

# **REAL RESULTS**

# DwC<sup>™</sup> System with Defyer<sup>™</sup> Technology Enables Drilling of Exploratory Well, Saves Operator \$453,000 Offshore Indonesia

## **Objectives**

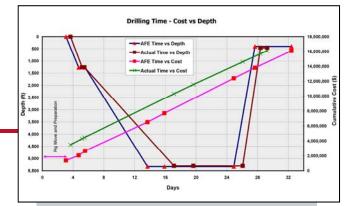
 Appraise and test hydrocarbons in the Belut field by drilling an exploratory well in an efficient and cost-effective manner.

### Results

- Weatherford deployed its 13 3/8-in. *DwC* drilling-with-casing system, equipped with a *Defyer* drillable casing bit.
- Torque rings were employed on all connections to increase the torque capacity of the API connection. This enabled the casing to be rotated during running and drilling operations, and mitigated the risk of applying too much torque to the casing.
- The operator completed drilling to a total depth (TD) of 1,262 ft (385 m) in 12-1/2 hr, with an average rate of penetration (ROP) of 65.3 ft/hr (19.9 m/hr), and on-bottom ROP of 125 ft/hr (38.1 m/hr).
- A cementing run began immediately after TD had been reached, and the hole cleaned.

# Value to Client

- Weatherford's DwC system eliminated NPT by mitigating the risks associated with drilling in 319 ft (97 m) of water, saving the operator 0.59 days in drilling time.
- The DwC system improved drilling efficiency, compared to conventional methods, saving the operator US\$453,000 in operating costs.



The chart represents the authority for expenditure (AFE) Time vs. Depth and Time vs. Cost, compared to the actual Time vs. Depth and Time vs. Cost, and indicates the time and money saved by the operator through the use of Weatherford's *DwC* drilling-with-casing system.

Location Indonesia

Field South Belut Area

Well Type Offshore exploration

Formation Basal Upper Arang, Lower Arang, Udang reservoir

Well Depth 1,262 ft (385 m) TD

Setting Depth 1,262 ft (385 m)

Casing Size and Type 13 3/8-in., 68-lb/ft L-80 BTC

Hole Size 17 in.

Hole Angle 0.92° at 1,200 ft (366 m)

Total Length Drilled 816 ft (249 m)

Flow Rate 300 to 1,100 gal/min (1.14 to 4.16 m<sup>3</sup>/s)

On-Bottom ROP

125 ft/hr (38.1 m/hr)

#### Products/Services

- Drilling services
- DwC drilling-with-casing system
- Defyer drillable casing bit

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