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Copper and Silver Water Treatment

# Case Study

## **Sussex Housing Care Homes**

Copper and Silver Ionisation for Legionella control in care homes in the UK

**Background:**

Oakwood, Saxon Wood and Woodlands House are three care homes situated in the South of England, that are under the Sussex Housing & Care, a not-for-profit provider of housing and care for older people in Sussex. All three homes have been using the Orca copper and silver ionisation system for the past few years.

**Results:**

Figures 1 a, b, c below show the Legionella counts results for the three care homes. As shown in figure 1 a, low levels (100-300 cfu/L and one case of 1700 cfu/L of L. non-pneumophila) occurred in Oakwood Residential Care Home in a few occasions between 2013 and 2014.

This was due to outlets not being flushed regularly, which is necessary to make sure copper and silver circulates within the water system which in turn achieves Legionella control and avoids the formation of biofilm.

The outlet with the higher count of 1700 cfu had to have biofilm removed from the rubber lined hose. By keeping the copper and silver levels where it should be 0.02 mg/L silver and 0.200 mg/L copper and following maintenance procedures, including flushing of low use outlets, has made sure Legionella is being controlled at Oakwood Residential Care Home since the end of August 2014.

No *Legionella* has ever occurred in Woodlands House since installation of the system in 2012 (Figure 1c), which shows that the CSI system and the maintenance carried out regularly, has kept Legionella out of the water in the home.

The results for the Saxon Wood home which had three positives for L. non-pneumophila before the commissioning of the CSI system installed in March 2016, shows a steady decrease from installation of the system (Figure 1b).

