

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF051719\  
 Data File : VF062649.D  
 Acq On : 17 May 2019 20:15  
 Operator : FY/SY  
 Sample : K2894-17  
 Misc : 5.06g/5mL/MSVOA F/SOIL  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 SB-02-9-10

Quant Time: May 18 01:44:33 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F051619S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 17 05:49:09 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.05  | 168  | 96       | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 5.75  | 114  | 160      | 50.00 | ug/l  | -0.04    |
| 63) Chlorobenzene-d5       | 9.84  | 117  | 96       | 50.00 | ug/l  | -0.08    |
| 72) 1,4-Dichlorobenzene-d4 | 12.68 | 152  | 91       | 50.00 | ug/l  | 0.06     |

## System Monitoring Compounds

|                           |       |     |          |        |         |       |
|---------------------------|-------|-----|----------|--------|---------|-------|
| 33) 1,2-Dichloroethane-d4 | 5.01  | 65  | 170      | 250.60 | ug/l    | -0.03 |
| Spiked Amount 50.000      |       |     | Recovery | =      | 501.20% |       |
| 35) Dibromofluoromethane  | 4.31  | 113 | 312      | 254.83 | ug/l    | 0.00  |
| Spiked Amount 50.000      |       |     | Recovery | =      | 509.66% |       |
| 50) Toluene-d8            | 7.58  | 98  | 418      | 142.99 | ug/l    | -0.14 |
| Spiked Amount 50.000      |       |     | Recovery | =      | 285.98% |       |
| 62) 4-Bromofluorobenzene  | 11.45 | 95  | 335      | 302.16 | ug/l    | -0.06 |
| Spiked Amount 50.000      |       |     | Recovery | =      | 604.32% |       |

## Target Compounds

|                               |      |     |      |          |        | Qvalue |
|-------------------------------|------|-----|------|----------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.04 | 85  | 558  | 427.123  | ug/l # | 1      |
| 3) Chloromethane              | 1.25 | 50  | 366  | 304.258  | ug/l   | 97     |
| 4) Vinyl Chloride             | 1.19 | 62  | 207  | 186.944  | ug/l # | 41     |
| 5) Bromomethane               | 1.46 | 94  | 299  | 493.600  | ug/l   | 99     |
| 6) Chloroethane               | 1.26 | 64  | 372  | 914.753  | ug/l   | 90     |
| 7) Trichlorofluoromethane     | 1.55 | 101 | 402  | 270.386  | ug/l # | 21     |
| 8) Diethyl Ether              | 1.68 | 74  | 996  | 3381.569 | ug/l   | 77     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.91 | 101 | 339  | 358.084  | ug/l # | 7      |
| 10) Methyl Iodide             | 1.98 | 142 | 536  | 288.217  | ug/l # | 30     |
| 11) Tert butyl alcohol        | 2.68 | 59  | 283  | 6318.737 | ug/l # | 1      |
| 12) 1,1-Dichloroethene        | 1.86 | 96  | 966  | 1120.139 | ug/l # | 1      |
| 13) Acrolein                  | 2.18 | 56  | 297  | 6352.710 | ug/l   | 94     |
| 14) Allyl chloride            | 2.20 | 41  | 156  | 199.868  | ug/l # | 66     |
| 15) Acrylonitrile             | 3.09 | 53  | 367  | 2904.917 | ug/l # | 31     |
| 16) Acetone                   | 2.36 | 43  | 581  | 3301.240 | ug/l # | 47     |
| 17) Carbon Disulfide          | 1.94 | 76  | 765  | 299.283  | ug/l # | 1      |
| 18) Methyl Acetate            | 2.32 | 43  | 858  | 3102.359 | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 2.54 | 73  | 554  | 359.353  | ug/l # | 60     |
| 20) Methylene Chloride        | 2.36 | 84  | 701  | 794.639  | ug/l # | 56     |
| 21) trans-1,2-Dichloroethene  | 2.41 | 96  | 646  | 766.382  | ug/l # | 34     |
| 22) Diisopropyl ether         | 2.94 | 45  | 628  | 326.226  | ug/l # | 86     |
| 23) Vinyl Acetate             | 3.34 | 43  | 933  | 718.474  | ug/l # | 73     |
| 24) 1,1-Dichloroethane        | 2.99 | 63  | 429  | 303.778  | ug/l # | 14     |
| 25) 2-Butanone                | 4.37 | 43  | 391  | 1039.862 | ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 3.82 | 77  | 1161 | 1436.849 | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 3.65 | 96  | 266  | 191.847  | ug/l   | 16     |
| 28) Bromochloromethane        | 3.91 | 49  | 389  | 491.140  | ug/l # | 70     |
| 29) Tetrahydrofuran           | 4.28 | 42  | 1356 | 8911.745 | ug/l # | 43     |
| 30) Chloroform                | 4.16 | 83  | 584  | 297.849  | ug/l   | 90     |
| 31) Cyclohexane               | 3.88 | 56  | 380  | 200.402  | ug/l # | 58     |
| 32) 1,1,1-Trichloroethane     | 4.28 | 97  | 206  | 158.199  | ug/l # | 16     |
| 36) 1,1-Dichloropropene       | 4.43 | 75  | 242  | 147.606  | ug/l # | 1      |
| 37) Ethyl Acetate             | 4.28 | 43  | 217  | 324.165  | ug/l # | 51     |
| 38) Carbon Tetrachloride      | 4.14 | 117 | 70   | 56.771   | ug/l # | 12     |

