

Case Study: ISO 14310 V-1 qualified ME Cement Retainer

Challenge

Many P&A operations are carried out with the use of Cement Retainers. Due to the lack of ISO qualified cement retainers, dispensations and compensating measures are required when using the retainers as a barrier element during P&A operations prior to pumping cement.

Solution

Recently the Interwell retrievable ME 420-550 Cement Retainer successfully passed the ISO 14310 grade V-1 qualification. The cement retainer consist of a standard ME plug with a retainer assembly attached below. The cement retainer was installed in a well for a customer on the NCS, using a tractor and standard hydrostatic setting tool at 4265 m MD.

The retainer was successfully tested to 295 bar with seawater before the tubing was pulled. The casing was logged before a Cement Stinger was run on 2 7/8" x 5 7/8" tapered drillpipe string inside the 5 1/2" completion and production casing. Prior to stinging into the cement retainer, a flow test was performed. Actual forces experienced when entering and pushing down the sleeve in the retainer were according to simulations.

Value Created

The spacer and cement was successfully pumped and placed below the retainer, while carefully monitoring pumping rate and well pressure.

Date:

Mars 2013

Region/Field:

North Sea

Quote from Customer;

The ME Plug with the attached cement retainer sub performed above expectation. Based on the function test and the successful field trial, it is assumed that the cement retainer will be chosen for the future P&A operations.

