



Weatherford®

REAL RESULTS

MetalSkin® Expandable Liner, Integrated Services Deliver Second Casing-Repair Installation in Geographically Constrained Field

Objectives

- Provide a casing-repair solution to mitigate the deterioration of the 9 5/8-in., 36-lb/ft casings in a storage well. Alternative options to the casing repair would have proved far more costly, including the freight of stored products to sites in the Netherlands, which would affect profitability over the long term.
- Maintain the inside diameter (ID) of the cased hole to maximize both product withdrawal and injection rates. An alternative solution was to mill 2,297 ft (700 m) of 9 5/8-in. casing and run a new, smaller casing string as part of a costlier operation, which would have resulted in a smaller ID.
- Design a suitable installation method to overcome the significant complications posed by the surrounding geography, mainly cooling towers and process pipelines.

Results

- To address the requirements for varying levels of pressure, high- and low-force overpull across short distances and geographical constraints, Weatherford deployed the 7 5/8-in. x 9 5/8-in. MetalSkin solid-expandable liner and successfully installed it approximately 1,131 ft (345 m) downhole.
- The expandable liner minimized ID reduction in the wellbore and enabled the operator to prolong the use of one of the largest storage caverns.

Value to Client

- Using Weatherford combined services, including the MetalSkin expandable liner, enabled the operator to prolong the use of one of the largest storage caverns in the field, protecting productivity and the operator's investment.
- The operator experienced no accidents, incidents, or environmental issues during the procedure.



In a United Kingdom storage cavern, Weatherford MetalSkin expandable liner and combined services were used to repair deteriorated casing and maximize returns while avoiding costly drilling, storage, and transit alternatives.

Location

Onshore, United Kingdom

Well Type

Product storage cavern

Storage Capacity

1,801,048 ft³ (51,000 m³)

Casing

9-5/8 in., 36 lb/ft

Products/Services

- MetalSkin solid-expandable liner
- Completion services
- Tubular running services
- Downhole rental tools
- Fishing services
- IPP® injection production packer
- Thru-tubing
- Slickline
- Drilling rig

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