

Speed Squeeze System successfully maintains zonal isolation during an acid stimulation of a pre-perforated cased lateral.

438 Speed Squeeze System

CHALLENGE

An Operator had an oil-producing well show decreased production potentially from other frac hits in the area. Multiple perforation clusters along the horizontal section were required to be isolated and stimulated using 7.5% HCL on jointed pipe after a cleanout trip was completed.

SOLUTION

The 438 Speed Squeeze System was deployed on jointed pipe with 200 ft of spacing between packer elements. At a stimulation rate window of 5 -8 bpm, the lateral was successfully Acidized at a surface pumping pressure of approximately 7000 to 9000 psi.

RESULT

- Zonal Isolation on all 25 stages
- Oil Production boost of 40% after 2 months accredited to straddle system vs clean out's and bull head acid jobs on other wells.
- Increased production from 10-40 bopd to 140 bopd



Work Completed in Q3 in the Permian Basin

Acid Stimulate a horizontal cased well bore.

A land well located in the Permian required an acid stimulation on a previously perforated 5 ½ inch cased well bore (17 ppf J55). 200 ft cluster sections were isolated between an upper and lower packer element with two packers ran top and top bottom. The nozzle configuration was set up to engage packer elements at 5 – bpm. Once this rate was achieved acid was diverted/placed with successful isolation into all 25 zones.

The solution was provided with Lee Energy Systems 438 Speed Squeeze Packers:

- 438 PPS A hydro mechanical packer set by differential pressure generated by pumping through a set number of nozzles and sizes. Once the critical rate is achieved, the packers will set creating zonal isolation. Upon completion, the rate is decreased and the packers release their seal.
- Nozzle Stimulation Sub A sub that houses 6 nozzles that determine the packer setting rate window.
- Velocity Control Valve A rate activated valve that closes once the pre-determined activation rate is achieved. In wellbores with heavy sand inflow and cold weather coil applications, this is a suitable option to keep fluid moving.
- Variable Nozzle Sub Optional for unknown stimulation rates.
 See Lee Energy Systems for additional information





Upper Packer Section

Nozzle Stim Sub

Lower Packer Section