

Onshore Re-Abandonment

Background

The well was drilled in 1996 to a depth of 3990m and was plugged with 5 cement plugs in the same year. In the years after surface pressure build up was detected and the decision was made to re-abandon the well.

Objective

The objective was to find the leak path and to re-abandon this well. Works consisted of milling through the existing cement plugs and perform inflow pressure tests. After successful inflow testing, the well was to be plugged back to surface.

Execution

- Engineering was performed to modify and convert the HWT600K to a snubbing unit such that it could deal with pressure below shallow plugs.
- Temporary wellhead was installed.
- BOP's were rigged up as a low pressure snubbing configuration using two annulars. One annular was dressed with a rotating element.
- Cement plug nr 5 was drilled out and the well was circulated clean and plug nr 4 was successfully inflow tested.
- Nr 1 Bridge plug was set at 755m inside the 13 3/8" casing and a100m cement plug was installed.
- Nr 2 Bridge plug was set at 135m inside the 13-3/8" casing to support a second cement plug with a length of 100m.
- Successful pressure test on top cement plug.





Results

- Good engineering and project planning resulted in a good operational efficiency.
- The well was successfully plugged. Both cement plugs were successfully tested during the first test.
- The HWU operation was completed in 26 days. (incl. NPT, waiting on -weather, -parts and -decisions, maintenance, Rig Up/Down time, etc.)
- Zero incidents and accidents.