

Case Study

All Metal Motor

All Metal Motor Removes Scale from Geothermal Well

Case Study No. 4005

DETAILS:

Location:	New Zealand
Casing Size:	7" - 29#
Conveyance:	2" Coiled Tubing
Operation Depth:	2,177' (663.6m)
Well Orientation:	Vertical
Fluid	Water
Operation Type:	High Temp Milling
Tools Used:	2 7/8" OD All Metal Motor

HIGHLIGHTS



- No Temperature Limitations
- No Fluid Restriction
- Reliable Performance
- Exclusive Innovative Design

RESULTS:

A customer in New Zealand ran a trial of three different BHAs to clean out an unquenched geothermal well. Compressed air was comingled with the fluid to prevent cooling the 230°C (446°F) bottom hole temperature (BHT). TTS' **All Metal Motor** was used in comparison to an air hammer as well as a competitor's motor; all three trials consisted of milling 122m (400') of scale. While the other trials resulted in multiple stalls and burning up bearing sections, TTS' **All Metal Motor** successfully completed the millout with no failures. Due to the high BHT, the design of the **All Metal Motor** excelled having no elastomers or fluid limitations. The customer was very pleased with the performance of the **All Metal Motor** and has since awarded TTS additional wells to be completed.