

# CASE HISTORY

## EXTREME TEMPERATURE MULTI-FINGER CALIPER LOG

### APPLICATION

Geothermal

### TECHNOLOGY

Vulcan MFT-40

### LOCATION

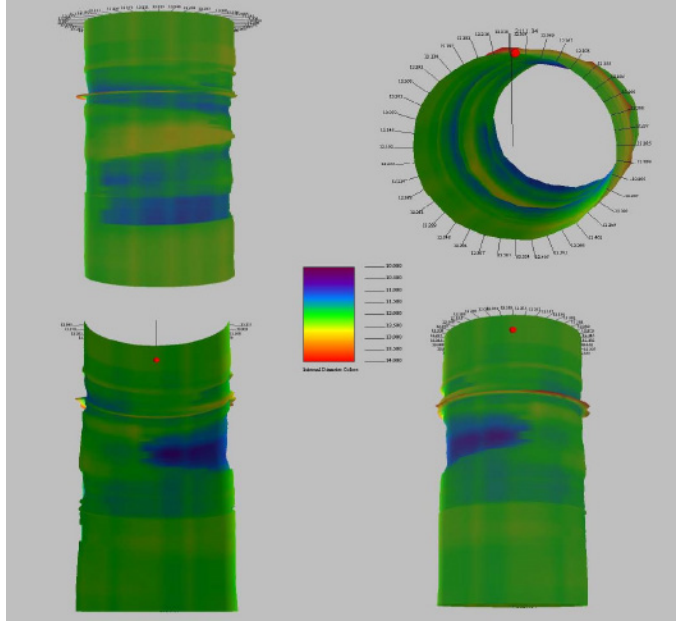
California, US

### CUSTOMER CHALLENGE

The client sought to evaluate 13-3/8" casing approximately one month after start of production to validate the condition after exposure to heat for an extended period. The well was previously logged prior to start of production with a conventional multi-finger caliper tool. That log indicated a zone of remnant cement in the wellbore. The client wished to re-log without quenching the well with the aim of minimizing production downtime. The post-completion bottom hole temperature of 560°F demanded that any subsequent logging runs would need to utilize technology with the ability to withstand the extreme conditions.

### SCIENTIFIC SOLUTION

Scientific Drilling's newly-released Vulcan MFT-40 caliper, with its 600°F temperature rating and 14.5" measurement capability, was the perfect solution for the client. The tool was run to the bottom of the interval of interest at ~3,000 ft and logged out of hole at 30 ft/min giving a vertical resolution of 0.12". The data confirmed the integrity of the casing and a zone of remnant cement was detected, as shown in the 2D log data and 3D images.



### CUSTOMER VALUE

The Vulcan MFT-40's 600°F temperature rating meant the customer could circumvent the need to quench the well in order to convey a conventional, low-temperature multi-finger caliper. This provided savings of thousands of dollars by avoiding the deployment of a pumping unit. In addition, preventing the quenching operation meant the client could minimize lost production as well as the associated loss in earnings.

