

RapidSuite® Multistage Fracturing Completion Systems Activate Almost Two Years after Installation

100% ZONAL ISOLATION ACHIEVED IN 17 STAGES

CHALLENGES

An operator wanted to reduce cost per BOE with multistage fracturing completion in a long lateral.

- » Harsh downhole conditions
- » Activation timeframe up to two years

SOLUTION

Halliburton proposed a multistage solution for both wells.

- » RapidStage® sleeves
- » RapidStart® initiator toe sleeves
- » Swellpacker® systems

RESULTS

After being downhole for almost two years the RapidSuite® sleeves opened as designed

» 100% zonal isolation in all 17 stages



After almost two years downhole in harsh conditions, the RapidSuite® and Swellpacker® systems performed as planned: clear opening signature and 100% zonal isolation was achieved in all 17 stages.

OVERVIEW

MIDDLE EAST

An operator in the Middle East sought a reduction in the cost per barrel of oil by installing Swellpacker® and RapidSuite® systems in two of their long lateral wells that required multistage stimulation treatments. Almost two years after installation the RapidSuite sleeves opened as designed and efficient zonal isolation was achieved in the 17 treated stages.

CHALLENGE

The operator needed a cost-effective solution to complete and stimulate two wells in a mature field. The proposed solution had to be able to provide reliable zonal isolation and flawless / efficient performance under harsh downhole conditions. Wells were to be drilled as drilled and uncompleted (DUC) wells, thus the system needed to be activated almost two years after installation.

SOLUTION

Halliburton proposed the RapidSuite frac sleeve system in an openhole configuration utilizing Swellpacker isolation systems to provide required compartmentalization. As the frac sleeve with the most reliable opening signature in the industry, the RapidStage® sleeve was selected for the job.



These sleeves are able to provide the efficiency that comes with ball-drop activated frac sleeves as well as unsurpassed reliability. To create the initial flow path required to commence multistage stimulation operations, Halliburton proposed the RapidStart® Initiator sleeve. To compartmentalize and control fluid placement along the lateral, they chose the field-proven Swellpacker isolation system.

The first well was completed with 10 stages, nine with RapidStage sleeves and one with a RapidStart Initiator sleeve. The second well had seven stages, six with RapidStage sleeves and one with a RapidStart Initiator sleeve. Composite frac balls were used to activate the sleeves and isolate previous stimulated stages.

RESULT

The Halliburton Unconventional Completion systems achieved 100% zonal isolation in all 17 stages. After being downhole in harsh conditions for almost two years, the RapidStart initiator sleeves opened in both wells, according to plan and without any issues. The RapidStage sleeves also performed as expected, providing 15 clear opening signatures. The composite balls withstood the sleeve opening and the treatment differential pressure, while the Swellpacker isolation systems created solid pressure barriers between stages in the openhole casing annular space. With Halliburton Unconventional Completions, the operator experienced reduced completion times, translating to a lower cost per barrel of oil.