



# MONARCH WATER

## Scaleout Success Story

**Date of Report:** 15th March 2013

**Objective:** To ascertain the effectiveness of Monarch Scaleout within a working environment.

**Water Hardness:** 574ppm – source Walpole water treatment works – Essex & Suffolk Water.

**pH level:** 7.24

**Equipment to be protected:** Under sink hot water heater supplying hot water taps in toilet and Kitchen with water heated to 60° C.

**Evaluation period:** 5th September 2012 to 15th March 2013 – a total of 27 weeks (6+ mths).

### **Application:**

The hot water heater was previously protected by an ion exchange water softener. The softener was installed in the autumn of 2003 and had worked successfully until it was placed on bypass on 13th July 2012 to allow the system to do a controlled build of scale over an 8 week period.

The softener was removed on the 5th September 2012 and the pipework was revamped to include the installation of new isolating valves for the Scaleout and the post filter – see Pic 1.

The Scaleout was installed by David Hunt, a Gas Safe qualified heating engineer and took 1.75 hours.



**Pic 1**

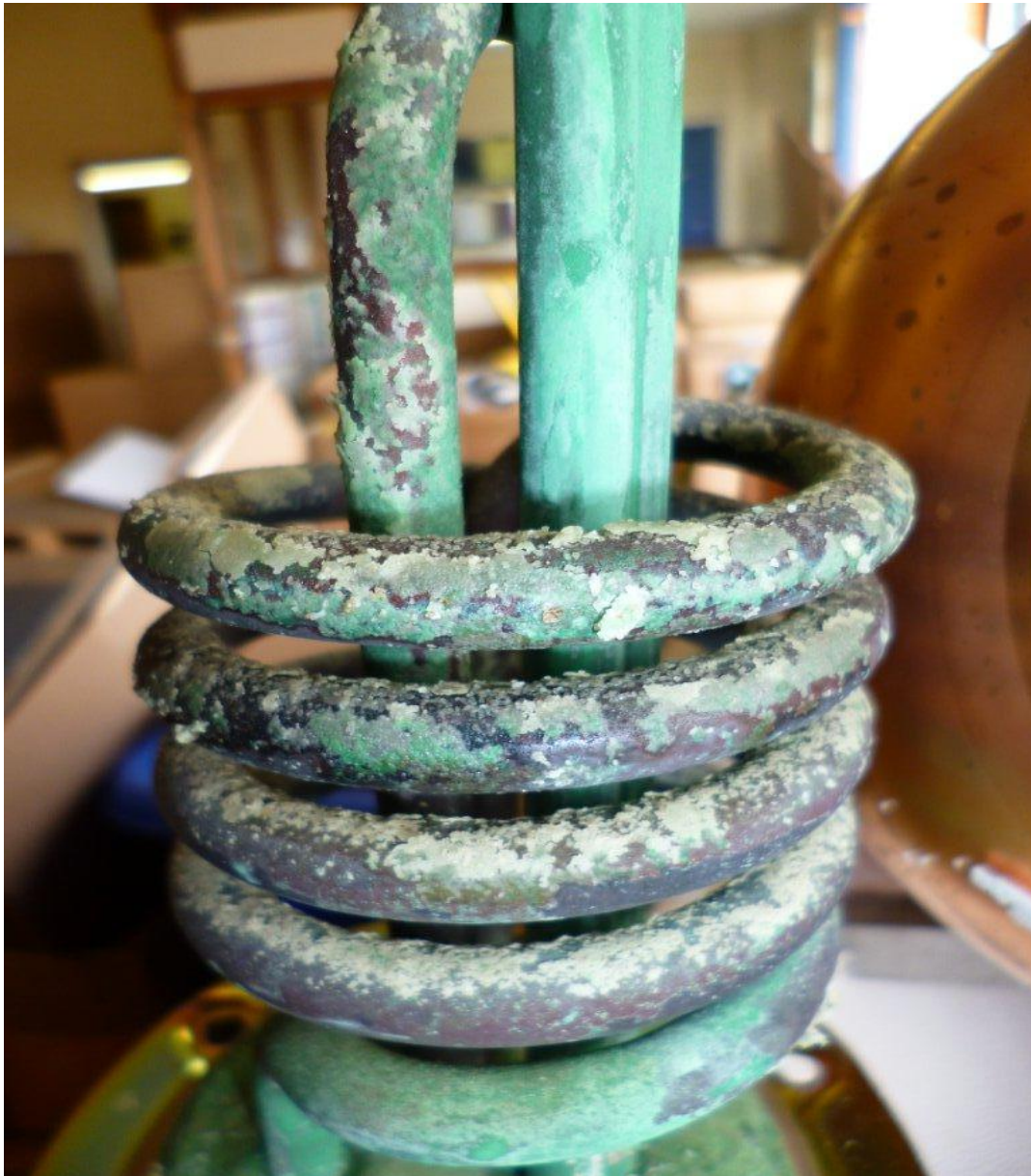


## MONARCH WATER

**5th September 2012.**

The under sink water heater was removed and photographs were taken of the scale build up on the element from the 8 week period – see Pic 2.

The Scaleout and SPF10 post filter was installed.



**Pic 2**



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**15th March 2013.**

The under sink water heater was removed again and photographs were taken of the element.

This covering the 27 week period of having the Scaleout installed – see Pic 3.



**Pic 3**

### **Results:**

The under sink water heater had operated continuously for a period of 27 weeks without interruption and with no need of service or attention.

The Scaleout is based on Filtersorb SP3 resin with an SPF10 (10 micron) post filter.

The Scaleout model was an S15C – 15mm mains supply suitable for a Combination boiler.

Scaleout is a registered Trademark of Monarch Water Ltd.



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**Conclusion:**

The Monarch Scaleout ...

- Removed significant levels of existing scale deposits that resulted from the controlled build up period, and
- Provided exceptional protection against future scale deposits from water hardness of 574ppm

The average water hardness in the UK is between 300-350ppm.

**END:**

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