

# VariForm® Centralizer Enables Running 12,220-ft Casing String to TD, Saves More Than 3 Days of Rig Time

## Objectives

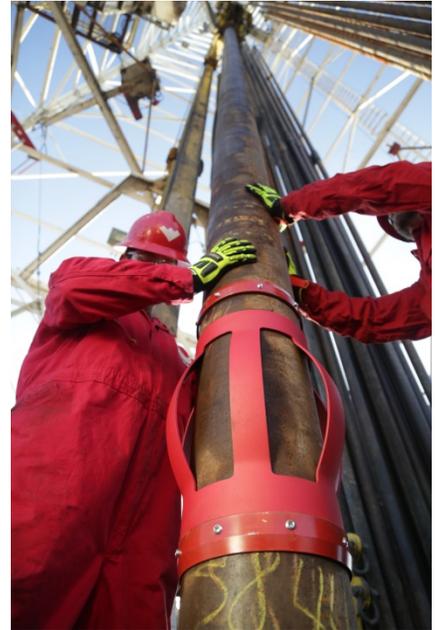
- Run a casing string with a 9 5/8-in. OD and a 12,220-ft (3,725-m) length through a 12 1/4-in., 31° deviated wellbore to total depth (TD) in an offshore gas well.
- Mitigate the time and costs associated with multiple wiper trips. Drilling in an active formation can cause formation swelling, stuck-pipe issues, and wellbore instability. In this scenario, one or more wiper trips may be required to enable casing to reach TD.

## Our Approach

- Weatherford recommended using the VariForm centralizer to reduce drag, pass through tight spots, and maintain excellent standoff (greater than 80%) in the open hole.
- With collapsible bow springs and a low profile, the centralizer reduced the risk of hanging up the casing and facilitated a smooth run in the open hole. Passing through the restrictions and reducing drag eliminated the need for time-consuming and costly wiper trips.
- The centralizer enabled reaching TD with the 12,220-ft casing string—the longest casing string successfully run and set by the operator in Trinidad.

## Value to Client

- The VariForm centralizer mitigated the risk of stuck pipe and eliminated the need for one or more wiper trips, which saved the operator 76 hr of rig time valued at approximately US \$2.21 million.



The Weatherford VariForm centralizer keeps starting and running forces at or near 0 lbf (0 N) for minimum drag during casing running, and it achieves high restoring forces for maximum standoff during cementing operations.

### LOCATION

Trinidad and Tobago

### WELL TYPE

Offshore, gas

### HOLE SIZE AND ANGLE

12.25-in., 33.57° maximum inclination

### CASING TYPE AND SIZE

9.625-in., 53.5-lb/ft P110

### DEPTH

- Casing to surface: 12,231 ft (3,728 m)
- Openhole section: 7,269 ft (2,216 m)
- Total: 12,256 ft (3,736 m)

### PRODUCTS/SERVICES

VariForm centralizers

