# All Metal Motor

All Metal Motor Removes Scale from Geothermal Well



## HIGHLIGHTS

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

DETAILS	
Location	New Zealand
Casing Size	7" 29#
Well Orientaion	Vertical
Fluid	Water
Conveyance	2" Coiled Tubing
Operation Type	High Temp Milling
Operation Depth	2,177 Ft
Tools Used	2.87" OD All Metal Motor

#### **OBJECTIVE**

A customer in New Zealand ran a trial of three different BHAs to clean out an unquenched geothermal well.

### RESULTS

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.

### VALUE TO CLIENT

The customer was very pleased with the performance of the All Metal Motor and has since awarded TTS additional wells to be completed.



