

# Retrievable Bridge Plug Enables Proper Tubing Cut and Saves 4 Rig Days, Congo

Rigless intervention reduces workover cost and mitigates risk

The SIMultra\* retrievable bridge plug saved 4 rig days during an intervention operation in HPHT environment.

## Create gas-tight seals in HPHT environment with minimal workover costs

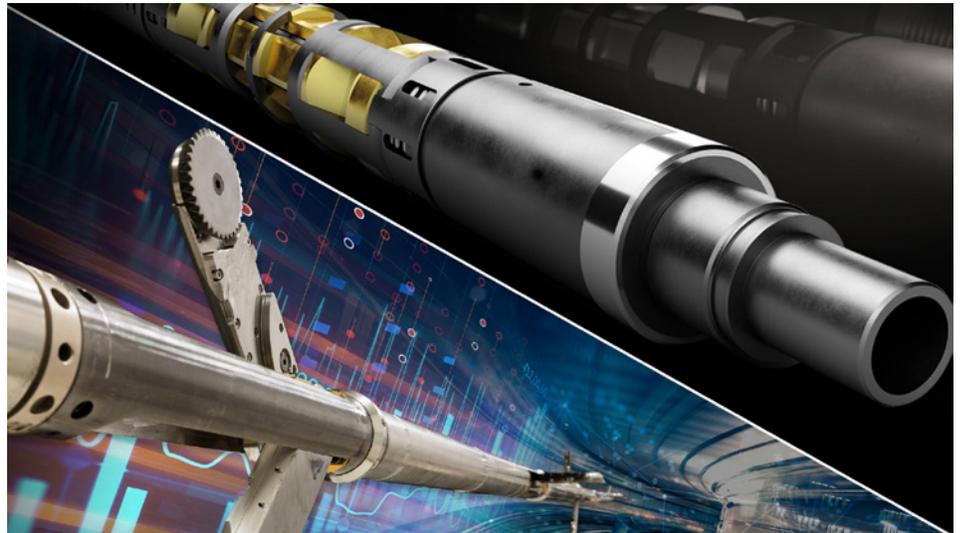
A gas injector well was to be converted into a producer well. A workover program was planned to cut and change the existing tubular, including setting a standard plug to isolate the lower zone.

The wellbore had a 75° deviation at 4,283-m [14,052-ft] MD with a minimum restriction of 4.313 in at the nipple. The lower-profile sealbore provided an insufficient barrier and limited the deep-set plug development for the lower zone. And additional risks involved a severing operation that blocked the retrieval process.

The operator needed to create a gas-tight seal in a 5½-in, 320-kg/m<sup>3</sup> [20-lbm/ft<sup>3</sup>] liner in a challenging HPHT environment with pressures up to 35 MPa [5,076 psi] and temperatures up to 152 degC [306 degF]. To minimize workover time and cost, alternative e-line rigless intervention options were pursued.

## Provide consistent and homogenous barrier

Traditional deep-set plugs did not meet the expansion requirement for the current working envelope, and a cementing operation was not a viable option to provide a consistent and homogenous barrier at such deviation and temperature.



*SIMultra plugs have a high expansion ratio, expanding and retracting significantly further than conventional V0-rated sealing technologies.*

## Use hybrid metal-elastomer seal rated for challenging conditions

The SIMultra retrievable bridge plug was deployed using the TuffTRAC\* cased hole services tractor. Certified to ISO 14310:2008 grade V0 and quality grade Q1, the SIMultra retrievable bridge plug incorporates a proprietary hybrid metal-elastomer seal to create a well barrier with both exceptional reliability and retrievability. Suited for HPHT operations, it is performance rated to 177 degC [350 degF], 69 MPa [10,000 psi], and extreme CO<sub>2</sub> sour service capability.

Using metallic support plasticity to close the extrusion gap during the setting process, the elastomeric compound of the historically high shearing stress is freed—unlocking sealing performance to a completely new stage.

## Avoided rig intervention and reduced workover costs

The successful gas-tight isolation using the SIMultra plug enabled cutting the tubing properly, and the rigless intervention saved 4 rig days, reducing workover costs.