



**Send To: 13790**

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**Facility: 13792**

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Result	PASS	Report Date	16-SEP-2015
Customer Name	Doulton Water Filters		
Tested To	Standard 53 Cyst Live Cryptosporidium POU/POF		
Description	HIP/Sterasyl Inline		
Test Type	5 Year Testing		
Job Number	J-00170136		
Project Number	W014147		
Project Manager	Terrence Jones		

**Thank you for having your product tested by NSF International.**

Please contact your Project Manager if you have any questions or concerns pertaining to this report.

**Report Authorization** *Kerri L. LeVanseler*  
Kerri LeVanseler - Director, Chemistry Laboratory

**Date** 16-SEP-2015

**Standard 53 Cyst Live Cryptosporidium POU/POE: PASS**

**Manufacturer's Name:** Fairey Industrial Ceramics Ltd.

**Job ID:** J-00170136

**Date of Job Creation:** 12-AUG-2015

**Date Sample Received:** 12-AUG-2015

**Date Test Completed:** 11-SEP-2015

**Sample Type:** 5 Year Testing

**Product:** HIP/Sterasyt Inline

**DCC Number:** HIP/Sterasyt Inline

**Flushing Time:** 10 minutes, let stand 24 hours, then flush 10 minutes

**Maximum Rated Op. Pressure:** 100 psi

**On Cycle:** 50/50

**Percent Capacity:** 200%

**Physical Description of Sample:** Plumbed in to Separate Tap without Reservoir

**Rated Service Flow:** 1.05 GPM

**Test Description:** STD 53 - Live Cyst Reduction - HIP/Sterasyt Inline - 5Y

**Trade Designation/Model Number:** HIP/Sterasyt Inline

**Performance Standard:** 53 - 2014

**Cryptosporidium P/F:** PASS

**Pass/Fail Criteria (Cryptosporidium %R):** 99.95 %

**Overall Percent Reduction:** >99.99 %

**All of the effluent percent reduction sample points are greater than or equal to the pass/fail criteria.:**  
YES

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### Data Summary Table

Sample Point	Accumulated Volume (gal)		Dynamic Pressure (psi)	
	Effluent 1	Effluent 2	Influent 1	Influent 2
Flush++	18	15		
8th Cycle	144	133	60	60
25%	218	202	61	61
50%	263	244	62	62
75%	299	283	62	62

Sample Point	Cryptosporidium (Oocysts/L)				Flow Rate (gpm)	
	Influent 1	Influent 2	Effluent 1	Effluent 2	Effluent 1	Effluent 2
Flush++			ND(1)	ND(1)	1.5	1.4
8th Cycle	100000	100000	ND(1)	9	1.5	1.4
25%	100000	100000	ND(1)	2	0.95	1.1
50%	100000	100000	ND(1)	ND(1)	0.61	0.57
75%	100000	100000	ND(1)	ND(1)	0.32	0.31

**Cryptosporidium Detection Limit:** 1 Oocysts/L

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### Data Analysis Table

Sample Point	Inf. Average (oocysts/L)		Average (oocysts/L)		Eff. % Reduction (%)	
	Influent 1	Influent 2	Effluent 1	Effluent 2	Effluent 1	Effluent 2
8th Cycle	100000	100000	ND(1)	9	99.99	99.99
25%	100000	100000	ND(1)	6	99.99	99.99
50%	100000	100000	ND(1)	4	99.99	99.99
75%	100000	100000	ND(1)	3	99.99	99.99

Sample Point	Ave. % Reduction (%)		Maximum (oocysts/L)	
	Influent 1	Influent 2	Effluent 1	Effluent 2
8th Cycle	99.99	99.99	ND(1)	9
25%	99.99	99.99	ND(1)	9
50%	99.99	99.99	ND(1)	9
75%	99.99	99.99	ND(1)	9

**Inf. Average:** Influent Average

**Average:** All Effluent Average

**Eff. % Reduction:** Effluent percent reduction at this sample point.

**Ave. % Reduction:** Percent reduction calculated from all prior influents and effluents.

**Maximum:** Maximum Effluent

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## Water Characteristics

Characteristic	Units	Range		
		Minimum	Average	Maximum
Hardness, Total	mg/LCaCO <sub>3</sub>	75	75	75
Solids, Total Dissolved	mg/L	250	250	250
Temperature	degrees C	21	21	21
Turbidity	NTU	ND(0.1)	ND(0.1)	ND(0.1)
pH		7.72		7.72

All analyses performed at NSF International, 789 N. Dixboro Road, Ann Arbor MI 48105

### Calculation Definitions

All calculations use values as presented in the Data Summary Table and rounding is performed only at the conclusion of the calculation.

### Percent Reduction Calculations

Overall Percent Reduction:

Influent Average includes all influents.

Effluent Average includes all effluents

$$\% \text{ Reduction} = \frac{\text{Influent Average} - \text{Effluent Average}}{\text{Influent Average}} * 100$$

Percent Reduction for Current Influent Point:

The influent value for the specific sample point.

Effluent Average includes all effluents for the current sample point.

$$\% \text{ Reduction} = \frac{\text{Influent} - \text{Effluent Average}}{\text{Influent}} * 100$$

Percent Reduction for Current Effluent Point:

The influent value for the specific sample point.

Effluent includes the effluent value for the specific sample point.

$$\% \text{ Reduction} = \frac{\text{Influent} - \text{Effluent}}{\text{Influent}} * 100$$



### Average Percent Reduction Calculations

Average Percent Reduction:

Influent Average includes all influents up to and including the current sample point.  
Effluent Average includes all effluents up to and including the current sample point.

$$\% \text{ Reduction} = \frac{\text{Influent Average} - \text{Effluent Average}}{\text{Influent Average}} * 100$$



Test Configuration