

CASE STUDY



CHALLENGE:

- Repair parted 7" x 29# casing that had a 17.40 ft (5.3 m) gap between the casing ends.
- Straddle the open hole section and successfully position a casing patch system into the casing below the part.
- A tie back liner had to be able to pass through the casing patch system and latch into the production liner below.
- Frac through 4 ½" liner following the casing patch installation.

SOLUTION:

- Utilize Owen Oil Tools X-Span casing patch technology to straddle and patch the parted casing with a single trip system to be deployed on tubing and set with Owen Oil Tools hydraulic setting tool.

RESULTS:

- The X-Span system was successfully deployed and precisely positioned and straddled the open hole.
- The well bore integrity was re-established and pressure tested.
- The tie back liner was run and the well was successfully frac'd and put on production.

OVERVIEW

An operator in Western Canada determined they had a breach in their intermediate casing on a newly drilled well. A multi-finger caliper log was completed on wireline and it was determined that the casing was parted at a depth of just over 10,300 ft, and that there was a severe gap of 17.40 ft (5.3 m) with no casing. A packer was run and casing integrity was confirmed below and above the parted area. The gap in the casing was about 500 ft above the 4-1/2" production liner top.

SOLUTION

Utilize Owen Oil Tools X-Span casing patch technology to straddle and patch the parted casing. A simulation tool that replicated the casing patch assembly was run on tubing to confirm alignment of the casing ends. A 40 ft (12.20 m) long X-Span system with a mule shoe guide on the bottom end was deployed on tubing and set in one trip with Owen Oil Tools hydraulic setting tool.

RESULTS

The bottom end of the patch was successfully guided through the open hole section and positioned into the casing below the part while the top end of the patch remained in the casing above the part. The parted section was straddled and the depths were confirmed by wireline. The patch was set and pressure tested to 1500psi. The large gap between the casing ends it did not have an effect on the pressure ratings of the X-Span system.

The large bore of the Owen Oil Tools X-Span system allowed the 4-1/2" tie back liner with an anchor seal assembly to be run through the patch and latched into the 4-1/2" production liner. Pressure was applied and held on the annulus while the well was successfully frac'd and put on production.

