



# Weatherford®

## REAL RESULTS

### DwC™ Technology, Defyer™ Bit Enable Operator to Drill Shallow Gumbo Section, Set Surface Casing Without Incident, Save US\$500,000

#### Objectives

- Reduce drilling time to overcome a gumbo problem in the formation.
- Drill and set an 18 5/8-in. surface casing section in shallow depth safely and efficiently.

#### Results

- Weatherford personnel used drilling-with-casing (DwC) technology to deploy a 20- $\times$ 24-in. Defyer DT506 drillable casing bit with a 20- $\times$ 18 5/8-in. crossover to make up the bit to the 18 5/8-in. casing joint. A 20-in. stab-in float collar was made up above the Defyer bit.
- Using DwC technology in combination with another drive and drilling system enabled the operator to drill through the gumbo zone while achieving an average rate of penetration (ROP) of 20 ft/hr (6 m/hr).
- Using a stab-in stinger, the operator cemented and set the casing at 1,006 ft (306m) measured depth (MD) and true vertical depth (TVD) .
- The Defyer bit was drilled out successfully.

#### Value to Client

- Using Weatherford's DwC technology with a Defyer drillable casing bit enabled the operator to drill through a problematic gumbo zone, cement the surface casing, and maintain the drilling schedule.
- The operator did not experience any recordable safety incidents or downtime.
- The DwC technology enabled the operator to save US\$500,000 and two days of rig time over conventional drilling technology.



DwC technology was used to deploy the 20- $\times$ 24-in. Defyer DT 506 drillable casing bit through a gumbo zone to a run length of 831 ft (253 m) while achieving an average ROP of 20 ft/hr (6 m/hr).

#### Location

Northwest Java, Indonesia

#### Formation

Claystone (85%), sandstone (10%), and limestone (5%)

#### Well Type

Offshore, exploratory

#### Hole Size

24 in.

#### Setting Depth

1,006 ft (306 m) MD/TVD

#### Run Length

831 ft (253 m)

#### Surface Casing

18 5/8-in., 87.5 ppf X-56 with tubular connector

#### Products/Services

- DwC technology
- Defyer DT 506 drillable casing bit
- Stab-in float collar

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