

### Balmichael WTW

**DWQR Staff Present**

Colette Robertson-Kellie

**Scottish Water Staff Present**

Mark Bunyan, Stephen Brown, David Hutton, David Seales, Gary Caig, Scott Gibson

**Date of Inspection**

8th September 2021

### Summary of Inspection

#### Overall Summary

The Balmichael supply on the Isle of Arran is operated by a multi functional team that manages the supply from the source through the treatment works and through the network. The supply is well managed by Operators, and the Senior Operator is clearly very knowledgeable and experienced.

General housekeeping at the site was good, task scheduling was well completed and up to date, and other than instrument servicing that had been delayed because of ferry disruptions caused by COVID-19 restrictions, all instrumentation was being well maintained. Water quality at the time of the audit was well within regulatory parameters.

The water quality of the boreholes supplying raw water is well understood, with one borehole producing relatively high levels of naturally occurring manganese, and another which has ingress of surface water, which is currently being investigated. Operators manage the output of the boreholes to control raw water quality, although demand on the supply can cause difficulties with this. There are septic tanks on the catchment but there is a lack of awareness of their locations or the risk from them, so this should be investigated.

The membrane plant appears to work well, and external contractors are engaged to carry out maintenance and servicing work on it.

The calculated Ct of the supply was unacceptably low and needs to be investigated further and addressed, as it is well below requirements to ensure robust disinfection. Both compartments of the clear water tank failed flood tests which needs to be addressed.