

# Liner and Cementing Solution Saves 6 Days of Rig Time in Challenging Offshore Formation

## Objectives

- Ream and push the liners to total depth in two wells in a faulted formation.
- Create a quality cement bond behind the liners.

## Our Approach

- The operator had experienced issues with a competitor's expandable liner system in a previous development well in the same area and had lost approximately 4 days of rig time. As a result, Weatherford proposed a solution including a high-torque liner-hanger system, a reliable running tool, and dual plugs for both offshore development wells.
- The Weatherford team deployed a high-torque BA-type R running tool, a V0-rated liner-top packer, and a WPHR premium hydraulic-rotating liner hanger in each well.
- The team reamed and pushed the liners to a setting depth of 7,218 ft (2,200 m).
- Field-proven dual subsurface release (SSR) plugs were used to achieve accurate cement placement and, in turn, a good cement bond between the liner and the formation. The client confirmed the cement bond by logging in one well, and in the other it was deemed unnecessary.
- The team released the running tools and then set and pressure tested the V0-rated liner-top packers to 3,500 psi (24 MPa).
- In each well, the entire operation was completed in one trip.

## Value to Client

- The single-trip operations—including running, setting, and testing each liner-hanger system—saved the client approximately 3 days of rig time per well. By comparison, an operation to resolve a liner-top integrity failure entails one trip for a polish mill run and a second trip for a tieback packer.
- The robust running tool released the liner system on cue, which eliminated fishing operations and associated nonproductive time.
- The WPHR liner-hanger system and V0-rated liner-top packer provided a reliable barrier against gas migration.



The WPHR liner hanger is well suited for drilldown and liner-reaming applications.

### LOCATION

Australia

### WELL TYPE

Offshore, gas

### HOLE SIZE

12-1/4 in.

### PARENT CASING SIZE AND TYPE

13 3/8-in., 72-lb/ft VAM TOP® SM95

### LINER SIZE AND TYPE

9 5/8-in. 47-lb/ft VAM® 21™ 13Cr L80

### TOTAL DEPTH

11,089 ft (3,380 m)

### LINER SETTING DEPTH

7,218 ft (2,200 m)

### PRODUCTS/SERVICES

- TSP5 tieback polished bore receptacle
- TSP5R3 high-pressure liner-top packer
- WPHR premium hydraulic-rotating liner hanger
- Dual SSR plugs
- 402NP float collar
- BA-type R running tool
- RCTDH remote-control top-drive head

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