



Weatherford®

REAL RESULTS

Repsol YPF Saves Two Days and \$100,000 Running Premium Liner Hanger and Reamer Shoe in Loma La Lata Field

Objectives

- Install a 7-in., 4,423-ft (1,348-m) liner in a single trip after previous problems deploying the drilling liner to TD in an 11,450-ft (3,490-m) gas well.
- Achieve critically important zonal isolation at the shoe and across a 2,297-ft (700-m) gas zone uphole.

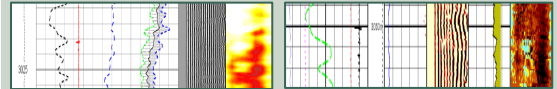
Results

- A Weatherford premium hydraulic-set, rotating (WPHR) liner hanger, and a Diamondback™ reamer shoe were run into the 90° hole and reamed 1,968 ft (600 m) in 13 hr without encountering any problems.
- The well was circulated and conditioned, the hanger was set, and the setting tools were released.
- The liner was rotated at 16 rpm for 3-1/2 hr at an average 4,842 ft-lb of torque during the cement job. The liner-top packer was then successfully set.
- This operation represented the first time a rotating liner hanger was used by Repsol YPF in Argentina in a 90° wellbore.

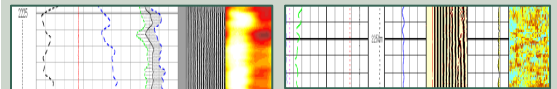
Value to Client

- A good cement job with isolation at the shoe allowed the production zone to be drilled and completed open hole.
- The problematic upper gas zone was successfully isolated.
- The *Diamondback* reamer shoe eliminated the need to pull the liner, making another wiper trip unnecessary and saving two days of rig time.

Well with Static Liner Well with Rotated Liner
984 ft (300 m) above bottom



3,609 ft (1,100 m) above bottom



The well with the rotated liner (right) shows a significantly better cement bond than the offset well (left) with a static liner.

Client
Repsol YPF

Location
Neuquen, Argentina

Formation
Sierras Blancas

Well Type
Gas

Well
YPF.NqLLL-378H

Hole Size and Angle
8 1/2 in., 90°

Casing Size and Type
7-in., N-80 26 lb TBL

Setting Depth
7,024 ft (2,141 m)

Liner Length
4,423 ft (1,348 m)

- Products/Services**
- WPHR liner hanger
 - WTSP5R
 - Model R setting tool
 - *Diamondback* reamer shoe

The WPHR liner hanger is ideally suited for use in deep, highly deviated wells. The cones and slips are designed to optimize bypass, making it especially useful for drill-down and reaming applications.

