

# MetalMax™ All Metal Motor

Exceptional Durability: 4.5 Days of Non-Stop Pumping

## HIGHLIGHTS

- 13 days continuous cement operation
- Removing more than 19,000' including 15,000' lateral of cement
- 4.5 Days of continuous pumping on a single MetalMax BHA

## DETAILS

Location	Webb County, TX
Formation	Eagleford
Well Orientation	Horizontal
Fluid	Water
Conveyance	2-5/8" Coiled Tubing
Operation Depth	25,704'
Operation Type	Cement Drill Out
Tools Used	3.50" MetalMax Motor 3.50" WavForce XRV

## RESULTS

During a cementing operation in South Texas, an operator encountered a significant challenge that resulted in over 19,000' of cement remaining in the casing, halting completion activities and suspending operations. Given the high BHT, extended lateral length, and the amount of cement in the well, the operator required a milling system capable of sustaining high torque and flow rates under extreme downhole conditions.

Upon tagging the wiper plug in the vertical section, it was apparent that TTS was facing a complex and extended milling operation. Conventional motors with elastomeric stators were unsuitable for the harsh wellbore environment, which demanded continuous, extended milling operations under extreme thermal and chemical conditions. Thru Tubing Solutions deployed a 3.50" BHA featuring an all-metal motor, MetalMax, and WavForce XRV friction breaking tool, to provide a high-performance milling solution. The larger tool ID allowed consistent pump rates between 4.5 and 7 BPM, reaching up to 7.5 BPM at times, optimizing hole cleaning, efficiently transporting cement cuttings out of the well. After approximately 13 days of continuous operations, TTS successfully reached PBTD at 25,704', removing more than 19,000' of cement, including 15,000'+ in the lateral. TTS also achieved a record 4.5 days of continuous pumping on a single MetalMax BHA.

By utilizing the MetalMax's all-metal rotor and stator design, TTS helped the operator recover from a major cementing setback, restoring wellbore access and enabling a TTS One-Trip TCP run to be made, allowing operations to continue with the planned plug-and-perf completions.

**ONE COMPANY. ONE SOLUTION.**

[thrutubing.com](http://thrutubing.com)

**THRUTUBING**  
SOLUTIONS