



Overview

Run Date: November 24, 2021

Tool Service Company: Envision Downhole

Location: Scurry County, Texas

Onshore/Offshore: Onshore

Well Type: New Drill: Horizontal

Products / Services: Toucan Tornado 2.87" Thru-Tubing HSRT: Hi-Speed Reaming Tool

Objectives

The objective was to clean out the wellbore for toe prep prior to completion & stimulation.

Run Details

- In vertical: Coil Speed 80 Rolling pumps @ 1/2bbl min.
- At KOP: Decreased speed to 40 increased pump to 2.5bbl/min (2600psi) – started POP (Pipe-On-Pipe) 1/8 per 10
- At landing point: Increased speed to 60 – pumps still @ 2.5bbl/min (2600psi)
- Tagged float collar: @ 14,490' (tagged 3 time with no change) there was +/- 100psi Differential)
- Pump Sweep: 2.5bbl/min
- POOH: maintained 60 on speed and 2.5 bbl/min (2600psi) until reaching curve.
- Cut POP
- Through Curve: Coil speed 40 and 2.5bbl/min. (2600 psi)
- Back in Vertical: Coil Speed 80 and rolling pumps to 3000' then shut down pump to bump up.

Results

The Senior Consultant utilized the Tornado 2.87" Thru-Tubing HSRT on this well in the Permian Basin to successfully clean out the wellbore prior to completion on 2-3/8" coil. For this job, the Thru-Tubing HSRT was dressed with a used Varel 4-7/8" Slip Stream Bit.

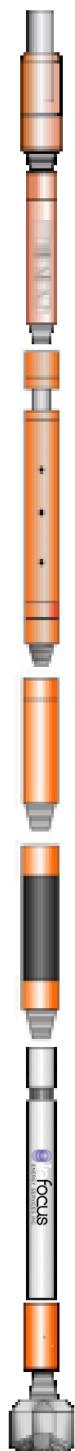
While using Pipe-On-Pipe chemical lubricant on the way in the wellbore the pump rate was maintained at a low 1/2 bbl/min. At the Kick Off Point, the pump rate was increased to 2.5 bbl/min while the coil speed was reduced until through the curve when the pump rate was held steady at 2.5 bbl/min while increasing coil speed. The Float Collar was tagged three times, then a sweep was pumped at 2.5 bbl/min.

With average flow rates of 2.5 bbl/min, the Oscillator tool used was operating at ~30 Hz. The TT-HSRT worked flawlessly in combination with the Oscillator tool and an oversize 4-3/4" bit.

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Operational Notes

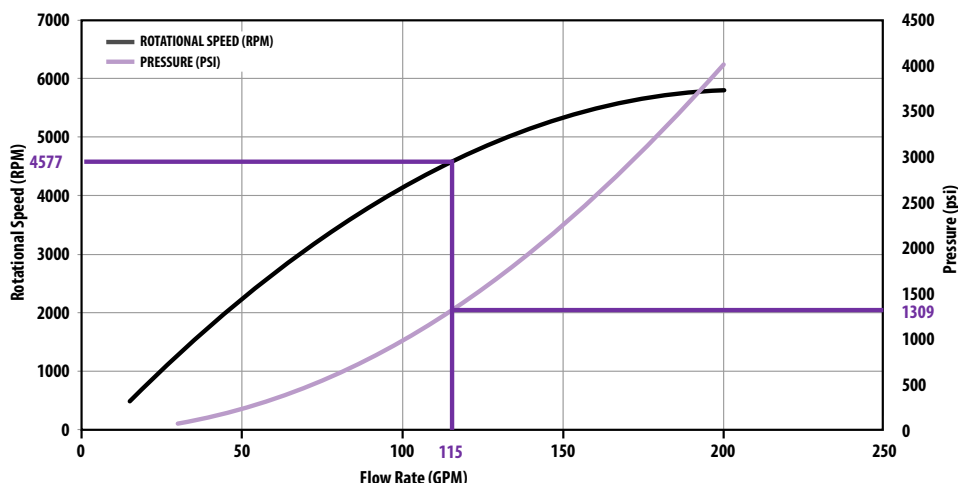
Convenience utilizing the InFocus 2.87" Thru-Tubing HSRT on location is important to note – the BHA is made up without getting on the man-lift as the Thru-Tubing HSRT is only 2.3 feet long resulting in the total BHA length of a little over 16 feet. This shorter length of the BHA is an advantage handling tools on location.

BHA

- 3 1/4" Slip-type coil connector
- 2 7/8" Dual back pressure valve
- 2 7/8" CTT Bi-directional jar
- 2 7/8" Hyd. TJ Disconnect - 0.875" ball seat
- 2 7/8" CTT Oscillator
- 2 7/8" Toucan Tornado Thru-Tubing HSRT
- Box X Pin bit sub
- 4 3/4" Varel Slip Stream (used bit)

BHA appearance: All tools looked good upon retrieval.

Total bbl pumped through BHA: 746bbl



Operational specifications are for reference only. Actual tool performance may vary depending on a variety of downhole conditions. Performance data is subject to change without notice.

Learn more about InFocus Thru-Tubing HSRT tools here:

<https://www.infocusenergy.com/thru-tubing-hsrt>

InFocus Thru-Tubing HSRT tools are currently available in three sizes:

1-11/16", 2-1/8" and 2-7/8"