

REAL RESULTS

OverDrive[™] System with TorkDrive[™] Tool Installs 22-in. Casing in Deepwater Well, Enhances Safety, Sets Brazilian Record

Objectives

- Run a 22-in. casing string in a 26-in. section of a deepwater well. The water depth was 9,150 ft (2,789 m), one of the deepest in Brazil.
- Enhance safety and efficiency by introducing mechanized tubular running equipment and eliminating manual handling and the need for a stabber in the derrick during casing-running operations.

Results

- Weatherford deployed the remotely operated *OverDrive* system featuring the *TorkDrive* 500 M ICT (internal clamping tool) equipped with the integrated safety interlock system. An RMS 3000 rotary-mounted spider was provided to counteract torque during connection makeup.
- The *TorkDrive* tool eliminated the need for conventional casing tongs and applied 40,000 ft-lb (54,232 N M) of torque during makeup of each of the 96 connections. The total run length was 3,861 ft (1,177 m) with a maximum running rate of 10 joints per hour.
- The 22-in. casing string was successfully installed to a total depth of 13,133 ft (4,003 m).
- The entire operation was performed efficiently and without incident.

Value to Client

- Using Weatherford's remotely operated *OverDrive* system enabled the operator to maintain conventional running speeds and reduce the number of personnel on the rig floor, eliminating manual handling of power tongs and elevators and the need for a stabber in the derrick, significantly reducing incident exposure.
- Use of the system mitigated the risks associated with pinch points, unnecessary efforts, and uncomfortable positions usually associated with running large OD casing.
- The integrated safety interlock system eliminated the risks of dropping the string.
- While the running time of 10 joints per hour is equivalent to conventional run times, safety was dramatically improved with less personnel and manual handling of equipment.

Weatherford Francisco Ochoa Product Champion, *OverDrive* Systems francisco.ochoa@weatherford.com Repsol Sinopec Brasil S.A. Bipinchandra Dugam Lead Drilling Engineer Deepwater Drilling Group bdugam@repsolsinopec.com



Weatherford's *OverDrive* casing running and drilling system with the *TorkDrive* 500M ICT tool greatly enhanced safety by combining the functions of power tongs, elevator, fill-up circulation tool, weight compensator, and bails. This technology minimized personnel risk by reducing the number of personnel on the rig floor without reducing casing running efficiency.

Client Repsol Sinopec Brasil S.A.

Date 25 August 2011

Location Campos Basin

Well Name Paõ de Açucar

Rig Stena DrillMax

Hole Size and Angle 26 in., vertical

Casing Type and Size 22-in. Dril-Quip[®] S-90/MT, 224.28 PPF

Well Type Offshore, exploratory

Water Depth 9,150 ft (2,789 m)

Run Length 3,861 ft (1,177 m)

Products/Services

- OverDrive casing running and drilling system
- TorkDrive 500M ICT
- RMS 3000 rotary-mounted spider
- Integrated safety interlock system

Dril-Quip is a registered trademark of Dril-Quip, Inc.

Weatherford products and services are subject to the Company's standard terms and conditions, available on request or at weatherford.com. For more information contact an authorized Weatherford representative. Unless noted otherwise, trademarks and service marks herein are the property of Weatherford and may be registered in the United States and/or other countries. Weatherford products named herein may be protected by one or more U.S. and/or foreign patents. For more information, contact patents@weatherford.com. Specifications are subject to change without noice. Weatherford stills its products and services in accordance with the terms and conditions set forth in the applicable contract between Weatherford and the client.