

Case Study

Nested ESET™ Expandable Liners Enable Planned Completion in the Gulf of Mexico

Challenge

A Major Operator drilling a well in the Gulf of Mexico needed a solution to cover three depleted reservoir sands. The unstable wellbore conditions made finding a solution that would allow them to complete the well as planned a challenge. The Operator needed a solution that would be robust enough to withstand the harsh conditions while maximizing internal diameter (ID) to reach the planned total depth (TD) to complete the well. Conventional casing solutions would mean completing the well with the planned production casing becomes a challenge if not impossible.

Solution and Results

After evaluating all options, the Operator decided to run a 9-5/8 in. ESET® Expandable Liner to cover the three depleted reservoir sands. Due to extreme losses and hole deterioration, the 9-5/8 in. liner was unable to make it beyond an obstruction. The liner was set and successfully expanded covering ~1,000 feet of the unstable formation. After installation, a dumb iron was run to drill the shoetrack and cleanout the open hole.

Approximately 600 feet of the depleted openhole still needed to be covered and the decision was made to run a nested 8-5/8 in. ESET liner through the expanded 9-5/8 in. ESET liner to the original planned shoe depth and isolate the zones. By setting and expanding the 8-5/8 in. ESET liner, the loss zone was completely isolated, and the post-expanded ID allows for the Operator to complete the well as planned.

Good planning and communication from the broad team ensured the running and rotating limits of the ESET liners were understood for the expected difficult wellbore conditions resulting in the safe and successful installation of the nested liners.

