



Wellbore Service Tools

Single-trip solution to set packer and perform negative test saves operator rig time and \$1.8 million

Location: Gulf of Mexico

Overview

A major operator challenged Halliburton to design and execute a single-trip solution to set an EZ Drill® SVB packer and to also perform a negative test from 13 ppg to 9 ppg of mud equivalent with the CleanWell® Inflow Tech® test packer. Additionally, Halliburton would need to install a wear bushing insert while running the operation in hole. When pulling out of the hole, the wear bushing insert would need to be removed and the setting area jetted. Performing these three applications in one run would be a challenge, but the result would save the customer costly rig time.

Halliburton proposed an integrated solution to perform a negative test in one trip, using the Inflow Tech test packer and setting the EZ Drill SVB packer. Incorporating lessons learned from previous attempts to perform this single-trip application, a cleanout trip was completed prior to setting the two packers during the same run.

Premium EZ Drill SVB packers are ISO 14310 V0 rated tools – manufactured with brass and cast iron components – that allow operators to control flow and pressure differentials in either direction. They are ideal for use in cement squeeze applications or for abandonment. For this application, the EZ Drill SVB packer was set at 28,322 ft with 15,000 lb of weight applied and an integrity test was performed by pressuring up against the packer to 5,560 psi.

The Inflow Tech test packer is designed to perform isolated negative tests on downhole liner tops to ensure that the change from a heavier fluid to a lighter completion fluid will be compatible with the wellbore. The Inflow Tech test packer was set at 26,947 ft and the liner was successfully tested to 6,585 psi. After the completion of the negative test, a jetting tool was used to flush the wellhead and the blowout preventer (BOP) stack area.

The team successfully set the EZ Drill SVB packer, completed the negative test, and installed and removed the wear bushing insert. All equipment functioned as designed.

Benefits

Two records were set as a result of this job: a world record for the deepest deployed Inflow Tech test packer at 26,947 ft, along with a Gulf of Mexico record for the highest negative test pressure at 6,585 psi. By combining an integrated solution and using a risk analysis matrix, Halliburton was able to mitigate potential severe risks and produce a safe and successful run.

The simple weight-set application of the Inflow Tech test packer allows it to be placed anywhere in the string, thus promoting use of the packer in special applications. This resulted in saving the operator approximately 36 hours of rig time, equivalent to \$1.8 million in savings.



Two records set: world record for deepest Inflow Tech® test packer at 26,947 ft and GoM record for highest pressure at 6,585 psi



CHALLENGE	SOLUTION	RESULTS
<p>Set isolation packer, perform negative test, and install/remove wear bushing insert in a single trip</p>	<p>Single-trip integrated solution to set EZ Drill® SVB packer, perform negative test with Inflow Tech® test packer, and install/remove wear bushing insert</p>	<p>Established world record for deepest setting of Inflow Tech test packer at 26,947 ft</p> <p>Achieved highest pressure on record in the Gulf of Mexico at 6,585 psi</p> <p>Successfully set EZ Drill SVB packer, performed negative test, and installed/removed wear bushing insert in one trip</p> <p>Saved 36 hours of rig time, thus saving operator \$1.8 million</p>



1 TRIP

to set EZ Drill® SVB packer, perform negative test, and install and remove wear bushing insert

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