



Case Study: Retrofitting Insert Valve Carrier prevents expensive workover

Date: 2020
Region: UK North Sea



Key Capabilities

- *ISO 14310 validation grade Vo (gas-tight) qualified thus mitigating the risk of gas migrating up the control line and causing control line failure.*
- *Time saving installation when compared to WRSV swellable seals.*
- *Based on Interwell's tried and tested Single-Run Anchored Production Straddle (APS) that has an extensive successful global run history.*
- *One run to set and one run to retrieve.*
- *4 ½", 5 ½" & 7.0" IVCs available in stock.*
- *Can be run on Slickline, E-Line, Coiled Tubing or Drill Pipe.*

Challenge

A major North Sea operator required a solution for retrofitting a Wireline Retrievable Safety Valve (WRSV) in a gas producing well. The 5 ½" Tubing Retrievable Safety Valve (TRSV) had failed and the TRSV Nipple profile's seal bores had been damaged. Previous attempts to set WRSVs in the TRSV Nipple had been unsuccessful and the well had to be shut in.

Solution

Interwell proposed the 5 ½" Insert Valve Carrier (IVC). The IVC provides a means to retrofit a WRSV in or across a damaged TRSV/SV Nipple profile, whilst utilizing the existing control line to operate the WRSV. In this instance, the IVC was configured to set across the TRSV in the Pup Joints above and below it and have a No-Go OD for accurate depth correlation. A third party WRSV was interfaced with the IVC and tested prior to mobilisation. The IVC was Run In Hole (RIH) using Braided Line and landed off on the TRSV Nipple profile's No-Go ID. The IVC was set using Interwell's Electronic Setting Tool (EST). The control line was lubricated and bled. The IVC and WRSV were successfully tested. With well integrity reinstated, the well was put back on production.

Value Created

By using Interwell's IVC, the operator was able to successfully retrofit a WRSV outside of the damaged TRSV Nipple profile, reinstating well integrity, restoring production and preventing an expensive workover or Plugging & Abandonment (P&A) of the well.

The use of a No-Go OD allowed the operator to set the IVC accurately on depth using Braided Line, saving the operator from having to mobilize a more expensive E-Line package.

