

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF030419\  
 Data File : VF061838.D  
 Acq On : 5 Mar 2019 00:40  
 Operator : VA/AP  
 Sample : K1712-07  
 Misc : 5.75u/5mL/MSVOA-F/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 Z-2-1

Manual Integrations  
 APPROVED

MMDadoda  
 3/5/2019 10:48:36 AM

Quant Time: Mar 05 05:52:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F030419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 05 04:04:51 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.86  | 168  | 238973   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 5.59  | 114  | 388919   | 50.00 | ug/l  | -0.01    |
| 63) Chlorobenzene-d5       | 9.77  | 117  | 321405   | 50.00 | ug/l  | -0.01    |
| 72) 1,4-Dichlorobenzene-d4 | 12.54 | 152  | 149347   | 50.00 | ug/l  | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response   | Conc    | Units | Dev(Min) |
|-----------------------------|-------|------|------------|---------|-------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.84  | 65   | 94830      | 54.11   | ug/l  | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery = | 108.22% |       |          |
| 35) Dibromofluoromethane    | 4.10  | 113  | 135702     | 46.99   | ug/l  | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery = | 93.98%  |       |          |
| 50) Toluene-d8              | 7.55  | 98   | 343426     | 41.36   | ug/l  | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery = | 82.72%  |       |          |
| 62) 4-Bromofluorobenzene    | 11.40 | 95   | 146140     | 43.50   | ug/l  | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery = | 87.00%  |       |          |

| Target Compounds             | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane   | 0.97 | 85   | 132      | 0.048  | ug/l # | 43     |
| 3) Chloromethane             | 1.07 | 50   | 334      | 0.116  | ug/l # | 42     |
| 4) Vinyl Chloride            | 1.10 | 62   | 67       | 0.025  | ug/l # | 1      |
| 5) Bromomethane              | 1.32 | 94   | 463      | 0.251  | ug/l # | 3      |
| 6) Chloroethane              | 1.45 | 64   | 68       | 0.052  | ug/l # | 1      |
| 14) Allyl chloride           | 1.91 | 41   | 299      | 0.119  | ug/l   | 90     |
| 16) Acetone                  | 2.24 | 43   | 18458    | 49.092 | ug/l   | 95     |
| 17) Carbon Disulfide         | 1.82 | 76   | 126      | 0.020  | ug/l # | 1      |
| 19) Methyl tert-butyl Ether  | 2.42 | 73   | 182      | 0.052  | ug/l # | 1      |
| 20) Methylene Chloride       | 2.24 | 84   | 29413m   | 12.950 | ug/l   |        |
| 21) trans-1,2-Dichloroethene | 2.31 | 96   | 78       | 0.035  | ug/l # | 1      |
| 22) Diisopropyl ether        | 2.79 | 45   | 531      | 0.088  | ug/l # | 1      |
| 23) Vinyl Acetate            | 3.20 | 43   | 351      | 0.119  | ug/l # | 74     |
| 24) 1,1-Dichloroethane       | 2.88 | 63   | 101      | 0.028  | ug/l # | 1      |
| 25) 2-Butanone               | 4.28 | 43   | 267      | 0.325  | ug/l # | 55     |
| 26) 2,2-Dichloropropane      | 3.63 | 77   | 60       | 0.039  | ug/l # | 52     |
| 27) cis-1,2-Dichloroethene   | 3.44 | 96   | 69       | 0.024  | ug/l   | 1      |
| 30) Chloroform               | 3.87 | 83   | 148      | 0.036  | ug/l # | 18     |
| 31) Cyclohexane              | 3.73 | 56   | 111      | 0.028  | ug/l # | 16     |
| 32) 1,1,1-Trichloroethane    | 4.10 | 97   | 61       | 0.022  | ug/l # | 22     |
| 36) 1,1-Dichloropropene      | 4.38 | 75   | 263      | 0.068  | ug/l # | 67     |
| 37) Ethyl Acetate            | 4.10 | 43   | 504      | 0.282  | ug/l # | 30     |
| 39) Methylcyclohexane        | 5.59 | 83   | 2521     | 0.553  | ug/l # | 48     |
| 40) Benzene                  | 4.63 | 78   | 961      | 0.095  | ug/l # | 52     |
| 41) Methacrylonitrile        | 4.74 | 41   | 217      | 0.237  | ug/l # | 25     |
| 42) 1,2-Dichloroethane       | 4.87 | 62   | 1076     | 0.446  | ug/l # | 1      |
| 43) Isopropyl Acetate        | 6.96 | 43   | 255      | 0.120  | ug/l # | 43     |
| 45) 1,2-Dichloropropane      | 6.26 | 63   | 63       | 0.026  | ug/l # | 44     |
| 48) Methyl methacrylate      | 6.73 | 41   | 173      | 0.136  | ug/l # | 31     |
| 52) Toluene                  | 7.61 | 92   | 1780     | 0.291  | ug/l # | 70     |
| 53) t-1,3-Dichloropropene    | 8.21 | 75   | 98       | 0.036  | ug/l # | 42     |
| 54) cis-1,3-Dichloropropene  | 7.36 | 75   | 125      | 0.034  | ug/l # | 36     |
| 55) 1,1,2-Trichloroethane    | 8.31 | 97   | 92       | 0.051  | ug/l # | 16     |
| 56) Ethyl methacrylate       | 8.62 | 69   | 125      | 0.063  | ug/l # | 68     |

