

TuffTRAC Tractor Conveys ReSOLVE Service's Setting Tool Across Tubing Gap to Install Plug, Myanmar

Tubing gap and restrictions successfully negotiated for the nonexplosive setting tool to install plug with real-time confirmation

CHALLENGE

Install plug in highly deviated well with a tubing gap to be negotiated.

SOLUTION

Deploy the ReSOLVE* instrumented wireline intervention service on the TuffTRAC* cased hole services tractor to nonexplosively set the plug with measured confirmation of the operation.

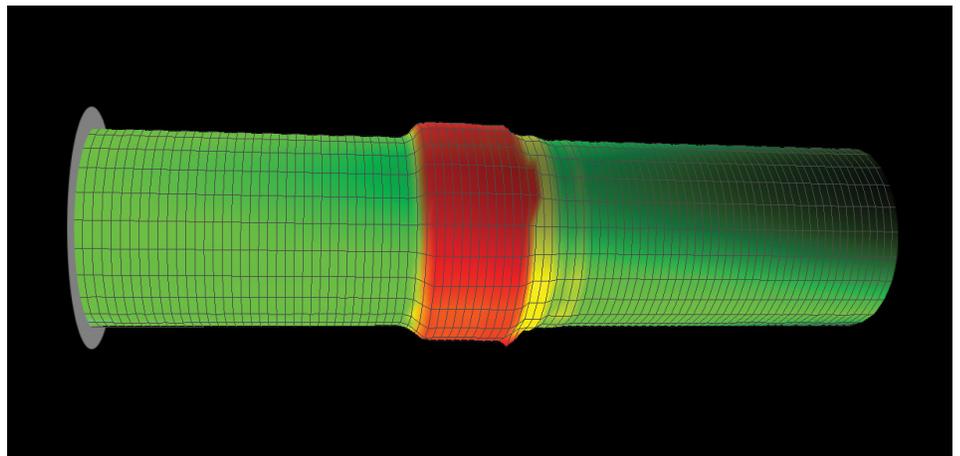
RESULTS

Easily negotiated the gap and other restrictions to tractor the setting tool 3,000 ft to the designated depth and install the plug, with a distinctive signature on the measured compressive force applied to confirm placement.



Highly deviated conveyance across a gap

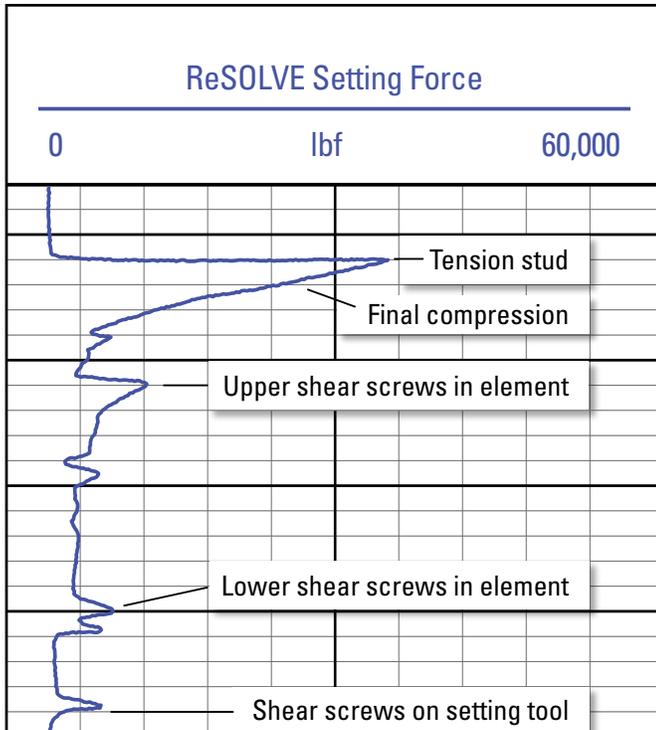
An operator in Myanmar needed to set a plug in a gas well to shut off water production. The well deviation was too high to run in hole on wireline by gravity alone, and a further challenge was the presence of a 1-ft-long gap in the tubing. The gap made it difficult to enter the section below the gap and also posed a high risk of hanging the plug-setting tool against the upper section when pulling out. The operator initially attempted deployment on slickline and then on coiled tubing, but both runs failed.



The 1-ft gap in the tubing indicated in red on the image from the PipeView multifinger caliper tool posed conveyance risks during both descent and pulling out that had prevented deployment on slickline and on coiled tubing in the deviated well.*

Tractor conveyance of instrumented plug setting

With low sensitivity to well conditions and reverse tracting and active traction control to improve maneuverability and reduce slippage, the TuffTRAC cased hole tractor is ideal for deviated wells with challenging configurations. It is combinable with all Schlumberger wireline cables and wireline cased hole services, including the ReSOLVE service's nonexplosive plug setting tool. This hydraulically powered module of ReSOLVE instrumented intervention service provides a large force of up to 78,000 lbf for setting plugs and packers. With real-time confirmation reporting of the setting force applied and a variable setting speed, the setting tool is a reliable, low-risk alternative to the conventional use of explosives to set plugs and packers. Not using explosives provides a significant advantage for operations in locations where explosives security and safety concerns can complicate logistics and cause delays.



Confirmed plug setting, unimpeded by gap

Unlike the previous conveyance attempts, the TuffTRAC tractor easily negotiated the tubing gap and other restrictions to tractor the ReSOLVE service's setting tool 3,000 ft to the designated depth for the plug. The tool was fitted with a custom sleeve to cover the dimension change at the extension piston, which prevented hanging on the tubing ends around the gap. The instrumented tool measured and reported the compressive force applied to set the plug to provide a distinct plug signature that directly confirmed operational success in real time.

Direct measurement of the axial force applied during the plug setting operation by ReSOLVE intervention service confirmed installation.