Openhole Logging Services Perform World's 1st Shuttle Operation With Drillpipe Swivel

Objectives

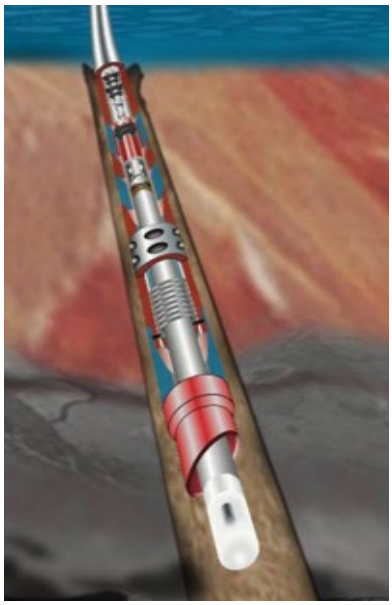
- Acquire wireline petrophysical data by logging from 19,442 to 13,901 ft (5,926 to 4,237 m) in an extended-reach well.
- Enhance drillpipe rotation capabilities to overcome high drag forces when logging to total depth (TD).

Our Approach

- The Weatherford wireline team deployed a Compact well shuttle to convey Compact logging tools inside drillpipe and fully protect them during tripping. The team included a drillpipe swivel above the well shuttle bottomhole assembly (BHA).
- Unlike conventional drillpipe conveyed logging without rotation capabilities, the logging solution with the drillpipe swivel enabled rotation up to 80 rpm and eliminated buckling while running in the hole.
- The Compact well shuttle provided the team the ability to circulate fluid through the bottom of the BHA when running in the hole. The shuttle also enabled using pressure pulses to lock the swivel and rotate the drillstring in the event of pipe sticking.
- While the team had the ability to maneuver the drillstring, they also had full access for well control.
- Using the Compact tools, the team safely logged the well from total depth (TD), tripped out, and delivered high-quality data to the operator.

Value to Customer

- The Compact well shuttle and Compact logging tools acquired critical petrophysical data in a challenging well.
- Using the drillpipe swivel with the Compact tools enhanced rotation capabilities to overcome drag, eliminate buckling, and reach TD.



Weatherford performed the world's first shuttle job including a drillpipe swivel as an alternative to conventional drillpipe-conveyed logging.

LOCATION
Saudi Arabia

WELL TYPE
Onshore, oil, horizontal, extended reach

HOLE SIZE
8.5 in.

LOGGING INTERVAL
5,541 ft (1,689 m)

TOTAL DEPTH
19,442 ft (5,926 m)

PRODUCTS/SERVICES
- Compact well shuttle
- Compact cross-dipole sonic tool
- Compact microimager
- Compact gamma ray tool

Weatherford®