

Zone Starter Toe Sleeve Successful Openings 11-Months After Install

CHALLENGE

A large operator in the Marcellus/Utica had drilled multiple DUC's with WellBoss Zone Starter Cycling Toe Sleeves, which were uncompleted for 11+ months. When going in to open these tools the operator was looking for the following:

- + Perform casing integrity test at 9,500 psi for 30 mins.
- + Fully open after cycling pressure and achieve formation breakdown
- + Initiate formation injection

SOLUTION

Zone Starters are designed with reliability in mind! Wellbore conditions such as: temperature, casing fluids gasses and cement are variables that can impede the functioning of a toe sleeve. By incorporating coatings to moving parts, specialized greases, reliable/redundant sealing mechanisms and fit for purpose metal selections, operators can have confidence in opening Zone Starters reliably.

Installation Date: July 17, 2019

Opening Date: May 3, 2020

- + 09:52 hrs: Start Stg 1 Toe pop - PT Csg to 9,900 psi for 30 min good test, 1st Cycle
- + 10:28 hrs: Bleed to 0 psi - 5 min
- + 10:51 2nd cycle Pressure to 9,900- 5 min
- + 10:57 hrs: Bleed to 0 psi - 5 min
- + 11:11 hrs: Toe opened @ 5,059 psi. Injected 40 bbls @ 8 bpm x 6,400 psi.

Zone Starters - Designed for reliability no matter when they need to be opened!

ZONE STARTER MULTI CYCLE

- + Casing = 5.5" #23
- + True Vertical Depths = 7,000'
- + Total Depths = 19,000' +
- + Static Temperature = 150°F
- + Surface Pressure Test = 9,500 psi
- + Opening Pressure = 5,059 psi



BENEFITS

The technologically evolved design of the Zone Starters allow operators to:

- + Cycle pressure multiple times to achieve casing integrity tests up to casing burst with no time limit
- + Install multiple sleeves with variable port sizes and confidentially open all sleeves after bleeding off pressure test - Frac away
- + Accurately perform DFIT with low opening pressure

