



Weatherford®

REAL RESULTS

MetalSkin® Expandable Casing, Integrated Services Delivers Casing Repair Installation in Geographically Constrained Environment

Objectives

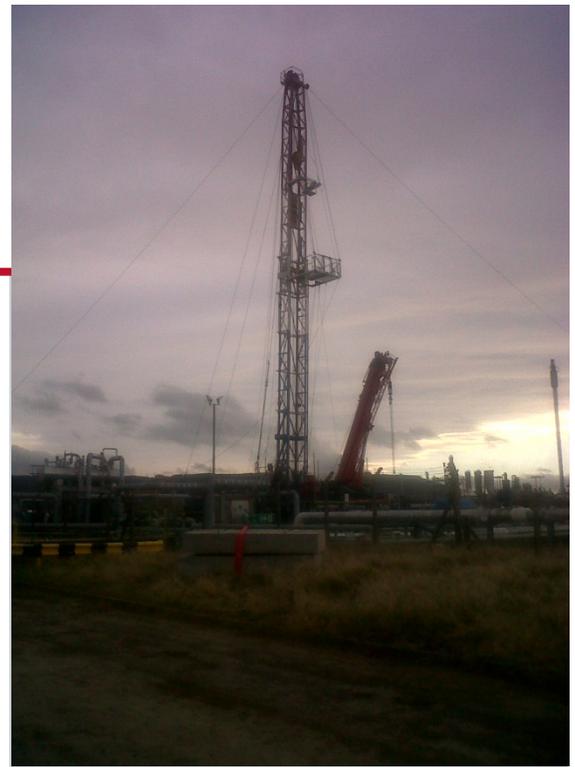
- Provide a casing-repair solution to mitigate the deterioration of the 9 5/8-in., 40-ft/lb casings in a storage well. Alternative options to the casing repair would have proved far more costly, including the freight of product to sites in Holland, which would affect profitability over the long term.
- 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 both high- and low-force overpull across short distances and geographical constraints, Weatherford deployed a combination of internal casing jacks for high-pressure expansion and a 100-ton crane and hydraulic workover unit with upgraded hoisting block for higher forces.
- With this unit in place, Weatherford installed the 7 5/8 × 9 5/8-in. *MetalSkin* solid expandable casing patch approximately 909 ft (227 m) downhole.
- The expandable casing patch minimized the reduction of the ID in the wellbore and enabled the operator to prolong the use of one of its largest storage caverns.

Value to Client

- Using Weatherford's combination of services, including the *MetalSkin* expandable casing, enabled the operator to prolong the use of one of its largest storage caverns at Wilton, protecting productivity and the operator's investment.
- The operator experienced no accidents, incidents, or environmental issues at any time during the procedure.



Weatherford's range of products and services combined to deliver a comprehensive and integrated solution, maximizing returns for the operator while avoiding costly drilling, storage, and transit alternatives.

Location

Onshore, United Kingdom

Field

Wilton Brine Fields

Formation

Triassic salt band

Well Type

Product storage cavern well

Storage Capacity

1,801,048 ft³ (51 000 m³)

Casing

9 5/8-in., 40 ft/lb

Products/Services

- Tubular running services
- Downhole rental tools
- Fishing services
- *MetalSkin* Solid Expandables
- IPP Inflates
- Thru-Tubing
- Slickline
- Jacking systems
- Hydraulic workover rig

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