

**INDEPENDENT LABORATORY CERTIFICATE OF ANALYSIS**
**Evaluation of Bacterial, Viral, and Cyst Reduction Capabilities of a Small Water Purifier Device per NSF Protocol P248 and P231**

**Reported to:** First Water Systems, Inc.  
 6950 Brixton Place  
 Suwanee, GA 30024

**Date Tested:** 12/11/2012  
**Project No.:** 825-101

**Product Tested:**

**First Water 40™ Treatment System, as deployed on the FW-1200™ Small Unit Water Purifier**, by First Water Systems, Inc. The product is defined by 1 micron mechanical filtration, carbon block filtration, Zeonic™ Virus Media, and an ultraviolet light dose of 40 mj/cm<sup>2</sup> at flow rates ≤ 20 gpm.

**Test Performed:** EPA and NSF P248 (2012) and P231 Biological Water Challenge Test

**Independent Laboratory Testing Results:**

Organism	Required % Reduction	Actual % Reduction	Pass/ Fail
<i>R. terrigena</i> (bacteria)	> 99.9999	> 99.999999	Pass
MS2 coliphage (virus)	> 99.99	> 99.99	Pass
fr coliphage (virus)	> 99.99	> 99.99	Pass
Cryptosporidium (cyst)	> 99.9	> 99.99	Pass

**Conclusions:**

Independent laboratory testing found that **First Water 40™ Treatment System, as deployed on the FW-1200™ Small Unit Water Purifier** achieved the microorganism contaminant reductions in accordance with the levels set forth by NSF and EPA in protocols P248 and P231.

**Laboratory Qualifications:**

Microbac Laboratories, Inc. operates one of the world's most diversified commercial testing and analytical laboratory groups in the environmental, food, pharmaceutical and other testing areas. The MicroBioTest division of Microbac has over 26 years of experience serving microbial and viral testing community and is fully compliant to Good Laboratory Practices (GLP) and ISO 17025.

**Reported by:** MICROBIOTEST



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Date