CASE STUDY

HALLIBURTON

Germany

Rapid Response GeoESP® Box Test Container Saves Geothermal Operator +€1.5MM

Six months downtime saved; wells now being monitored 24/7/365

CHALLENGE

- VSD power quality issue detected
- Replacement equipment lead time estimated at six months
- No ESP surveillance

SOLUTION

- Optimized down-hole performance with GeoController hardware
- Connect to Intelevate online monitoring platform

RESULT

- Reduce cost of replacement equipment
- Immediate support to thermal plant while MV VSD replaced
- Intelevate platform online monitoring and real-time performance visibility

Overview

A German geothermal well previously operated with two electric submersible pumps (ESPs) was to be replaced with a single, wider operating range GeoESP. To ensure flawless execution, Summit ESP®, A Halliburton Service, followed critical reasonable procedures before installation, which detected some issues with the surface equipment.

GeoESP®
Box Test Container
SAVES
6 Months Downtime
$1.5 MM Euro

Challenge

When evaluating the customer's equipment, our engineer detected abnormalities in the low voltage (LV) variable speed drive (VSD) output, which was not repairable.

Solution

The team began redesigning the system to use a medium voltage (MV) variable speed drive (VSD) to handle the 10K KV voltage peaks detected during commissioning. A new system was quoted with a six-month lead time, leaving heating requirements for thousands of Germans at risk. The team proposed a GeoESP® Box Test Container, a plug-and-play surface solution with direct adaptation for different grid voltages throughout Europe for immediate support to the thermal plant while the VSD was replaced. GeoController® hardware offered operators a quick, easy interface for field service. It connected the plant to the Intelevate™ digital platform, providing analysis of real-time test data from a mobile phone and setting "smart" alarms for testing operations.

SUMMIT ESP
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Result

The rapid deployment of the GeoESP® Box Test Container allowed the customer options in case of surface equipment failure, keeping production online instead of the estimated six months of downtime at an estimated cost of at least €1.5MM in lost production/downtime and workover and equipment costs.