

# CASE STUDY

W B Chambers Farms Ltd, Maidstone, Kent, UK



## Overview

WB Chambers is the largest independent cane fruit grower in the UK, supplying quality fruit directly from the farm to many of the country's major retailers. They grow an extensive range of berries, currants and stone fruit and are especially recognised as market leaders in the year-round supply of quality raspberries and blackberries.

## Key Problems

The farm is in an area known for having particularly hard water, and the water source for this particular site is a borehole. On their 18ha site, the 112km long Netafim irrigation system provides water to approx. 900,000 plants via almost 800,000 drippers. Due to scale build up caused by hard water they have to replace up to 5% (40,000) of these drippers annually as they become blocked. The replacement of the drippers necessitates not only a large expense of capital and time but also results in a reduction in yield of between 5-10%. This is a huge loss in revenue for the farm.

## Our Solution

After performing a site survey and full water analysis report, an Integro™ 6 was installed onto the water supply, between the tank and the dosing rig, in July 2020.



## Water Analysis

A water analysis report carried out in September 2020 confirmed that the mains water supply was very hard (415.1 mg/l hardness as CaCO<sub>3</sub>).

## Detailed Results

Determinand	Value	Units	Determinand	Value	Units
pH	6.6		Conductivity	898	uS/cm
Nitrate-N	71.9	mg/l	Ammonia-N	< 0.1	mg/l
Chloride	30.5	mg/l	Sulphate as SO <sub>4</sub>	69.6	mg/l
Phosphorus as P	3.8	mg/l	Boron	0.09	mg/l
Potassium	24.3	mg/l	Copper	0.01	mg/l
Magnesium	6.67	mg/l	Manganese	0.15	mg/l
Calcium	155.3	mg/l	Zinc	0.05	mg/l
Sodium	18.6	mg/l	Iron	0.36	mg/l
Carbonate	< 10	mg/l	Alkalinity as HCO <sub>3</sub>	71	mg/l
Hardness as CaCO <sub>3</sub>	415.1	mg/l	Dissolved Silicon	9.1	mg/l

## The Results

Since installation of the Integro™, all existing limescale has been removed from the irrigation system and no new scale has formed. This is evidenced by the fact that, remarkably, not a single dripper has needed to be replaced throughout the whole system. This success in eliminating the scale from the drippers has reduced expenses, saved an immense amount of time and increased crop yield resulting in greater profits. With the benefit of the lifetime warranty and the ongoing return on investment being realised, we look forward to a very long, successful relationship with WB Chambers Farms.



## What WB Chambers had to say

*“In July 2020, we installed the Integro. Within the first 4 weeks we noticed existing scale build-up being removed throughout the whole irrigation system. It continues to prevent blocked drippers, saving us time and money. Sidon Water have been professional and helpful, they are a great team to work with.”*

**Salih Hodzhov, Production Director at WB Chambers Farms Ltd**



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