

Advanced Dual Casing Exit Success Offshore India

TrackMaster Select™ system achieved a 13 $\frac{3}{8}$ " × 20" dual-casing exit in a single trip

CHALLENGE

A dual casing sidetrack, in 13 $\frac{3}{8}$ and 20 inch casing was required in a vertical well where the casing was known to be uncemented at the exit point. The goal was to complete this operation in a single trip and to ensure that the subsequent directional drilling BHA could pass freely through the dual window profile.

SOLUTION

WIS proposed and planned the use of the 13 $\frac{3}{8}$ inch TrackMaster Select™ cased hole whipstock system utilizing 12 $\frac{1}{4}$ inch bi-mills to provide the client with a full gauge window. WhipSim® simulation software was also used as an integral part of the planning process.

RESULT

- A successful dual casing sidetrack was completed in a single trip using a 13 $\frac{3}{8}$ inch TrackMaster Select whipstock system
- The system was set at a depth of 276 m, and both windows were milled and rat hole drilled in 11.5 hours
- The subsequent directional drilling BHA passed through the window without any issues and drilled ahead

Challenging Application Planned and Executed

Dual casing exits are considered to be challenging projects. In this case, the exit was required in a vertical well, in both 13 $\frac{3}{8}$ (68 ppf) and 20 inch (133 ppf) casing sizes. Uncemented casing at the exit point also increased the complexity of the operation. The Wellbore Integrity Solutions (WIS) team in India responded to the client's requirements rapidly and thoroughly planned and executed this operation with a total milling and drilling time of 11.5 hours.

The Value of WhipSim

As part of the planning process, WIS' proprietary WhipSim® simulation software was used to predict the dual window opening profile, trajectory and volume of steel to be removed. In this case, almost 900 lbs of steel was projected to be milled.

WIS combined best practices, risk analysis processes, and an experienced local team to deliver this outstanding result.

Whipsim Simulation Output

