Reclaim™ Thru-Tubing P&A Solution Remediates Annuli Via Perf, Wash, and Seal, Extends Production Life for Well Targeted for Abandonment

The Reclaim thru-tubing plug and abandonment solution is a revolutionary well-cessation system that enables fast and reliable plug and abandonment operations without the need for high-horsepower rigs or complex completion-retrievals.

Objectives

- Remediate two zones of an oil well identified as having poor cement bonds and posed risks to potable water sources.
- Assess the option to plug and abandon (P&A) the well ahead of planned cessation of production (COP).

Our Approach

- In collaboration with the operator, Weatherford experts debated both P&A operations as well as remedial cementing and brought up the possibility to remediate the annulus with the Reclaim solution. The team determined to attempt a perf, wash, and seal operation and extend the production life of the well.
- The existing plan called for a cement squeeze at two locations in the wellbore identified as having a poor cement bond and posed a risk to the environment. Yet the squeeze operations risked channeling.
- The Reclaim solution would provide the best chance of success due to the annulus access that would be provided by the perforations (12 shots per foot across the zone) in combination with the cup tool that, together, would ensure the cement was accessing the full circumference of the wellbore.
- In November 2024, field personnel used a workover unit and perforated the annulus to open communication across a 20-ft (6-m) interval at 7,940 ft (2,420 m).

LOCATION
United States

WELL TYPE
Oil producer

FORMATION
Cased-hole environment

HOLE ANGLE
20°

PRODUCTION CASING SIZE AND TYPE
5-1/2 in., 23 ppf

BOTTOMHOLE TEMPERATURE
451°F (233°C)

DEPTH
7,940 ft (2,420 m)

PRODUCTS/SERVICES
- Reclaim thru-tubing P&A solution

Weatherford®

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Our Approach

- The Reclaim technology was run into the wellbore and, after spotting the main bore support pill, the annulus fundament was pumped. The cup tool channeled the cement and filled the upper annulus with an additional 100 ft (30 m) of cementing before pulling into the blank casing, blowing the ball seat, and pumping 100 ft (30 m) into the main bore plug.
- The main bore was then drilled out, and, after the team logged the hole to confirm the cement bond, a suspension plug was set. The operation was repeated at 5,042 ft (1,536 m).
- Both operations were conducted successfully, and the well was suspended until February 2025 when a wireline unit was mobilized to facilitate the logging of the remediated section as well as the installation of casing patches across the perforated section.
- The log results were then supplied to the Texas Railroad Commission who subsequently approved the operation and the methodology.

Value to Customer

- By using the Reclaim thru-tubing P&A solution, the operator increased well life and prevented surface leakage and contamination.
- This method extended the production life to a well that was targeted for abandonment.
- Through the acceptance of the methodology delivered by the Reclaim solution, a large number of wells could see their producing life extended.