DEEP WATER

CASE STUDY

Operator Successfully Deploys Four-Zone Multizone Completion

FIRST XSTMZ™ SINGLE-TRIP SYSTEM INSTALLATION IN ULTRA-DEEP WATER AT OVER 30,000 FEET

GULF OF MEXICO

CHALLENGE

- Four-zone completion in ultra-deepwater conditions
- Reservoir pressure uncertainty

SOLUTION

- Two × two-zone stacked XSTMZ™ system
- Set all packers simultaneously to help mitigate hydrostatic losses and minimize installation time

RESULTS

- First XSTMZ system successfully installed at >30,000 feet
- Lower and upper two-zone sections completed using stacked design

SUCCESSFUL INSTALLATION

>30,000 FEET

OVERVIEW

A major operator in the Gulf of Mexico Lower Tertiary selected the XSTMZ™ Xtreme single-trip multizone system for completion of multiple reservoirs with high pressure differentials. Due to reservoir pressure uncertainty, the four-zone multizone completion, originally configured as a single-trip installation, was ultimately installed in two trips.

CHALLENGE

Significant pressure differentials between zones necessitated a reconfigured design that allowed for a two × two-zone stacked XSTMZ system installation. This configuration allows for commingled production of all zones simultaneously.

SOLUTION

The XSTMZ system was designed for use in the ultra-deepwater offshore completions environment and evolved from the highly reliable, field-proven ESTMZ™ enhanced single-trip multizone system, which features a system rating of 3,750,000 pounds of proppant with a treating rate of 45 bbl/min. Fully rated to 15,000-psi working pressure, the XSTMZ system provides higher pump rate and proppant volume capability, which is crucial in managing and effectively developing Lower Tertiary depleted reservoirs.

The XSTMZ™ system set all packers simultaneously, mitigating hydrostatic losses and reducing costs

RESULTS

The XSTMZ system was deployed and all packers set simultaneously to mitigate hydrostatic losses and reduce costs related to installation time. After setting the packers and displacing to completion fluid, the lower two-zone section was treated without tripping of the workstring. Following successful completion of the lower zones, the completion fluid was displaced to a higher density fluid, the upper two zones perforated, and a cleanout trip performed. The upper two-zone XSTMZ system was then installed, and the upper two zones treated as designed, without tripping of the workstring.

The proven strength, reliability, and innovative design of the XSTMZ system is crucial to our customers continued deepwater and ultra-deepwater successes. The single-trip multizone capabilities with proven reliability represent a step change in the commercial viability of many such fields, helping operators maximize asset value.

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