CASE HISTORY

Drilling and Completions  FREECAP® Swellable Packers

LINER TOP BACKUP

FREECAP® Swellable Packers used in Liner Design

Location: Gulf of Mexico

CHALLENGE: A deepwater Gulf of Mexico (GoM) operator recognized the potential loss of well integrity and associated cost to repair a failed liner top packer. The use of liners in well construction is common today. A long-term annular seal in the overlap section is essential for well integrity. The preferred method to obtain this seal is to pump cement up into the casing/liner overlap when the liner primary cement job is performed. With a liner top packer there are two barriers in the casing/liner overlap section. In some cases it is not possible to place cement in the overlap section, which leads to dependence on the liner top packer as the primary and only barrier. A secondary seal in the casing/liner overlap can ensure long-term well integrity, as well as prevent costly workovers if the primary seal fails.

SOLUTION: A FREECAP® swellable packer was included in the liner design and placed one joint below the liner top hangar. Once the liner was cemented in place, the FREECAP® packer swelled in the fluid that was left in the overlap section, thereby providing a secondary barrier to the primary liner top packer.

RESULTS AND BENEFIT: The well was placed on production and there was pressure integrity in the liner/casing overlap.