**Fig 1a - Oakwood Residential Care Home - Legionella counts**

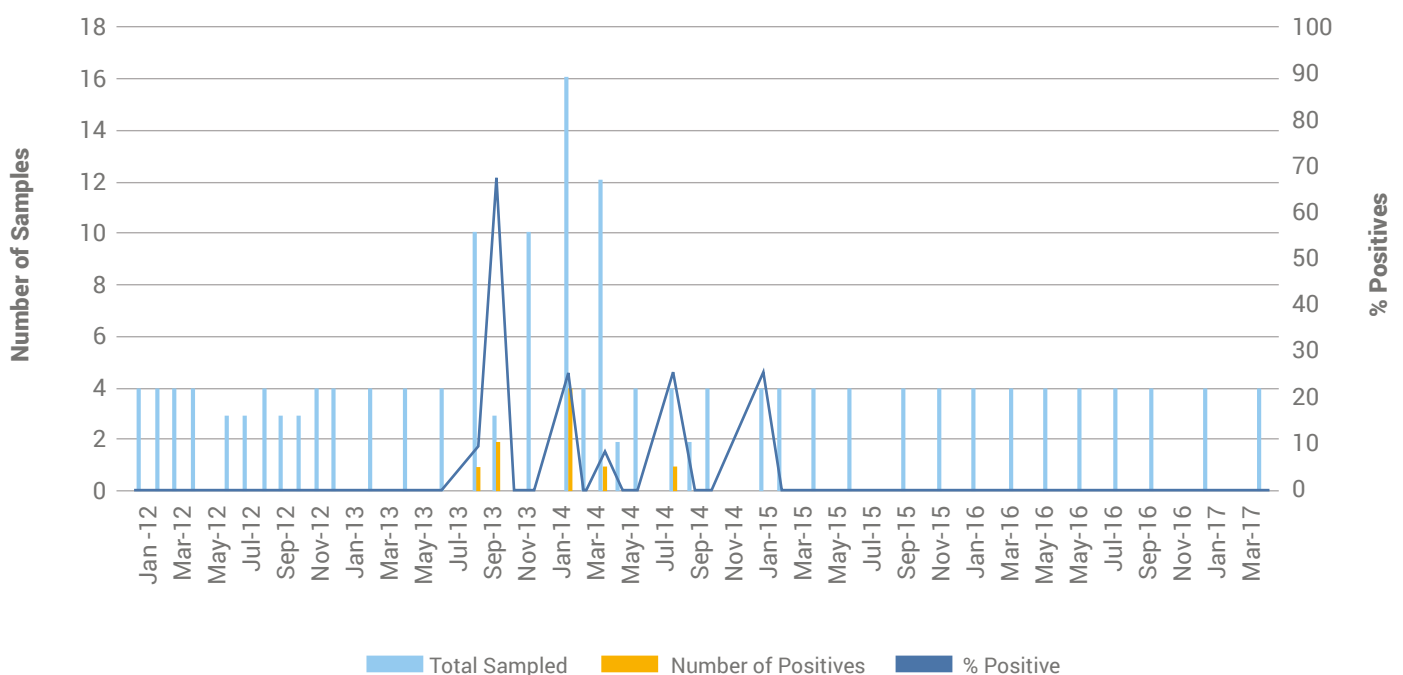


Fig 1b - Saxon Wood Care Home - Legionella counts

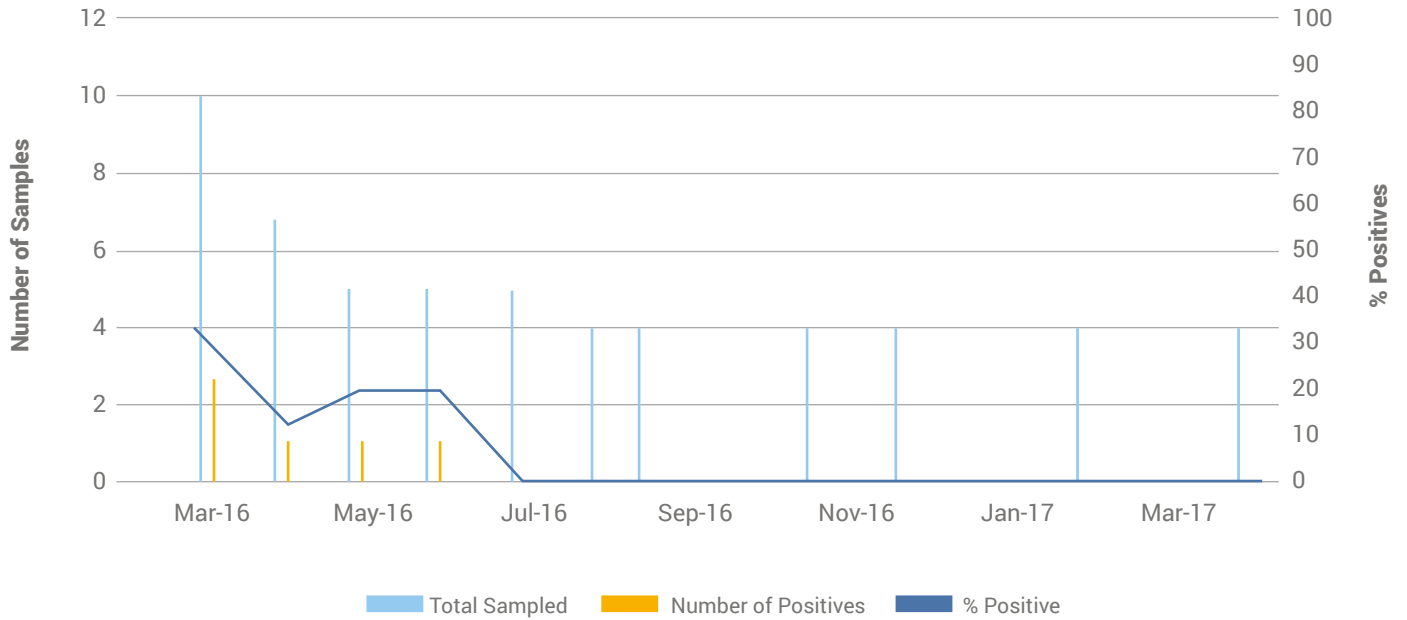
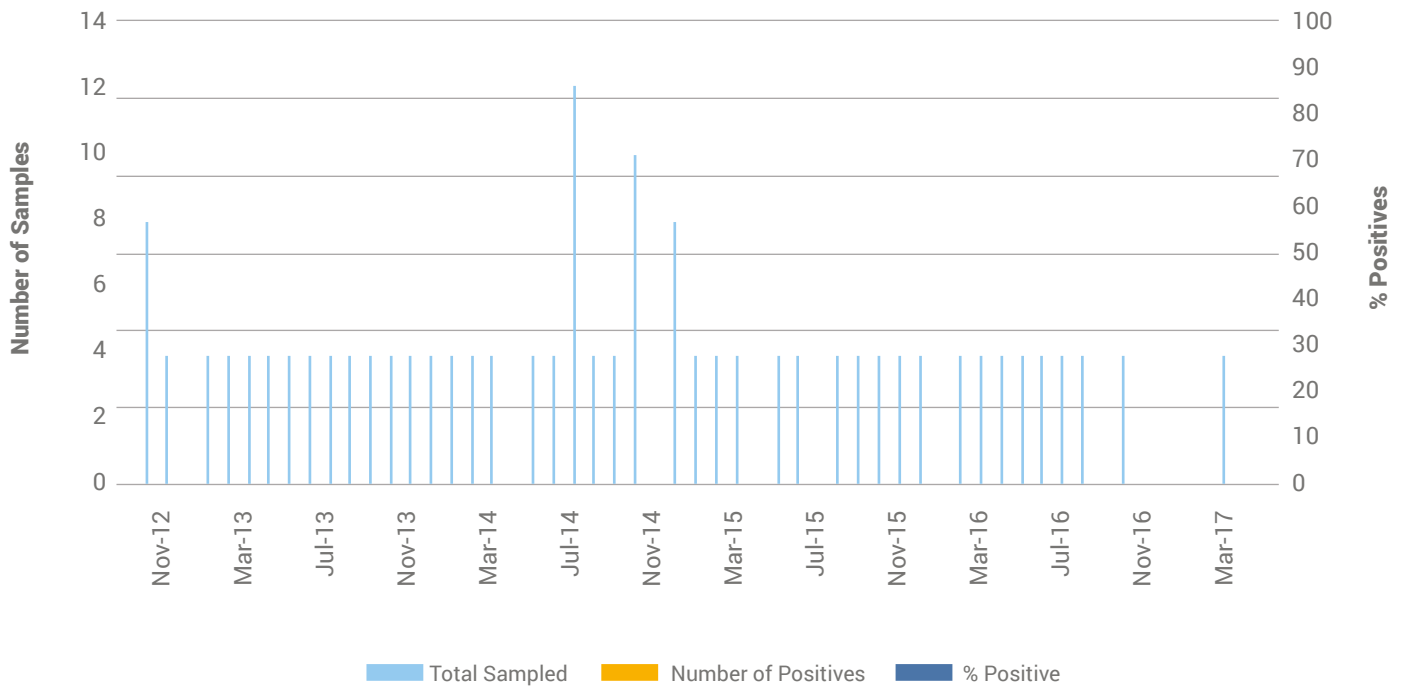


Fig 1c - Woodlands House Care Home - Legionella counts





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