

# CHALLENGING WELL, INDONESIA

## S2 CENTRALIZER EXCELS IN HIGH-DEVIATION HORIZONTAL WELL

**Region:** South East Asia

**Location:**

**Country:** Indonesia

### THE CHALLENGE

The project involved running a 4-1/2" liner into a horizontal section of a highly deviated well in Indonesia. With a MD of 7000m with TVD of 4324m and inclination up to 90 degrees, the well presented significant challenges typical of extended-reach drilling.

Additionally, the open hole section measured 6-1/8", creating a tight annular clearance with the 4-1/2" liner. They also faced uncertainties related to hole conditions, including potential ledges or tight spots that could impede liner deployment. These factors increased the risk of excessive drag, torque, or the liner getting stuck before reaching target depth (TD).

### THE SOLUTION

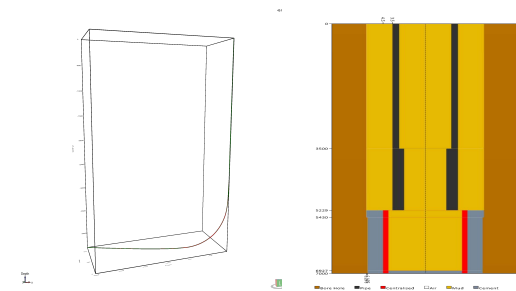
To address these challenges, approximately 60 pieces of Centek S2 centralizers were strategically placed along the liner string. The S2 centralizer, known for its high restoring force and low running force, was selected for its ability to perform in challenging wellbore geometries.

Prior to the operation, a simulation using LatLoad was conducted to evaluate the feasibility of the liner reaching TD. This simulation helped to optimize centralizer placement and ensure that the liner could be run with manageable drag and torque.

### THE RESULT

The LatLoad simulation results indicated that the liner run was feasible with the planned centralizer configuration. In actual field execution, the 4-1/2" liner was successfully deployed to TD with minimal issues.

The S2 centralizer held up well against the high-deviation and tight-clearance conditions, contributing to a smooth and efficient liner installation.



EXCELLENCE TO THE CORE