Case Study: Custom Multi-Run APS in North Sea

Challenge

A major North Sea Operator had a requirement for a water shut off solution to isolate a 33ft perforated interval in 5 $\frac{1}{2}$ " liner. A straddle was required that was capable of being run through a 3.812" minimum restriction in the 4 $\frac{1}{2}$ " tubing and had the ability to withstand a differential pressure of 2500 psi and a well temperature of 90°C.

Solution

Interwell proposed a 360-550 Multi-Run Custom Anchored Production Straddle (APS) utilizing the successfully proven High Expansion (HEX) technology. The straddle with an OD of 3.60" was the ideal candidate for meeting the client's challenging well parameters.

The two run solution was then mobilized. The lower straddle module was set below the water producing interval in the 5 ½" liner. The upper straddle module, in conjunction with Interwell's unique stinger solution, was successfully located into the latch system of the lower straddle module. The upper straddle module was then set above the perforated interval and effectively isolated the water producing zone.

Value Created

The Multi-Run Custom HEX APS was designed and tested in 13 weeks, and was delivered ahead of the customer's tight operational schedule. The solutions successfully isolated the water producing zone, and allowed the client to resume production.

Date: November 2016

Region/Field: North Sea

Key Capabilities:

- V3 tested to maximum capabilities of 2500 psi and temperatures up to 100°C
- Slim design (small OD/ large ID)
- Retrieve with standard GS in a single operation
- Can be run as a single or multiple run straddle



