



CASE HISTORY

Drilling and Completions

FREECAP® – Swellable Packers

SECONDARY BARRIER ASSISTS OPERATOR IN MEETING NEW DRILLING REQUIREMENTS

FREECAP® swellable packers enable operator to proceed with drilling activities by providing a secondary barrier above the production interval in deepwater Gulf of Mexico.



CHALLENGES: Due to recent changes in regulations in the GOM many operators have halted drilling activities and are moving their focus to other areas around the globe. One of the regulatory changes requires a secondary barrier above all hydrocarbon bearing intervals. The operator required a secondary annular barrier above the liner for long-term pressure integrity and a second annular barrier just above the pay zone. These zones were typically isolated with standard cementing practices; however a proven secondary barrier above the pay zone would allow the operator to continue drilling even under the restriction of tighter regulations.



FREECAP Swellable Packers provide Secondary annular barrier above hydrocarbon bearing zones in DeepWater GOM.

SOLUTION: TAM International worked directly with the operator to design a new completion that would incorporate ten TAM FREECAP® packers. One was used as an annular barrier in the intermediate liner and three as secondary barriers in the completion liner. The remaining six packers were incorporated as secondary barriers in the up-hole intermediate liners. The FREECAP® packers use swellable elastomer technology to provide isolation in the liner-casing annulus and the casing-openhole annulus. The 7 in. (178 mm) completion used one packer as a backup to the liner hanger for long term liner top pressure integrity, the other to provide annular isolation above the pay zone.

RESULTS AND BENEFIT: US\$ 500k/day rig cost

The application of FREECAP swellable packer system enabled the operator to continue drilling operations in the Gulf of Mexico. By using the new completion design they were able to reduce exposure to risk associated with other annular barrier systems and effectively seal the casing / open-hole annulus above the hydrocarbon bearing zones. This new completion design will be implemented in future wells across the field and is being considered as a step-change improvement for challenges related to poor annular isolation.