



Weatherford®

REAL RESULTS

Air-Hammer Drilling Improves Performance in China, Saves Over 100 Days Rig Time Per Well

Objectives

- Improve drilling performance and reduce rig time by using air-hammer drilling in developmental wells in the Puguang field.

Results

- Weatherford conducted a feasibility study for using air-hammer drilling techniques on the wells.
- Air-hammer drilling was conducted in 17 1/2- and 12 1/4-in. holes, successfully reaching a total depth (TD) of 14,764 ft (4,500 m).
- On average, wells were completed in 40 days, nearly 10 times faster than comparable offset wells from surface to TD.

Value to Client

- The use of air-drilling techniques improved drilling performance and saved the client more than 100 days of rig time per well.
- The increase in drilling performance was noted by other operators in the region. Weatherford is conducting further feasibility studies for conducting additional air-drilling operations in the area.



Weatherford engineers inspect a used air-hammer bit after it drilled over 3,281 ft (1,000 m) of hard formation.



Weatherford 6,000 scft/min air package rigged up on location in Puguang, six compressors, three boosters, and a mist pump.

Location

Central China

Field

Puguang field

Well Type

Onshore development

Hole Sizes

17-1/2 and 12-1/4 in.

Products/Services

Controlled Pressure Drilling® (CPD®)