

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY120519\  
 Data File : VY000890.D  
 Acq On : 05 Dec 2019 18:32  
 Operator : SY/MD  
 Sample : K6177-07MS  
 Misc : 5.80G/5ML/MSVOA Y/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 EP-6MS

Manual Integrations  
 APPROVED

apatel  
 12/6/2019 10:01:33 AM

Quant Time: Dec 06 05:35:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y112719S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 27 12:40:47 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.   | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|--------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 7.80   | 168  | 305728   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.69   | 114  | 543068   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 11.49  | 117  | 490012   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.42  | 152  | 220142   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |        |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 8.15   | 65   | 171965   | 52.93   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 105.86% |          |
| 35) Dibromofluoromethane      | 7.73   | 113  | 169039   | 53.41   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 106.82% |          |
| 50) Toluene-d8                | 10.18  | 98   | 692422   | 54.72   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 109.44% |          |
| 62) 4-Bromofluorobenzene      | 12.48  | 95   | 238489   | 50.19   | ug/l    | 0.00     |
| Spiked Amount                 | 50.000 |      | Recovery | =       | 100.38% |          |
| Target Compounds              |        |      |          |         |         |          |
|                               |        |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 1.90   | 85   | 147837   | 44.921  | ug/l    | 95       |
| 3) Chloromethane              | 2.11   | 50   | 202056   | 49.807  | ug/l    | 96       |
| 4) Vinyl Chloride             | 2.25   | 62   | 201441   | 50.383  | ug/l    | 97       |
| 5) Bromomethane               | 2.65   | 94   | 129756   | 54.519  | ug/l    | 94       |
| 6) Chloroethane               | 2.79   | 64   | 126745   | 51.704  | ug/l    | 98       |
| 7) Trichlorofluoromethane     | 3.13   | 101  | 282979   | 51.645  | ug/l    | 95       |
| 8) Diethyl Ether              | 3.53   | 74   | 113038   | 54.812  | ug/l    | 100      |
| 9) 1,1,2-Trichlorotrifluoroet | 3.90   | 101  | 175524   | 51.873  | ug/l    | 99       |
| 10) Methyl Iodide             | 4.09   | 142  | 224029   | 52.586  | ug/l    | 98       |
| 11) Tert butyl alcohol        | 4.96   | 59   | 81666    | 249.869 | ug/l    | 96       |
| 12) 1,1-Dichloroethene        | 3.88   | 96   | 180296   | 53.785  | ug/l    | 96       |
| 13) Acrolein                  | 3.73   | 56   | 50109    | 155.640 | ug/l    | 99       |
| 14) Allyl chloride            | 4.49   | 41   | 314509   | 54.718  | ug/l    | 98       |
| 15) Acrylonitrile             | 5.17   | 53   | 287076   | 269.578 | ug/l    | 99       |
| 16) Acetone                   | 3.96   | 43   | 187443   | 251.524 | ug/l    | 97       |
| 17) Carbon Disulfide          | 4.20   | 76   | 547858   | 50.533  | ug/l    | 99       |
| 18) Methyl Acetate            | 4.48   | 43   | 235985   | 75.732  | ug/l    | 97       |
| 19) Methyl tert-butyl Ether   | 5.23   | 73   | 502975   | 56.183  | ug/l    | 99       |
| 20) Methylene Chloride        | 4.72   | 84   | 217779   | 55.439  | ug/l    | 95       |
| 21) trans-1,2-Dichloroethene  | 5.22   | 96   | 206435   | 54.181  | ug/l    | 99       |
| 22) Diisopropyl ether         | 6.13   | 45   | 654917   | 55.438  | ug/l    | 98       |
| 23) Vinyl Acetate             | 6.07   | 43   | 1379076  | 192.023 | ug/l    | 99       |
| 24) 1,1-Dichloroethane        | 6.03   | 63   | 362201   | 55.628  | ug/l    | 98       |
| 25) 2-Butanone                | 7.00   | 43   | 364110   | 264.492 | ug/l    | 99       |
| 26) 2,2-Dichloropropane       | 6.99   | 77   | 290240   | 52.963  | ug/l    | 99       |
| 27) cis-1,2-Dichloroethene    | 7.00   | 96   | 227278   | 55.184  | ug/l    | 99       |
| 28) Bromochloromethane        | 7.34   | 49   | 149638   | 62.170  | ug/l    | 97       |
| 29) Tetrahydrofuran           | 7.36   | 42   | 246428   | 270.137 | ug/l    | 99       |
| 30) Chloroform                | 7.52   | 83   | 343131   | 52.533  | ug/l    | 97       |
| 31) Cyclohexane               | 7.79   | 56   | 336053   | 48.721  | ug/l    | 97       |
| 32) 1,1,1-Trichloroethane     | 7.71   | 97   | 289090   | 53.599  | ug/l    | 100      |
| 36) 1,1-Dichloropropene       | 7.92   | 75   | 277378   | 51.369  | ug/l    | 100      |
| 37) Ethyl Acetate             | 7.08   | 43   | 154563   | 49.573  | ug/l    | 99       |
| 38) Carbon Tetrachloride      | 7.91   | 117  | 247702   | 51.510  | ug/l    | 100      |

