CASE STUDY

GWD40 IMPROVES WELL PLACEMENT, REDUCES COLLISION RISK, AND SAVES 40 HOURS OF RIG TIME IN GEOTHERMAL APPLICATION

TECHNOLOGY
- GyroGuide GWD40™

APPLICATION
- Wellbore placement
- Collision risk mitigation

LOCATION
- Germany

INDUSTRY CHALLENGE + OBJECTIVE

As part of a government-backed project to expand an existing geothermal plant to provide more than half a million households with geothermal heating by 2040, a specialized drilling company was drilling six tightly spaced wells. As the plant was built in an urban area, it was critical that disruption to the surrounding city be minimized and that any chance of a wellbore collision be eliminated. To accomplish these goals, the company implemented our GWD40 system.

TECHNOLOGY + SERVICE SOLUTION

- Our GWD40 system provided data for advanced collision avoidance and real-time knowledge of wellbore position, enhancing performance and safety.
- The GWD40 system collects real-time survey data at an inclination up to 40° and in any direction, enabling safer operations and more accurate wellbore positioning.
- Gyro accuracy ensures precise wellbore guidance for collision avoidance, with the GWD tool providing continuous inclination and toolface from vertical while sliding and full surveys on demand.

RESULTS + VALUE DELIVERED

- We successfully implemented our GWD40 system in the 26-in. sections of four out of the six wells to reduce wellbore collision risk and decrease the ellipse of uncertainty in each well.
- We presented an average of 18 surveys across each of the four wells. When compared to traditional wireline surveys, using GWD saved approximately 40 hours of rig time for the entire project.
- The wells were drilled and surveyed with no service quality issues, no NPT, and minimal disruption to the surrounding city community.

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