188872   | 72.03   | ug/l   | 99       |
| 48) Methyl methacrylate        | 6.88  | 41   | 68907    | 71.30   | ug/l   | 95       |
| 49) 1,4-Dioxane                | 6.87  | 88   | 11654    | 1506.26 | ug/l # | 69       |
| 51) 4-Methyl-2-Pentanone       | 8.41  | 43   | 390763   | 322.73  | ug/l   | 98       |
| 52) Toluene                    | 7.79  | 92   | 169845   | 65.70   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 8.44  | 75   | 149658   | 67.22   | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 7.46  | 75   | 155738   | 72.56   | ug/l   | 94       |
| 55) 1,1,2-Trichloroethane      | 8.64  | 97   | 73775    | 69.61   | ug/l   | 96       |
| 56) Ethyl methacrylate         | 8.77  | 69   | 88751    | 71.86   | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 9.01  | 76   | 128542   | 68.28   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 7.79  | 63   | 38938    | 383.55  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.64  | 43   | 320079   | 318.16  | ug/l   | 96       |
| 60) Dibromochloromethane       | 8.87  | 129  | 134190   | 69.94   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.15  | 107  | 89364    | 66.83   | ug/l   | 94       |
| 64) Tetrachloroethene          | 8.31  | 164  | 90836    | 66.07   | ug/l   | 95       |
| 65) Chlorobenzene              | 9.95  | 112  | 244602   | 68.44   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.08 | 131  | 114579   | 69.76   | ug/l   | 96       |
| 67) Ethyl Benzene              | 10.05 | 91   | 453189   | 70.64   | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.28 | 106  | 305291   | 136.74  | ug/l   | 89       |
| 69) o-Xylene                   | 10.84 | 106  | 166996   | 72.73   | ug/l   | 91       |
| 70) Styrene                    | 10.91 | 104  | 267380   | 73.12   | ug/l   | 99       |
| 71) Bromoform                  | 10.90 | 173  | 88899    | 71.89   | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.24 | 105  | 526367   | 69.62   | ug/l   | 100      |
| 74) N-amyl acetate             | 11.47 | 43   | 160662   | 71.85   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.80 | 83   | 102427   | 66.42   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.90 | 75   | 90943    | 65.97   | ug/l   | 94       |
| 77) Bromobenzene               | 11.60 | 156  | 141886   | 66.52   | ug/l   | 98       |
| 78) n-propylbenzene            | 11.70 | 91   | 638786   | 68.04   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.82 | 91   | 391671   | 68.12   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.93 | 105  | 474285   | 69.30   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.96 | 75   | 38871m   | 54.69   | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.99 | 91   | 428686   | 68.47   | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.22 | 119  | 460272   | 68.04   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 12.30 | 105  | 494223   | 68.76   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 12.40 | 105  | 595797   | 67.31   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.55 | 119  | 550556   | 70.36   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.57 | 146  | 271162   | 67.25   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.65 | 146  | 270579   | 68.53   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.93 | 91   | 512614   | 67.77   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.00 | 117  | 124456   | 70.69   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.03 | 146  | 260392   | 67.11   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.72 | 75   | 30987    | 71.28   | ug/l   | 92       |

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Sample : VSTDICC075  
Misc : 5.00g/5mL/MSVOA F/SOIL  
ALS Vial : 35 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VSTDICC075

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Quant Title : SW846 8260  
QLast Update : Fri Aug 17 23:38:00 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.27 | 180  | 218333   | 69.35 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.26 | 225  | 141682   | 68.15 | ug/l  | 96       |
| 95) Naphthalene            | 14.53 | 128  | 345355   | 75.43 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.68 | 180  | 211191   | 69.44 | ug/l  | 99       |

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

