

Liner System and SurgeMaster® Tool Run Liner to >14,000 Ft With Minimal Losses and Save 3 Days of Deepwater Operations

Objectives

- Run liner to the target setting depth of 14,310 ft (4,362 m) in a deepwater well while mitigating fluid losses. Other service providers failed to run the liner to the desired depth during previous attempts because of severe fluid losses.
- Provide a high-quality cement job.

Our Approach

- Weatherford recommended the SurgeMaster II multi-opening diverter tool, which reduced the surge pressure on the formation to 150 psi (1 MPa), increased liner run-in speed to 148 ft/min (45 m/min), and minimized fluid losses.
- In addition to the SurgeMaster tool, the team deployed a liner hanger, liner-top packer, balls, darts, plugs, and cementing head.
- The team ran the 7-in, 35-lb/ft liner and set the hanger at the target setting depth without any incidents.
- The liner hanger enabled rotation of the liner during the cementing operation, which enhanced the quality of the cement job.

Value to Client

- The SurgeMaster II tool enabled the operator to run the liner to 14,310 ft (4,362 m) with only 10 bbl of fluid losses. Using conventional technology, fluid losses would have been between 100 and 200 bbl.
- By rotating the liner and providing a reliable cement job, Weatherford eliminated the need for remediation. This saved the operator three days of deepwater operations valued at approximately US \$900,000.



The SurgeMaster II tool reduces surge pressure on formations and increases liner run-in speed by directing mud into the annulus above any restrictions. It can open and close as many times as necessary.

LOCATION

Mexico, Gulf of Mexico

WELL TYPE

Deepwater, development, oil

HOLE SIZE AND ANGLE

8-1/2 in., 5°

CASING SIZE AND TYPE

9 5/8-in., 53.5-lb/ft VAM SLIJ II, TAC 140

LINER SIZE AND TYPE

7-in., 35-lb/ft VAM SLIJ II, TAC 140

SETTING DEPTH

14,310 ft (4,362 m)

WATER DEPTH

9,071 ft (2,765 m)

PRODUCTS/SERVICES

- SurgeMaster II tool
- WPHR liner hanger
- WTSP4R1 liner-top packer
- Autofill float collar
- Landing collar
- Balls
- Darts
- Plugs
- Top-drive cementing head



SurgeMaster is a registered trademark of Weatherford in the United States.