

# Case Study All Metal Motor

TTS' 3-1/8" OD All Metal Motor Outperforms Conventional Motors in Plug Drill Out

Case Study No. 4007

## DETAILS:

Formation:	Haynesville
Casing Size:	5-1/2"   26#
Conveyance:	2.375" Stick Pipe
Operation Depth:	~21,600'
Well Orientation:	Horizontal
Fluid	Recirculated Fluid
Bottom Hole Temperature:	>305°F
Operation Type:	Plug Drill Out
Tools Used:	3.13" OD All Metal Motor

## RESULTS:

After stator issues with a competitor's conventional (elastomeric) motor, causing multiple days of down time, a customer in Louisiana was looking for a more rugged BHA for their well completions. It was decided to deploy TTS' milling BHA with an **All Metal Motor**. The **All Metal Motor** is equipped with a metal rotor and metal stator. Engineered to perform in wells with extremely harsh environments, this stator contains no elastomers which are typically damaged by high BHT and circulating fluid containing compounds not compatible with rubber.

Using recirculated fluids, the motor drilled through 80+ composite bridge plugs and reached TD around 21,600' in a single run. The job took a total of 6 days in which the motor was exposed to a BHT of >305° F. The customer was pleased with the performance of the **All Metal Motor**, and they were able to reduce costs by eliminating motor issues and additional trips due to an elastomeric stator. Since this job, the customer has continued to use the **All Metal Motor** on four subsequent wells.

## HIGHLIGHTS



- Single Run Operation
- No Temperature Limitations
- Exclusive Innovative Design
- No Elastomers

(eliminating concerns with rubber swell, chunking or debonding)