



Weatherford®

REAL RESULTS

Norway: Use of MetalSkin® Cased-Hole Liner System Repairs Casing Leak, Extends Well Life of Offshore Well

Objectives

- Accurately locate an intermittent leak in the 9 5/8-in. casing of a 20-year-old well.
- Deploy and expand a solid expandable cased-hole liner to repair the leak and give sufficient QHSE integrity for future well operations.
- Re-run a 5 1/2-in. upper completion and return the well to full production.

Results

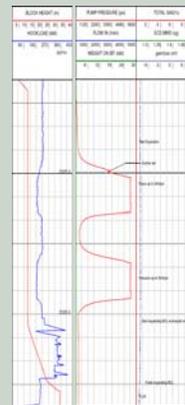
- Weatherford's 7 5/8- x 9 5/8-in. *MetalSkin* cased-hole liner system was successfully installed, expanded over the trouble interval, and pressure tested without incident.
- The location of the leak was not as expected, yet the flexibility of the system enabled the *MetalSkin* cased-hole liner to be deployed at the new depth of 5,715 ft (1,742 m).
- The client successfully re-ran the upper completion through the *MetalSkin* liner and returned the well to full production.

Value to Client

- The success of the *MetalSkin* cased-hole liner demonstrated that solid expandables are a cost-effective solution for repairing worn and damaged casing, enabling wells to be returned to full QHSE integrity.
- The *MetalSkin* liner system eliminated the need to cut, pull, and possibly mill out 6,562 ft (2,000 m) of casing, saving BP Norge an estimated three weeks (US\$6 million) of rig time and 4,500 bbl/day (US\$5 million) of deferred production.



Ula platform, offshore Norway



Pictured left to right: Expansion load and pressure chart and MCL integral anchor joint

Client

BP Norge

Location

Offshore Norway

Well Type and Name

Single-bore production well, Ula A12A

Casing and Liner Size

9 5/8-in., 53.5 lb/ft VAM® TOP
7-in. liner

Depth

Casing: 14,872 ft (4,533 m) MD
Liner: 15,272 ft (4,655 m) MD

Run Length and Angle

33 ft (10 m) of casing patch to 5,692 ft (1,735 m), 47°

Products/Services

- Weatherford solid expandable systems
- 7 5/8- x 9 5/8-in. *MetalSkin* cased-hole liner system