

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF100918\  
 Data File : VF060497.D  
 Acq On : 9 Oct 2018 18:36  
 Operator : VA/AP  
 Sample : VSTDICV050  
 Misc : 5.00/5mL/MSVOA F/SOIL  
 ALS Vial : 39 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 ICSVF100918

Manual Integrations  
 APPROVED

apatel  
 10/10/2018 12:34:06 PM

Quant Time: Oct 10 02:34:35 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F100918S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 10 02:28:46 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.   | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|--------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 5.01   | 168  | 287353   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 5.73   | 114  | 457062   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 9.89   | 117  | 410969   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 12.61  | 152  | 212529   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |        |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 4.98   | 65   | 199590   | 45.80   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 91.60%  |          |
| 35) Dibromofluoromethane      | 4.26   | 113  | 213230   | 50.68   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 101.36% |          |
| 50) Toluene-d8                | 7.68   | 98   | 530678   | 52.48   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 104.96% |          |
| 62) 4-Bromofluorobenzene      | 11.49  | 95   | 220943   | 49.80   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 99.60%  |          |
| Target Compounds              |        |      |          |         |         |          |
|                               |        |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 1.00   | 85   | 255383   | 50.514  | ug/l    | 98       |
| 3) Chloromethane              | 1.14   | 50   | 165086   | 47.258  | ug/l    | 90       |
| 4) Vinyl Chloride             | 1.18   | 62   | 177587   | 46.868  | ug/l    | 91       |
| 5) Bromomethane               | 1.37   | 94   | 147614   | 49.537  | ug/l    | 91       |
| 6) Chloroethane               | 1.42   | 64   | 99234    | 49.543  | ug/l    | 94       |
| 7) Trichlorofluoromethane     | 1.54   | 101  | 399197m  | 47.003  | ug/l    |          |
| 8) Diethyl Ether              | 1.69   | 74   | 61295    | 50.438  | ug/l    | 84       |
| 9) 1,1,2-Trichlorotrifluoroet | 1.88   | 101  | 199268   | 46.903  | ug/l    | 95       |
| 10) Methyl Iodide             | 1.96   | 142  | 322274   | 47.845  | ug/l    | 92       |
| 11) Tert butyl alcohol        | 2.67   | 59   | 59119    | 258.903 | ug/l #  | 93       |
| 12) 1,1-Dichloroethene        | 1.85   | 96   | 160150   | 45.128  | ug/l    | 96       |
| 13) Acrolein                  | 2.07   | 56   | 29332    | 280.693 | ug/l    | 93       |
| 14) Allyl chloride            | 2.17   | 41   | 288383   | 55.129  | ug/l    | 89       |
| 15) Acrylonitrile             | 3.05   | 53   | 112555   | 234.137 | ug/l    | 93       |
| 16) Acetone                   | 2.32   | 43   | 188352   | 243.405 | ug/l    | 94       |
| 17) Carbon Disulfide          | 1.91   | 76   | 464525   | 47.069  | ug/l    | 94       |
| 18) Methyl Acetate            | 2.44   | 43   | 89650    | 54.893  | ug/l    | 94       |
| 19) Methyl tert-butyl Ether   | 2.52   | 73   | 396102   | 49.584  | ug/l    | 98       |
| 20) Methylene Chloride        | 2.26   | 84   | 160567m  | 48.438  | ug/l    |          |
| 21) trans-1,2-Dichloroethene  | 2.39   | 96   | 166332   | 50.216  | ug/l    | 90       |
| 22) Diisopropyl ether         | 2.90   | 45   | 550275   | 51.174  | ug/l    | 98       |
| 23) Vinyl Acetate             | 3.31   | 43   | 944458   | 250.905 | ug/l    | 99       |
| 24) 1,1-Dichloroethane        | 2.98   | 63   | 353823   | 49.032  | ug/l    | 100      |
| 25) 2-Butanone                | 4.48   | 43   | 243649   | 234.397 | ug/l    | 95       |
| 26) 2,2-Dichloropropane       | 3.73   | 77   | 165208   | 43.909  | ug/l    | 97       |
| 27) cis-1,2-Dichloroethene    | 3.60   | 96   | 197658   | 51.121  | ug/l    | 98       |
| 28) Bromochloromethane        | 3.86   | 49   | 114577   | 45.713  | ug/l #  | 93       |
| 29) Tetrahydrofuran           | 4.22   | 42   | 104821   | 239.216 | ug/l    | 96       |
| 30) Chloroform                | 4.01   | 83   | 397924   | 47.651  | ug/l    | 98       |
| 31) Cyclohexane               | 3.83   | 56   | 228122   | 49.415  | ug/l    | 97       |
| 32) 1,1,1-Trichloroethane     | 4.24   | 97   | 316338   | 48.085  | ug/l    | 94       |
| 36) 1,1-Dichloropropene       | 4.43   | 75   | 266258   | 50.082  | ug/l    | 95       |
| 37) Ethyl Acetate             | 4.26   | 43   | 94068    | 50.092  | ug/l #  | 78       |
| 38) Carbon Tetrachloride      | 4.13   | 117  | 272807m  | 51.084  | ug/l    |          |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 5.59  | 83   | 252358   | 50.414   | ug/l   | 97       |
