

Non-workover solution for damaged SVLN bores; 6 years of uninterrupted production through Interwell IVC

Date: Dec 2022
Region: NWS, Australia



Key Achievements

- Enabled installation and maintained integrity of Wireline Retrievable Subsurface Safety Valve (WRSSSV) within damaged seal bore - avoiding a workover.
- System maintained wellbore seal integrity and safety valve operation throughout production for 6 years in large bore gas well producing ~65 mmscf per day

Challenge

A major operator in Western Australia had noted a pressure failure and loss of control line integrity at the surface-controlled subsurface safety valve (SCSSV) in one of their wells, resulting in production being halted and the well suspended. On investigation wire tracking damage within the Safety Valve Landing Nipple (SVLN) seal bores was found to be the cause, but conventional methods used to try to repair the issue were unsuccessful. Due to being a high production value well, a robust solution was sought which could bring the well back online quickly and safely without the requirement to perform a potential workover.

Solution

In 2016 we provided a tailor-made Insert Valve Carrier (IVC) designed to straddle across a safety valve whilst allowing hydraulic control to a 3rd party wireline retrievable insert valve. The system was built, qualified, tested to wellbore conditions and verified by an independent industry body.

The IVC, with periodic verification of the system as per industry standards, was then operated continuously for the next 6 years at ~65 mmscf per day and without any integrity issues.

Value

We delivered our product and services within a short timeline, helping the operator to recommence production quickly via intervention whilst eliminating a costly workover. No compromise was made to production rates and the reliability of the IVC resulted in constant production over the time the system was installed.

In 2022 the IVC was easily retrieved after 6 years in the well, enabling the operator to install two temporary downhole barriers to perform surface wellhead/tree maintenance.

