

Case Study: APS for Gas Lift

Challenge

Premier Oil's Brenda D3 well is a subsea well, located in the North Sea. Three gas-lift mandrels were installed in the well and the lower two valves were deemed to be too deep, meaning the well was lifting from the top valve only. A blockage or failure occurred in the top valve and production ceased.

Solution

Interwell's Anchored Production Straddle (APS) can be used to retrofit a gas-lift device, and remedy existing gas-lift systems that have failed or deepen the point of gas-lift in the well. Interwell's solution was to install a retro-fit 5½" dual packer gas-lift straddle with a Petroleum Technology Company (PTC) GoLift™ sub and 1½" SafeLift™ gas-lift valve to increase the lower gas-lift effectiveness.

To straddle the existing upper side-pocket mandrel (SPM), Interwell installed a 5½" Straddle Dual Packer Module across the upper SPM and a Single Packer Module with PTC's GoLift™ sub and 1½" SafeLift™ gas-lift valve, creating a retro-fit 5 ½" Triple Packer gas-lift straddle.

Value Created

The Brenda D3 well was unable to flow prior to the intervention. Post intervention, the production rate was 1,685 BOPD, and is still flowing at similar rates 18 months later. The cross-company collaboration between Interwell, PTC and Premier resulted in a safe and successful operation and the well regaining full production.

Date:

November 2013

Region/Field:

Brenda field, North Sea

Key Capabilities:

- Vo tested to 5,000psi and temperatures up to 150°C.
- Slim design (small OD/ large ID).
- Retrieve with standard GS.

