

### West Sacramento Laboratory – EPA Method 1694: Antibacterials by HPLC/MS/MS

#### Method Application:

The method is used to determine trace concentrations of antibacterial compounds originating from common personal care products in water matrices. Data reporting limits is 50ng/L with method detection limits ranging from 1.1 to 6.1ng/L.

#### Market Application

The method is designed for engineers or monitoring entities who are required to test for trace levels of fugitive antibacterials, considered to be endocrine disrupting compounds. These antibacterial products are most often found in hand soaps, shampoos and conditioners, and other household products. This method has been used to support pilot studies that determine PPCP removal efficiencies of different process applications targeting different water sources including well water, ground water, surface water, and estuary water.

#### Advantages:

Utilizing Solid Phase Extraction (SPE) columns to efficiently extract and isolate target analytes, instrumentation is capable of identifying exact mass fragments that provide unique characteristic and quantitation of target analytes. The method also employs all available labeled analytes to increase quantitation reliability and accuracy. Analytes without labeled isotopes are quantitated with a closely related internal standard. Estimated detection limits (EDL) are available to generate the lowest possible detection limit calculated for each analyte in each sample (analyte/sample matrix specific detection limit – similar to EDL described in Method 8290).

1694 Anti-Bacterial (LCMS/MS)		
Analyte	RL (ng/L)	MDL (ng/L)
Triclocarban	50	1.1
Triclosan	50	6.1

For more information on West Sacramento's new method capability, please contact:

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