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| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 342822   | 47.920   | ug/l   | 100      |
| 40) Benzene                    | 8.17  | 78   | 848452   | 53.944   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.33  | 41   | 93746m   | 57.048   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.24  | 62   | 217591   | 52.604   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.28  | 43   | 304821   | 51.879   | ug/l   | 100      |
| 44) Trichloroethene            | 8.94  | 130  | 213835   | 52.901   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 218379   | 55.276   | ug/l   | 99       |
| 46) Dibromomethane             | 9.31  | 93   | 111972   | 54.244   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.50  | 83   | 264940   | 54.636   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.30  | 41   | 143641   | 55.595   | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 29597    | 1011.918 | ug/l   | 93       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 830686   | 273.633  | ug/l   | 99       |
| 52) Toluene                    | 10.24 | 92   | 518650   | 53.258   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 288289   | 55.336   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 341654   | 55.482   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.64 | 97   | 165884   | 54.393   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 240554   | 55.138   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 295783   | 55.647   | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.78  | 63   | 443849   | 252.313  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.83 | 43   | 622036   | 281.198  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.99 | 129  | 186005   | 56.656   | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 11.08 | 107  | 158249   | 55.058   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.72 | 164  | 220710   | 51.842   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.51 | 112  | 532523   | 52.282   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 184612   | 53.782   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.59 | 91   | 977059   | 51.507   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.70 | 106  | 733005   | 102.949  | ug/l   | 100      |
| 69) o-Xylene                   | 12.03 | 106  | 348418   | 52.482   | ug/l   | 100      |
| 70) Styrene                    | 12.04 | 104  | 603698   | 53.107   | ug/l   | 100      |
| 71) Bromoform                  | 12.20 | 173  | 105899   | 54.700   | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.33 | 105  | 913520   | 52.117   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.14 | 43   | 230765   | 47.300   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 186971   | 54.136   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 126792m  | 50.835   | ug/l   |          |
| 77) Bromobenzene               | 12.60 | 156  | 206253   | 54.284   | ug/l   | 99       |
| 78) n-propylbenzene            | 12.67 | 91   | 1093468  | 51.091   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 616056   | 52.104   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 751353   | 51.771   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 71619    | 56.403   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 639942   | 52.534   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.07 | 119  | 617268   | 50.589   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.11 | 105  | 742984   | 51.170   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 894637   | 50.415   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.36 | 119  | 779673   | 50.514   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 375858   | 50.427   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 378669   | 51.310   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.69 | 91   | 761138   | 48.774   | ug/l   | 100      |
| 90) Hexachloroethane           | 13.95 | 117  | 149468   | 52.569   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.73 | 146  | 349337   | 52.106   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.35 | 75   | 31916    | 55.198   | ug/l   | 96       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 217046   | 47.843 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 102763   | 45.687 | ug/l  | 100      |
| 95) Naphthalene            | 15.23 | 128  | 537894   | 51.062 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 192546   | 47.516 | ug/l  | 99       |

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

