## H2O International Inc.

DOULTON <sup>™</sup> WATER PRODUCTS AND H2O INTERNATIONAL INC TECHNOLOGIES WORKING TOGETHER

Box 1324, Highway 86 West, Wingham, Ontario, Canada, N0G 2W0 Ph (519) 357-4055, Fax (519) 357-3832 Toll Free (800) 439-1671 h2o@doulton.ca Website http://www.doulton.ca

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## FLOW TESTING FOR DISASTER AID GRAVITY DRINKING WATER FILTER(S)

Table 1 represents the flow rate testing of the H2O International Disaster Aid Gravity Drinking Water Filter. This filter can be configured as follows:

Two (2) or Four (4) CS0700 – 7 inch Super Sterasyl Ceramic Candles Two (2) or Four (4) IMP700 – 7 inch Super Sterasyl Ceramic Candles

Configuration	Litres per Hour	Imperial Gallons p/hr	US Gallons p/h
Two (2) CS0700	2	.44	.54
Four (4) CS0700	4.2	.92	1.1
Two (2) IMP700	4.6	1.0	1.2
Four (4) IMP700	9.5	2.1	2.6

Table 1: Flow Rate Testing

Flow rate testing was done using raw water from a municipal source. Flow rate will decrease as the outer surface of the ceramic becomes clogged with sediment, bacteria, or any other particulate matter in the raw water being filtered.

Notes:

1. When the unit is first put into service, a minimum of 30 minutes of flow should be run through the new ceramic candles and then discarded and the lower chamber wiped clean. This is because the 'clean' water will show signs of a grayish black powder. This is carbon dust from the manufacturing and assembly of the carbon core into the ceramic candle. This is normal. Drinking

this 'dust' will not harm anyone but discarding the first 30 minutes of processed clean water is recommended.

2. The ceramic candles may be cleaned without removing them from the upper chamber by using the cleaning pads provided with each unit. Any lightly abrasive sponge or cloth will also work.

3. To clean the candles simply wrap the cleaning pad around each ceramic and lightly twist it back and forth. There is no need to try and make the ceramic 'white' again. It will always be a dirty white colour once put into use. Over cleaning simply wastes the life of the ceramic. After cleaning the ceramics, the upper chamber should be flushed with clean water from the lower unit at least once.

4. The removal efficiencies provided in Table 2 represent all configurations and are certified by Fairey Industrial Ceramics Ltd, Newcstle, Staffs, England.

Table 2:	
Bacteria: E. Coli, Cholera,	>99.99%
Shigella, Salmonella, Klebsiella	
Cyst: Cryptosporidium, Giardia	>99.999%
Absolute Filtration: .9 Micron	>99.99%
Particulate Between .9 and .5	>99.9%
Micron	
Algae, Rust, Sediment and	>99.99%
Suspended Solids	
Turbidity Reduction	>97%
Guinea Worm	100%
Chlorine and other like chemicals	>95%

Prepared by:

D.G.(Dave) Alex Marketing Director 1-250-465-1322 Dave@doulton.ca http://www.doulton.ca