

Case Study: Reinstating well integrity with the Anchored Production Straddle

Challenge

The well was completed as a primary sand column oil producer but experienced extensive corrosion and suffered from complex well integrity challenges. Initial attempts to restore well integrity were not successful, primarily due to the reduced tubing drift.

Wellbore modelling revealed severely buckled tubing above the required straddle setting depth. The operator required a slim straddle design which was capable of passing through the tight restrictions.

Solution

With its small OD and relatively large ID, the Anchored Production Straddle (APS) was used as the solution. The APS was then customised to accommodate the depth and length parameters of damage within the well.

Due to the nature of the well, the robustness of the APS allowed for more than 150 downward jars to deploy to depth. Despite the significant jarring, the APS was successfully set and the post-operation leak detection proved the straddle's integrity.

Value Created

Attempts were made with a conventional OD straddle solution, but due to the nature of the well's helically buckled tubing, the Interwell APS was ideally suited to drift through the restriction and was successful in returning a challenging well to production and reinstating the production tubing integrity.

Date:

June 2014

Region/Field:

UK North Sea

Key Capabilities:

- Vo tested to 5,000psi and temperatures up to 150°C
- Slim design (small OD/ large ID)
- Retrieve with a standard GS in a single operation
- Can be run as a single or multiple run straddle

