CASE STUDY

GWD40 ASSISTS IN THE COMPLETION OF A 40 WELL PROJECT AT A COAL MINE IN POLAND SAVING $665,000

TECHNOLOGY
- GyroGuide GWD40™

APPLICATION
- Gyro While Drilling

LOCATION
- Onshore, Poland

INDUSTRY CHALLENGE + OBJECTIVE

Operators in Poland needed assistance to drill a ring of 40 wells at an operational coal mine in Poland. The future of the mine depended on a new shaft being sunk, however, the land where this was located was at risk of a cave-in from drilling. It was imperative that operations were done accurately and successfully as to not compromise the integrity of the existing mine. Operators needed a solution that could drill a ring of 40 wells to approximately 490 meters and freeze them, thus allowing a shaft to be dug within the circle. This is known as a “freeze ring”. The wells were to remain vertical, with each being no more than 1.5 meters from neighboring wells at total depth. As the close spacing would lead to magnetic interference in MWD, the solution was to use GyroGuide GWD40 for every second well in the circle – the even numbered wells, to ensure placement within the restrictions, required to successfully complete the freeze ring.

TECHNOLOGY + SERVICE SOLUTION

- Gyrodata proposed using GWD40 as the lowest cost solution for this price sensitive project.

- Compared to singleshot wireline, our streamlined GWD40 procedures allowed us to use half the number of people, two personnel versus the typical four, and the two rigs could work concurrently meaning that there were potentially two tools in hole at once. Together, this allowed us to survey quickly and accurately and created a cost saving for the customer.

- Gyrodata supplied five GWD40 tools on site. This allowed an uninterrupted service delivery by testing tools used on runs while other tools were drilling subsequent wells. The process of running and servicing multiple tools kept this large job timely and on track.

RESULTS + VALUE DELIVERED

- Using GWD40 created extensive time savings compared to a standard wireline conveyed singleshot. The wells were surveyed at six meter intervals on the first rig, with 73 presented surveys per well on average and in ten meter intervals on the second rig, with 52 surveys per well on average.

- 22 wells were drilled without nonproductive time.

- The use of GWD40 saved approximately 11 days on the first rig and 8 days on the second, contributing to the cost savings of $665K based on rig time, and wireline crew costs.