Case Study: BVS saves 14 months of workover time

Challenge

A client in Northern Europe needed to recomplete one of their underground gas storage facilities. State regulations demanded filling the cavern with water to "kill" the storage well before pulling the old completion and installing the new one. If this procedure had been carried out, it also required a long removal process to lift all of the water out of the well.

Solution

A proposal to install a dual barrier, and verify the integrity by Barrier Verification System (BVS), was presented to the Mining Authority and approval was granted. Two High Expansion (HEX) plugs were used for the dual barrier; the lower plug was installed with the Electronic Setting Tool (EST), logging the installation profile of the lower barrier. The upper plug, including the BVS transmitter, allowed for pressure measurement between the upper and lower barrier, thus verifying the barrier integrity.

Value Created

Receiving regulatory approval for the new solution to re-complete the well was a big achievement for both Interwell and the asset owner. The supply of downhole integrity data was the important contributing factor to change a traditional approach to a more cost-effective one. The conventional workover would have taken approx 16 months at a cost of approx EUR 8million, but by using Interwell's solution, the complete workover operation took less than two months and reduced the cost by half.

Date:

March 2016

Region/Field:

Northern Europe

Key Capabilities:

- Positively verify integrity of an installed well barrier
- Reduces time taken to verify barrier
- Wireless transfer of well information



