Project:
Study Sponsor:
Sample(s): **BCS 1407065 and 1407066, received July 07, 2014.**
Test: **Filtration Efficacy – Initial Efficacy***
Test Parameter: **Soluble Inorganic; Metals – pH 6.5**
Performed and Analyzed by: **George Lukasik, Ph.D. & Kintin Ng; July 17, 2014**

Metal Species	Influent Concentration (ppm)	United Filter #1 Effluent BCS 1407065		United Filter #2 Effl BCS 1407066	
		Concentration (ppm)	% Reduction	Concentration (ppm)	%
Arsenic	0.098	<0.0040**	>95.9%	<0.0040**	
Cadmium	0.097	<0.0010**	>98.8%	<0.0010**	
Chromium	0.097	0.0038	96.1%	0.0044	
Iron	0.32	<0.050**	>84.4%	<0.050**	
Lead	0.094	0.0024	97.5%	0.0031	
Mercury	110	36	67.3%	24	
Selenium	0.10	0.025	75%	0.022	
Silver	0.078	0.0016	98.0%	<0.0010**	

** The species was not detected in the filter effluent.

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FL DOH LABORATORY #E82924, EPA# FL01147

TEST DATA ON FILE.

Project:
Sample(s): **BCS 1407065 and 1407066, received July 07, 2014.**
Test: **Filtration Efficacy – Efficacy following passage of 1000 gallons municipal tap water ****
Test Parameter: **Soluble Inorganic; Metals – pH 6.5**
Performed and Analyzed by: **George Lukasik, Ph.D. & Kintin Ng; July 18, 2014**

Metal Species	Influent Concentration (ppm)	1000 Gallons United Filter #1 Effluent BCS 1407065		1000 Gallons United Filter BCS 1407066	
		Concentration (ppm)	% Reduction	Concentration (ppm)	%
Arsenic	0.10	<0.0040**	>96.0%	<0.0040**	
Cadmium	0.10	<0.0010**	>99.0%	<0.0010**	
Chromium	0.10	0.010	90.0%	0.010	
Iron	0.30	<0.050**	>83.3%	<0.050**	
Lead	0.10	0.0038	96.2%	<0.0020	
Mercury	0.00110	0.00040	63.6%	0.00042	
Selenium	0.11	0.018	83.6%	0.016	
Silver	0.056	<0.0010**	>98.2%	<0.0010**	

** The species was not detected in the filter effluent.

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Project:	
Study Sponsor:	
Sample(s):	**BCS 1407065 and 1407066, received July 07, 2014.**
Test:	**Filtration Efficacy – Initial filtration efficacy and efficacy followi gallons of City of Gainesville municipal tap water ****
Test Parameter:	**Soluble Inorganic; Metals – pH 6.5**
Performed and Analyzed by:	**George Lukasik, Ph.D. & Kintin Ng; July 17 and 18, 2014**

* Chemical filtration challenge study description: Initially, fifteen liters of City of Gainesville mur were passed through each of the provided filters using 58-60 PSI of pressure. The indicated cl added to 25 liters of municipal drinking water and placed in a stainless steel pressure vessel. A was used (Specpure® plasma standard solution, cat. 14657, Alfa Aesar, MA) to spike the wate homogenized. The pH of the water was 6.5. The vessel was sealed and pressurized to 57 PS challenge solution were passed through each of the filters. Each filter's effluent was collected The flow rate was validated using a NIST traceable timer and was measured to be two gallons the influent was removed prior to the beginning of the challenge study and at the end of the stu gallons of municipal drinking water were passed through each the filters. The described filtration challe repeated. The collected influent and effluent samples were stabilized immediately following collection a immediately preserved to TestAmerica Tampa Laboratory for analysis. TestAmerica is NELAP accrec the indicated species in water. Method 6010B- Metals (ICP) and 7470A – Mercury (CVAA) were used quality control data was provided and validated results.

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Project:	
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Sample(s):	**BCS 1407065 and 1407066, received July 07, 2014.**
Test:	**Filtration Efficacy – Initial filtration efficacy and efficacy followi gallons of City of Gainesville municipal tap water ****
Test Parameter:	**Soluble Inorganic; Metals – pH 6.5**
Performed and Analyzed by:	**George Lukasik, Ph.D. & Kintin Ng; July 17 and 18, 2014**

Study data are summarized in the provided table(s). The results presented pertain only to the study cc articles/samples provided by the client (or client representative). The study was authorized and comm The results presented pertain only to the samples analyzed and identifier number(s) indicated. The da representative of the study conducted using the material/samples/articles provided by the client (or cli and its (their) condition at the time of test. The study and data are obtained under laboratory condition representative or indicative of a real-life process and/or application. Positive, negative, and neutralizat performed as outlined in the method and as per Good Laboratory Practices. All analyses were perform with laboratory practices and procedures set-forth by our NELAP/TNI accreditation standards (ISO 17(noted. BCS makes no claims with regards to the express or implied warranty regarding the ownership safety or fitness for a particular purpose of any such property or product.

Signature of Laboratory Director/Authorized Rep. _____ Date: July 3

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