



Weatherford®

REAL RESULTS

Integrated Solution Enables Client To Achieve TD With Three Liner Sizes in High-Pressure, Deepwater Formation

Objectives

- Install three liner systems of different sizes to total depth (TD) according to a contingency plan in an offshore, S-type, exploratory well with uncertain pressures. The operator had originally planned to run and set two liners of different sizes; however, the plan changed when the operator discovered the need to set and cement the 9 5/8- x 13 5/8-in. liner higher because of the formation lithology.

Our Approach

- The Weatherford team advised on the running and installation of three liner-hanger systems, including a 11 3/4- x 13 5/8-in. P-series hydraulic liner system, a 9 5/8- x 13 5/8-in. P-series hydraulic liner system, and a 7- x 9 5/8-in. SwageSet liner system to realize the contingency plan.
- The team used W-series liner-hanger running tools with mechanical ball seats (MBS) to install all three liner systems to depth prior to cementing.
- The tight-tolerance liners included large-bore autofill float equipment, which eliminated the time required to fill the casing and reduced surge pressures while running the liner.
- Subsurface-release dual-wiper plug systems with RC-TDH remote-controlled cement heads optimized cement placement to maintain shoe integrity on drillout.
- All three liners were set and cemented at hole-section TD without incurring any nonproductive time (NPT).

Value to Client

- Weatherford provided a liner-hanger solution that enabled the client to safely run and cement three different liner-string sizes to TD without NPT in a high-pressure, deepwater drilling program.



Weatherford provided an integrated liner solution that enabled the client to secure three casing setting points and meet well objectives.

Location
Malaysia

Well Type
Offshore, exploratory

Water Depth
3,780 ft (1,152 m) MSL

Liner Sizes

- 11-3/4 x 13-5/8 in.
- 9-5/8 x 13-5/8 in.
- 7 x 9-5/8 in.

Total Depth
8,671 ft (2,643 m) MD

Setting Depths

- 13 5/8-in. casing at 6,257 ft (1,907 m) MDRT
- 11 3/4-in. liner at 6,686 ft (2,038 m) MDRT
- 9 5/8-in. liner at 7,917 ft (2,412 m) MDRT
- 7-in. liner at 8,671 ft (2,643 m) MDRT

Products/Services

- P-series hydraulic and mechanical liner systems
- SwageSet mechanical liner system
- W-series liner-hanger running tool
- Mechanical ball seats
- Large-bore autofill float equipment
- RC-TDH remote-control cement head

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