

Case Study

PrimeSET liner hanger successfully reaches depth and anchors system after aggressive installation

UNITED STATES, CODELL
PRIMESET LINER HANGER

After several hours of continuously rotating a liner into a well, an operator successfully installed and cemented the completion string anchored by the Packers Plus PrimeSET™ Liner Hanger. Despite the torque exceeding 4,000 ft-lb, the PrimeSET components sheared and functioned as expected when the liner reached total depth.



Challenge

An operator targeting the Codell formation had drilled an exploratory well with a measured depth of 13,800 ft. This well was among the deeper wells in the area.

The liner hanger is a pivotal tool for cemented system installations to hold the system in place and ensure an effective pressure seal for stimulation. Operational risks include an accidental pre-set, slips not holding, packer not sealing, or the running tool not releasing. If the liner hanger malfunctions, remedial solutions are often costly.

Solution

The PrimeSET is a robust liner hanger system that can handle high torque and weight limits. If the system cannot be run to depth even after the maximum possible weight has been applied, a combination of pushing, pulling, and rotating is usually done to install the system to the planned depth.

The operator chose the PrimeSET Liner Hanger for its rotational functionality during installation, and other features such as premium sealing capability, anti-preset design, and

secondary release option.



The PrimeSET Liner Hanger withstood 4,200 ft-lb of torque during an installation in the Codell formation

Results

At a depth of 7,400 ft, the system could no longer be pushed any deeper. The PrimeSET allowed the operator to rotate the liner from this depth to the planned installation depth of 13,800 ft.

The PrimeSET functioned successfully, shearing and setting as designed, even after handling forces of over 1,600 ft-lb of torque for more than 6 hours, peaking at over 4,000 ft-lb of torque.

Had the system been installed with a liner hanger that could not be rotated, the system

would likely not have reached planned depth. In these situations, operators may pull the system out to try a different solution, cut the installation short, or abandon the well altogether.

The PrimeSET Liner Hanger is part of the Packers Plus TREX cemented product line. The TREX line offers solutions such as hydraulic toe sleeves and ball-activated sleeves for single point entry or limited entry stimulation. For more information, go to packersplus.com.