

Advanced 16-in Liner Hanger Technology Enables Well Integrity and Operational Continuity in Complex Offshore Gas Wells

Objectives

- Install a 16-in liner to isolate a wellbore instability interval and maintain the optimal operational plan.
 - The operator anticipated significant wellbore instability challenges—including potential collapsed zones and high loss intervals—during the intermediate section of two offshore gas wells. These risks had the potential to delay delivery and increase nonproductive time (NPT).

Our Approach

- The operator and Weatherford collaborated closely to evaluate subsurface data and confirm that installing a 16-in liner hanger system was the optimal approach for managing the anticipated instability and loss zones.
- Because this would be the first 16-in liner hanger installation for the operator, Weatherford mobilized a global team to accelerate engineering, equipment manufacturing, delivery, and field deployment without compromising quality or readiness.
 - The Weatherford global manufacturing group expedited the production and shipment of all 16-in liner components.
 - Certified personnel were deployed on-site to ensure flawless assembly, system integration testing, and readiness prior to loadout.
 - The system was executed on an accelerated timeline to prevent delays in the drilling program.
- Weatherford successfully ran, set, and cemented 16-in liners on two wells despite the carbonate formations being highly prone to losses and wellbore instability.
- Clear evidence of spacer and cement returns confirmed proper placement, packer sealing, and overall system integrity.

Value to Customer

- The installation of the Weatherford 16-in liner hanger system was a critical enabler for the operator's drilling sequence. Successful placement ensured:
 - On-schedule well-delivery aligned with the operator's best-case plan
 - Reduced operational risk and minimized NPT exposure
 - Improved well integrity across unstable carbonate intervals
 - Confidence and continuity for subsequent drilling and completion operations

LOCATION
Middle East

WELL TYPE
Offshore gas producer

FORMATION
Intermediate hole section through carbonates (prone to losses and wellbore instability issues)

HOLE SIZE AND ANGLE
First job:
17-1/2 in, enlarged to 20 in, 18° to 31°

Second job:
17-1/2 in, enlarged to 19 in

PRODUCTS/SERVICES
• Liner hanger systems

