

CASE STUDY- 2022- ANGOLA

Archer delivers first 7” X-it® cased hole whipstock system in Angola. 7” X-it® single trip mill provides a clean, full gauge window and rathole.

Challenge

Due to wellbore challenges a Customer in Angola required a whipstock system to provide a clean, full-gauge window and rathole for side-tracking with a 6” directional drilling assembly in a vertical well. The Incumbent fishing company was unable to provide a solution therefore Archer were approached to provide the 7” X-it® “Whipstock in a box” to be mobilised at short notice to Cabinda, Angola. The exit would be through a 7”, 29-lbs/ft liner, at 8,296 feet. A single trip casing exit was needed in Halite Salt formation.

Solution

Archer’s 7” X-it® “whipstock was shipped to Angola via air freight, the tools boxed and ready within 3 days and on location in 8 days. The cased hole mechanical whipstock system was run with a 6” single trip mill set up with a tri-mill configuration. The whipstock assembly was oriented using MWD and the retrievable anchor was set at 8,318ft against a pre-set mechanical base. The single trip mill was then released from the whipstock for window milling to commence.

Result

Full-gauge window & rathole in one trip. A 15-foot window and 20-foot rathole was milled in 2.5 hours and 4.5 hours respectively. The window was reamed and polished and a slide test performed through the window showed no torque or drag. The single trip mill provided excellent performance with the lead mill returning to surface only 1/16” under-gauge while the follow and dress mills were in-gauge, confirming an excellent window condition. The subsequent 6” drilling assembly was able to pass safely and easily through the window and drill ahead to TD.

“Thanks for the quick report and fabulous job throughout this whole process. I know this was on a very short notice, but you guys have done a great job to help us out of this, very much appreciated”



Pre operation

Post operation

