



Weatherford®

REAL RESULTS

DwC™ Technology Helps Reduce NPT in Strong Sea Currents on Offshore Angola Well

Objectives

- Reduce nonproductive time (NPT) on an offshore appraisal well in Angola in an area known for its strong sea currents. Conventional drilling was not possible because a ROV was not available to assist in re-entering the hole with the casing shoe during casing running operations.

Results

- Building upon previous successes in Angola drilling six wells with 20-in. conductor casing, a Weatherford drilling-with-casing (DwC) system was used to spud a well which had proven impossible using conventional means.
- A Defyer™ DT 506 drillable casing bit and an internal casing drive tool (ICDT) with a tensile capacity of 2.8 million lb (853.4 kg) were run with the DwC system.
- After a 12-hr work stoppage at 757 ft (230 m) to repair the top drive, the ICDT freed the casing with a 100,000-lb (45,359-kg) overpull, enabling circulation to resume and drilling to proceed to 1,768 ft (539 m) total depth (TD).

Value to Client

- Using Weatherford's DwC technology enabled the client to drill the offshore well to TD without pulling out of hole. Because of the strong sea currents and lack of a ROV, this job would have been impossible using conventional drilling methods.



The Defyer DT casing bit has a fully drillable center nose section made of aircraft-grade aluminum, enabling rapid, damage-free drillout with conventional PDC bits, roller-cone bits or another DwC assembly, eliminating the need for a special drillout run or retrieval of the bottomhole assembly after drilling to TD, saving operational time. The higher diamond content on the nose section enables five-blade models to drill longer sections than three-blade or four-blade models.

Location
Angola

Well Type
Offshore appraisal

Water Depth
326 ft (100 m)

Well Depth
1,768 ft (539 m) TD

Casing Size and Type
20-in., 133-lb/ft, X-56, RL-4S conductor

On-Bottom ROP
42 ft/hr (13 m/hr)

On-Bottom Hours
56

Products/Services

- DwC services
- Defyer DT 506 drillable casing bit
- ICDT
- Model 402L float collar