



## Completion Solutions

# VersaFlex® Expandable Liner Hanger System Overcomes Pre-Salt and Fluid Loss Challenges with ZERO HSE Issues

Location: Brazil

### Challenge

In Brazil, TOTAL wanted to drill a pre-salt offshore deepwater exploratory well, which required a robust and efficient liner hanger system that could address the pre-salt and fluid loss challenges. With standard wash and ream capabilities, the system was also required to provide a reliable liner-top seal that was certified to ISO 14310 V0.

### Solution

Halliburton proposed an integrated solution comprising a single-trip VersaFlex® expandable liner hanger system in combination with the wireless, remote-controlled Commander™ 1000 cementing head, HWE® wiper plug system, Super Seal II® float equipment, and a RPT reamer shoe to complete the job. Halliburton's proposal included the benefits of better flow area, previous experience in Brazil, and on-time delivery.

TOTAL and Halliburton jointly developed a detailed Design of Service procedure to ensure successful deployment in this critical deepwater well.

### Results

Halliburton Brazil Completions team worked with TOTAL to address the changing well construction plans. The team followed through with the management of change and overcame the obstacles that were put forth. The tools and personnel were mobilized on time and without incident. The liner was rotated during the cementing job, and the VersaFlex expandable liner hanger system was expanded and set. The system provided an effective zonal isolation on the top of liner, thus, demonstrating the VersaFlex system's set-and-forget reliability and allowing TOTAL to continue with their well operations. The remotely operated Commander 1000 cementing head provided safe and efficient job operations, dropping the drill pipe releasing dart during the cement job without requiring personnel to leave the rig floor with a safety harness. The job was delivered with ZERO health, safety or environmental issues.

A major milestone was achieved in the successful construction of TOTAL's deepwater exploration wells in Brazil. This marked another first for the VersaFlex expandable liner hanger system.

