Case Study

All Metal Motor

All Metal Motor Excels with Recirculated Fluid
Case Study No. 4008

RESULTS:

A customer in Louisiana had 10,000+ feet of cement they needed to mill out from their production casing. Using a competitor’s standard elastomeric motor, they were only able to drill roughly 2,500’ of cement before experiencing issues. The elastomeric stator began debonding and chunking out due to the cement particles in the recirculated fluid resulting in a motor failure. TTS' All Metal Motor, composed of a metal rotor and metal stator, was deployed to finish the operation. After 6.5 days in hole with a BHT of >320°F, the All Metal Motor successfully drilled the remaining 7,500+ feet of cement in one run. Due to the durable design and the absence of elastomers, the fluid composition did not affect the performance of the All Metal Motor; proving once again, that TTS has the best solution for operations involving harsh fluids.

DETAILS:
Formation: Haynesville
Casing Size: 5-1/2” | 23#
Conveyance: 2-3/8” Stick Pipe
Operation Depth: ~21,850’
Well Orientation: Horizontal
Fluid: Water
Bottom Hole Temperature: >320°F
Operation Type: Cement Drill Out
Tools Used: 2-7/8” OD All Metal Motor

HIGHLIGHTS
• Single Run Operation
• No Temperature Limitations
• Exclusive Innovative Design
• No Elastomers
(eliminating concerns with rubber swell, chunking or debonding)