| 40) Benzene                    | 4.78  | 78   | 580329   | 53.165   | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.89  | 41   | 53323    | 49.976   | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 5.09  | 62   | 240000   | 48.465   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 7.08  | 43   | 122326   | 52.265   | ug/l # | 90       |
| 44) Trichloroethene            | 5.64  | 130  | 183899   | 54.081   | ug/l   | 90       |
| 45) 1,2-Dichloropropane        | 6.37  | 63   | 145885   | 54.596   | ug/l   | 89       |
| 46) Dibromomethane             | 6.22  | 93   | 104145   | 48.589   | ug/l   | 99       |
| 47) Bromodichloromethane       | 6.52  | 83   | 281721   | 52.042   | ug/l   | 97       |
| 48) Methyl methacrylate        | 6.85  | 41   | 79972    | 50.441   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 6.83  | 88   | 14786    | 1055.108 | ug/l # | 88       |
| 51) 4-Methyl-2-Pentanone       | 8.37  | 43   | 427100   | 261.591  | ug/l   | 100      |
| 52) Toluene                    | 7.75  | 92   | 337808   | 49.138   | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 8.40  | 75   | 211043   | 50.197   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.43  | 75   | 259532   | 53.002   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 8.61  | 97   | 105035   | 49.714   | ug/l   | 95       |
| 56) Ethyl methacrylate         | 8.74  | 69   | 129678   | 53.048   | ug/l   | 92       |
| 57) 1,3-Dichloropropane        | 8.97  | 76   | 186032   | 51.135   | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 7.75  | 63   | 59676    | 240.230  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.61  | 43   | 326929   | 276.825  | ug/l   | 93       |
| 60) Dibromochloromethane       | 8.84  | 129  | 170823   | 51.507   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.11  | 107  | 123240   | 51.625   | ug/l   | 97       |
| 64) Tetrachloroethene          | 8.27  | 164  | 160933   | 49.407   | ug/l   | 91       |
| 65) Chlorobenzene              | 9.91  | 112  | 404485   | 50.679   | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.05 | 131  | 175012   | 48.681   | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.01 | 91   | 773762   | 51.386   | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.25 | 106  | 527543   | 102.629  | ug/l   | 97       |
| 69) o-Xylene                   | 10.81 | 106  | 275967   | 49.367   | ug/l   | 100      |
| 70) Styrene                    | 10.88 | 104  | 409278   | 50.864   | ug/l   | 97       |
| 71) Bromoform                  | 10.87 | 173  | 90762    | 49.796   | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.21 | 105  | 864832   | 54.744   | ug/l   | 96       |
| 74) N-amyl acetate             | 11.45 | 43   | 205166   | 59.666   | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.76 | 83   | 142032   | 53.490   | ug/l   | 94       |
| 76) 1,2,3-Trichloropropane     | 11.87 | 75   | 102574   | 49.970   | ug/l   | 83       |
| 77) Bromobenzene               | 11.58 | 156  | 178993   | 50.984   | ug/l   | 88       |
| 78) n-propylbenzene            | 11.67 | 91   | 985121   | 52.358   | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 11.79 | 91   | 566733   | 51.451   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 11.89 | 105  | 685876   | 51.752   | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 11.94 | 75   | 49327m   | 55.115   | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.97 | 91   | 576444   | 50.724   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.20 | 119  | 689437   | 51.747   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 12.27 | 105  | 683530   | 50.799   | ug/l   | 98       |
| 85) sec-Butylbenzene           | 12.37 | 105  | 930411   | 51.491   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.52 | 119  | 761646   | 51.345   | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 12.54 | 146  | 333663   | 49.896   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.63 | 146  | 337337   | 52.017   | ug/l   | 92       |
| 89) n-Butylbenzene             | 12.91 | 91   | 818760   | 52.748   | ug/l   | 98       |
| 90) Hexachloroethane           | 12.98 | 117  | 189844   | 53.521   | ug/l   | 90       |
| 91) 1,2-Dichlorobenzene        | 13.01 | 146  | 327722   | 50.909   | ug/l   | 95       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.70 | 75   | 28115    | 49.886   | ug/l   | 92       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.25 | 180  | 248362   | 49.959 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 14.24 | 225  | 173827   | 51.431 | ug/l  | 97       |
| 95) Naphthalene            | 14.50 | 128  | 460031   | 53.831 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.65 | 180  | 237937   | 51.374 | ug/l  | 98       |

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

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