

Case Study

Toe-XT Hydraulic Sleeve successfully activated after 8 months

UNITED STATES, PERMIAN BASIN
TOE-XT

An operator working in the Permian Basin installed the TRES™ Toe-XT™ Hydraulic Sleeve to simplify operations for the first stage of a plug-and-perf well. After nearly 8 months sitting downhole, activation of the Toe-XT Hydraulic Sleeve was successfully executed without issue.



Challenge

The operator was having issues with functioning hydraulic toe sleeves on a consistent basis. When operated as designed, a hydraulic toe sleeve for the first stage of a well will eliminate the need for a coiled tubing run, reducing both time and cost for completion operations.

Solution

The operator selected the Packers Plus Toe-XT Hydraulic Sleeve for the first stage of a plug-and-perf well that also included one stage of four QuickPORT™ IV sleeves. The Toe-XT Hydraulic Sleeve enables a single pressure test operation to verify casing integrity prior to opening the sleeve for stimulation. The pressure test is independent of

stimulation operations and the sleeve opening pressure is lower than that of the pressure test to reduce fluid usage requirements.

Results

The well was successfully stimulated nearly 8 months after installation. Both the Toe-XT Hydraulic Sleeve and the QuickPORT IV sleeves functioned as designed. Casing integrity was tested with the Toe-XT Hydraulic Sleeve to 8,900 psi for 15 minutes at 2 bpm.

The sleeve was opened at a slightly lower pressure of 8,800 psi.

The Packers Plus TREX Cemented Product Line offers a wide range of solutions for cemented liner well completions, including the PrimeSET™ Liner Hanger, Toe-XT Hydraulic Sleeve, QuickPORT IV sleeves for limited entry stimulation and Diffusor® Sleeves for single point entry stimulation.



First two stages of hybrid plug-and-perf well consisting of Toe-XT Hydraulic Sleeve and four QuickPORT IV sleeves