Eni Saves 3 Months of Rig Time By Avoiding Sidetrack

Casing Reconnect system rapidly restores metal-to-metal casing integrity after perforating guns fired prematurely, offshore Mexico

After a service company’s perforating guns fired prematurely, Eni used a Casing Reconnect® metal-to-metal, gas-tight casing repair system to restore casing integrity.

Eni’s goal: Repair damaged casing
Repair or replace the 9%-in and 13½%-in casing with a metal-to-metal connection rated to 5,000 psi and compatible with the required 13Cr110 casing.

Secondary goal: Avoid a sidetrack
With rig availability limited for the offshore well, if Eni could not find, test, and mobilize a solution within 2 weeks, the only alternative was to plan and schedule an expensive and time-consuming sidetrack.

Schlumberger solution: Restore metal-to-metal integrity
Schlumberger engineers recommended cutting the 9%-in casing below the damaged section and recovering the damaged section to surface, performing a cement squeeze in the 13½%-in annulus, and then running in the Casing Reconnect system on new casing to connect it to the remaining 9%-in casing.

Result: Eni meets deadline, enabling completion
The complete Casing Reconnect system solution and tools—84,000 lbm of equipment—were assembled, tested with 13Cr110 casing, crated, and shipped to meet the 2-week time frame.

After the damaged casing was removed from the well and the cement squeeze performed, the Casing Reconnect system was installed with no NPT and tested to 5,000 psi, confirming the well integrity and enabling the well completion to continue.

“Despite a tight deadline and challenging requirements, Schlumberger delivered the solution we needed with excellent teamwork and commitment.”

Antonio Pasquale, Well Operation Manager, Eni Mexico