

Case Study: Client modified Cement Retainer

Challenge

A well in the Norwegian North Sea started P&A operations in November 2012, utilizing standard Cement Retainers. However, the operator then required an ISO qualified Cement Retainer and approached Interwell to provide the solution.

To make a more robust solution Interwell was also challenged to fully align at least two out of a total of six pump-throughholes in order to be able to pump particles up to 18mm diameter through the Cement Retainer.

Solution

Interwell designed a new Cement Retainer that had at least two holes aligned with 90 degree phasing, regardless of the position of the sliding sleeve. The innovative new Cement Retainer consists of a standard ME plug with a retainer element connected below. The Interwell retrievable ME 420-550 Cement Retainer successfully passed the ISO 14310 V1 qualification.

The Cement Retainer was installed in the well using a tractor and standard setting tool at 4265m MD. After installation, the retainer was successfully tested to 295bar with seawater. The tubing was pulled and the casing logged before the Cement Stinger was run on 2 7/8" pipe inside the 5 1/2" completion. Prior to stinging into the cement retainer, a flow test was performed followed by a bottom up circulation. The spacer and cement was successfully pumped and placed below the retainer, while thoroughly monitoring rates and well pressure behavior.

Value Created

When other industry products were not able to meet the high quality test requirements, Interwell was the only company able to provide the ISO 14310 certified retrievable Cement Retainer for the operator's applications. The ME Plug with the attached Cement Retainer sub performed above expectation.

Date:

November 2012

Region/Field:

Norwegian North Sea

Key Capabilities:

- Retrievable if cementing not required
- Large circulation ports
- Large ID
- Position indication system
- Barrier qualified
- Run on wireline or drillpipe