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 Quant Title : SW846 8260  
 QLast Update : Fri May 17 05:49:09 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc      | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-----------|--------|----------|
| 39) Methylcyclohexane          | 5.61  | 83   | 677      | 343.178   | ug/l # | 52       |
| 40) Benzene                    | 4.79  | 78   | 1137     | 254.564   | ug/l # | 53       |
| 41) Methacrylonitrile          | 4.92  | 41   | 855      | 2436.213  | ug/l # | 59       |
| 42) 1,2-Dichloroethane         | 5.13  | 62   | 237      | 266.088   | ug/l   | 71       |
| 43) Isopropyl Acetate          | 7.08  | 43   | 1723     | 1986.740  | ug/l # | 75       |
| 44) Trichloroethene            | 5.64  | 130  | 195      | 155.339   | ug/l   | 86       |
| 45) 1,2-Dichloropropane        | 6.35  | 63   | 674      | 597.786   | ug/l # | 69       |
| 46) Dibromomethane             | 6.21  | 93   | 164      | 251.685   | ug/l # | 26       |
| 47) Bromodichloromethane       | 6.51  | 83   | 75       | 55.443    | ug/l # | 1        |
| 48) Methyl methacrylate        | 6.84  | 41   | 1153     | 2543.590  | ug/l # | 48       |
| 49) 1,4-Dioxane                | 6.81  | 88   | 229      | 39443.389 | ug/l # | 40       |
| 51) 4-Methyl-2-Pentanone       | 8.33  | 43   | 492      | 829.962   | ug/l # | 32       |
| 52) Toluene                    | 7.78  | 92   | 146      | 62.329    | ug/l   | 84       |
| 53) t-1,3-Dichloropropene      | 8.36  | 75   | 270      | 243.967   | ug/l # | 1        |
| 54) cis-1,3-Dichloropropene    | 7.42  | 75   | 191      | 123.289   | ug/l # | 1        |
| 55) 1,1,2-Trichloroethane      | 8.57  | 97   | 353      | 508.970   | ug/l # | 66       |
| 56) Ethyl methacrylate         | 8.72  | 69   | 925      | 1119.466  | ug/l # | 1        |
| 57) 1,3-Dichloropropane        | 8.95  | 76   | 246      | 208.239   | ug/l # | 1        |
| 58) 2-Chloroethyl Vinyl ether  | 7.43  | 63   | 384      | 1427.738  | ug/l # | 51       |
| 59) 2-Hexanone                 | 9.68  | 43   | 633      | 1748.064  | ug/l   | 78       |
| 60) Dibromochloromethane       | 8.82  | 129  | 187      | 206.875   | ug/l   | 66       |
| 61) 1,2-Dibromoethane          | 9.05  | 107  | 154      | 209.051   | ug/l # | 3        |
| 64) Tetrachloroethene          | 8.32  | 164  | 268      | 352.382   | ug/l # | 24       |
| 65) Chlorobenzene              | 9.92  | 112  | 252      | 133.649   | ug/l # | 41       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.18 | 131  | 189      | 249.689   | ug/l   | 78       |
| 67) Ethyl Benzene              | 9.89  | 91   | 345      | 105.325   | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.29 | 106  | 81       | 65.794    | ug/l # | 72       |
