

Microcystin Report

Project: Adya Water Filtration System Evaluation

Toxins – Microcystins (MC)

Sample Preparation:

One liter of DI water was spiked with 10 ppb (100 μ L of 100 ppm) MC-LR. The spiked solution was placed in the top tank of the assembled Adya filtration system and allowed to filter through to the dispensing tank. Samples were collected from both the top tank (pre-filtration) and from the dispensing tank post-filtration.

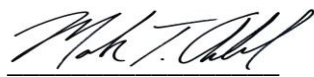
Analytical Methodology:

A microcystins enzyme linked immunosorbent assay (ELISA) was utilized for the quantitative and sensitive congener-independent detection of MCs. The current assay is sensitive down to a LOD/LOQ of 0.15 μ g/L for total MCs. The average Lab Fortified Blank (LFB) recovery was 102%.

Summary of Results

<u>Sample</u>	<u>MC Levels</u> (μ g/L)
Pre Filtration (10 ppb MC-LR solution)	10.8
Post Filtration (10 ppb MC-LR solution)	ND
<i>ND = Not detected above LOD/LOQ</i>	
<i>LOD/LOQ = 0.15 μg/L</i>	

Submitted by:



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Date:

8/18/14