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 QLast Update : Tue Mar 05 04:04:51 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 58) 2-Chloroethyl Vinyl ether  | 7.28  | 63   | 63       | 0.183 | ug/l # | 44       |
| 64) Tetrachloroethene          | 8.15  | 164  | 67       | 0.026 | ug/l # | 1        |
| 65) Chlorobenzene              | 9.78  | 112  | 75       | 0.011 | ug/l # | 42       |
| 67) Ethyl Benzene              | 9.90  | 91   | 462      | 0.043 | ug/l # | 45       |
| 68) m/p-Xylenes                | 10.13 | 106  | 440      | 0.106 | ug/l # | 60       |
| 69) o-Xylene                   | 10.70 | 106  | 362      | 0.082 | ug/l # | 64       |
| 70) Styrene                    | 10.79 | 104  | 151      | 0.024 | ug/l # | 12       |
| 73) Isopropylbenzene           | 11.11 | 105  | 211      | 0.020 | ug/l # | 48       |
| 74) N-amyl acetate             | 11.37 | 43   | 307      | 0.120 | ug/l # | 65       |
| 76) 1,2,3-Trichloropropane     | 11.87 | 75   | 354      | 0.273 | ug/l # | 99       |
| 77) Bromobenzene               | 11.48 | 156  | 70       | 0.027 | ug/l # | 1        |
| 78) n-propylbenzene            | 11.59 | 91   | 863      | 0.071 | ug/l # | 63       |
| 79) 2-Chlorotoluene            | 11.71 | 91   | 87       | 0.013 | ug/l # | 38       |
| 80) 1,3,5-Trimethylbenzene     | 11.82 | 105  | 491      | 0.058 | ug/l # | 86       |
| 81) trans-1,4-Dichloro-2-buten | 11.87 | 75   | 354      | 0.570 | ug/l # | 21       |
| 82) 4-Chlorotoluene            | 11.89 | 91   | 236      | 0.033 | ug/l # | 37       |
| 83) tert-Butylbenzene          | 12.13 | 119  | 295      | 0.031 | ug/l # | 75       |
| 84) 1,2,4-Trimethylbenzene     | 12.20 | 105  | 606      | 0.072 | ug/l # | 91       |
| 85) sec-Butylbenzene           | 12.30 | 105  | 678      | 0.056 | ug/l # | 54       |
| 86) p-Isopropyltoluene         | 12.46 | 119  | 1011     | 0.099 | ug/l # | 80       |
| 87) 1,3-Dichlorobenzene        | 12.48 | 146  | 220      | 0.043 | ug/l # | 26       |
| 88) 1,4-Dichlorobenzene        | 12.56 | 146  | 256      | 0.052 | ug/l # | 27       |
| 89) n-Butylbenzene             | 12.84 | 91   | 886      | 0.092 | ug/l # | 72       |
| 90) Hexachloroethane           | 13.06 | 117  | 60       | 0.025 | ug/l # | 13       |
| 91) 1,2-Dichlorobenzene        | 12.94 | 146  | 309      | 0.063 | ug/l # | 48       |
| 93) 1,2,4-Trichlorobenzene     | 14.19 | 180  | 267      | 0.076 | ug/l # | 50       |
| 95) Naphthalene                | 14.45 | 128  | 1714     | 0.281 | ug/l # | 88       |
| 96) 1,2,3-Trichlorobenzene     | 14.61 | 180  | 353      | 0.110 | ug/l # | 49       |
| -----                          |       |      |          |       |        |          |

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

