

Landing Collar Insert Facilitates Installation and Drillout, Saves 8 Weeks of Lead Time and \$400,000

Objectives

- Manufacture, supply, and install a landing collar solution that works across different well conditions and with different liner materials. Previously, the operator had used a landing collar with a box and pin housing and drillable insert.
- Reduce manufacturing lead times and costs associated with using special materials. A landing collar typically has a housing made of material that matches the liner material. For applications that use exotic liner materials, the landing collar housing can be expensive or difficult to obtain.

Our Approach

- Weatherford developed a drillable landing collar insert that uses the client's casing and existing connections as the traditional housing. This eliminated the need for a housing made of costly or scarce materials.
- Use of a landing collar insert made of standard aluminum material instead of special materials reduced lead time by approximately 8 weeks.
- The landing collar insert provided the capability of anchoring and sealing into a range of casing IDs, and Weatherford installed it directly into the casing in 10 minutes using a lightweight, portable tool and hydraulic pump.
- After the cementing job, Weatherford drilled out the landing collar insert.

Value to Client

- Weatherford created an off-the-shelf, landing collar alternative that reduced lead times by approximately 2 months.
- Use of the landing collar made of standard materials reduced costs by approximately 10%, which saved the client US \$400,000.
- The interchangeable landing collar insert provided compatibility with all connection types and all liner material types. The insert depended only on the client's casing ID range.
- The landing collar insert facilitated drillout using a polycrystalline-diamond-compact (PDC), roller-cone, or rock bit.
- Use of the landing collar made of standard materials eliminated a single-source procurement process.



The top image shows the landing collar insert before installation; the bottom image shows it after installation.

LOCATION

United Arab Emirates

WELL TYPE

Onshore, oil and gas

CASING SIZE AND TYPE

7-in., 29-lb/ft S13Cr

PRODUCTS/SERVICES

- 7.5-in. polished bore receptacle
- 7-in. WTSP5 liner-top packer with an R1 profile
- 7-in. P series hydraulic rotating hanger
- 7-in., 26- to 29-lb/ft single-wiper plug (SWP)
- Drillpipe dart (DPD)
- 7-in. insert landing collar
- 7-in. dual-valve float collar—Model 402DK
- 7-in. dual-valve float shoe—Model 323DA

