

# Case Study: First run Pump Open Sub in UK

## Challenge

The client had trouble with a well taking losses into the formation, so they required a deep-set barrier and a secondary shallow barrier to allow recovery of the Xmas Tree prior to pulling the completion.

## Solution

Interwell ran an Electronic Setting Tool with deep-set 375-500 Medium Expansion bridge plug (ME) at a depth of 3,067m. The deep-set plug was tested to 300psi, then 1,000psi for a 30-minute period and a successful test was achieved.

The shallow-set 420-550 Medium Expansion bridge plug run with 4.20 Pump Open Sub (POS) add-on, was set using the Electronic Setting Tool at a depth of 163m as a secondary barrier. The tools were tested to 300psi for five minutes, then 1,000psi for a 30-minute period.

The shallow-set ME plug and POS were pressured up against with 300psi for five minutes, then 1,082psi for 15 minutes. Pressure was then applied in incremental stages of 200psi until the POS sheared out and circulation of 4-7 barrels was established to confirm that POS was fully open. Recovery of the completion commenced and the ME & POS were recovered, still installed in the tubing joint, which was then pulled offline.

## Value Created

This was the first run of the POS in the UK and to great success. The client saved approximately 12 hours of rig time by pumping out the POS, recovering the tubing, and retrieving the ME and POS Offline.

**Date:**

July 2015

**Region/Field:**

UK North Sea

**Key Capabilities:**

- ISO 14310 qualified
- Allows temporary barrier
- Opens at predetermined differential pressure
- The 4.20in POS has the option of remote equalization, enabling production/injection (when open)

