



CSA INTERNATIONAL

Standards
Development

QMI
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Certification
and Testing

April 25, 2001

Project Number 1005996

Attention: Ms. Nancy Huber
Subject: Evaluation of Water Treatment Device

Dear Ms. Huber

I am pleased to inform you that we have completed testing of the submitted filter samples. The test results are enclosed for your records.

Testing was performed according to the ANSI/NSF 42 and 53 standards. The materials used to manufacture the filter and filter housing were evaluated and found to be satisfactory. The filters were also evaluated for chlorine and lead (pH 6.5 & pH 8.5) removal and the results were also found to be satisfactory.

Contaminant	Percent Removal
Chlorine	>97
Lead - pH 6.5	99
Lead - pH 8.5	95

Our toxicologist is reviewing the Microban information and once they submit their findings, we will issue you a revised Certificate of Compliance.

If you have any questions, please contact me.

Sincerely,

Marco Giuliacci, Ph.D.
Senior Scientist
Drinking Water Products Evaluation Program

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CSA International Analytical Report

FILTER PERFORMANCE TESTING - CHLORINE

Product I.D.: 00-016
 Master Contract #:: 204464
 Project #:: 1005996
 Network #:: 6006013
 Standard: ANSI/NSF 42

Rated Service Capacity: 140 Liters
 Volume Tested: 140 Liters
 Date Tested: 2000/11/21
 Date Reported: 2000/11/22
 Sample Type: Pitcher Filter

Experimental Results

Sample I.D.	Trial 1			Trial 2			Sampling %
	Influent Water Concentration (mg/L)	Product Water Concentration (mg/L)	% Removed	Influent Water Concentration (mg/L)	Product Water Concentration (mg/L)	% Removed	
Initial	1.94	<0.05	97	1.94	0.01	99	Initial
1	2.12	<0.05	98	2.12	0.00	100	10
2	2.13	<0.05	98	2.13	0.03	99	20
3	2.17	<0.05	98	2.17	0.04	98	30
4	2.08	<0.05	98	2.08	0.03	99	40
5	2.11	<0.05	98	2.11	0.04	98	50
6	2.09	<0.05	98	2.09	0.03	99	60
7	2.09	<0.05	98	2.09	0.08	96	70
8	2.10	<0.05	98	2.10	0.05	98	80
9	1.94	0.11	94	1.94	0.11	94	90
10	2.07	0.12	94	2.07	0.12	94	100
Average	2.08	0.06	97	2.08	0.05	98	

Note: Average includes initial sample.

Chlorine Reduction Class

Average* Influent Challenge Conc. (mg/L)	Minimum Product Water Conc. (mg/L)	Maximum Product Water Conc. (mg/L)	Experimental % Removal*	Class
2.08	<0.05	0.12	>97	I

* - Average of trial 1 and 2.

CSA International Analytical Report

FILTER PERFORMANCE TESTING - LEAD pH 6.5

Product I.D.: 00-016
 Master Contract #.: 204464
 Project #.: 1005996
 Network #.: 6006013
 Standard: ANSI/NSF 53

Rated Service Capacity: 140 Litres
 Volume Tested: 280 Litres
 Date Tested: 2000/12/11
 Date Reported: 2000/12/18
 Sample Type: Pitcher Filter

Experimental Results

Trial 1				Trial 2				
Sample I.D.	Influent Water Concentration (mg/L)	Product Water Concentration (mg/L)	% Removed	Sample I.D.	Influent Water Concentration (mg/L)	Product Water Concentration (mg/L)	% Removed	Sampling %
39-spl-Pb-ini	0.142	0.002	99	45-spl-Pb-ini	0.142	0.002	99	Initial
40-spl-Pb-50	0.139	0.004	97	46-spl-Pb-50	0.139	0.003	98	50
41-spl-Pb-100	0.135	0.001	99	47-spl-Pb-100	0.135	0.001	99	100
42-spl-Pb-150	0.154	0.001	99	48-spl-Pb-150	0.154	0.001	100	150
43-spl-Pb-180	0.142	0.001	99	49-spl-Pb-180	0.142	0.001	99	180
44-spl-Pb-200	0.142	0.001	99	50-spl-Pb-200	0.142	0.001	99	200
Average	0.142	0.002	99		0.142	0.002	99	

Note: Average includes initial sample.

Metal Reduction Criteria

Average* Influent Challenge Conc. (mg/L)	Minimum Product Water Conc. (mg/L)	Maximum Product Water Conc. (mg/L)	Maximum Allowable Product Conc. (mg/L)	Experimental % Removal*
0.142	0.001	0.003	0.015	99

* = Average of Trial 1 and 2

CSA International Analytical Report

FILTER PERFORMANCE TESTING - LEAD pH 8.5

Product I.D.: 00-016
 Master Contract #: 204464
 Project #: 1005996
 Network #: 6006013
 Standard: ANSI/NSF 53

Rated Service Capacity: 140 Litres
 Volume Tested: 260 Litres
 Date Tested: 2000/12/04
 Date Reported: 2000/12/18
 Sample Type: Pitcher Filter

Experimental Results

Trial 1				Trial 2				
Sample I.D.	Influent Water Concentration (mg/L)	Product Water Concentration (mg/L)	% Removed	Sample I.D.	Influent Water Concentration (mg/L)	Product Water Concentration (mg/L)	% Removed	Sampling %
21-spl-Pb-ini	0.139	0.012	91	27-spl-Pb-ini	0.139	0.010	93	Initial
22-spl-Pb-50	0.135	0.010	93	28-spl-Pb-50	0.135	0.011	92	50
23-spl-Pb-100	0.137	0.008	94	29-spl-Pb-100	0.137	0.009	94	100
24-spl-Pb-150	0.147	0.005	97	30-spl-Pb-150	0.147	0.005	97	150
25-spl-Pb-180	0.144	0.002	99	31-spl-Pb-180	0.144	0.003	98	180
26-spl-Pb-200	0.139	0.003	98	32-spl-Pb-200	0.139	0.004	97	200
Average	0.140	0.007	95		0.140	0.007	95	

Note: Average includes initial sample.

Metal Reduction Criteria

Average* Influent Challenge Conc. (mg/L)	Minimum Product Water Conc. (mg/L)	Maximum Product Water Conc. (mg/L)	Maximum Allowable Product Conc. (mg/L)	Experimental % Removal*
0.140	0.002	0.012	0.015	95

* = Average of Trial 1 and 2