

# **REAL RESULTS**

## Long, Heavy 13 3/8-in. Liner and 4,000-psi Tie-Back Enable Continued Drilling Operations in Caspian Sea

### **Objectives**

- Run a 13.375-in. liner/casing string in auto-fill mode and perform a cement job, without losses, in a well offshore Azerbaijan. Having experienced issues with cementing intermediate casing strings, the operator required an integral liner-top packer, a tie-back string to surface, and a dual-plug cemented liner.
- Minimize rig time and nonproductive time (NPT).

### Results

- Weatherford successfully ran the 13.375-in. liner to depth; displaced cement as planned, without losses; set the liner-top packer and tested it to 900 psi; ran the tie-back string to surface and tested it to 4,000 psi.
- Auto-fill II float equipment was activated according to plan and remained in auto-fill mode when blockage in the shoe was removed.

## Value to Client

- Nine hours of rig time, worth about US\$90,000, were saved by running Weatherford's auto-fill II float equipment.
- Weatherford's liner system did not require drill-out of a drillable pack-off bushing, saving rig time.
- Addressing early workshop challenges promptly was key to the success of the operation and ensured maximum operational efficiency.
- The success of this operation gave the operator a proven solution for similar applications.



Weatherford's two-trip, 4,000-psi-burst-pressure liner system was the ideal solution for the operator's requirements for this job.

Location Caspian Sea

Well Type Water injector

Hole Size/Maximum Deviation 17 1/2-in./73°

#### Liner

- 13 3/8-in., 68-lb/ft, L-80 Hydril® 521
- intermediate liner with tie-back
- Length: 7,254 ft (2,211 m)
- Weight in air: 522,000 lb (236,775 kg)

Previous Casing 16 in., 84 lb/ft

### Depths

- Liner top: 4,557 ft (1,389 m)
- Liner shoe: 11,811 ft (3,600 m) MD

Auto-fill Conversion Rate 4 to 5 bbl/min

#### **Products/Services**

- Well construction services
- PHS liner hanger
- TSP4 liner-top packer
- Auto-fill II float equipment

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