| 69) o-Xylene                   | 10.81 | 106  | 72       | 56.780    | ug/l   | 82       |
| 70) Styrene                    | 10.86 | 104  | 514      | 266.686   | ug/l # | 61       |
| 71) Bromoform                  | 10.86 | 173  | 63       | 166.181   | ug/l # | 27       |
| 73) Isopropylbenzene           | 11.25 | 105  | 60       | 9.199     | ug/l # | 45       |
| 74) N-amyl acetate             | 11.46 | 43   | 1461     | 980.871   | ug/l # | 58       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.76 | 83   | 258      | 193.565   | ug/l # | 8        |
| 76) 1,2,3-Trichloropropane     | 11.89 | 75   | 175      | 199.820   | ug/l # | 1        |
| 77) Bromobenzene               | 11.57 | 156  | 306      | 188.750   | ug/l   | 92       |
| 78) n-propylbenzene            | 11.68 | 91   | 704      | 91.207    | ug/l # | 50       |
| 79) 2-Chlorotoluene            | 11.79 | 91   | 447      | 102.759   | ug/l # | 39       |
| 80) 1,3,5-Trimethylbenzene     | 11.90 | 105  | 179      | 34.227    | ug/l   | 95       |
| 81) trans-1,4-Dichloro-2-buten | 11.98 | 75   | 229      | 588.245   | ug/l # | 26       |
| 82) 4-Chlorotoluene            | 11.96 | 91   | 467      | 108.866   | ug/l # | 37       |
| 83) tert-Butylbenzene          | 12.19 | 119  | 196      | 36.941    | ug/l # | 1        |
| 84) 1,2,4-Trimethylbenzene     | 12.21 | 105  | 302      | 59.664    | ug/l   | 94       |
| 85) sec-Butylbenzene           | 12.38 | 105  | 134      | 18.819    | ug/l # | 54       |
| 86) p-Isopropyltoluene         | 12.49 | 119  | 454      | 75.656    | ug/l # | 53       |
| 87) 1,3-Dichlorobenzene        | 12.59 | 146  | 70       | 23.866    | ug/l # | 4        |
| 88) 1,4-Dichlorobenzene        | 12.64 | 146  | 141      | 51.227    | ug/l # | 24       |
| 89) n-Butylbenzene             | 12.93 | 91   | 490      | 82.818    | ug/l # | 57       |
| 90) Hexachloroethane           | 12.93 | 117  | 338      | 234.799   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.99 | 146  | 150      | 57.372    | ug/l # | 33       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.70 | 75   | 63       | 396.206   | ug/l # | 24       |

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Quant Title : SW846 8260  
QLast Update : Fri May 17 05:49:09 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|----------------------------|-------|------|----------|---------|--------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.15 | 180  | 59       | 31.526  | ug/l # | 11       |
| 94) Hexachlorobutadiene    | 14.25 | 225  | 68       | 52.066  | ug/l # | 16       |
| 95) Naphthalene            | 14.52 | 128  | 379      | 111.473 | ug/l # | 29       |
| 96) 1,2,3-Trichlorobenzene | 14.65 | 180  | 72       | 40.617  | ug/l # | 11       |

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

